

**Analysis of Women Farmers' Agency in
Agricultural Cooperatives:
Case Study of Mali**

By

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STATEMENT OF ORIGINALITY

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To whom it may concern

This statement informs and certifies that, to the best of my knowledge, this dissertation is the outcome of my efforts. I do hereby declare that the intellectual content of this thesis entitled:

“Analysis of Women Farmers’ Agency in Agricultural Cooperatives: Case Study of Mali”

is the result of my research and has not been submitted in part or entirely to any degree program or other academic institution. Whenever assistance has been received, or third-party work has been used, it has been duly acknowledged using complete references.

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ABSTRACT

When discussing economic progress and development issues of developing nations, it is vital to consider the role of small-scale women farmers, especially in countries where farming is a key sector of the economy. In developing countries, women provide the labour and income necessary to sustain livelihood activities. Smallholder women farmers actively participate in the agricultural sector in Mali; however, many of them have been snared into the vicious cycle of poverty as they encounter several challenges producing and selling their farming yields, mainly if they work independently.

Reducing the obstacles women farmers encounter can improve agricultural productivity and stimulate economic growth. Agribusiness activities have been encouraged by the government through the creation of farming cooperatives among smallholders across Mali. Agricultural cooperatives are platforms through which farmers maximise benefits, reduce costs, and share risks while expanding their economic and social needs. On the one hand, some scholars and practitioners have identified cooperatives as a powerful mechanism for economic growth in developing countries where essential agrarian tools and infrastructure are insufficient or non-existent. On the other hand, others have contended that while agricultural cooperatives may not always provide the required level of rural development, women farmers in many sub-Saharan African countries might gain economic and social empowerment through their membership in cooperatives.

This thesis aims to assess the impact of women's involvement in agricultural cooperatives from the agency and empowerment concepts. It analyses how women's collective engagement and bargaining in cooperative activities have impacted their access to agricultural resources, mainly land, credit, seeds, fertilisers, markets, agricultural extension agents and services, training, information, and decision-making processes often constrained by societal norms. To support its findings, the study draws on the theoretical framework of women's agency and empowerment.

Chapter one describes the background, literature reviews, and study objectives to fulfil the above goal. It also explores the theoretical framework of women's agency and empowerment attained over collective engagement and social bargaining. These theories are deemed beneficial in analysing the process and achievement earned by women farmers in increasing their livelihoods. The author develops a conceptual framework from the theories to hypothesise that participating in cooperative activities has led to women's improved access to farming resources and empowerment.

Chapter two provides a historical overview of agricultural cooperatives in developed and emerging countries, focusing on how African cooperative movements have been introduced and developed. Structured cooperatives were initially introduced in Africa during the colonial era to support the colonial powers' services to distribute, produce, and supply market inputs. The chapter also provides concise and precise definitions and explanations of agricultural cooperatives, principles, types, and classifications. Chapter two further sheds light on cooperatives development and policy framework in Mali through the Cooperative Act No.01-

076 of 2001 and the (OHADA Act) of 2010. Lastly, the chapter describes the role of agricultural cooperatives in rural development, women's engagements in Mali's cooperatives, and government initiatives in supporting them.

Mali has a wide range of land tenure systems shaped by the country's colonial, postcolonial, and pre-colonial histories. Chapter three overviews the land tenure systems from pre-colonial Mali to the present. During the pre-colonial time, land tenure systems were based on rules reflecting the country's socio-economic, political, and cultural realities. These rules were a mixture of precepts originating from religious beliefs and conventions between communities established by the ruling organisations. These conventions recognised and legitimised the authority of a lineage, a community, or a group over specific resources, until colonialism heightened the colonial power's control over land under the state supervision, thereby destabilising the traditional influence of indigenous communities. Following independence, Mali's government kept all the colonial texts on land tenure while it gradually got rid of customary rights in practice through inconsistent regulatory measures. Over time, both tenure systems have evolved, leading to a problematic integration of customary and statutory tenure regulations and procedures that the public misunderstands. Within this complex land tenure context, the competition between males and females for land intensified. Since men are presumed the sole household food providers, women are said not to need agricultural plots; consequently, they have no or fewer tenure rights.

The methodology, techniques, and tools used in collecting the data are discussed in chapter four. To collect her primary data, the author conducted a field survey in the Baguineda, Bamako, and Kati areas of Mali from January to February 2020. A total of 300 participants were surveyed, and in the three study areas, 170 questionnaires, 42 semi structured interviews, and 15 focus groups were conducted. Likewise, secondary data, including reports from cooperatives, relevant documentation, and online sources from government ministers and NGOs, were also collected. The interviews were analysed using transcribed audiotapes, while the questionnaires were examined in SPSS, applying descriptive analysis, correlations, and comparison models. The outcomes were assessed and compared with the theory of agency and empowerment to draw conclusions and make policy recommendations.

Chapter five describes the demographic and socio-economic profiles of the respondents. Primarily their location, age, educational attainment, employment, sex, marital status, land size, and farming experiences were assessed. Participants own and access land distinctly based on their site, class, sex, and type of tenure systems employed. The average land size used by individual males was one to two hectares of land, while women had less than one hectare. The section also highlights the cooperative's institutional structures, challenges, and reasons for establishment. The cooperatives were well structured with different management boards, election systems, and activities depending on members and the group's needs. Most associates in the three study areas created cooperatives to handle market failures, defend themselves against adverse socioeconomic conditions, improve economic development, and enhance their members' living standards. The author also found that mixed cooperatives and cooperatives led by women were keen on women's needs better than male-dominated cooperatives. Lastly, the section delves into the difficulties cooperatives face in handling their administrative documents,

submitting regular reports, accessing adequate infrastructure, and incentives needed to increase their efficiency.

Chapter six focused on the case studies and participants' oral accounts. The main findings can be summarised as follows: Amidst diverse and challenging land regimes and practices, scarcity, and expulsions, cooperative members in Baguineda, Bamako, and Kati have united their forces to assert their land rights and access to agricultural resources. Security of tenure and access to input were prerequisites for cooperatives' organisations in Baguineda and Kati's rural areas. In contrast, access to credit and training was essential for the ones in Bamako. The survey found that a cooperative's level of organisation, characteristics, and institutional features impact its members' ability to bargain with their milieus. Developing proper negotiation skills and taking responsibility for oneself is the basis of practical cooperation, which leads to transformational possibilities. This is most readily demonstrated when members are empowered to take on better responsibilities while contributing to the development of their communities.

Accordingly, market gardening cooperatives (80%) were crucial to their members' access to resources, followed by marketing cooperatives (73%), and finally, microcredit and food-processing cooperatives (62%). These cooperatives ensured their members' access and control over land, credit, training, information, and market in the three study areas. Women in Baguineda have improved access to both formal and informal land after joining agricultural cooperatives. In comparison women in Bamako and Kati cooperatives have benefited from more training, information, and subsidised seeds and fertilisers.

Data from women's oral accounts in the three study areas further demonstrate that their involvement in cooperatives is a reaction to the socio-economic environment they have long faced. In other words, they sought to challenge the status quo. Beyond their different activities, membership in the cooperatives has provided women with social status as they received social recognition in male-dominated societies. The author also found that their collective engagement and bargaining power within cooperatives allowed them to develop strategies to negotiate with customary leaders and local authorities. As a result, they managed to acquire more land communally, which they jointly cultivated. Women further nurtured a sense of agency and empowerment collectively, which boosted their self-confidence and autonomy in carrying out their projects and expressing their perspective on community matters, which the government and NGOs often support as a strategy to improve marginalised peasant living conditions.

Chapter seven concludes the analysis with a summary, conclusions, and recommendations on how agricultural cooperatives can further contribute to women's empowerment by developing a more inclusive and sustainable gendered approach regarding discriminatory practices women farmers encounter. Recommendations included specific tasks and policies for different stakeholders at the cooperatives, government, NGOs, agricultural extension agents, and individual levels on lessening discriminatory gender practices in accessing agricultural resources.

DEDICATION

This dissertation is dedicated to my wonderful parents, especially my father, Amadou Diallo. I owe you a great deal Dad, for encouraging me to pursue higher education and reminding me that my first husband was my degree. I also dedicate this thesis to my mother, Bintou Founé Kanfana, one of the most fascinating, extraordinary, courageous, unique, and kind-hearted persons I have ever known. The struggles and efforts you've put in helped me earn this PhD and make me the woman I am today. I am grateful to have you and dad as parents and proud of your sacrifices, support, and unconditional love. I love you all very much.

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LIST OF ACRONYMS

ACHPR	African Charter on Human and Peoples' Rights
ADB	African Development Bank
AFD	Agence Française de Développement (French Agency for Development)
APCAM	Assemblée Permanente des Chambres d'Agriculture (Permanent Assembly of Agricultural Chambers)
APU	Agricultural Production Unit
AU	African Union
BAD	Banque Africaine de Développement (African Development Bank)
BNDA	Banque Nationale de Développement Agricole (National Bank for Agricultural Development)
CCS-SFD	Cellule de Contrôle et de Surveillance des Systèmes Financiers Décentralisés (Unit for the Control and Surveillance of Decentralised Financial Systems)
CDF	Code Domanial et Foncier (Land Law)
CEDEAO	Communauté Économique des États de l'Afrique de l'Ouest (Economic Community of West African States)
CIA	Central Intelligence Agency
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement (Agricultural Research Centre for international Development)
CNDIFE	Centre National D'éducation, d'Information sur la Femme et l'Enfant au Mali (National Center for Education and Information on Women and Children in Mali)
CNOP	Coordination National des Organizations Paysannes (National Coordination of Peasant Organizations)
CNRA	Centre National de Recherche Agricole(National Agricultural Research centre)
COOP-CA	Société Coopérative Avec Conseil d'Administration (Coopératives with Board of Directors)
CPS	Cellule de la Planification et de la Statistique (Planning and Statistics Unit)
CREDD	Cadre Stratégique pour la Croissance et le Développement Durable (Strategic Framework for Growth and Sustainable Development)
CSA	Commissariat à la Sécurité Alimentaire (Food Security Commissioner)
DFS	Decentralised Financial System
DNGR	Direction Nationale du Génie Rural (National Directorate of Rural Engineering)
DNPSES	Direction Nationale de la Protection Sociale et de l'Economie Solidaire (National Directorate of Social Protection and Solidarity Economy)
DRC	Democratic Republic of Congo
EAC	Enquête Agricole de Conjoncture (Agricultural Economic Survey)
ECOWAS	Economic Community of West African States
EDMS	Enquête Démographique et de Santé du Mali (Enquête Démographique et de Santé du Mali)
EMEP	Enquête Malienne d'Evaluation de la Pauvreté (Malian Poverty Assessment Survey)
EMOP	Enquête Modulaire et Permanente auprès des Ménages (Modular and permanent Household Survey)
EU	European Union
FAFE	Fonds d'Appui à la Femme et l'Épanouissement de l'Enfant (Support Fund for

	Women and Children Empowerment)
FAO	Food and Agricultural Organization
FCFA	Franc de la Coopération Financière D’Afrique (Franc of the Financial Coopération of Africa)
GDP	Gross Domestic Product
GRET	Groupe de Recherche et d’Échanges Technologiques (Research and Technological Exchange Group)
IAGU	Institut Africain de Gestion Urbaine (African Institute of Urban Management)
IFAD	International Fund for Agricultural Development
ILC	International Land Coalition
ILO	International Labor Organization
IMF	International Monetary Fund
INSAT	Institut National de la Statistique du Mali (Mali’s National Institute of Statistics)
LOA	Loi d’Orientation Agricole (Agricultural Orientation Law AOL)
MCA	Millennium Challenge Account
MINUSMA	Multidimensional Integrated Stabilization Mission in Mali
NGO	Non-Government Organization
ODD	Objectifs de Développement Durable (Sustainable Development Goals)
ODRS	Office de Development Rural de Sélingué (Office of Rural Development of Sélingué)
OHADA	Organisation pour l’Harmonisation du Droit des Affaires en Afrique (Organisation for the Harmonisation of Business Law in Africa)
ON	Office du Niger (Office du Niger)
ONU	Organisation des Nations Unies (United Nations)
OPIB	Office du Périmètre Irrigué de Baguinéda (Office of the Irrigated Areas of Baguinéda)
PDA	Politique de Développement Agricole (Agricultural Development Policy)
PDSEC	Plan de Développement Social, Economique et Culturel (Local Development Plan)
PFG	Politique Foncière Générale (General Land Policy)
PNG	Politique National Genre (National Gender Policy)
PNIA	Programme National D’Investissement Agricole (National Agricultural Investment Program)
PNISA	Programme National d’Investissement dans le Secteur Agricole (National Program For Investment in the Agricultural Sector)
PRODAFFE	Programme de Développement pour l’Autonomisation de la Femme, de l’Enfant Et de la Famille (Development Program for the Empowerment of Women, Children and Family)
PRODESS	Programme de développement du secteur de la Santé (Health Sector Development Program)
RAG	Rural Association Groups
RGPH	Recensement Général de la Population et de l’Habitat du Mali (General Census on Population and Housing in Mali)
RM	Republic of Mali
SCOOPS	Société Coopérative Simplifiée (Simplified Cooperative)
SDR	Secteur Développement Rural (Rural Sevelopment Sector)

SIGI	Social Institutions and Gender Index
SIP	Sociétés Indigènes de Prévoyance (Indigenous Welfare Corporations)
SMPR	Société Mutuelle de Production Rurale (Mutual Society of Rural Production)
SNU	Système des Nations Unies (United Nation System)
SPSS	Statistical Package for the Social Sciences
SRD	Secteur Développement Rural (Rural Development Sector)
UEMOA	Economic and Monetary Union of West Africa
UN	United Nations
UNDP	United Nation Development Program
USA	United States of America
USAID	United States Agency for International Development
WB	World Bank
WILDAF	Women in Law and Development in Africa

CHAPTER 1: INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Background of the Study

The Republic of Mali is in the western region of Africa, bordering seven countries, namely, Algeria to the north, Mauritania and Senegal to the west, Guinea and Côte d'Ivoire to the south, Burkina Faso and Niger to the east. Mali covers 1.2 million square km, out of which 5.5% is fertile land. Mali is also structured into ten administrative areas or regions: Gao, Kayes, Kidal, Koulikoro, Ménaka, Mopti, Ségou, Sikasso, Taoudéni, and Tombouctou. Furthermore, Mali comprises 703 communes, 49 circles, and one district. Bamako is the capital city of Mali, with a population of 2.5 million as of 2019. Approximately 34% of Mali's inhabitants currently live-in inner-city hubs (CIA, 2019).

Notwithstanding being the eighth-largest state in Africa, its population is small-scale, with a mere 3% yearly increase. Mali has slightly over 20 million citizens (90% of whom reside in the south) due to the desert ecosystems that encompass two-thirds of the land area. With 45.53 births per 1000 and 6.16 children per woman, Mali's natality rate is among the highest worldwide (CIA, 2019)

Regarding geographical characteristics, Mali can also be split into three major agroecological sectors: the southern part has a semi-tropical or Sudanese climate. In contrast, the central area has semi-arid or Sahelian weather, and the northern part has an arid or Saharan climate. The north and south divide can be observed in Mali's ecological and cultural background. The north covers huge infertile land and desert regions, with slightly larger towns and more partial-nomadic societies. The southern area has sub-tropical weather, and due to the favourable climate, this region is densely populated. Bamako, the capital city of Mali, is also found in this region. About 20 ethnic groups live together and share a long tradition of co-existence. Ethnically, the south is mainly comprised of the Bambara people, whereas the north is deemed more culturally varied, with the Songhai, Moors, Fula, and Tuaregs communities inhabiting the regions that are near the Niger River.

Nearly half of Mali's population is below 15 years old (48.6%), and more than half, 50.4 %, are women (Ministry of Agriculture, 2009). Despite being made up of several ethnic groups, around 90% of the country's population is Muslim, whilst the remaining 10% are Christians and animists. Islam is profoundly embedded in Mali's history, with Timbuktu's prehistoric metropolis considered an epicentre for Islamic knowledge in the 12-16th century.

Mali is ranked among the world's least developed countries. The country is classified as the 138th least developed country in the world, with a GDP of US\$18 million from an economic development standpoint (World Bank, 2014). There is a 30 % unemployment rate, and nearly 36 % of the inhabitants live under the poverty line surviving on less than USD 1 per day (IMF, 2016). Yet, Mali's substantial natural resources comprise gold, kaolin, limestone, granite, gypsum, phosphate, salt, uranium, and hydropower. Cotton and gold trades represent 80% of the country's entire exports. Even though Mali has excellent macroeconomic statistics (e.g., GDP growth ratio of 4.5%), the living standards remain low. A small percentage of the population work in the formal sector (less than 20%), slightly more insignificant in the rural areas. Forty-four percent of Mali's residents are considered poor, with 33% of the urban population and 53.2% of rural ones falling within this classification (Ministry of Agriculture, 2009b)

The important part of the country's financial venture is restricted to the Niger river regions, with food production and mining representing 80% of Mali's income and trades. Accordingly, the country's economic position changes with these two activities. As described previously, nearly 65% of the country's land space is desert or half desert. Roughly 10% of the inhabitants are nomadic, and around 80% of the employed people are involved in the agriculture and fishing sector (Ministry of Agriculture, 2009a). Manufacturing activity is centred on handling farm products. Mali's authority supports cereals' production to lessen the nation's dependence on imported goods and reduce its reliability to nutrition cost ideals.

Furthermore, Mali is highly reliant on remittances and external support. The country's economic development declined for three years continuously, standing at 4.9% in 2018. This situation can be attributed to the spreading of insecurity in the nation's central and northern regions. On the demand side, public venture shortened by 2% of GDP, key government revenues dropped, and private internal demands showed more resilience (INSAT, 2018).

The agricultural realm remains deeply reliant on climatic changes. Considering the significance of the farming sector, rainfall is a crucial economic growth component (DFS, 2011). Malian farming regularly encounters persistent challenges, such as frequent droughts since the 1970s, uneven rainfall, land degradation, value decline of raw materials like cotton, and a rise in production expenditures (inputs and fuels).

Map 1: The Republic of Mali



[Source: <https://www.geographicguide.com/africa-maps/images/map-political-mali.jpg>]

Despite the vulnerability of Mali's agricultural production, the sector has excellent agri-sylvo-pastoral, forestry, and fisheries potential. For example, Mali has an estimated 46.6 million hectares, including 12.2 million hectares of agricultural land, 30 million hectares of pastureland, 3.3 million hectares of wildlife reserves, and 1.1 million hectares of forest land (Ministry of Agriculture, 2009a). Of this large quantity of arable land, only 5.2 million ha (11.9%) are grown yearly (FAO, 2018). The country also has significant ground and surface water resources with 2,600 km of river. These water resources are mainly constituted by the Niger and Senegal rivers and their streams, forming two basins with irrigable potential estimated at more than 2.2 million ha. Water resources are essential. The Niger and Senegal rivers and their tributaries flow across the country, covering 1,700 km (i.e., 40% of the total length of the Niger River) from east to west and 900 km (i.e., 53% of the Senegal River) (Ministry of Agriculture, 2018).

These two rivers supply an average of 70 billion m³ of water annually, although there are wide-ranging variations of 40 billion m³ in dry and rainy periods (Ministry of Agriculture, 2009a). Water from non-perennial sources, amounting to nearly 15 billion m³, is used for market gardening, drinking water for the population, and livestock farming (Ministry of Agriculture, 2018). The Inner Delta of Niger which extends over more than 30,000 km², is an ecological site with significant agriculture, fisheries, and herding potential (FAO, 2016). Mali also has incredible biological diversity, forestry and wildlife resources, extensive and

diversified livestock industry 7.1 million cattle, 19 million sheep/goats, 600,000 camels, and 25 million poultry (Ministry of Agriculture,2018).

But these significant potentials are not adequately exploited by the government. According to the FAO report of 2016, this is due to the shortcomings in financing the sector with family farming predominance. The bulk of agricultural practice in Mali remains traditional, where nearly all the agricultural activities are done manually and still household oriented. On the other hand, limited access to equipment and other resources, such as productive land, credit, inputs, and dependency on rainfall, make it difficult for farmers to improve their agricultural livelihoods despite the government's efforts to support the sector.

For example, the budget allocated by the government to support the Agricultural sector was around 193 million USD or 112.361 billion FCFA in 2011, including 62.828 billion FCFA for the agricultural sub-sector. This amount almost doubled as of 2021 (Ministry of Agriculture, 2018). Besides, in July 2003, heads of the African Union ratified the "Maputo Declaration on Agriculture and Food Security in Africa". The Statement included numerous crucial decisions about agriculture; foremost amongst them remained the "commitment to the allocation of at least 10 percent of national budgetary resources to agriculture and rural development policy, its implementation within five years, and to guarantee the development of the agricultural production of at least 6% yearly" (Assembly/AU/Decl. 7(II)). In line with the commitment made by African Union members in the Maputo Declaration on Agriculture and Food Security in 2003, the Malian government agreed to allocate ten percent of its national budget to agricultural development for five years.

The Malian government has increased the allocated budget to 15 percent in recent years (Ministry of Agriculture, 2018). In this regard, the state enacted several agricultural development programs and plans, such as the Agricultural Orientation Law AOL (2006), the Agricultural Development Policy PDA (2010-2013), the Growth and Poverty Reduction Strategic Framework CSCR (2012-2017), the National Program for Investment in the Agricultural Sector PNISA (2015-2025) among others.

Regardless of agricultural prominence, individuals relying on it for their employment, the powerful labour operating in that realm, and their impact on Mali's external trade revenues, the sector remains undeveloped and outdated in terms of agricultural innovation (Resonances,2006). As evidenced in her fieldwork in the Baguineda and Kati regions, the author observed that in these areas farmers use fewer modern inputs and largely depend on hired hands and human labour for their livelihood activities. Farmers in the conventional subsector make up only a minor fraction of the agricultural population with access to credit.

The shortage of innovative inputs and the scarcity of technology and agricultural credit in Mali's conventional farming sector prevail, preventing farmers from producing efficiently at scale and improving their livelihood activities (Traore, 2008).

An unavoidable consequence of this smaller farming production skill leads to low-income levels for many rural inhabitants who rely mainly on agriculture for their livelihood. Despite the government's attempt to transform the sector, expanding policy tools such as the Agricultural Orientation Law of 2006 and other rural development strategies mentioned above, Mali's agricultural sector remains traditional and basic, although it provides farmers with cash and food supplies to the entire country.

The Food and Agriculture Organization (FAO) also indicates that conventional and small-scale peasants do not generally have access to valuable assets, financial institutions, and machinery. They are also left out in the marketplace due to their lack of negotiation capability. Mali's case is not any different. So, Mali's agriculture needs to increase farmers' yields while also adding value to their local production. Mali farmers also need better food processing tools and techniques to safeguard food security and promote surplus export to other countries.

Furthermore, the kind of products Malian farmers can produce is determined by the type and quality of the soil. In many regions, the soils are primarily sandy, and, in the lowlands, they are subject to over-utilization and erosion. For example, only 0.65 % of cultivated land in the country is fallow, with sandy soil prevalence rendering farms susceptible to erosion (Ministry of Agriculture, 2018). These types of soils require good air circulation and drainage. Under these circumstances, only small amounts of plots are suitable for agricultural production due to desert conditions and the soil type.

As a result, agriculture in Mali is more focused on crops such as millet, maize, wheat, corn, peanuts, sorghum, and rice production. Irrespective of the plot size, millet remains the crop cultivated by a significant proportion of Malian farmers. Besides, most Malian farmers also perform market gardening, mainly for domestic consumption. Throughout Mali, only 12.38% of crops grown are meant for selling (the Republic of Mali, 2007b). Mainly, farmers produce to meet their household food consumption needs, and the remainder of their yields are traded to compensate for other family expenses.

The practice of agriculture in Mali is also exemplified by the low level of education of farm household heads, with only 12% obtaining a formal education (INSAT, 2016). The characteristics mentioned above illustrate general issues in terms of productivity and the style of farming that remains small-scale, family-oriented, and traditional with limited access to modern production equipment and tools, as previously mentioned. Yet, Mali's agriculture faces

another social challenge. That is the issue of gender equality in agricultural production and accessing scarce resources. Gender inequalities and imbalances pervade most farming communities. Malian society consists of several ethnic groups; these are either sedentary or nomadic in nature and are dispersed throughout the country. These ethnic tribes' three prominent production methods are farming, fishing, and herding. In addition, they practice handicrafts, commerce, and services, as explained earlier. These ethnic bands are conventionally characterized by an influential societal hierarchy where females, as mothers and spouses, identify and assume several responsibilities and positions.

Customary and religious traditions remain important factors in controlling women-men interactions in the household. With the gender division of labour, women's responsibilities are fundamentally recognized in reproduction, productive and community services, and men's in productive endeavours. These disparities and divergences in the gender division of labour create significant and heavy workloads for females and girls than men and boys with harmful effects on their health, productive activities, and living conditions (Geoforum, 2013). Moreover, sociocultural issues weigh strongly on females' status in the household and society and reduce their ability to make decisions and partake in public life on equal terms as men. These bias patterns lead to practices that make women vulnerable in the economic, social, and political spheres. These arrangements restrict their admission to economic prospects preventing them from building and attaining better financial independence.

These challenges are partially due to women's lack of education and representation in decision-making positions. As an illustration, the ELIM survey (2012) indicates the literacy rate for women is 21.5% compared to 41.5% for men. As of 2020, women's literacy rate in Mali was 25 percent compared to 46 percent for men (ELIM, 2020). This percentage is even lower in rural areas among women farmers. The proportion of literate people is higher in urban areas (53.2%) than in rural areas (21.6%) and in wealthier households (48.6%) than in poorer families (16.3%). This disadvantage affects girls compared to boys and is linked to the importance of marriage for young girls in most communities, resulting in early dropout from school due to motherhood. Regarding employment in the civil servant sector, men make up 85.5% of higher category A, while a significant number, 44.1% of women, are in the lower category B1 (ELIM, 2012).

As a result, in Mali, most women are employed in the informal sector, and their level of qualification is deficient. Women work in occupations or sectors with limited employment stability and at lower-level positions, with no prospect of career advancement and, consequently, no improvement in income. About 95% of working women are concentrated in

agriculture, livestock, fishing, trade, processing, domestic activities, hotels, and restaurant activities (INSAT, 2018). The COVID-19 pandemic further added hurdles to women's precariousness in the formal and informal sectors. Women's low level in skills employment, lower education level, inequalities in remuneration, disparities regarding time spent on unpaid domestic and care work, and precarious employment leave them at a disadvantage position in many respects compared to men before the pandemic. They further have weak access to credit and microfinance due to the size of their businesses and their financial inability to expand or develop them. These additionally impact women's land ownership and access to other productive assets.

The same situation holds true for their access to important decision-making positions. As of 2020, women represented less than 30 % in key strategic positions in the government (INSAT, 2018). Even though from 2012 to 2021, the percentage of women in ministerial positions tripled to nearly 29 percent from 9.5 percent beforehand. As a result of the quota law that was adopted in December 2015, more women have been appointed to strategic leadership positions (La Loi N°2015-052). Yet, gender inequalities persist in many socio-economic spheres of life (UNDP, 2021). Mali is classified 50th out of 52 in the Gender Equality Index in Africa, led by the African Development Bank (ADB). The Global Gender Equality index of 2021 further ranks Mali 34 out of 35 countries in sub-Saharan Africa. According to the Global Gender Equality index of 2021, Mali ranks 149 out of 151 countries (Global Gender Equality Index, 2021).

Gender inequality has implications for the agricultural production realm. This is because women represent a significant portion of the farming population as the labour force. Women farmers' access to resources, such as land, remains limited, representing a fundamental challenge to the sector's development. In Mali, land ownership and its protection are essential. Ninety-two percent of lands belong to smallholder farmers who do not hold any title deeds to their property (INSAT, 2016). Women farmers and other vulnerable groups bear the most of this consequence. Due to the land procurement structure, few women farmers take administrative procedures to legalize their land ownership. Seventy-five percent of agricultural land is allotted in the country according to the informal or customary tenure system (Ministry of Agriculture, 2018).

Even though Mali's secular laws remain equal between men and women in inheritance, traditional and Islamic law offers an alternative layer of regulations to men who oversee land access and tenure systems. For instance, under Sunni tradition, which most Malians identify with, women (daughters) might inherit land and houses. However, their percentages remain

less than their male counterparts—mainly women-owned, half the portions of what men inherit in Islam. In traditional practices, a woman loses her right to use and own land once she becomes married. These practices are justified with the arguments that males bear more responsibilities in providing food and financial assistance to their household members than women.

In contemporary Mali, women are as active as men in all economic domains, primarily in agriculture. Still, men dominate land access and ownership of farming land. As women farmers represent most of the active agricultural labour force, they should receive better land entitlement. If women farmers are offered more secure land and innovative farming inputs such as fertilizers, better-quality seeds, pesticides, and training in advanced agricultural practices, capital, land, and skills, such state, in theory, may lead not only to women's better well-being but to the overall agricultural production development. This is one of the questions the author raises in this thesis.

1.1.1 Mali's Smallholders' Farmers Characteristics

In Mali, most of the population is employed in the agricultural sector. Agriculture is primarily family-run and mostly rural (although there are increasingly diverse forms of semi-urban or urban farming), organized around family-owned farms. Currently, there are an estimated 900,000 family farms in all sectors which are the primary actors of agricultural development (EAC, *Enquête Agricole de Conjoncture*, 2015-2016). These farms are socio-economic entities or enterprises whose members are linked by family ties. Members jointly pool their resources such as knowledge, know-how, interpersonal skills, and potential, as well as financial and material assets, to primarily produce and satisfy the needs of the household and its members and then to create wealth through marketing the surplus. Hence, production is mainly oriented towards family nutrition, even if it does exclude surplus sales to meet other needs. This type of family farming is different from a commercial or private agricultural enterprise, where the relation between members is the provision of capital to produce wealth for the business owners (the financial resources stem from each shareholder's or a sole shareowner's contribution). This style of enterprise employs a paid workforce to ensure production. Family farms and agricultural enterprises are part of the private sector. They are currently being registered and recorded in line with the provisions of the Agricultural Orientation Law. Family agricultural enterprises are generally small and are characterized by their low level of equipment. They also face challenges in obtaining funding.

Moreover, self-employment is the main economic activity in rural areas, occupying 95% of rural workers engaged in agriculture. The 2015-2016 agricultural survey data (EAC,

Enquête Agricole de Conjoncture) indicates that Mali's farming population consists of approximately 13,669,508 people, of which 49 percent were females and 51 percent were males. Over 90 percent of rural households are headed by males. Agricultural households led by females are generally run by widows who retain only tiny plots of land. Yet, the active agrarian population is relatively young and primarily comprises females representing 51.6% of the rural population, 60% of the agricultural labour force, and accounting for 80% of food production (RGPH, 2017).

The average number of individuals in a Malian agricultural household is 11 people, with an extra three or more people in rural households in contrast to urban homes, which generally have eight individuals on average. Regarding the EACI (2014) data, there was a slight increase in the average household size between 2014 and 2017. In 2014, the average household size remained at nine individuals. A large household has a high potential for agricultural labour. According to the same data, the country's demographic structure implies that less than half of the household workforce is of working age. The labour force (15-59 years old) differs more between urban and rural areas. In Malian households, the demographic dependency ratio, which relates to the number of dependent persons (under 15 and over 59 years old) in the workforce, is 2.11 on average, which means that potentially active people in Malian households amount to 2.11 dependents (EACI, 2014).

This burden is higher in rural areas compared to urban areas. The dependency ratio is 2.18 persons for one working person in rural areas compared to 1.88 in urban households. In addition, the ratio of households headed by women in 2017 was nearly the same as that in 2014, when 5.8% of households had a woman as their head of household (EACI, 2014).

Regarding formal literacy, the level of education among Malian farmers remains low, as highlighted earlier. Seventy-four percent of heads of households have never attended any formal school. This situation is much more alarming in rural areas where most agricultural activity occurs. Indeed, only 15.37 percent of households have received a formal education and completed primary school (INSAT, 2016). A vital component of agricultural production is qualified human capital. There is a generational pattern benefiting younger individuals entering the farming sector. Heads of the household in the study areas have relatively low levels of education because they often belong to cohorts where fewer people have had the chance to attend modern school.

The enrolment rate is generally low in the age group forty-five and above, especially in rural areas; this could constitute a constraint in developing modernized agriculture since farmers' education level is a positive determinant of productivity (Kilic et al., 2013). Also,

gender disparities in education are relatively significant. For example, while both males and females are susceptible to formal education in rural areas, enrolled men are more likely to obtain a secondary education than women. In urban areas, females are more likely than males to get an advanced education than in rural areas, but their chances are still lower (Diakite et al., 2004).

In addition to human capital challenges, Malian farm households have limited access to the necessary infrastructure and services. These difficulties reflect the fragility of household living conditions and impact the practice of agriculture in the country. Seven out of ten households do not have access to electricity, with a similar situation regarding access to tap water (INSAT, 2016).

Water and electricity are essential resources for any agricultural activity. For example, access to electricity can reduce post-harvest and farm losses with the possibility of keeping production for a specific time. Being able to store farm produce also improves household income because it provides them with opportunities to store and market their produce at the right time once prices are greater. Electricity also makes it possible to expand processing activities for specific products. It improves farmers' profits since they can increase the quality of their yields to secure a substantial portion of the value added to their produce. It is essential to underline the country's rural electrification efforts, access to electrical energy in rural areas improved from 7 percent in 2014 to 16 percent in 2018 (Ministry of Agriculture, 2018).

As for water, which is an urgent input for agricultural production, the chance of developing facilities aimed at improving productivity, such as irrigation infrastructure, is crucial for rural development. Most of the country's farming endeavours are based on rainfall for farming activities. In some regions, farmers benefit irrigation programs from government institutions such as Office du Périmètre Irrigué de Baguinéda (OPIB) in Baguinéda, Office du Niger (ON) in Ségou, and Office de Développement Rural de Sélingué (ODRS) in Sélingué. In general, household access to water is higher in Mali than electricity. Only 30 percent of households are connected to piped water (INSAT, 2016). Such circumstances are incredibly difficult for women and girls who walk long distances to fetch water.

Furthermore, there are disparities between urban and rural areas in the type of occupation. In the employment-population data, individuals aged 15-39 years in rural areas are involved in agriculture (including livestock farming, hunting, forestry, and fishing) as their primary occupation, without distinction of gender. In urban areas, on the other hand, the state of immediate employment is more heterogeneous. The service sector employed most of the urban population, followed by mining, industry, construction for men, and agribusiness

activities for women. Agricultural activity remains the key sector in rural areas, while the service sector is important in urban areas. Farming in the peripheries of urban areas as a secondary activity becomes more important, especially for women.

Poverty in rural areas remains widespread and profound. It is estimated that 53% of rural people are poor compared to 11% in urban areas. This number is increasing in recent years as around 80% of rural household residents live below the poverty line (INSAT, 2018). The main factors contributing to high poverty levels include enormous household size, shortage of employment; the paucity of schooling; lack of access to marketplaces; inadequate roads, and infrastructure, and insecurity triggered by terrorism and climate change (INSAT, 2016).

Some scholars (Makhura et al., 2001) indicated that most disadvantaged farmers remain excluded from conventional farming and exercise subsistence farming in crowded regions and on infertile plots. This type of survival agriculture is characterized by small production, inadequate access to farmland, unavailability of inputs, more importantly, inadequate access to credit. Smallholder agriculture in Mali is related to insufficient value addition since most crops are marketed as unprocessed raw materials. Due to their small size and limited production, most small-scale farmers fail to meet the growing domestic and international market demand for products (Ministry of Finance, 2012).

The challenge of less production and low farming productivity of conventional farmers remains a worldwide issue obtaining growing interest from scholars, development organizations, and government heads (Chambers, 1983; Kahn, 1978; Norman et al., 1979; PAO, 1985; International Fund for Agricultural Development, 1984). Lessening the challenges encountered by smallholder farmers in Mali could expand the development of the agricultural sector and the country's financial growth strategy.

1.2 Literature Review

1.2.1 Women in Agriculture in Sub-Saharan Africa and their Land Ownership

Women represent an enormous and significant group of peasants who have been slightly overlooked in agricultural-dependent countries. The Economic Commission for Africa estimates that females in Africa contribute, on average, 70% of the labour for food production, 100% to food processing, 50% to livestock breeding, and 60% to marketing (Cloud, 1986). When households led by women are counted, the overall female involvement in agriculture will be even higher in all developing nations. According to the same report, data from many sub-Saharan African countries reveals that rural women participate considerably in their households' support. Their contributions to family expenses are outstanding in lower

households. Yet, women tend to have fewer assets, tools, and farm inputs than males. Few women own or have title deeds to the land they cultivate throughout the developing world. Access and ownership of land are affected by strong hierarchies based on age, gender, and ethnicity, which determine access to land and natural resources (Chauveau et al., 2006; Lund, 2006).

Women's lack of land ownership is more noticeable in developing countries, where landowners embody less than 30% of overall landholders. Still, this gets essential distinction throughout the world, though the bottom rates are unevenly noted in Sub-Saharan Africa and South Asia. Rich nations also have some incidences of woman landownership limitations. The United States, United Kingdom, Norway, and Finland have shared below 15% (World Bank, 2008).

Ester Boserup was one of the first pioneers of development studies to lure the world's attention in 1970 with her experimental research on economic development. In her study, she focuses on women's substantial and diverse roles in agriculture. She also highlights the progress made in making women's responsibilities and contributions in agriculture more perceptible in developing countries (Boserup, 1970).

In most of sub-Saharan Africa, women work as autonomous labourers on their farm plots, handled by themselves or with their children's help. They also provide labour on their husbands' plots. Altogether, estimates indicate that women encompass 46% of the agricultural employment force in sub-Saharan Africa. Yet, their decision-making process and control over their income are mainly dependent on their husbands (Agrawal, 2001; Ruth Suseela, Meinzen-Dick, 2011; Quisumbing & Pandolfelli, 2010).

For a long time, sub-Saharan African countries' public development policies and donor agencies for agricultural and rural development strategies granted less attention to female farmers' essential role (Boserup, 1970). They have given less attention to lowering rural women's farming constraints, enabling them to enhance their yield as part of their development policy. Governments and their partner interventions recognized women's role as more household-oriented rather than economic producers. They either disregarded women's responsibilities utterly or endowed them with information and training about their household production functions and not on their financial roles (Rekha Mehra, 1995). Governments in developing countries presently admit that women contribute significantly to agricultural production throughout the developing world. Even in communities where women are isolated, they continue to participate in farming activities with fewer resources.

Resources stand as the shares of assets that give women opportunities to partake in economic, social, and political changes to be productive and defend themselves from breakdowns (Moser,1993). Resource access and control are essential in the process of empowerment, in which power stems from a combination of resources (Giddens, 1984). Nonetheless, there is a gender prejudice regarding women's land ownership and access to agricultural resources. Women are regularly discriminated against in maintaining land privileges which remain essential for their human security and growth (Tinker, 1990). Inequitable gender relations and women's precarious entitlements to land and resources prohibit them from decision-making over land and natural resources usage. These disparities lessen women's secure rights to resources, aggravating difficulties based on inadequate rights (Kariuki & Place, 2005).

Although existing laws defend women's claims, a lack of legitimate understanding of their entitlements and inadequate application of the regulations can lessen women's capability to use these entitlements (Djiré et al., 2010). Likewise, when they can own land, insecure tenure rights lessen women's agricultural production in the long term (Tsikata, 2016). Besides, women receive less access to hired farm labour, agricultural extension agents and services, inputs, and labour-saving skills (Rekha Mehra, 1995). They additionally obtain lesser revenues and output gains from these elements (Agrawal, 2001; Ruth Suseela, Meinzen-Dick, 2011; Quisumbing & Pandolfelli, 2010). The lower efficiency in distributing assets is related to gendered norms and institutional limitations (World Bank, 2014). The study argues that there is a correlation between women's empowerment and their access to means and factors of production. Identifying the role played by agricultural cooperatives in addressing some of these concerns is the core of this research.

1.2.2 Women in Agriculture in Mali and their Land Ownership

Mali shares the characteristics mentioned above. Women outnumber men in the age groups between 15 and 59, i.e., in most age groups comprising the working population in farming. Mali's population is primarily rural, and women represent more than half of this population and play a prominent role in the economy, although they remain passive workers. Women make up 51% of the active economic population in Mali, and of these, 74% work in the agriculture sector (RGPH, 2017). Several studies on women in Mali's agriculture acknowledged females' role in farming and rural development. In this line, reports from the World Bank, and the FAO purport that females represent 70% of the farming labour force, 80%

of food manufacturers, 100% of processors, and perform 60% to 90% of marketing activities (World Bank, FAO, 2018).

As wives and mothers, women are at the heart of family farms. They grow individual food stocks through their vegetable gardens, which are ultimately used for family consumption. Additionally, their indispensable role in processing and marketing agricultural products provides profitable resources for the household. These roles de facto confer rural women a leading position in agricultural production. Despite this vital function, women remain structurally excluded and vulnerable due to their poor access to means of production and services. Women farmers generally encounter structural exclusion embedded in the socio-cultural organization and patterns of communities in which they live.

For instance, women generally operate as workers on their spouses' or fathers' land. The productivity generated by collective fields handled by men is assumed to meet the demands of the whole family. So, in this case, it is said that women do not need individual plots. To fulfil their personal needs, women are given access to small parcels of land for market gardening purposes, or they collect products from trees (such as shea nuts), which they process for sale or consumption. Accordingly, in Mali, there is a traditional division of farm labour by sex in most rural areas; the tasks performed by women and men change substantially between and within regions and by agroecological zones all over the country. Women's involvement in farming also alters over time due to current demographic, political, and economic changes after the 2012 security and socio-economic crisis (Diallo, 2021).

Women's land access and control are not homogenous in Mali. It differs according to the location, ethnicity, the farming system, the economic stand of women, and each community's political and cultural arrangement. Urban areas have no discriminatory gauge for housing plots; the sole challenge remains women's financial inability to buy them, which is generally lower than their male counterparts. In non-agricultural communities like some northern Mali regions where huge exploitable farming land exists, the plot goes to the entity that wishes to farm on it. These regions face no challenge in acquiring farming land. Both men and women hold equal access to land since very few individuals practice agriculture due to desert conditions. Once individuals obtain land, they can pass it on to their families (Niare et al., 2017).

While in rural areas of the southern parts, land access, distribution, and management go to the first family that occupied the locality. They can also pass the right to cultivate it to other people while maintaining their property rights. The household receives land use rights from the ownership family. Family farmlands are usually managed by the household heads, mainly men

who handle the production and oversee revenue expenditure. Prevailing conventional and customary patterns of the south deem men as heads of households and the sole providers for their family's food needs. These practices value and prioritize men's needs by assigning both farming and housing land to them to meet their household's consumption requirements. So, women farmers in agricultural societies usually gain admittance to land through their matrimonial family or via their cooperatives' membership. Hence, women still encounter challenges in accessing and owning land. As an illustration, in 2012, less than 20 percent of women were landowners throughout Mali (CPS/SDR, 2012). Even when women can access land, they are often granted infertile plots.

In farming societies, some plot types, such as rice fields in less developed grasslands or market gardens, are solely grown by women. In Mali, market or vegetable gardening activities take different sizes and forms depending on the area. They are small markets or vegetable gardens found near the homestead land; they lay mainly on roadsides or edges of fields. Almost every household in agricultural societies practices market gardening as a supplement to family agriculture. Market gardening also provides households with daily food needs. Such gardening requires less economic resources, using locally available plants, materials, and indigenous farming methods (Diallo, 2021).

Women are often engaged in vegetable gardening, which improves domestic and intra-household food security throughout the year. Market gardening remains a significant agricultural activity, particularly for women, providing their household necessities and cash. Subsequently, it can be an income-generating activity for women if surplus vegetables and fruits are left. They are taken to markets for selling, which give women extra money to compensate for household needs (Diallo, 2021). This practice also allows women to supplement the household's nutritional needs, mainly during the offseason.

Moreover, market gardening tends to be side-lined and perceived as unequal, small, and a supplementary activity to rural production. Such beliefs, in turn, lead to an underestimation of the crucial role of vegetable gardens in national food production. Consequently, women's market gardens tend to be more deficient in soil quality and are smaller and more isolated than those cultivated by men (Momsen, 1988). Conventional practices grant married women control over these lowlands or small market gardens, which may be passed over to their daughters-in-law from one generation to the next.

Land ownership in Mali is thus exemplified by a high concentration of agricultural land among men in farming communities. Men traditionally have absolute control over land as women's access and control depend on men. Customary and inheritance rituals are typically

defined by traditional and religious rules, which award land privileges to husbands, brothers, and sons rather than wives, sisters, daughters, or widows (Djire, 2012).

For example, most women farmers still cannot own land or other agricultural resources in most farming communities. Ninety-two percent of landowners in rural areas still do not hold any title to their property; women and the young suffer the most (Oumar et al., 2017). Still, women cannot traditionally own land; they can cultivate or utilize land temporarily. But land can be retrieved from them at any time, thus preventing women in rural areas from investing in land development projects such as irrigation, fencing, or tree planting (USAID, 2010). To improve their land tenure security, women often create associations and appeal that private land or community land be allocated to them for their collective use, often for communal gardens or fields (USAID, 2010, p. 52). Scholars like (Agarwal, 1994; Kevane, 2004; Lastarria-Cornhiel, 1997) maintained that Malian women are often disadvantaged by statutory and customary land tenure systems, resulting in their weak control over land and property rights, among other natural assets. In cases where prevailing legislatures defend females' property rights, inadequate information and insufficient application of these laws constrain their capacity to implement these entitlements.

Facing these challenges, the Mali government, from its independence has established and continues to institute several strategic frameworks aimed at empowering and advancing women's status so that they can fully participate in the country's development. For example, Article 2 of Mali's Constitution of February 25, 1992, stated that "all Malians are born and remain free and equal in rights and duties. Any type of discrimination based on social origin, colour, language, race, sex, religion, and political opinion is prohibited". Malian constitution establishes the principle of equality and non-discrimination (Articles 1 to 21) and thus guarantees men and women equal rights and freedoms.

The government further instituted the National Program for the Abandonment of Excision in 2002; the adoption in August 2001 of a new Civil Code with new provisions relating to the protection of women in war crimes, crimes against humanity, and child trafficking; the adoption in 1992 of a trade code abolishing a husband's consent for married women to engage in commercial activities; the adoption of Ordinance No. 92-024/CTSP of May 12, 1992, on income and salary taxation for paid women, which aims to reduce tax burdens on women due to their high birth rate (Ministry of Women and Children, 2010). Mali also initiated the national gender policy to decrease gender inequalities (PNG, 2011), and recently law 052 which encourages women's representation in decision-making stances (Oumar et al., 2017).

It should further be noted that Mali has ratified international conventions on women's rights. These include the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in September 2000, and the additional Protocol on the Charter of Human and Peoples' Rights of the African Union, adopted in July 2003 in Maputo, on the rights of women. This protocol committed states to eliminate all discrimination against women. Moreover, Mali reiterates the principle of gender equality promotion enshrined in the Constitutive Act of the African Union. It also stresses that women's rights are recognized and guaranteed by all international human rights instruments and recognizes the crucial role of women in safeguarding African values.

Despite the government's commitment to improving the status of women, Malian women are still subject to legal and social discrimination. As explained earlier, women's status is also affected by poverty (with Mali ranking 179th in human development) and by the weight of its cultural and religious traditions and values systems. Malian authorities often justify their failure to carry out reforms to end discrimination against women in all areas, particularly in agriculture, by referring to religious and customary practices. In theory, these laws and strategies aim to enhance women's abilities in all spheres of life, including social, economic, and political inequalities between males and females. The application of these laws and policies is not fully implemented.

Besides, ambiguity, rapid shift, and disagreement denote rights to land in rural, urban, and peri-urban areas throughout contemporary Mali persist. Recent plot sales at the periphery of Bamako have instituted concerns where traditional and statutory property tenure co-existence has triggered uncertainty in property schemes (Arko-Adjei et al., 2010; Dauvergne, 2010; Gough and Yankson, 2000; Mabogunje, 1992). Both traditional elites and government officials claim the land. For example, the first-comer status and lineage are more critical in rural areas, while payment and certifications are more useful in urban areas (Lund, 2007).

Due to structural adjustment programs and market liberalization of the early 2000s, land and labour are steadily expanding into commodities. Devolution raises social disparity as some groups get limited access to power and assets, including land (USAID, 2010). As the USAID report acknowledges, the decentralized, elected leaders dealing with land disputes might promote new egalitarian policies. Poteete and Ribot (2010) argued that newly appointed local leaders chose to conduct decentralization amendments, leading to dominance and marginalization. In such cases, marginalized rural women are often ignored by customary and statutory land rights. In this situation, women can find themselves entirely dependent on their husbands (Argawal, 1997).

In regions where agricultural production is the main economic activity, farmland is becoming scarce due to climate change and rapid urbanization. The remaining farming land available is no longer sufficient to fulfil the needs of an expanding population. In this vein, women can neither easily own land nor use it. Individuals with the ability to make decisions can command and exercise their power, applying the smartest approaches to achieve their interests within this context. This is often attained at the disadvantage of the less informed, less educated, and less powerful group, i.e., women.

Lack of land access equally affects entry to additional valuable assets, particularly credit; sometimes, water and grazing entitlements. In De Soto's work "The Mystery of Capital" (2000), he supports the notion that "dead" investment turns into "living" while reinforcing de facto property utilization in rural settings where farming remains the prominent type of activity. If government-approved documents certify the right to a particular property or parcel of smallholder farmer's shares', this could encourage the needy rural farmers by allowing them the ability to utilize their property as a guarantee when accessing credits (Bassett, 1993; Benjaminsen et al., 2009; Toulmin, 2008).

Based on the evidence mentioned above in the literature, the study contends that inequality between men and women persists in Mali's land ownership. It is essential to lessen this gender gap regarding women's land privileges and access to other agricultural resources. In theory, women have the right to land in Mali, but they are sometimes deprived of it in practice. Understanding the role cooperatives play in addressing the challenges women encounter in land ownership, accessing inputs, markets, subsidies seeds, fertilizers, and equipment can add supplementary income to female farmers' livelihood activities. If women farmers are given better land title ownership, offered essential sources of production, better education, and training, they could increase Mali's economic development.

Promoting gender equality in accessing agricultural resources stands not only as a women's human right; it is also a driver for socio-economic and sustainable development. Closing this gender inequality gap will have vital socio-economic impacts on women, families, and communities. Studies have revealed that lessening gender disparities encourages economic growth, decreases poverty, closes production gaps, particularly in agriculture, substantially affects maternal and child health expands prospects for future generations and reinforces political and social structures (World Bank, 2012; Ellis et al., 2006). This indicates that women's full inclusion in rural economies through equal land ownership and access to other resources ensures healthy, balanced, and profitable sustainable growth for families, communities, and the entire country.

1.2.3 Agricultural Cooperative and Rural Development

An agricultural cooperative is a peasant organization that enables its members to have better access to marketing, food processing services, tools, and farming inputs for production through collective action (Diallo, 2021). The term agricultural cooperative is used in this study for any rural or urban association that conducts any joint activity to serve its bodies without hurting others. Furthermore, cooperative principles are stated in the regulations in which organizations exercise their ideologies. Cooperative organizations must complete specific guidelines or attributes that distinguish them from other small businesses or corporations.

Theoreticians and practitioners approved seven principles, which are: “Voluntary and open membership, democratic member control, member economic participation, autonomy and independence, education, training and information, cooperation among cooperatives, and concern for the community” (ICA, 2005; Diallo, 2021). The achievement of any cooperative organization primarily relies on these ethics. There is empirical evidence that cooperatives assume a vital role in facilitating, organising, and incorporating small farmers and entrepreneurs in countries like Canada, Spain, Italy, India, and Bangladesh, thus providing them with some prospects to join the mainstream economy (Chauke et al., 2013).

To eradicate poverty and create jobs, cooperative expansion is intended to support underprivileged groups (Sebonkile C. Thaba, 2015). Cooperatives have been a tool to raise women’s human capability and increase the self-confidence, awareness, and skills that they intrinsically hold (Tesfay and Tadele, 2013). Studies also indicate that women’s participation in lucrative cooperatives is recognized as an actual interference policy for poverty mitigation in households (Raniga and Mthembu, 2017). The World Bank acknowledged in 1954 that the cooperative movement could lay sturdy structural foundations for agricultural development (Hussi et al., 2011). Agricultural cooperatives are also known to be a catalyst for farmers’ empowerment in rural areas. There is an ever-growing prominence of the role of farming cooperatives in carrying out and promoting rural sector development and improving the marginalized peasant groups (Belloncle and Marcel, 1953; Develtere, 1993; Bijman et al., 2012). A wide range of literature on agricultural cooperatives’ efficiency reveals that cooperatives positively influence farm profits and income (Filey, 1929; Hussain, 1973; Mann, 1978; Naghizaden, 1984; Zeuli, 2004; Onumah, 2007).

Primarily, cooperatives provide access to protected markets in the long term, thus protecting independent producers from big and powerful commercial or industrial corporations (Boger, Boger, and Silke, 2001). Secondly, cooperatives might also offer services unavailable to farmers or only available at a high cost. They can counteract power and go beyond particular

economies of scale. Additionally, cooperatives stand as competitive yardsticks for non-cooperative, conventional companies (Beckmann and Boger, 2004). Thirdly, cooperatives may improve technological and market efficiency through a progressive enhancement of value-added activities. Fourthly, they might reduce and adopt transaction (e.g., information) costs, with an improved flow of information on customer requests while enhancing relationships between clients and producers. They also strengthen decision-making among two or more levels of the marketing network (Szabo, 2010). The use of cooperatives as governance structures also helps avoid (ex-post) hold-up problems in perishable foodstuffs and various asset types (Hakelius, 1996). Lastly, cooperatives could raise their members' revenue by lessening transaction and production expenses and repaying the surplus made at another level of the marketing network to the associates (Forgács, 2008). The data also indicated that cooperatives give voices to peasants within their localities, improve their access to credits, and connect them to marketplaces by lowering operation expenses (Delveltere, Pollete, and Wanyama, 2008).

Facing the challenges mentioned in the literature above, the author found some encouraging signs of individuals coming together to defend their rights and appeals to land as well as other resources in Mali by joining agricultural cooperatives. Through cooperatives, producer organizations or unions strengthen the potential of small-scale farmers (men and women) to collectively assert their privileges over land and access other resources (Zallé et al., 2003). Some marginalized groups are beginning to confront the conventional hierarchies through cooperatives, including women and men of low social status (USAID, 2010). There has been a rise in the cooperative movement in Mali to change discriminatory practices in accessing agricultural resources. Since August 1991, political parties in Mali, peasants, scholars, and worker associations wrote a constitution that became the new legal structure tackling property rights. The Malian government has since 2001 been promoting farmers' associations, such as agricultural cooperatives. It is predicted that cooperative membership could improve small-scale peasant involvement in decision-making, access to agricultural resources effectively, and increase development in farming regions (Chirwa et al., 2005).

The impact of cooperative membership on females' access to farming resources, mainly their land ownership, has occasionally been documented. Literature in Mali rarely reflects other entities such as women groups or cooperative movements as catalyst organizations in improving their members' resource access. In this regard, few of the existing literature in Mali explicitly assesses the impact of women's participation in cooperatives as a means of boosting their land ownership and access to other agricultural resources. This research aims to fill that

gap by understanding this less-examined aspect of rural farming. This study aims to examine how agricultural cooperatives support small-scale female farmers' access to farming resources and encourage the rural sector's development. In this analysis, the thesis will assess agricultural cooperatives' impact on facilitating women's land ownership in three southern Mali areas (Baguineda, Bamako, and Kati). This will be attained through appraising their contributions in addressing small-scale female land access and ownership, access to credit, seeds, fertilizers, equipment, market, and decision-making processes.

Since Mali's government acknowledges the agricultural sector's importance in its economic and social stability, there is growing attention to agricultural cooperatives in Mali. This involves the necessity to conduct a gender need assessment exploring the function and sustainability of farming cooperatives in state policies and in empowering marginalized groups. In that regard, an in-depth analysis of the roles of agricultural cooperatives in improving their member's land ownership and access to resources under diverse conditions will be examined. Mainly the extent to which women's participation in agricultural cooperatives has enhanced their land ownership and facilitated their access to other productive farming resources that could expand their income and empower them within their families and communities. To integrate small-scale woman farmers into the country's economy, agricultural cooperatives are being endorsed by this study as an essential tool in tackling the challenges encountered by women to advance the traditional farming sector in the Southern Mali regions where the survey was conducted.

1.3 The Objective of the Study and Research Questions

The primary goal of this study is to examine the role agricultural cooperatives have played in supporting female farmers' access to land and ownership rights, access to credit, seeds, fertilizers, information, equipment, market, and decision-making powers in Mali. This study focuses on three agricultural sites, namely Baguineda, Bamako and Kati areas. More precisely, the survey seeks to explain the major characteristics of agricultural cooperatives and women farmers' participation in these organisations at the study sites.

Thus, this thesis examines how agricultural cooperatives have contributed to women farmers' income generation activities; their major constraints in owning land; access to decision-making positions; credit, market, seeds, fertilizers, and equipment in the three areas of study. The following questions are raised and will be answered in this dissertation to examine these aspects.

- 1- What role have agricultural cooperatives played in addressing the constraints that female farmers faced regarding land ownership, accessing credit, seeds, fertilizers, markets, and equipment in the study areas?
- 2- What approaches and strategies did women take that led to their empowerment within the cooperatives?

There is growing acknowledgement that if developing nations have to accomplish enduring and sustainable growth, particular interest must be accorded to the transformation of conventional smallholder farmers to increase their farming productivity (Kahn, 1978; Norman et al., 1979). Given that women farmers represent the primary labour force in the agricultural sector in Mali, meticulous interest must be given to them. The study argues that conventional smallholder women farmers' needs should be addressed through a development policy. Accordingly, agricultural cooperatives are prone to achieve that goal while promoting their government's agricultural growth strategy. Since few studies have been conducted in Mali to assess agricultural cooperatives' role in enhancing female farmers' land ownership and access to other farming resources, the knowledge generated by this study will be valuable to cooperative organizations and the government. It will also benefit non-governmental organizations that work with agricultural cooperatives to help them confront their challenges and be more knowledgeable about issues at the grassroots level.

By carefully investigating the role of agricultural cooperatives in enhancing smallholder female farmers' land ownership and access to other agricultural resources in the Southern Mali region, this study will make policy recommendations that can assist in supervising government strategies in using cooperatives as a platform for rural development and women socio-economic empowerment.

The analysis will also provide insights into development interventions in other emerging states with similar cases to Mali, agencies, and individuals concerned about smallholder rural farming development. This will also lead to the acute vision of bolstering poor farmers, primarily women farmers' empowerment while increasing their productivity and land ownership. The data obtained from this analysis will help and support the cooperative organization to better manage and assist female farmers and contribute to Mali's poverty reduction development plan. Furthermore, the knowledge gained from this research will serve as an initiation for further research regarding issues encountered by agricultural cooperatives in Mali. Lastly, the findings will be utilized to understand small-scale female farmers' collective struggles in other developing countries.

1.3.1 Limitations of the Study

This study evaluates the impact of women's membership in agricultural cooperatives in facilitating their land ownership and access to other agricultural resources in the Baguineda, Bamako, and Kati areas. The study was limited to smallholder farmers as members of cooperatives, involved mainly in agribusiness activities. Even though small-scale farmers' members of agricultural cooperatives remain scattered all over the country, this analysis has only emphasised on Baguineda, Bamako, and Kati sites. This implies that the study's findings are built on the areas stated and cannot be generalized to other parts of Mali.

1.4 Analytical Framework: Concepts, Ideas, and Theoretical Assumptions

Regarding the challenges women farmers in rural Mali have faced, the author developed a research question on whether women's involvement in rural and urban cooperative activities has empowered them. The author's inquiry is whether women's cooperatives could transform the prevailing unequal power structure of the farming societies in Mali. This research will address the possibility that such women's activities might lead to women's social, political, and economic empowerment in the agricultural sector.

In Mali, government and community representatives are constantly working to address important and complex issues in farming. These problems include desertification, climate change, land scarcity with rapid population growth, growing economic inequality, social insecurity, and their precarious impacts on human lives.

Government interventions generally focus on drafting policies and strategies to tackle those challenges. Yet, when entities face a hard choice in complex situations, better decisions and efficient action come from local knowledge and communities. This bottom-up approach has triggered the need to pay more attention to community engagement in decision-making processes. Governments realize that integrating local people, their values, and principles into their decisions could enhance the prospect of community approval of government intervention in local activities. This approach also involves other stakeholders and non-governmental organizations cooperating with local people to attain long-term and viable results in addressing their issues.

In this vein, the current analysis examines the influence of women's collective engagement in agricultural cooperatives on their overall empowerment. How were the cooperatives created, administered, and what reasons inspired women to join cooperatives? What type of transformations did the cooperative's involvement add to women's life regarding their personalities, capacities, responsibilities, socio-economic situations, and political

challenges? These questions will guide this analysis. The survey adopted a conceptual framework based on existing literature to answer these questions.

This section explores the theoretical and conceptual frameworks used in this analysis. The concepts lay in women's agency and empowerment achieved through bargaining and collective engagement. The section will highlight definitions of these concepts and the major theories discussed by scholars on them. It will further shed light on these theories' discourses and challenges in achieving women's agency and empowerment within groups. How women gained and developed empowerment and agency skills leading to their improved land ownership and access to other agricultural resources, will be explained. The last section will cover the conceptual framework adopted in this study, driven by agency and empowerment theory in enhancing women's access and control of agricultural assets.

In feminist studies, many scholars have debated the concepts of empowerment, agency, equality, and participation (Sachs et al.,2010). Marginalized groups are often active in organizing, empowering, bargaining, and engaging together (Coles and Mitchell 2010; Majurin, 2012). The author in this part reviews these concepts to determine their applicability from a gender perspective whilst considering different authors' viewpoints.

1.4.1 Women's Agency, Access to Resources, and Empowerment

- **Agency**

Agency implies the capability to act out, to be able to recognize essential goals in one's life and have the capacity to act on these aspirations no matter what one might confront. When people can perform that ability, they employ an agency. The ability to perform can merely be recognized in the framework of collective constructs in a specified time or circumstances as realities vary from and within countries, communities, organizations, factions, ethnicity, and cultures.

Accordingly, Amartya Sen (1985) described agency as what an individual is free to do and accomplish in quest of whatever objectives or ideals, they consider essential. In this line, agency necessitates the capability to confront barriers, question or challenge subjugation and deprivation conditions, and, as entities or together with others, impact and make decisions and be considered in society.

Theoretically, women's agency stands as the procedures applied regarding decision-making, mediation, and necessary influence for them to advocate and utilize assets (Kabeer, 2001). Yet it is tremendously challenging for disempowered people or groups to use their agency efficiently in practice. The difference between usual and rational choices when

assessing agency becomes significant. Standard choices undertaken within habits and customs can be contented but hardly grant new or progressive agency stages (Kabeer, 2001).

Employing agency to analyse women's empowerment is useful. It leads to the following two questions:

- a) *Does an individual's ability to make efficient choices depend on their activity?*
- b) *Does personal agency attainment depend on their degree of involvement in collective engagement?*

The current study attempts to answer these questions.

The query is how agent experiences differ based on circumstances and where she is, such as the household, village, town, market, or administrative office. As Kabeer maintains, women's performing agency is influenced by various conditions, which may change their understanding of possibilities and alternatives or empower them to change their subordination conditions (Kabeer, 2008).

Alkire (2008) also illustrates women's agency in spheres as domains. The domains chosen to evaluate women's agency comprise choices encompassing sexuality, marriage, motherhood, and the practice of reproductive rights; making decisions in the household; involvement in labour, land, and markets, with participation in political affairs and decision-making stances. The individual agency remains unpredictable; when less essence and impact exist, as such, females' empowerment can be assessed when it influences agents' life choices at the personal level (Alkire, 2008). In this regard, an actor's agency can be discussed and renegotiated as it is not stable. It remains crucial to contemplate what women might or might not solve from the existing challenges through their exercise as agents.

Agency operationalizes the notion of choice. It implies the capability to identify one's aspirations and work on them. It goes beyond the visible behaviour to incorporate connotation, motivations, abilities, and resolution that individuals give to their action, "their sense of agency" (Kabeer, 2008, p. 20). Agency also emphasizes the intertwining roles of ethical and material elements in creating these structures and the significance of regulations, norms, and traditions related to kinship and the family. Women's empowerment necessitates transformative agency (Kabeer 1999; Gasper and van Staveren, 2003). The transformative agency is not achievable without improved personal and collective engagement, without awareness regarding social viewpoints and how these depict one's identity, responsibilities, and duties.

Accordingly, as Kabeer notes, collective engagement is also vital for transformative agency and questions shared opinions and rules that disempower females (Agarwal 1997; Kabeer, 1999). Ferguson and Keep also argue that agency through collective engagement

promotes females' empowerment characteristics and offers the ground where community patterns such as gender roles are challenged (Ferguson and Keep 2011). When females gain agency skills, they are likely to have connections, exchanges, and negotiations regarding duties, and privileges and probably change gender roles in the family and cooperatives. Cooperative groups' capacity to empower females depends on women's capability to efficiently use their agency skills to contribute to collective engagement regarding their control over valuable assets and their entry into decision-making processes and responsibilities (Coles and Mitchell 2010; Majurin, 2012).

Since females' interactions with household members, labour force, and state structures involve diverse and conflicting patterns that change depending on women's class, status, age, background, and other characteristics, how entities interact with others, such as household members, colleagues, and social patterns, are influenced by gender roles. These dynamic forces are not separate from social constructions and institutions (Connell, 2000). Connell (1987) argues that agency and structure linkage is significant because women's agencies can alter arrangements.

Structural forces have contradictory impacts on females' existence in various collective backgrounds. On the one hand, they might enable equality, empowerment, and agency to some extent while cultivating discrimination on the other hand. To be independent, an individual must understand her agency's perception, which does not imply power over others. That attitude is only achievable within a structure of interactions favourable to self-sufficiency. Roberts (1989) investigates an individual's connection to power structures, regulations, guidelines, meaningful beliefs, access to valuable opportunities, material assets, and security. Independence is thus identified as being either nurtured or improved by one's connection to sources of government, social resources, and capacity (Roberts, 1989).

The regulations and assets entitled to the person remain tightly built on social constructions' transforming attributes. Capacity for agency differs from females' relationships to the structural policies and resources since the agency is established in intersecting cultural, social, economic, and legitimate structures (Bourdieu, 1977). As Bourdieu (1977) contends, several constructs exist within communities, and individuals' relationship to these arrangements during their social interaction changes and impacts their group and agency level. Another aspect to be considered while analysing agency is the role of formal and informal institutions. By creating the rules of games for agency application, institutional rules control agency efficiency to a larger or smaller range (Connell, 2000).

To prevent issues, these guidelines can also affect the accumulation of promises of resources and regulate the value of these profits. Similarly, collective engagement principles and formal institutions also play an essential role in people's choices about their lives. General illustrations comprise the state's legal framework, tax guidelines, and local government regulations and rules. These include the way indigenous groups or resources like land are administered. It also involves the process of conflict resolutions between formal and informal institutions, mainly the legal extent, where rules and regulations are regularly prescribed. Yet, in practice, they denote inconsistent or imperfect handling in their defence of marginalized individuals (Roberts, 1989).

- **Access to Resources**

Individual or group agency is generally foreseen based on their asset endowment. Assets are the shares of resources that give agents prospects to utilize economic, social, and political changes to be productive and defend themselves from shocks (Moser 1998; Swift, 1989). Resource access and control are essential in the process of empowerment, in which power is assumed to stem from a combination of resources and regulations (Giddens, 1984).

African women's inadequate access to productive resources regularly restricts their chances to contribute to collective engagement, ignited by patriarchal systems (Ruth Meinzen-Dick and Margreet Zwarteveen 1998; Chris Penrose-Buckley 2007; Degnet Abebaw and Megbib G. Haile, 2013). Females are regularly confined to a cultural setting where they see their disempowerment as expected and appropriate (Kabeer, 1999). Naila Kabeer emphasizes females' capability to implement strategic life choices in three discernible and interconnected features: resources, agency, and achievements.

Kabeer (1999, p. 437) describes empowerment as the capability to implement choice and differentiate between resources, agency, and achievements (outcomes). According to Kabeer, these interconnected elements are essential for women to develop empowerment in their life cycles. Obtaining assets such as education and service skills is the primary step toward empowerment. Agency, women's self-control, and opinions over their personal decisions must go along with resources (Datta and Gailey 2012, p. 571).

According to Kabeer, "resources and agency produce individuals' capabilities: that is, their ability to live the lives they desire" (Kabeer, 2005, p. 15). These two should be supported by visible achievements or outcomes in women's lifetimes. As Kabeer asserts, "the word 'achievements' refers to how this ability is achieved or fails to be fulfilled; that is, the outcomes of individuals' attempts" (Kabeer, 2005, p. 15). Assessing specific, rigorously measurable outcomes for women's empowerment is impractical as power dynamics in each society change

over time, and what signifies empowerment can vary from one place to another (Datta and Gailey 2012, p. 571).

Kabeer also argues that it is impossible to split agency, resources, and achievements, which indicates that it is hard to interpret agency values per se. There are context-specific elements and limitations on choice involving poverty and access to essential services that affect alternative accessible resources to individuals. Sen (2008) describes these alternatives as capabilities in development as freedom. Altogether, resources and agency represent what Sen refers to as capabilities: individuals' ability to live the lives they want and attain valued senses of being and doing. Yet disparities in structural functions commonly appear in circumstances of acute inadequacy in entities realizing their capabilities (Sen, 1985).

Kabeer (2008) claimed that women's agency guides empowerment when it exercises, questions, confronts, or modifies weakening rules and institutions that maintain women's subordination. As a result, women can practice agency in various distinct ways. For instance, they can exercise choice as an individual or cooperatively within the family unit and through their involvement in markets, politics, and other formal and informal organizations like cooperatives. Nevertheless, admission to resources alone does not unavoidably translate to collective transformation (Marta B. Calás; Linda Smircich; and Kristina A. Bourne, 2009). It is contingent on females' aptitude to make independent life choices and manage resources, efficiently leading to achievements (Kabeer, 1999).

Traditionally engrained and patriarchal settings may limit women's agency, creating challenges in applying their economic prospects and individual capabilities (Sen, 1999). Females' involvement in collective engagement through cooperatives already emulates agency, reflecting women's willingness and choices to join in collective engagement. Hereafter, it is necessary to consider facts that preconditioned this attainment.

Women in varied geographical and traditional settings build distinct agency structures in reaction to prevailing rules and patterns. Individuals' responses can also provide the ability to alter the regulations that support females' subservience. They equally can be constrained or encouraged and established to restructure them for their benefit (Giddens, 1979; Hays, 1994; Misra & Akins, 1998; Sewell, 1992).

Based on these assessments, it can be claimed that agency is a must-possess skill for any individual with ideas and aspirations. At one point or another in our lives, we must be our agents by recognizing our goals and hurriedly working to accomplish them regardless of the challenges. The step one chooses to realize those goals are dependent on one societal structure and one ability to change those arrangements. Agents must hold a high level of consciousness

when they intend to transform the choices that give them access to resources and become better agents of change.

- **Empowerment**

The term empowerment has various meanings and interpretations. On the one hand, feminist scholars hold distinct definitions. On the other hand, mainstreaming complicated the term as feminist implications are usually absent in conventional organizations applying the concept (Kabeer, 1997a, 1999b, 1999c).

Originated from the 1960s Afro-American rights movements in the U.S. (Stromquist, 1995; Kabeer, 1997), the notion of empowerment was used by the Afro-American movement advocating for “black power” “to unite, to recognize their heritage, to build a sense of community... to begin to define their own goals, to bond their groups and to support those organizations” (Carmichael & Hamilton, 1967, p.44, quoted in Stromquist, 1995, p. 13). The connotation of power was employed in female movements in the 1970s, particularly by advocates seeking more than women’s empowerment in development and emphasizing equal opportunity to create a gender-centred viewpoint (Kabeer, 1997). Still, it can be generally argued that this empowerment method has arisen, helping third-world feminist researchers enhance individuals’ capabilities in changing their lives (Moser, 1989).

Besides, empowerment is characterized as an individual or a group’s capability and aptitude to make valuable choices and change those choices in needed actions and results. Empowerment also stands as entities’ view of themselves as capable, gaining the ability to take steps and “being able to maximize the opportunities available to them without or despite constraints of structure and state”(Rowlands, 1995, p.102). Rowlands further describes empowerment as “transforming social relations” (Rowlands, 1997, p. 131).

The concept also describes practitioner abilities that lead to agent emancipation when adequately utilized. This notion of empowerment is the anticipated outcome or consequence of social assistance intervention. A few authors include a social or community component to empowerment, arguing that individuals are endowed through sharing practices, increasing consciousness, collective engagement, and activism (Browne, 1995, p. 359). This empowerment paradigm supports an equal allocation of material assets and often implies statutory policy and structural changes as empowerment pathways (Townsend, 1998, p. 10).

Likewise, Stromquist (1995) stated that empowerment remains a procedure to modify the provision of power. Women must be the drivers of this procedure while behaving like their personal supporters; because the challenges and fundamental barriers they face are overlooked mainly by their nations, which primarily identify them as wives and mothers. Being the ones

who clearly understand their challenges, women must be the leading agents of empowerment. In this procedure, women's agency and awareness are essential to dismantle the structures and strengthen their repression (Stromquist, 1995). Stromquist also asserts that empowerment goes beyond a simple political involvement or awareness rising and needs cognitive, psychological, political, and economic elements (Stromquist, 1995).

Women's empowerment is also enlightened as "the process by which women redefine gender roles in ways which extend their possibilities for being and doing" (Mosedale, 2005, p. 252). Similarly, Hainard and Verschuur (2001) identify empowerment as a means of building bargaining capabilities from the household to the collective level, leading to a better and fair allocation of power and resources. Such a definition assigns agency to women to attain fundamental changes in gender relations, which is a relatively intricate procedure.

Equally, Batliwala identifies that women were guided to partake in their subjugation and consequently envisions external transformation agents as essential for empowerment. The scholar theorises empowerment as "a spiral, changing perception, distinguishing areas to focus on, designing policies, acting for change, and evaluating actions and outcomes" (Batliwala, 1994, p. 132). Additionally, Mahmud (2003) stated that empowerment is an emerging procedure that bestows shifts in a facet heading to empowering regulations in sequential scopes. Also, Johnson (2005) approves that empowerment is not an end-state, as the subject and situations continuously change. Fernando (1997) observed that several empowerment activists support an established circle to oppose and alter prevailing power arrangements that remain necessary.

Based on these various explanations, women's empowerment must be perceived as a bottom-up procedure over which womenfolk describe their crucial needs, and provide knowledge and awareness of their condition (Rowlands, 1998, 1999). Unequal gender relationships that handicap women imply that females lack the skill, achievable alternatives, and the ability to make autonomous and well-articulated choices (Kabeer, 1999; Gasper and van Staveren, 2003). That skill and independence might be constrained by collective rules, for example, the patterns which maintain gender roles (Agarwal, 1997). Empowering women implies changing practices in which gender limitations are repealed.

Women's empowerment should be initially examined to comprehend how, why, and under what situations women are subjugated (Datta and Gailey 2012, p. 570). Without recognizing the circumstances that hinder women's empowerment, it is difficult to identify ways to enhance and empower women. In many cases, as is the point in our study, women seek to empower themselves beneath patriarchal regulations, which are more intensified by the

gradually traditional attitude toward them and the fierce battle they are exposed to under neoliberalism.

In this line, it is essential to comprehend Cynthia F. Epstein (2007) when she acknowledges the significance of incorporating time and space in our analysis. She inscribes that all social institutions allocate responsibilities based on an individual's biological sex and communally constructed rules and regulations. The role assigned to an individual based on their sex stands necessary in most cultures and is highly resistant to change (Epstein, 2007, p. 3). The three-way construction pulls awareness of women's various requirements, including their reproduction, production, and collective gains (Moser, 1989).

In this regard, Kabeer (2003) contends that societal norms based on gender roles, gender division of labour, and gender relations impact entities' interaction within patriarchal communities as it strengthens one group's capacity (men) to power over the other group (women). She further notes that these norms and patterns are shaped by established agreements and social structures dominated by men. Kabeer's examination clarifies the crucial question in assessing the method of empowerment. Empowerment is perceived to occur in a sum of various stages, involving a variety of distinct elements, and emerges within a range of different procedures (Kabeer, 1999, p. 2; Mahmud, 2003).

The literature on women's empowerment underlines the effectiveness of rational distinctions about the interconnected sub-components of gender equality. Even though there are disparities among feminists regarding the definitions of empowerment, some commonalities still exist. One of the most genuine and universally approved features of empowerment amongst feminists is empowerment standing as a means, not a product (Rowlands, 1995; Stromquist, 1995; Hainard & Verschuur, 2001).

Thus, the empowerment approach is foreseen as a procedure that benefits production or economic expansion in a broader schema. Some organizational changes that help women will be attained personally and at the group level (Mayoux, 1995; Özgüler, 2007). Another essentially approved viewpoint is that "to be empowered, one must be disempowered first" (Kabeer, 1999; Mosedale, 2005; Özgüler, 2007).

Women remain disempowered in diverse circumstances and practices; nonetheless, it also remains essential to highlight that women do not constitute a homogeneous group as they have distinct selves and identities (Mosedale, 2005, p. 252). In this regard, gender engrossments are not standardized for women worldwide. Women's realities and struggles are different from one place to another. It is, therefore, essential to consider the gendered relationships in various societies from different perspectives. Thirdly it is generally assumed

that empowerment cannot be bestowed but must instead be won (Mosedale, 2005, p. 256). Implying that changes in gender or power relationships could inspire females only if these changes stand as an outcome of women's acts. Lastly, empowerment requires confronting and questioning unjust and hegemonic constructions, regulations, and systems (Rowlands, 1997). Empowerment must have an alternative ability through "reflection, analysis, and action" (Mosedale, 2005, p. 244).

Empowerment is felt and achieved in three stages: personal, relational, and collective. At the individual level, empowerment is achieved by the rising perception of identity, self-confidence, and self-respect while realizing the unique ability to act and survive through confronting prejudice or subjugation. At the relational stage, empowerment involves eliminating the impact of internalized repression (Rowlands, 1997, 1998). It necessitates negotiation skills and involvement in decision-making (Rowlands, 1995, 1997, 1998). And at the collective level, empowerment includes the ability to attain a fundamental transformation or rigorous effect, particularly on a specific challenge, while cooperating with others or coordinating a group activity (Rowlands, 1995, 1998). As highlighted by different scholars, the ability to make crucial choices in one's life remains central to agency and empowerment theory. How women's collective engagement in cooperative activities enables them to bargain, make choices and attain decisions essential to improving their resources access and control within their communities will be explained in what follows.

1.4.2 Bargaining Power and Collective Engagement in Attaining Women's Agency and Empowerment

- **Bargaining Power**

Like the concepts of agency, access to resources, and empowerment, bargaining power also has various explanations by distinct scholars. Bargaining power refers to an individual's capability to participate in social bargaining under specific circumstances built on the regulations and the individual action resources. It is also described as an actor's capability to join collective negotiation within a particular circumstance through one's engagement, assets availability, and established regulations. Bargaining power is contextual: The nature of collaboration and the policies define the type of action resources an individual could utilize and how they could be successful or converted into power legacies for a particular condition (Weinberger et al., 2001).

In this vein, the kind of relationships or contracts and the regulations define the type of action resources an individual could apply and how successfully they could be altered into

power bequests for a given circumstance. A person's bargaining power also changes in various stages, such as within the family, a group, or outside the group (Weinberger et al., 2001). The bargaining rate defines whom the agent embodies and the individual's personality. For instance, in some Malian communities, a female expressing herself in public gatherings exemplifies all the females attending that meeting as social expectations institute that women stay silent while attending public meetings. While in other instances, a female could remain silent when her husband is present at the meeting, even if she knows better than her spouse regarding the issue being discussed. In this vein, an agent is generally a man in the household context. He allocates resources and usually holds power (Quisumbing, 2003).

Resource ownerships are essential and described as the pool of resources accessible to an individual and involves physical, natural, financial, social, political human capital, and land rights (Di Gregorio et al., 2004). Land rights entail complicated interactions among various asset handlers and operators and can merely be valuable when identified as legal and necessitates authority provisions to administer such requests (Singha et al., 1995). Empirical data suggests that land rights improve females' status in the household and within the group, resulting in better bargaining power (Quisumbing, 2003).

Personal agency, if exercised for enhanced intrahousehold, can bring about bargaining power. This is one of the most crucial elements in women's achieving agency and empowerment. Though, bargaining power alone might fail to attain fundamental changes in gender interactions, which remain confined by communal values characterized by patriarchy (Agarwal, 1997; Kabeer, 1999).

In this context, Agarwal's work is to be noted when she argues that joining a group and bargaining represents an essential role in improving an individual's capacity to face repressive norms and might encourage negotiation in and outside the family as rules are demarcated and strengthened outside the household (Agarwal, 1997). Moreover, negotiation in a more public realm, members' pressure, alliance, and unity could improve individual bargaining power and agency in the family (Agarwal, 1997; Kabeer, 1999). An alternative practice remains that cooperatives can empower women while strengthening their intra-household bargaining power via financial activities that expand women's access to resources, collective assets, and business entitlements (Agarwal, 1997; Meinzen-Dick et al., 2011). A group's support can also provide access to decision-making, mainly when women represent most members in mixed groups, as the majority can substantially influence decisions (Agarwal, 2010).

As mentioned earlier, formal, and informal rules also define the implementation of the primary requirements (patterns, management, and regulations). These rules remain the

decision-making procedures influencing the type of essential action resources. Females used kinship and collective engagement through bargaining to access resources (Singha et al., 1995). Bargaining ethics explain predictions regarding the outlays and advantages of membership. They further influence the bargaining procedure and might be controlled while negotiating. Rules are either written or unwritten, precise, or indirect.

Women and men might significantly differ regarding their rationale and the kinds of collective negotiation they pursue (Agarwal, 1997; Kabeer, 1999). Bargaining incentives are influenced either by the inclinations and concerns of agents or by how they recognize their possibilities of thriving via collective engagement, which correlates to distinct groups' regulations and requires efficient bargaining power. In this vein, agents' incentive depends on their commitment to participate in the negotiation procedure depending on their choices, action resources, and regulations.

Based on these scholarly concepts, this study examines whether stakeholders' bargaining power can impact their resource access and management and their relationship with social structures in the case of agricultural cooperatives in Mali. As Haddad indicates, resources are not constantly shared even inside one household, where women and children are often not prioritized to receive (Haddad et al., 1997). On the other hand, the individual associated with a collective entity such as the cooperative generally brings about dynamic changes back to the household. The current study thus pays attention to the individual and the collective levels in grassroots women's cooperative activities.

The differences in women's abilities or possibilities to bargain are essential in negotiating power balance and defining assets' allocation within a cooperative. Prospects are proven by women's capacity to transform a resource into a power endowment in a specific circumstance. The cooperative with improved negotiation skills will lead during the bargaining process as they already have an advantage in acquiring more resources.

- **Collective Engagement**

The word collective clarifies joint action from individuals, shareholders, aid groups, or civilian groups. Associating the term collective with engagement broadens the possibility of moving the emphasis from the individual to the collective through interrelated entitlements aimed at inclusion, ensuring accountability within diverse profits, principles, and standpoints (Bassler et al., 2008). This type of collective engagement comprises voluntary activities carried out by individuals within a group or cooperative to attain mutual benefits (Marshall, 1998).

Collective engagement means the process through which volunteer organizations are established and mutually supported and where the stakeholders agree to cooperate. People are

involved when they perform a significant responsibility in negotiations, debates, decision-making, project application, and procedures. Individuals are usually connected by geographic vicinity, specific concern, public interest, or similar circumstances to tackle the problems they share (Johnson & Eagly, 1989, p. 293).

Collective engagement manifests in different organizations, including volunteer self-help organizations, formally established associations like legal associations, and corporations. Formal institutions generally intend to handle a group of people's natural resources or promote political change at the state level (Sultan et al., 2005). Collective engagement is not only formal, like in the case of cooperatives or other legal associations, but it can also have an informal joint arrangement that might be further adaptable and receptive to changing requirements of the associates. Likewise, group size, rules, former achievements, assets, efficient governance, and interconnectedness amongst cooperative participants are considerations that might promote and sustain successful collective engagement (Agrawal, 2001, p. 154).

Collective engagement within a community occurs in various forms and levels and is meant to have set goals. On the one hand, some efforts aim to create collective investment and enhance community interactions and trust. On the other hand, they aim to address concerns by revealing members' common assets through joint collective engagement. However, be it formal or informal, both types of collective engagement require strong institutionalized leadership and governance by its members for the group to be sustainable (Sultan et al., 2005, p.45). The impact of institutions on the characteristics and activities of collectives' engagement could be more significant once each member relates to the specific reference unit embodied by the cooperative (Alexander et al., 2018; Lapinski & Rimal, 2005).

The engagement can occur throughout an association, like farmers' cooperatives and fishermen's cooperatives. Although collective engagement is often supplemented and reinforced by the *de jure* principle, its arrangement is commonly further ascertained with traditional rules that participants are generally comfortable in society (Sen, 2000). The collective engagement process also involves developing and implementing regulations for the consumption of assets that define the types, supervision, and administration of assets involved and the non-utilization of these assets (Marshall, 1998).

Studies (Baland and Platteau, 1996; 1999; Ostrom, 1992; 1999; Wade, 1988) could identify substantial advantages in such joint ventures as shared assets, preserving community infrastructure, law-arranging towards environmental preservation, assets utilization, and representing the organization to the outside world based on associates' socio-economic attributes.

One of the collective engagement requirements for its members is the ownership of asset endowments assessed by the membership. On the one hand, an entity's resource endowments define prospects to participate in the collective engagement. On the other hand, it is affected by socio-cultural patterns like gender; the extent to which gender is mainstreamed within the group is significant (Nkedi-Kizz et al., 2002). In communities where women's involvement in the public space is restricted due to gender-based norms, gendered division of labour, and time limitations, joining a collective engagement through cooperatives might grant women prospects for exchanging knowledge, making their voices heard, retrieving leadership, training, and responsibilities (Ferguson and Kepe, 2011; Majurin, 2012).

The following values are crucial for any collective engagement. The values may mean expanding peoples' awareness about their neighbourhood and the problem they are trying to tackle. It also involves inspiring people to start extra information and knowledge-sharing platforms, utilizing that knowledge to develop the community. It similarly aims to address prevailing challenges, establishing continuing prospects for people to engage, cooperate, and guarantee that these chances and efficient communications remain routine (Bassler et al., 2008).

As many scholars argued, collective engagement plays a crucial role in various domains of human lives, including revenue creation, reducing threats, and providing community services (Alexander et al., 2018; Lapinski & Rimal, 2005). Experience has demonstrated that collective engagement institution performs a vital role in how individuals utilize natural assets, which influences the effects of production methods. Several nations' decentralized plans and public-headed expansion programs are based on collective engagement. In many parts of the world, individuals collectively work to offer access to community supplies and local facilities that are not provided by the government or may not be possible to attain as single entities.

Through collective engagement, indigenous people develop and preserve community parks, religious or sacred towers, and public halls, conduct volunteer fire monitor groupings, and apply community natural resource supervision regulations. They often distribute provisions to indigenous and central authorities, such as helping schools and health services (McCarthy, 2004).

Ultimately, managers tend to be more responsible when the group initiates implementation. The negotiation rate is regularly less than from the government-based curricula. These gains often increase local asset supervision's value or translate into community development programs. Regarding this study, collective engagement can influence gender inequalities, particularly when it leads to a more equitable allocation of assets, enhancing income for vulnerable groups. It can also act as a means for women to share risks to achieve

greater profits via long-term planning and participation in knowledge practices that allow multiple interactions, leading to a shared exchange of opinions and experiences (Matthews, 2008, p.15). Matthews also suggests that collaboration among entities earmarks knowledge and provides activities that improve decision-making while fostering interactions and capacity building among participants.

1.5 Conceptual Framework

This study investigates the scope and nature of agency and empowerment achieved by women through collective engagement and bargaining. Based on the data collected from women's cooperative organizations, the survey will analyse how women's joint engagement in cooperatives enhances their access, control, and ownership of land, credit, market, and equipment in Mali. Being knowledgeable about the theoretical frameworks explained above, the study will adhere to feminist theories on agency and empowerment, seeking theoretical insight and practical applicability regarding women's better access to resources in agricultural cooperatives. Women from different cooperatives in diverse economic and social backgrounds with distinct individual feature bargain with their milieu to raise their members' consciousness is predominantly central to this survey.

In this regard, identifying how group leaders act through cooperation, negotiation, and agency is an essential aspect of empowerment as they promote collective change. To examine the connection between women's participation in cooperatives and their empowerment, this study adopted a feminist perspective on collective engagement, bargaining, and agency in accessing and controlling resources for their agricultural production. Incorporating these different perspectives is necessary as organizations within the same country can be gendered and might question or strengthen dominant established roles. Through collective engagement in cooperatives, women's empowerment and agency can also act as a unifying ideal for communal achievement. They can affect agents' collective engagement and bargaining power effectiveness, and success. This context is particularly appropriate in examining empowerment across gender lengths as it highlights the organizations, regulations, actors, and relationships which establish gendered patterns of cooperation.

Based on the theories described above, the study argues that women's involvement in cooperative activities can represent significant potential and benefits for their empowerment when they make good use of their agency and bargaining power through collective engagement within their social contexts. On the other hand, women's effective use of agency, collective engagement, and social bargaining also present limitations. Agency alone cannot bestow empowerment if it fails to transform the agents' life choices. Henceforth, agency, collective

engagement, and bargaining power must be accompanied by agents' willingness and awareness of the systems that oppress them to foresee better possibilities within their immediate environment. As agents of social change, women can also be restricted by the established structures, denoted in the characteristics of the persistent system in which agents act, and may be powerless by their ability to switch agency into action. Women's joining collective engagement and effective bargaining are recognized as the most crucial aspects by those oppressed. Unsurprisingly, once individuals are constrained, their self-assessments are influenced by the belief that encourages the subjugation they face. It is therefore vital to contextualize the concept of empowerment and investigate how each person, community, and group deals with it (Oberhauser and Pratt, 2004, p. 221).

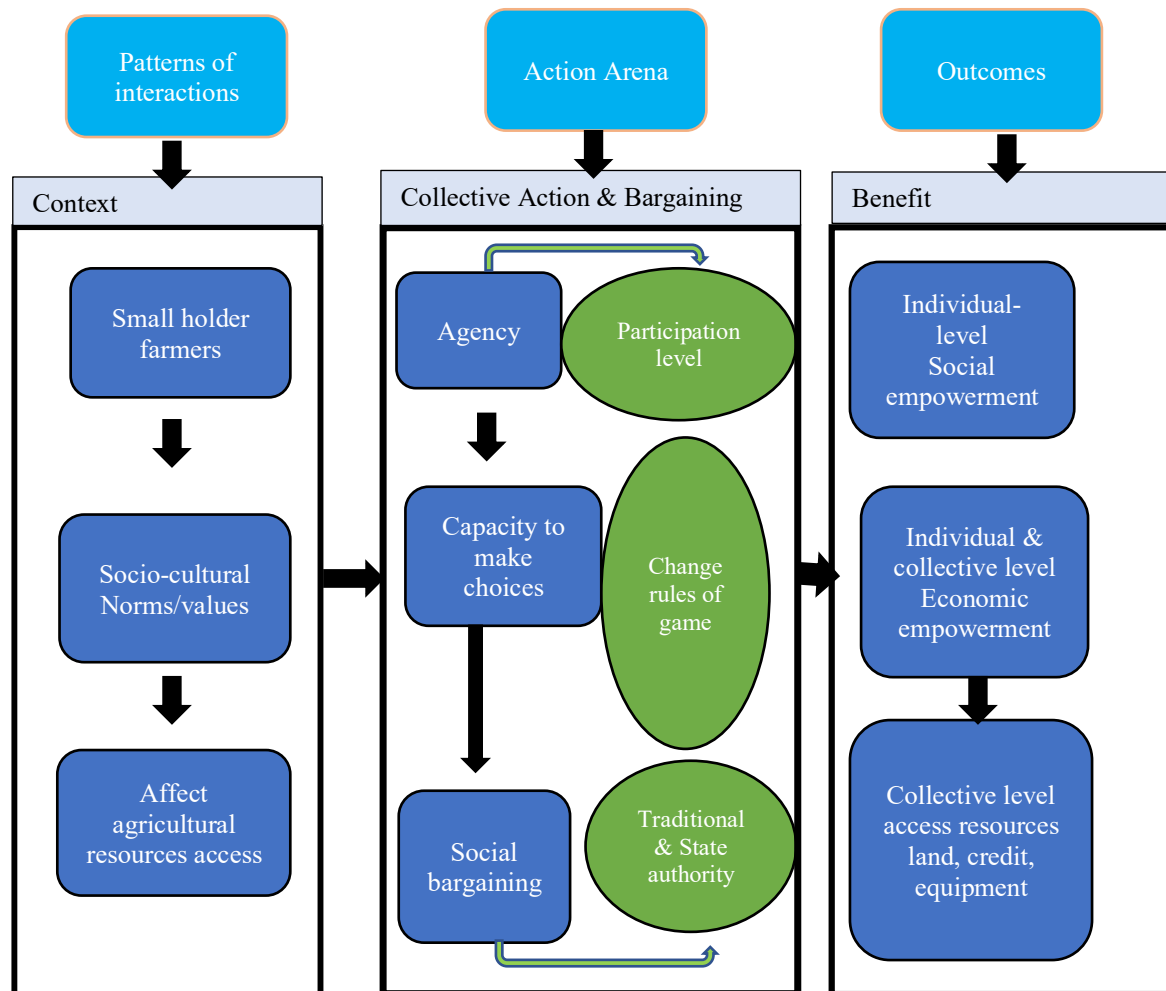
Additionally, the study cannot presume that females' necessities expressed in the literature above will immediately be relevant to all Mali cooperatives' organizations. It remains critical to work on women's experiences within distinct settings besides recognizing the community's collective structure to attain knowledge based on the practice of empowerment as legitimate as possible. Consequently, it becomes difficult to assess a single straight empowering process for women. In doing so, this study's framework looks at women's empowerment within cooperatives as a dynamic process involving collective engagement, cooperation among members, bargaining power, and agency as tools that can all be used jointly to enhance strategies applied by women in cooperatives. Women's membership in a cooperative provides a strategic life choice when their ability is primarily influenced by intersected elements such as gender norms and roles in patriarchal settings. When capabilities are effectively employed, they allow women to negotiate and bargain with existing structures and systems that hinder their access and control of resources in male-controlled societies.

The conceptual framework adopted by this study aims to contribute to the insights and potentials of agricultural cooperatives in empowering small-scale women farmers through collective engagement, agency, and social bargaining of the agents. It provides strong evidence of the effects of women's membership in collective groups leading to their access and control of agricultural resources and their empowerment at the household, cooperative, and community levels. Through the framework, we will examine how women's cooperatives' members perceive the agency and empowerment they achieve from their memberships.

To attain this objective, the study creates an analytical framework examining the intersection of agency, empowerment, collective engagement, and bargaining power. It also looks at how implementing these concepts from a gender perspective can strengthen active

collective engagement. Negotiation can be applied as a mechanism for women’s empowerment and equity in dominant masculine societies.

Figure1. 1: Collective Engagement & Bargaining for Women’s Agency & Empowerment



[Source: author]

The framework presented in Figure 1.1 is complex and adaptable. It involves women’s capacity to make choices based on their needs and challenge structural and institutional practices in accessing resources based on unequal gender practices. The first box represents women’s interactive relationships within their social environment and opportunity structure, which discriminate against them. The second box represents the action arena that shaped women as cooperative members’ interaction with recognized legal and customary community leaders. It shapes women’s capabilities to deal with social norms and power relations and includes practical abilities to lead collective engagement and social bargaining with existing patterns. The last box exemplifies the outcomes achieved due to women’s joint action and bargaining power, foremost

to their individual and collective empowerment, which positively affects their access and control of agricultural resources while allowing them to negotiate with modern and traditional community heads.

The framework conforms to the notions of scholars in the literature mentioned above. They proposed a change in oppressive gender relations, primarily on how women can shape agency and bargaining power through their collective engagement to influence the social systems that meritoriously state what is possible and not possible for them. The framework depicts the original conditions that small-scale women farmers encounter in owning and accessing farming assets in their interactive relationship with the opportunity structures. These patterns established by social norms influence women's asset access and management prospects, hindered by the socio-economic, political, and power structures around those assets.

Women's collective engagement can help confront the dominant norms that control their social, political, and economic empowerment. It also allows them to make decisions, negotiate and restructure institutions that subordinate them. In other words, through women's collective engagement, social bargaining occurs between them and the structure that disempowers them. This social bargaining can occur inside families, groupings, and negotiations amongst parties or with the government and other external actors. These procedures lead to collaboration models when women can challenge social patterns through bargaining with customary and government structures to increase their status and access resources and assets vital for their livelihood activities. As a result, this will provide a model of the state of gendered relations in patriarchal settings while building institutional frameworks that encourage females' involvement in decision-making stances with formal and informal institutions and provide an understanding among members about the structures that oppress and subordinate them.

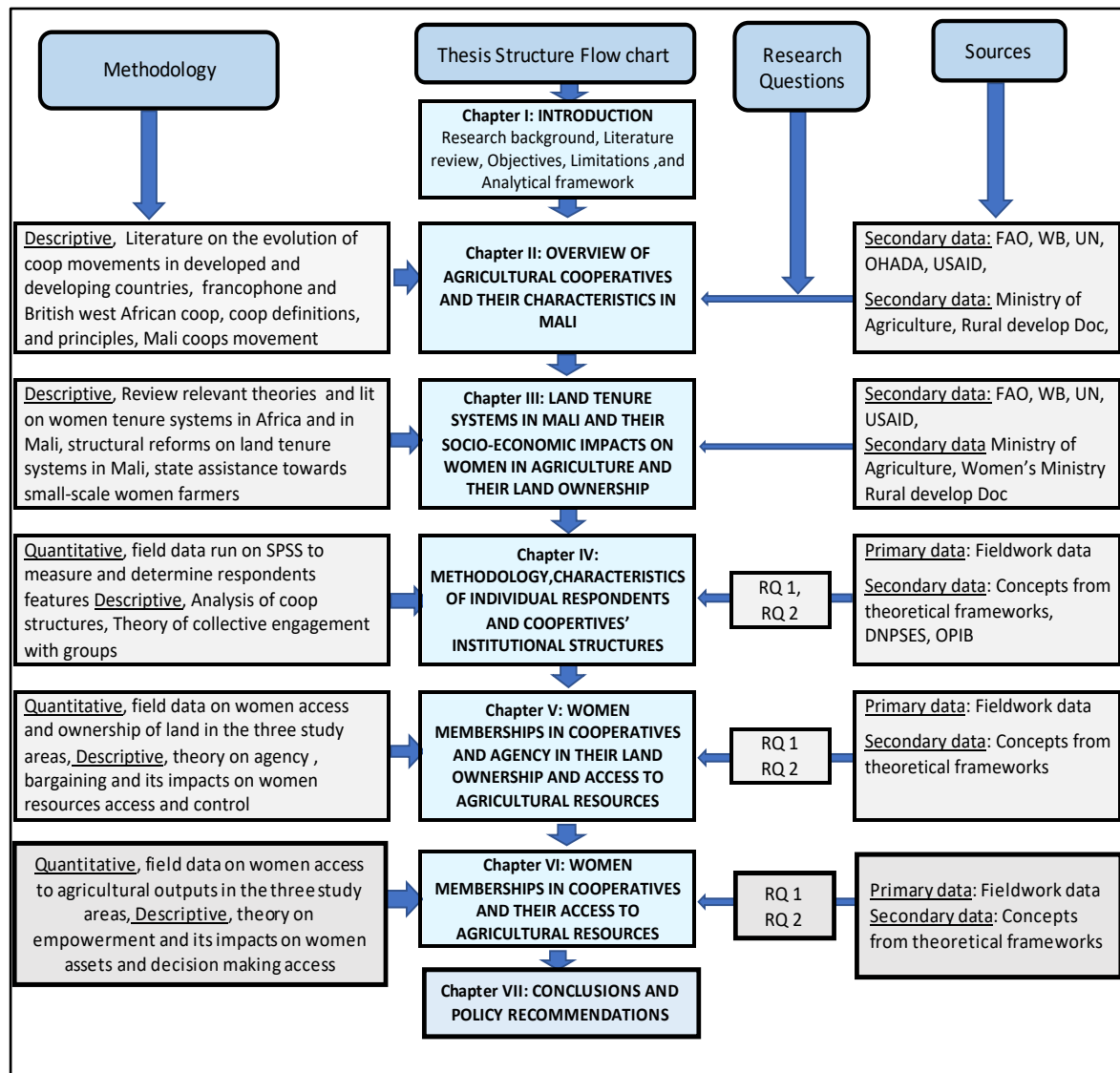
The framework is used at three levels: inside households, collective engagement groups, and bargaining between members and with customary and government community leaders and other external actors like donor agencies. Since gender concerns are often not clearly explained in collective engagement, evaluating the gender dimensions at these three levels is essential. The types of collective engagement and bargaining skills women require to achieve agency and empowerment are prerequisites for the achievement of their established goals. Attaining the established objectives requires women to transform the power structures through instituting self-confidence and self-respect with the socio-cultural norms and patterns and legal systems to contribute to decision-making processes

and access resources efficiently. In this framework, the author argues that individual commitment might expand into collective characteristics and engagement actions in cooperative settings. However, agents' involvement in activities differs in their collaborative relationships with other individuals and the responsibilities that connect them to those systems.

The framework above will thus focus on the action arena influenced by different conditions, including agency, collective engagement, and bargaining power. These elements shaped women's resource endowments, liabilities, and legitimate control of structures, affecting a series of outcomes in women's relationships with their immediate environment. Utilizing a gender analysis dimension to this framework, the study will examine how female members of cooperatives understand and operate with an established milieu in chapters five and six. The diverse incentives and capacities for their involvement in collective engagement can specifically enhance their agricultural resource access and control. Additionally, the theory explores how cooperative members' agency-level alter joint engagement to attain efficient bargaining, which leads to members' empowerment.

Lastly, the conceptual framework presented above will assess the context established by the interactions and opportunity structure patterns, providing interactive relationships among women members of cooperatives to attain their outcomes. Agents' capability to influence opportunity structures subsequently affects the action arena, the most vibrant fragment of the framework where women's agents of cooperatives take crucial decisions to transform and restructure opportunities relating to their access and control of resources. In that stage, collective engagement and social bargaining occur guided by women's ability to make effective choices, which will lead to their empowerment at the individual and collective levels. Women's interaction with their partners increased personally at the household level, giving them more influence and decision-making power. While at the group level, their bargaining power and negotiation skills improve because of their joint action leading to their access and control of resources, including land, credit, seeds, fertilizers, and equipment. These aspects will be examined in the analysis section.

Figure 1. 2: Thesis Structure Flow Chart



[Source: author]

The thesis comprises seven chapters, as indicated in Figure 1.2. Chapter one has two major sections. The first section introduces the research context where the study's background and problem statement are addressed. A thorough explanation of existing studies on agriculture and women in agriculture in sub-Saharan Africa and their land tenure issues are explained. Agricultural cooperative's role in rural development is briefly clarified in this section as well. The chapter also sheds light on the study's significance, purpose, and research questions. The second part of chapter one provides a detailed synopsis of the theoretical and analytical framework used in the research. Mainly women's agency and empowerment achieved through collective engagement and

bargaining within agricultural cooperatives are used as the main conceptual framework in identifying how these later work in women's access to agricultural resources.

An overview of agricultural cooperatives in developed and emerging countries, along with cooperatives principles, values, classifications, and Mali's cooperative framework policy, are explained in chapter two. Land tenure systems, patterns, characteristics, and the challenges related to women's tenure systems in Mali are described in chapter three. The research methodology, wherein the study sites, methods, tools, emphasizing the data collection processes, sampling procedures, and study methods are clarified in the first part of chapter five. The survey outcomes by individual respondents, the cooperatives establishment, and institutional structures are further explained in the second section of chapter four.

Women's memberships in cooperatives and their agency in acquiring primary farming resources are presented in chapter five. Chapter six describes the level of empowerment gained by women in accessing agricultural resources in the three study areas. Chapter seven summarizes the findings and sheds light on the study conclusions and recommendations, supported by a bibliography and reference lists at the end of the thesis.

CHAPTER 2: AGRICULTURAL COOPERATIVES OVERVIEW AND CHARACTERISTICS IN MALI

This chapter first provides a historical overview of agricultural cooperatives in developed and developing countries focusing on how cooperative movements were introduced and developed in Africa. This is followed by the general outline of cooperatives in Africa and the role governments play in supporting them. The section also describes the types and characteristics of cooperative movements in Mali, their organizational structure, the laws and regulations overseeing them, and the support they receive from the government.

According to the UN (2009) report, self-help and self-accountability characterise cooperative enterprises, which are primarily democratic and self-determining. Their objectives encompass fulfilling economic, social, and environmental needs (UN, 2009). Among many other definitions, the Canadian Co-operative Association explained cooperatives as “business organizations owned by the members who use their services” (Fairbairn, 2004, p. 25). Depending on the requirements of the government, how a cooperative is officially defined differs from country to country. Based on the sector the cooperative belongs to, and what activity it engages in, the government of a particular country could incentivize or deter cooperative immersion (Bijman & Iliopoulos, 2014).

While cooperatives can be classified by their objectives, this study primarily centres on agricultural producers’ cooperatives or farmers’ cooperatives. The agricultural cooperatives are created to unite agricultural producers under a shared business, to cumulate opportunities enabling producers to share inputs and outputs, access markets and other necessary resources.

Agricultural cooperatives have been employed for different kinds of farming. The cooperative concept involves farmers ‘group activities where all production methods often belong to the cooperative (Hussain, 1973). The cooperative also comprises other agricultural service provisions where farmers jointly run their agricultural assets. Thus, an agricultural cooperative is a conventional form of mutual activity among farmers in the production, marketing, and processing of farm produce. The cooperative intends to improve members’ yield and revenues by assisting them in accessing investment, agricultural inputs, outputs, information, and better markets. The benefits of farmers’ joining an agricultural cooperative include the ability to share risk, attain economies of scale, lesser transaction costs, increase competitive returns, and easy access to resources (Bijman et al., 2012).

In this dissertation, the word agricultural cooperative is utilized for any farmers' organization where members conduct any collective activities for the profit of their associate members without hurting others (Filley, 1929; Hussain, 1973; Mann, 1978; Naghizaden, 1984). Cooperatives activities range from simple to extensive services for farming, depending on the number of resources assembled, goals established, demands, and principles of each group as indicated by the cooperative principles (Naghizaden, 1984; Reed, 1977).

2.1 Origin and Evolution of Cooperative Movements in Developed Countries and Africa

2.1.1 Origin of Cooperative Movements

Cooperation has always existed among people, whether in rich or emerging countries. Individuals develop strategies to support each other economically, socially, or culturally whenever they co-exist. Cooperative organizations began in contiguous resistance to the evolution of industrial capitalism and modernism in the 18th century (Fairbairn, 2004). Growth in industrialized technology, which started during England's Industrial Revolution (1750-1850), brought an end to the predominant home-based business association prevailing before the Industrial Revolution. This was due to the ineffectiveness of home-based manufacturers in competing with low-cost consumer goods which factories could offer (Center for Cooperatives, 2015).

Workers disrupted from their home-based manufacturing activities migrated to big cities where employment was scarce with poor working conditions and low wages. Ineffective proficiency in farming drove additional workforces out of the farming communities into big metropolises. Meanwhile, the working class and their allies in the big cities explored ways to fight against socio-economic discrimination during the latter half of the nineteenth century and the early twentieth century. Cooperatives were created during this time, and they were channels for organizing the lower-class worker in opposition to the factory owners. The initiation of cooperatives permitted factory workers to obtain a new extent of independence by offering them tangible ways to compete against the wealthy class. They combined their efforts and resources in a cooperatively owned enterprise (Gertler, 2001).

These lower-class workers supported each other economically and socially. As an illustration, they participated in insurance plans where each worker made contributions to a fund to help other workers in case of injury and sickness. Among such self-help associations, Friendly Society organizations emerged in the early 18th century, introduced by Daniel Defoe in 1702. In his book entitled "*An Essay on Projects*," Defoe explained them as "several people entering into a mutual group to help one another in case any disaster or distress [that] fall upon

them” (Defoe, 1702, p. 118). This kind of insurance program was a pioneering self-help organization that arose when the state did not have any efficient insurance or compensation system for the workers when they encountered hardship (Fairbairn, 2004).

One progression that perhaps had the most significant effect on establishing cooperatives in England ‘was the creation in 1844 of the Rochdale Society of Equitable Pioneers, Ltd. This stood as a consumer cooperative founded in Rochdale, England, by some workers. They devised a range of basic trading rules centred on a two-year experiment on cooperatives. Jointly cooperating individuals with the idea of mindfulness laid the foundation when the Rochdale association’s pioneer cooperative associates launched the cooperative movement (K Zeuli, 2004). They brought together individuals who shared concerns about expanding opportunities for needy individuals through their associations. As the association’s aims and the allies’ concerns change, this paradigm changes accordingly.

Another crucial change about cooperatives was how they functioned as credit or banking organizations in Germany. The first savings and credit organization were created in 1864 by Friedrich Wilhelm Raiffeisen. The Raiffeisen Bank’s purpose was to offer savings and credit facilities in urban and rural regions motivated by the concept of “self-help.” Raiffeisen cooperatives set the guidelines that regulate current credit associations (Ingalsbe & Groves, 1989). In the American contest, cooperatives were introduced in 1752 by Benjamin Franklin as dairy and cheese cooperatives. Within the century, cooperative organizations quickly spread to the rest of America. Cropp (2002) asserts that cooperatives in the USA have evolved into substantial stimulus in agriculture and play an essential role in shaping national agricultural strategies.

In all these countries, cooperatives are known to be one of the gears of rural development. Agricultural cooperatives have been well-known for helping their associates in developed countries, particularly for improving market conditions (Attwood, D.W. and Baviskar, 1988). As an illustration, cooperatives in North America have been responsible for changing goods available on the markets and have impacted prices and other market conditions. They have also been constant with market supply and bid conditions while delivering equitable handling, services, and additional safety from unequal speculation (Torgerson, Reynolds, & Gray, 1998). As a result, associates from cooperatives assist in strengthening individuals’ marketing competence, which they would not be able to attain by themselves (Christy, 1987; Valentinov, 2007; Vitaliano, 1983).

The expansion of cooperatives over time in other developed countries was also influenced by various aspects like asset access and availability. Ingalsbe and Groves (1989)

cluster these into three significant categories, all interconnected: (1) monetary circumstances triggered by war, recession, technology, state fiscal policy, etc.; (2) peasant organizations affecting the value of their leadership, passion, and interest to encourage cooperatives, the ability to change community strategy, etc.); and (3) public plan as defined by government concern, statutory proposal, and legal interpretation (Ingalsbe and Groves, 1989).

Hence, developed countries like the United States of America, Canada, Australia, nearly all European countries, and communist states like China have achieved food security through cooperative organizations, which perform a crucial role in achieving food safety (Christy, 1987; Valentinov, 2007; Vitaliano, 1983). Cooperative societies also engaged in farm input and output, marketing, enabling irrigation for yield cultivation, value addition, and providing services to small and micro-businesses. Gertler (2001) contended that cooperative societies in developed nations were an essential vehicle of collaboration, joint action, development, and strengthening community projects, which are vital for sustainable development (Gerner, 2001, p. 26).

Cooperatives in developed nations are pervasive today and have solid organisational power for farming groups in various countries. The cooperative sector globally consists of roughly 800 million members in around 100 countries (Bibby and Shaw, 2005). Cooperative societies were also projected to be 3 million in 2019 and provide employment to 280 million or 10% of the world population (Karakas, 2019). The largest cooperatives are found in developed countries. For example, in the European Union, they were 131 million cooperatives in 2016, offering employment to 4.3 million people and having a yearly turnover of €992 billion (European Parliamentary Research Service, 2019, p. 3). In the EU, cooperative companies represent around 60% of the yield, processing, and marketing of farming commodities, with an income of approximately €210,000 million (Galdeano, Cespedes, & Rodriguez, 2005).

Moreover, over 50% of global farming yields are sold via cooperatives (Bibby & Shaw, 2005). Cooperatives represent 80 to 99% of milk production in Norway, New Zealand, and the United States; 71% of fishery production in the Republic of Korea; and 40% of agriculture in Brazil (ICA, 2007). Until today cooperative organizations remain an essential organizational plan in numerous agrarian fairs. Based on these pieces of literature, one can conclude that cooperatives have played and continue to play a vital role in the emancipation of marginalized farmers in developed nations to gain access to market inputs and improve their livelihood resources.

On the one hand, cooperatives were utilized in the 18th and 19th centuries in British industrial sectors and other developed countries to protect workers in the wake of capitalism.

On the other hand, early cooperative movements in Africa offered their members similar protection in their agricultural activities through a traditional form. Cooperative organizations are not a new trend in Africa, although their structure and principles in the post-independent states of the 20th century are different from the pre-colonial ones. Colonization in the 18th century introduced Western cooperative movements to Africa.

They eventually, became a de facto way to unify farmers in rural areas to meet the needs of the colonial powers' food commodities and raw materials. The following section will shed light on the process of cooperative development in west Africa.

2.1.2 Cooperative Movements in Africa

As mentioned earlier, the cooperative movement is not a recent trend in Africa. Before colonisation, cooperatives existed in most rural African societies in their traditional form (self-help groups for agricultural work, tontines, etc.). These traditional cooperatives were built on conventional values and practices of solidarity among people of the same community and the collective engagement that influences individuals' understandings of their joint engagement. For centuries, they established communal rules and regulations of self-help and solidarity between and among farmers of specific clans. Formal peasants' organizations with legal principles (written documents) like cooperatives were introduced during the colonial period in Africa to support the colonial power services of distribution, production, and marketing of inputs (Chambers, 1983).

Western cooperative models were introduced from developed countries to colonial African states through colonial power's command and enforcement of western legal principles on indigenous farmers. The colonisers were unfamiliar with African communities' local beliefs, practices, and collective patterns. They introduced the western cooperative strategy, which they deemed civilized and essential. The attitude of the colonial institutions and systems generally portrayed the western cooperative style as the "best" and up-to-date. As a result, the introduced cooperative model in Africa was typically western; even their names were shuffled since no efforts were made to translate and adapt them into the colonized countries' cultures (Kadzola, 2009).

As an illustration, in Mali, traditional cooperatives were called "Seneke Tons or Tons Villageois," namely village associations. The name "Seneke Tons" would be replaced by the "Societes Indigenes de Prevoyance" (SIP) in the early twentieth century, which literally means "Indigenous Welfare Societies or the Native Providential Societies" during the French colonization of French Sudan, now known as Mali.

The management systems and the structures of the western cooperatives were solely based on European standards. For instance, the accounting structures were in foreign languages (French or English), which the indigenous people could not understand. In that vein, the colonial powers rejected any participation of the local people in cooperatives management (CIRAD, 1994).

The colonial policies also aimed to increase the surplus of raw materials and resources to boost the economy of the colonial states. They subsequently valued the production of farming yields, where they would gain substantial revenue from crops through intricate mechanisms based on forced labour tax compilation methods from the farmers they ruled (Develtere, 1993).

Amin and Bernstein (1995) also explained that formal western cooperatives were primarily established in sub-Saharan Africa by colonizers' administrations that repeatedly encouraged peasants' production of cash crops. These cooperatives supported an economic system that considered cooperatives as companies that were often harmful to local inhabitants (Belloncle, 1993).

Gideon Onumah (2007) also argued that farmers' cooperatives were reinforced by colonial administrations, mainly as tools in mobilizing rural resources aiming to accelerate western powers' industrialization. Over the next several decades, western cooperative movements expanded in Africa. They ultimately befell into de facto means to unite farmers in rural areas to satisfy the imperial power's food commodity and raw material needs.

During the colonial area, the western cooperative models introduced in Africa emphasized a sector-based approach concentrated on a few products such as cotton, coffee, cocoa, groundnuts, rice, etc., sold on the global market or vital for urban food marketing. Cooperatives in colonial times tended to promote the concept of productivity and economic empowerment of colonial powers (Onumah, 2007). For example, the French cooperatives "Les Sociétés Indigènes de Prévoyance" establishment in Mali in the twentieth century was followed by bridges construction and irrigation systems of the Office du Niger in the Segou region to produce raw materials like sugar, rice, and cotton meant for colonial exportation in the southern parts of Mali (CIRAD, 1994).

Moreover, private (NGOs) and public organizations have fulfilled an essential role in contemporary cooperative organizations. Structural adjustment programs occurred in the 1980s in Africa, where governments changed their development strategies by opening up their markets to international investors. As a result, agricultural cooperatives also transformed: their functions expanded. The advent of price liberalization, the state withdrawal from rural

management, and structural adjustment policies imposed by the World Bank and IMF on developing countries' donors have influenced agricultural cooperatives and farmers' organizations.

Structural adjustment programs (SAP) of the post-World War II era in Africa have been oriented towards sustaining a stable supply of food and agricultural goods in the advent of the food crisis and population growth. Leaders in developing countries were encouraged to open their countries to foreign investors in the agricultural sector and other economic spheres. Thus, when these leaders opened their national markets to investors, they encouraged farmers to grow as much as possible in specific types of agricultural products like biofuels, cotton, sugar, rice, etc. (Almas & Campbell, 2012).

On the one hand, technological advances in the agricultural sector brought by SAP helped to boost specific types of yield production. On the other hand, a free trade system in developing countries stipulated competition and subsequent increases in staple food prices. Consequently, many farmers were producing crops intended for the global capitalist market, paving the way for expansions in the cost of staple food locally (Almas & Campbell, 2012).

Africa's structural adjustment program simulations paved the way for implementing a system that benefitted multinational companies, which employ industrious policies that often excluded poor farmers from mainstream agriculture as these later lacked capital, skills, and farming equipment. Neoliberal changes to the agricultural system were established in the name of "market competitiveness, mutual benefit, and improved market share, shunning traditional models of market protection, state assistance, and export promotion" (Potter & Tilzey, 2007, p. 1293). Following these structural reforms, cooperatives were perceived as organizations built on conventional practices, yet as an alternative to capitalism (Birchall, 2003), due to their compatibility with local traditional values and social practices (Develtere, 1993).

In most parts of Africa, the government or its agencies overseeing rural cooperatives administration faced farmers' strong opposition since the early post-independence 1960s. This is mainly because farmers believed that state institutions and leaders in power were the only beneficiaries but not themselves. SAPs programs in Africa were also supposed to ensure the government systems implementation. As a result, much debate has emerged among farmers' organizations, civil society organizations, and scholars: to what extent should governments allow farmers to organize their cooperatives and whether or not the government would take supplementary measures to its intervention in rural areas (Develtere, 1993).

The monopoly mentioned above by the colonizers through the western cooperative's standards to farmers by early post-independent regimes through the introduction of SAPs

eventually faced pushback from many people in Africa. The development process of cooperative movement in Africa is thus the consequence of complex history and indigenous people's clash with the colonial legacy and its motivations (Onumah, 2007). Some scholars (Belloncle and Marcel, 1953) argue that a deep prejudice often demonstrates the historical intersection of agricultural cooperatives by external mediators toward the African past and culture. Yet the group's nature, roles, and objectives cannot be apprehended without a detailed analysis of the historical evolution of cooperatives and their mode of production during colonization. Knowledge about the historical growth of cooperatives in Africa will allow us to comprehend the process of modern cooperative development in Africa and how they evolved with history. The following sections will provide insights into these historical aspects of cooperative movements in French and English colonies.

2.2 Francophones and Anglophones Cooperatives in Africa

This section explained the discourse between cooperatives in former French and Anglo-Saxon colonies in West Africa. The section further elaborates on the differences and similarities in the two systems and how this impacts contemporary cooperative organizations in Africa. West African states can be divided mainly into two groups, i.e., the British and the French colonies. Before the colonial period, conventional forms of mutual aid institutions existed in Africa where community members assisted each other through group work-related activities described previously. Although these groups did not have legal papers as contemporary cooperatives, their members managed their work collectively by shared rules and principles established by the community and group members.

These traditional cooperatives were able to meet their members' economic and social needs through mutual help and cooperation until westerners invaded the continent. Subsequently, the conventional types of cooperatives were replaced by the French and the British cooperative style upon colonization of Africa in the early nineteenth century. The following section will highlight how cooperative organizations evolved in both francophone and anglophone colonies of West Africa and their impact on post-colonial cooperative movements in Africa.

2.2.1 Francophone Cooperatives in West Africa

The concept of cooperation among individuals was the essence of social structure in most pre-colonial African societies; nevertheless, the French colonial government overlooked this indigenous cooperative model. Accordingly, like other deeds of the French colonial administration, the "Sociétés Indigènes de Prévoyances Societies SIP" (the Native Providential

Societies) was founded by the Metropolitan decree of June 1910 (14). Governor-General Ponty made the formal request at the Government Council of 1909. This initiative was followed up with proposals made in 1893 and 1897 by Lamorthe, Governor of Senegal, and Claude as Governor-General of the freshly new French West African colonial group (Asiwaju, 197). The governor voiced the need to launch a seed reserve for agriculturalists in groundnut regions. He believed that the lack of such a mechanism complicated the issue of scarcity, mainly during the dry season. His viewpoint led to a range of government bills issued to the region's commissioners in 1902, 1903, and 1907 instructing the creation of seed reserves in the areas under French rule (Wibaux, 1965, p. 28-57).

Senegal became the primary operation field of that system, especially in the Sine Saloum and Diourbel regions. The initiative was known to have received support from farmers in the Sine Saloum district, where the prerequisite of such a facility was strongly needed. Associate's contribution was primarily in the form of seeds for storage, allotted at the right time with an interest rate also payable in seeds (Przerworski, 1970, p. 4). This led to establishing an initial 5% fee, upraised to 25% in 1908, while the interest rate was converted into cash with time. Within a few years of their establishments, the SIP in Sine Saloum increased in wealth and membership from 692 associates with a capital of 24,989 francs to 764 members with a capital of 28,101 francs (Asiwaju, 1976, p. 44)

The triumphant story of colonial officials in the groundnut regions of Senegal was portrayed as the justification for the 1910 legislature, which was extended to other French colonies in West Africa. Although this verdict legalized the SIP in French West Africa, cooperatives existed in Senegal until 1930. Once the economic crisis hit Europe following WWI, the formation of cooperative enterprises tremendously increased in French West African colonies (Wibaux, 1965, p. 28-57).

Consecutively, as the economic crisis harshly struck Europe, there was a requisite to hasten rural economic production in the colonies, leading to the upsurge of SIP. Consequently, modern cooperatives were established by the Cooperative Ordinance of 1935 in most territories of West Africa (Senegal, Mali, Burkina Faso, Nigeria). Following the request of the Governor-General of the new French West African colonies, this Ordinance regarded indigenous associations mainly as tools to advance the colonial power's needs. Governor-General Brevie played a crucial role in SIP expansion in West Africa. From the enactment of the 1910 decree, there were about 22 cooperative organizations with 1,503,825 memberships. These numbers increased from 53 cooperatives in 1931 to 102 in 1933, with 8,549,231 enrolled members throughout the French colonies (Belloncle, and Marcel, 1953). By 1952, the sum of the

Societies was 116 with 415 memberships and a capital of 2,771,117,499 francs CFA. Table 3.1 indicates the number and members of SIP in west French Africa by 1953.

Table 2.1: The “Sociétés Indigènes de Prévoyances” of French West Africa in C .1953

The colonial territories	Number of SIP	Estimated budget in CFA	Membership
Senegal	14	1,867,891,312	1,110,868
Niger	9	87,189,312	1,252,720
Mauritania	8	12,104,856	176,500
Guinee	20	176,000,000	1,382,000
Haute Volta	11	122,542,242	1,851,281
Dahomey	18	61,981,212	428,793
Cote d'Ivoire	18	211,538,684	1,227,000
Soudan (Mali)	28	231,569,612	2,081,253
Total	116	2,771,117,499	9,510,415

[Source : Wibaux,1965, op cit. P.36]

An increase in the number of SIP is somehow correlated with the growth of farmers' organizations in the well-designed setting. At the same time, seeds and seedlings storage and supply were important livelihood activities mostly handled by cooperatives. The cooperatives were thus highly concerned with attaining complete and integrated rural economic and social growth (Migot, 1970, p. 17-60). An impressive amount of time and assets were dedicated to the transportation and sale of associates' yields. In the French west colonies, the cooperative actions were protracted to cover various agricultural activities such as soil preservation, rural water provision, irrigation schemes, shops, and stores with farm inputs at subsidized costs, as well as roads, hospitals, schools, and slaughterhouses expansions (Frank, 1965).

As a result, administrative power was applied to establish and manage the SIP, as was the case, to attain other goals of the colonial government. Wilbaux highlights this point in his explanation about the SIP “ ... une association d'inspiration administrative destinée à faciliter et encourager le développement de la production agricole autochtone et, en principe, charger d'éveiller dans l'esprit du cultivateur Africain le sens qu'il peut avoir de la co-operative” (Wibaux, 1965, p.37). Implying that cooperatives were managerial organizations intended to facilitate and encourage the development of agricultural production and, in principle, to awaken the sense of co-operative enterprise in the mind of African farmers.

Regarding the management of the cooperatives, a new law was enacted in 1915 on the motivation that indigenous people were not educated enough to abide by the regulations of the 1910 decree. This new law made cooperative membership compulsory for all male adult

farmers, herder men, fishers, and artisans in the French West African colonies (Belloncle, 1979). The new law also explicitly aimed to hasten farming production and lessen economic problems, such as the rising cost of living in the urban areas caused by the outburst of WWI.

Nevertheless, the compulsory membership in cooperatives was not applied to French citizens and African assimilates who were allowed to establish and run similar cooperative organizations based on orthodox principles (N'Daiye, 1965). Besides the issue of mandatory membership, the SIP was directly managed and controlled by colonial officials. Each cooperative was established by the governor of the region, who set regulations, fixed the tariffs payable by associates, and endorsed the cooperative's budget within its territory (Lauer, 1973). The colonial representatives in other French regions had the veto to supervise the cooperative council and nominate the organization members' management team. These contradicted the democratic principle of the cooperative.

The endorsed control in the region was highly fortified by three levels of supervision and interference, mainly at the territorial, federal, and metropolitan levels. Headquarters leadership exercised control at the territorial level over the management of common funds instituted in 1933 to offer credit services to the SIP throughout the West African colonies. Besides, the governor of any region could intercede and inspect any features of the cooperative society's actions within their district at the federal level. The General government monitored the territorial management position in Dakar. Lastly, regular supervision was implemented by the inspector bodies in the colonies through the Ministry of Overseas France in Paris (N'Daiye, 1965).

Throughout rural communities of French West Africa, indigenous people endured multiple cases of abuse from the colonial administration, including forced labour, conscription, compulsory farming production, summons of harvested produce, direct taxation, and mandatory memberships in the SIP (Wibaux, 1965). This authoritarian nature of the French SIP lessened indigenous people's motivation to join cooperatives.

Between 1947 and 1960, the SIP was replaced by the "Sociétés Mutuelles de Production Rurale" and then by the "Sociétés Mutuelles de Development Rural," SMDR, which was more or less similar to SIP in terms of control and management (N'Daiye, 1965). Following WWII, the colonial government initiated some positive efforts to introduce democratic principles by authorizing associates' involvement in the management of the cooperatives. However, the conventional control by the colonial official continued through a special government commissioner (Commissaire du Government), and the problem of compulsory adherence did not change.

The French were unable to acknowledge that local African people were capable of adopting the Western French collaboration model, which was presumed to be ideal. Cultural arrogance and assimilationist tendencies partially explain this lack of understanding. This was also due to genuine ignorance and lack of knowledge of the cooperative ideals of the diverse African cultures (Wibaux, 1965). The French colonial policy considered African cultures backward, static, and savagery, needing modernizing through ‘civilization’ (Lauer, 1973). Their approach focused more on the convenience of the French government than on understanding and valuing African cultures and reality (Apthorpe, 1979). Under this policy, African people were presumed oblivious of the cooperative societies systems and organizations; the policy additionally stressed the importance of systematic education for indigenous people.

Both the SIP and SMDR were perceived as tools for developing the western ideal of cooperation (Samuel, 1983). The establishment and maintenance of these two organizations contributed to setting up the ground for the bureaucratic model and management of former post-independent west African colonies. These were later unsuccessful in forming the adequate atmosphere and socio-political settings required to expand independent cooperative societies. The persistence of the European model and the utilization of mandatory memberships disheartened the thriving of cooperative societies’ aptitudes in many parts of Africa.

2.2.2 Anglo-Saxon Cooperatives in West Africa

Unlike the French cooperative model in francophone West Africa, the Anglophone countries’ experiences show that official interference from the westerners resulted from the local cooperative organization’s invitation. It was intended that indigenous farmers in English-speaking parts of west Africa would join cooperatives and provide labour for the construction of the buildings and experimentation sites to benefit from the services and facilities.

Associates’ interest was noticed in their access to local “cocoa houses” in the case of Nigeria, where members could take their crops for preservation or sell them to the Agricultural Department (Heussler, 1971). Cooperative meetings allowed farmers and state officials to communicate amongst themselves. Contrasting with the French West African style, the British government was receptive to public objection, showed more interest in attending indigenous cooperative meetings, and did not use any mandatory rules on the African farmers (Wibaux and Adeyeye, 1978).

Though both the British and the French aimed to exploit their colonies, the British tactic brought less discomfort than the French one (Henri and Marcel, 1935). The progressive British

style was reflected in the cooperative ordinance of 1935, which emphasized the cooperative principles of voluntary membership, democratic control, and fund management. Regarding voluntary membership, it was mentioned that “prospective members must apply for admission [and] where they had become members without prior application.... they should be free to resign” (Adeyeye, 1978, p. 46). The free choice and development strategy enabled a viable growth and expansion of British colonies’ formal and informal cooperative organizations. For instance, existing statistics for French West Africa in 1953 show a sum of 116 Sociétés Indigenes de Prévoyance. The records for Nigeria in 1951 indicate a total of 1091 (821 registered and 270 unregistered) leading cooperative societies with various functions and types (Wibaux and Adeyeye, 1978).

The British colonies’ strategy held better opportunities for cooperation, unlike the French, who employed oppression. Yet not everything was perfect under British rule. For instance, in Nigeria, the British government prevented and slowed down the initial purpose of pioneer farmers’ cooperatives from trading their crops abroad. Accordingly, Adeyeye contends that “instead of training cooperatives to become independent exporters, the government designed them to replace the African middlemen, as they become a service organization for expatriate firms” (Adeyeye, 1978, p. 32). This contradicted the farmers’ willingness to attain an increased income from their yield trade. In this regard, the British cooperatives’ level of autonomy was limited as farmers felt exploited, as was the case with the French system. Adeyeye referred to this assimilationist practice as an unresisted desire to fulfil the convenience of western literate officials’ sine qua non for cooperative societies (Adeyeye, 1978, p. 122-123). This indicates that although the British tried to adapt to local customs and practices, they still assumed that the western model was perfect for cooperative movement development in Africa.

2.2.3 Differences and Similarities Between Francophone and Anglophone Cooperatives

Cooperative movements in French and British West Africa, like in other parts of the western colonies, were endorsed with similar aims and purposes regarding exploiting the colonies’ human and natural resources (Asiwaju, 1947, p. 173-176). The comparisons between the objectives of these two systems and their approach to local culture were obscured by essential disparities in the mode of management and the types of reactions from local people in the two colonies. Table 2.2 summarizes the differences and similarities between the francophone and anglophone cooperatives in west Africa.

Table 2.2: Comparison of Francophone & Anglo-Saxon Coop in Colonial West Africa

Coop Type	Francophone coop	Anglo-Saxon coop
Differences	<ul style="list-style-type: none"> - Interventionist strategy applying direct and severe control - Coop initiatives were imposed on local people - Use intimidation not only as an administrative and political tool but also as a mechanism to achieve socio-economic transformation - Obligatory agricultural production, compulsory enrolment in the SIP - Official management of the coop 	<ul style="list-style-type: none"> - Chose a “laissez-faire” attitude - Initial attempt for cooperation results from indigenous people - Expert advice, comprehensive and flexible methods of cooperation with rural people - Open and voluntary memberships - Members management of the coop
Similarities	<ul style="list-style-type: none"> - Exploiting the colonies’ human and natural resources - Cultural arrogance - Ensured key responsibilities in the management of the coop - Similar legacies on the bureaucratic control of the cooperatives 	

[Source: author based on literature¹]

The French carried out an interventionist strategy where the state applied direct and severe control; the British chose the minimum official guidance or a “laissez-faire” attitude (Adeyeye, 1979, p. 34-38). These two approaches suit the generalizations of the western characteristics, which, on the one hand, exemplify the gap between the idealist and “dirigisme” French and the inclined, moderately relaxed British on the other hand (Asiwaju, 1947). However, both systems share cultural arrogance, which primarily looked down on African cooperative societies as primitive and outdated while ultimately considering theirs as progressive and the best. British and French expansionists were distinguished by how they conformed to local culture, their level of recognition, and their concessions to African cultures and systems, which had distinct impacts on local project development and initiatives (Asiwaju, 1947, p. 173-176).

The French official government managed the cooperative movement in French West Africa. In Anglophone Africa, the initial attempt at cooperation for genuine contemporary business resulted from indigenous people’s initiative, totally free of government interference.

¹ Asiwaju A.I. (1982). The Co-Operative Movement in The Colonial Context: A Comparison of The French and British Rural West African Experience To 1960 *Journal of the Historical Society of Nigeria*. DEC. 1981-JUNE 1982, Vol. 11, No. 1/2 (DEC. 1981-JUNE 1982), pp. 89-108

In French West Africa during colonial rule, this difference was usually more significant and more systemic, with intimidation not only as an administrative and political tool but also as a mechanism of making the socio-economic transformation. Under this system, the typical residents, mainly the rural ones, were endangered by forced labour, conscription, subjective compulsory chieftainships, taxation, and involuntary relocation of settlements (Asiwaju, 1947). Intimidation was further employed to attain conformity of colonized people in the socioeconomic procedures. This intimidation was exercised, for example, in obligatory agricultural production, compulsory enrolment in the “Sociétés Indigenes de Prévoyance” (SIP), as well as in the gradually adapted forms of “Sociétés Mutuelles de Development Rural (SMDR), which shared similar objectives with the former. As a result of early colonial state involvement and constant domination, members lost interest in joining cooperative societies.

The extreme utilization of mainly administrative coercion strongly distinguished the French and the Anglo-Saxon cooperative management in west Africa during the colonial time. J. J. Lauer further exemplifies this in his famous work about agricultural innovation among the Idoos of the Western Ivory Coast. He raised specific problems ascending from the feature of coercion, averting the importance commonly granted to the farmers as the significant feature of the revolution. Likewise, Dr Lauer uncovered that administrative pressure restricted farmers’ decisions regarding agricultural developments. Besides, the diversity and variety of administrative strains abruptly constrained agricultural ventures and incidentally delayed the accomplishment of economic objectives (Lauer, 1973, p. 3).

The comprehensive tactic by the French contrasted with the Anglo-Saxon cooperatives in West Africa, which centred their goals on official expert advice or comprehensive and flexible methods of cooperation with the rural folk (Elliot, 1970). Although both the British and the French primarily misused traditional cooperative institutions, the British were somehow flexible about local cultures and thoroughly explored and charmed indigenous practices and institutions to achieve their colonial objectives (Syracuse and Cohen, 1963). In the case of Nigeria, a similar initiative was passed by the government in 1935, representing the enactment of the first cooperative ordinance (Dean, 1973). In both systems, it remains crucial to note that the colonial administration ensured the initial management of the societies. In contrast, the French persisted in compulsory membership with direct, authoritative control. In comparison, the British remained firmly attached to the cooperative principles of open, voluntary memberships and were better authorized to cooperate in the management of their organizations.

Both the British and the French had similar legacies regarding the bureaucratic management of the cooperatives. Though official interference in cooperative management was undoubtedly not legitimate to influence general concerns like cooperative adherence and autonomous control, concerns over the bureaucratic administration of cooperatives were highlighted by some scholars in former British colonies. They highlighted the limited number of literate and trained staff among local people, as in French West Africa (Heussler et al., 1963). The assessment of these strategies would help comprehend the colonial past and assess recent rules and practices of cooperative movements in Africa.

2.2.4 Historical Impact of Colonial Practices of Cooperatives in Post-Independent Cooperative

Most post-independent African countries sustained colonial practices and legacy after independence. The development of rural areas in general and mainly the cooperative societies of the post-independent governments in Africa heightened the merging of two types of development.

Firstly, following independence, the new governments maintained most of the colonial practices of cooperative administration. The bureaucratic control of the cooperatives remained intact. This receives criticism from some scholars in Africa. For example, C.G. Widstrand argues that “political independence in West Africa has sharpened the awareness of various governments about the need for accelerated rural development and community life”. There is common acceptance of co-operatives as the most effective strategy in many places. However, an increase in government support meant a corresponding enlargement of the bureaucratic control, and this led to widespread criticism of the cooperative movement in West Africa; similar to elsewhere (Widstrand, 1979), it was considered “just another arm of government” (Adeyeye, 1978).

Secondly, the newly post-independent African leaders eliminated the SIP and other associations. When African states gained political independence from their colonial masters, their economic and social context improved. This change was also noticed in the rural areas, with the government taking control over the lands and peasants’ organisations. They reinvigorated the establishments and expansion of real cooperatives following collective principles of voluntary adherence, democratic governance, and trust management, limited to French citizens and few African assimilates during the colonial era. With the advent of independence on the continent, other associations have arisen with different names (groupings, village associations, etc.). Additionally, private organizations such as (churches and missionary

schools) have worked with peasants in isolated rural areas on issues ignored by public authorities. They have intervened in market gardening and rural credit, which led to the establishment of community-level organizations to handle the activities carried out by local people in rural areas. Many autonomous farmers' organizations thus emerged during those periods (Charles, 1981).

Following independence, several Sub-Saharan administrations applied strategies that further emphasized cooperatives' role and other rural associations in the rural area. They grew into solid networks for government-subsidized credit, input, supply, and marketing projects and were sometimes constrained to work under tight supervision and management by the government (Hussi et al., 2002). Scholars emphasize the threat of undue government interference assumed to have troubled the French colonial tradition and destroyed prospects of sustainable cooperative societies in rural areas.

While some scholars agree that cooperatives could and should be endorsed by the state, they emphasize that this support must not be translated into a form of control; government intervention must instead use assistance to grant power to members to manage their organizations (Adeyeye, 1978). In reforming agriculture, the post-independent government introduced a new structured sector taking over the leadership of the previous systems where colonial government influenced farmers' organizations (Baland, J.M. and Platteau, 1996). Hence, early post-independent governments tried to control the cooperative organization in most parts of Africa.

Accordingly, the restructuring of agriculture and rural societies are indicators that should not be applied to explain or ignore the complexity of rural realities and the multiple attempts by governments to empower their peasants (Birchall, 2003). Although, there is substantial diversity in production contexts and the economic and social backgrounds in which peasants work throughout developing countries (Brenneman Lyle et al., 1994). Compared with developed countries, small-scale cooperatives have obtained enormous assistance in Africa. There was more assistance from the newly independent government than during the colonial era (Birchall, 2003).

Agricultural cooperatives were identified as a political hazard to the government policies in Africa and remained closed or mostly substituted by government structures (Kadzola, 2009). In some West African countries, including Mali, cooperatives were deemed an expansion scheme labelled "populist-nationalist cooperative strategy" (Develtere, 1993, p. 19). This system intended that the cooperative pattern be reformed to suit the dominant government's apprehension. Under this approach, governments believed that cooperatives

should no longer remain independent groups (as they were meant to be). In that vein, government-established cooperatives were built into systems and beliefs which would not benefit the farmers' members of these cooperatives but rather help fulfil the states' legal and financial agendas (Develtere, 1993). Under these systems, cooperative adherence was compulsory, and public servants were commonly assigned to the main supervision positions of the cooperatives. As a result of governments' substantial involvement, members regarded these organizations as governmental institutions rather than cooperatives (Brenneman et al., 1994).

After several revolutions from the peasant groups in rural areas regarding government involvement in cooperative affairs, fundamental adjustments occurred within cooperatives. These adjustments emphasized alliances founded on conventional arrangements and balanced capitalism (Birchall, 2003) because of their nonconformity with community traditions, ethics, and societal patterns (Develtere, 1993). Develtere (1993, p. 20) labels this the "new cooperative movement", particularly in Africa, which witnessed a shift in state cooperative management to farmers' cooperative management based on the cooperative values and principles of autonomy and self-management. Illustrations of these adjustment policies led to the creation of the Cooperative Act of 2001 in Mali (Ortmann & King, 2007) and the OHODA Uniform Act in 2010 in West Africa.

As time passed, new governments tended to perceive cooperatives as development tools that could accelerate poverty alleviation strategies in rural areas. Throughout the post-colonial period, cooperatives were seen in distinct manners in each country. In sub-Saharan countries, including Mali, assistance to cooperatives is amplified with government intervention with peasants. They aim to give farmers an independent economic status as part of their industrial venture for rural development (Birchall, 2003).

From the early 2000s, states and external actors have started new strategies to modernize cooperatives by giving them full autonomy in their management. On the one hand, some authors affirm that governments are abandoning the models of pre-existing styles that impose invasive and dominant strategies on farmers' organization, self-management and control. On the other hand, other scholars also believe that the government must hold responsibilities, functions, and accountabilities (including financial) to the cooperatives as they doubt farmers' ability to manage themselves fully. This handover in the state involvement in farmers' cooperatives is often determined exclusively by the government and its donors. In most countries, the government approves cooperatives' self-autonomy by specifying some patterns and modalities for their management (Mercoiret, 1990). Cooperative organizations are

currently growing at the village, national, and regional levels in most sub-Saharan African countries.

Based on these findings, the author argues that farmers and rural producers must be at the centre of policy creation, execution, assessment, and analysis of any local development strategy. Cooperative members should be asked about their opinions, ambitions, and needs that affect decision-making and policy design. Hence continuous and tight cooperation over communication must be prioritized between cooperatives and the government. Past efforts to revitalize rural development have failed because governments and experts spoke on behalf of the rural population rather than people speaking for themselves. This creates shortcomings in determining communities' desires over issues brought about by the government. It remains essential for government and planners to directly talk to rural people about their needs and concerns and design policies and strategies to address their challenges.

2.3 Cooperative Concept, Meaning, and Principles

The term cooperation originates from Latin, which implies operating together (Filley, 1929). Interdependence and collective assistance amongst individuals has been the foundation of communal life. Individuals cannot live separately and isolated (Nganwa, Lyne, and Ferrer, 2010). Ever since the start of humanity, people have found rewards in acting mutually and assisting each other in all incidents. In Mali, it is prevalent for individuals to be interrelated in ordinary life over communal support and self-help actions in their socio-economic environments.

There are numerous scholarly views on the definitions of cooperative organizations. The most accepted and utilized one remains the International Cooperative Alliance (ICA, 2005) explanation which defines a cooperative as: "an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise." Likewise, in the UN report, cooperative societies are also defined as charitable organizations amongst rural communities to resolve their common agricultural problems together (UN Report, 1984).

Cooperatives lack a commonly accepted definition and vary significantly based on the extent of assets pooling, supervision, and purposes (Naghizadeh, 1984). This creates challenges in connecting prevailing processes in assessing cooperatives' performances about their accomplishments, failures, and confines the generalization of lessons gained from each specific cooperative worldwide (Goyal, 1966; Hussain, 1973). The cooperatives under investigation in this study include male, female, and mixed agricultural cooperatives. The members either run a farm autonomously or communally. These cooperatives introduce enhanced farming methods,

joint acquisition of inputs, joint marketing of products, and other associates' services. Accordingly, the organization ranges from market gardening to food processing and marketing cooperatives.

2.3.1 Cooperative Principles

The cooperative guidelines are rules through which cooperatives create their ethics in use. Cooperative organizations need specific, exceptional standards or characteristics that differentiate them from other community organizations. Based on the literature, there are seven principles commonly approved by scholars and experts (ICA, 2007; Kanyane, 2009). Figure 2.1 summarizes the seven cooperative principles.

Figure 2.1: Cooperative principles



[Source: <https://www.ccmcc.com/sites/default/files/principlesvertical>]

The principles are accordingly defined as:

1. **Voluntary and open membership:** Cooperatives are volunteer groups accessible to any individuals capable of using their skills and enthusiasm to take accountability for membership, deprived of gender, societal, cultural, political, or religious discernment.
2. **Democratic control of members:** Cooperatives are independent associations managed by memberships that enthusiastically establish guidelines and make decisions. Male and females serve as chosen councils and are responsible for all the members. In notorious cooperatives, associates hold equal vote privileges (a participant, a vote), and cooperatives at other phases remain organized autonomously.
3. **Member's economic participation:** Associates relatively and legitimately manage the wealth of their organisation. A slight portion of the wealth remains the shared estate of the

group. Members generally obtain partial reimbursement, in any investment provided for their involvement. Their assigned duties are used for any group resolutions: evolving capitals that could be inextricable, helping associates in part with their relations in the organisation, and backing other actions agreed in the group.

4. Autonomy and independence: Cooperatives are independent, self-help groups run by members. When associates sign contracts with other groups, involving authorities, or increase investment from outside suppliers, they do so based on relationships that guarantee autonomous command by their associates and preserve their joint sovereignty.

5. Education, training, and information: Cooperatives offer education and training to their associates, nominated bodies, administrators, and personnel to efficiently expand their cooperatives. They notify the community, mainly young individuals, and decision-makers, regarding the type and advantages of their collaboration.

6. Cooperation among cooperatives: Cooperatives also help their associates professionally while reinforcing the association effort in cooperating with local, national, regional, and international organisations.

7. Concern for community: Whereas protecting associate appeals, cooperatives operate for their communities' sustainable development through strategies acknowledged by their memberships. Cooperatives' success mainly depends on their universality values, voluntary, self-and social accountability, egalitarianism, impartiality, unity, and openness ethics.

2.3.2 Classification of Agricultural Cooperatives

Cooperatives have been created globally to attend to their members' benefits, comprising buyer, manufacturer, employee, and service cooperatives. According to the CNRA (2010), 48,000 cooperatives help 120 million individuals in the USA, while 750,000 cooperatives assist 730 million affiliates worldwide. These cooperatives offer different services to their memberships, including monetary assistance, equipment, farm materials, farming crops, customer supplies, electric energy, telephone, housing, and other insurance services. This study is concerned with agricultural cooperatives, categorised into three main groups, namely:

- 1) Marketing cooperatives that negotiate improved fees, manage, produce, and trade farm crops);
- 2) Farm supply cooperatives that buy in bulk, manufacture, frame, and distribute farm resources and inputs, including fertilizers, chemicals, seed, fuel crops, farm equipment, hardware, and constructing stores;

3) Service cooperatives that deliver services involving ginning, chortling, credit, trucking, storing, ventilation, irrigation, artificial pollination, services, and insurance (Cropp & Ingalsbe, 1989; USDA, 2004).

These cooperatives also differ significantly in scope and roles accomplished. The explanation of cooperatives remains disputed because of the differences in ownership (producer, worker, or consumer) and purpose (credit, housing, grocery, etc.). Still, these three principles underscore the importance of democracy and autonomy in all cooperative organisations (Bijman et al., 2012).

Many agricultural cooperatives remain moderately minor enterprises in most sub-Saharan African countries. Cooperatives can be categorised based on formality, ownership, and the cooperative organisation degree. The study will only focus on the formation process since this type is the most significant feature in Mali. Attwood (1988) specified that cooperatives could be formal and informal organisations. The difference mainly depends on the legal status of a cooperative.

A- Formal cooperatives

Formal cooperatives are governed by cooperative legislation and must comply with their legal obligations (Amin and Bernistein, 1995). A range of approaches and management policies guide formal cooperative organisations in Africa. The important and well known in West Africa is OHADA (Organisation pour L'Harmonisation du Droit Des Affairs en Afrique) uniform act. The OHADA act describes a cooperative society as a group of co-operators unified by a shared bond. Its purpose was to increase the efficiency and profitability of cooperative values and activities. Any physical or legal entity can be a cooperative society member, where it is not subject to any legitimate inability in agreement with the terms of the national law of each state party.

The act mainly set legal requirements for registering, creating, and managing all types of cooperatives in West Africa. The implementation of the OHADA Act is ensured by the DNPSSES, which guarantees that cooperatives' principles are followed throughout Mali. Doing so assists existing cooperatives' enrolment with the government and gets their official status based on the OHADA Act.

B- Informal cooperatives

Informal cooperatives are cooperative societies without legal recognition and usually function beyond the cooperative act's scope, although they comply with the cooperative's ethics. According to Van der Merwe (1996), the most communal informal organisations are community-based saving systems intended to enhance their members' lives financially and

socially by offering them economic provision within a social or community-based partnership. It is usually well-known among individuals who operate together or belong to a similar religious belief, household, or community to come together and create these forms of cooperatives. They have cooperative systems and may even have an intended structure (Philip, 2003). Hileselassie (2003) also argues that traditional cooperatives or informal cooperative arrangements have predominated in emerging countries, including Mali, for centuries and continue today. These traditional cooperatives patterns are usually too entrenched in the community beliefs, with typical examples of work structures, cooperation during harvest time, water irrigation, collective activities, rotating saving and credit services, funeral communities, building, and farming endeavours

2.3.3 Reasons for Cooperatives Establishment

The real incentive for founding agricultural cooperatives is farmers' capability to pool production and assets. Usually, it remains too costly for farmers to produce crops or initiate agricultural services in developing countries. Cooperative organisations offer a scheme for farmers to join an organisation, over which a group of farmers can obtain better financial results than when they try independently.

Current research continues to document various reasons motivating the creation of cooperatives. The primary reason is the market failure (Centner, 1988; Christy, 1987; Hansmann, 1999; Torgerson et al., 1998; Valentinov, 2007). Market failure involves a lack of buyers and wholesalers of agricultural produce. Challenging behaviour, collusion, depredation, and insufficient information can also lead to extra expenses for farmers (Harris & Carman, 1983).

Besides market failure in many developing states, peasant farmers also encounter poor infrastructure and lack of equipment, foreseen by inadequate roads or communication schemes, leading to high contract expenditures (Shiferaw, Obare, & Muricho, 2006). Pricing of produce remains informal in various conventional rural marketplaces. Marketing prices also stand elevated (Lele, 1981). In such instances, smallholder peasants suffer the most due to inadequate information (Tollens, 2006).

The additional justification for cooperatives' establishment is that individual farmers want an official process to commercialise their products in the market, usually beneath their influence (Cook, 1995; Cook & Iliopoulos, 1999). In that regard, cooperatives increase farmers' negotiation power with input providers and consumers of agricultural products. Christy (1987) found that the best communal and broadly acknowledged justification of farming cooperatives

in the USA is the institutional belief established by Professor Edwin Griswold. He regarded collective engagement as serving a border occupational activity and obliging farmers to remain extra competitive (Cook, 1995; Torgerson et al., 1998).

Cooperatives have also existed to bypass the stockholder-held enterprises to improve the value of their products and limit external market influence (Cook, 1995; Szabo, 2006). Although, from the early 1990s, farmers' primary purpose was adding value to their assets, which were viewed as aggressive approaches for cooperative development or extension in developed nations (Cook & Chaddad, 2004).

The third idea in establishing cooperatives remains their performance as self-help associations to solve a group's needs that satisfy societal and human desires. Christy (1987) described this belief as retaining better importance on the collective growth feature (human and society). Most of the emergent cooperatives in developing nations have been designed for this purpose, to anticipate impoverished farmers standing in rural communities. Cooperatives under such circumstances have a high proportion of low-income members (Christy, 1987, p. 27). Though these establishments diverge from other cooperatives, the main asset of each associate is labour. Former sharecroppers and those with limited resources make up the majority of members.

While cooperatives are formed for economic gains, they also tend to have social objectives. Cooperative expansion remains a tactical approach by governments in developing countries to encourage farmer involvement in the supply chain. Kachule and Dorward (2005) recognised that the drives for farmers entering agricultural organisations comprised accessing credit inputs, output, markets, and technical assistance. Similarly, Clegg (2006) advised that cooperatives have an excellent capability to expand the underprivileged living conditions if they can increase control in the marketing of their yield. Farmers receive numerous advantages from being part of a cooperative society, including improved access to bargaining power, assets, and resources depending on the cooperative's nature.

Besides, agricultural cooperatives also curtail their associates from making excessive profits. Veerakumaran (2005) highlights that cooperative support is essential for sustainable food safety at the family level; they remain the most crucial official mechanism to achieve food security. The NCBA (2005) also maintains that cooperatives remain shaped by their members once the marketplace fails to offer required services, industries, and goods at reasonable prices and fair value. Cooperatives allow individuals to expand their living conditions and increase their financial prospects over self-help.

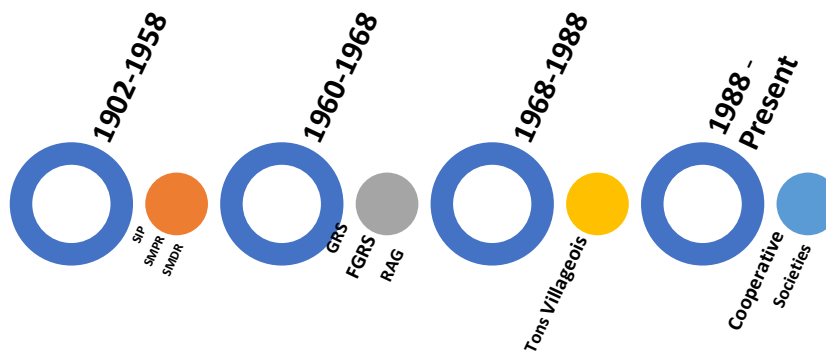
According to the same report, individuals start cooperatives to reinforce their negotiation power, preserve entry to sustainable markets, and benefit from new market prospects. Cooperatives also acquire desirable products and services reasonably, expand revenue prospects, decrease expenses, and manage risk. Similarly, (Barton, 2000) held that farmers create cooperatives to make higher incomes, access inputs, and receive essential assistance at lesser prices than they might acquire somewhere else or inaccessible before joining the cooperative. Cooperatives also allow their members to sell their crops at improved prices or in previously unavailable markets.

Cooperative membership and activities are significant instruments for farmer organisations and socio-economic empowerment. While economic profits are an essential driver in creating cooperatives, it is not the only concern. Another essential advantage of farmer involvement in cooperatives is that they hold autonomy in the organisation’s management, guaranteeing ownership and control over resources. In this regard, income reimbursement is shared among cooperative associates rather than stakeholders. Cooperatives thus, generate social and economic benefits that allow individuals to accomplish objectives that they may not realise by themselves (Cook, 1995; Szabo, 2006).

2.4. The Evolution Process of Cooperatives Movement in Mali

The cooperative movement in Mali has undergone both positive and negative stages in the country’s socio-economic and political history. According to some studies, cooperative action has been marked by various structural adaptations (N’Diaye, Albert, 1965). Cooperatives’ administration methods have changed from colonial to postcolonial times, creating structural changes. Figure 3.1 summarises the historical evolution of cooperatives in Mali from colonial to contemporary Mali societies.

Figure 2.2: Development process of coop movement in Mali



[Source: author based on literature²]

² 1- Aperçu des Mouvements Coopératif et Mutualiste du Mali : Maciga Diawara, Aliou Ouattara / Socodevi juillet 2008, P : 13

The first phase, from the period of 1902 to 1958, was characterized by the rise of cooperative movements, which resulted from a lengthy process that began in 1902 with the creation of village granaries by the French colonial administration to accumulate cereal stocks. The institutionalization of village granaries also exemplified this period in the form of “Sociétés Indigènes de Prévoyance” (SIP), indigenous welfare societies whose membership was compulsory and contributed to subsidizing the colonial administration during the 1910s. In 1953, the SIP was replaced by the “Société Mutuelle de Production Rurale” (SMPR) joint rural production companies, which were more in line with the previous cooperative movement’s ideals. It also imposed compulsory membership where surpluses had to be paid back to the social investments. In 1956 the SMPR was changed to “Sociétés Mutuelle de Développement Rural” (SMDR) Rural Development Mutual Enterprises (SDRs) by the Decree of 13 November. The SMDR was similar to the SMPR type of management. The creation of the Malian Federation and the advent of Mali’s Republic led to an extensive reorganization of the pre-cooperative institutions in the 1950s.

The second phase, from 1960 to 1968, was denoted by drafting legislative texts establishing legal frameworks of the Malian cooperative movement in rural and urban areas. In rural areas, the law 60-8 and 60-9 of June 9th 1960, was enacted on the status of SMDR, Rural Production and Mutual Aid Groups (GRPSMs), and finally Rural Association Groups (RAG), considered cooperatives as public welfare institutions and self-managed organizations. The national conference on cooperation in rural areas was held in May of 1968, advocating the abolition of the SMDRs and the continuation of cooperative structures such as Rural Groupings (GRs) and their Federations (FGRs) were expected to become multi-functional agricultural cooperatives.

Meanwhile, in urban areas, Law 63-21 of January 25th, 1963, was adopted, which enshrined the universal principles of cooperation on mutual aid (Wibaux, 1953). This law marked the turning point of intensive action to promote urban cooperatives in all sectors of the national economy. The renewal period of cooperatives was experienced by introducing

2- Rapport Annuel des activités 2018 de la Direction Nationale de la Protection Sociale et de L'économie Solidaire (DNPSSES) Février 2019
3- Loi N° 01 __076__ / Du 18 Juillet 2001 Régissant les Sociétés Coopératives en République du Mali
4- Source : Article de Ressources Solidaires www.Ressources-Solidaires.Org/Du-Social-Et-Du-Solidaire
5- La Politique de Développement des Sociétés Coopératives au Mali de la Direction Nationale de la Protection Sociale et de L'économie Solidaire (DNPSSES) Février 2019
6- Direction nationale de la protection sociale et de l'économie solidaire (DNPSSES) : Cadre D'analyse et D'action. Renforcer la Cohérence entre l'agriculture et la Protection Sociale pour Lutter Contre la Pauvreté et la Faim en Afrique,2018

legislative and regulatory action in response to the 1968-69 laws aimed to improve governance and re-establish confidence within cooperatives throughout the country.

The third phase, the period from 1968 to 1988, occurred following a thrilling stage of widespread modification in structure contrary to collective ideals; the Malian cooperative movement fell into a phase of uncertainty. With memories of collective fields on the one hand and the political upheavals that followed, on the other hand, people became cautious of the cooperative movement. 1974 symbolises integrating cooperative action as a strategy in Mali's national economic and social development plan, which began by implementing a ten-year plan. This led to the advent of a new type of organisation, called the "Tons Villageois", or village associations, in 1979. The associations recognised a new form of organisation in communities where political authorities were the driving force of local development in Mali.

The final phase from 1988 to the present marks a new momentum in the cooperative movement. This state was enabled by the new democratic context introduced in 1991, with the first law reorganising the cooperative movement in 1988, including village associations and cooperatives. It also enshrines the dissolution of the SMDR through the enactment of law 01-076 governing cooperative societies in Mali in 2001. The decree of 2005 established the composition, organisation, and functional modalities of the National Council for Cooperation, a transitional structure leading in 2009 to the creation of a Confederation of Cooperative Societies.

The evolution of sociétés indigènes de prévoyance in 1902 to Cooperative Societies in 2001 results from various structural adjustments in the name, composition, and objectives of farmers' associations in rural areas. If the SIP and its different designations were meant to satisfy the colonial power's economic needs, post-colonial cooperative movements were directed to meet local farmers' interests, even though that was not their initial objective following independence.

In contrast with the SIPs, contemporary Mali's governments revealed a strong willingness to expand farmers' social and economic development activities in rural areas by encouraging income-generating activities, endorsing economic empowerment, and ending poverty via agricultural cooperatives. In modern-day Mali, the focus is on improved programs for cooperative associates in various domains, including education, training, supervision of the cooperative organisation, and asset expansion by its members.

According to Belloncle, "Today there is an enormous gulf in social void, social communication and social identification between the planners and those they plan for" (Belloncle, 1979). For example, some sub-Saharan countries are now well-known for their

mass movement's resilience in rural areas (i.e., Mali, Senegal, and Burkina Faso). While other emerging African countries are still struggling in the spotlight, cooperative trends on the entire continent are developing outside the traditional scope of interference (Cairncross, 1980).

In that vein, the government of Mali is committed to providing a supportive legal environment to help cooperatives expand and succeed by creating a Social and Solidarity Economic department overseeing cooperative organisations and their activities.

2.4.1 The Social Economy, the Cooperative Laws, and Policies in Mali

The social economy originated from the labour movement during the industrial revolution and was centred on the communal attainment of individual needs. It is also closely related to the concept of collectivism and democracy. The organisations formed in the social economy movement are social enterprises, i.e., businesses from grassroots organisations, created when markets or states do not meet individuals' needs who then undertake action as beneficiaries. Managed and driven by its members' needs, they determine its economic productivity by innovating and promoting shared values of democratic and economic governance within the enterprise.

Since the late 1970s, the capitalist economic system has undergone globalisation and trade liberation changes. In this context, some economic actors have chosen to reconnect with practices of the 19th and 20th centuries by mainly creating human-centred strategies rather than profit-oriented approaches. These organisations have various legal forms (cooperatives, mutual societies, etc.) and are categorised under the "Social and Solidarity Economic Department" or Humanitarian department in many countries. The social and solidarity economy refers to a set of economic initiatives with a social purpose contributing to the institutionalisation of new approaches toward life and the economy. It places human beings at the centre of economic and social development. The solidarity economy's conventional stakeholders are mutual cooperatives, associations, foundations, labour groups, and congregations. Their legal statutes are based on individual supremacy over capital and operate democratically.

Jacques Defourmy and Walloon (2008) define the social economy as: "economic activities carried out by companies, mainly cooperatives, mutual societies and associations producing commercial and non-commercial goods and services based on solidarity, autonomy, and citizenship." The guiding principles of the social economy are to ensure poverty reduction through facilitating the establishment of business and job creation. It also encourages an approach based on the autonomy and adaptability of organisations by promoting solidarity, equity, democratic principles, decision-making processes, and collective responsibility as

conditions for sustainable development. In that regard, the solidarity economy endorses the supremacy of individuals over the capital in the distribution of surpluses while strengthening partnerships between the state and civil society.

In the Malian context, the government has established mechanisms to ensure better social protection for its citizens for several years. Although, the crucial concern remains social protection in the informal agricultural sector, employing around 80% of Mali's population. A significant proportion of the rural population is still affected by poverty, making them vulnerable at various levels. In this vein, "La Direction Nationale de la Protection Sociale et de l'Economie Solidaire" (DNPSES), the National Directorate of Social Protection and Solidarity Economy, was created by the decree No. 2016-002/P-RM of February 15, 2016, ratified by law No 2016-064 30 December 2016. Its objectives evolved due to specific reforms undertaken within the DNPSES (DNPSES, 2018).

The DNPSES is a regulatory department that ensures the registration, supervision, and monitoring of cooperative societies according to articles 11, 12, 38, and 75 of law N°01 076 / of 18 July 2001 governing cooperative societies in the Republic of Mali (Ministry of Rural Development, 2018). The DNPSES also ensures the National Health Insurance Plan operationalisation, development, and funding of a collective security system in Mali. Its main objectives are to elaborate and ensure the implementation and monitoring of regional solidarity plans and programs so that studies and research related to social security are carried out at the regional level. It also ensures the elaboration and monitoring of yearly development plans and programs for cooperatives, mutual associations, or groups, mainly renewing their accounts and managing their budgets.

Accordingly, the DNPSES collects, processes, and centralises statistical data from these organisations. More importantly, it protects applying laws and regulations governing cooperative organisations, mutuals, and other types of associations. Based on this support mechanism from the state, professional agricultural organisations that are groups of individuals or legal entities with agricultural vocations are expanding in Mali. These groups decide to unite to defend their interests in cooperation with government authorities like DNPSES and third parties to provide goods and services to their members. Farmer organisations include cooperatives, associations, unions, federations, confederations, foundations, and syndicates. They exist throughout the country but have structuring, governance, and financing difficulties.

The cooperatives that comply with the DNPSES regulations are being provided training, information, awareness-raising, mobilisation, and counselling support to strengthen members' capacity to monitor and evaluate their activities with the groups. Conscious of the privileges of

the DNPSES, which support cooperatives by providing them with training and information to expand their activities, individuals are launching cooperative organisations throughout Mali. Table 2.3 indicates the growing number of cooperative organisations in all regions of Mali. The most significant number of cooperatives is found in the country's southern parts, where agriculture is extensively practised. As of 2018, there were 18.294 cooperatives in Mali, of which 11.377 were operational. These cooperatives generated 2.068 employment in the country, as indicated in Table 2.3.

Table 2.3: State of Agricultural Cooperatives in Mali End of 2018

N°	Regions/District of Bamako	Registered coop	Operating coop	% Operating coop	No. of jobs created	Capital
1	Kayes	2480	898	36,21	1	380 506 925
2	Koulikoro	5453	3417	62,66	1236	1 588 487 965
3	Sikasso	4555	4555	100,00	23	1 415 443 940
4	Ségou	2156	1049	48,65	253	1 049 824 685
5	Mopti	1777	931	52,39	0	1 074 012 705
6	Tombouctou	1200	266	22,17	131	419 019 265
7	Gao	247	109	44,13	0	243 500 530
8	Kidal	1	0	0,00	0	-
9	Ménaka	55	5	9,09	0	-
10	Taoudénit	13	13	100,00	0	-
11	District Bamako	357	134	37,54	410	943 853 225
TOTAL		18 294	11 377	62,19	2 068	7 114 649 240

[Source: DNPSES Annual report 2018]

The table above from DNPSES reveals positive outcomes since cooperatives have been thriving in several parts of the country. When the Cooperative Act of 2001 was initiated, roughly 4.000 registered cooperatives were created. Recently as of 2019, more than 18.000 cooperatives were registered. Indicators show that the trend will continue to grow.

Since the fight against poverty is at the core of Mali's development agenda massive jobs and wealth creation must be foreseen on solidarity dynamics. Decentralization of farmers' organisations, including cooperative societies, mutual insurance companies, micro-finance institutions, income- and job-creating associations, are necessary tools and requirements to achieve that goal. Nevertheless, the Social and Solidarity Economic department's potential in Mali for creating jobs and wealth remains noteworthy as poverty endures. This department's challenges include declining incomes, unemployment, poverty, and limited resources.

Many people are pessimistic about welfare states and rely on the Social and Solidarity Economy, which effectively organises individuals around shared visions to create and improve wealth distribution. From this perspective, the Social and Solidarity Economy would accelerate

the development and implementation of Mali's human development index. Despite persisting challenges, actors from the Social and Solidarity Economy are pioneering entrepreneurship and innovative activities. It has supported micro-credit activities, building health care centres, community schools, mutual insurance companies, agricultural cooperatives, fishers, herders' and market gardeners' cooperatives, and other rural initiatives (DPNSES, 2016).

2.4.2 The Cooperative Act No.01-076 of July 14th, 2001

The first meeting on social development, which allowed stakeholders to agree on some significant objectives in line with social inclusion, poverty reduction, and employment creation, was held in the Ségou region, Mali, in June 2001. This led to the adoption of the Cooperative Act of 2001 in the National Assembly of Mali. In its first article, the Act highlights that cooperation in Mali should be based on self-help, self-reliance, and self-responsibility. It also emphasises the principle of democracy, equality, social responsibility, equity in the distribution of economic profits, less interest in the capital, and a high focus on education and inter-cooperation.

The primary purpose of this act was to improve the socio-economic condition of cooperative associations based on cooperative principles. The principles encourage collective actions, sharing production costs and services, improving product quality, increasing members' skills through training and information, and access to land, equipment, and production materials. In doing so, cooperative membership ensures the rationalisation of supply and distribution channels. These objectives demonstrate the Malian government's strong willingness to expand social and economic development activities by encouraging income-generating activities, endorsing economic empowerment, and ending poverty via agricultural cooperatives. If these strategies are fully implemented, Mali's economy will be revitalised with numerous sustainable financial enterprises. Accordingly, the government is committed to providing a supportive legal environment to help cooperatives expand and succeed. In 2010 the Cooperative Act N 01-076 of 2001 was replaced by the Treaty for the Harmonization of Corporate Law in Africa (OHADA Act).

2.4.3 The Uniform Act for the Harmonization of Business Law in Africa (OHADA)

In 2014, the National Policy for the Promotion of Social and Solidarity Economy adopted the act "Organization pour l'Harmonisation du Droit des Affaires en Afrique" OHADA Act on December 15th, 2010. OHADA is interrelated to the Cooperative Act of 2001, as explained above. Eager to make substantial progress toward a united Africa and to create an atmosphere of confidence and treasured economies, member states signed the Treaty for the

Harmonization of Business Law in Africa [OHADA] in Port-Louis Mauritius on 17 October 1993, and reviewed in Quebec, Canada on 17 October 2008, with the agenda of starting an innovative and sustainable growth in Africa. The member states also reiterated their promise to launch an African Economic Community and encouraged membership in the ECOWAS, a financial and economic stability feature. The uniform act represents an essential mechanism for realising the state party's economic incorporation within a broader African agenda (OHADA, 2010)

The Act is subject to the participation of any member state of the African Union (AU) and the adherence of any other non-AU member state willing to comply with its agreement. The Act, therefore, goes beyond geographical boundaries. Currently, seventeen (17) nations are associates of the OHADA Act: Benin, Burkina-Faso, Cameroon, Central African Republic, Côte d'Ivoire, Congo, Comoros, Gabon, Guinea-Conakry, Guinea-Bissau, Equatorial Guinea, Mali, Niger, the Democratic Republic of Congo (DRC), Senegal, Chad, and Togo.

Furthermore, the Act primarily aims to harmonise, simplify, reform, and adapt business regulation in the concerned states to facilitate business activities, guarantee legal reliability of economic activities, encourage the development of state parties, and launch the right investment environment. It also intends to promote mediation to resolve contractual disagreements and jointly launch more efforts toward improving judicial and legal agents' training. The most crucial purpose of the act is to tackle legal and judicial insecurity occurring in the state's parties. It accomplishes this by harmonising business law through simple and progressive rules tailored to state parties' financial system requirements.

Any cooperative society, union, or federation of cooperative organisations whose headquarters is in the region of the state parties and attached to the treaty on the Harmonization of Business Law in Africa, shall be subject to the requirements of this Uniform Act. Any association or cooperative society that approves the cooperative appeal is also subject to this Uniform Act. It also reveals that individuals of any nationality desiring to carry out an activity as a cooperative society on the territory of one of the contracting states shall, except where exemption is explicitly required, conform to the Uniform Act (Marcel, 2004).

In this regard, the OHADA Act seeks to: "Contribute to the strengthening of an autonomous society, in which poverty reduction will be achieved through the creation and redistribution of wealth by promoting businesses and organisations based on solidarity and human beings' prevalence" (OHADA, 2015).

On 16 May 2011, the OHADA Act became the joint legislature relevant in Mali's cooperative movement. The accurate application of the OHADA uniform act related to the

cooperative law aims to ensure a vigorous, viable, self-reliant, autonomous, and self-sufficient joint enterprise. It also provides the continuation and establishment of unified guidelines to guarantee that cooperatives contribute to expanding the economy and employment creation and revenue creation. It further ensures that cooperatives impact economic growth, employment creation, and income generation.

More importantly, the act confirms the government's intention to support emerging cooperatives, especially those owned by small-scale farmers. The OHADA Act aims to promote cooperatives by increasing the number of economic enterprises operating in the formal economy. The government, in cooperation with the National Directorate of Social Economy and Solidarity, supports new cooperatives, especially cooperatives held by females, youth, and people with disabilities living in rural areas, to conform to the OHADA act.

2.4.4 Types, Registration, And Constitutions of Cooperative in Mali

There are two types of cooperatives in Mali: a simplified cooperative society and a cooperative with a board of directors.

A- Simplified Cooperative Society

Simplified cooperative societies are made by at least five individuals or legal entities. A major general meeting decides the structure of a simplified cooperative society. The cooperative is given a corporate name which must be printed or constantly followed by the characters "Société Coopérative Simplifiée" and the abbreviation "SCOOPS." A management committee composed of three members or more usually supervises them. The number of cooperative members should not exceed one hundred. Management committee members may increase from three to five once this number is reached during the cooperative life cycle.

The general assembly chooses management committee members among its representatives with a straightforward majority unless a clause in the organisation articles necessitates a majority vote. The management committee shall appoint a chairperson from its members. The reports direct the management of the simplified cooperative society (DNPSS, 2016).

B- Cooperative with Board of Directors

The OHADA Act, in its articles two, fifteen and sixteen, stipulates that cooperatives made of fifteen individuals or legal entities may form a cooperative society with a board of directors. A cooperative with a board of directors should be designated by a corporate name which must be immediately followed or preceded, in legible characters, by the statement

“Société Coopérative Avec Conseil d’Administration” and the abbreviation “COOP-CA” (OHADA, 2010).

Table 2.4: Simplified Coop Society Vs. Coop Society with Board of Directors

Difference	Simplified Cooperative Society	Cooperative with Board of Directors
Minimum people required	5	15
Constitution	Members who do not reveal their shares at the establishment time may do so through periodical contributions.	-The initial share capital is fully subscribed before the Constitutive General Assembly. - ¼ of the minimal value of members’ shares is paid upon subscription, and the remaining income is to be released within a maximum of 3 years. - A subscription form is made in two separate copies (1 for the cooperative and 1 for the member)
Management	The SCOOPS is managed by a management committee of 3 to 5 members, which appoints a president within its membership.	COOP-CA is managed by 3 to 12 members of the board of directors

[Source: the author based on literature³]

A cooperative with the board of directors shall be administered by a committee of at least three and not more than twelve members. The number of administrators can be temporarily exceeded in a merger with one or more cooperatives. Directors who remain in office for more than six months are not allowed to serve more than twenty-four months in the merged cooperative. Directors who die cannot be replaced, and new directors may not be elected, except in a recent merger or until the number of directors in office has been reduced to twelve.

- **Registration of Cooperatives**

The National Directorate of Social Economy and Solidarity department stated that they issued certificates to cooperative societies if the applicants fulfilled all the Cooperatives Act requirements. One such provision is that the cooperative’s constitution complies with all the commitments of the Cooperatives Act. Conditions for receiving the certificate also include

³ 1- Journal Officiel sommaire OHADA, Organisation pour L’harmonisation en Afrique du Droit des Affaires : Acte Uniforme Relatif au Droit des Sociétés Coopératives Adopté le 15 décembre 2010 à Lomé

2- Decret N O8- 793/P-RM Du 31 Décembre 2008 Fixant les Modalités de Création et D’Enregistrement des Organisations Interprofessionnelles Agricoles République du Mali

3- Loi N° 04 – 038 / Du 5 Août 2004 Relative Aux Associations République Du Mali

4- Organization for the Harmonization of Business Law in Africa OHADA: General Overview Access:

<https://www.ohada.org/en/general-overview/>

adherence of the applicant to the cooperative principles and values, plus the suggested name of the cooperative shall abide by the regulations of the OHADA Act. Once the cooperative is enrolled, the National Directorate of Social Economic and Solidarity Department will acknowledge it and assist in training, information, capacity building, and management skills.

- **Constitution**

Every cooperative's constitution must be in tangent with the OHADA Act of 2010 by providing general information on the cooperative, its members, and meeting frequency. The data must give an exact name, the rate and number of elections, and allowance of the cooperatives. Alongside, membership should specify the prerequisite for requesting participation, responsibilities of members, privileges, regulations for removing associates, and participant mortgage.

Guidelines also stipulate on voluntarily retreating from contribution, the notification period for removal, refund of dividends, and any procedures required about an associate's responsibility on behalf of the cooperative for a specified period following abandonment, policies, and processes for deferring affiliation and for ending membership shall be provided.

Lastly, the cooperative must specify the minimum number of meetings held, the terms, and the activities members must undertake during the sessions. The minimum number of joint meetings should guarantee effective representation, management, and decision-making information. Regulations must also comprise information on the voting and approval decisions while conducting a board meeting. According to Articles 20 and 25 in chapter two on supervision issues, there must be regulations for nominating a president, vice president, and interim chairperson. Sections 2, articles 127-136 of the Cooperatives Act on finance statuses should be the same as the cooperative's fiscal year dates. Guidelines on how additional funds and capital are employed or not applied in the regulations when allocated resources are pooled or suspended must be clarified.

The author found that most survey cooperatives in the three study areas had simplified cooperative "SCOOPS" status. Some cooperative members follow the OHADA Act regulations and principles regarding their organisation management. However, other cooperatives have challenges complying with some guidelines of the OHADA Act. This lack of compliance with the established cooperative laws, on the one hand, is due to members' low level of education or lack of formal education. On the other hand, it is also due to their carelessness as they know no sanctions or penalties are taken against the cooperatives that do not follow regulations. As an illustration, some cooperatives did not upgrade their cooperative status from SCOOPS to Cooperatives with a Board of directors when their membership

expanded. Other cooperatives did not submit their yearly report to the DNPSES department. Additional efforts are needed from the cooperatives themselves and the government through the DNPSES to meet cooperative needs and hold them accountable for complying with stipulated rules.

2.5 Role of Agricultural Cooperatives in Rural Development and Government Policy to Support Them

2.5.1 Role of Agricultural Cooperatives in Rural Development

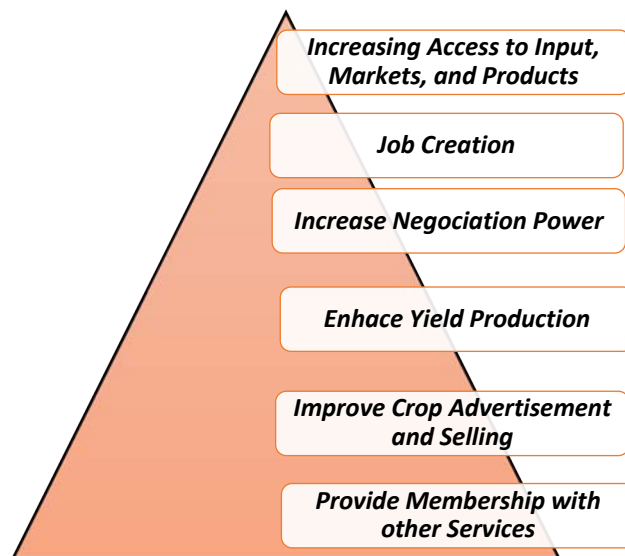
The motivations for cooperative establishments lie in the rules and objectives of organisations. Cooperatives were identified as a powerful people-centred tool for development during the World Summit for Social Development held in Copenhagen in 1995. The UN General Assembly Resolution 51/58 was adopted in 1996 by cooperatives (Matabi, 2012).

The Summit approved to employ and fully extended the capacity and involvement of cooperative organisations to achieve socio-economic development goals, especially poverty eradication, profitable employment creation, and the development of social and economic integration (Commitment 9th). Besides, cooperatives perform a crucial role in integrating the global economy and in nurturing peacebuilding among people, communities, and nations (Matabi, 2012).

According to the National Directorate of Social Economy and Solidarity, Mali's government development strategic plan highlights that most rural inhabitants are poor. Nearly 70% of Mali's poor population resides in rural areas (INSAT, 2018). Farming is generally their main activity and primary financial source, yet their incomes and employment prospects are deemed inadequate. Rural household incomes are limited because agricultural growth strategies remain deficient in offering lucrative businesses or sustainable livelihood activities. Farmers in rural areas' living expenses are lower since they allocate more time to farming activities and lack access to essential infrastructure and services, including energy, transportation, water, communication, and service industries. In that regard, it remains necessary to support rural development activities. Likewise, Jayalakshi (2009, p. 21), stated that rural development occurs whereby governments provide minimum necessities, increase productivity, and provide employment opportunities. Agricultural cooperatives are the most standard and assured entities for rural development (Naghizadeh, 1984). This is reflected in the government's strategy of creating innovative agricultural cooperatives while restoring the prevailing ones by enacting the cooperative law of 2001, which was later replaced by the OHADA Act enacted by seventeen African states in 2010 as explained earlier.

Cooperatives contribute to rural development, including offering access to agricultural input and market products, service creation, negotiation power, increasing yield production, expanding crop selling, and providing associates with other essential services. Figure 2.3 outlines the role of cooperatives in rural development.

Figure 2.3: Role of Cooperatives in Rural Development



[Source: author based on literature⁴]

- **Increasing Access to Input, Markets, and Products**

Cooperatives are helpful for their members in overcoming barriers to resources, information, and market access. Farmers delivering crops through co-agents are efficiently utilised to represent their labour contribution via promoting relationships with other groups. Clegg (2006) maintains that rural cooperatives had significant roles in assisting small-scale peasants in adopting serious and fluctuating business sectors and high exchange rates to achieve economies of scale via mass trading to fulfil market needs (Akwabi, 1997).

According to Akwabi, rural cooperatives offer farming communities an opportunity to expand their market mainly, when co-agents can create innovative regional markets in developing countries. They provide a strategic call to farmers going through yield production and absorb exchange rates which otherwise would have denied small-scale farmers access to better marketplaces and advanced coordination networks (Holloway et al., 1999).

- **Job Creation**

⁴ Amin, N. And Bernstein, H. (1995). The role of agricultural cooperatives in agriculture and rural development lapc: *policy paper* 32.

Agrarian cooperatives are essential for rural improvement because they hire auditors, accountants, and administrators as part of their immediate work (Allahdadi, 2011). Members obtaining better income through increased cooperation are likely to spend their revenue on projects such as cattle, poultry ventures, and other small businesses. Such initiatives differentiate them from mainstream agrarian activities. Selling the cooperative produce, raising the profits levels of commercial peasants, increasing extra service to the rural individuals, and supporting the bulk of peasants that would have travelled to towns searching for better employment exemplified some advantages of cooperative membership (Brenneman, 1994).

Besides, Agrarian cooperatives sustain better revenue levels, allowing small-scale farmers members to build modest residences, send their kids to school, and provide health insurance to maintain their rural households (Chambo et al., 2007). Likewise, they increase access to members' education or literacy programs, training in business skills, and capability building. The cooperative organisation also empowered members to engage in democratic discussions and implement non-authoritarian values and governance instruction within their groups. This allowed associates to grow into open-minded individuals competent to discuss efficiently diverse political issues related to their society (Attwood, 1988). Through cooperative learning and practice, associates also earned skills in running small businesses. Hence rural development is expected to improve if farmers efficiently participate in agricultural cooperatives.

- **Increase Negotiation Power**

Cooperatives have strengthened individual peasants' negotiation power when members unite and discuss common needs and interests. Cook (1995) suggested that cooperative organisations would help boost surpluses and offer market indemnity. For instance, due to the financial system mechanism, a cooperative could provide marketing capability motivating peasants to join the enterprise, thus preventing price control.

- **Enhancement in Yield Production**

According to Chambo (2010), agricultural cooperatives determine their members' capacity to allocate necessary farming inputs to produce goods and boost yields appropriately. They also supply a guaranteed market for manufacturing goods to remote small-scale farmers in rural regions. Through collective engagement, agrarian cooperatives can gain improved profits by selling yields in bulk, where outcomes are equally shared and managed among the associates. Additionally, agricultural cooperatives are accountable for encouraging poor

peasants' access to markets, improving their requirements, and scoring for consumable goods such as tomatoes, onions, and cabbages (Ortman et al., 2006).

- **Improved Crop Advertisement and Selling**

A marketing cooperative is an association held and controlled by farmers making similar goods. Farmers establish marketing cooperatives to obtain better power in selling their crops and raising their foodstuffs' value. They also reduce the costs of advertising their harvest, gain farming inputs like fertiliser, and seed, and brand their merchandise in better-protected marketplaces (Dorsey and Assefa, 2005). Besides, a cooperative that possesses transport services may offer minor shipping costs, such as local services exclusively utilising equipment designed to carry associates yields in operationalising and maintaining their production. Selling expenditures can be considerably lowered by a cooperative that carefully chooses the essential services it will deliver (Bibby 2005). Smallholder peasants can also enter additional and more significant markets in selling as a group, implying supplementary outstanding prices (Markelova and Dick, 2009).

Largely, smallholder peasant farmers can only market their products in the neighbouring marketplace as their quantity is insufficient to be transported to more profitable markets. However, a marketing cooperative might get enough supplies and bulk to find and ship to bigger shops where returns are higher (Develtere, 1993). Smallholder peasants can gain brand-new deals acquired in selling jointly. Marketing cooperatives can also utilise labels, and other marketing needs to offer farmers extra consistent markets. Lastly, marketing activities can generate trust for cooperative goods from consumers who purchase cooperative brands. This will accelerate the transaction of cooperative manufactured goods even when the market is saturated (Lyne, 2008).

- **Provide Membership with other Services**

In addition to the benefits mentioned above, cooperatives also supply distinct commodities and services to their associates. Due to their structure, cooperatives can work in marketplaces with little to no competitive rates on profits. Non-cooperative members will not benefit from working in such environments since they would not benefit financially (Fulton and Ketilson, 1992).

Members of cooperatives benefit from social investment more than non-cooperatives. Such non-economic advantages include consistency in accessing better marketing channels, crop quality management, farm inputs (fertilisers, equipment, seeds, and professional

counsellors), research, and education. Some of these essential services eventually compensated participants with social investment funds.

2.5.2 Government's Policy in Supporting Agricultural Cooperatives

Social protection is increasingly recognised as a crucial means of reducing poverty in low-income countries like Mali. According to the African Union, “social protection is a range of social protective measures undertaken by the state and other actors in response to acute levels of vulnerability and poverty. It aims to ensure that human rights are safeguarded against risks of harm to those unable to defend themselves for reasons beyond their control”.

In Mali, the government has defined social protection as “the set of measures through which the state intends to protect citizens against social risks” (Declaration of Social Protection Policy, MDSSPA, 2002). It encompasses all social security, social action, and social assistance mechanisms. It aims to ensure a basic level of well-being for individuals by effectively fighting against poverty, social exclusion, discrimination, life risks, and adverse external shocks. Increasingly, this mechanism of solidarity is perceived by Malian authorities as one of the key elements at the heart of proactive growth strategies. Social protection remains a secure way to reduce economic, social, food/nutritional vulnerability and other strains by adopting a national policy.

At present, Mali is experiencing a gradual decline in families' livelihood activities and communal solidarity due to the adverse impact of climate change, demographic pressures, and the emergence of new priority needs. These issues lead to weaknesses in managing social problems and the ability to mobilise resources to finance solidarity actions. This results in the social disempowerment and exclusion of certain social groups, particularly vulnerable people (women, children, disabled people, the elderly and orphans).

As most Malians live in rural areas and depend on farming activities for their livelihoods, poverty is more prevalent within the rural population. In this regard, the government emphasises social protection and security in rural communities through farmers' organisations. Three essential pieces of legislation have been enacted in recent years to govern farmers' organisations. These are Law N°01-706 of 16 July 2001 governing cooperative societies in the Republic of Mali and Law N°04-038 of 5 August 2004 governing associations, and the OHADA Act of 2010. At the grassroots level, farmers' and herders' organisations are expanding. Traditional organisations (village associations, women's groups) are emerging and being formalised through cooperatives to gain better access to services (credit, technical support, investments, etc.).

Specialised agricultural organisations (cooperatives, associations, unions, etc.) are the State's critical partners in developing and implementing agricultural policies. These grassroots organisations are represented at the local and regional levels through local and regional Chambers of Agriculture. The Chambers of Agriculture are advisory and professional entities representing rural interests. They have the legal status of advisory bodies, and their members are professionals working mainly in the following sectors: agriculture, livestock, fishing, and forestry. Within these institutions, large-scale producers are the most represented.

However, there have been controversies regarding government support for agricultural cooperatives in several developing nations, including Mali, where most cooperatives depend exclusively on government support. Though, this is not always the case in other developing nations. For example, in Brazil, cooperative organisations were trained to operate autonomously (Raquejo, 1997). In most countries, cooperatives obtained operational and organisational assessments to work independently.

Some experts contended that agricultural income efficiency in sub-Saharan Africa is meagre and vulnerable to fluctuations due to its extreme dependence on household labour, lack of technology, and exposure to natural issues such as rainfall, soil use, and pests (Fitsum et al. 2003). On the one hand, other scholars believe that cooperatives should rely on their members' capability to solve their varying needs regarding both domestic and external shareholders under challenging circumstances (Rankin, Dunne, & Russell, 2007). On the other hand, others argued that government policies regarding cooperatives' capacity to resolve their domestic and external problems are crucial because they can restrain or improve autonomous cooperative development (Hoyt, 1989).

In developing countries, attempts to coordinate peasants into lucrative cooperatives often fail. According to Akwabi-Ameyaw (1997), agricultural cooperatives regularly collapsed in Africa due to difficulties sustaining supervision, inappropriate political endeavours, or monetary irregularities. Likewise, Van Niekerk (1988) accounts that cooperative collapse in emerging states was primarily due to their lack of administration, competence, expertise, investment of resources, and associates' infidelity anticipated by inexperience. Reasons for cooperative lack of success comprise inadequate supervision, lack of training, dispute amongst associates, lack of resources, and management issues after enrolment. Even though cooperatives were intended and embraced by several developing nations in Africa, Asia, and Latin America as a way of farming expansion, their achievement and collapse narrative remains overwhelming. This can be explained by the dual method of expanding agricultural cooperatives as a rural development tool. The main reasons are primarily the failure of training

curricula in attaining smallholder and impoverished peasants, and the absence of incentives for cooperative associates to operate effectively while increasing their productivity (Putterman, 1985).

Despite these difficulties, the government needs to support cooperatives and organisations willing to launch cooperatives. Providing cooperative members with education and training of managers, memberships, and mentoring of administrators (over short- to median-term) remain essential (CSA, 2005). To solve the issue, the regional government has agreed to grant attention to the cooperative sector, for example, by enacting regional policies such as the OHADA Act, supporting agricultural growth through industrial development. This act acknowledges agricultural cooperatives as part of this process (Krishnaswami and Kulandaiswamy, 2000)

Chapter one explains that Mali's agricultural sector undeniably possesses strong capabilities, but its potential is inadequately exploited. This is mainly due to shortcomings in financing the sector. The government's gradual withdrawal from rural funding was supposed to be substituted by private investments, which are not flourishing enough in this sector and are relatively 'cagey' or cautious. The low income from the agricultural value chains, which largely depend on rainfall, the scarcity of modern farm equipment and high threats in the sector make its investment marginal.

Agriculture is primarily led by family farming with traditional agricultural practices. Small-scale farming remains significant for industrial growth and poverty reduction in Mali, though its expansion is contested by efficient improvements to overcome inequalities in accessing agricultural resources (World Bank, 2008; Hazell et al., 2010). As mentioned, several times throughout this dissertation, small-scale women farmers in Mali have insufficient access to factors of production, including land, credit, inputs, information, and markets (Lyne, 1996; Matungul et al., 2001).

Due to their limited access to land and means of production, women and youth are not primary producers, hindering their inclusion in governance bodies in rural areas. For instance, producer organisations are well developed, with 31.2% of farmers belonging to a peasant organisation. However, women farm managers have less access to farmer organisations: 17% belong to a farmer organisation compared to 32% of men. Agricultural producers (farmers, herders, foresters, fishers) are engaged in the quest for institutional and organisational ownership and self-advancement. At the same time, the most dynamic of these groups, i.e., women, face difficulties in accessing services, literacy, and necessary resources to survive.

In the face of these challenges and the sector's contribution to unemployment and food security, the Malian government has recently highlighted agriculture as the engine of its economic development with financial corporations. To improve agricultural productivity, especially among the small-scale rural peasant population, agricultural cooperatives' promotion has been recognised as the primary vital strategy in addressing the challenges encountered by smallholder peasant farmers. As explained earlier, the government manages the cooperative societies in Mali through the National Directorate of Social Economy and Solidarity. The survey conducted in Mali on cooperatives by this department in 2020 suggested that mainly those in rural areas need support. Cooperatives could lift families out of poverty and support the government poverty reduction scheme.

The government has undertaken favourable development policies and initiatives to empower farmers by enhancing their land ownership and access to agricultural resources with its development agencies since 2005 (Diallo, 2021). Accordingly, contemporary rural development strategies in Mali are mainly concentrated on agricultural development. This is particularly the objective of the country's agricultural growth strategies and policies, aiming to develop a farming sector through promoting and expanding farming cooperatives for viable and sustainable agriculture. The Ministry of Agriculture, the Ministry of Economy and Finance, the Ministry of Women and Children, and the Ministry of Trade established policies and measures to boost rural smallholder activities. Among them is the Agricultural Orientation Law AOL (2006), the Agricultural Development Policy PDA (2010-2013), the Growth and Poverty Reduction Strategic Framework CSCR (2012-2017), and the National Program for Investment in the Agricultural Sector PNISA (2015-2025) among others.

These laws and policies encourage a credible agenda enabling rational, balanced, and improved rules and measures related to agricultural development and gender equality via Mali's national amendments and sectorial programs (CPS/SDR 2015-2016). These laws and policies on agricultural development further define the major orientations of the country's agricultural development policy while at the same time stressing the need for these strategies to be primarily focused on small-scale family farming. This is also in line with the United Nations Sustainable Development Goals 3 and 5. The SDGs set the objective by 2030 to double farmed output and the revenues of smallholder farmers, mainly females, indigenous communities, peasant households, pastoralists, and fishers. They also guarantee equitable access to land, yield incomes, inputs, monetary services, employment, and markets. The SDGs aim to add value to entities' yield production and generate employment prospects in areas other than agricultural activities.

Mali also endorses numerous international and regional agreements on gender equality. The National Gender Policy (PND, 2011), which was established to lessen gender inequalities in all socio-economic activities through its application, remains slow. In theory, this strategy offers a robust and practical framework that will allow a consistent, coherent, and improved outcome of developments related to gender equality through Mali's national amendments and sectorial policies. In principle, they should enhance females' capabilities at all levels (economic, social, political, etc.) and lessen inequalities between sexes. On the other hand, applying these policies mentioned above is not easy as African societies like Mali are still riddled with patrilineal characteristics.

Hence, obtaining appropriate institutional assistance from the government can allow cooperative organisations to improve their members' living standards, lessen poverty, and boost farm productivity. Enhancing the efficiency, productivity, and sustainability of smallholder farmers in agriculture is the pathway to increasing the living conditions of the poor rural folk in emerging nations. Consequently, institutional improvements are thought to play a vital responsibility as they could help farmers surmount market failures and access more resources (Hazell et al., 2010). Besides, in the age of trade liberalisation anticipated by globalisation, the cooperative approach remains one of the best ways of self-protection for small farmers in emerging nations, mainly due to the cooperative self-help notion and associates' self-independence. The government must consolidate cooperative endeavours and creation by providing suitable institutional initiatives while respecting their autonomy.

2.6 Chapter Summary

This chapter provides a historical overview of agricultural cooperatives in developed and developing countries focusing on how cooperative movements were introduced and developed in Africa. Whether informal, formal, huge, or minor, cooperatives are both a platform for the exhibition of farmers' concerns and accomplishing the objectives members established for themselves and their organisations.

The modern-day agricultural cooperatives were shaped in Europe in the seventeenth century as a self-help technique to counteract compelling circumstances of poverty. Due to massive European immigration, they spread to North America and other continents. In the African context, structured cooperatives were initially introduced in the continent during the colonial era to support the coloniser's services of distribution, production, and marketing of inputs. The chapter also sheds light on the colonial overview of cooperative movements in

French and Anglo-Saxon Africa. It further demonstrates the differences and similarities between these two systems.

The French implemented an interventionist strategy where the state applied direct and severe control; the British chose the least official guidance or a “laissez-faire” attitude. These two approaches fall under the umbrella of western characteristics, demonstrating the gap between the idealist and “dirigiste” French and the inclined and moderately relaxed British. However, both systems share cultural arrogance, which primarily looked down on African cooperative societies as primitive and outdated while considering theirs as progressive and the best. British and French expansionists were distinguished by how they conformed to local culture, their level of recognition, and their concessions to African cultures and systems, which had distinct impacts on local project development and initiatives in different parts of Africa.

The section further elaborates on concise and precise definitions and explanations of agricultural cooperatives, principles, types, and classifications. Cooperatives are defined as: “an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise.” Additionally, cooperatives are based on the principle of voluntary and open membership, members’ democratic control, members economic participation, autonomy and independence, education training and information, cooperation among cooperatives, and concern for the community. Cooperatives can have different types depending on members’ economic activities. They can also be formal or informal based on their status and regulations.

The chapter also describes the cooperative laws and acts enacted by Mali’s government. Especially the Cooperative Act No.01-076 of 14 July 2001, replaced by the Uniform Act for the Harmonization of Business Law in Africa (OHADA Act) of 2010, which establishes cooperatives management and structures in contemporary Mali. More importantly, the chapter provides detailed information on Mali’s cooperative movements and framework policy through the social and solidarity economy department, which oversees and supports the cooperative organisation, supervision, and monitoring through the OHADA Act.

The section explains the two types of cooperative organisations in Mali: simplified cooperatives comprising at least five entities and cooperatives with a board of directors totalling at least 15 people; their management, composition, and registration procedures conform to the OHADA Act are also explained.

Lastly, the chapter describes the role of agricultural cooperatives in rural development. Agricultural cooperatives primarily provide access to inputs and market commodities, employment creation, bargaining power, unobtainable services to members, and improving

crop production and marketing for rural people. The chapter ends with women's engagements in Mali cooperatives and government initiatives in supporting them. The establishment of women's cooperatives in Mali is their reaction to changes in their socio-economic conditions. Beyond their different activities, most women's cooperative objective is to earn social recognition as women in male-dominated societies. Women also join cooperatives to implement approaches, preserve their autonomy, and carry out their projects. A significant number of women express their perspectives on community-development issues, often supporting government strategies aiming to boost the productivity of marginalised farmers.

CHAPTER 3: LAND TENURE SYSTEMS IN MALI AND THEIR SOCIOECONOMIC IMPACT ON WOMEN IN AGRICULTURE AND THEIR LAND OWNERSHIP

Mali's region encompasses 1,241,238 square kilometres, making it the sixth largest country in sub-Saharan Africa. This large land area engenders the misleading belief that Mali has enough terrestrial land and natural resources to sustain its inhabitants. While the country comprises a substantial land area of over 1.2 million km², around 60% of this area (74.8 million hectares) remains covered by desert or semi-desert parklands (Ministry of Agriculture, 2011). Approximately 44 million hectares (35% of overall landmass) remain appropriate for farming and livestock breeding, while woodland represents 5.5 million hectares (less than 1% of landmass) (Ministry of Agriculture, 2011). Overall, fertile land makes up less than 5% of the arable land in Mali. Amongst the 44 million hectares appropriate for food or animal breeding, only 11.5 million hectares remain suitable for yield creation. The remaining (30 million hectares) are meant for pastures and mineral extraction purposes (Becker, 2013).

Moreover, the country includes various ecological systems, from semi-tropical forests in the south to savanna climate in the centre to the arid Sahara Desert in the north. Mali has over 19 million inhabitants as of 2020. Around 40 different ethnic factions coexist in the country, each group with its language, traditions, and distinctive characteristics (Colleen, 2017). These ethnic groups have co-existed for centuries by creating many local structures over land and other natural resources. Furthermore, Mali's ethnically diverse residents adapted to their challenging environment managing the territory they reside in and mainly living-in harmony until recently. These livelihood structures might seem unsophisticated, disorganized, or even fictional to a stranger. Nonetheless, Mali's land tenure methods are conventional, modern, well-arranged, and complicated (Afro News, 2010).

Land-use procedures have become incredibly complex after decades of interruption from colonial and post-independence effects of Western legal institutions, which are often at odds with traditional practices and regulations. In 1960, Mali gained independence from France and adopted modern land laws through decentralization and devolution, characteristics of many Sub-Saharan African countries' tenure regulations. The government's land laws and legislative policies gradually change the traditional tenancy systems which existed for centuries before colonization.

It is essential to clarify certain concepts and terms related to land tenure and ownership in the following section. The word tenure is derived from the French word “*tenir*” (to hold), so land tenure refers to “who gets to hold the land” (Kevane, 2014). In the African setting, the vocabulary of land tenure refers to the way people relate to their land and the methods by which conflict is resolved based on that relationship.

Additionally, land tenure also involved “the institutional structure which governs the provision of access to land and other natural resources and how this entry is guaranteed beyond societies. It defines the development of institutions structuring land tenure and property rights agreements” (USAID, 2012). On the other hand, land ownership refers to the right to possess and distribute land within a specific area. The USAID Report (2012) on land tenure in Mali defines the subsequent concepts as follows:

Property rights are the social contracts regulating the utilization, management, and allocation of holdings. Land tenure stands as the established structure that governs access to land and other natural resources and the way this entry is guaranteed beyond communities. It further converges on the development of the establishments structuring land tenure and property rights agreements. It thus implies the package of entitlements, obligations, and restrictions around land and natural resources (p.52). The report further explains institutions as “social systems that sustain the establishment, application, and implementation of regulations regulating human behaviour and relations” (p.65).

Mali’s tenure system is divided into two categories: “customary” tenure - including traditional tenure - and “statutory” tenure, which includes government rules, law, and legal procedures. The tenure system in Mali clearly defines the line between “customary” (or traditional) and “statutory” (or government) rules. Legal procedures on customary tenure rights are, however, not clearly defined.

Customary tenure systems refer to the conventional principles and customs overseeing land and other resources. It also refers to the structures around the usage and allocation of privileges to land and other natural resources like forests, tree species, grazing areas, and water resources (Laurent et al., 2008). The following section overviews Mali’s land tenure system and its implication for women.

3.1 Overview of Land Tenure Systems in Mali

Examining the evolution of land tenure management in Mali involves analysing how the land has been managed over time, i.e., land institutions, property management and policies. Whether or not they respect people's rights and the structures that influence their

implementation. In line with the major stages of the country's socio-historical and political evolution, the study schematically identifies three main stages in land governance in Mali: pre-colonial, colonial, and post-colonial tenure systems.

3.1.1 Pre-colonial Land Tenure Systems

Every society has a legal system that governs its internal structures, functions, and interactions. Pre-colonial African societies, particularly the Malian ones, were based on rules reflecting the nation's socio-economic, political, and cultural realities. The history of Malian communities reveals that the societies were built on agreements concluded or following common beliefs between spirits or animal species inhabiting the areas with the primary settlers. It also involves agreements between the settlers and newcomers based on conventional rules (Djiré, 2001; Ouattara, 1989; Kassibo, 2000; Delafosse, 1922).

These rules were a mixture of precepts originating from religious beliefs and conventions between communities established by the ruling organizations (Djire, 2010). In "Bamanakan," the most widespread language of Mali, they bear the name "Ben-kan," literally translated as conventional wisdom (Cisse, 1997). In this regard, Malian societies were inseparably linked to the notion of convention.

These traditions, while often conflictual, have been able to establish various mechanisms of social regulation that have contributed to the establishment of a negotiated order (Coulibaly, 1997). Like any other legal order, this negotiated mandate usually reflects a steady power balance between the various social classes and strategic groups involved. The conventions focused on challenges and value systems well internalized and understood by social actors (Djire, 2005). The existence of traditional institutions such as the "dugukolo tigi" (master of the land), the "jitigi" (master of the water), the "batigi" (master of the river), or the ritual ceremonies of sacrifices and offerings, along with other institutions derived from these early conventions (Maiga and Diallo, 1998). Although mostly unwritten, these conventions are still relevant to collective knowledge and social practices. They recognize and legitimize the domination of a lineage, a community, or a group of communities over specific resources, including land. Such conventions exist almost everywhere throughout Mali and govern the social patterns and local rules in contemporary societies.

Before colonization which started in the late 19th century, access to land and resources was based on the principle that they belonged to the first occupants. If newcomers are not considered a threat, they must conclude effective agreements with early settlers (Hilhorst Thea and Coulibaly Amadi, 1998). In this regard, land management under the various empires and

kingdoms that have succeeded one another (Ghana empire from the 3rd-11th century, Mali empire from the 13th -14th century, Songhai empire from the 14th-16th century, the Peulh Kingdom of Macina in the 19th century, among others) in pre-colonial Mali were ensured by village chiefs, under the king control. These well-organized empires reigned over the country, controlled individual land admission, and managed assets. Under these systems, indigenous organizations were often assigned authority to ascertain procedures regulating land management, usage, allocation, and other natural resources (Fernandes and Varley, 1998).

Similarly, these organizations resolved disputes around land and other natural assets. For example, the Mandingo Empire of Sundiata Keita initiated much of what the Bambara community's tenancy systems still practice. Likewise, in the "Kouroukan Fouga" treaties of 1235, ownership, utilization, and property supervision were assumed by rural communities that employed traditional rights adopted through ancestry and the first tenancy rule (IDRC and Flynn-Dapaah, 2002). Nevertheless, exceptions to the regulations often occurred since the king's allies acquired and retained power over properties for diplomatic reasons. In addition, the ruling elite supported immigration for migrants seeking to settle down to ensure sufficient labour for farming production, as well as to get fine soldiers in case of conflict (Maiga and Diallo, 1998). In contemporary Malian society, local families holding long-held tenancy privileges to land supervised the newcomers' and immigrants' tenure terms and agreements (Djiré; Keita; and Diawara, 2010).

Mali's land tenure systems have been shaped by historical practices. Customary laws regulating entry to property and natural assets in pre-colonial Mali remained essential components of the social order over these resources (Yatich TTB et al., 2008). In pre-colonial times, married women had no rights to land for fear of interfering with the conventional household tenure systems achieved through inheritance. Farming societies maintain control over land and resources within extended family units through various traditional land tenure practices aimed at safeguarding family interests (IDRC and Flynn-Dapaah, 2002).

In most cases, the community head endowed with the empire's supremacy managed the land and its resources. Newcomers and foreigners must talk to him first by passing unwritten or oral conventions on their assets' access and use. Pastures, transhumance, and livestock itineraries were managed according to the same principles. The great empires and kingdoms collapsed upon colonial intrusion in Mali, leading to another tenure system.

3.1.2 Colonial Land Tenure Systems

The French colonial era in Mali introduced drastic changes to the pre-colonial land tenure structures. The French colonial governments destabilized the established superpower of

local groups, in which indigenous farmers and pastoralist communities were accountable for distributing and implementing land and other natural resources. Colonial land legislation was based on two essential principles: strengthening the land ownership of the colonial power and expanding the model of dominant Western private property under the State self-supervision.

Sub-Saharan Africa's early stages of colonization were marked by a legal challenge surrounding land ownership: who should own the occupied lands? (Djire, 2016). The French colonial government's answer to this question was straightforward: the French State. The French system was based on the eminent domain theory, which originated from the feudal system that makes the State the sole owner of all the land (Djire, 2010).

This theory would be reinforced by the concept of "*vacant or land without owners*," which already existed in the French civil code and was introduced into the colonial legislation to take over indigenous lands (Kante Salif; and Defoer Toon, 1994). French colonization of Africa was thus characterized by the enactment of several texts enabling colonial land ownership systems and rejecting the indigenous tenure schemes over prioritizing European settlers' needs. It further sets restrictions on land owned collectively or land distributed by community leaders. During colonization, such land could only be leased or sold with the governor's approval (Chauveau Jean-Pierre, 2003).

To alleviate the complexities of registration and enrolment principles, the French deliberately recognized customary tenure rights, which could be converted into title deeds (Cissé, 1997). These guidelines were further strengthened by a decree and provisions that set instructions in respecting customary rights by granting permits to the colonial administration on conventional rights (Delville Lavigne, 1999). The decree was influenced by the notion of vacant land which essentially specified that State-owned land was "lands that are not subject to a legal title of ownership or use and have been unexploited or unoccupied for more than ten years" (Christian Lund, 2000).

The French colonial policy contrasted with the British one, which accustomed itself to its colonies' environments; the French land policy was grounded in a pragmatic approach to extending land ownership as established by the French Civil Code in new territories (Djire, 2005). This approach led to the introduction of two legal systems: Firstly, state-owned land, which, as already mentioned, integrated individual land into the private domain of the State. Vacant land or land without owners was allocated to meet the colony's necessities and assigned to French residents to meet individuals' needs (Chauveau Jean-Pierre, 2003). Secondly, the land ownership system converts customary rights into land titles through a registration process which was less accessible to indigenous residents. In addition to these two systems, a third was

put in place, which failed to recognize customary land rights (Guillen et al., 1990). The first comprehensive law for the former French colonies in Africa, whereby registration was a prerequisite for acquiring land, required permission to use or lease any public lands as of July 24, 1906 (Kornio, O. et al., 2004). This law's provisions were incorporated in legislation, with detailed changes, notably in 1932 (decree of July 26) and 1955 (decree of May 20). In principle, registration was open to anyone, Malians, and Europeans alike. However, indigenous people were excluded from this system since the procedures for obtaining property rights based on French law were complicated, making indigenous people reluctant or unable to request it (Roche-gude, 1982).

The conditions for obtaining property rights were meant to discourage even the most courageous individuals. In this regard, the institution facilitating indigenous tenure rights was challenging, especially in conventional occupation cases, the most common type of ownership. It was usual for the colonial administration to refuse to issue legal administrative certificates in such cases (Djiré, 2006). As a result, the implementation of the French Civil Code enforced new systems, such as the principle of "*mise en valeur*" (Kornio, O. et al., 2004), implying that land goes to the government unless it is used efficiently, meaning landlords must register their unregistered lands or use them practically for the government to acknowledge their land entitlements. From these practices emerged the notion that state authorities control the ownership and management of land. As this practice became prevalent, it strengthened the idea of the state ownership of land and its natural assets.

Moreover, the colonial administration was also driven by the incentive to offer primary materials and cash crops to French businesses before and during colonization (Roche-gude, 1982). For instance, the construction in 1932 of the Markala dams in Mali, an irrigation scheme in the Office du Niger in the Segou region, was in line with this strategy. In its early years, this irrigation program employed foreign labour to manufacture cotton and sugar cane for the colonial government (MCA-Mali, 2007).

During colonial times, indigenous people, mainly women, were excluded from accessing land. They were encouraged to stay home and perform productive and reproductive roles. These roles assigned to women were necessary for the continuity and sustainability of the imperial economy as they needed labour (young people) on the farms to run their businesses. Based on this literature, it can be argued that colonial land policy failed because it did not reflect the conventional practices and patterns of rural communities where the notion of civic rights on property and its technical tools (registration, land title, etc.) were unknown and therefore deemed unnecessary for land exploitation.

3.1.2 Post Independent Tenure Systems

Following independence, the Malian government believed that an independent state must control its economic growth and decided to keep the majority of the colonial texts on land tenure (Le Bris; Le Roy; and Leimdorfer, 1982). The new government gradually got rid of customary tenure rights, especially in practice and often through inconsistent regulatory measures. The evolution of land tenure laws in the post-colonial era is divided into three stages: The first stage is characterized by the State's absolute monopoly on land management. The second stage maintained the State monopoly and allowed local stakeholders to participate in natural resources management and recognise customary rights. The continuity of previous French guidelines characterizes the third stage which originated from colonial texts. On the other hand, the discontinuity of essential elements from conventional systems was also maintained (Guengant Jean-Pierre et al., 2003).

Following independence in 1960, the new Malian State concluded that all types of land utilization remained provisional and revocable by the government at any time. During the first communist regime supervision, public strategies were initiated to restore lease dealings and promote agricultural development in rural areas. During the reign of Mali's first President Modibo Keita, the Marxist government reinforced the principle of State property ownership (Coulibaly and Diakite, 2004). However, that government was overthrown by a military coup after a junta seized the nation-state. During the military regime, government influence over land expanded by enacting land regulations in 1984 and 1990. The 1990 tenure law strengthened the notion of state ownership, designating Mali's private realms as unregistered property administered by the government (Miggiano; Taylor; and Mauro, 2010). The military government's reign ended in 1991 following extensive widespread protests.

The advent of democracy in 1992 in Mali instituted new approaches to the government's attempt to reform land ownership. Another law, the "Code Domanial et Foncier," (CDF) or land law, was passed in 2000 and amended in 2002. Innovative components of this law echoed devolution and decentralization approaches widespread around West Africa during that period (Mortimore, 2003). The "Code Domanial et Foncier" delegates responsibilities to centralized local government bodies to handle their properties while abiding by the state legal tenure entitlements. Yet, the State reiterated its power to control all types of land and public realms, including airspace, property, and sub-soil reserves (Lorenzo et al., 2004).

These new legal guidelines have, to some extent, undertaken traditional systems and patterns that persist in ruling land relations primarily in rural areas (Diallo, 1993). In contemporary Mali, customary and statutory tenure systems continue to cooperate, which leads

to legal pluralism. Yet, the boundary between traditional and legal tenure systems is often understood with profound ambiguities, conflicts, and complexities. People's insecurities in the right to land in contemporary Mali mainly originated from the incoherence of these two systems, which continually involve statutory and customary tenure practices (Djiré; Keita; Diawara, 2010; Diallo, 2022).

Regarding women's tenure rights, independent Mali's secular state has demonstrated increasing help through the enactment of laws and policies advocating better equality between men and women. This is evident in the nation's constitution, which grants equal rights and opportunities to all its citizens. Mali also supports international treaties on women's rights, ratifying the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW), the Maputo Protocol on Women's Rights, and domestic law such as the Code Domaniale et Foncier (CDF), which grants male and female equal entitlements in holding title deeds. The "Loi d'Orientation Agricole" the Agricultural Orientation Law, (AOL) was also adopted in 2006. It guarantees equal rights and opportunities between men and women in the agricultural realm. More importantly, Article 24 of this law stipulates that Mali's State supports innovation and institutionalization of vulnerable groups, mainly women and youth, in farming exploitation in rural areas.

From the historical overview of land tenure systems, colonial and post-colonial land policies could not be attained without a lawful mechanism to institute their legitimacy and rationality. The current land tenure system originating from the French civil code, which legitimizes private property over conventional practices, gradually imposes itself on the indigenous people leading to a clash with the pre-colonial traditional land management rules and procedures (Mabogunje, Mabogunje, and al., 1992). Colonization triggered a partition in Mali between traditional tenure practises and government-instituted legitimate conducts anchored in colonial practices. Following independence, popular political and civil society organizations wanted to create laws and regulations meant to expand the State, unify the nation, and reform the country. Public laws have remained strict and obstinate, attempting to foresee every judicial condition with comprehensive official texts around tenure systems. This raises another complex dimension in Mali's existing land tenure situation.

3.1.4 Islamic Tenure Systems

Islamic law offers an alternative set of regulations that govern land access and tenure systems. In Islam, the land is considered a sacred trust in which supreme ownership belongs to "Allah" God. Accordingly, land and natural resources are governed by two interdependent principles in Islam. The first principle concerns the unrestricted use of natural resources, which

are not created by humans. Resource access is free under Islamic rule, and it cannot be traded. The second principle is sustainability, under which land belongs to individuals who sustain it (by cultivating it) (Diakite et al., 2004). According to Islamic principles, any land that has not undergone human transformation should be available to all, though this does not grant absolute ownership or ailment in its utilization.

In Mali, around 90 percent of the population is Muslim. In regions that have been strongly Islamized, such as in the northern part of Gao, Mopti, and Timbuktu, access to land is governed by Shariah's prescriptions or according to local customs and tradition.

Regarding women's access to land in Islamic tenure laws, there are no restrictions for women to own, inherit, use, or purchase land. Women can receive land or property as a dowry or acquire it through inheritance, yet women's shares are smaller, generally half that of their male counterparts in case of inheritance (Chaudhry, 1997). Women can also maintain control over their marital household and financial assets through marriage and may continue to do so after divorce or widowhood. More importantly, women can have individual land title deeds or communal lands. These rights are evident in Islamic law, which endorses women's rights to land and property (Haddad; Hoddinott; and Alderman, 1997).

In Sunni tradition, women (daughters) can inherit land and houses. Nevertheless, only males can inherit land in other Islamic factions, although females can be awarded usage entitlements. Nearly all Malian Muslims are Sunni. Though women remain eligible to inherit land beneath sharia or Islamic law, their legacy remains less than those of their male counterparts, as mentioned earlier. Males are believed to hold more substantial responsibility as they are assumed to be the providers of their households; for this reason, they have more land privileges than women (Chaudhry, 1997). In this vein, some scholars indicated that females should be rewarded for their lowered inheritance privileges through unconventional methods of financial support or via different possibilities of obtaining and owning lands, such as life cycle rewards, trusts, dowry, and preservation assistance (Jones-Casey et al., 2011)

Nevertheless, Muslim women do not constitute a homogeneous group. Middle Eastern Muslim women have different aspirations, experiences, and demands than Muslim women in Sub-Saharan Africa. Both groups of women grow up in distinct socio-cultural, political, and economic contexts that influence their ability to own and access land. Hitherto, the difficulties related to women's land ownership in Muslim countries are not significantly different from those encountered by women in the rest of the non-Muslim world. For example, the laws or customary practices of 102 countries still forbid women the same rights to access land as men (SIGI, 2014).

In Mali, where social norms based on Islamic tradition are neither evenly incorporated into State legislation nor applied correctly among people as the Sharia laws are commonly misinterpreted by religious leaders, who are usually male. Religious leaders typically administer discriminatory gender practices under the misperception of religious norms. Therefore, in Mali, women's tenure rights are based on interpretations of Islamic law that are distinct from equal rights, which Muslim guides often arbitrarily change to their benefit. Families and communities use various local arrangements to apply Islamic law in post-colonial Malian societies. As a result, women are often subjugated to male control. Ambiguities between Mali's secular regulation, customary law, and Islamic law, strengthened by an inadequate public understanding of any of these laws, hindered modifications in laws regulating females' land access and inheritance rights.

3.2 Types of Land Tenure Systems in Contemporary Mali

Land tenure systems in contemporary Mali are divided into two major classifications: the formal system of written law instituted by the government and the conventional system shaped by indigenous rules. Between these two systems exists informal practices that make use of both approaches.

3.2.1 Formal or Statutory Land Ownership System

A clear understanding of Mali's formal land tenure system requires providing an overview of its important principles or fundamentals and analysing the types of management that characterize it. Land legislation in Mali is based on the following essential principles: equality of citizens, state ownership, decentralization, access to property through registration and title deeds to land, and recognition of customary rights (Coulibaly et al., 2004).

In this regard, land acquisition is done in two ways in Mali depending on whether an individual is in a managed area which are areas that benefit irrigation systems or land improvement from the government such as Office du Niger (ON), Office de Développement Rural de Selingué (ODRS), or Office du Périmètre Irrigué de Baguinéda (OPIB) or in a non-managed area which are areas that did not benefit any type of land improvement from any government structure and are not supervised by any organism. Managed areas are generally plots where intensive farming is practised, especially rice and extensive market gardening. In contrast, the non-managed areas are regions intended to farm dry crops, such as millet, sorghum, and peanuts. The delivery of the Land Acquisition Act is the responsibility of the locality. The managed area is under the strict management of the State's authority through technical services and managerial organizations (ON, ODRS, and OPIB) and refers to statutory

tenure systems, while non-managed areas are mainly overseen by customary leaders within their territorial boundaries recognized as customary tenure system.

In the statutory land tenure system, the state is the most crucial player in facilitating access and ownership of land under formal rules. The state enables agriculture by allocating land for farming in urban, peri-urban, and rural areas, and other land distribution mechanisms for property and housing purposes. This vital role of the state is evident in Mali. For instance, Mali's government has set a legislative framework with delegate institutions like ON, ODRS, and OPIB to facilitate land access and tenure for farmers on managed vacant public lots.

In a non-organized area, the prefect, the mayor, and the customary chief may issue plots. Thus, in Mali, all lands belong to the state. However, in practice, ruled by traditional norms, land use is managed by village and customary chiefs within their collective territorial boundaries. The traditional leaders can relish land by cultivating it, derive their fruits or trees, or attribute them to newcomers without a definite ownership title. The state determines the final allocation of the land title deed. Formal registration of claims over land is complicated. People frequently access land through inheritance or by securing use rights through traditional systems, in the form of gifts or purchases among villagers, or the state's legal systems (Djire, 2007).

The first step to acquiring a title deed is getting an inspector to draw up a plot plan presented to the prefect through requests and other documents. This request is disseminated to the head of the national land office's cadastral department and the locality's agricultural planning and land services. Once the prefect has obtained a clear response from these three departments, he begins the community land inquiry. This is to be published in the national daily newspaper "l'Essor," following that announcement, a representative from the district land headquarters goes to the community on the date stipulated to enrol statements and record any deliberations regarding the advertised land (Amadi et al., 2004). The village authorities must endorse these records to confirm that traditional rights to the property have been conceived and indicate their title's approval. This is a lengthy and costly procedure led by men, thus making it challenging for poor and uneducated men and women to register their land.

In provisions of rural land tenure and the supervision of natural resources, local authorities' decision-making power and influence are fragile as the central government handles land title registration. Moussa Djire, a Malian legal specialist, compared local governments to "shepherds without sheep" in this respect. Djire argues that if customary leaders have accountability for local land development, most decision-making power over land and assets hardly fulfils this responsibility as they have limited ability (Djire, 2010).

3.2.2 Informal or Customary Land Ownership System

The official actors supporting access to lands under customary law are traditional chiefs or customary families. In most parts of Mali, traditional families and land chiefs maintain a legal role in land management, usually acting as “landowners.”

Customary leaders’ land rights lie in traditions and norms, which administer group command over land utilization and removal (Nugawaba et al., 2003). By this logic, land chiefs distribute land to community members or households. Land access under this practice differs on numerous considerations such as age, inheritance, marital status, and connection with the community (in the case of foreigners). For example, a foreigner can be incorporated into society through friendship or marriage and be assigned land-use rights. Access to agricultural land in rural Mali is structured and safeguarded by membership in the community (IAGU, 2002).

Accordingly, land represents a crucial and supreme asset whose exploitation factors unity and compassion. Similarly, the land remains an asset that is fundamental to the organization of communities at the village level. It is a means of production, forging sharing union, solidarity, and shared consumption of produces between family units and the community. Family land is similarly a financial and symbolic endowment to farmers.

For their livelihoods and income-generating activities, most Malians live in rural communities and rely on customary land tenure and natural resources. Conventional systems play a fundamental role in administering land in rural areas, where land distribution is usually done based on one’s family, class, sex, and age.

Traditionally, the head of the family unit handles land and manages agricultural work. The farm unit (family farm) is a family endowment and is dealt with in such a way as to meet the needs of all household members. Private fields are also cultivated according to a schedule that permits individuals to devote two or three days a week to running their plots. In short, the family chief oversees land and farming production, drawing on household labour to make sure that everyone’s desires are met (Diarra et al., 2004). While individuals (women and men) operate on the household or family plot, they also get access to their own (personal land), which they can nurture to meet individual needs. However, it should be noted that underneath traditional practices, access to land for personal use does not equate to fundamental rights over this land (Cisse, 1997). It is still the household head who maintains supreme decision-making power over land and who has access to it.

Within Mali land tenure practices, several interest levels about land are recognized to be legal or conventional; thus, land tenure guidelines acknowledge multiple intersecting rights

over the same land (RocheGude, 1982). These are mainly classified as primary and secondary rights. Primary rights confer supreme decision-making power over land, while secondary rights usually grant the right to temporarily utilise the land (Coulibaly et al., 2004). For example, a woman or young man might have the right to cultivate a plot of land to meet individual needs. Still, they do not have primary rights over this land as the household head, or traditional commander maintains this right.

3.2.3 Dual Tenure Systems

There are two main ways of accessing land in Mali: access through the systems established by the “Code Domanial et Foncier” CDF and access through customary systems (intra-lineage access, loans, gifts, etc.), as explained above. These two systems coexist and are fully recognized in Mali. Article 35 of the “Code Domanial et Foncier” states that land in the private estate of the State shall be allocated following a certain number of modalities, namely transfer, lease, and assignment. Depending on the modalities, the documents issued can be diverse. They range from the temporary certificate of the title deed to the final certificate of individual private ownership.

Regarding customary rights of access to land, it should be mentioned that the land on which these rights apply is also considered part of the State’s private domain. The “Code Domanial et Foncier” recognizes and supports customary rights, whether they are exercised collectively or individually, and even foresees their recognition following a contradictory public inquiry that results in the delivery of an enforceable title against third parties.

In contemporary Mali, traditional tenure systems have occurred for centuries and continue to be practised, although statutory systems’ control has increased. In rural communities, customary practices offered protection nurtured by well-known and well-established societal regulations and procedures among community members (Djiré, 2006). Traditional authorities’ power to handle the admittance, usage and allocation of property rights and other natural assets has decreased due to enforced legitimate decrees and urbanization. Although current regulations and policies are intended to protect customary practices through their recognition to some extent, the line remains unclear between the statutory and the customary tenure systems (Dabatey, 1998; Diallo 2022). Statutory laws are more broadly recognized and generally used in urban areas and peripheries. Traditional tenancy practices are highly prevalent in rural areas, but they remain heavily influenced by broader exogenic forces.

On the one hand, customary land allocation and supervision systems still represent the dominant pattern for most families. On the other hand, statutory tenure right is considered more

legal and widely recognized by the government. Even though Mali's tenure regulation formally acknowledges customary freehold rights, through the government recognition of traditional heads as guardians of land obtained under tradition. Yet, at the same time, the state remains the legitimate owner of all untitled property. Since state laws deliver no apparent means through which it confirms customary tenancy rights over vacant or unidentified property, the majority of the population seeks traditional landholdings which remain precarious. Customary heads can allocate temporary or leasehold privileges to land, but not a definite guarantee; only the state holds the right to issue land title deeds.

The Malian legal context comprises at least eight mechanisms to validate rights to the land (Ministry of Agriculture, 2009a). These range from written certification of traditional land allocation to a legitimate title deed to land approved by the government. Whereas each process gives the owner some degree of security regarding land proprietorship and entitlements, the asserted level of protection varies significantly on additional aspects, several of which remain ingrained in traditional practices. This involves the owner's status, family lineage, ethnic group, financial status, political, and religious weight (Zallé, & Konate, 2003). Beneath some traditional tenure practices and Article 46 of the CDF, a property might only be transmitted to a family or ethnic faction. Generally, transfer entitlements are limited to males (Charles, 1981).

The shift from customary to statutory tenure arrangements can undermine the right to communal supervision of rural lands (Diarra et al., 2004). The proprietorship and management of collective resources, such as village forests, public gardens, pastureland, wildlife, refuge fields, and even mausoleums, have not been sufficiently tackled in legal tenure regulation (Ministry of Agriculture, 2009b).

Since profusely confusion surrounds land tenure regulation and administration in Mali, the statutory tenure system should further consider the fundamental issue of secondary rights. Although this might be attributed to several reasons, the main reason remains the incoherence between traditional tenure practices of the pre-colonial period and the various land policies introduced by colonial and post-colonial governments (Dabatey, 1998; Diallo, 2022). Both tenure processes substantially changed over time to the extent that property ownership practices lack effective integration of customary rules into current regulations. As a result, the public weakly recognizes land tenure policies and systems.

The notion of state ownership of land and other acute natural resources remains the core of Mali's land institution. In this line, Beauregard (2009) purports that various legislation and rules regarding land and access to natural resources persist in Mali; though, most of them

remain indulged in the French colonial regulations, echoing the state's absolute control of the land.

Other laws introduced following the country's political and economic adjustments of the 2000s, emphasizing decentralization and private property, were crucial. Nevertheless, traditional land tenure systems which originate from pre-colonial times are still utilized. Women's land ownership is still challenging under customary and religious tenure laws. Given that there are few plot reserves for agriculture in contemporary rural areas, women and young people are losing access to land.

A contrast appears between the Malian legal system regulating land tenure on the one hand and traditional practices on the other hand. Likewise, other scholars argued that Mali's land tenure system is complex. It involves modern laws, which mainly put land in the hands of the state to sell or allocate; it also implicates elderly and customary chiefs to handle land and its usage (Djire et al., 2012).

Figure 3.1: Complexity around land tenure in Africa



[Source : Revue Grain de Sel, Inter-reseaux, numéro 36 (septembre-novembre 2006), <http://graindesel.inter-reseaux.org>]

It is only as recent as 2005 that Mali's government started to standardize the complex system of laws and decrees overseeing legal procedures and set plans to recognize and record traditional practices. Scholars are still sceptical about how these reforms will play out in practice since post-independence governments maintained the colonial tenure legacy. They continued to strengthen the statutory legal principles projected to build national unity and bring land policies and regulations into compliance with Western legal concepts and guidelines

(Perquin, 1993). Anxiety around tenure occurs since few people believe that the state and local experts will obey the land administration principles. As Mali expands and organizes its property tenure strategies, it should challenge this complexity around land tenure, as shown in Figure 3.1. Land tenure discussions exclude a wide range of people, including women and youth.

3.3 Challenges to Women's Tenure Issues in Africa and Mali

3.3.1 Challenges to Women's Tenure Issues in Africa

A wide range of studies by development experts has explored gender-specific limitations encountered by female farmers (Agarwal, 1994; Kevane, 2004; Lastarria-Cornhiel, 1997). Much of this literature highlights females' limited access to valuable assets and human capital. Doss (1999) realizes that African households remain multifaceted and diverse, where gender roles remain equally intricate and entrenched in farming and non-farming production structures. The tasks and obligations from these structures are dynamic, retorting to alter women's economic situations. Women are often underprivileged by legal and customary land tenancy arrangements, resulting in less land access and predetermined rights to property, water, and other natural resources (Gladwin, 2002). Although prevailing law defends females' land rights, the absence of legal information and the fragile application process of these tenure rights restrain women's ability to work out their prerogatives. In this line, Muhammad Yunus (2006) argued that "Poor people are bonsai people; there is nothing wrong with their seeds. Only society never gave them a base to grow on. To get poor entities out of poverty, all required is to establish a supportive environment."

Other studies further documented production disparities between men and women farmers, mainly in Sub-Saharan Africa. Tinker and Summerfield (1999b); Razavi (2003) claimed that females regularly miss out on the allocation of property rights, which are critical for human security and growth. Even though women have legal land rights in practice, the outcomes are hardly fair when non-farm prospects expand. Likewise, Boserup (1970) contended that unequal gender relations and females' unprotected rights to property avert them from partaking in decision-making around land and natural resource utilization in several countries throughout the world. In some instances, inequalities in accessing agricultural inputs and outputs originate from women's uncertain tenure rights, influencing their access to better markets. Change is required in the laws that ignore women's property rights so that they can have distinct or shared titles to land; legal consciousness also remains imperative (Agarwal, 1994; Kevane, 2004)

Similarly, Jane and Summerfield (2006) contended that customary practices entrenched in outdated cultural land-use norms persist with state land tenure and management conceptions. All over the world, females' and males' relationships to land and shelter generally alter based on social constructions and arrangements, predominantly kinship systems and gender structure. Women and men live in cultures that have depended on survival economics; nonetheless, they are quickly shifting, as are the rules and traditions that regulate economic collaborations. Gale Summerfield (2006) suggested that tenure systems remain unclear regarding females' rights. Patriarchal norms and beliefs that prevent a woman from maintaining her husband's land following divorce leave women burdened under conventional practices. Gale further argued that a lack of comprehensive land rights creates biases since small-scale farmers must compete with housing companies, committal mounds, and roads for available land (Gale, Summerfield, 2006).

Property acquisition hence remains a central and distinctive issue for women in Africa. Females make up a large proportion of farmers in the continent, yet their access to plots is hindered due to customary practices and gender division of labour (Dennerly, 1996; Mougeot, 2000; Mbiba, 1995; Schiere, Tegegne, and Van Veenhuizen, 2003). Women are expected to carry out household nutrition provisions and care work. They still confront patriarchal regulations within the family, which disqualify them from acquiring land titles.

For example, in Uganda, women constitute 70% of farm labours, whereas only 7% own a plot (Mbiba, 1995). Likewise, in Harare, women are mostly de facto occupants and debtors (60%) and constitute most agricultural producers (Ibid). Purchasing a plot remains additionally restricted by females' domestic chores, which neither offer secure revenue nor a means of safeguarding their rights. Moreover, women's inadequate education impedes their knowledge of the process of property rights and restricts their prerogatives to utilize land, subjecting them inadvertently to involuntary expulsions (Nugawaba, 2004).

Moreover, in Africa, most female farmers are evicted, or in cases where they can access land, they hold fewer rights and decision-making power over those lands (Agarwal, 1994; Kevane, 2004). Generally, women gain access to the plot via a male family member (father, husband, or brother), who determines precisely how to utilize the plot. As an illustration, Nugawaba et al., (2004) indicated that married women would manage plots near their municipal farming residence in Kampala. Still, their husbands would decide what yields to grow and use their productivity. Equally, women who earned land through inheritance might hold a plot; though they cannot trade it because that type of property goes to the household unit, then its trading involves written official papers (Ibid).

As a result of these practices, less than 20% of sub-Saharan African landowners are women (FAO 2011, p.37). Additionally, in most sub-Saharan African countries, indicators of land ownership remain obscured by mutually preserved types of ownership such as household-owned or group-owned. Males usually have 10% better land ownership (Doss, 2014). Wives have entitlements to the household or communally owned plots when their husband's co-owner passes away, although this might also be constrained (Ibid). Because females rarely hold title deeds to land, they regularly obtain usufruct entitlements over a male family member. In case of death or separation from their husbands, these secondary rights might be eradicated (Djiré et al., 2012).

The persistence of gender disparities in accessing land and other agrarian resources influences female smallholders' ability to participate efficiently, manage, and gain new economic prospects (Ministry of Agriculture, 2009a). In short, women farmers in developing countries who receive lesser education have more secondary access to resources, including land, seeds, fertilizers, farm equipment, transportation, markets, and family labour (FAO, 2011; UN Women et al., 2015). Women also cultivate crops that are less significant and have less value on the market. For all these reasons, they still lag behind their male counterparts in enjoying the same socioeconomic and political benefits in dominant masculine societies.

3.3.2 Women's Land Ownership in Mali and its Challenges

Women's land ownership rights and control are not homogenous in Mali. Individuals' sex, status, education, financial means, and location impact their property rights. Accordingly, in urban areas, women have no discriminatory gage for housing plots; the sole challenge remains their financial inability to buy them. In the non-agricultural regions of Gao, Timbuktu, and Kidal, where ample land exists, the plot goes to the entity that wishes to farm it. Women farmers in the Northern regions have no challenge acquiring farming land. Both men and women hold equal access to land since very few individuals practice agriculture. Once individuals obtain land in those communities, they can pass it to their offspring. Women usually derive their income from handicraft work and livestock breeding activities in the north.

In contrast, most of the agricultural land in the Southern part of Mali is collectively cultivated by family members. The head of the household supervises communal land and manages agricultural work and revenues from the family farm. Subsequently, the farm unit is a family endowment, and it is managed to meet all household members' needs. Private fields are also cultivated according to a schedule that permits individuals to devote two or three days a week to running their plots. In that regard, while individuals (women and men) operate on

the household plot (family farm), they also get access to their own (personal land), which they can nurture to meet individual needs.

Females usually acquire their plots via their husbands' or spouses' lineage and hold inadequate plot privileges compared to males. Under this system, customary heads can allocate permanent or leasehold benefits to the land, though only the state has the right to issue land title deeds. Beneath some traditional tenure practices and Article 46 of the Land Law, a property might only be transmitted to a family or ethnic faction. Generally, transfer entitlements are limited to males (Charles, 1981).

Women's obligations and rights to land generally change over their lifetime as defined by their social status as married women, singles, grandmothers, and widows (Hamilton et al., 2003). Discrimination resulting from social status is persistent, influencing a person's condition and access to natural resources. For women, marital status is at the heart of obtaining access to land in southern agricultural communities (Giraudy et al., 1994). Married women's access to land, natural resources, and group membership is less complicated than girls' or singles. Usually, girls in Mali will take over land via inheritance when they have no elder brothers, even if they return the plot to their ancestor's family once, they marry. Older, mature, or widowed women are exceptions to the established tenure rule. As an illustration, in some rural areas, mainly in the cotton-producing region of the southern part of Mali, traditionally, females do not have personal access to land. Instead, they operate as workers on their partner's or father's land. When they are about 40 years old, following the first grandchild's advent, these womenfolk request to be acquitted of their responsibilities on the farm and take on seeing after grandchildren. Nevertheless, if a woman becomes a widow, it is accepted that she must take care of her kids. In this case, she is granted access to her partner's land till her eldest son can take over.

Conventional practices value and prioritize men's access and control over farming and housing land. It is assumed that the household farm managed by men meets the entire family's needs, so in this case, it is contended that women do not need access to individual plots (Diarra et al., 2004). To meet particular needs, women are granted access to the "Nako" market garden or the crops from trees (such as shea nuts), which they assemble and process either for selling or domestic consumption. Market gardens are small vegetable plots found nearby the homestead land, mainly on roadsides or edges of fields. Almost every household in agricultural societies practices market gardening as a supplement to family agriculture (Diallo, 2021).

Market gardening also supplements the daily household needs of food. Such gardening requires less economic resources, using locally available plants, materials, and indigenous

farming methods. Women are generally engaged in vegetable gardening, which improves domestic and intra-household food security throughout the year (ibid, p.110). If surplus vegetables and fruits are left, it can also be an income-generating activity for women. They are taken to markets for selling, which provide women with extra cash to compensate for household needs (ibid, p. 111). Consequently, in farming communities of the South, conventional patterns deem men as heads of households and sole providers of the family sustenance needs. Accordingly, women are granted individual market gardens to meet their personal needs, which they access via their husbands (household head) or through the village chief over negotiation with their husbands.

Gender discriminatory patterns such as unequal division of household labour, unequal power relations at decision-making levels, gender ascribed roles, biased institutional processes, and socio-cultural tenure practices often deny women adequate access and ownership of agricultural land, housing, as well as other socio-economic activities in Mali (Zallé, & Konate, 2003). William J. Grigsby's article on "Women, descent, and tenure succession among the Bambara of West Africa" depicts Bambara women's traditional land privileges. The Bambara remain the major ethnic group in Mali as they represent 40% of the inhabitants, and the "Bamanankan" language is spoken by 80% of the population (William, 2008). In his analysis of females' customary entitlements to land and natural assets, William explicitly describes the Bambara women's land access as fragile. However, numerous traditions are comparable for males and females in Mali. He argued that though women are commonly guaranteed land use via their spouses or other male family members, women are likely to acquire fewer land privileges. Men hold nearly all the decision-making authority and how property is utilized and handled (William, 2008).

Mostly, females' entitlements to a specific type of land are granted to them either by their relatives or spouses, which remain provisional. This implies that a woman could be relocated anytime to a new plot when agreed upon by her male relatives or spouse. Likewise, USAID's (2010) report indicates that women cannot traditionally own land in Mali. They can nurture or utilize a plot provisionally. This plot could be retrieved from women at any time, thus discouraging many of them in rural areas from participating in plot enhancements such as irrigation infrastructure, fencing, or tree planting.

Male farmers usually offer their spouses one of their plots, which men presume will be restored after their wives garner their yields. This process occurs in a cycle; since females' land cultivation remains temporary, they ordinarily grow them yearly and are discouraged from initiating constant enhancements on these plots like establishing irrigation schemes or planting

trees. Furthermore, West African tradition regularly prohibits females from planting trees as this implies that they are staking claim to a piece of the plot. Planting a tree on a farm may also be regarded as an impediment to harvesting farm produce (Micheal, 2003).

To improve their land tenure safety, women regularly create alliances and appeal that public property or plots held by a particular landlord be allotted to them for their collective utilization, often for communal gardens or fields. In some communities, women acquired land through cooperatives for joint use, mainly for small-scale survival farming through market gardening. Nonetheless, this practice is new and still uncommon.

If men ensure continuous cropping, gardening, and cash farming for long periods, women perform market gardening on smaller fallows or plots. Possessing smaller and infertile fields excludes women from partaking in profitable agricultural activities. Under customary tenure rules, forest resources are overseen by community rules of access and management. Women often obtain their income from gathering forest products such as shea nuts, *néré*, (*Parkia biglobosa*, known in English as the African locust bean) Arabic gum, palm nuts, baobab fruits, and tamarind. Traditional tenure management systems have limited overutilization rights to a certain extent, nonetheless, the need for tree crop products led to their decline in some areas (UEMOA, 2003). Land tenure is regularly exemplified by numerous intersecting rights. A farm owned by a household is occasionally allocated to females for collecting firewood or gathering wild fruits throughout the farming season. The kind of plot regulates who can manage the additional assets. An abandoned fallow plot might be deemed less appropriate as the vacant field lures reptiles like snakes or other dangerous insects. There are hardly any constraints on collecting extra assets in those plots (Dabatey, 1998). Consequently, farming trends have often constricted females' conventional usage privileges, rendering them more susceptible to hardship.

Another challenge encountered by women is the registration of property claims. Traditionally, women are not often engaged in public or representative affairs due to their hectic workload, mainly in rural areas. They do not register their land rights with the provincial land commissions. Their spouses perform this on their behalf. In the discussions with women during the fieldwork, the author discovered that tenure rights were registered under the husband's name rather than the wife's in several instances. This can be unreliable in a polygamous regime because if the land is recorded under the spouse's name upon death, it will be passed to his male offspring. If the husband had multiple wives, when the sons running the farm inherit the land, they might expel any remaining wives who are not their mothers. The issue can become conflictual, sometimes involving the courts and expensive legal fees.

Moreover, the male offspring will often sell extended family land to rich urban office workers behind their relatives' backs. This practice often led to violence between families and among family members. Accordingly, Jane S Jaquette and Gale Summerfield (2006) contended that land and house inheritance is a serious concern in Africa, where friction between customary, religious, and civil law benefits males and deprives females.

When women farmers are engaged in legal procedures, they also prefer to indicate their sons' names when their spouses die, to trade guarantees for potential assistance. As such, one of the interviewees stated that:

Sons are deemed permissible heirs of the family land. This is standard practice; even when women can acquire land on their account, they tend to pass this right on to their sons. Daughters are regarded as temporary family members since they will be married and leave the parental house after marriage (Interview with Baguineda women's cooperatives on February 5, 2020).

Hence, unclear statutory laws about women's property rights and biased patriarchal values and norms are prevalent in Mali. Men's control over women in accessing agricultural resources, particularly land. The study then argues that women's socioeconomic positions are influenced by religious and customary laws where patriarchy is embedded in Mali's conventional practices. Nonetheless, women are discovering new approaches to defending their rights via cooperative networks.

3.3.3 Challenges Related to Urbanization, Capitalism, and Climate Change

Recent experience from various parts of Africa demonstrates that growing population and market economies' development have made significant changes in land tenure practices (Jean-Francois et al., 2002). Similarly, other scholars argue that demographic growth, market expansion, and other modernizing trends also impact land tenure practices (Cisse, 1982). Demographic pressure triggered by land shortages makes women's livelihood choices reliant on the remaining land and concedes their capabilities to generate alternative revenues (Defoer et al., 1997). The combined impacts of population growth and commercialization of property rights have heightened tension on land and increased its financial value, thus destabilizing its social and cultural significance (Bronson, J., Diarra, S. et al., 1994). Privatization and effective land use have exacerbated tenure's individualization (Charles, 1981).

A second important factor transforming property claims is land capitalization, as it gets a fair benefit for some groups. The most apparent impact of adjustments in land management is the sharper and extreme disparity between the rich and the poor (Jean-Francois et al., 2002).

Fundamental rights over land are concentrated in the hands of comparatively wealthier individuals or families (Guyer, J et al., 1987). Under legal systems, urbanization is promoted via property sales as it offers land entitlements as market properties. The allocation of land to the richest triggers property value increases on farmland (Jolderma, R. et al., 1991).

Due to the lack of new agricultural land, prevailing plots have been destroyed as households divide the remaining land, compromising land admission for future generations. For centuries, customary land management systems allowed families in Mali to meet their demands. Yet, the disintegration of land ownership has added a fundamental change in the conventional management of land privileges that transcends individualization of ownership (Giraudy et al., 1994). Land grabbing has also intensified throughout the country with property privatization of the early 2000s.

Land tenure is accordingly becoming a central issue, triggering numerous conflicts since the end of the 1980s. These conflicts over access to land, which result in constant bloodshed over the years, are fuelled by unclear land tenure regulations. Within this environment, the rivalry between customary and statutory tenure systems increases. The rivalry between males and females and peers also intensifies and regularly excludes females and young males from accessing valuable assets, as elderly males have ultimate control over household land (IAGU, 2002). Women are the primary victims of this new competition; they lack title deeds, often have no stable income, and have no access to credit to acquire title deeds for the plots they utilize.

- **How do these challenges particularly affect women?**

The changes in the land management systems have an overwhelming impact on women's exploitation rights. Among rural stakeholders, women play a prominent role in Mali and are the first to be affected by land tenure insecurity. Women represent 51.6% of the rural population, makeup 60% of the agricultural labour force, and account for nearly 80% of food production (EAC 2015/2016). Yet women continue to have precarious status under customary law, which does not recognize their right to own the lands they cultivate. In Malian customary law, women are excluded from owning land, even though they are widely involved in land utilization. They are the principal victims of increasingly widespread land conflicts, with repercussions on family food security (Dabatey, 1998).

Although under traditional methods, women and young men were ensured rights to utilize land either from the family unit or for individual production. Since rights over land tend to be individualized, women and young men are likely to lose out (Marthe et al., 2006). Women

from the most vulnerable families, particularly young and poor households, are mainly expelled from land and agricultural activities.

Additionally, climate change imposes a significant challenge on the socio-economic development of all countries currently. Tenure systems are often challenged to change due to the threat of more droughts and expanded desertification caused by extreme weather, bringing about more conflict over natural resources, mainly in irrigated land (Valentina et al., 2001). Developing countries like Mali are particularly at risk due to prevailing poverty, lack of decent human capital, and economic vulnerability. Various studies on climate change in Mali have shown that the country's most significant climate challenges are droughts, floods, strong winds, and high-temperature variations (Dennerly, 1996; Mougeot, 2000; Mbiba, 1995; Schiere, Tegegne, and Van Veenhuizen, 2003). These problems threaten mainly the primary sector (agriculture, livestock, fishing) and forest exploitation, which are vital components of the country's economy.

Health, water resources, infrastructure, industry, and mining are also exposed to climate change (AEDD, 2011). Women are often more portrayed as a socially vulnerable group of people than men by the adverse effects of climate change. Where households have no economic income except agricultural production, men's needs tend to be prioritized. In the circumstances explained above, it is not unusual for women to cede land use rights and be forced to pick up agricultural processing and trade activities.

All these challenges mentioned above have a negative influence on land tenure security. More smallholders migrate beyond their neighbourhoods to pursue better lives as productive plots are becoming progressively sparse in Mali because of chronic droughts and land deprivation from mismanagement or over-exploitation. Female immigrants' land claims are particularly fragile (Thea et al., 1998). Since women gain access to plots through their partners, who receive land via local communal memberships or seniors, these females largely retain tertiary entitlements to property. Consequently, unmarried women's command and privileges over land remain further weakened than indigenous married women within those neighbourhoods. In other words, management techniques (location of accessible land, tenure status, access processes), climate change, population growth, land market, land capitalization, and individualization of property rights are the main factors limiting access to land for most poor farmers.

3.3.4 Challenges in Islamic Inheritance and Legal Rights

Islamic law offers an alternative seam of regulations overseeing Mali's land access and tenure systems. As mentioned earlier in Islam, the land is considered a sacred trust in which supreme ownership belongs to Allah. According to Sunni tradition, women might inherit land and houses. Nevertheless, just males might inherit the land in other Islamic factions, although females could be awarded usage entitlements. Sharia or Islamic law is established in the Quran (the magic book of Allah, as divulged to the Prophet Muhammad) and the Sunna, which is the doctrines and rituals of the Prophet Muhammad, remain primarily documented in the Hadith (Jones et al., 2011). Muslims consider the holy Quran as the exact magic words of Allah; consequently, they take on its status impeccably and indisputably.

For unclearly delivered issues in the Quran, Islam urges Muslims to employ "ijtihad" or objective interpretation to reach a verdict built on the Quran and Sunna. The Quran in "an-nisa" surat examines inheritance. Various important Quranic stipulations about females' legacy include:

1. When a father passes away, he must provide his son "a portion equal to that of two daughters." If the deceased has no sons but multiple daughters, they obtain two-thirds of the inheritance. When the deceased has only one daughter, she gets half.
2. If a male passes away with no offspring, his sisters can receive half of his heritage. When a female passes away under the same conditions, her brothers receive her whole inheritance.
3. A female is expected to give the spouse half of her fortune when she has no offspring. If she has heirs, her partner remains eligible for one-fourth of her heritage (following compensating liabilities). However, a husband is expected to give one-eighth of his inheritance to his wife when he has living offspring or paternal grandchildren. His wife can receive one-quarter of his estate when he has no offspring. When it is a polygamous marriage, the inheritance is shared equally among his wives. The Quran acknowledges 15 male inheritors and ten female heirs (Abubakri et al., 2008).

Whist Sunni Muslims agree that up to one-third of their property will be bestowed to non-inheritors via request. Shiite Muslims refuse inheritance privileges for unspecified parties in the Quran (Abubakri et al., 2008). Mali Muslims are nearly all Sunni.

Islamic law acknowledges that women hold autonomous legitimate, financial, and religious characteristics from men. Though women remain eligible to inherit land under sharia or Islamic law, their legacy remains less than their male counterparts (half of the men share). This is because it is assumed that males hold a more considerable responsibility to offer

financial assistance to their households (Chaudhry, 1998). In Islamic practices, when witnesses are required to record land deals in Islamic procedures, two women are asked to witness one man's equivalent, as is the ritual under Islamic law.

Furthermore, the Persons and Family Code in Mali, which regulates men and women's relationships in the household, has decreed for many years that, under Islamic law, when a male head of the family dies, his sons inherit the bulk of his land and possessions while his female family members inherit one-quarter of it. The land is usually inherited and kept by a spouse or male household head. When the household does not have sons or the son is below 18 years old, the wife can own land. In divorce instances, she will lose ownership of the land, which is conferred back to the husband (Bagayogo et al., 1985). Several experts indicated that females should, for this purpose, be rewarded for their lessened inheritance privileges by unconventional methods of financial support or via different possibilities of obtaining and owning lands through rewards, trusts, dowry, and preservation assistance over women's lifetime (Jones et al., 2011).

Islamic rights are neither equally incorporated into the State legislation as Mali is a secular country; they are not applied correctly and are misinterpreted by religious and customary leaders, who are generally male. These leaders usually administer discriminatory gender practices under the guise that they are religious norms. In addition to the misinterpretation of texts, one of the significant difficulties regarding women's land ownership is the lack of knowledge of those who administer the texts. For example, there is an assumption that males provide for the household's economic needs while women are exempted from that obligation. However, daily evidence in Mali proves the opposite, as women are as much involved in household finances as men. Therefore, the implementation of Sharia principles in dominant Muslim countries occurs through the overthrow of Islamic law into government institutions or public knowledge where individuals use distinct interpretations. In this regard, families and communities use various local interpretations to apply Islamic law in contemporary societies.

Furthermore, Mali's secular laws have often remained in tension with most Malian traditions, mainly Muslim religious principles. As an illustration, until recently, Malian law merely acknowledged civil marriages, as the State recognized neither traditional nor religious marriages. Attempts from the secular government to detach from Sharia rule and procedures guided most Malian Muslims to fear cultural relegation. Several Malians, primarily Muslim, conveyed fears regarding social amendments that they believed evolved from Western powers, which may endanger their societies' ethical structure.

Even though Mali's legal law started to endorse equal rights between men and women, women's privileges to land remain unequal. Most Malians expressed that they were not ready to acknowledge changes to the Persons and Family Code in 2009, which comprised amendments associated with inheritance traditions. The Family Code attempted to equalize land ownership between men and women. The national assembly requested to establish fair treatment empowering women in several other aspects, including inheritance and recognition of children born before marriage over a judicial tactic. This request encountered strong public resistance. Discussions over this suggested change triggered much hostility among the Muslim population (and others) to the point that the proposed modifications were postponed (Coulibaly, C. et al., 2004).

While some of Mali's law encourages equality of rights among all sexes, there are also discriminatory laws against women. For instance, the loi 62 an-rm/ Code du Mariage et de la Tutelle (Law on Marriage and Guardianship, 1962), identified as the "Family Code," asserts that "a wife remains accountable to be submissive and obey her husband, while the husband is liable to protect his wife. The husband is the chief of the family and oversees household finances. A wife ought to live with her husband" (Code du Mariage et de la Tutelle, 1962).

In contemporary Malian society, no formal inheritance protocol exists, even if the Marriage and Guardianship Law stipulates that heirloom issues shall be determined by the spouse to be resolved by traditional or official rules, this process is generally biased against women (Code du Mariage et de la Tutelle, 1962). Additionally, the Family Code supports husbands in inheritance, divorce, and child custody. Though Mali's State has taken initiatives to improve the Family Code, its attempts have encountered significant opposition from the Muslims, who represent about 90% of the population and several of whom follow Islamic law, which establishes special rights and duties for men and women about family and individual issues. The ambiguity between Mali's secular rule and Islamic law is strengthened by a lack of public assistance for amendments and hindered adjustments to laws regulating women's land and inheritance rights.

Changes that are explicitly in opposition to Islamic law encounter massive disputes. For millennia, Islam triumphed in connecting millions of Malians across a universal range of religious and living principles. Muslim males and females retain a deeply embedded sense of self in these ideals.

Even though more than 68% of rural women in Mali are involved in agriculture, the majority can only gain access to land from men who retained fundamental entitlements over land and its resources. Mali's secular state has demonstrated increasing help through laws and

policies that advocate for equality between men and women. This is evident in the nation's constitution, which grants equal rights and opportunities to all its citizens. Mali also supports international treaties for the defence of women, ratifying the Convention on the Eliminating all Types of Discrimination Against Women CEDAW in 1991, and the Maputo Protocol on Women's Rights in 2003, among others.

Other national law adopted in Mali aims to enhance gender equity in land ownership. As an illustration l'ordonnance, n°00- 027/P-rm du 22 mars 2000 portant Code Domaniale et Foncier CDF, (Land Law, 2000) grants males and females equal entitlements in possessing land title deeds. Additionally, loi n° 0640/arm portant Loi d'Orientation Agricole LOA (Agricultural Orientation Law, 2006) guarantees the expansion of equal rights and opportunities between men and women in the agricultural realm. More importantly, Article 24 of this law stipulates that Mali's State assists and supports the innovation and institutionalization of vulnerable groupings, mainly women and youth in poverty. Nonetheless, statutory laws like the LOA and the CDF, among others, remain less implemented in practice.

Although Mali's constitution and some other legislative laws encourage equality between males and females, women still enjoy fewer equal rights to men regarding land privileges and inheritance. Regardless of legal rights, women still face challenges in holding land titles. Women further lack knowledge and information regarding their legal entitlements and other significant barriers to exercising these rights. As a result, most Malian women farmers continue to acquire land via traditional law, religious law, or a mixture of these two. Small-scale farmers are experiencing a wide range of tenure patterns, which shape the major characteristics of land tenure systems in rural areas. Under these arrangements, the fundamental rights to the plot are handed from men to their male inheritors. The situation is progressively changing, with some women taking action to challenge the status quo.

In one instance, a rural landlord deceased without a male heir to inherit his land. While the brother of the deceased man tried to sell his dead brother's plot, the owner's daughters appealed to obtain their father's property so that they could be able to take care of their mother. The women brought the lawsuit to court since the community could not settle the issue. The arbitrator declared that the brother was made to provide eight arable hectares to the female heirs. Since "he [the brother] had confiscated the traditional disposition of the property by requesting to get money out of it," parallel incidents were acknowledged (Hamilton et al., 2003). As the land was the deceased's legacy, they warned the perpetrator to ask for the deceased's spouse (his sister-in-law) before trading the land to avoid being accused of disowning his nieces.

These are the kinds of circumstances that participants at meetings regularly underline to devise ways to settle these sensitive issues. There is a threat that continued opposition or co-existence of different tenure systems will generate obstacles and misunderstandings in the long term. Recently, the public attitude regarding women's land ownership in Mali has changed. Progressive state policies, such as the land law or CDF, the Agricultural Orientation Law (AOL), are expected to improve women's access to land titling and provide them with more secure tenure rights (Ministry of Agriculture, 2009c). In the face of these challenges, there is currently a movement in Mali to alter these practices so that property or plot would be inherited equally amongst all living male and female children.

Based on this literature, the study argues that entities pursuing heightened equality amongst women in Muslim cultures and patriarchal societies should recognize these ideals by acknowledging that women are offered some, though inadequate, inheritance rights under Islamic law and conventional practices. While outsiders might be influential in simplifying and articulating adjustment procedures, actual modifications in principles and actions are prone to be highly recognized and lasting once the concerned actors or local people exhibit them. Successful approaches might be possible if Malian females and males come together and identify burdens that females confront, mainly in the face of social and economic adjustments. A range of actions could be taken to protect their profits. Wives and daughters shall inherit more land and access assets throughout their lives, thus enhancing their land privileges and access to crucial resources. Both men and women can contribute to the purpose of gender equality by implementing resilient strategies.

Since Islam encourages independent thinking on questions not openly uttered in the Quran, it offers the possibility of discussing women's rights and altering their disadvantageous status within Muslim communities. Experts must bear in mind and emphasize those sections of Sharia law that prove admiration and respect for females and seek to safeguard their concerns and rights.

Lastly, social change is a steady process, and the road to it is hardly well-lit or straightforward. Legal adjustments must work in tandem with changes in mindsets and actions without immediately dominating them. Supporters of women's rights should remain ready to devote time to identifying community patterns and their stands, collaborating with females and their communities to foresee crucial adjustments, and creating practical resolutions to attain those goals. While such an attempt might be iterative, gradual, and tense with backsides, it is less susceptible to intense opposition or disagreement. Women's benefits are more likely to be achieved when they lead correctly.

3.3.5 Women's Exclusion From Political and Public Realms

Many scholars contended that women's involvement in socio-political matters is critical and necessary. Very few women are substantial political agents in the Malian context (Affa'a-Mindzie, 2015; Jorio, 2009). Malian women have a subjugated position when participating in government-planned activities and public life. This position results from their geographical position, level of education, and social class (Gottlieb 2016; Klein 2016; Puchner 2003; Bleck and Michelitch, 2018). According to Gottlieb (2016), women are also discriminated against in the Malian legal code, in which the "marriage age for women is lower than for men: women's requirement to receive their husband's consent to start a business; women being hampered to be household heads; the husband control over family assets and choice of residence meaning that "women are officially bound to obey their husbands" (Gottlieb, 2016, p. 98). To understand this phenomenon, it is crucial to examine women's political participation, their access to agricultural resources, and their permitted productive activities. As mentioned previously, women's involvement in public and political life is much questioned in Mali. This is ironic considering women's contributions to the liberation movements for independence from colonial powers in several African nations (McFadden 2005; Amadiume, 2000).

African women have played an essential role in the struggle for independence on the continent; many joined in the fight, along with men, for their sovereignty (Patricia McFadden 2005; Amadiume, 2000). According to Amadiume:

To portray African women purely as needy and in search of help from developed countries is equal to prejudicing women with a stunning history of genuine leadership abilities, commercial creativity, and methods of opposition to repression—this robust heritage allowed African women to play significant roles in anti-colonial resistance movements (Amadiume, 2000).

Additionally, Amadiume (2000) claims that women's marginalization is not an outdated practice but a contemporary issue. She observes matters related to neo-colonialism through the capitalist economy, new ruling procedures, and the legacies of Islamic and Christian norms, which have enforced patriarchy as a way of life and women's subordination. Moreover, she points out the pressure of international organizations like the World Bank and the International Monetary Fund (IMF) on African countries' governments to reform their markets, resulting in a more severe exclusion of women from economic activities. She affirms that this happened through the burden of financial regulations and arrangements that

destabilized nations and obstructed citizens through losing wages and jobs alongside low education rates. Women have been affected more than men as they have lost jobs or were pushed to low-wage jobs. For Amadiume:

During the pro-independence and emancipation movements, African women shifted into leadership positions inspired by the pre-1988 Eastern European communist model. For all we can tell, the western liberal democratic paradigm being imposed on Africans through SAPs [Structural Adjustment Programs] is firmly against the involvement of women in government (Amadiume, 2000, p. 33).

McFadden (2007) also argued about these institutions' effect on retaining women at the periphery of political and public matters. She further criticizes fundamentalist principles and practices in setting back the evolution of feminists and female activists regarding women's rights. According to McFadden (2007), regional organisations are another element that affected women's exclusion and obstructed their lives. She contends that these structures provide power to a few leaders who establish military networks, control, and influence women, in addition to discontinuing people's social mobility and hindering their economic pursuits.

Women's education is incredibly impactful as it allows them access to the public sphere and earns them respect (Puchner, 2003). Their access to information and constitutional knowledge can empower them and endorse policies affecting them (Bleck and Michelitch, 2018). Nevertheless, rural women's access to information is constrained. According to Bleck and Michelitch (2018), in their study about some rural areas in Mali, "[W]omen ... have limited and irregular forums for information exchange and discussion within the village, as well as limited access to the radio (given its cost). When women receive information, it may have been 'filtered' by male household members or village leadership... women can often have quite limited freedom to access information" (Bleck and Michelitch 2018, p.302-303).

Additionally, there are differences between; the rural and urban areas, the educated and non-educated, as well as married and unmarried women. These intersecting factors make rural women face gender inequality and insufficient decision-making access in both political and personal spheres. To understand why women are excluded from land ownership, it is necessary to examine how society and interstate networks impact women's needs and concerns in decisive matters.

3.4 Structural Reforms in Mali's Land Tenure Issues

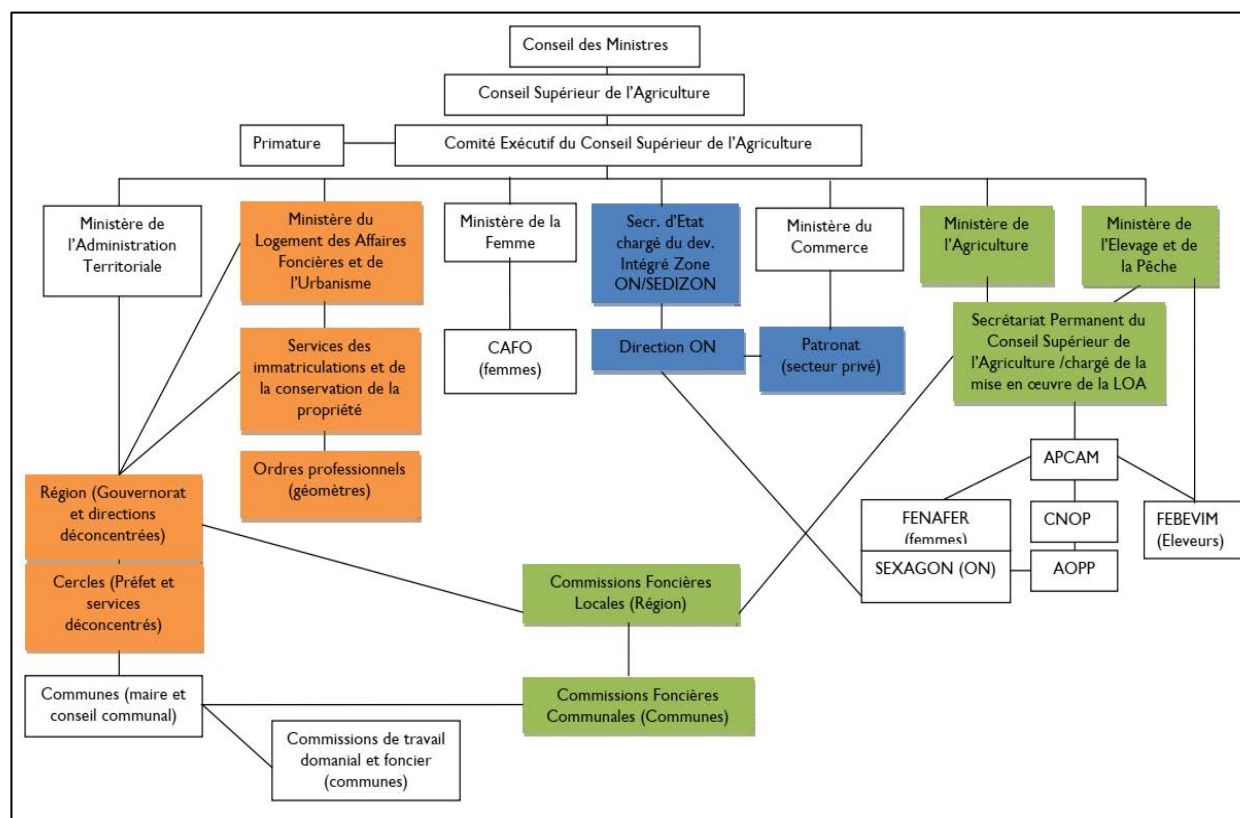
3.4.1 Land Formalization Process

Over the last 15 years, Mali's regime was diligently engaged with its civil society organizations and private sector to establish important land judicial processes intended to edge the path for substantial transformation in how land claims are recognized and handled. The most crucial among these texts are la "Loi d'Orientation Agricole LOA" (the Agricultural Orientation Law AOL), la "Politique Foncière Générale PFG", (General Land Policy), le "Code Domanial et Foncier CDF" (Land Law), among others (PNIA, 2009). The CDF is noteworthy as it entails a range of joint meetings among different ministries (Ministry of Housing, Land Issues, and Urban Planning) from 2008 to 2009. These consultations took place at the local, national, and regional levels to listen to all the stakeholders' ideas regarding the proposed CDF. The CDF (Article 46) acknowledges, to an explicit extent, traditional methods of managing land and entry to natural assets (Code Domanial et Foncier, 1999). It asserts that no entity or society can be compelled to hand over customary land rights to the government except when serving broader state concerns. The CDF further specifies that the allocation of privileges remains subject to fair or earlier compensation (Article 43). It additionally stresses that deals among individuals or parties built on traditional methods and processes could be formally approved (Article 8). The certification stands as evidence of property deals.

Several institutions and agencies also regulate property tenure disputes in Mali. Precisely the commander of the Government and the Prime Minister jointly operate with Ministers boards, the Supreme Body of Agriculture, including the Ministers of Territorial Administration and Local Communities; Ministry of Economy, Industry, and Trade; Ministry of Women's Children and Family; Agriculture; Livestock and Fisheries Ministry; Housing, Land Issues, and Urban Planning Ministry (Ministry of Agriculture, 2010). A steady department created inside the Ministry of Agricultural oversees the High Council on Agriculture appraisals. Another distinct department within the agriculture ministry supervises property term disputes inside the Office du Niger (ON) area. The Housing, Land Affairs, and Urban Planning Ministry overlooks the metropolitan land tenure matters, as indicated in Figure 3.2 (USAID, 2012).

The political changes brought by the Revolution of March 26, 1991, established the conditions for citizens' substantial participation in the country's political, economic, and social life, as indicated in Figure 3.2.

Figure 3.2: Institutions involved in LTPR reform in Mali



[Source: USAID land tenure assessment report 2012]

The primary institutional orientation was guided through respecting citizens’ fundamental rights and redefinition of their political and economic engagements and the State’s role in involving citizens and stakeholders at all levels. Governmental decentralization and citizens’ participation in public affairs management represent important aspects issued by the constitution of February 25, 1992. Simultaneously, the new land reform has strongly reaffirmed the option for economic liberalization by guaranteeing property rights (Djire, 2004).

These possibilities have led to the adoption of new laws in almost all areas of socio-economic life. In this regard, legislative bills on land supervision and natural resource management, most from the 1980s, have been revised to adapt to the new context (Salif et al., 1994). The new provisions have tried to consider the demands and needs of all Malians. This need was strongly expressed after March 26, 1991, during the National Conference and the States-General consultation with the rural world to involve many government structures regarding land tenure management in Mali (Soumare et al., 2015).

Regardless of practical actions that aim to improve the formal composition of texts and laws around the land and natural assets, the overall control of land tenure matters worsens due

to a lack of sufficient consultation and knowledge within administrative departments. Land tenure ambiguity, unequal land entry, and access to natural assets characterize Mali’s existing land tenure provisions. Small-scale farmers or family farmers, including women, youth, and migrant populations, handle these concerns, though to varying degrees.

3.4.2 Recognition of Customary Rights

While allocating lands held under customary rights in the state’s private domain, the CDF recognizes customary rights as having excellent legal value. In Article 43, CDF certifies that traditional rights can be exercised collectively or individually on unregistered land. It specifies that no entity or society can be dispossessed of their traditional rights for public utility without fair and prior compensation (CDF, Article 43). This type of right includes steady development; it can be granted to a third party or be transformed into ownership rights for the holder (Republique du Mali, 2001).

Table 3.1: Differences between informal and formal Institutions

Aspects	Informal institutions	Formal institutions
Nature of evolution	Endogenous	Exogenous
Function/structural arrangements	Site-specific	Familiar at district or national level
External inputs and material support	Low	High
Consideration of social and cultural embeddedness	Low	High
Ownership	Local community	State
Enforcement and monitoring	Based on the agreement of the community	Legally by State

[Source: Author adapted from Ghate & Nagendra, 2005]

Following a public and contradictory inquiry, customary rights may be subject to enforceable title against third parties. However, as the decree defining the modalities of this inquiry has not been adopted, the provision remains, for the time being, a mere abstraction (Diakite et al., 2004), as the state sets certain limits to the exercise of these rights. Individuals do not entail prominent and permanent ownership rights on the land, nor can they benefit from the various properties listed, and they do not have registered documents. As a result, they have fewer legal rights which are not fully recognized by the government based on its land tenure institutions, as evidenced in Table 3.1

According to legal instruments, all land belongs to the state, but it is managed by village chiefs and customary leaders in practice. For example, the latter can allocate, lend, or sell land.

The purchaser then has no title to the land, as the final allocation of the land remains the government's responsibility. Land conflicts often involve matters of plot delimitation or village boundaries. The relationships between farmers, herders, and fishers are also problematic. These three groups share the same land, which they use for different seasons and activities.

For example, conflicts can arise when traditional pastureland is cultivated during pastoral migrations. Disputes also arise during inheritance, for instance, between the Bozos, fishermen who exploit water, and the Fulani who occupy pastureland. When dealing with shared spaces, it becomes difficult to determine who owns the land, as each group claims to be the owner of a given piece of land that they have used for generations alongside their relatives. Such questions cannot be answered due to unclear rules.

Moreover, customary access rights are unevenly harshly restricted when agro-investors are given leases offering them total control over the land and its correlated resources (Singh, I. et al., 1986). For example, when an investor gets a land title or contract, this often limits or eliminates indigenous people's access to specific land resources. The practice mentioned above critically influences women's capacity to generate household revenue. Forest land is also involved when pastoralists are pushed off conventional livestock grazing routes. In such cases, farmers grow on lands that fall within the centuries-old transhumant pathways. Customary land inheritance systems cannot grant land to subsequent generations with insufficient land size, even if only for survival purposes (Sounkara, 1990). As a result, the rural poor are either compelled into other professions or obliged to drift on lands usually owned or managed by others. These approaches are not only dependent on the long-term utilization of the plot but also affect the patterns (supporting or forbidding) regulations that govern them (Ellis, 1998).

Debates around legislation and its interpretation that are locally practised are at the heart of land tenure issues, with two types of laws coexisting: customary law and statutory law. Facing the uncertainty and informality of traditional rules, farmers now seek greater security, including legal recognition of customary rights, their possibility of transmission and settlement, compulsory clearance in case of land title establishment, and empowerment of women, youth, and men in rural areas.

3.5 State Assistance Policy Towards Small Scale Farmers in Agriculture

Government actions in the rural development sector in Mali are determined by sectorial and sub-sectorial policies and strategies, along with programs and action plans. The sector has three primary guiding documents which are: the Agricultural Orientation Law (Loi d'Orientation Agricole, LOA) enacted in 2006, which integrates all the policies and strategies of the agricultural development sector and determines a long-term orientation framework; the

Agricultural Development Policy (Politique de Development Agricole, PDA) of August 2013, which consolidates the rural sector's policies and strategies. In addition to the PDA, Mali also adopted the new Agricultural Land Policy (Politique Fonciere Agricole, PFA) in December 2014.

Besides these laws, the government further enacted the National Agricultural Sector Investment Plan (Plan National d'Investissement du Secteur Agricole, PNISA, 2015-2025), representing Mali's national policy framework for the agricultural sector in the broader context. The PNISA provides ten-year planning, management and investment needs in agriculture, the assets, and the gaps in investment and operational financing of the agricultural sector. The PNISA is accordingly structured around the following key strategic priorities: capacity building of public, private, and civil society organizations involved in agricultural development activities, emphasising monitoring and evaluation; investments in insecure land tenure, natural resources management, irrigation, and water management systems. It also involves measures encouraging the production and competitiveness of crops, and livestock commodity chains; training and research; and improving social protection to respond to the issue of transitional and perennial food insecurity. Other existing agricultural development frameworks include the National Agricultural Support Fund (Fonds National d'Appui à l'Agriculture, FNAA); the Economic and Social Development Project (Projet de Development Economic et Social, PDES), which primary objective is to improve production and productivity as well as governance in the agricultural sector.

The guidelines set out in these policy frameworks and tools are consistent with the ECOWAS regional policy. They aim to contribute to the achievement of SDGs objectives, particularly reducing poverty rates by half and eradicating hunger. Since malnutrition continues to affect numerous children in sub-Saharan Africa, it's apparent that the dilemma and status of women, along with food and nutrition security of children and other family members, are to be addressed. The need to balance women's contribution to agricultural value chains and their benefits, the importance of gender equality and women's empowerment in achieving Zero Hunger Goals and Gender Equality of the sustainable development goals are closely linked.

According to the 2015-2016 agricultural survey data (EAC, Enquête Agricole de Conjoncture), Mali's farming population was around 13,669,508 people, of which 49 percent are female whilst 51 percent are male. As shown in Table 3.2, the majority of agricultural households are headed by men, with over 90 percent being under male guidance. Although, the active agricultural population remains immensely young (below 15 years old), is primarily made of females.

Table 3.2: Agricultural population in 2015-2016, by sex and by region

Region	Male		Female		Total
	Number	Percent	Number	Percent	Number
Kayes	964 898	49,7	977 347	50,3	1 942 245
Koulikoro	1 701 955	49,7	1 720 680	50,3	3 422 635
Sikasso	1 676 876	50,8	1 626 100	49,2	3 302 976
Ségou	1 036 718	51,2	989 302	48,8	2 026 020
Mopti	1 159 761	51,7	1 083 858	48,3	2 243 619
Tombouctou	392 920	53,7	339 093	46,3	732 013
Total	6 933 128	51	6 736 380	49	13 669 508

[Source : CPS/SDR (EAC 2015/2016 Enquête Agricole de Conjoncture report)]

In the agricultural sector, women are represented in all the farming regions of Mali, as revealed in Table 3.2. Malian women contribute to socio-economic development, make up nearly half of the agricultural workforce, and do much of the food processing, weeding, threshing, winnowing, and other farm work. Women are primarily involved in subsistence farming and market gardening for their households. Hence, they are generally engaged in small-scale livestock production and all activities related to the processing and marketing of agricultural products. Women's role as full producers is not always recognized or appreciated.

Their contribution to development must be recognized and fully taken into account. It must be acknowledged that economic policy and planning are inextricably linked to the analysis of sex-disaggregated data, and this can be achieved through the systematization of gender-based data and analysis. This is indispensable for decision-making and developing relevant policies, especially in agriculture.

Moreover, it is also essential to mention that women outnumber men in the age groups between 15 and 59, i.e., most age groups comprising the working population, as illustrated in Table 3.3. Among rural stakeholders, women play a prominent role in Mali. They embody 51.6% of the rural population, makeup 60% of the agricultural workforce, and account for nearly 80% of food producers (EAC 2015/2016). Women are predominantly involved in yielding subsistence crops and vegetables intended for the family's consumption. Food security cannot be achieved without recognizing women's contribution to food production and improving their access to farming resources.

Table 3.3: Agricultural population in 2015/2016, by % of age group and sex

Age group	Masculine	Feminine	Total
Under 15-year-old	51,9	47,1	49,5
15–39-year-old	31,7	36,6	34,1
40–59-year-old	11,0	11,5	11,2
60 years and older	5,4	4,8	5,1
Total	100,0	100,0	100,0

[Source : CPS/SDR Enquête Agricole de Conjoncture EAC 2015/2016 Rapport]

Table 3.3 demonstrates that there are comparatively more women in the working-age group of 15- 59 years old in agricultural areas than men in all of Mali. Women constitute the major agricultural labour force. Malian households comprise more working-age women than men regardless of agricultural economic activity. Despite their essential role and dominance in the farming sector, women still encounter significant challenges accessing agricultural resources, mainly land, credit, and equipment.

Regarding land access, women work as labourers on their spouses' or fathers' land. The productivity to meet the whole family's demands from the collective fields are handled by men. So, it is claimed that females do not need access to individual plots in this case. Women are given access to tiny fields for market gardening purposes to fulfil their personal needs. They harvest products from trees (such as shea nuts), which they assemble and process either for sale or consumption (Diallo, 2021). In the traditional tenure system, the land distribution and management go to the first family that inhabited the locality. They can also pass the right to cultivate it to other people while maintaining their property rights. Family farmlands are usually grown by the household heads, mainly men who handle their production and manage their revenue expenditure. Accordingly, as of 2015, less than 20 percent of women farmers were landowners throughout Mali, as illustrated in Table 3.4

Table 3.4: Plot owners in Mali in 2014/2015 by region and sex

Region	Number			Percentage		
	Men	Women	Total	Men	Women	Total
Kayes	202 429	95 549	297 978	68	32	100
Koulikoro	421 115	133 492	554 607	76	24	100
Sikasso	1 024 31	171 709	1 196 020	86	14	100
Ségou	551 456	22 135	573 591	96	4	100
Mopti	387 447	26 738	414 185	94	6	100
Tombouctou	79 033	850	79 883	99	1	100
Total	2 665 791	450 473	3 116 264	86	14	100

[Source : CPS/SDR Enquête Agricole de Conjoncture EAC 2014/2015 Rapport]

As indicated in Table 3.4, only 14 percent of women farmers were landowners in Mali, compared to 86 percent of their male counterparts in 2015. Even though small-scale female farmers are at the heart of the agricultural sector in Mali, they still encounter difficulties owning farming land. Despite being active in all the agricultural value chains, from production to processing, and marketing, women, are exposed to various restrictions which hinder their empowerment and inclusive progress in the farming sector. Women's farmer's access to resources, mainly land, remains a fundamental challenge to the sector's development.

Table 3.4 indicates that Mali's men and women are not treated equally in the land tenure systems. The same circumstances are prevalent regarding their access to credit and equipment. Since most activities performed by women are informal and small-oriented, they encounter difficulties accessing formal credit due to their collateral shortage, and the substantial risk banks perceive in financing their activities. This also negatively affects their access to modern agricultural equipment to improve their farming endeavours. The inadequate levels of farming expertise and the absence of materials for women to generate enough yields with population growth led to further challenges (Cairncross, 1980).

Regardless of women's involvement in all agricultural value chains, they still encounter numerous and significant challenges in accessing agricultural resources, including land, inputs, technology, land, finance, services, decent jobs, and markets. Women's representation in decision-making bodies and institutions in rural areas remains marginal. Additionally, their greater dependence on local markets and price volatility have emerged as a significant feature of lower revenue. Post-harvest losses remain considerable, especially for women farmers, due to a lack of processing equipment and technologies.

Aware of these challenges, the government of Mali has approved judicial and institutional procedures to improve women's status. The following section will shed light on the gender-responsive measures for women's socio-economic empowerment in Mali.

3.5.1 Gender Positive Land Laws for Small Scale Farmers

The Government of Mali has instituted actions to support women, including legislative, regulatory, and administrative measures. Mali has ratified various international and domestic conventions which directly or indirectly impact women's status. Mali is also a signatory member of several commitments from regional organizations and international community laws aiming to empower women worldwide through social, economic, and political changes. As an illustration, the government of Mali enacted the Convention on the Elimination of all

kinds of Discrimination Against Women (CEDAW) at the first World Conference on Women in Mexico in 1985 and has partaken in other conferences consistent with women and gender issues. It also recognizes numerous United Nations resolutions and declarations to endorse gender equality and mainstream gender perspectives in all socioeconomic spheres (Soumare et al., 2015).

Mali further approved the Protocol of the African Charter on Human and Peoples' Rights (ACHPR). It also fully endorses the definition of discrimination based on sex in Article 2 of the Malian Constitution, which is based on equality between men and women. Mali's Constitution declares: "All Malians are born and remain free and equal in rights and duty. Discrimination based on social origin, colour, language, race, sex, religion, and political opinion is prohibited" (Mali's constitution, 1992). It further enacted Law No.94-009 of March 22, 1994, to create the National Directorate for the Promotion of Women; the Decree No.97-282/PRM of September 16, 1997, established the Ministry for the Advancement of Women, Children and the Family; the Convention on Consent to Marriage; the Maputo Protocol; the Trade Code; the New Civil Code; and the National Gender Policy with its six strategic orientations and nineteen key action strategies.

Commitments to gender equality have also been outlined in major national policies and reforms such as the President's Orientation Letter, the Economic and Social Development Program, and the Strategic Framework for Growth and Poverty Reduction (CSCR 2012-2017). The Strategic Framework for Growth and Poverty Reduction in Mali benchmark document for economic and social policy design and implementation. It combines all sectorial policies and strategies into a consistent framework and identifies financial needs and means to address them. These essential documents recognize that women have a crucial role in Mali's society due to their contribution to the country's growth and development processes, prioritizing women's economic advancement, participation in public affairs, and welfare eminence.

The Support Fund for Women's Empowerment and Child Growth (FAFE) is also a fund introduced by the Ministry of Women to promote women, children, and families. It targets the funding of women's entrepreneurship activities in Mali. The program also aims to improve the efficiency of women's economic activities through capacity building, establishing processing plants, and facilitating access to credit and financing. The main targets are rural women and those engaged in informal cross-border trade.

Mali has similarly adopted the National Gender Policy (Politique Nationale Genre, (PNG), aiming to efficiently incorporate gender concerns in budget administration to distribute resources based on well-defined necessities. The PNG further evaluates the outcome of

financial planning on women, men, girls, and boys to enhance resource proficiency (PNG, 2011). In 2011, Mali adopted its national strategy for Gender Responsive Planning and Budgeting (Stratégie Nationale de Planification et de Budgétisation Sensible au Genre, PBSG) as part of the implementation of Strategic Guidelines N°6 of the National Gender Policy on good governance in public policies and reforms under decentralization and devolution. This strategy focuses on three major areas of operation: reflecting the PBSG approach in national budgetary processes, addressing women's priorities in budget allocations at the sectoral and local levels, and setting up a mechanism for regular monitoring of PBSG implementation.

Regarding women's land tenure, the Government of Mali adopted various laws. For instance, in 1995, it enacted the law on forestry, wildlife, and fisheries, Law No.96-050 of October 16, 1996, regulating the rules, structure, and supervision of local authorities realm and the "Code Domaniale et Foncier" New Land Law (Ordinance N ° 0027 / P-RM of March 22, 2000), modified and ratified by Law N °02-008 of February 12, 2002. Under the CDF, land access and ownership requirements are equal between the sexes. It also enacted the Agricultural Orientation Law AOL in 2006, which aims to empower women farmers by granting them 15 percent of the state-managed land in rural areas. The AOL sets the country's agricultural development policy and framework for developing land regulation in farming. Decree No.768/P-RM of 29 December 2008 also registered family farms and farming enterprises. It provides outstanding guarantees, especially for women, by preventing them from being excluded from family farms or agricultural enterprises (the Republic of Mali, 2008).

Despite the efforts made, these laws and policies adopted by the government are yet to resolve land governance obstacles fully. They have broadened the legal perspectives for citizens' greater participation, communities' and groups' viewpoints on resource management, and substantial consideration of customary rights (Cisse, 199). These political attempts to improve land legislation also prove government initiatives to solve land issues through land reform policies.

3.5.2 The Agricultural Orientation Law (AOL)

Significant progress has been made on the legislative, regulatory, and institutional levels regarding farming and agricultural policy, most notably with the enactment of the "Loi d'Orientation Agricole" (LOA) and its enforcement texts as explained above. The Agricultural Orientation Law (AOL) was approved on August 16, 2006, by the National Assembly of Mali, following extensive local, regional, and national consultations. The AOL assigns the State responsibilities of developing and implementing agricultural policy in cooperation with local

authorities and the farmers. It defines and implements a procedure to promote development initiatives at the local, regional, and national levels while supporting the creation of agricultural and agribusiness enterprises and establishing peripheral farm ventures.

Notably, the purpose of the LOA is to define the main guidelines of an agricultural development policy in Mali, namely the promotion of “sustainable, modern and competitive agriculture mainly focused on family farms” (GRET, 2006). It also aims to “establish and oversee Mali’s long-term agricultural development policy “to guarantee food sovereignty and drive the national economy to ensure the population well-being” (Article 1).

The AOL covers all agro-economic activities, such as rural and suburban development. It also aims to make agriculture the cornerstone of Mali’s economy and stimulate “sustainable, diverse, modern and competitive agriculture, placing farmers at the centre of agricultural development”(Ministry of Agriculture, 2008). Hence, the AOL supports reforming and modernizing agriculture for medium and large family farms, increasing their competitiveness, and encouraging their integration into the sub-regional economy to boost employment creation in rural areas. The AOL has seven (7) titles with 33 chapters and 200 articles (LOA, 2006).

- **The Agricultural Orientation Law and gender promotion pillars**

The AOL tackles issues around land access, mainly considering equality between men and women in rural and urban areas. Numerous articles in the AOL endorse equitable access to land. The following are some of the articles in the AOL encouraging female land ownership and agribusiness entrepreneurship promotion:

- Article 8: Promotes equity between women and men in the agricultural sector, particularly in rural areas
- Article 24: Encourages the settlement of young people, women, and vulnerable groups as farmers by promoting their access to means of production, developing technical and financial support mechanisms for their empowerment
- Article 45: Promotes equity between women and men in rural areas, particularly on farm exploitation
- Article 83: Ensures equal access to agricultural resources to different farmers and agents of farm exploitation. To this end, preferences are granted to women, young people, and vulnerable groups in allocating State-managed areas.
- Article 89: Equitable access to agricultural resources is ensured for different categories of farmers. In this respect, vulnerable groups, such as women, benefit from positive discriminatory measures in allocating plots managed by the State (Ministry of Agriculture, 2009)

The AOL's emphasis on female participation could be an opportunity for women farmers in rural areas. One of its objectives is "the economic and social empowerment of women, youth and men in rural and peri-urban areas" (GRET, 2006). The AOL and its articles recognize obligations to encourage gender equality in the rural sector. Namely, the articles mentioned above pay particular attention to women built on solidarity, equity, and partnership, all of which are conducive to establishing equality in the agricultural sector. The AOL hence lies on the overall development strategy plan, determines the major orientations of Mali's agricultural development, and provides an essential role for women farmers by allocating them, along with young people 15% of the state-managed areas. It accordingly intends to promote women farmers on an equal basis with men and as agricultural practitioners who should be recognized and protected. The OAL also epitomizes a significant step towards agricultural growth, mainly promoting women's status in farming activities. Lastly, it consolidates the power balance between statutory requirements and traditional communities' concerns about their ability to govern themselves and their livelihood activities. Nonetheless, limitations and apprehensions are observed in the implementation of its obligations.

Based on the literature above, the author argues that some studies have tried to comprehend how Mali's government attempted to approve rules and strategies to reform agriculture and how they succeeded in creating laws to understand and deal with the colonisers' structure and prevailing customary principles. Reflecting the diverse views of scholars from different countries and the complex land tenure system in Mali, women's land ownership remains key to drawing lessons on how they can deal with this complex system regarding their land rights managed by a myriad of tenure entitlements with complex historical backgrounds.

In conclusion, Mali possesses the legal and political framework needed to ensure gender mainstreaming in promoting the agricultural development sector. The acute implementation of the PNISA and the AOL will enable significant progress in the farming sector through the improvement of women's and men's access to means and factors of production, the strengthening of food security and small-scale producers' income, the enhancement of their revenue and productivity, as well as the development and marketing of farm products. Even though Mali ratified several international agreements and domestic legal reforms on gender equality, little seems to change in Malian women's life experiences. The challenge in implementing laws meant to empower women and men in agriculture for sustainable development is exacerbated by sociocultural and economic constraints.

This research will investigate how women's participation in cooperative movements and activities impacts their land ownership and access to other agricultural resources in

contemporary Malian societies within these complex systems. The study mainly looks at these factors through the lens of women's empowerment and agency over collective engagement, and bargaining power in patriarchal practices, which have persisted in Mali's formal and informal land governance arrangements. It will thus contribute to feminist analysis of development and academic works since there are few materials in English on this subject in Mali.

3.6 Chapter Summary

This chapter explored the land tenure systems in Mali and their socioeconomic impact on women in agriculture and their land ownership. The chapter mainly depicts the historical overview of pre-colonial, colonial, and post-colonial tenure systems in Mali by highlighting the concept of vacant land or land without owners introduced by the colonial government to extend private property under state control for title deed registration.

In pre-colonial Malian societies, access and ownership of resources were based on rules reflecting the socioeconomic, political, and cultural realities. These rules were a mixture of precepts originating from conventions "Benkan," or religious beliefs established between communities or ruling bodies. They recognized and legitimized the domination of a lineage, generally the first family settlers, a community, or a group of communities over specific resources. Beneath the customary tenure system, the family chief oversees land and farming production, drawing on household labour to ensure that everyone's desires are met. While conflictual and mostly unwritten, these conventions have established various mechanisms of social regulation that have contributed to the establishment of a negotiated order. They are still relevant to collective knowledge and social practices. Such conventions still exist almost everywhere in Mali.

Islamic practices also play a significant role in Mali's tenure systems, with around 90 percent of its population being Muslim. In Islam, the land is considered a sacred trust whose supreme ownership belongs to Allah "God". In regions that have been strongly Islamized, access to land is governed by Shariah's prescriptions alongside local customs and traditions. Under Islamic law, land and natural resources are governed by two interdependent principles. The first recognized principle is the unrestricted use of natural resources as they have not been "created" by any human being. Hence, access to resources cannot be traded as they belong to Allah. The second principle is sustainability, according to which land belongs to the individual who takes the time to cultivate or nurture it. Therefore, according to Islam, any piece of land or natural resources that have not undergone human transformation should be accessible to

everyone. However, women receive half of the men's shares in Islamic inheritance practices. This is so because men are assumed to provide for women and other household members.

Furthermore, French colonial rule in Mali introduced drastic adjustments to the pre-colonial land structures. The French colonial governments destabilized the conventional power of the traditional, sedentary, and pastoralist communities accountable for distributing and implementing the usage of land and natural resources. They introduced the concept of "vacant land" or land without owners. Colonial land legislation was based on two essential principles: strengthening the land ownership of the colonial power and expanding the mode of dominant Western private property under state self-supervision. Consequently, indigenous groups lost their rights and control over the lands they had managed for centuries.

Following independence in 1960, Malian legislation, believing that an independent state must control its economic growth, kept all the colonial texts. The newly independent government gradually got rid of customary rights, especially in practice and often through inconsistent regulatory measures. The evolution of legislation relating to agricultural land in post-colonial Mali is divided into three main stages: The first stage denotes the state's absolute monopoly on land management. The second stage maintained the state monopoly and opened rooms for local stakeholders to participate in managing natural resources and customary rights recognition. The third stage stresses the continuity of previous guidelines established by the colonial power. At the same time, it set restrictions on recognising some essential elements of indigenous tenure practices.

The chapter further illustrates the dual formal and informal tenure practices shaped by structural reforms and current legislation preserving traditional tenure systems while introducing important innovations in promoting equality in land management. In contemporary Mali, two different and overlapping tenure systems exist: (1) Statutory (formal) tenure with registration through the government which grants full ownership rights; (2) Customary (informal) tenure, with a set of rules, is overseen by community leaders and elderly who grant utilization rights. These two systems remain problematic and complicated as they have their own rules regarding land transfers, access, and inheritance. They are often applied to the same piece of land resulting in disputes, as individuals use various approaches to access land. With a combination of formal and informal institutions, land tenure in Mali is characterized by legal pluralism.

Consequently, local land tenure has remained an oral tradition, with few communities having written rules on inheritance, transfer, and possession rights. Informal land tenure systems have persisted with conventional practices handled by community leaders to elders

and household heads. These traditional practices have been able to delaminate the actual relationships of people to the land, a shared understanding around tenure and access to other natural resources among individuals and within communities. The traditional tenure systems often contradict the statutory principles instituted by the government that did not still fully acknowledge customary tenure systems. The boundary between these two systems is still unclear and complicated for indigenous people and the government.

Under traditional tenure, the head of the family supervises land and farming activities drawing on household labour to ensure that all family members' needs are met. Although individuals (women and men) operate on the household plot, they also get access to their individual land, which they can nurture to meet personal needs. It should be noted that underneath traditional procedures, access to farming land for personal ends does not ensure fundamental rights over that plot. It is still the household head who maintains supreme decision-making power over land and who can access it.

The chapter also explores the challenges related to women's land tenure in Africa, precisely in Mali, and the factors excluding Malian women from political participation. Land tenure in sub-Saharan Africa is constantly evolving, particularly as the population rises, leading to additional food insecurity in mitigating the growing population need. Two broad trends are noticed in Mali's tenure landscape. First, property rights to land are becoming more individualized, and the market for rental land and sales is emerging in many farming communities. The government poorly manoeuvres titling strategies, impeding, rather than facilitating, the emergence of individual property rights. The titling process repeatedly seems to generate insecurity rather than tenure security. Private landholdings and personal transfers emerged in areas touched by dense urbanization. As land becomes individualized, the role of chiefs becomes obsolete.

Within the push and play of these forces surrounding individualization and privatization, women as secondary landholders are subject to different pressures and discrimination, alongside the complex tenure systems. As the power balance shifts from customary leaders to government, land access and control are handled to favour one sex.

As a result of this multifaceted land tenure system, women's land proprietorship remains a challenge within this plural scheme. Women's land ownership and access to resources remain difficult in traditional, religious, and modern tenure structures. Besides, women's obligations and rights to land change over their lifetime as defined by their position as married women, girls, grandmothers, and widows. They are generally discriminated against in all these systems, as they possess fewer or smaller pieces of land than men in farming

societies. Women are particularly concerned that heightened protection of conventional land tenure arrangements persists in a context where customary and religious laws and practices have been retained to preserve elements that subordinate them precisely. These discriminations include conventional tenure practices, divorce, and inheritance patterns, keeping women at a lower status. In many farming communities, local groups are reasserting and strengthening their rights to communal land ownership through cooperatives.

Additionally, governments have made numerous attempts to redress the perceived trend toward growing gender inequality in land tenure systems. This chapter ends with the government's support policy toward small-scale female farmers through the enactment of various laws and policies. The most important of them is the Agricultural Orientation Law, which advocates restructuring and modernizing agriculture for both medium and large family farms, increasing their competitiveness, and integrating them into the sub-regional economy, while boosting their competitiveness and employment creation in rural areas. The AOL also intricates greater attention to strengthening and enforcing equal ownership of land, registration of land titles, and amplification of women's rights under a formal land tenure system.

CHAPTER 4: METHODOLOGY, INDIVIDUAL RESPONDENTS' CHARACTERISTICS AND COOPERATIVES' INSTITUTIONAL STRUCTURES

This chapter has two main parts. The first section explains the study areas' characteristics, and where the survey was conducted. The study design involves respondents' selection, the data collection methods, and data analysis techniques. The first section includes five parts. The survey's location is primarily explained, followed by the sampling processes and data gathering procedures. Thirdly, variables like questionnaires and interviews under investigation are described. The details on the methods utilized to scrutinize the data are further elaborated. The difficulties encountered during the study; ethical concerns conclude the first section.

The second part of chapter four describes the findings of the survey data. It mainly explains the cooperatives' demographic and socio-economic features and the amount of land owned or accessed by respondents. The chapter further sheds light on the cooperative's institutional structures, management, members' reasons for joining them, and the challenges faced by the cooperatives.

4.1 Methodology: Study Sites, Data Collection Methods, Techniques, and Procedures

4.1.1 Study Areas' Selection

The study site selection principles focused on land tenure regimes, accessibility, and cooperatives' access to markets. The rationale for choosing a specific site must be adequately defined for the reader to understand the areas (Marshall and Rossman 1999, p.69). This survey's selected sites were in Mali's southern region, known for agricultural activities. Mainly, this study was carried out in Baguineda and Kati, which are part of the Koulikoro region and in the Bamako district.

The Southern part was chosen for numerous reasons: primarily, the researcher only had a few weeks to collect her data which meant less time to gather information; consequently, the Koulikoro region and Bamako, the capital city, were selected for logistical reasons. Secondly, the convenience of travelling to the survey site was also essential as the researcher aimed to build trusting relationships with the study participants to ensure the collected data's quality and credibility. Lastly, the researcher can understand these areas' languages and cultural practices' which motivated the choice of the selected sites. Being comfortable with the study areas' language and value systems was beneficial. It allowed improved communication by enabling

the researcher to create relationships with her respondents, collect valuable information, and gain access to further respondents’.

Additionally, the ongoing crisis that Mali has been experiencing since 2012 has triggered safety issues, mainly political, social, and economic insecurity in the Northern and Central regions. The Southern part of Mali was also selected for security reasons. More importantly, the southern parts encompass the most significant number of agricultural cooperatives in Mali. For example, in 2018, of the 18.225 registered agricultural cooperatives in Mali, 16.778 (2/3) of them were in the Southern and Central regions (DNPSES, 2018). Besides, 70 % of Mali’s cultivated crops (including rice, millet, maize, vegetables, and fruits) are grown in the southern regions (Mali Government, 2009b).

Moreover, the southern region cooperatives were targeted because women’s land ownership is more diverse and complex in that part. The survey aims to assess and compare agricultural cooperatives operating in diverse and complex land regimes, to process the prospects of apprehending a broad range of issues that influenced these cooperatives’ performance.

Regarding land ownership and access to resources, it was assumed that cooperatives in state-managed areas would have access to and the right to land easily. More women would own land in irrigated areas as promoted by the government policies. Based on this assumption, some cooperatives were selected in Baguineda, an irrigation scheme for small-scale farmers and rural Kati provinces which do not have irrigation systems for farmers. Additionally, the Bamako district was also selected to better understand cooperative performance, mainly in food processing and marketing. It was assumed that cooperatives in the capital city would have more access to administrative offices dealing with land titling and retail networks while facing extra competition than farmers in Baguineda and Kati.

Accordingly, this research is crucial as it aims to understand how cooperatives perform in these three different settings regarding their member’s land ownership and access to other agricultural resources. The areas were also selected due to the large number of small-scale women farmers working in market gardening, food processing, and marketing, and the presence of agricultural cooperatives with excellent prospects. Considering the purpose of this study, the cooperatives were meticulously chosen. This allowed the researcher to select some agricultural cooperatives showing noteworthy characteristics. In other words, the southern parts were chosen based on their land regimes and the high presence of female cooperatives in those areas. The land tenure systems and the cooperatives aiming to empower and enhance female farmers’ land ownership, either formally or informally, were essential selection criteria.

The cooperatives selected were amongst those strengthening women's land issues through their activities. This meant obtaining more precise knowledge on how and why these cooperatives remained effective or unsuccessful in conducting their activities and why the participants believed their organization was challenging the land tenure systems disempowering them.

4.1.2 Description of Study Areas

- **Baguineda**

This section offers a comprehensive explanation of the Baguineda study site regarding its topographical position, the major activities undertaken by its residents, their primary source of income, and its land tenure system. This survey centred explicitly on five villages in rural Baguineda and the town of Baguineda, namely: Massakony, Sounougouba, Tiema, Sebela, and Baguineda Camp village, were areas where the survey was conducted between January and February 2020. Most small-scale women's agricultural cooperatives are also found in these parts.

As indicated on (Map 2), this survey was first conducted in the Baguineda area, located 30km from Bamako, Mali's capital city. Baguineda area covers 3,000 ha of water, of which 4,500 ha are from the Niger River basin. Baguineda has an average rainfall of 400 millimetres from June to October and attains its highest levels in July and August. The province also has light sandy soil. The region had a population of 40,095 in 2019, of which 19,582 were women (OPIB annual report, 2020). The number of inhabitants is rapidly rising at a yearly rate of 6.9%; this is partly due to its proximity to Bamako's capital city, which has 2.5 million inhabitants and is home to Mali's leading agribusiness activities (OPIB annual report, 2020). Indigenous Baguineda people live in villages comprising roughly 30 to 300 family units. The average household range is eight individuals and varies from three to thirteen people. Each household has 2 to 13 workers per Agricultural Production Unit (APU).

L'Office du Périmètre Irrigué de Baguineda (OPIB), Office of the Irrigated Perimeter of Baguineda, is among the three agro-ecological zones created before the country's independence by the colonizers in 1926 with a channel excavation. Baguineda can increase crop production as supported by the OPIB dam's water resources from the irrigated perimeter (Diallo, 2021). Water access is one of the most acute difficulties in Mali for most farmers. The irrigated perimeter of Baguineda is under government management, which makes it different from other types of agricultural lands. For that reason, Baguineda can be a good case study with more potential for women to access irrigated land (*ibid*, p. 115).

Map 2: Baguineda Study Site



[Sources: Map 1: Archivo.Map_commune_Mali_BAGUINEDA_CAMP.svg] (July/19/2020 accessed)

[Sources: Map 2: <https://www.citypopulation.de/en/mali/admin/kati/>] (July/19/2020 accessed)

The villages' population fluctuates depending on the season; the most significant occurs in the rainy season and the minor during the dry season. The area's main socioeconomic activities are agriculture and livestock farming, logging, fishing, handicrafts, and trade. Cereal crops (rice in the irrigated field; sorghum and maize in the non-irrigated area) dominate agricultural activities. Market gardening cultivation is the dominant activity during the off-season. Around forty-eight percent of the land cultivated is generally cash crops (OPIB, 2020). Rice, maize, millet, and sorghum are the main cash crops. Sorghum and maize are the most cultivated food crops. In addition, vegetables, and fruits, such as onions, cabbages, lettuces, tomatoes, okra, eggplants, mangoes, watermelon, and groundnuts, are also cultivated.

On average, each household cultivates either rice or vegetables on 0.86 ha in the managed area of the OPIB. In comparison, 3.5 ha in the rainfed area is used for millet or sorghum cultivation. All the irrigable section within the perimeter is the property of OPIB, which is under government control. The managed or irrigated parcels have a particular land title (TF, 1075). A supervision decree (n°94-157/P-RM) oversees the principles of allocation, supervision, and utilization of the irrigated land between the government, OPIB, and farmers. OPIB irrigated areas provide the following tenure methods: yearly agricultural exploitation deals, farm licenses, and exclusive agreements. The annual exploitation deal is awarded to both male and female farmers. The exploitation license results from the yearly contract's tenure, providing the owner with perpetual and transmissible ownership rights. The exclusive agreements on non-managed land involve ordinary tenancies (for 30 years) and long-term

tenancies (for 50 years with no limitation on the number of renewals). The enhancement and management of the land is the leaseholder's responsibility (OPIB, 2020, p.56).

The managed areas were assigned to 2,894 farmers with a median plot size of 0.86 ha. Farmers with less than 0.30 ha of farmland represent 21% of the overall population. Approximately one-third of the farmers are not residents of Baguineda. Female farmers that are heads of households represent 3.3 percent, and they are primarily widows; on average, they own 1.89 percent of the allocated land (OPIB, 2020). Application of land laws (provisions, withdrawals, redistribution, operational deals, licenses, and tenancies) is restricted. To this day, few farmers in the Baguineda Perimeter hold an agricultural exploitation permit.

The yearly revenue per agricultural production unit is around 382,750 FCFA francs, or 63,790 FCFA francs per individual, with six individuals per household (OPIB, 2020, p.56). Nearly every household improves its farming revenue via off-farm activities. This involves off-season activities, the exodus to towns, irrigated agricultural schemes, and food processing and marketing activities. The migration towards city centres occurs between December and January following the harvest season, and they return in May to begin their plot preparation for the subsequent farming season. Although all lands are formally deemed state property according to Mali's tenure rights, unregistered land is considered by residents as a tribe or community property with individuals having cultivation and grazing rights.

Despite the potential for production in the area, the prevalence of poverty is still soaring. Baguineda has inadequate social and health facilities like hospitals and schools (OPIB annual report, 2018). The primary diseases in the area are malaria, bilharzia, diarrhoea, and onchocerciasis (river blindness). All villages are difficult to access during the rainy season due to inadequate infrastructure. According to the Malian Poverty Assessment Survey (EMEP, 2001), the Koulikoro region remains amongst Mali's most impoverished areas, with a poverty level of 84% and yearly revenue lesser than 114,000 FCFA.

It is undeniable that women farmers in Baguineda have an active role in rural production. Women represent 45% of the active population in that area. Besides their domestic chores, they are responsible for rice farming, sowing, clearing, planting, eliminating wild plants, harvesting, stacking, and market gardening representing 60 to 70% of their daily workload (OPIB annual report, 2018). Men perform ploughing and threshing activities. Regarding market gardening, men also help in tilling and making boards.

In contrast, women carry out the remaining work, including the processing and marketing of products, representing 60 to 80 % of women's workload. Villages are structured into youth and women's organizations comprising cooperatives, customary, religious, and

cultural organizations. Rural peasant associations are primarily village-based. On average, each community has an organization or cooperative. The impediment in accessing farming land in rural communities and the difficulties in selling market garden products remain significant barriers to the area's development.

- **Bamako**

The second study site was in the Commune IV of the district of Bamako. Bamako is the capital city of Mali, with 1.810.366 inhabitants in the 2009 population census. It is estimated to be one of the quickest-growing cities in sub-Saharan Africa (INSAT, 2009). The capital city of Mali is situated in the southwestern part of the country on the Niger River. Bamako is home to thousands of rural populations looking for employment in formal and informal sectors. The area is comparatively flat, except for its northern part, which consists of slopes, and features of an extinct volcano. It is the country's administrative centre, with significant regional trade and conference hubs. Bamako is also the seventh-biggest West African city hub, following Abidjan, Accra, Dakar, Ibadan, Kano, and Lagos (Industrial Census, 2006).

The district of Bamako was split into six communes characterized by numbers. In total, it has six communes. The data was collected in Commune IV, mainly in Lafiabougou, Djicoroni, Aci 2000, Hamdallaye, Sebenicoro, with female and male cooperatives in marketing and food processing, vegetable gardening, and agroforestry activities.

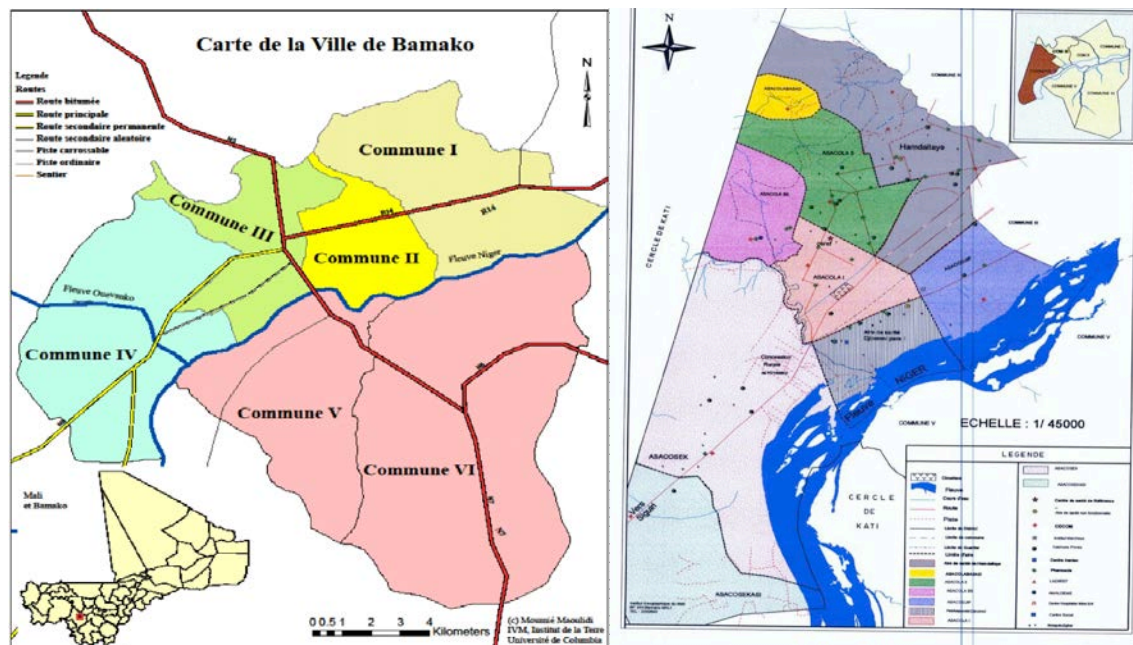
The Commune IV of Bamako is built on a granitic and schistose basement covered by a sedimentary sandstone cover, as indicated in Map 3. It is entirely located in a broad morphological entity of Manding Hill. Few hills dominate its relief in its western and northern parts. These hills constitute natural constraints to the development of some areas. The Commune IV is also located between isotherms ranging from 700 to 1300mm. Its relief is slightly inclined to influence the atmosphere rotation. The climate is distinguished by a rainy season of 800 to 1200mm/year and a dry season. The rainy season lasts five months, from June to October. The dry season is divided into a cold cycle (from November to January) and a hot season (from February to May).

The Commune IV of Bamako also comprises eight (08) wards which are distinct entities either by their settlement or lifestyle pattern. These wards are administered by customary leaders who are the heads of communities. They are either appointed by the regional administrative authority on the district's notables' proposal, guided by the candidate's profit, designated by the same officials or elected by the inhabitants. The 2009 general population and

housing census disclosed a population of 300,085 inhabitants (RGPH, 2009), with a growth rate of 4.4%.

Average households in Commune IV are made up of six people. Locally made commodities dominate the crafting endeavours, including clothes, shoes, processed food, and metal supplies. Inhabitants also practice trade, market gardening in the peripheries, and fishing in the Niger River (Klimatafel, 1990). The service sector is the most developed, and the city thrives in crafts and trade. It is also the headquarters of many large companies and administrative institutions.

Map 3: Bamako Commune IV Study Site



[Source: Map 1: <https://www.researchgate.net/profile/Birama-Ly/publicationCarte-de-la-ville-de-Bamako>] (July/15/2020 accessed)

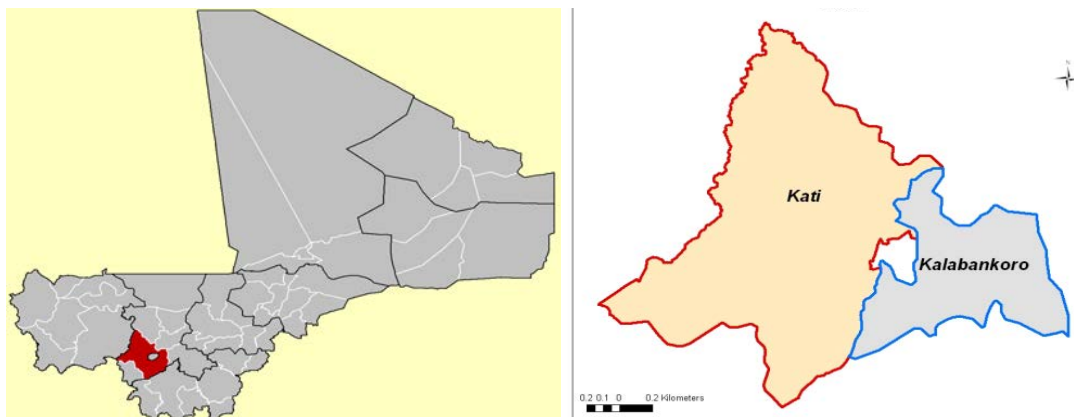
[Source: Map 2: <https://docplayer.fr/docs-images/97/131546807/images/87-0.jpg>] (July/13/2020 accessed)

While most men in the Commune IV of Bamako are engaged in profitable segments of the economy, such as paid jobs in government service, private enterprises, trade, productive employment, and providing for the family, women are engaged in agribusiness activities like small trade, market gardening, food processing, and marketing. On average, a household earns 35000 to 50000 FCFA monthly. In these multidimensional sectors, entrepreneurship and agribusiness activities are mainly informally practised by women. Women entrepreneurs in this area represent the most significant number of the active population, to increase their productivity some join or form cooperatives.

- **Kati**

The last study site was the Kati area, an urban commune, and the biggest city in Koulikoro’s region. Kati covers 9636 km² and is surrounded to the north by the circle of Kolokani; to the east by Koulikoro; to the west by the circle of Kita; to the south by the district of Kalabancoro; to the south/west by the circle of Kangaba and the Republic of Guinea-Conakry. Kati’s circle has been divided into two zones for operational reasons. The northwest district of the river comprises 24 communes with a population of 610,024 inhabitants, while the southeast districts of the river include four communes and a population of 310,183 inhabitants (RGPH, 2009). The inhabitants are primarily Muslim; however, the Roman Catholic mission society is also recognized.

Map 4: Kati Study Site



[Source: Map 1: https://upload.wikimedia.org/wikipedia/commons/a/a2/Cercle_of_Kati.png](June/23/2020 accessed)

[Source: Map 2: <https://aws.labome.com/figure/te-646-2.png>] (June/25/2020 accessed)

Kati is located 15 km from Bamako, the capital city of Mali. Given their geographical location and proximity to Bamako, these two districts represent hybrid areas with a high population concentration in the urban centres, as shown in Map 4. The city of Kalabancoro has more than 60,000 inhabitants, representing 20% of the district’s total population and the city of Kati has 52,000 inhabitants or 9% of the population. The district of Kati, which is more extensive and densely populated, is 59% rural, unlike Kalabancoro, which has only 37% of its territory in rural areas (63% urban) (RGPH, 2009).

The relief is mainly dominated by the Manding mountain massif from the northeast to the south, making it difficult to travel. The climate is exemplified by a rainy season of 1000 mm/year on average, falling from June to October; a dry and hot season from March to June; a dry and cold season from November to February. The flora is characterized by a grassy savannah covered with fruit trees (Shea; Nere, Baobab, etc.) and small shrubs. The region is irrigated in its central part from south to east by the Niger River and the Sankarani. Seasonal streams are also found. Its road infrastructures allow a migratory flow that addresses the different needs of its populations. A major highway of 15 km connects Kati's city to the Bamako district. Kati's city is also connected to Bamako by a road over 80 km.

The two districts' primary economic activities in the rural areas are mainly agriculture (millet, maize, and groundnut cultivation). Vegetable crops (onions, tomatoes, eggplants, etc.) are also grown because of their proximity to the capital and trade potential. Smallholder farmers lead agriculture, their production is mainly survival accommodated, and generally, the family house is engaged in growing land they traditionally own.

In the study areas of Kati, access to land and other agricultural inputs is mainly based on customary tenure systems, which date back to the precolonial Mali societies. According to the legal instruments, all land belongs to the state; however, in practice, the land is managed by village chiefs and customary leaders in rural communities. They have the right to allocate, lend or sell land. The purchaser then has no title to the land, as the final allocation of the land remains the government's responsibility. In this regard, landowners who are generally customary leaders and village chiefs allocate their land to farm managers within their communities. The latter share the plots of land among their heads of household, who in turn may grant land to their family members.

Each household has an average of half a hectare of farmland, depending on the village and population size. Small-scale agriculture offers most food supplies for both families in Kati and Bamako. Farmers provide for domestic consumption while the leftovers are traded in local markets. Kati is a thriving market town for potatoes and vegetables in Mali.

Additionally, individual farmers also practised livestock breeding to improve their incomes. These comprise cattle, goats, sheep, and chickens. An important livestock market takes place every week in the Kambila commune at 3 km from the city of Kati. It brings together traders and buyers from neighbouring areas, including the city of Bamako. The rural inhabitants reside in villages that range from 20 to 200 households. The standard family size is ten individuals, ranging from 6 to 13 people. Each household has 6 to 13 workers. The estimated annual income per household is 750.000 FCFA francs. Almost every family unit

increases its farming revenue through off-farm activities. Both on-farm and off-farm crop selling is performed as farmers seek to boost profits from their agricultural endeavours.

In urban areas, the main economic activities are small businesses, and there is a high proportion of civil servants residing in Kati and Kalabancoro. The social cohesion mechanisms appear to differ between rural and urban areas. The former is built on a community self-help system based on family ties, the latter being less structured due to the family unit's break-up (many people have migrated to the capital city).

The role of women in agricultural production and marketing in Kati is essential. They represent 58% of the active population (DNPSES, 2018). In addition to household activities, women help their husbands in regular fields where cash crops are grown. They have also been involved in market gardening and marketing farm produces. Like in Baguineda, villages in Kati are organized into youth and women's associations, including cooperatives, traditional, religious, and cultural associations. On average, each town has an association or cooperative. The congestion of farming property in the communities and the hurdles in selling market garden products are equally constraints to the area's inadequate development. From this perspective, the author collected data from women and male cooperatives in marketing, food processing, and production in rural and urban Kati, mainly in Diago, T'Noubana, Banambani, Kati town, Mamaribougou, and Sibiribougou.

4.1.3 Cooperative Selection Methods

A random stratified sampling method was used to choose agricultural cooperatives in the three different areas. A stratified sampling process is a likelihood sampling practice. The researcher split her sample population into subcategories labelled strata and randomly picked the final respondents evenly from the multiple subgroups (Ritchie and Lewis, 2003). The survey retained three strata (agricultural cooperatives in Baguineda, Bamako, and Kati), with a list of 10 cooperatives in each area. The researcher chose half of the most active ones in each list; thus, five to six cooperatives were selected. To clarify what female cooperatives have in common, or do differently, a couple of them had to be male cooperatives, to determine which type is best suited to women. This was achieved based on a ranking proposed by the National Directorate of Social and Solidarity Economy (DNPSES). The cooperatives were picked from a file established by the National Directorate of Social and Solidarity Economy and OPIB.

To examine women's land ownership and access to resources, officials from these two departments validated the choice of each cooperative. Moreover, the local DNPSES branch's perspective was requested to confirm the designated cooperatives. Two to four female

cooperatives which aim to enhance small-scale women’s land ownership and access to agricultural production resources and one male cooperative were selected for each setting. In line with the study’s purposes, which remained to examine how female involvement in cooperatives can enhance small-scale farmers’ land ownership, cooperatives operating for at least two years were judged suitable for the analysis. Table 4.1 illustrates the characteristics of the survey cooperatives.

Table 4.1: List of The Selected Cooperatives

Cooperative name	Year established	Sector	Male	Female	Total
*BAGUINEDA					
Benkady	2000	Market gardening	2	138	140
Binkadi	2015	Market gardening and livestock breeding	2	128	130
Djiguiya	2000	Market gardening	6	254	300
Kofeba	1990	Market gardening and food processing	3	100	103
Nieta	2005	Marketing and processing	0	120	120
Sinigne Sigui	2017	Market gardening	4	260	264
Yiriwa Ton	2008	Market gardening	4	138	202
*BAMAKO					
Agro-Foresterie coop	2017	Florist	97	0	97
Binkady	2009	Micro-credit and processing	2	60	62
Binkan	2016	Processing	1	79	80
Djigui Seme	2016	Processing	10	50	60
Fasso Bara	2015	Market gardening and livestock breeding	9	3	12
Yereta ton	2015	Processing	1	5	6
*KATI					
Benkady	2012	Market gardening and livestock breeding	60	32	92
Bincady Sabouyouman	2010	Market gardening	98	0	98
Dabagana	2000	Market gardening	20	280	300
Djiguiya	2015	Market gardening and livestock breeding	22	0	22
Jakossoro ton	1995	Marketing	0	80	80
Univers des Animaux	2019	Fishing and livestock breeding	5	2	7

[Source: author based on own fieldwork,2020]

4.1.4 Fieldwork Process

The fieldwork lasted approximately six weeks, from January 22nd to February 28th, 2020. Before leaving Japan for Mali, the researcher emailed some staff from the Ministry of Agricultural, The Ministry of Women and Children, the National Directorate of Solidarity and Social Economy, and OPIB. They offered the researcher some general information about the survey, which was then utilized to draw the analysis method.

Once on the field, the investigator first contacted the Ministry of Agriculture and the Ministry of Women representatives, which provided information about individuals and organizations dealing with agricultural cooperatives in Mali. This led the researcher to get in touch with the National Directorate of Solidarity and Social Economy department, the main

department that deals with Mali cooperatives, to understand agricultural cooperatives' structures and policy implementation. The researcher engaged in a dialogue with an official from that department to choose appropriate sites for the study, as scheduled, while considering the cooperative's aims and proximity to the city. The investigator depended on the Ministry of Agriculture headquarters' information, the DNPSES valuable data about cooperatives' endeavours was achieved via discussions with officials from these departments to find suitable cooperatives.

Once in the field, the researcher quickly described the goal of the trip and the objectives of her study. She did the same process in all the cooperatives she visited. She successfully interviewed board members of cooperatives after her initial meeting with them. With these board members' support, she subsequently selected the cooperatives' representatives to be questioned. These interviewed people later assisted in finding other members within the cooperative. A similar procedure was followed with all the interviewed cooperatives. Questionnaires were also distributed to the board of directors for all the cooperative members based on their availability.

4.1.5 Participants' Selection

Upon selecting the sample cooperatives, they were contacted some days before the interview to inform them of the appointment and its objective. Once on the field, the agricultural extension agent announced the researcher and her schedule to the cooperatives' board and ordinary representatives. The classification of farmers and farmers' cooperatives was accomplished with the support of each local DNPSES and OPIB office's extension agent of the communities.

This process occurred in all the cooperatives, with extension agents assisting the researcher in identifying women farmers in cooperatives who, in return, helped identify their associates. Purposive sampling methods were applied in picking farmers for interviews. In purposive sampling, members were chosen, built on their involvement within the cooperatives, including the members who have inclusive experience and understanding of how the cooperative worked, its objectives, strengths, and challenges, and who thrived on recognizing other farmers' interests.

Focus group discussions were also conducted with knowledgeable members. Besides, the survey also utilized snowball sampling to choose additional participants to be interviewed. To attain the diversity of the experiment, respondents' beliefs and characteristics were produced (Ritchie & Lewis, 2003). Individuals, as well as groups of farmers, were interviewed. Mainly

groups of 10 to 20 people were questioned, and personal interviews were also performed with the managing director of the cooperatives. Also, the researcher interviewed other members such as the extension agents, bureaucrats, and office workers with experience in dealing with cooperatives or who were responsible for implementing cooperative activities. These involved two extension officials from each local DNPSES, two officials from the Ministry of Agriculture, and three officials from the Ministry of Women. After identifying the participants (two to three days before the interview), the researcher and the participants decided on the appropriate time and venue.

- **Data Collection Methods and Instruments**

This part summarizes the data collected, the sampling techniques, and the instruments utilized in examining the data. Three different methods were employed to answer the research questions. Also, the section explains the study design, the tool used to gather the data, and sampling techniques applied throughout the survey.

- **Data Collection Method**

As mentioned previously, the data collection process was conducted from January 22nd to February 28th, 2020. The researcher applied numerous data sources to ensure that the results were accurate. Collected information during the field survey was both primary and secondary data. Preliminary data was collected using focus group discussions, interviews, and questionnaires with smallholder agricultural cooperatives, cooperative administrative staff, and key informants. A semi-structured interview guide was employed to enable further probing while guiding a rigorous conversation around the study's main interests to stay focused on the study's purposes.

4.1.6 Primary Data Collection

The primary data collection used different instruments and techniques, specifically focus group discussions, individual interviews, questionnaires, and observations. We primarily collected information about land ownership and asset access from smallholder members of agricultural cooperatives. One sample model was chosen for data collection.

- **Focus Group Discussion**

A focus group discussion of ten to twenty people was conducted in each cooperative, depending on the members' availability. This meant to assess members' perception of cooperative management, strengths, and weaknesses. In this regard, the researcher uses semi-structured interviews in focus group discussions. This allows her to comprehend the rationale and choices that motivate these smallholder farmers, to join cooperatives, their failures,

achievements, and major challenges they face. The interviews were carried out as a directed conversation to safeguard that a reliable investigation process was practised and avert needless interruptions, as Yin (2003) recommended.

The author sought to collect as comprehensive knowledge from several participants as much as possible. Additionally, interviewing only cooperative leaders may bias the study since they only highlight what interests them. Taking into account the diverse viewpoints of each member was considered compulsory while designing the research methods. A sum of fifteen focus group discussions was performed in the three survey areas. Six focus group discussions were mainly conducted in the Baguineda area, four in the Kati area, and five in the Bamako district. The focus group discussions aimed to understand members' insights regarding the significance and achievement of their organizations. The discussion with the farmers' group intended to better understand the cooperative management system and the difficulties encountered. The meetings allowed members to examine what other people believed about their organizations while encouraging them to disclose additional information about their groups (Ritchie et al., 2003).

- **Questionnaires**

A structured questionnaire was administered to improve the information value of the data gathered. A sum of 170 smallholder farmers was tested for this survey, cooperative leaders were also interviewed. A structured questionnaire was conceived and directed in the study areas. The questionnaires were primarily open-ended and closed questions drafted in French. Due to the nature of the study, participants were able to explain and support their answers. Although the questionnaires were prepared in French, they were directed by the investigator and a colleague translated them into Bamanakan, the lingua franca of Mali where necessary.

The questionnaire was divided into the following sections. Questions dealing with the socio-demographic features of the respondents. This section explores general information about participants, including respondents' age, locality, number of years spent at school, sex, profession, and marital status. Additionally, that section addresses questions about land, including the size of agricultural land, the year settled on that land and ownership of the land.

The second part dealt with cooperatives establishment, organization characteristics, structures, and management. Information about cooperative membership and leadership, farming experience, labour availability within the cooperative, the type of cooperatives they know, what services they receive from their cooperatives, and where they sell their products were examined. More importantly, it also addressed questions related to gender issues within the cooperative.

The last part of the questionnaires dealt with cooperative access to assets, including land, seeds, fertilizers, access to credit, market, extension agents and services, information, training, literacy, and equipment. The section also examined the impact of cooperative involvement on members' income, entrepreneurship activities, and decision-making processes in their families, enterprises, community, professional, political, or community organizations. Additionally, it asked cooperatives to assess their strengths and weaknesses regarding their members' empowerment and access to agricultural resources. Lastly, the questionnaire invited participants to identify their cooperative's primary challenge and their methods to overcome those challenges.

- **Interviews**

Besides focus group discussions and questionnaires, the researcher opted to perform face-to-face interviews with individual cooperative associates to learn more about the farmers' viewpoints on their organization's endeavours, advantages, and difficulties. Face-to-face exchanges in qualitative research are vital as they allow the investigator to identify the implications members ascribe to social acts, opinions, attitudes, and principles (Marshall and Rossman, 1999). The researcher's purpose of semi-structured and face-to-face interviews allowed her to better comprehend the women coming together to voice their challenges in patriarchal settings.

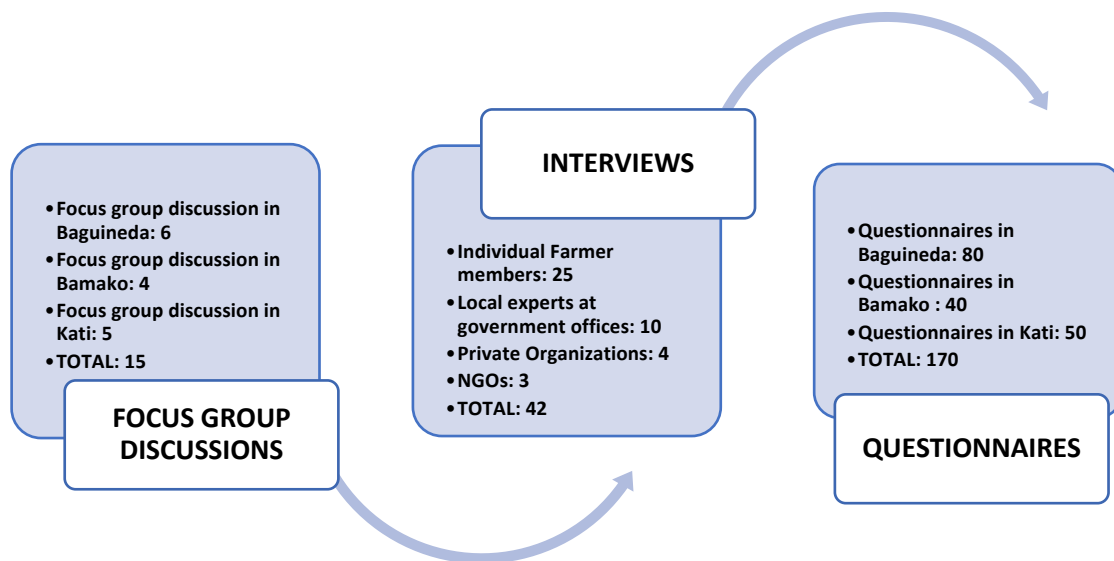
Individual interviews were also conducted to handle the gap during the focus group discussion since some members might be shy or careful to address some sensitive issues publicly. Personal interviews are applied for sensitive and more intricate inquiries (Ritchie and Lewis, 2003). As part of the assessment process, participants were also asked to analyse their associations' achievements regarding their purposes and projected impacts on their associates' needs.

An interview guide was made to avoid unnecessary focus group discussions. The discussions with farmer associates and cooperative administrative officials were done in Bamanakan, the lingua franc of Mali. Overall, 25 farmers were questioned separately to get an intuition about members' assessments regarding their organizations' worth and accomplishment. Besides ordinary associates, the survey interviewed one member from the board unit and one extension agent from each cooperative. Audiotapes were utilized in recording the conversations, as this offered a more detailed description of the interview (Yin, 2003). The discussions generally took 45 minutes to an hour.

- **Local Experts Interviews**

In addition to cooperative members, individual interviews were conducted with officials from government offices, Ministers, NGOs, and private organizations. Interviews were also conducted with administrative officials dealing with cooperative organizations, women’s land ownership, and empowerment in Mali. Individual interviews were mainly done at the Ministry of Agriculture, CNOP (Coordination National des Organizations Paysannes), the National Coordination of Peasant Organizations, APCAM (Assemblée Permanente des Chambres d’Agriculteurs du Mali), the Permanent Chamber of Farmers House, the Ministry for the Promotion of Women, Children, and Family (Ministère de la Promotion de la Femme de l’Enfant et de la Famille) and its sub- department more precisely at the Permanent Secretariat of the National Gender Policy (Secretariat Permanent de la Politique Nationale Genre and at CNDIFE (Centre National d’Education, d’Information sur la Femme et l’Enfant au Mali) the National Center of Information and Education on Women and Children. Additionally, interviews were also performed at the Ministry of Solidarity and Humanitarian Action and its sub-department, mainly at the National Directorate of Social Solidarity and Economy (Direction Nationale de la Protection Sociale et de l’Economie Solidaire DNPSSES), its local branches (Service Local du Development Social Commune IV, and Service Local du Development Social Kati, la Chambre d’Agriculture de Kati, and at OPIB (Office du Périmètre Irrigué de Baguineda).

Figure 4.1: Types of primary data used



[Source: author based on own fieldwork,2020]

Furthermore, interviews were conducted with private organizations and NGOs dealing with cooperatives mainly (Agri-profocus, AKvo Foundation, Guindo Farming, Plateforme Nationale des Producteurs de Riz au Mali, Africa Connecting, HUB IIT, Amassa Afrique Verte).

The purpose of these discussions was to get an insight into members' engagement in cooperative pursuits and the difficulties they faced. Regarding administrative officials and cooperative leaders interviewed, the researcher intended to determine their understanding of the cooperatives' accomplishments and assess how they perceived cooperatives' influences on female land ownership and access to agricultural resources. Figure 4.1 summarizes the types of primary data used in this survey.

4.1.7 Secondary Data Collection

Secondary data sources included collecting and examining records from the cooperatives, ministries, and related departments. Any relevant information related to the study objectives was collected. In this vein, secondary data was completed from document exploration, including written reports, published and unpublished documents about women's engagement in cooperatives, government policies, laws related to agriculture and cooperative activities, women empowerment in agriculture, minutes of joint meetings, and other communications and information from the internet. Several information sources were employed to triangulate data practice and guarantee truthfulness. This aims to authenticate the information collected from different sources (Yin, 2003).

4.1.8 Choice of Research Scheme

Multiple or compound case studies were utilized as the inquiry approach. A multiple case analysis model was chosen for this investigation for the following purposes: Firstly, to obtain more realistic results, given the significant number of agricultural cooperatives working under various circumstances. Additionally, it strives to retain the flexibility of individual case studies while strengthening the rationality of external outcomes. Lastly, it enables a cross-case assessment, allowing comparisons based on the hypothesis (Yin, 2003). Nevertheless, the researcher recognizes that this approach can also have challenges due to limited time and resources.

4.1.9 Data Analysis

Data were analysed using a qualitative assessment that explained, categorized, and linked data. In qualitative research, researchers use practical, informative methods to explore the impacts of facts on individuals (behaviours, choices, principles, and beliefs) in their joint

communities (Ritchie & Lewis, 2003, p. 3). A qualitative research method was picked for this research because of its practical purpose.

The recorded interviews were also transcribed to offer a source of assessment, including data coding and recognition of crucial things. This involved illustrating and evaluating the circumstances under which the survey was implemented, and statements produced by respondents. Following the identification of common topics, relationships, and classifications, data analysis began informally. Recurrent issues and concepts were found to converge on the prevalence of their incidence. The researcher then categorized them more comprehensively, using better-directive classifications or major subjects, subsequently outputting them in a broad structure.

Furthermore, the author used SPSS to analyse her questionnaires. Descriptive analysis and correlation were used to compare performance within cooperatives regarding women's land ownership and access to agricultural resources. Explanatory numbers are essential to get a strong perspective on the types of tested groups. Descriptive statistics might also allow the researcher to assess and differentiate various tested groups about the required characteristics. Hence, descriptive statistics in this survey like frequency, mean, standard deviation, descriptive analysis, and comparisons were utilized to evaluate the collected primary data.

Additionally, descriptive numbers were applied to explain the socio-economic attributes of smallholder women farmers' level of performance within cooperatives, their land ownership, access to credit, seeds, fertilizers, training, markets, equipment, and decision-making. Figures and tables were further employed to prove the data findings on participants in each cooperative. That supplied detailed information regarding how participants diverge based on performance behaviour in each cooperative.

- **Difficulties during the Data Collection Process**

While the researcher collected the data needed for this study, she encountered several difficulties accessing some materials. This was mainly because some administrative officials in charge of the information were unwilling to share them. For instance, when she tried to check a report of one of the local DPENSES data produced on the performance of cooperatives in that area, she could not access it as the agent in charge of this report did not want to share it with an outsider. She also faced some challenges with the questionnaires since many cooperative members could neither read nor write. Hence, she had to translate the questionnaires into Bamanakan, the national language of Mali, with the extension agent's help and one more student she hired. Also, in some cooperatives, the board directors appeared uncomfortable with

the researcher interviewing individual member participants and inspecting some of the cooperatives' records.

Data accessibility was difficult for the researcher primarily due to partial or outdated information received from some institutions. For instance, she needed the recent cooperative activities report; unfortunately, many institutions provided her with data from the last two years. Due to the delay in updating data and poor record-keeping, the information about the latest report of cooperative organizations was not accessible, and the administration depended on former reports and recall.

- **Data Reliability**

Yin (1989) stated that research reliability reduces mistakes and prejudices. Data reliability shows how reliable the utilized tools are and under what circumstances they were employed (Sheppard, 2004). Data reliability is mainly related to the firmness and consistency of the instruments applied. It thus evaluates the findings produced if the researcher used the same data collection instrument several times. Trustworthiness guarantees that the tools used to collect and measure data are reliable.

Consistency in qualitative research is deemed arguable. Some researchers believe it is impossible to duplicate or prove qualitative research. Others also argue that the reliability of qualitative research can be solved by employing precision during data statements (Ritchie & Lewis, 2003, p. 9). This survey's reliability was enhanced by distinctly identifying structures and concepts, utilizing accurate measurement levels, and using various research methods and indicators. Moreover, the data collection tools (questionnaires and interviews) were pre-tested to confirm truthfulness and reliability. Cohen et al., (2007) asserted that trustworthiness remains a required prerequisite of authenticity as it may be adequate but not a vital requirement for consistency.

- **Ethical Concerns**

The ethical concerns that arose during the surveying process included the type of issues under inquiry, the gathered information, and the data collection tools and procedures (Shaughnessy and Zechmeister, 2003). Undertaking quality scientific research, researchers encounter problems accessing and obtaining informed consent, safeguarding the impacts this might have after the study to avoid harm to the interviewees or the community where the survey was carried out (Peil and Rimmer, 1995). Cooper and Schindler (2003) described research ethics as rules or guidelines of behaviour that monitor ethical preferences regarding individuals'

conduct and interactions with others and guide them against the annihilation or negative impact of the survey activities.

Sekaran (2003) further allied research ethics codes of behaviours and required communal conduct patterns while overseeing the investigation. He additionally stated that moral behaviour must be employed by the investigator, member, supporter, and expert. Failure to comply with ethical guidelines might weaken the whole study procedure and result in unfortunate lawful or economic outcomes (Shaughnessy and Zechmeister, 2003).

The survey went under a low-risk assertion because the investigator followed an evaluation and consent of Doshisha University Global Studies Department's study plan. The code of behaviour fundamental to research, including respondents' rights as specified in Doshisha University research moral policy, was considered. The survey's objective was clarified before the interviews or any data collection process. The study respondents were informed of the purposes of the research and their expected role. The survey's contribution was voluntarily based after the respondents received an explanation of the research goals and their responsibilities. Oral consent was obtained from them, and they were also given a choice to participate or decline the offer. Besides confidentiality, the provided information was also self-assured and recognized. Research ethics guided the researcher regarding participants' consent before collecting any information from them. The investigator asked respondents for informed consent while highlighting that they possess the right to withdraw their participation anytime during the survey process. This method was applied throughout the survey. Lastly, the author used pseudo names and surnames while quoting the participants. This is to protect participants' anonymity.

In other words, the participants' privacy, confidentiality, and self-respect were thoroughly safeguarded. No explicit bids aiming at incriminating or convicting any specific entity or group were made during the survey. Final reports of the study might also be shared with the groups involved in the analysis through the ministerial or local agencies.

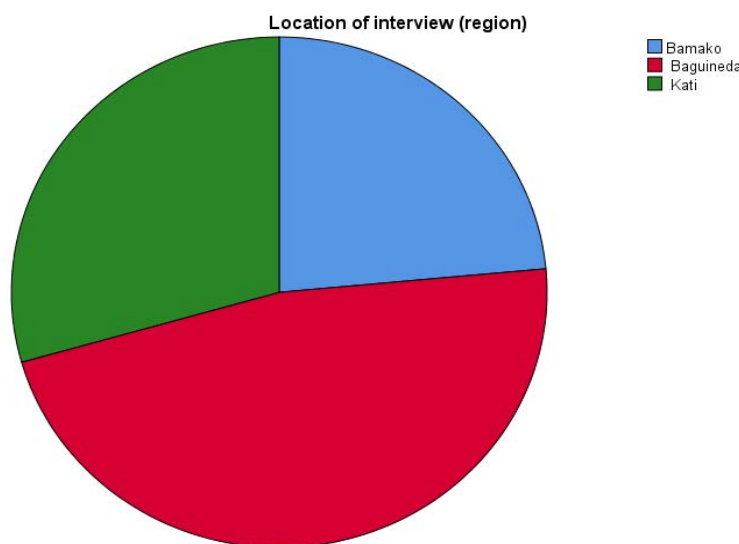
4.2 Characteristics of Individual Respondents

As highlighted throughout the dissertation, the overall purpose of this research is to evaluate the role agricultural cooperatives play in facilitating small-scale farmers' land ownership and access to other agricultural resources. While the specific objective is to identify whether female involvement in agricultural cooperatives has impacted their land ownership and access to other agricultural inputs. To achieve these objectives, the author conducted fieldwork with female farmers in the Baguineda, Bamako, and Kati regions.

The demographic data of the three study sites are compared since they share many similarities. Firstly, they all belong to the same region geographically and have similar features and characteristics. The survey cooperatives are also in the major agricultural areas in Mali. Additionally, farmers in the study sites are also mainly involved in the same agricultural activities, such as cash crop production and market gardening activities. They also have similar household sizes, same matrimonial regimes, and similar cultural practices. Lastly, they have similar education levels and use approximately similar land amounts for farming activities. For these reasons, the author combined the demographic data of the three study areas in her analysis. Nonetheless, the analysis often highlights their differences throughout the section when necessary.

4.2.1 Demographic and Socio-Economic Characteristics of Respondents

Figure 4.2: Location of the Interviewees



[Source: Outcomes from SPSS made from field survey, 2020]

The data was collected from 170 respondents in 15 agricultural cooperatives in three different rural provinces in Mali: Baguineda, Bamako, and Kati. As indicated in Figure 4.2, precisely 23.5 percent of the respondents were from Bamako cooperatives, while 47.6 percent were from Baguineda cooperatives, and the remaining 28.8 percent were from cooperatives in the Kati regions.

Demographic attributes are also crucial in assessing how cooperatives' involvement impacts female farmers' access to resources in the survey. In this part, members' quantifiable features, such as age, household size, job, marital status, sex, and years spent at school, are examined. Table 4.2 summarizes those elements.

Table 4.2: Demographic Features of Sampled Respondents

Variables	Cooperative members			
Age	Max	Min	Mean	S. D
	65	19	36	9.97
Sex	Cooperative members (%)			
Male	30.6			
Female	69.4			
Level of Education in years	Max	Min	Mean	S. D
	5	1	3.15	1.81
Profession	Respondents (%)			
Farmers	95			
Office workers	5			
Household size	Max	Min	Mean	S. D
	13	3	6	2.6
Marital status	Respondents (%)			
Married	87.1			
Single	8.8			
Widowed	4.1			

[Source: Outcomes from SPSS made from field survey, 2020]

* Key: Maximum (MAX); Minimum (MIN); Standard Deviation (SD)

Participants' features are more likely to be affected by their demographic characteristics since these attributes affect their primary activities. Additionally, participants' demographic features are vital when assessing economic data because they impact associates' socio-economic conduct. It is important to integrate demographic elements in determining the cooperative's role in improving its members' access and ownership of farming inputs and outputs.

- **Age**

Participants' age can be utilized to describe their involvement in agriculture. Age is an essential component since it reveals whether the household gains from senior farmers' knowledge or is built on their personal choices, risk-management, or visions of younger labourers (Makhura and Mokoena, 2003). Table 4.1 explains the age attributes of the individuals interviewed. Participants' minimum age was nineteen years old. In contrast, the maximum age of the participants was sixty-five years old. Precisely the respondents were born between 1954 and 2001. The mean age of interviewees was 32 for male participants and 28 for female participants. On average, the dominant age group of the farmers interviewed in all the cooperatives was thirty years old and above.

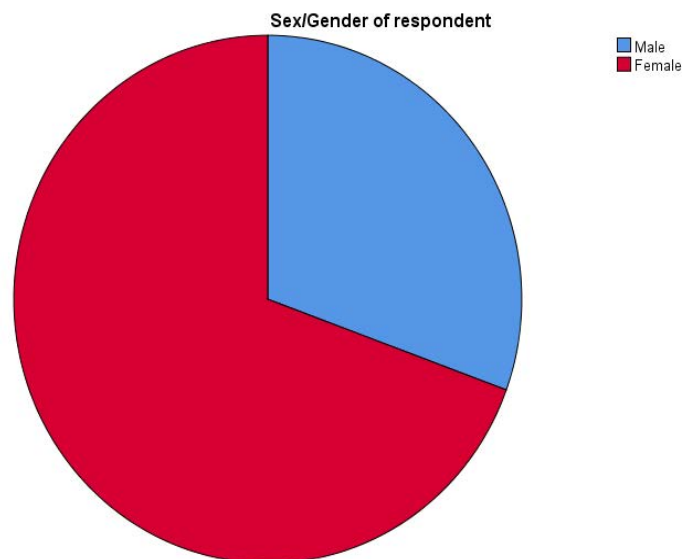
The age factor is also vital because most people join cooperatives when married with family responsibilities. Cooperative members with more experience are given more responsibilities. The author understood that leadership roles in all three provinces were generally assigned to elderly members during the interviews. Young members usually help

with physical work or paperwork when no elder member can take over those tasks. This is important in the Malian context. It shows how loyal Malians are towards some of their cultural practices, such as hierarchy and respect towards the elderly, even in formal settings like cooperatives.

Additionally, the findings suggest that senior people mostly perform smallholder farming. The farmers' age appears appropriate to reveal agricultural skill and knowledge and enhance the creativity of farming methods. The outcomes imply that younger farmers are less likely to support farming endeavours. Usually, they migrate to municipal towns to carry out employment in non-farming industries.

- Sex

Figure 4.3: Sex of the Respondents



[Source: Outcomes from SPSS made from field survey, 2020]

Sex remains a critical characteristic because of its impact on conventional agriculture. Participant sexes determine their level of farm implementation like agricultural schemes or access to land, finance, and agricultural extension agents. Figure 4.3 indicates the characteristics of the interviewed cooperative members by sex.

Regarding the sex of the respondents, of the 15 cooperatives interviewed, there were, on average, more female members than male members, except in only male cooperatives. There were more females (69.4%) than males (30.6%) in all the cooperatives, as displayed in Figure 4.3. The survey had more female participants than males. This is because the study primarily targeted small-scale women farmers in agricultural cooperatives. The author wanted to

understand more about Mali cooperatives' composition, characteristics, activities, and gender dynamics, mainly within female cooperatives.

- **Household Size**

The accessibility of the labour force to carry out strenuous agricultural activities is much affected by the household size. Studies on household size assess that family size impacts women's involvement in cooperative activities since women have numerous household chores to perform. In that vein, a bigger household size implies more available labour-intensive workers. It is more challenging for women to be engaged in extra activities outside the family when household members mainly comprise older or younger individuals who cannot help with agricultural or household duties.

During the survey, the household's size was deemed necessary, like the number of entities that inhabit the family. It can indicate the amount of labour accessible by the family unit. The author discovered that the household sizes varied from 3 to 13 persons per household throughout the survey. The largest household size was 13 individuals in the rural areas, while this fluctuated from 3 to 6 in the capital city. Using the household size as an indicator for labour accessibility in farming endeavours, it can be assumed that women in larger households had fewer obstacles with labour and were more engaged in cooperative activities than women in smaller households.

Women with larger households are likely to have an array of workers (adolescents, middle-aged, and elderly). The study contends that labour is an essential component of family farming because smallholder agriculture is labour focused rather than capital-intensive. The survey results unveiled a relationship between household size and female farmers' cooperative activities. On the one hand, women's engagement in group activities offers them some skills. On the other hand, women in larger households are less likely to own land, mainly if they are more male household members.

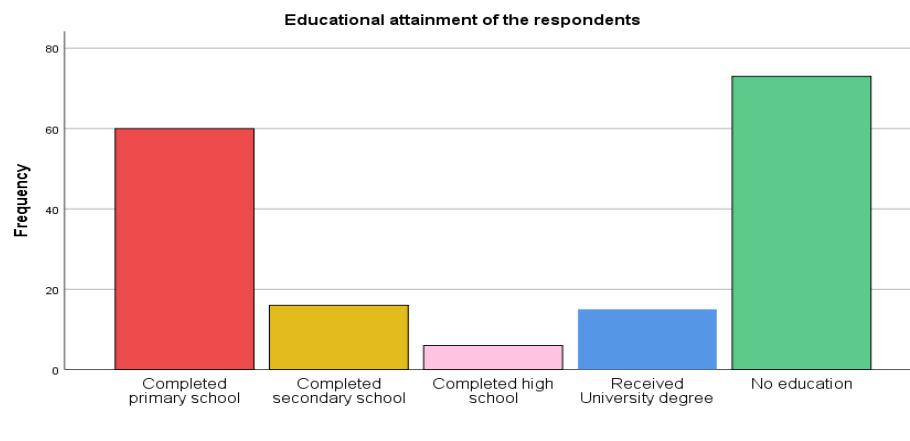
- **Educational Achievement**

Thirty-five percent of respondents completed primary education, while 9.4 percent completed secondary education. Only 3.5 percent reached high school, while 8.8 percent received a university degree. More importantly, the remaining 42 percent never received any formal education, as revealed in Figure 4.4.

This finding is not surprising since the overall literacy rate in Mali is 45 percent. Among the survey participants, the most significant number completed primary education. The lowest literacy rates are among farmers who dominate the primary sector. Any development plan

aiming to empower farmers in Mali must provide them with a minimum level of formal education. Education is vital as it helps farmers follow up with new agricultural value systems and trends in production, handling, and marketing activities. Reading and writing skills may allow farmers to follow information on the appropriate time to cultivate, plant, get seeds, harvest, and export in numerous markets at higher prices. Furthermore, a farmer’s education level is essential in agriculture as it plays a critical role in implementing new technologies forecasted to improve productivity. Education also boosts farmers’ skills and knowledge, which they can efficiently apply in their agricultural ventures.

Figure 4.4: Respondent’s Level of Literacy



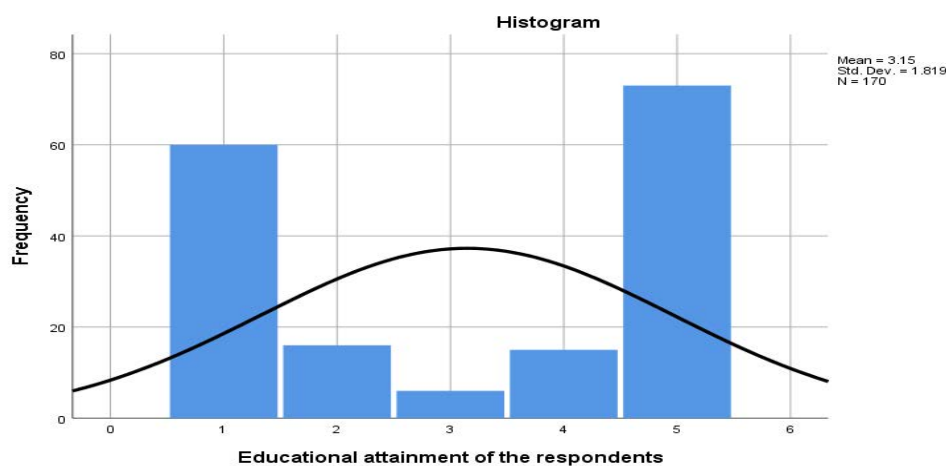
[Source: Outcomes from SPSS made from field survey, 2020]

Regarding educational attainment by sex, 65 percent of women never received any formal education, while 45 percent of male respondents never received formal education. This is also important; it underlines the lowest education rate among women farmers. However, the percentage of women with primary education within the sample population is significant. Forty-five percent of them have a primary education level. Overall, only 25 percent of women in Mali are educated. During the interview, the author observed that female cooperatives’ members benefit from adult literacy training in all the study areas from agricultural extension agents. Women also benefit from school kits such as copybooks, pens, pencils, and rulers from NGOs for their literacy training activities.

Figure 4.5 reveals the educational attainment and histogram of the sampled respondents, which remain low. Cooperative members receiving functional literacy because of their engagement in cooperative activities is crucial. It indicates that cooperatives support

women farmers (who are generally illiterate) with functional literacy to deal with their accounting and finance regarding agricultural production and cooperative performance. Women farmers' education level also correlates to their social capital and their capability to handle advanced farmhouse and handling processes. On the one hand, farmers with better education appeared more informed and active in understanding agrarian knowledge and materials. For example, the survey found that farmers who received higher education remain the ones who mainly partake in cooperative activities. On the other hand, non-cooperative participants might not be informed of those advantages and might not gain from them.

Figure 4.5: Histogram of Respondents' Educational Achievement



[Source: Outcomes from SPSS made from field survey, 2020]

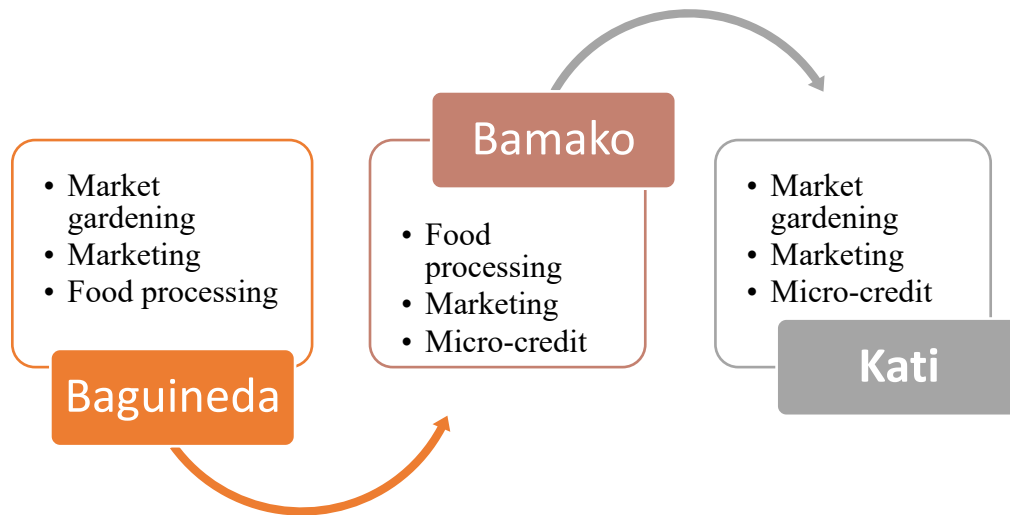
- **Employment of the Respondents**

Most respondents worked in the agribusiness sector, primarily in market gardening, food production and processing, micro-credit, marketing, agroforestry, fishing, and animal breeding. Sixty-five percent of the respondents were from market gardening, followed by animal breeding. Thirty percent were from food processing, micro-credit, and marketing domains, while only 5 percent were office workers. Furthermore, of the 170 sample individuals, only 8.2 percent of the respondents were from the agroforestry realm, which men dominate. There were no women in the agroforestry domain because it required much physical work, such as fetching water and regular inspections of saplings. Additionally, there were no women in that sector because it was “dirty work,” according to one respondent.

As for the employment distribution by locality, most women respondents in Baguineda province were mainly involved in market gardening and marketing vegetables like onions, salads, carrots, and cabbages. The respondents from Bamako were primarily engaged in food

processing, marketing, and micro-credit activities, while those from Kati province were practising market gardening of potatoes and marketing, as illustrated in Figure 4.6.

Figure 4.6: Major Activities in the Study Areas



[Source: Created by the author based on own study, 2020]

Cooperatives in the rural areas of the Baguineda and Kati regions were also involved in animal breeding of small ruminants, and poultry. No women in both provinces' were engaged in agroforestry and fishing activities. This is because fishing is considered a primary male activity; even though women are chiefly involved in fish marketing in Mali, they rarely fish themselves.

Cooperatives from the capital city Bamako were mainly involved in processing sesame, sweets, shea nut products, juices from hibiscus, ginger, baobab, millet, fonio, and sorghum. They receive their products mainly from suburban and urban agricultural producers. They rarely own any agricultural plots and are primarily involved in marketing and micro-credit activities.

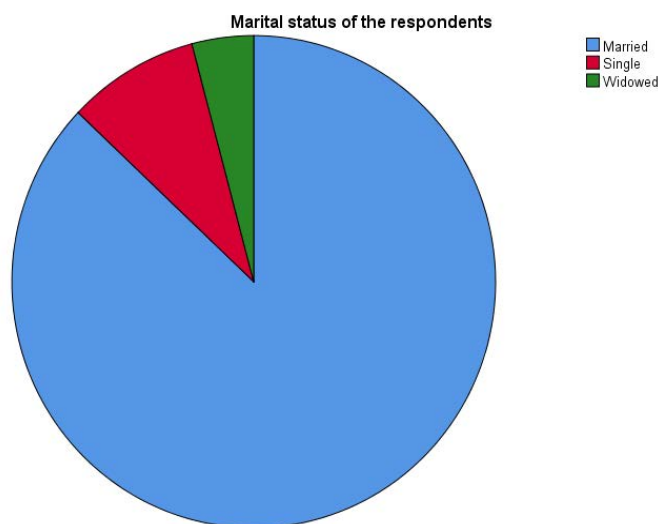
Participants' employment is indispensable because income helps farmers buy tools for agriculture or their agribusiness activities. Off-farm and non-farm work endeavours are vital for enlarging farm resources and households' incomes. It allows families to enhance their yield by granting them chances to seemingly use inputs while lessening the threat of food scarcity in times of starvation. The overall employment outcomes indicate that many of the survey participants operate in the fields of market gardening (65%), food processing, marketing,

microcredit, agroforestry (35 %), and wage employment (8%). This confirms that many of the study respondents were real farmers.

- **Marital Status of the Respondents**

The participants' marital status is generally applied to define the consistency of a family unit in Malian households. It is usually assumed that married farmers are more secure in agricultural activities than when they are single (Prakash, 2003). A farmer's matrimonial position will influence farming production and access to assets if this holds true. The findings are presented in Figure 4.7.

Figure 4.7: Marital Status of the Respondents



[Source: Outcomes from SPSS made from field survey, 2020]

The outcomes revealed that the respondents' marital status was split into three main groups: married, single, and widowed. Precisely, 87.1 percent of the respondents were married, while 8.8 percent were single, and 4.1 percent were widowed, as disclosed in Figure 4.7. This is particularly interesting because it underlines the importance of social status in joining cooperatives. During the interview, many cooperative members, nearly 65 percent in Baguineda, Bamako, and Kati, stressed the importance of marriage as the entry point in joining their cooperatives. Based on the cooperative principles', membership should be allowed to anyone interested in becoming a cooperative member; however, regarding cooperative membership in the study areas, being married, and belonging to the community was significant feature in becoming a cooperative member. Members believe that married women and men are

more responsible and face more challenges than singles, who generally bear fewer responsibilities as they help on family farms.

They believed that singles have less responsibility and no household members to feed; for this reason, they are often excluded from cooperative membership even though they might sometimes participate in cooperatives' collective activities such as land preparation, harvesting, or marketing. Another category found during the fieldwork was the widows' cooperative in Bamako. Widows created their cooperatives to meet their daily basic needs since they shared similar values and challenges, including widowhood, single motherhood, and providing food, shelter, education, and health to their children.

- **Land Access and Ownership of Individual Respondents**

Regarding land ownership, of the 170-sample population, 48.8 percent claimed to have agricultural land, while 51.2 percent said they did not have any agricultural land. Regarding the amount of land owned by individual farmers, the minimum farm size was 0.76 hectares, while the maximum was 10 hectares in all three study sites. On average, all individual farmers hold 1 or 2 hectares, depending on their sex, as indicated in Table 4.3 and Figure 4.8.

Table 4.3: Distribution of Households by Cropped Area (hectare)

Variables	Individual farmer
Mean	.038
Median	1.51
Standard deviation	.501
Maximum	2
Minimum	.025

[Source: Outcomes from SPSS made from field survey, 2020]

Generally, men had more land than women in the absence of communal land. This is because men can inherit land from their fathers or grandparents. Men also bear the responsibility of distributing land among their family members. However, within cooperatives, women have the same amount of land as their male counterparts. The average collective land size was 5 to 10 hectares within cooperatives.

The outcomes also indicate that most plots managed by cooperative participants are at least 1 hectare plus the communal land. This suggests that the productivity generated by cooperative members is expected to increase as members utilize additional land.

Participants were also questioned on the plot's ownership they utilize for agricultural purposes. The findings reveal that 48.8 percent of the cooperative members interviewed hold agricultural land. In comparison, 51.2 percent did not have any land, and only 15 percent had

communal or shared land in Baguineda and Bamako. There were no farmers in Kati who benefited from joint or shared agricultural land.

- **Year Settled and Land Ownership Difference by Sex**

As of the year of settlement, most farm owners were indigenous residents from the provinces. They inherited the land either from their grandfathers or their fathers. Elderly participants settled in the agricultural land for more than 30 years, while younger ones stayed for 10 to 20 years. Additionally, participants were asked if the household head was the plot owner. Surprisingly, only 28.8 percent of the respondents in all three study areas said they were both heads of household and plot owners.

In comparison, 71.2 percent said that they were not the owner of the agricultural plot. Usually, in Mali, husbands are the head of the household. As chief of the family, they decide and control household assets and decision-making processes. As decision-makers, they have the right to cultivate and grant land to their family members. In this regard, the decisions regarding the amount of land to be cultivated, the type of crops, and by whom lie in their hands.

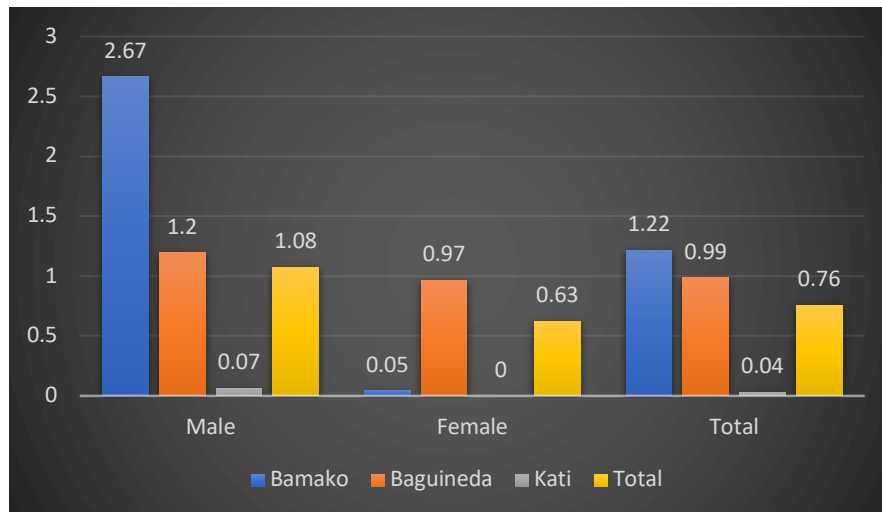
On the one hand, household heads cultivate cash crops like cereals for household consumption and selling. On the other hand, the household head also decides the type and amount of cultivated land. Women are often given small and poor plots to compensate for household expenses for market gardening purposes. In this vein, women generally provide labour on their husbands' farms in Mali. They also work as independent operators on market gardens that they grow and manage themselves or with their children's help. Mali's market gardening activities take different sizes and forms depending on the area. They are called "Nako" in Bambara. Nako means small gardens or vegetable gardens found nearby the homestead land, mainly on roadsides or edges of fields. Almost every household in farming communities practices market gardening as a supplement to family agriculture (Diallo, 2021).

Market gardening also supplements the daily household needs of food. Such gardening requires fewer economic resources, using locally available plants, materials, and indigenous farming methods. It is not uncommon for women to engage in vegetable gardening, which improves their domestic and intra-household food security throughout the year. Market gardening is a significant agricultural activity, particularly for women, providing their household needs and cash. Subsequently, it can be an income-generating activity for women if surplus vegetables and fruits are left, they are taken to markets for selling, which provides women with extra money to compensate for household needs (ibid, p. 110).

Moreover, in the survey areas, land available to smallholder female farmers is usually granted by customary leaders in Baguineda and Kati. The land is disproportionately shared

between the household's male head and their wives for farming purposes in those two areas. Male farmers hold primary rights to land as chefs and heads of families; they are responsible for allowing their wives to access land. This situation leaves many women farmers landless since they must rely on their husbands or male partners to own or access land. As a result, most women farmers do not hold the land they cultivate, although they obtain the right to utilize it.

Figure 4.8: Average Land Size in Hectare by Sex and Location



[Source: Outcomes from SPSS made from field survey, 2020]

The outcomes from Figure 4.8 indicate that women had less than two hectares of land in all three study areas, with the highest amount being in Baguineda and Bamako. In Baguineda, women have more access to land from the OPIB irrigation scheme, which provides extra collective land to women in addition to their individual plots gained from their husbands or traditional leaders. This implies that the productivity generated by cooperative members in Baguineda is expected to increase as members utilize additional land. While in Bamako, wealthy cooperatives could buy land in the peri-urban areas to conduct their agribusiness activities. For example, one cooperative in Bamako holds 10 hectares of land in peri-urban areas. In contrast with Baguineda and Bamako, cooperative members in Kati only possess half a hectare of land. This is explained by the non-availability of any government irrigation scheme like OPIB in the area, coupled with the rapid urbanization of Kati and the practice of conventional tenure practices in the area.

Farmers' overall plots held differ based on their involvement in a cooperative where associates tend to access an extra amount of land, like in the case of Baguineda. The additional piece of land operated by cooperative associates to cultivate their yields supports cooperative

members' ability to practice farming more significantly than non-cooperative associates, as they have access to individual and collective land.

Table 4.4: Correlations of Total Land Area Owned in Hectares by Sex

Correlations			
Variables		Sex of respondent	Total land area owned in hectares
Sex of respondent	Pearson Correlation	1	-.166*
	Sig. (2-tailed)	1	.031
	N	170	170
What is the total land area owned in hectares?	Pearson Correlation	-.166*	1
	Sig. (2-tailed)	.031	1

[Source: Outcomes from SPSS made from field survey, 2020]

* Correlation is significant at the 0.05 level (2-tailed).

Regarding the sex distribution of land in hectares by area, the results show a negative correlation between women's land ownership and the total average land owned by them. There is a statistically considerable disparity between land ownership and the sex of the respondents. Since the notice is less than 0.025, then there is statistical significance. Inferring that there is a relation, and it is negative, while it increases with males, it decreases with women. The more women farmers in a sample, the less the average land ownership. In other words, women in the study areas were less likely to own agricultural land than their male counterparts, as indicated in Table 4.4.

- **Crops Farmed by Households**

Farmers in Baguineda and Kati seemed to have similar yields and vegetable cultivation aims. Half of the plots used by farmers in the Baguineda region are made of rice, millet, and corn on dry land. In contrast, the remaining half is made up of onions, eggplant, lettuce, carrots, potatoes, and cabbage in irrigated areas. Likewise, farmers in Kati also planted food crops like millet and maize for household consumption. Larger plot areas in Kati were dominated by vegetable crops such as potatoes, beans, lettuce, onions, and carrots. Contrasting with Baguineda, participants mainly cultivate potatoes (70%) and cabbage (55%) in Kati, whereas cooperatives in Baguineda grow onions (65%), cabbages (50%), and eggplants (35%). Even though nearly all the chosen yields are cultivated throughout the year, most vegetables are produced during the summer season, particularly potatoes, onions, cabbages, and cereals are grown during the rainy season. Some farmers in the survey area were applying yield sequences. For example, they cultivate maize and millet from May to October, while vegetables, onions,

and cabbages are grown from December to April. Vegetable crops usually necessitate additional water and maintenance in contrast with cereal crops. Farmers find it simpler to cultivate such yields as their primary goal is to trade, although they are also intended for domestic consumption

Picture 1: Baguineda and Kati Cooperative Members Performing their Activities



[Source: Photo: Taken by the researcher during fieldwork in Baguineda and Kati, January-February,2020]

Despite farmers cultivating a variety of crops, they are not stable. Large amounts of potatoes, onions, and cabbages are harvested all at once by producers. This creates market surpluses and lower prices for farmers' produce. Overall, the proportion of crops grown by farmers is vegetables for commercial purposes. For domestic consumption, other crops like cereals are cultivated by farmers in Kati, while in Baguineda, cereals are produced for commercial and domestic consumption purposes. Moreover, farmers revealed various motives for growing such crops. Results indicated that overall, smallholder farmers grow crops because they get revenue (38%), produce subsistence food (34%), are easy to sell on the market (13.6%), and are easy to cultivate (10.8%).

4.3 Institutional Analysis of the Surveyed Cooperatives

4.3.1 Establishment of the Cooperatives

Regarding the cooperatives' establishment, the oldest cooperative started in 1990, while the newest was created in 2019. Of the 15 cooperatives interviewed, 18 percent were created in 2000, which coincides with the advent of structural adjustment programs in Mali. In 2000, many farmers joined or created cooperatives to protect themselves against market forces in the global economy. As mentioned in the cooperative principles and definitions, people start or join cooperatives to solve or enhance their everyday social, economic, or cultural needs.

Furthermore, 16 percent of the surveyed cooperatives were created between 2005 to 2007. In 2006, Mali's Agricultural Orientation Law (AOL) was passed to modernize agriculture and empower farmers, mainly small-scale farmers in all agriculture domains. In the AOL, special attention was granted to cooperatives as well. Especially the AOL encourages the promotion and support of agricultural cooperatives in rural areas. This might also explain why many cooperatives were created from 2005 to 2007.

From 2015 to 2019, there was a substantial increase in the number of cooperatives created. Forty percent of the sample cooperatives were created between 2015 and 2019. The OHADA Uniform Act was enacted in 2010, strengthening and empowering agricultural cooperatives in Mali by granting them many privileges such as access to land, credit, modern farming equipment, and training. The uniform act also allowed agricultural cooperatives to access subsidised seeds and fertilizer. The enactment of these laws explains the rise in cooperative creation from 2015 to today.

According to one of the respondents:

In many contemporary Mali societies, people join or create cooperatives to benefit from the advantages of the AOL and the OHADA Act. Since they are primarily concerned with getting profit from NGOs or the government, they rarely fully assumed their role as cooperative members.

Another respondent added that:

Most Mali cooperatives do not comply with the cooperatives' management principles; all they want is personal profit. Some cooperative members never attend meetings unless there is something to share or take advantage of; some never pay their monthly subscription fees (Interviews at DNPSES, February 8th, 2020).

Organizations and institutional practices create perspectives based on regulations, rules, and procedures for both personal and collective engagement within a group. These regulatory institutions enforce legitimate or formal penalties to ensure that members' deeds meet the requirements. As a result, members' behaviours are determined mainly by their self-interest in achieving their goals.

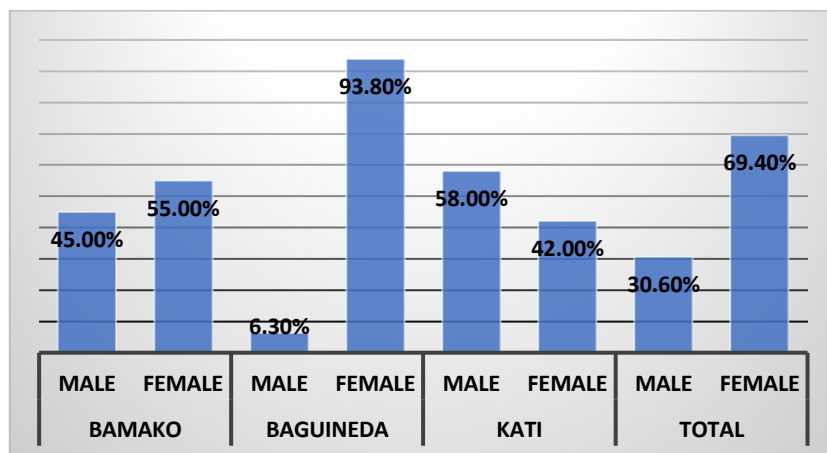
Based on these findings, the study argues that copious policy revolutions in agriculture led to cooperative establishment and development in Mali. These changes occurred in 2006 with the enactment of the AOL and 2010 with the ratification of the OHADA Act, motivating many farmers and entrepreneurs to join or create cooperatives in both rural and urban areas.

Sound agricultural laws and policies encourage poor farmers to face common challenges by joining their efforts and developing movements through cooperatives to meet their daily social and economic needs. This explains the surge in the number of cooperatives created in 2005. It increased from 16 percent to 40 percent from 2005 to 2019. More cooperative societies are likely to be established if the AOL and the OHADA improve poor farmers' livelihood conditions. They mainly aim to grant farmers better land rights and access to seed, credit, fertilizer, and equipment.

4.3.2 Types of Cooperatives by Sex

The surveyed cooperatives ranged from female cooperatives, male cooperatives, and mixed cooperatives, as indicated in Figure 4.9.

Figure 4.9: Sex of the Respondents by Location



[Source: Outcomes from SPSS made from field survey, 2020]

All women cooperatives have more female members than male members, while male cooperatives are mainly made of men. In mixed cooperatives, they were still more women than men. Within mixed cooperatives, men usually help with physical work or marketing activities. The gender dynamics do not influence women's participation, access to leadership positions, and decision-making process within mixed cooperatives in Bamako. While within hybrid cooperatives in Baguineda and Kati, some women respondents claimed to be often influenced by men when making decisions and holding certain leadership positions. In mixed cooperatives, men usually deal with administrative and accounting functions while women are chairs, vice-chairs, or active members. Women in the capital city within mixed cooperatives were more favoured and empowered than those in rural areas. With male members often influencing cooperatives in rural areas, women's needs, and priorities are not fully considered during important decision-making processes in only male cooperatives.

Consequently, the survey found that gender inequality is worse within male cooperatives, where women's issues in the community often go unnoticed. Male cooperatives are more gender-biased than female cooperatives, as they mainly focus on their adherents' financial and social interests. Male cooperatives make decisions that benefit only their male members. In contrast, female cooperatives pay more attention to social issues affecting males, females, and children. According to the results, female cooperatives were more engaged and interested in community development projects such as building schools and roads and buying grounding machines and equipment for the entire community from the cooperatives' capital. As explained in the theoretical framework section, when women join collective engagements, there will likely be negotiations between families and cooperatives regarding duties, privileges, and gender roles. The capacity of cooperatives to empower their members depends on their (women's) abilities to efficiently contribute to collective engagement, gain access to and control over profits from valuable assets and have entry into decision-making processes and responsibilities.

Regarding the power dynamics in all three types of cooperatives, the older a member is, the higher their chances of having a leadership position within the organization. Leadership roles are usually granted based on the member's age and years of experience within the cooperative. Ninety-five percent of the surveyed people were ordinary members who joined the cooperatives at different times, depending on their age and marital status. In most cooperatives, 70 percent of the members were appointed based on their age and experience, while a vote elected 30 percent in others.

4.3.3 Coverage and Ownership of The Cooperatives

Regarding the cooperatives' coverage, 60.6 percent were from villages or rural areas, while 23.4 percent were from the district level, and, finally, 16 percent were from peri-urban areas. The author purposely chose these three categories to better understand cooperative activities from various perspectives and their role in empowering women in rural, urban, and suburban areas. She focused more on the rural and sub-urban areas, as clearly shown by the data, because the most vulnerable female farmers reside in rural areas. She also wanted to understand cooperatives' strengths and weaknesses in these three categories to develop strategies and help them overcome their challenges.

Regarding ownership, most of the cooperatives, 73 percent, were mainly founded and owned by local farmers. In comparison, 17 percent were created through agricultural extension agents' advice. In all the cases, cooperative members possessed full responsibilities regarding

their organization management and ownership. There was no influence from any political or religious authority or organization regarding the cooperative's management and leadership. In all three counties, the 15 surveyed cooperatives were managed by their members. Though sometimes cooperatives obtain advice from agricultural extension agents, they also benefit from training opportunities, accessing subsidized seeds, fertilizer, equipment, or improving tenure rights from the government, donor agencies, and NGOs.

4.4 Features and Membership of the Cooperatives

4.4.1 Case Study of Baguineda

Seven cooperatives were selected in Baguineda, namely (Benkady, Binkadi, Djiguiya, Kofeba, Nieta, Sinigne Sigui, and Yiriwa Ton) cooperatives. All seven cooperatives were recognized, well-formed, and economically active cooperatives of farmers in rural and urban Baguineda. The national office of the DNPSES and the district administration of the OPIB handled their registrations.

The cooperatives were created between 1990 and 2017 to support small-scale farmers in marketing, handling production, micro-finance ventures, settling, and intervening in land disagreements. The cooperatives also have from 20 to 300 members, who are primarily women. Their agricultural production is mainly focused on market gardening intended for profit-making (marketing). Cabbage, carrots, eggplants, lettuce, onions, okra, and potatoes are highly cultivated.

The author used women's voices from these seven cooperatives to support or contrast her hypothesis and answer her research questions. On the one hand, membership in these cooperatives was only open to married housewives in the same community who practised market gardening, food processing, marketing, micro-credit, and animal breeding (Diallo, 2021). On the other hand, there were no restrictions on becoming a cooperative member based on age or economic status. All the cooperatives except one had at least one male member. This approach is due to tradition's weight and the unequal gender division of labour within households in Baguineda. The sample cooperatives preferred to have at least a male member dealing with external activities like selling the cooperative products to distant markets and coping with physical or administrative work since household chores constrain women's activities and mobilities.

The cooperatives also have transparent systems and requirements for regulating the activities of the organizations. Likewise, they have internal laws that monitor the administration of the cooperative. For instance, all the cooperatives have a regular payment of

500 to 1000 FCFA remitted by every member to ensure the organization's expenditures. Similarly, there is an entry fee payment and investment plan. Associates can access credit, seeds, or equipment from the organization. In all the cooperatives, members come together to cultivate the common land, process the product, and sell them jointly. More importantly, cooperative members support each other in land preparation, crop planting, and harvesting for collective and individual farmland. Failure to do so necessitates a penalty fee set by each cooperative based on their agreements (ibid, p. 117).

In all cases, cooperative members are entitled to fulfil responsibilities regarding their organization management. There is no political or religious authority influence regarding the cooperative's management and leadership. Nevertheless, the cooperatives benefit from advice from agricultural extension agents who are professionals in agriculture hired by OPIB or local DNPSES to assist farmers in their activities. They offer them training to improve their farming activities and support them in accessing subsidised seeds, fertilizer, equipment, or tenure rights from the government, donor agencies, and NGOs.

The cooperatives have several dedicated bodies dealing with management, finance, disagreement resolution, external relations, marketing, and partnerships. They are also active in defending and altering their associates' land rights and lobbying government offices, mainly from OPIB, to obtain and secure land access (ibid, p. 118). Agriculture is their primary source of income for most cooperative members and defending their property rights means securing their livelihood and providing them with social accommodations.

4.4.2 Case Study of Kati

Six cooperatives, namely (Agro-Foresterie cooperative, Binkady, Binkan, Djigui Seme, Fasso Bara, and Yereta ton), were also chosen in Kati. The cooperatives in Kati were also well-structured and economically dynamic associations of sellers and farmers located in urban and rural Kati regions with hybrid (statutory and customary) land tenure systems.

The six cooperatives were founded between 1995 and 2019 to assist producers in solving their property issues, supporting the marketing of farm produces, intervening in disagreements, and helping members access farm inputs. The cooperatives were legally enrolled with DNPSES and the Chamber of Agriculture in Kati. Overall, the groups ranged from 7 to 300 members (97 men in one cooperative). The cooperatives' primary interests are marketing, protecting land tenure rights, and access to inputs, equipment, and credit. Furthermore, they produce various agricultural products to generate revenue and sustain their livelihood. Many smallholders grow beans, carrots, cabbages, lettuce, onions, and potatoes.

Farmers also practice livestock production of goats, sheep, and poultry. The practice of livestock farming, especially goat and sheep, in most families in Kati aims to meet the households' consumption needs. The groups' degrees of organization were low compared to cooperatives in Baguineda. Most members conveyed that they face challenges operating as a unit given their different activities; nevertheless, they were willing to improve that challenge through their cooperatives' engagement. Like cooperatives in Baguineda, the selected six cooperatives in Kati have transparent guidelines administering the groups' operations. The cooperatives also have a regular subscription of 250 FCFA and an entry fee of 5000 FCFA to be paid by every participant to cover the group's managerial costs. The cooperatives also provide their memberships with money to buy fertilizer and seeds. Additionally, they enthusiastically support their members' property rights during apprehensions with property owners.

Expulsions are not widespread, but urban designers who challenge peri-urban land utilization for farming purposes regularly threaten them. Overall, the groups have various units dealing with matters like organization, disagreement resolution, and group activities. Most farmers in Kati cooperatives cultivate the land they hold traditionally from their parents or grandparents. Many farmers believe farming is a lucrative profession, and while farming remains their primary activity, they can also engage in other rural pursuits. As an illustration, a farmer from one group stated that he prefers agricultural work to other employment types since it allows him to raise yields throughout the year, thus allowing him to make more money than he would if he had worked in another occupation. Many individuals from rural Kati did not receive any formal education; access to administrative jobs and farming resources like subsidy seeds and farming equipment remains a challenge.

To enter the cooperatives, outsiders must be part of the community either by marriage or following customary practices. Cooperative leaders stated they are willing to consider diverse approaches to incorporate non-locals into their cooperatives. However, that approach was new to them as they had not thought about it before this survey, nor could the groups realize the benefits of distributing their plots to outsiders. Accordingly, members of the cooperatives are typically individuals who live in the area. Non-members can enter the cooperatives by contacting the heads of the groups. Also, women hold a crucial responsibility in the organization because they grow and market agricultural produces, a practice that is widely accepted among Malians. Like in Baguineda, most farmers work with their family members. Additionally, a deep-rooted feeling of solidarity and support exists amongst cooperative memberships.

4.4.3 Case Study of Bamako

Besides Baguineda and Kati, which are part of the Koulikoro regions, six additional cooperatives (Benkady, Bincady Sabouyouman, Dabagana, Djiguiya, Jakossoro ton, and Univers des Animaux) were also selected in Bamako, the capital city of Mali in the Commune IV. The cooperatives were established between 2009 and 2017 and had 6 to 97 members (two of which were only male cooperatives). Members have enrolled their cooperatives with governmental institutions, mainly DNPSES, and have internal regulations and rules. The group's missions are to promote the marketing and processing of farmed products and gain better admission to credit, information, and education. The group's significant goals are to increase access to services and expand managerial skills to strengthen their agribusiness activities.

Like cooperatives in Baguineda and Kati, the ones in Bamako also have visible regulations overseeing the organizations' management. They also have a regular fee of 1000 FCFA and an entry fee of 10.000 FCFA to be paid by every associate. The cooperative members in Bamako are part of Commune IV and are connected by entrepreneurship, marketing, and food processing activities. Their leading economic activity is food processing and marketing; hence participants were entrepreneurs before entering the cooperatives. Many members are younger than farmers in Baguineda and Kati and need to expand their entrepreneurship activities. Fruits are the main foodstuffs that cooperatives trade and process (mangoes, tamarind, and baobab) and cereals (sesame, millet, and corn). Most groups set restrictions on the kind of production their participants produce, while others do not. Women peddle their agricultural output to wholesalers in local markets, urban markets, supermarkets, and sometimes abroad. Bamako cooperatives producers conveyed that their marketing and processing revenue was enough to cover their households' essential needs.

Also, most of the leaders were politically active and had ties with agricultural departments, ministries, or provincial departments of agriculture. Since the group's establishment, they have made efforts to expand its relationships with other cooperative corporations, agricultural offices, and diplomatic leaders. The members stated a slight improvement on this front. The groups have been obtaining agricultural training from NGOs and private organizations as part of the state curricula overseen by the Ministry of Agriculture. The organizations' primary limitation is expanding organizational skills in marketing and processing their productions.

Cooperative members in Bamako believe that the primary benefit of being engaged in a cooperative is to share opinions alongside the prospect of gaining access to credit with state

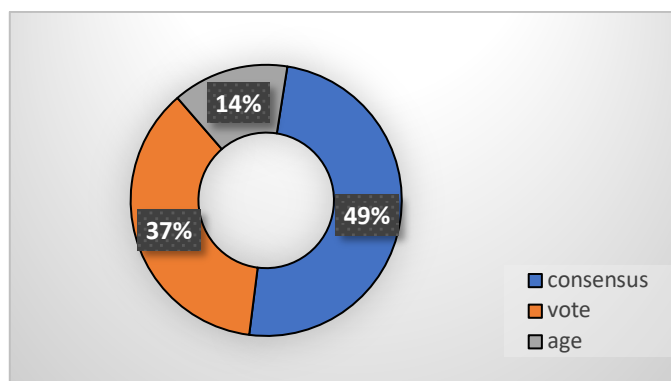
institutions and other opportunities from NGOs and private organizations. Currently, most groups provide their members with services like microcredit and food processing based on national and international standards. Admission to the groups also remains open to both females and males. Unlike cooperatives in Baguineda and Kati, membership in cooperatives in Bamako is accessible to all citizens of Mali eager to comply with the cooperative principles. Land disposal and access are not the primary concerns for cooperative associates in Bamako. The incentives for cooperatives not bothering with land dilemmas are twofold. Initially, urbanization reached Bamako as it is the capital city of Mali. Second, most cooperative members have safe land access based on statutory regimes through title deeds. Guindo, a local DNPSES agent, asserts that smallholders and entrepreneurs in Bamako understand their rights well and are more engaged politically (Interview at DNPSES, February 2020).

4.5 Management of the Cooperatives

4.5.1 Cooperatives Leaders Election and Terms

Questionnaires were addressed to the surveyed cooperatives to understand their cooperative management strategies. Firstly, participants were asked how they elect their leaders. Of the 15 cooperatives interviewed, 50 percent of the overall sample population indicated that they chose their leaders by consensus, implying that they chose them based on agreements set by the members themselves. Furthermore, as Mali's cooperative law and regulations indicated, 37 percent of the interviewed members stated they elected their leaders by casting a vote. And finally, 14 percent said they chose their leaders based on their age, as shown in Figure 4.10.

Figure 4.10: Leader Election in Cooperatives



[Source: Outcomes from SPSS made from field survey, 2020]

The older a member is, the more likely they will be elected as the group leader. This process is carried out in turn according to the age of each member. Agreeing with the OHADA uniform act, which regulates cooperative administration in Mali, leaders must be selected by vote for three years term. However, the survey found that the principle is not always applied in rural areas, as indicated by the study results. In all three study areas, leaders were mainly chosen by consensus. When analysed by region, 61 percent of the cooperatives in Baguineda chose their leaders by consensus, while 54 percent of the leaders in the Kati regions were selected based on their age.

In contrast, the researcher discovered that 80 percent of Bamako cooperatives' leaders were elected by vote, while 20 percent were chosen by consensus. This implies that cooperatives in Bamako are better at following and applying the OHADA uniform act guidelines regarding the cooperative members' election than cooperatives in rural areas. This can be explained by the fact that most cooperative members in the capital city are educated; therefore, they are more likely to abide by the rules than the less or non-educated members.

Respondents were additionally asked to specify the number of years they elect their leaders. Regarding that question, the number of years ranges from three to an undetermined period. Precisely 63.5 percent answered that they elect their members for five years. At the same time, 23 percent of them stated that they elect their leaders for an unspecified number of years. Once you are chosen, you serve for a lifetime. Thirteen percent alleged they elect their members for three years, while 0.6 percent contended that they elect them for two years. According to Mali's collaborative law, leaders should be elected for three years, renewable at the end of the third year.

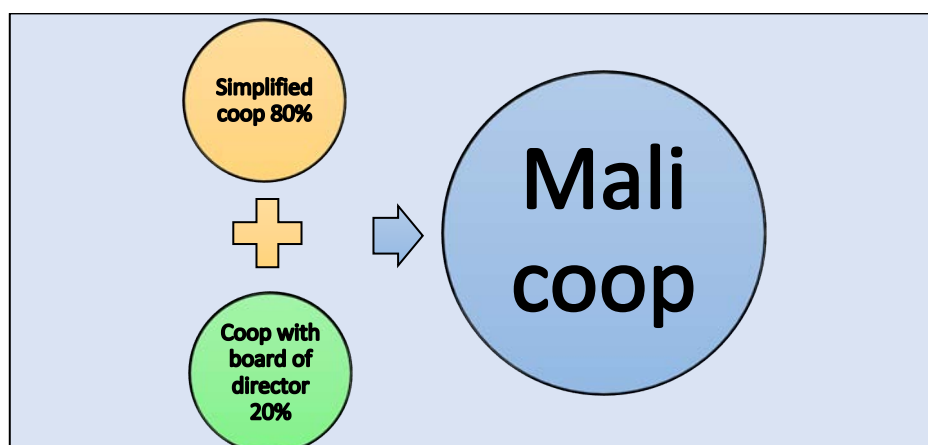
Based on this survey result, most of the cooperative leaders in the study areas are elected either for five years or indefinitely. When disaggregated by location, 65 percent of the cooperatives in Baguineda elect their members for five years and more, while 60 percent of the cooperatives in Kati elect their leaders for five years or more. Again, 75 percent of the cooperatives in Bamako elect their leaders for three years.

Sex is not a determining factor in how and for how long cooperative leaders are elected. Each area and cooperative had its way of management and organization. The most common practice was that cooperative leaders were elected mainly by consensus for five years in the rural Baguineda and Kati regions. In comparison, most cooperatives in Bamako were rigorous in following the cooperative principles stated by the OHADA Act regarding leaders' terms. Bamako cooperative leaders were elected by vote and could serve for three years, renewable at the end of the third year.

4.5.2 Cooperatives' Structure

Participants were also asked to describe their cooperative's structure to better comprehend the organization's management. Eighty percent of the members said they have a simplified cooperative form with an administrative committee regarding that question. In comparison, 20 percent of them replied that they have a cooperative with board of directors' system with a supervisory committee, as illustrated in Figure 4.11.

Figure 4.11: Characteristics of the Cooperatives



[Source: Created by the author based on own study, 2020]

Nevertheless, regarding that question, the author realized that most cooperatives had difficulties specifying the type of cooperatives they had. According to the cooperative law in Mali, there are mainly two types of cooperative organizations: simplified cooperatives with a management committee whose members should comprise 5 to 100 individuals and cooperatives with a board of directors, administered by a supervisory committee and include 10 to 1000 members.

When analysed by area, the survey uncovered that all the cooperatives in Bamako and Kati except one were simplified cooperatives titled "SCOOPS." In comparison, cooperatives in Baguineda fall into the category of cooperatives with a board of directors. Yet, the author realized that some cooperatives in Baguineda whose memberships exceed a hundred associates were still using the simplified cooperative pattern of management, which contradicts the OHADA Uniform Act of 2010.

One possible justification for this could be that most cooperatives in that area started with few members. With time, they exceeded 100 members and failed to upgrade their status to cooperatives with the board of directors. According to the OHADA Act, any cooperative

that exceeds 100 people should upgrade its status within one year. Another explanation might be that most of the members interviewed were less educated with a primary education level or uneducated. Subsequently, they do not know how to read and write; thus, this, in turn, impacts their management pattern. Some of the cooperatives failed to upgrade their organization status due to the aforementioned reasons.

Besides, the survey found that simplified cooperatives, whose members do not exceed 100 associates, tend to be more effective than cooperatives with a board of director system. Within simplified cooperatives, associates and management leaders work jointly to address collective needs, while in cooperatives with a board of directors, associates in rural areas seem disconnected from the leadership. Only a few elites, the educated and well-informed ones, generally benefit from cooperative activities in this type of cooperative. As mentioned in the theoretical framework section, collective engagement requires joint intensive commitment from all members to achieve responsibilities, such as when some group members have trouble separating from their activities or disregard other interests when accomplishing collective duties. This might affect members' full engagement in attaining the cooperative mission successfully. A mutual sense of importance, passion, creativity, and commitment of all members can lead the group to thrive. Simplified cooperative members have high levels of shared dynamism, attempt to share risks and responsibilities in task implementation, and persevere in the face of obstacles.

4.5.3 Information and Understanding of the Cooperative Goals

Respondents were further asked to clarify whether they had received enough information about their cooperative before joining it. Seventy percent of the overall participants stated they had received enough information about their cooperative's goals before entering it, while 30 percent said the opposite. This is also important as it explains how dedicated cooperatives are in defining the intents and purposes of their organizations to new members. When cooperative leaders were asked the same question, they emphasized that new members clearly understand the goals before joining their organization to avoid conflicts of interest. They further stated that they explain the cooperative rules and principles in local languages before and after new members join the group.

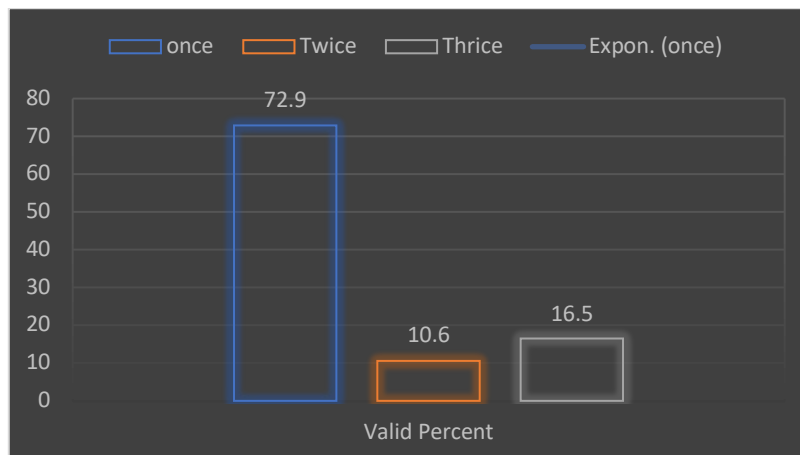
Likewise, participants were also asked to evaluate how well they recognized their cooperative's objectives and goals. Sixty-nine percent of the respondents thought they clearly understood their organization's goals and objectives regarding that question. In comparison, 22 percent replied that they know them, and 9 percent contended that they somewhat

understand them. This unveils that most members gained crucial information about the groups' goals and objectives before joining them in all three study areas. Additionally, respondents were also asked if they were given enough training about the organization's goals and objectives. Ninety percent of the respondents said they had received enough information about the cooperative missions and goals in all three provinces. This finding is significant as it remains necessary for any organization to define its objectives clearly and for new members to comprehend and recognize its principles, rules, and goals before joining them to avoid misunderstandings and conflicts of interest.

4.5.4 Members Participation

The survey cooperatives were further asked to determine the frequency of their meetings and members' participation in the group. The results show that 72 percent of the 15 cooperatives had meetings once a month, while 16 percent had group meetings three times per month. Finally, 10 percent replied that they have a meeting twice a month.

Figure 4.12: Meeting Attendance Rate



[Source: Outcomes from SPSS made from field survey, 2020]

The monthly meetings are generally about cooperative activities where members exchange ideas on improving and enhancing their associates' needs in land ownership and accessing credit, seeds, fertilizer, or equipment. In addition to the monthly meetings, roughly 60 percent of the overall cooperatives said they often held extraordinary meetings in urgent circumstances. Members also appealed that they were satisfied with the frequency of their meetings. Most of the surveyed cooperatives have meetings at least once a month based on their members' availability, as indicated in Figure 4.12.

Regarding participation, 10 percent of the cooperatives stated that not all members attend meetings regularly. They found it challenging to have all the members participate in meetings. This is a challenge in most organizations, where members only pursue their interests. Most of the sampled cooperatives have a mechanism for dealing with members' non-participation in meetings, ranging from paying compensation or doing extra physical work during land preparation or harvest time.

The surveyed cooperatives were also asked to clarify whether they must pay any subscription fees before joining the cooperative. Regarding that question, all 15 cooperatives have subscription fees that differ per cooperative and area. Fifty-five percent of the 15 cooperatives said that new members must pay 1000 FCFA to become members, while 10 percent responded that they paid 5000 FCFA, 16 percent paid 500 FCFA, 9 percent paid 100 FCFA, and 6 percent paid 10000 FCFA. Subscription fees ranged from 100 FCFA to 10000 FCFA, depending on the members' locations and incomes. Cooperatives in the Baguineda and Kati regions had at most 1000 FCFA as a subscription fee, while those in Bamako paid more, up to 10000 FCFA. In addition to subscription fees, members also paid extra fees in female cooperatives from 100 to 500 during the monthly meetings. Both subscription and monthly payments are decided by cooperative members themselves based on their incomes. These incentives are used as collateral or lent as a credit to members who paid it within a specific time with lower interest rates. The capital is also used to buy seeds, fertilizer, and equipment for collective use among the cooperative members. The money is additionally invested in the road or school construction projects based on community needs and member approval. Cooperative members collectively work to offer access to community necessities and local facilities that are not provided by the government or may not be possible to attain as single entities. Collective engagement enables indigenous peoples to develop and preserve community parks, religious or sacred edifices, and public halls and establish community natural resource supervision regulations through their organizations.

Besides this outcome, the author also found that some cooperatives have conflicts of interest between the co-founders and newcomers. Cooperative initial founders believe that they must be granted priority in accessing better opportunities than newcomers. In this regard, they often requested new members to pay the total investment paid by them before becoming new members.

4.6 Cooperative Regulations and Interactions with Others

4.6.1 Criteria for Joining Cooperatives

Regarding this section, respondents were asked if land ownership, level of education, socio-economic status, political affiliation, or type of crop grown affects individuals' chances of joining the cooperative. Among these criteria, social status was the most important, with 95 percent of the respondents referring to it as an essential criterion in joining their organizations. If the members' ages were mentioned earlier as necessary, so was social status. For example, marital status was an essential criterion in women's cooperatives in rural Baguineda and Kati. Any woman planning to join the cooperative must first be a resident of the locality and be married in that community.

Meanwhile, only the household head can join the cooperative in male cooperatives in the study areas. The head of the household in Mali is generally a man. Still, a woman can be head of the household when her husband has died and when she decides to remain single until her male children take over the household headship. In most Malian societies, husbands are the family's chief; they provide and make the family's critical decisions, including land ownership, access to credit, seeds, fertilizer, and household equipment. The same situation holds true in Bamako, about the widows' cooperative, where only widowed women could become members.

More precisely, 47.1 percent of the cooperatives in Baguineda stated that marital status is the entry point in joining their organization, while 29.4 percent of Kati cooperatives said so. Only 23.5 percent of the cooperatives in Bamako value marital status. This is an important finding; it highlights marriage's role in contemporary Malian societies. Being married gives individuals status in the community and expands their opportunities to own land and join specific organizations like cooperatives in some rural neighbourhoods. Thus, 95 percent of the 15 sample cooperatives value the marital status of newcomers. Female cooperative members believed that as wives or heads of households, they share common challenges, including lack of land ownership and access to credit. They further said they share common visions in providing a better life for their children, which might differ from singles' interests. Consequently, most participants believed that only people with the same marital status, same challenges, and vision could be members of their organization. This practice contradicts the cooperative principles, which do not discriminate against anyone based on their marital status.

Moreover, 19 percent of the respondents stated that only a particular crop producer could join their cooperative. This was most frequent among agroforestry cooperative producers in Bamako who were exclusively male. Twelve percent of the respondents stated that both

males and females are qualified to become association members. More importantly, 1.2 percent of the respondents only mentioned holding agricultural land as their membership criteria. This is also significant; it highlights how sensitive people are regarding social status than economic status. If being married or being the head of the household was crucial for most participants, the financial state was less considered by these later, which reveals that cooperatives are most often created to solve social issues.

This also explains why many Malians get married in both rural and urban areas at an earlier age. Around 60% of Malian women get married before their 20's. The legal age for marriage in Mali is 16 years old for women and 18 years old for men (Ministry of Women, 2018). No matter how successful a woman is financially, politically, and academically, if she is not married, she may still be rejected or face prejudices by her community or family for failing to fulfil that social expectation. Individual success and social recognition are primarily based on marital status and sometimes the number of children one has, namely in rural areas, since children represent a vital labour force.

It is common for men to discriminate against unmarried men and women, but it is more common for women to discriminate against unmarried women. Accordingly, women themselves reinforce some patriarchal practices in rural communities. This is highlighted by Batliwala, who claimed that women were encouraged to participate in their subjugation. She, therefore, viewed external agents of transformation as necessary for their empowerment. She theorizes empowerment as “a spiral, changing perception, distinguishing areas to focus on, designing policies, acting for change, and evaluating actions and outcomes” (Batliwala, 1994, p. 132).

As active agents of change, women must be the ones to resist and change the discriminatory practices that impact them. In part, this is because their nations ignore the challenges they face and the fundamental barriers they encounter, particularly about their gender roles as mothers and wives. Being the ones who clearly understand their challenges, women must be the leading agents of empowerment by challenging subordinate practices towards them. In this process, women's agency and awareness raising are essential to dismantle the structures strengthening their repression.

The inappropriate practices of collective engagement that comply with conventional patterns may include social status, which expects members to be married. Female members often adhere to normative regulations because they recognize social beliefs as the norms and are expected to do so as they were trained since childhood to do so. The fundamental values and norms set rules against one sex through the institutionalization of gender-specific roles,

responsibilities, and relationships with communities and among individuals. These established norms and patterns are maintained and transmitted from one generation to the subsequent, maintaining gender discrimination against some categories of individuals based on their sex or sexual orientation. These behaviours involve a range of values grounded on members' opinions and personal beliefs of reality. These beliefs, ideas, and opinions stem from discriminatory information or practice women and men inherit from their families. These patterns include the gender division of labour, gender stereotypes, the importance of marital status, virginity, and women's submission and obedience towards their husbands and other family members.

It will be easier to achieve collective engagement if distinct approved socio-cultural practices and value systems that discriminate against one sex are more carefully adjusted by dominant groups to reflect the benefits and essence of everyone. The influence of traditions on collective beliefs and activities needs to be re-evaluated to understand the systems that trapped one group of individuals, usually women, in a vicious circle. Redefining these socio-cultural patterns in contemporary Malian societies requires questioning what cultural practices should be paid more attention to, how they must be interpreted and coordinated into positive habits, and how they will be understood to promote a fair and equal society.

4.6.2 Mutual Relationship in the Cooperative

Respondents were asked to specify whether their cooperative grants more importance to social welfare than economic profits. Ninety-one percent of the overall respondents alleged that their cooperative grants more importance to social welfare, while 9 percent replied that their organization values financial gains more. When analysed by region, only 26 percent of the cooperatives in Bamako emphasize social welfare. Forty-two percent of the cooperatives in Baguineda held that their organization values social welfare more than economic profits, while the age status is 33 percent in Kati cooperatives.

This is also significant because cooperatives are created for economic and social reasons. People in a specific community with common problems and similar objectives form cooperatives to solve their social dilemmas. Regarding the socio-economic benefits, a respondent in Baguineda said:

Thanks to my participation in cooperatives, I now have access to communal land, boosting my monthly income. Before joining the organization, I had no regular income. Women like me are gaining more visibility in the community thanks to our involvement in cooperative activities (Interview at Yiriwa ton Cooperative on February 12th, 2020).

Another respondent from Kati cooperatives stated:

Upon joining the cooperative, my husband was more considerate and thoughtful towards me because I could support him with his business from the money I made from the cooperative. Through cooperative engagement, we strengthen our relationships with neighbouring communities on a broader scale. We regularly exchange ideas and opinions about our organization and community developments (Interview conducted at Bincady Sabouyouma, February 15, 2020).

Finally, a respondent from Bamako argued:

Thanks to our collaboration with other cooperatives through the DNPSES, cooperative movements in Bamako are raising women's revenue over employment creation, increasing their income, and offering them chances and strategies to be independent business owners. Through exchanges and collaboration with other cooperative organizations, thousands of female entrepreneurs are empowered (Interview at the local DNPS of Commune IV, February 15, 2020).

Even if cooperatives are not mainly created for economic reasons, they often deal with marginalized members' financial issues. Some cooperatives used micro-credit to enhance their members' access to credit or agricultural resources. The 15 surveyed cooperatives have different needs and objectives. Still, the primary goal was to solve social challenges and increase their income, which eventually increase the living standards of their members. Participating in groups or collective engagement is essential to improving individuals' socioeconomic status. It also creates networking environments among members and unity, improving their collective bargaining power as agents and expanding their access to resources and decision-making within their families and communities.

4.6.3 External Influence on Cooperatives

Respondents were additionally asked to determine who gets all the benefits of their cooperative thrives; regarding that question, 90 percent of the participants held that cooperative members got all the benefits of their organization's success. In comparison, 10 percent said that political leaders and local authorities would benefit if their organization expanded. This 10 percent is significant since it highlights local and political authorities' influence on grassroots organizations. Political and local authorities often remain corrupt in most rural and urban areas. Local farmer's organizations are used to obtain funding from the government or international

NGOs under the guise of poor farmers, many of whom are less educated and unaware of the local elite's reward.

Even though there were no mentioned cases about this during the interviews, the responses provided by ten percent of the respondents refute the answers where members claim to have absolute control over their organizations.

Members were similarly asked to determine who would get all the blame if their cooperative failed. Regarding that question, 98 percent of them said that cooperative members would get all the responsibility if the group collapsed. In comparison, only 2 percent hypothesized that local and political authorities would get all the blame if they failed. This is also important as it expresses the sense of responsibility that members hold towards their organization. They know that they will suffer the most consequences if their organizations fail. This might motivate them to put more effort into the success of their organization. As a result, of all the 15 cooperatives interviewed, 170 members were willing to serve in the cooperative's governance and leadership positions for the common interest of all members.

Recognizing these different patterns in groups' interactions is a precondition for constructing successful collective engagement, which focuses on the costs and gains of members' involvement in cooperative activities. The level of agency and commitment membership grants to their organization activities and the meaning of responsibilities and guidelines within collective groups influence these costs and gains. To a broader extent, it also placed each member at the centre of their own space of choice, an area characterized by identifying the changing procedures in the structures that define their lives. Nevertheless, with the transforming socio-economic conditions, members participate in more social and economic matters and consequently mediate through their habits of doing things and demonstrating the advantage of being united. Although not unequivocally holding power, the level of agency achieved by joint action over social bargaining allows them to participate in decision-making while conveying their concerns, needs, and preferences through social networking.

4.6.4 Differences and Cooperation Among Cooperatives

Participants were asked to specify whether they knew other cooperatives and if so, to clarify the main differences between their cooperatives and others. Seventy percent of the respondents knew about other agricultural cooperatives, while 30 percent said they did not know about agrarian cooperatives. This 70 percent is noteworthy because it demonstrates the upsurge of cooperative movements in Mali.

Regarding the differences between cooperatives, 22.4 percent alleged that their organization differs from other cooperatives on average. Participants spotted the difference in the number of members and the geographical location of the cooperative. The 15 sampled cooperatives were from three different provinces: rural, urban, and suburban areas. Seventeen percent of the respondents mentioned the quality of output obtained by their organization to be its distinctiveness. The cooperatives were involved in various domains of the agribusiness sector. While most were engaged in market gardening, others were engaged in food processing and marketing; these cooperatives will undoubtedly have different outputs.

Finally, six percent of the respondents highlighted their cooperative's success to be its main difference. This is also imperative; even though the number remains low, it proves some successful cases out of the 15 cooperatives. Some cooperatives also praise themselves for building or repairing roads and schools and improving their members' credit and input access as their most significant achievements and differences from other organizations. Although not all 15 cooperatives differed in size and activities, they had common goals and objectives to increase their income levels and challenge their members' daily socio-economic needs.

Table 4.5: Mergers within the Coops and their Motivations

Responses	Reasons	No.	%
No	Did not merge	32	18.8
Yes	Improve efficiency	63	37.1
	Reduce transactions	15	8.8
	Improve membership	14	8.2
	Improve capital injections	26	15.3
	Improve management	20	11.8
	Subtotal	138	81.2
Total		170	100

[Source: Outcomes from SPSS made from field survey, 2020]

Whether successful or not, cooperatives create perspectives offering regulations, rules, and practices for personal and collective empowerment, which requires joint action and commitment to achieving responsibilities; when some group associates have trouble accessing essential factors or means of production, the cooperative support them.

Moreover, respondents were asked to specify whether their cooperatives ever joined or merged with other cooperatives and explain the reasons for unification.

Regarding that question, 81.2 percent of the respondents stated that their organization joined another cooperative, while 18.2 percent said that their organization never merged with any other groups. The reasons mentioned for this merging were different. Thirty-seven percent

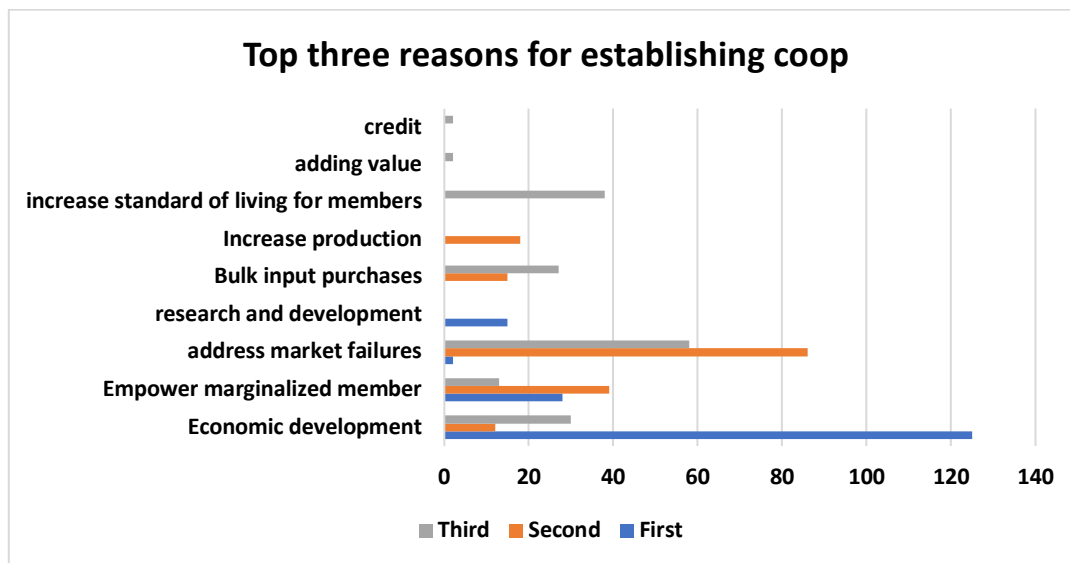
of the cooperatives stated that they joined other cooperatives to improve their efficiency in conducting their activities. In contrast, 8.8 percent of the cooperatives argued they merged with other cooperatives to reduce transaction costs. Furthermore, 8.2 percent of the cooperatives claimed that they joined other cooperatives to improve their membership quality. In comparison, 15.3 percent of the surveyed cooperatives merged with other cooperatives to strengthen their capital injections, and finally, 11.8 percent joined other cooperatives to improve their management level; mainly in filling out their administrative documents, keeping records of their meetings, and lending money to their members as illustrated in Table 4.5.

People are engaged when they perform a significant role in the negotiations, debates, decision-making, and application of the ventures or procedures that concern them. On the one hand, some efforts aim to build social capital and enhance community relationships and trust. On the other hand, to solve issues, they reveal how social capital is created when entities form collective engagements with other groups to empower their members and increase the success of their group. The survey contends that cooperatives have different reasons for joining or merging with other cooperatives based on the findings above. While some joined for economic reasons like improving cash flow, accessing credit, and reducing transaction costs, others merged for exchange reasons to learn from others and increase their management style. Either of these reasons contributes to the success and welfare of the cooperatives and their members. That is one of the main reasons for setting up cooperatives in communities.

4.7 Reasons for Establishing and Joining Cooperatives

Cooperative members were also asked to explain the three main reasons for establishing their cooperative. Of the 15 cooperatives, 85 percent said their first motivation for creating their cooperative was economic development, 73 percent argued that their second motivation was to prevent market failures in challenging socioeconomic conditions, and 22 percent contended that their last reason was to increase the living standards of their members, as illustrated in Figure 4.13. The theories explain that collective engagement plays crucial roles in various spheres of human lives, including revenue creation, declining threats, and providing community services. In that vein, collaborative engagement through cooperative organizations plays an essential role in how individuals access and utilize economic and social assets, which affect production outcomes.

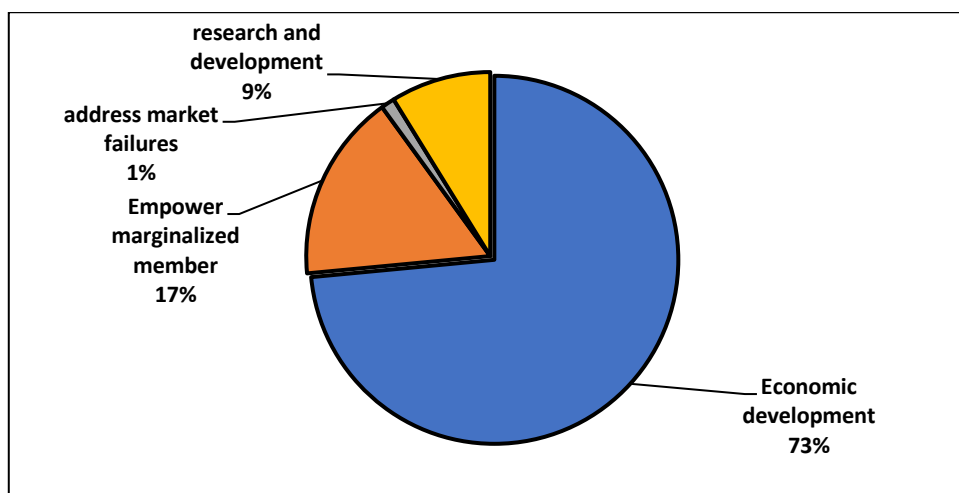
Figure 4.13: Motivations for Cooperatives Establishments



[Source: Outcomes from SPSS made from field survey, 2020]

The overall main reasons for creating the cooperatives in the three study areas ranged as follows: economic development, empowering marginalized members, research and development, and addressing market failures, as shown in Figure 4.14.

Figure 4.14: Main Reasons for Establishing Cooperatives



[Source: Outcomes from SPSS made from field survey, 2020]

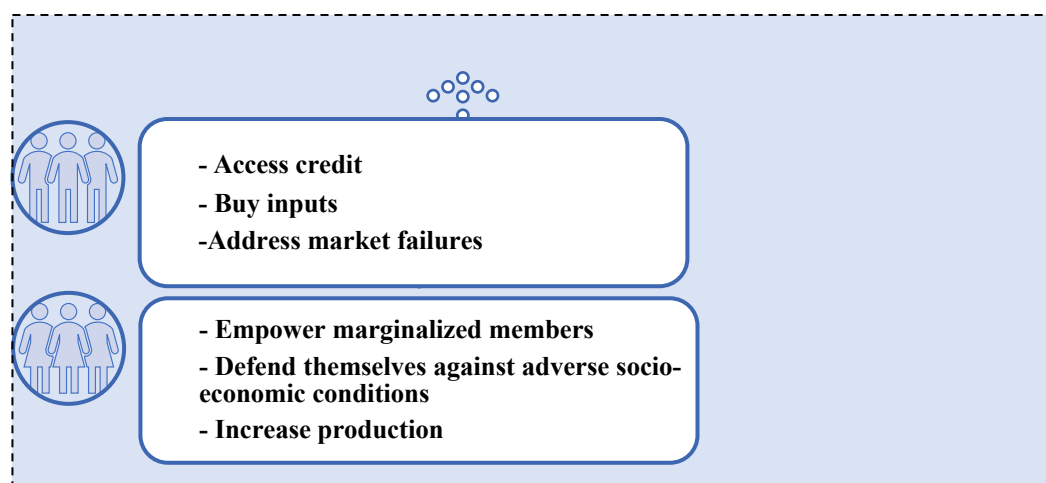
Collective engagement amongst cooperative associates is an entry point in addressing needs and receiving information, resources, and training. As highlighted in the theoretical framework, accessing these opportunities might be especially crucial for the poor and marginalized entities, who are generally disadvantaged in gaining access to those privileges.

Other reasons include accessing input and output marketing, agricultural products, infrastructure improvement, employment, access markets, finance, and insurance.

The three main reasons slightly differ per area. The main three reasons highlighted by Baguineda cooperatives members were to address market failures, bulk input purchases, and economic development. Meanwhile, cooperatives in Bamako alleged that they created their organization to improve their processing skills, add value to their products, and provide needed services to their members. Cooperatives in Kati aimed to access credit, cheap storage, transportation, and increase their living standards. Individual or group agency is commonly foreseen based on their asset endowment. The shares of resources that give agents prospects to utilize economic, social, and political changes to be productive and defend themselves from shocks is a reality in all the surveyed cooperatives. In this regard, resource access and control are fundamental in member empowerment, in which power is assumed to stem from their joint action to improve their living standards while improving income.

When analysed by sex, 90 percent of the women respondents stated that they created cooperatives to empower their marginalized members, defend themselves against adverse socioeconomic conditions, and increase production output. In comparison, 85 percent of the male respondents stated they created their cooperatives to access credit, make bulk input purchases, and address market failures, as demonstrated in Figure 4.15.

Figure 4.15: Reasons for Coop Establishments by Sex



[Source: Outcomes from SPSS made from field survey, 2020]

In communities where females' involvement in the public sphere is constrained due to gender norms, gendered division of labour, and time limitations, among other challenges, joining collective engagement through cooperatives could grant those women prospects for

exchanging knowledge, making their voices heard, retrieving leadership, accessing training and other responsibilities. As members participate in joint endeavours, they are shaped by core commitments and values, recognizing social norms to behave in a specific manner to overt discrimination. The fundamental values and norms of agents represent rules against which active members' needs and concerns are assessed and appraised.

Additionally, respondents were asked to explain their reasons for joining their cooperative by study areas. Seventy percent responded that they joined the cooperative to increase their income. In comparison, 13 percent held that they became a cooperative member to obtain products or services unavailable to them. Finally, 6 percent said they joined cooperatives to access credit. If most respondents in Baguineda claimed that they join cooperatives to make bulk input purchases, respondents from Bamako were mainly concerned with adding value to their processed goods. In contrast, those from Kati were interested in accessing credit. Table 4.6 better details the major reasons for cooperative establishments in the three study areas.

Members might have different reasons for joining cooperatives. The most crucial thing to retain is that individuals have different needs and challenges depending on their location, income, responsibilities, and sex. They join cooperatives to meet their personal needs, either social or economic and have a better and more successful life.

Table 4. 6: Major Reasons for Establishing Cooperatives by Study Area

Provinces	Reasons
Baguineda	- Address market failures -Bulk input purchases - Economic development
Bamako	- Improving their processing skills -Adding value to their products -Provide needed services to their members
Kati	- Accessing credit, - Cheap storage and transportation -Increase the living standard of their members.

[Source: Outcomes from SPSS made from field survey, 2020]

Any collective engagement involves a range of values built on members' opinions, personal beliefs, experiences, and concerns. These beliefs, ideas, experiences and opinions stem from local communities' establishments and patterns, such as those defining who has control over what, how local people's experiences navigate, translate, and coordinate these patterns of social norms and how they are understood. Associates' behaviours rise within

cooperatives as their agency and awareness skills increase regarding the socio-cultural practices, which usually discriminate against them or a specific group of people.

This study maintains that individuals create cooperatives to solve common social or economic difficulties depending on their community's necessities, satisfy members' needs, and increase their production or living standards. Hence, individuals engaged in economic activities through cooperatives to increase their benefit. Any corporate activity requires profit; therefore, considering the adverse socio-economic conditions that farmers in Mali face, they regularly establish cooperatives with clear objectives and missions to solve their problems based on their lived experience.

Even though most respondents made positive claims entitled to their engagement in cooperatives, they also identified management issues they faced after joining the collectives. Regarding the issues, participants were asked to explain if they knew of any cooperative that had been closed or disbanded. They were further inquired to clarify the reasons for their closure or disbandment and how they started operating again. Ninety-nine percent of the respondents declared that they did not know of any cooperative that had been closed or disbanded. To better understand the lack of closure and disbandment, the author asked the same questions at the National Directorate of Solidarity and Social Economy (DNPSES), which primarily deals with Mali's cooperative organizations. The survey found that no cooperative has ever been closed by DNPSES, which holds the ultimate right to do so if a cooperative does not fully comply with the OHADA Act. The cooperative's status, leader elections, and terms described earlier are being violated in some cooperatives.

A respondent from DNPSES held that many cooperatives have challenges handling their administrative documents or reporting their yearly activities. Still, they have not received any sanctions from the DNPSES. The author further investigated this lack of sanctions. The head administrative manager, Mamoutou⁵, at DNPSES avowed that:

We cannot close the cooperatives which fail to comply with the cooperative principles as stated by the law simply because of Mali's social-cultural settings. Kinships, families, and parenthood systems are sacred. We are all brothers and sisters; for this reason, we are less stringent with them (Interview at DNPSES on February 12th, 2020).

⁵ The author uses pseudo names throughout the thesis to preserve respondents' anonymity

Regarding shutting down cooperatives, agricultural agents are less punitive. There are fears that they will be judged by the community and even lose respect and consideration from rural people who, in some cases, may be their family members or parents. Additionally, Guindo another officer at DNPSES stated that:

We do not have to close the cooperatives that are not active or not complying with the cooperative principles. The majority of these cooperatives close on their own without our intervention. Those cooperatives failed to inform their agricultural extension agents about their closure or the mismanagement of their organization because they still want to keep their status and take advantage of some eventual opportunities from the government and private organizations supporting cooperative activities (Interview at DNPSES on February 12th, 2020).

Collective engagement alone without effective agency cannot empower members if they fail to adhere to the basic cooperative rules and principles to transform their agents' life choices. Henceforth, collective engagement in cooperatives must be accompanied by agents' willingness to maintain enhanced joint practices to foresee better possibilities within their immediate environment.

Efficient collective engagement can only offer substantial gains in decreasing adverse hurdles members face regarding their socio-economic empowerment. When effectively and responsibly applied at all levels, collective engagement can improve members' livelihoods. Although collective engagement might often maintain a solid base in local patterns, participants are further expected to abide by legal supervision and policies for the cooperative to thrive.

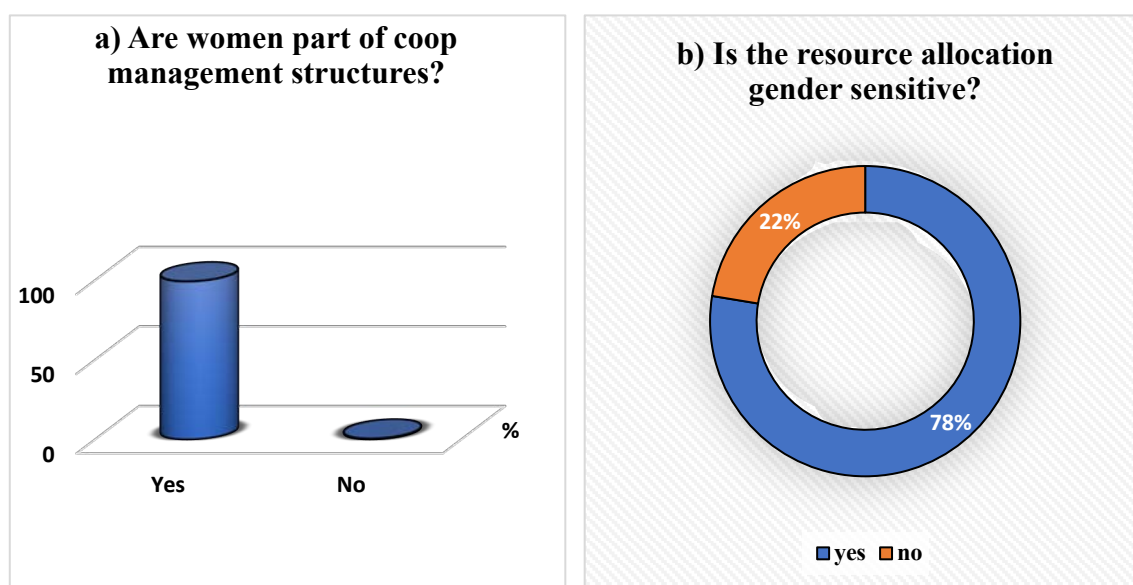
4.8 Gender Needs Within Cooperative Management Systems

Cooperatives were further asked to explain the gender dynamics within their organizations. The survey found that in mixed cooperatives, male members usually serve on the administrative committee while women are chairpersons and vice-chairpersons. Women also help in the finance committee. Female cooperatives sometimes have at least one or two male members out of a hundred members.

Men in leadership positions do not significantly impact the cooperative's decision-making process in mixed cooperatives. They mainly serve in the marketing realm and commute from their villages to other localities for their cooperative's business or administrative purposes. They also help with physical work that women might find challenging to accomplish. Accordingly, female cooperatives contrast with male cooperatives whose members are only men. Male cooperatives do not have a single female member within their group. Men solely make all the decisions regarding the management of their organization.

Social institutions allocate responsibilities to individuals based on their biological sex, and the commonly built gender divisions of labour, obligations, and interests that occur in society affect women. Within mixed cooperatives, men and women’s interactions establish capability, complicity, and power balance between male and female members. These power dynamics are shaped through established agreements of cooperative principles and values, which promote all members’ democratic and equal participation in group activities.

Figure 4.16: Women’s Representation in Cooperative Management Structures



[Source: Outcomes from SPSS made from field survey, 2020]

As indicated in Figure 4.16, cooperatives were asked if the resource allocation within their organization was gender sensitive. Regarding that question, 78 percent of the 15 cooperatives stated that resource allocation in their organization was gender-sensitive, while 22 percent conveyed the opposite. Resource allocation was not gender-sensitive in only male cooperatives. Both female and mixed cooperatives were sensitive to gender issues when making significant decisions within their organization.

This is an imperative finding; it illustrates that women are more likely to be empowered in mixed cooperatives and only female cooperatives that pay more attention to both women’s and men’s social and economic needs. Female farmers within cooperatives in Bamako, Baguineda, and Kati have more prospects to have land rights, access credit, and benefits from subsidies, seeds, and fertilizer from the government or NGOs through their cooperatives.

In addition to agricultural resources, they also benefit from training and information about input and output prices as cooperative members. Collective engagement in groups has consistent effects on females' representation in cooperative activities in the different study areas. On the one hand, women's participation might enable equality, empowerment, and agency in accessing productive assets while lessening discrimination on the other hand. Women as agents must always hold high levels of consciousness if they intend to transform their challenges into opportunities and become agents of change. Generally, women are usually constrained to abide by cultural practices, which often disempower them socially and economically. Women must thus understand their agency's discernment to gain more power and address their collective needs through cooperatives. Economic and social empowerment is only achievable within a structure of interactions favourable to gender-sensitive policies and regulations within the groups.

Moreover, illiterate female members also benefited from adult literacy programs providing them with opportunities to read, write, become familiar with bookkeeping, accounting, dealing with banks, and taking notes about their financial records and minute of every meeting. On that issue, Safi, one of the respondents in Baguineda, asserted:

Joining the cooperative was the best thing that ever happened to me. Now I can read, write, and even help my kids with their school assignments. Assitan, another respondent, added that: becoming a cooperative member allowed me to increase my income. Now I can access credit at a lower cost with banks; more importantly, I benefit from government subsidize seeds, and fertilizers (Interview with Binkan Cooperative on February 15th, 2020).

Furthermore, Martin alleged:

After joining the organization, I nurtured more respect and attention from my spouse since I have higher revenue now. Likewise, Anta, the group leader, declared that participating in cooperative activities allowed us to have a collective land from the village chief, which was impossible before. More significantly, we were also able to hold a title deed for that land thanks to the help of an NGO (Interview at Yereta ton Cooperative on February 17th, 2020).

If agency grants an individual the freedom to do and accomplish whatever objectives or ideals, they consider essential, women's collective engagement in the cooperatives strengthens their agency skills, as explained by the oral accounts above. Cooperative

involvement bolsters women's agency which necessitates the capability to confront barriers, question or challenge subjugation and deprivation conditions, as entities or together with others, impact and make decisions and be considered in society.

4.9 Chapter Summary

This chapter has two major parts. The first part elaborates on the study methodology, procedures and tools applied in collecting and analysing the data. The survey was conducted in Baguineda, Bamako, and Kati areas. Data collection was overseen by employing semi-structured focus group discussions, interviews, and questionnaires. Mainly structured questionnaires and focus group discussions were administered with five to six cooperatives in each province. A stratified random selection process was used in selecting the cooperative. Personal interviews were also handled with administrative staff in the ministerial departments, private organizations, and NGOs dealing with cooperative movements. A total of 300 members were tested. A multiple case research method was utilized with each chosen case, depending on the cooperative objective of enhancing women's land ownership and access to other agricultural resources. Cooperatives in the rural, urban, and peri-urban areas with statutory and customary land regimes were assessed. Interviews were examined using transcribed audiotapes, and the questionnaires were analysed in SPSS using descriptive analysis, comparisons, and correlations. Cooperatives based on sex and type of activities were assessed to obtain outcomes in the three study areas of Baguineda, Bamako and Kati. The findings were evaluated and compared to the theory of empowerment and agency through collective engagement and bargaining to draw conclusions and make policy recommendations.

The first section of chapter five appropriately elaborates on the research methodology employed in choosing the study sites, the sampling methods, and the techniques used in collecting the data in the three study areas. The section similarly explains the selected cooperatives, provides general information about the cooperative, and the rationale for choosing the three study sites. Baguineda, Bamako, and Kati were chosen mainly because they have a high proportion of agricultural cooperatives in those areas with different tenure systems.

The section also explains the primary and secondary data applied in the survey, including the interviews, the questionnaires, the focus group discussions, and the documents collected in the field. The research mainly involves the triangulation of data using qualitative and quantitative research methods to consolidate the study outcomes. The section also elaborates on the data analysis methods and procedures, the reliability of the data collected, and ethical consideration applied by the researcher while collecting the data.

The second part of the chapter provides general information about the demographic and socio-economic features of the respondents involved in the survey. The survey assesses all the independent variables related to individual respondents of the analysis, i.e., their location, age, educational attainment, gender, marital status, household size, and agricultural experiences. This information is essential in understanding the cooperative memberships, income, and amount of farming inputs and output employed. Most respondents were between 19 to 65 years old and lived in rural, peri-urban, and urban Baguineda, Kati, and Bamako areas. Eighty-seven percent were married with no primary education level. They live in households comprising 6 to 13 individuals, agricultural production being their dominant activity.

The second section also delved into the participants' land access and ownership by sex, the number of years settled on that land, and the type of crops cultivated by each household. Participants own and access land distinctly based on their location, sex, and tenure systems. The average land size used by individual males was around one to two hectares of land. Generally, women had less than one hectare of land in all three study areas. They were usually provided half a hectare for market gardening purposes, while men possessed larger plots of land for cash crop production. Most participants inherited their land from their fathers or husbands and laboured their fields for at least ten years. In Baguineda, respondents benefited from the OPIB irrigation schemes. Farmers in Baguinda usually hold one or two hectares of land from the OPIB offices, which offer them prospects to conduct irrigated farming and their traditional plot, which they received through customary leaders, which they cultivated during rainy seasons.

Additionally, the chapter explored the institutional characteristics of the surveyed cooperatives, mainly their establishment, classification by sex, coverage, and ownership. All the cooperatives were formally registered groups with the national or local DNPSES, controlled and managed by their associates. They ranged from male cooperatives, female cooperatives, and mixed cooperatives. Female cooperatives were the dominant type, as the survey aimed to find out how cooperatives enhance women's access to agricultural resources.

The section similarly highlighted the cooperatives' elections and terms, structures, the members' understanding of their organization goals, participation, relations with other cooperatives, and their criteria and reasons for joining the group. Of the 15 cooperatives interviewed, 50 percent of the overall sample population alleged they chose their leaders by consensus, implying that they chose them based on agreements set by the members themselves. Furthermore, 37 percent of the interviewed members elect their leaders by vote as Mali's cooperative law and regulations requested. And finally, 14 percent said they chose their leaders

based on their age. For cooperatives that choose their leaders by vote, the survey reveals that they were elected for two to five years depending on the member's agreements. While most cooperatives in Bamako comply with the OHADA principles, others in Baguineda and Kati are not.

Regarding the cooperative structures, 80 percent were simplified cooperatives, while the remaining 20 percent were cooperatives with a board of directors. There are many cooperatives in Mali; regardless of the form of the organization, each had different management boards in line with the Cooperative Act. In addition, 80 percent of the respondents claimed to clearly understand their cooperatives' criteria and goals. They also hold accountable relationships with other cooperatives for training and exchange purposes.

Finally, the chapter elaborated on members' main reasons for joining and establishing the cooperatives, the gender needs within the group, and the challenges faced by the organization and its management systems. Associates had different reasons to join or start cooperatives in all the study areas. Most of them contended that they entered or established cooperatives to face market failures and defend themselves against adverse socio-economic conditions, for economic development, and to increase the living standards of their members. Gender needs were considered in all the cooperatives, yet particular attention was given to women's needs in female and mixed cooperatives. Lastly, many cooperatives faced challenges in managing their administrative documents, regularly reporting their activities, and finding access to infrastructure and incentives necessary to boost their endeavours.

CHAPTER 5: WOMEN'S MEMBERSHIP IN COOPERATIVES AND AGENCY IN THEIR LAND OWNERSHIP AND ACCESS TO AGRICULTURAL RESOURCES

The availability and accessibility of agricultural assets affect productivity, marketing, and decision-making among smallholder farmers. Farmers who retain resources appear to produce more and sell their products at better prices than farmers who do not own resources. This chapter presents and analyses the impacts of members' participation in cooperatives. The main aspects examined in this section involve land ownership, access to credit, equipment, seeds, fertilisers, and water.

The data provided in this chapter is primarily based on the author's fieldwork outcomes in the three study areas. As previously explained, the survey conducted in Baguineda was gathered with the assistance of OPIB in identifying and conducting interviews, questionnaires and focus group discussions with cooperatives in the area. Secondary data from the OPIB annual reports and activities with cooperatives were also used. Regarding the Bamako case study, the primary data were mainly obtained from cooperatives with the support of the National Department of DNPSES. Secondary data from the DNPSES, the Ministry of Agriculture, CNDIFE, and CNOP were additionally utilised. As for Kati, the primary data were gathered through interviews, questionnaires, and focus group discussions with the cooperatives with the support of the local DNPSES and the Chamber of Agriculture of Kati. Secondary data was also collected and employed from these two departments.

This chapter mainly deals with the cooperatives' means to access and own land in the fifteen survey cooperatives in urban Bamako, rural Baguineda, and the Kati areas of Mali. Bamako and the two rural areas for the fieldwork were chosen because Mali's legal system acknowledges statutory procedures alongside customary land tenure systems.

Mali differs from other sub-Saharan African countries where the state does not recognise traditional law. Mali's dual land tenure system application is prevalent in urban and peri-urban property allotment practices. Henceforward, Baguineda, Bamako, and Kati can exemplify the shortcomings and benefits of formal and informal property rights in diverse land tenure systems and cooperatives' implications in owning and accessing land in this dual system. In this vein, the chapter reviews the strategies used by cooperative members to retrieve and hold plots in various land tenure systems in the three case studies through a gender analysis approach. Gender analysis examines the roles and characteristics of each sex. Gender norms and social relations between women and men vary according to societies and times. In most

communities, they remain primarily built-in bias practices against women, particularly regarding resources access and control, political and economic participation. Understanding how women gain access and control over production resources in these complex systems around gender norms, patterns, and relations in societies like Mali remains an important study area.

The chapter further elaborates on the methods and procedures used by cooperatives to improve their member's access to agricultural resources. The section also highlights members' management levels in the grassroots organisations that encourage or hinder admission to agricultural resources in the selected cooperatives from participants' oral accounts.

5.1 Access and Ownership of Plot in Formal and Informal Land Tenure Systems

The land governance framework is a critical element in determining whether and how individuals, communities, and other actors can acquire rights and control over land and other natural resources. As highlighted in the literature, many land tenure issues arise due to weak governance. The attempt to resolve these issues depends on the quality of management.

In Mali, there are two significant types of land tenure systems. One is formal, and the other is informal. The formal tenure system is made of written law and is instituted by the government. In contrast, the informal tenure system is based on conventional consensus established by local communities and managed by customary leaders. In this regard, land acquisition is made in two ways in Mali, depending on whether you are in formal managed areas that benefit from improvement, like irrigation services from the government.

Examples of managed areas in Mali are the Office du Niger (ON), Office de Développement Rural de Selingué (ODRS), or Office du Périmètre Irrigué de Baguinéda (OPIB). Managed areas are generally areas where intensive farming is practised, especially rice and extensive market gardening. The managed site is under the State's authority control through its technical services and managerial organisations (ON, ODRS, and OPIB).

The delivery of the formal land acquisition act is the responsibility of the local governments. In the statutory tenure system, the state is the most crucial player in facilitating access and ownership of land under formal rules. The state allocates available land for farming or housing purposes in urban, peri-urban, and rural areas through its local institutions based on statutory tenure rules. This vital role of the state is evident in Mali. For instance, Mali's government has developed a legislative framework through the "Code Domaniale et Foncier" CDF, the Land Law, and the "Loi d'Orientation Agricole" LOA, the Agricultural Orientation Law with ON, ODRS, and OPIB to manage land access and supervision for farmers on vacant public lots.

The second type is land acquisition in the non-managed area, which are areas that did not benefit from any improvement system from the government and are not supervised by any organism. Non-managed spaces are allocated for the housing or farming of dry crops such as millet, sorghum, and peanuts. In the traditional tenure system, land access is managed by the village chiefs and customary leaders within the boundaries of their localities.

In customary land rights, land use and disposition are governed by conventional traditions and norms. In this system, village chiefs distribute land to community members or households. Land allotment differs on numerous factors such as age, inheritance, marital status, and connection with the community. In Mali, formal registration of claims over land is more complicated. People usually get access to land by securing use rights through traditional systems, gifts or deals among villagers or landowners. Land acquisition in non-managed areas remains the common type of tenure system inherited from the pre-colonial time and practised by 80 percent of farmers in rural communities.

On the one hand, in the non-managed areas, the prefect and the mayor are entitled to issue plots; on the other hand, customary leaders can also allot plots. Yet all lands (managed and non-managed) in Mali belong to the state, ultimately controlling the land and its resources. It is in this complex tenure system that people acquire land across the country. In what follows, the chapter will elaborate on the process and methods of land acquisition of cooperative members in the study areas.

5.1.1 Case of Baguineda Cooperatives

In Baguineda, statutory and customary types of land tenure systems are practised. On the one hand, farmers can work on managed areas from the OPIB Irrigated Perimeters of Baguineda, an irrigation scheme owned and controlled by the government. The OPIB was established in 1927 by the French colonisers to improve irrigated farming aimed to meet the colonies' interests. It has remained a government control agency after Mali's independence in 1960. The government fundamentally holds ownership and authority in managing the OPIB land. In this area, farmers who own land need to pay water fees to the OPIB office based on the size of the farm cultivated and are entitled to title deeds recognised by the state. Usually, farmers have a lower amount of irrigated land from government institutions. Within the OPIB irrigated area, the average plot size per individual farmer varies between one to two hectares of land, generally used for rice and vegetable gardening production.

On the other hand, farmers in Baguineda also acquire non-managed land traditionally from customary leaders or through inheritance. This land does not have any legal documents

and is used for millet, corn, and peanut crop production. Farmers, however, can acquire title deeds to the traditional plot by following legal procedures. Most farmers preferred not to do so due to the expensive costs and lengthy procedures for land formalisation. Accordingly, in Baguineda, some lands are owned legally in the managed areas (within the boundaries of the OPIB irrigated zone for farming purposes), private legal properties (entities with title deeds for housing purposes usually common in Baguineda city), and traditional farmlands in non-managed areas (through land commander and customary groups with no legal documents). The conventional land tenure system remained the most widespread type of tenure in the area.

The survey found that most landowners in the OPIB are heads of households. In all seven villages, women farmers have fewer opportunities than their male counterparts to access irrigated land. According to 85 percent of the women interviewed in Baguineda, men had distributed all the land among themselves. They only received small pieces of land from men to contribute to family expenses over market gardening activities. Women's principal means to access land remains personal borrowing from traditional landlords. Females are underprivileged under the conventional tenure rule, which considered their farming activities supplementary and denied them the right to own land (Diallo, 2021).

The chief of the village Bakary in "Nieta" cooperative contended that only widows could own land by themselves, and married women must cultivate their spouses' plots. In cases where widows cannot inherit properties from their partners, they might gain access to the farm by asking one of their male relatives or a cooperative to approach a traditional landlord and plead for them. The cooperatives intercede as a mediator between underprivileged women and customary chiefs in such circumstances. Accessing land through traditional landholders in rural communities is considered suitable for cooperative groups. Nevertheless, most respondents stated that they desire to operate with administrative officials in the OPIB as traditional landholding does not guarantee their formal land ownership. Land deals between customary landholders and farmers are verbal, and smallholders use rented land until customary landlords want to cultivate it or build a house (ibid, p. 119).

As a result of land shortage and multiple land systems, residents have developed many techniques for accessing and owning land. The primary fear of women farmers is that urbanisation is quickly changing rural tenure systems. During this study in Baguineda, the author noticed that land access was more complicated where the pressure on the land resource was high. Marginalisation and sometimes exclusion of women and other vulnerable groups such as the young and widows were also prevalent. For example, in the irrigated zone, access to land is getting more challenging as households expand; yet the amount and size of irrigated

plots remain the same. Consequently, some families now rely on properties as small as 0.25 ha for their livelihood activities. In this situation, women can find themselves utterly dependent on their husbands, and young men can no longer expand their households as there is not enough space for them to establish their own families (ibid, p. 120).

In Baguineda, the author found that most women had no titles to plots despite the government's policy of equal access to irrigated fields. Nevertheless, women in some cooperatives could access some communal land from the OPIB due to their collective engagement. This will be further explained in the following sections. Cooperative members encounter obstacles in accessing land as individual farmers; nonetheless, the benefits of being a cooperative member improve their prospects of obtaining extra plots and defending their existing tenure rights. The primary means of accessing land among the cooperative members are borrowing customary lands from village chiefs or traditional leaders.

5.1.2 Case of Kati Cooperatives

Unlike in Baguineda, there are no state-managed areas or irrigation services in the Kati areas where the survey was conducted. However, both formal and informal tenure systems are practised in Kati. Generally, farmers gain admission to plots from their families through the lineage systems managed by traditional methods. Accordingly, farmers have access to land through conventional practices from the village chiefs or inheritance in rural areas. Acquiring land from other representatives than the village chief or his family, such as from the head of households in the community, is another popular method of accessing land. Gaining access to land pursues different traditional tenure practices. For example, an individual desiring to acquire land brings cola nuts or other traditional gifts to the village chief or to the conventional landlord to appeal for a piece of the plot. Giving gifts to traditional landlords offering their plots to users remains essential. Gifts have a traditional significance. Traditional landlords sometimes perceive such gifts as a sign of commitment and companionship.

When the person requesting the plot belongs to the neighbourhood, the landlord allows entry to his land without approval from the village's chief. Nevertheless, when the individual requesting the plot is an outsider or does not belong to that community, the landlord requires permission from the village's head and other family leaders of the community. Authorising property-utilization rights amongst community representatives is a widespread ritual in Kati. This practice is shared across Mali in agricultural communities where land has a significant social function.

While in urban Kati areas, wealthy and middle-class residents acquire title deeds through legal systems for their plots which are generally used for housing purposes. This practice is prevalent in urban and peri-urban Kati areas. Wealthy retired government officials often bought land through formal systems in the peripheries of Kati, which they used for agriculture or livestock farming purposes. Individual farmers also borrow or rent statutory plots from wealthy landowners to conduct their farming activities at a fee determined by their agreement; however, this method is less common.

Land deals among farmers remain verbal, and the uncertainty of land tenure is soaring. Farmers in Kati are anxious about the municipality trading their farming plots for housing purposes to wealthy residents in Bamako. Since early 2000, Kati has experienced speedy urbanisation due to its proximity to Bamako, the capital city. Currently, the peripheries of Kati are hugely residential as many people are acquiring land for building houses through formal land tenure systems. As a result, numerous farming plots are being inhabited for housing, leading to disputes amongst indigenous family memberships, kinships, and the states.

Local municipalities could claim the lands which have usually been cultivated by farmers over a conventional tenure system for urbanisation purposes at the expense of residents. Consequently, farming land in the peripheries of Kati is becoming risky as the government possesses ultimate control over land and has the authority to grant it to whomever it considers to be worthy. The plots farmers have grown for years, which they received from their ancestors, are now being taken by the state. In most cases, local municipalities collaborate with the government to seize plots from farmers under the guise of expanding community development projects such as building hospitals, schools, and urban markets for rural residents.

According to the statutory tenure laws, all land belongs to the state, yet land remains managed by the village chief and traditional leaders in practice in most farming communities. During an interview conducted in the Dabagana cooperative on February 17th, an older farmer revealed that he scrubbed his farming land. He requested approval to utilise his property from the community head and customary clan. He was uncertain whether he must acquire permission from the local municipality to use his property. This implies that confusion surrounds land access in Kati areas with the coexistence of the statutory tenure system and the customary one.

Disputes around texts and their implementation with customary practices are at the heart of land issues, with two types of law coexisting: customary and statutory. Under statutory tenure systems, all land belongs to the government, which has the ultimate ownership rights. Under its policy of promoting agribusiness and urbanisation, the government is grabbing agricultural plots from farmers. This results in enormous consequences for the local population,

mainly women. This land-grabbing process is often accomplished without prior consultations with the farm owners. Besides, the victims also do not generally benefit from any compensation from the government. Accordingly, Mr Guindo⁶ from the Chamber of Agriculture in Kati alleged that:

If building infrastructure is more crucial for rural development, employment creation, and economic growth, farmers who have their land seized usually do not receive any compensation from the government (Interview at Kati Chamber of Agriculture, February 7, 2020).

This constitutes a blatant violation of the AOL, which stipulates in its Article 81, Section 2 that: “no individual or community can be forced to cede their land unless it is for public use and in exchange of a fair and prior compensation” (LOA, 2006). It is worth noting that the lands on which these rights are vested are part of the private domain of the State (Code Domanial et Foncier, 2000). As already mentioned, the state may expropriate land for public utilisation purposes. In this case, customary rights are considered mere rights of use and are therefore not entitled to compensation. Even if the leases can be revoked and the land can be taken back from investors, the laws make the state the sole owners of all the properties.

Land scarcity in Kati and the intersects of different land tenure systems thus generate many approaches to access plots. Cooperative members in Kati encounter similar land challenges as individual farmers in Baguineda. Like in Baguineda, the problem of women’s land ownership amongst individual female farmers in Kati remains a challenge. During the survey, issues related to land ownership and access were underlined by many respondents. Facing various challenges around land tenure systems, cooperative members in Kati gain access to land via multiple approaches. Some cooperative members hold private plots with statutory tenure systems (land with title deeds). At the same time, the majority, 85 percent of the respondent, access their land through customary tenure systems (land with no formal documents). So conventional land tenure system remains the standard type of land access among cooperative members in rural Kati areas. The benefits of belonging to cooperative organisations are offering farmers some possibilities of obtaining and safeguarding existing land entitlements and accessing other agricultural assets.

⁶ The author uses pseudo names throughout the thesis to preserve respondents’ anonymity

As an illustration, on the one hand, some wealthy cooperative members in Kati apply for title deeds to their plots from the local municipalities to formally protect their usage rights. This percentage was lower, with less than 10 percent in the survey cooperatives. These wealthy cooperative members who hold enough plots formally often provide parts of their lands to other memberships during the rainy season when they are busy carrying out other activities than farming. On the other hand, most of the cooperative members, approximately 85 percent, still rely on traditional landlords who provide access to plots to other members of the cooperatives in need. In this regard, cooperative leaders intervene as intermediaries between traditional landlords and members who rent fields to conduct farming activities.

The extent of formal land access amongst the cooperative members in Kati is somehow less if contrasted to Baguineda cooperatives. For most farmers in Kati, the security of tenure is reliant on traditional landlords who do not hold any legal rights over their land. The primary method of accessing land among cooperative members is traditional land access from customary leaders in rural Kati. The plot utilised by cooperative members belongs to the village's chief or the traditional family unit that established the community.

The benefits members receive by joining the cooperatives go beyond increasing their access to land. They also have other advantages to being a member. Even though cooperative members in Kati do not have access to communal land from any government institutions, they benefit from other advantages like social empowerment, better access to credit, and improvement of household relationships, among other benefits. Accordingly, one of the respondents said:

Among the economic advantages earned by the cooperative members, women have achieved unity. This has enabled them to develop strategies for meeting their household demands and expenditures. It also provides them with aspirations of accomplishing collective initiatives for members' empowerment. Other respondents added that our cooperatives offer us opportunities to improve our income-generating activities by creating collaborative exchange platforms where members' fundamental needs and concerns are addressed, said Karim (Focus group discussions at Univers des Animaux, February 10, 2020)

Furthermore, Saran from Bincady Sabouynouman cooperative claimed that:

Upon entering the cooperative, I now feel inspired because I understand that women can achieve whatever men can. My husband is more caring and thoughtful toward me. Because I was able to support him with his business from the money

I made from the cooperative (interview at Bincady Sabouyouma Cooperative, February 15, 2020).

The statements mentioned above denote the degree of self-confidence women in Kati gained after joining the cooperative. Their membership provided them with improvements in their household relationship.

In addition, the survey also found that most cooperatives in rural Kati are fiercely resistant to local government trading their property as their income and household livelihood depend on their land. Accordingly, most producers in Kati contended that land supervision and management should be the community leaders' tasks. Respondents in Kati believed that traditional leaders accurately understand the neighbourhood's experiences, beliefs, and property rights as they effectively oversee land access and management for centuries through conventional practices.

Based on these findings, the study argues that when compared with Baguineda cooperatives, none of the cooperatives in Kati benefited from any formal collective land from any governmental institutions for agricultural purposes. Most members use the land they inherited from their grandparents with customary authorities' permission. This is because the Kati areas where the survey was conducted did not have any public irrigated land from any government institution, as was the case of OPIB in Baguineda. In comparison, the cooperatives in Kati help their associates acquire informal agricultural plots from other members by signalling unused farm accessibility to dispossessed cooperative members and offering them contact with traditional holders, the chief of the community, and other associates. The widespread method in attaining plots remains individual farmers approaching landlords and requesting permission to utilise their parcel.

5.1.3 Case of Bamako Cooperatives

Unlike Baguineda and Kati, the dominant land tenure system in Bamako is a statutory one. In Bamako, cooperative organisations conveyed that land disposal or access is not their most critical concern. The land is not the main apprehension for cooperative members in Bamako, who are mainly engaged in marketing and food processing activities. Cooperatives usually operate on the land or facilities of one of their members.

In contrast with Baguineda and Kati, most cooperative members in Bamako could afford to buy land following formal procedures, as cooperative activities are not the primary jobs for members in Bamako. They are engaged in other activities like office work, entrepreneurship activities, working with NGOs, or are retired government agents. In one

instance, a cooperative of retired officials holds 10 hectares of land in peri-urban Bamako areas, which they bought from their personal means.

In this regard, Bamako cooperative members never felt intimidated by expulsions as they generally feel secure on their property. Lands or property held by most cooperative organisations in Bamako have title deeds. The informal or customary tenure system is less common in the capital city due to urbanisation. However, some cooperatives surveyed in Bamako seek to obtain community administration assistance to build formal facilities for their agribusiness activities.

Equally, cooperatives in the capital city acknowledged that public administration must provide cooperatives with agribusiness development skills through expert guidance. Cooperatives in Bamako are eager that the government will carry out policies to provide easy and accurate entry to infrastructure and facilities in urban areas.

Their fundamental concerns lay in their inadequate infrastructure and aptitudes to conduct their activities. Another challenge remains to create a database with public actors (official leaders, community leaders, cooperative members) offering practical solutions to their concerns. Members' engagement in cooperatives in Bamako is often a response to addressing these challenges.

Cooperatives in Bamako also stated that they face economic hardships, insufficient market access, inadequate infrastructures, and less access to modern equipment. For example, access to credit remains a challenge for most members who believe that they are often not welcome in financial institutions or that their voices are being ignored on that issue. Initiating projects that grant women prospects to carry out their activities autonomously through better access to credit remains vital for economic empowerment in Bamako.

5.1.4 Differences and Similarities in Land Ownership in the Three Study Areas

The analysis mentioned above in the three different surveyed areas uncovered that lack of access to agricultural inputs, mainly land in rural Baguineda and Kati areas, compelled farmers to coordinate themselves in cooperatives to safeguard their livelihoods. It was noticed that tenure safety was not a prerequisite for members to enter cooperatives in Bamako. The groups' intensity and method of accessing and owning land among farmers' and entrepreneurs' groups in Bamako differ from rural areas. Land ownership and access are not a priority for associates in Bamako. The rationales for members not facing land issues have two explanations. Firstly, urbanisation reached the district as it is the capital city of Mali. Secondly, most cooperatives members have safe access to land instituted on statutory regimes. While in

Baguineda and Kati, land access and ownership were important to cooperative members. As a result, cooperative members in Bamako, Baguineda, and Kati have different ways to access land.

Table 5.1: Cooperative’s Strategies to Access Land in the Study Areas

Location	Main Strategy of Access	Land Regime
Baguineda	Mainly inheriting, borrowing, and a few renting cases Some owning	Customary= with traditional leaders Statutory = with OPIB
Bamako	Mostly buying, owning Few renting cases	Statutory= with government offices or landowners
Kati	Mainly inheriting, borrowing, and a few renting cases	Customary= with customary chiefs

[Source: Author based on own study, 2020]

Table 5.1 summarises the procedures of land access in the study areas. Cooperatives in Baguineda and Kati areas share many similarities. For example, the customary land tenure system is the dominant practice in both areas. In both regions’ farmers have access to land via inheritance, borrowing, and renting. However, Baguineda has a statutory tenure system where farmers own land from the OPIB office. In comparison, the dominant land tenure system in Bamako is statutory. Generally, residents in Bamako own land over buying and renting.

Despite the proximity of the two study areas to the capital city Bamako, variation in land ownership systems remains. There are two main explanations for this. Firstly, Malian communities are not homogeneous even though some similarities are found; each group has its own established patterns and norms regarding the family establishment, structures, social interactions, and resource management among community members. Often, disparities in land access and control are found within the same community. For example, land access is based on statutory tenure systems in urban Bamako areas. In contrast, in the peripheries of the capital city, people can access land through customary tenure systems.

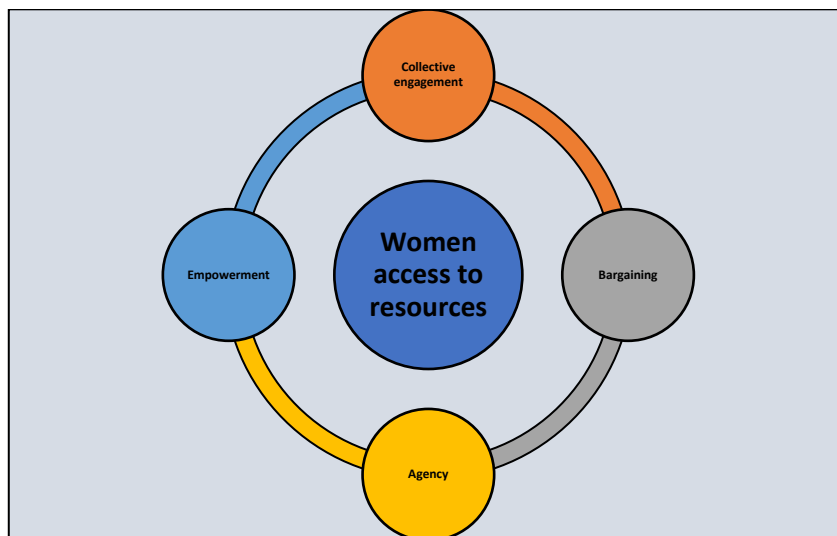
Secondly, the differences in land tenure systems between the study areas are also because the Baguineda area benefited from a managed or irrigated site (OPIB) overseen by the government. All the land in the OPIB areas is totally under state control. Most of the households in this area have access to some irrigated land. Besides this, they also maintain access to their traditional plots, which they acquired from inheritance or through customary tenure systems. While in the Kati area where the survey was conducted, there is no irrigated area managed by the government for agricultural activities, farmers in Kati rely on traditional landholding

systems through customary leaders or families for their farming activities. They also rely on rainfall during the rainy season and on wells and streams during the dry season for their market gardening activities.

5.2. Women’s Membership in Cooperative as Agency in their Resource Access and Ownership of Plot in Formal and Informal Land Regimes

As explained in chapter one, this thesis examines the impact of women’s participation in Mali’s cooperatives on their overall empowerment. How were the cooperatives created, administered, and what reasons inspired women to join cooperatives? What type of transformations did the cooperatives’ involvement add to women’s life regarding their personalities, capacities, responsibilities, economic and social status quo, political influence, and attainments regarding those aspects? To answer these questions, the survey adopted a conceptual framework based on existing literature on how groups of people lead acts through cooperation, negotiation, and agency, which are essential aspects of empowerment and can promote collective change. The concepts of women’s agency and empowerment through collective engagement and bargaining as indicated in Figure 5.1 will be utilised.

Figure 5.1: Synopsis of Theoretical Frameworks



[Source: author based on theoretical frameworks, 2020]

How women from different cooperatives in diverse social, economic, or cultural backgrounds, of varying status and individual features, bargain with their milieu to draw their members’ awareness and increase their resource access is predominantly central to this study.

The following sections will elaborate on the scope and nature of agency and empowerment achieved by women through collective engagement and negotiation. In doing so, we will assess how cooperative memberships enhance women's access, control, and ownership of land, credit, market, equipment, and decision-making in Mali. Being knowledgeable about the theoretical frameworks previously discussed in chapter one, the analysis will adhere to feminist theories on agency and empowerment, seeking insight and practical applicability of collective engagement and bargaining power role regarding women's better access to farming resources in agriculture. Agency and empowerment can lead to socio-economic progress when efficiently managed by women as agents of change.

5.2.1 Case of Baguineda Cooperatives

Throughout the investigation, it was noticed that women generally work independently in remote rural areas, which makes their access to services and products inaccessible. They also perform at a lower capacity and earn minimal wages in the informal economic system. Plot ownership was one of the crucial reasons farmers created or joined agricultural cooperatives. Land frictions in rural neighbourhoods compel female farmers to unite themselves to safeguard their incomes and livelihood activities.

How does being a cooperative member benefit women socio-economically?

One of the impacts is evident in the area of land acquisition. Three out of the seven cooperatives in Baguineda could own land for themselves as a cooperative, while the remaining four cooperatives have agreements with traditional landowners through negotiation. Women cooperatives have effectively lobbied the local government to access public lands formally from OPIB for farming purposes. Following these lobbying processes, three of the seven cooperatives could own 1 to 2 hectares of land from the OPIB office for their collective use (Diallo, 2021).

Accordingly, Marama⁷, one of the cooperative members of “Yiriwa ton” noted that:

I now have access to communal land by participating in this cooperative, increasing my monthly income. Before joining the organisation, I had no regular income (Interview at Yiriwa ton cooperative on February 12th, 2020).

⁷ The author uses pseudo names throughout the thesis to preserve respondents' anonymity

Ba Fanta, the President of Kofeba, also held:

Within a few years of its creation, our cooperative has advocated for women's land inclusion in the community and advanced gender equality since women have fragile land ownership access beneath both tenure systems. One of our goals is to strengthen women's leadership through land access and ownership with traditional elites and government officials and provide our members with real income-generating opportunities (Interview at Kofeba cooperative on February 6th, 2020).

Additionally, Ramata from the same group stated as follows:

After twenty years as a rural producer, I managed to generate sufficient earnings to purchase a house with title deeds and two plots in informal agreements after entering the cooperative.

Aichata, another farmer, added that:

Joining the cooperative allowed me to double my income as I had additional access to communal land. Now I bought a cow and a motorbike. The cow helps me out during land preparation, while the motorbike enables me to sell my products at distant marketplaces with better prices (Interview at Kofeba cooperative on February 6th, 2020).

While the provincial office approves women's collective strategies in acquiring farming resources, the cooperatives continue to lobby the state authorities to secure their share of land and develop clear guidelines for distributing plots among their members.

The oral account above implies that rural women farmers' collective engagement is often efficient in acquiring formal land via legal systems. In this vein, women's membership in cooperatives encourages them to act and address their land issues in the seven cooperatives in Baguineda. The approaches used by the sample cooperatives to provide their members with land for agriculture are not limited to formal networks and agreements. The cooperatives' leaders also support producers in finding suitable vacant land that can be informally used for farming. Cooperatives have enabled members lacking social connections to obtain a plot of land for agriculture, animal breeding, or food processing activities.

Women's memberships in cooperatives help their associates as agents to obtain land access by signalling new land accessibility to evicted farmers and allowing them to interact with traditional landlords, commanders of the locality, and other government representatives.

The group actively hunts land for its members with the government and customary heads inside and outside the village (ibid, p. 120). Joining agricultural cooperatives gives women the economic, social, and political leverage they need.

The survey also found that cooperatives with collective land ownership have at least five years of experience. Most cooperatives in Mali started owning land after the enactment of the AOL in 2006. The seven cooperatives interviewed were created in 2000, which coincided with the advent of structural adjustment programs in Mali. Several farmers joined or created cooperatives to protect themselves against global market challenges (ibid, p. 122).

Women's achievement through joining the cooperative is also seen in capacity building. Their participation in cooperative activities through joint engagement is similarly noteworthy in their empowerment as it nurtures women's agency and capability to confront conventional barriers to access resources. Gaining agency skills is the most crucial mechanism for empowerment when individuals feel repressed by traditional beliefs or practices that encourage their domination within specific communities. In this regard, Sanata, the leader of "Binkady" cooperative, said:

At first, men used to resist our engagement in the cooperative. We overcame several challenges by deciding not to pay attention to what others say and concentrating on achieving our goals. Our cooperative primacies are empowering women and addressing their land issues and access to production factors. Awa, another interviewee, also added that we express our needs and demands through the cooperative, enhancing our self-confidence (Interview at Binkady cooperative on February 5th, 2020).

Accordingly, Bintou a respondent of "Nieta" cooperative, argued:

We used to say yes to anything coming from men. Upon joining the cooperative, we learned to negotiate and say no sometimes. We expressed our concerns. We avowed what we wanted. We learned to convey the challenges related to our land access and ownership. We are challenging the patriarchal and legal structures which subordinate us (Interview at Nieta cooperative, on February 5th, 2020).

Oulematou, another member of the "Sinigne Sigui" cooperative, also stated:

After enrolling in the cooperative, I nurture more ambition and independence. My visibility and status have increased in the family, indicating that "these are the

most significant achievements for me (Interview at Sinigne Sigui cooperative on February 10th, 2020).

Accordingly, Kadia from “Benkady” cooperative said:

The cooperative is our home. We learned unity, self-confidence, and solidarity. We learned from each other and became ourselves. We are now a family. We cannot abandon it. We are now each other’s mothers, sisters, and children. The cooperative environment is the most important thing. Through dialogue and changes, we challenged difficulties related to our resource access and control. Besides, we joined forces with other cooperatives. We shared experiences (Interview at Benkady cooperative on February 12th, 2020).

The oral accounts mentioned above prove that membership in the cooperative sometimes allows women to increase their self-confidence and gain skills to bargain with their community leaders for better access to land. Collective engagement in cooperatives stimulates women’s agency skills and exchanges amongst members, who then develop competencies in bargaining with traditional and government officials for better access to farming resources. Bargaining in a conducive environment allows women as cooperative members to raise their self-confidence to develop communication, partnership, and agreement among themselves as women and with their communities. They likewise enrich their negotiation skills and agency level within the community and at the household level.

Besides the capacity-building dimension, women also benefit from socio-economic assistance from NGOs supporting small-scale women’s activities in rural areas. As an illustration, two of the survey cooperatives benefited from a training centre facility built by NGOs and UN agencies to conduct their activities. Another cooperative also gained a solar panel to perform their processing activities. Membership in the cooperatives has thus provided women with more knowledge about the possibility of their increased access to and ownership of land and continuous support from NGOs and bilateral organisations.

New membership in the cooperatives has grown since speculations about women’s attainment of collective land ownership, and NGO support became known. For the cooperatives that gain access to communal land, the primary criterion for allocating plots is based on the number of years a member has been in the group. As a result, new adherents must not immediately benefit from all the cooperative assets. The cooperative also maintains a tight relationship with the local agriculture bureau in OPIB, local NGOs, and the municipal

government. The cooperative leaders believe that the management of agricultural lands in rural communities should be the municipality's responsibility in collaboration with cooperatives.

Some members are continually concerned that they will lose their plots over the long term since landowners have the right to expand their empty plots or offer them to others at any time. The cooperative leaders of "Nieta, Kofeba, and Diguuya" believe that an official agreement providing title deeds through cooperation with the municipality to increase women's land ownership would be significantly valuable. This will allow women to invest in equipment, increase productivity, and protect the environment since farmers will take more care of the land during their tenancy. On the other hand, other members also do not trust municipal state authorities since community land allocated for farming is being offered to public servants in Bamako even though they were conscripted for indigenous horticulture purposes.

Likewise, the cooperatives' leaders think that working with NGOs to create projects aimed at expanding the capacity building in development programs and as agents in claiming their land access and ownership can thrive. Subsequently, cooperatives in Baguineda have brought NGOs' attention to rural governance, adult literacy, and food processing activities. The cooperatives' fundamental challenge in expanding managerial abilities lies in these three challenges (ibid, p. 122).

For example, amongst all the cooperatives' managers in Baguineda, barely a few individuals understood how to read and write French, Mali's official language, and many farmers only understood Bambara. Members think that in addition to claiming their land rights, one of the main benefits of joining cooperatives is to discuss opinions about community governance, improving their processing activities, and the prospect of acquiring literacy skills that will assist them in getting credit with the government and other private financial institutions. Regarding this aspect, respondents from Benkady cooperative said:

Joining cooperatives was like uncloaking and openly gauging opportunities and consolidating ourselves. It allowed our members to strengthen their skills through cooperation with NGOs and other non-governmental organisations. We benefit from training programs in adult literacy, capacity building, and cooperative management through these organisations. These skills are crucial for our cooperative growth (Focus group at Benkady cooperative, February 23, 2020).

As Kabeer explains, women's empowerment leads to their agency while providing them with resources that turn into achievements. The women's narratives above revealed that their memberships in cooperatives through collective engagement led to increasing their agency skills. Women could expand their members' access to land, shape their capacity-building skills, and benefit from other services from NGOs. For instance, women could enhance their bargaining power and collaborate with customary landowners and local municipalities. As a result, some women farmers expand their ownership of resources or establish an appropriate atmosphere in accessing land informally through negotiation with landowners (ibid, p .123).

Additionally, women's memberships in cooperatives have also allowed them to claim their land rights from local state authorities. At the same time, the women consolidated their relationship with local municipalities and NGOs who play a vital role in enhancing cooperative member skills in governance, literacy, training, and overall group management in overseeing cooperative behaviour towards member empowerment. Through their involvement in cooperatives, women's agency skills strengthen in bargaining with traditional and government institutions to achieve better land ownership and other assets within their communities.

The findings reveal that women's involvement in cooperatives provides them with more opportunities and a valuable position in their relationships with traditional and official landowners. Women farmers have developed a strategy to co-opt conventional practices, to grow and achieve land security either formally or informally through their cooperative memberships as they have become communities' agents. Thus, women's engagements in cooperatives in Baguineda have questioned and challenged the embedded socio-cultural and prevailing male-controlled ideals and systems. By creating their bargaining strategies, women negotiated with the patriarchal and modern structure by opening some room for change about their access and ownership of land in Baguineda.

5.2.2 Case of Kati Cooperatives

There are disparities between women and men regarding acquiring agricultural plots in Kati. As described previously, the primary method of gaining land is personal borrowing from traditional chiefs. Women have less access to land as they dwell with the conventional customary norms and often encounter various challenges in owning land under this system, as in Baguineda.

Women farmers generally cannot own a plot by themselves unless they are widows. Like in Baguineda, the problem of women's land ownership amongst individual female farmers

in Kati remains a challenge. During the survey, questions related to land ownership and access were underlined by many respondents. According to respondents from Jakossoro Ton cooperative:

Land access, let alone its ownership remains the primary concern among smallholder women in our community. With the speedy urbanisation of the region, land access is getting more complicated (Focus group discussions at Jakossoro Ton cooperative, February 7, 2020).

Generally, women acquire land via their husbands in rural Kati, like Baguineda. A man was probed about women's lack of land ownership; he mentioned two reasons. Firstly, he explained that conventionally males and females have different responsibilities within the household established patterns. The husband is the family's sole provider, while the wife must take care of the household and the man's assets. Secondly, he puts that women are not accountable enough to get land by themselves as they are too busy with household chores to handle any land.

Another male respondent was asked about his assessments of traditional land tenure practices versus statutory tenure practices. He revealed that some male farmers hoped the state will carry out reforms to allocate women secure land rights since customary land tenure systems fail. He emphasised the shortcomings that customary laws provide to females; however, he revealed that he would instead abide by his neighbourhood practices, although it might mean fewer privileges for women.

Lack of gender equality in accessing, controlling, and owning agricultural assets is usually centred on repressive and inequitable conventional patterns and prejudices that perceive females' primary responsibility to domestic and reproductive tasks. Due to these unfair social rules and practices, females endure subjugation and discrimination in owning and accessing productive resources. This is a human rights violation. Women are still discriminated against in most rural areas where the survey was conducted. This is due to the established socio-cultural arrangements which failed to consider women as capable agricultural agents. What actions are women taking to address the conventional practices in Kati regarding their land access and control?

The survey found that women members of cooperatives in Kati are challenging their status quo to improve their associates' access to agricultural resources and empower them.

In this regard, Salama, the vice president of Jakossoro Ton cooperative, convened:

Most males stood resentful of their superpower and terrified of being succeeded by females. They are terrified that women are as competent as they are. Many things come up during our meetings. We are trying to change these patterns through self-help and consciousness arising from our members. Awa from the same group stated that: it was discovering new things from each other like we knew about many of those things but had not put them together (Focus group discussion at Jakossoro Ton cooperative, February 12, 2020).

Likewise, Halimatou, the treasurer of Bincadi cooperative, revealed that:

I am inquisitive; why is it so difficult for women to own land? After my husband died, I managed to put the family land under my name. I had to confront his brothers, who wanted to take the land back from me. As cooperative managers, we are attempted to lead by example for other women. Women must recognise that they possess the rights and abilities to change the norms (Focus group discussion at Bincadi cooperative, February 7, 2020).

Correspondingly, Safiatou, the Djiguiya cooperative leader, declared:

Joining cooperatives was like undressing and genuinely assessing possibilities and strengthening ourselves. More importantly, it allowed our associates to intensify their skills and expertise while improving our claims over farming assets through cooperation and self-help (Focus group discussion at Djiguiya cooperative, February 23, 2020).

Assou further stated:

Women empowerment was something fresh for us; now, we perceive it necessary. It is not just how many women are landowners or how many of us will contribute to cooperative activities. Instead, women launch a platform to voice and address their rights to own land and other agricultural inputs. We cannot immediately change the unfair practices against women; however, we can stimulate plans, dialogue, and lead by example. If men believe they are talented, capable, and intelligent, so are we (Focus group discussion at Dabagana cooperative, February 22, 2020).

The above-mentioned oral accounts show that joining cooperatives allow women to get together and address their challenges in obtaining agricultural inputs and services for their

income-generating activities over challenging the status quo. Cooperative organisations boost the ground-breaking capability of their members and provide resources and access to smallholder females, whom, while functioning independently, might not gain from these prospects because of their minimal procuring power and lack of valuable assets or socio-cultural impediments. As an illustration, women's involvement in cooperatives helps them acquire land for their market gardening activities with traditional leaders. As was the case in Baguineda, cooperatives notify new land availability to expelled farmers and intervene as mediators between them and the customary leaders to access a new plot of land. The cooperatives are actively searching for lands for their members with traditional owners within their communities. Like cooperative leaders in Baguineda, the ones in Kati also have connections with local officials and dedicate more time to lobbying politicians and state authorities through local DNPSES for their plot ownership and access to other farmed resources.

The cooperatives in Kati also intercede and lobby customary and local government representatives in case of their members' eviction. Expulsions are common as women mainly cultivate on conventional plots, becoming accommodations due to the region's rapid urbanisation. Cooperatives in Kati believe that their groups have helped safeguard their privileges because their leaders will bring unresolved plot disagreements to traditional courts and legal courts to defend their members' interests.

The cooperative members believe that the local government's involvement in land disputes is an excellent opportunity to improve farmers' land protection. The cooperative managers recommended that the state establish legitimate measures to provide agriculturalists with everlasting property usage rights through a "title of exploitation", which will allow farmers to have formally documented papers in the administration of their plots and hold approved records against involuntary expulsions. The land title must define privileges and responsibilities, the length of the lease, the kind of activities and services allowed on the plot, and compulsory environmental and eco-friendly regulations. Accessing agricultural plots through traditional owners remains a common practice for cooperative members. Subsequently, cooperative members desire to operate with government elites since municipal state representatives like mayors can confiscate their land.

As explained earlier, the example of cooperatives in Kati is predominantly governed by a customary tenure regime. The cooperatives' leaders assume that an authorised contract with the municipality to utilise agricultural plots would greatly

benefit them. They believed that it would offer them protected tenancy, bequeathing their female members to purchase farm equipment, improve their production level, and preserve the environment as women farmers tend to take more care of the plot during their occupancy.

So far, the author mainly addressed the issue of women's benefit by being cooperative members: the increase in their access to land, the services they receive, some aspects of self-esteem, and improved household relationships. Then, the question is whether women's experiences in the cooperative have brought about any change in the patriarchal structure setting within their communities, leading to their empowerment.

The survey uncovers that the patriarchal system's influence over women's rights is noticed within only male cooperatives. Generally, females do not contribute to male cooperatives' group discussions in the survey cooperatives in Kati, not because of a lack of concern. But because most men fear that women might challenge the socially established norms by willing to take on leadership roles. Accordingly, Balla from Bincadi cooperative stated:

Women are welcome to enter our group as long as they don't challenge the power relationships within the cooperative or anticipate taking on leadership roles. When women start to nurture and protect themselves more, they intimidate the established regulations and customs, which is not appropriate in our society (interview at Djiguiya cooperative, February 8, 2020)

Likewise, Namory, a member of the Dabagana cooperative, added that:

Societal reforms take time and improving the equitable distribution of productive assets between females and males is not easy. Male leaders do not diligently share the necessity to change their minds and beliefs in this community. Some still perceive women's commitment to cooperatives as voluntary and leisure time after fulfilling their household chores. They believed that the cooperative's objective must be financial, not social (Focus group discussion at Dabagana cooperative, February 22, 2020).

On the other hand, some male members support women's leadership and equitable access to farming resources, especially in mixed cooperatives. They believe that gender equality can be addressed through cooperation between men and women. In this regard, Cisse the head of l'univers des Animaux cooperative advised:

Do we need to question every facet of male privileges? It entails patience, dialogue, and dedication. In this era, we must negotiate with men to drive the

process forward without engendering unnecessary conflicts as we are both (men and women) interdependent (Interview at l'univers des Animaux cooperative, January 30, 2020).

Sidy a respondent from Bincady Sabouyouma cooperative counted:

Instead of pondering women's land ownership and access to resources as a threat to men's power, we must perceive it as a chance to expand household livelihood. Patriarchal practitioners need to become an essential part of gender mainstreaming in asset access and ownership. Our cooperative promotes a win-win situation for anyone involved in the group. Other men in the organisation and I discussed the advantages of men accepting to be led by women while meaningfully contributing to the cooperative activities (Focus group discussion at Bincady Sabouyouma cooperative, February 24, 2020).

The oral accounts above from participants point out that women's involvement and experience in the cooperatives were mostly threatening to the patriarchal structures and thrilling for women. For these reasons, women often establish cooperatives to address their general concerns and actively manage their associates' resources with government authority and traditional leaders.

Women's empowerment within cooperatives is a dynamic process involving collective engagement, cooperation among members, bargaining power, and agency that enhance their strategies in challenging existing power structures. Women's cooperative membership provides them with a strategic life choice to question their lack of access to productive resources. Their ability to access resources or make decisions is primarily influenced by intersected elements such as patriarchal practices strengthened by social or cultural barriers. Cooperative involvement improves women's self-confidence and agency through training programs in leadership, allowing women to address crucial issues about their livelihood activities. Women in Kati effectively use their agency skills; they provide an opportunity structure for their associates to negotiate and bargain with existing structures and systems that hinder their access and control of resources in male-dominated societies. As evidence Fousseuni from Bincady Sabouyouman cooperative argued:

We establish the pattern of collaboration through training and exchanges in our organisations. More females can participate in outdoor activities within our community and express their needs thanks to this initiative. We discussed

important challenges around women's access to resources and enhancing their income-generating activities during our meeting. We believe that women ought to hold individual plots and assets and be embodied in the community's decision-making stance (Interview at Bincady Sabouyouma cooperative, February 14, 2020.)

Likewise, Bintou stated:

Within our cooperative, women became more dynamic and informed about their rights, steering to empowerment pursuits through joint action. Much of our members' activism has been about land rights and finance access. Another issue our associates' address is discriminatory practices against women's access to resources and decision-making in local communities. We hope to incorporate women's needs in community development plans. As farmers and entrepreneurs, we must acquire essential resources to make our agribusiness activities more lucrative (Focus group discussion at Bincadi cooperative, February 7, 2020).

The strategies employed by women in Kati involve the capacity to choose, foster their needs and challenge structural and institutional practices in accessing resources. Although accessing resources might take a lengthy procedure, the surveyed cooperatives lay the ground in mainstreaming gender concerns for women's socio-economic empowerment in Kati. Regarding the concept of agency and empowerment discussed in the conceptual framework section, the author argues that being cooperative members can undoubtedly provide the momentum for women to change the established structures and create a better environment for their economic, social, and political leverage.

The question is whether women's experiences in the cooperative have brought about any change in the structure or management of the cooperative as a group; that is to the issue of collectiveness rather than each individual's perception of their self-change. Cooperative members' lack of land access and ownership and other agricultural resources motivates them to join their efforts with other community members to address the issues.

Women's collective engagement and agency act as a unifying principle for community action, which influences the effectiveness and success of agents' access and control over resources. The agency context is particularly appropriate in examining collective engagement across gender lengths as it highlights the organisations, regulations, actors, and relationships which establish gendered patterns of cooperation. As agents of social change in dominant masculine societies, women are restricted by conventional norms in accessing and inheriting land, which prevent them from expanding their livelihood activities and confine them to

household responsibilities. Women's involvement in cooperatives influences their ability to switch agencies into an engagement.

The survey found that females' collective engagement is progressively addressing this issue. Cooperatives gradually boost their associates' negotiating power and self-confidence in participating in the public sphere and challenging their concerns. The social networks and resources women as agents can gain from the collective engagement are conditional on cooperative leaders' capacity to negotiate within the communities' social networks. The encouragement and joint support that cooperative members provide to each other are vital in facilitating, sustaining, and enhancing their self-confidence. Unity, collective accountability, equal opportunity, and respect for others stand among the necessary ideas on which legitimate cooperatives are founded.

This change is noticed at the group level as members solve organisational issues. For instance, Bincadi members regularly attend cooperative management and training in leadership skills. Mariam, the head of the management department at Jakossoro Ton cooperative, asserted:

We have progressed so much in Jakossoro Ton with women empowerment. Female involvement in cooperatives has changed ideas and created new manners of seeing and doing things in our society. Females are participating in many training and capability-building programs. When a male leader makes an obscene statement about women or if male members do not intend to support our cause, we react. We can now bring up these matters at the meetings before we were too reluctant to do so (Interview at Jakossoro Ton cooperative February 22, 2020).

Women being cooperative members as agents provide them with support to improve their livelihood conditions. This strategy is a turning point in empowering women. Women are creating collective approaches to gaining improved access to resources, benefiting, and owning assets equal to men, which contrasts with the embedded socio-cultural practices. Women develop their capability, reinforce their leadership, expand their competencies and aptitudes, and fulfil administrative tasks. They become part of managerial positions in the groups in both rural and urban Kati areas.

5.2.3 Case of Bamako Cooperatives

Women can hold land by themselves through formal tenure procedures in Bamako cooperatives if they have the financial means. Usually, both men and women are entitled to equal land ownership in Bamako.

Land ownership is not yet the main priority of cooperatives in Bamako, as was the case in Baguineda and Kati. Cooperatives in Bamako are somewhat interested in modern agribusiness facilities to establish their headquarters and oversee their processing activities. Accordingly, they are appealing to the government, NGOs, and other donor organisations with that request.

Cooperatives in Bamako are actively engaged in food processing and marketing activities. Like cooperatives in Baguineda and Kati, the ones in Bamako provide their members with food processing and marketing skills. The groups set requirements on the products of their memberships since they are generally intended for formal commercialisation in supermarkets and overseas.

Picture 2: Processed Foods from Djigui Seme Cooperative in Bamako



[Source: Photo: Taken by the author during fieldwork in Bamako, February 2020]

In this regard, cooperatives in Bamako are helping their members produce quality products which can be marketed in urban and international markets. Besides, they are also linking their members with wholesalers in neighbouring urban markets or supermarkets, offering better prices.

Noumousso from Fasso Bara cooperative asserted:

One advantage of joining the cooperative is how it resolves women's needs collectively while offering common solutions. Fasso Bara women entrepreneurs' roles in food production and processing are becoming progressively noticeable within our communities. Our members are producing quality products for local markets. They also voiced their needs and concerns on how to improve their processing activities during the monthly meetings (Focused group discussion at Fasso Bara cooperative, February 24, 2020).

Likewise, Zeinab, the manager of Djigui Seme cooperative added:

Our cooperative members are gaining valuable skills in food processing and packaging during the training offered by NGOs. This was crucial in adding value to our manufactured goods and accessing better markets. Thanks to this opportunity, we are supporting our families while improving our incomes (Interview at Djigui Seme cooperative, February 12, 2020).

The oral accounts above indicate that women's involvement in cooperative activities in Bamako is valuable and presents empowerment practices forecasting a secure environment to discuss challenges related to their income-generating activities and provide shared solutions to those needs.

Besides the economic dimension, cooperatives in Bamako also benefited from training programs in capacity building, cooperative management, and employment creation. Most cooperative members in Bamako also consider their organisations effective in providing access to information and training opportunities, allowing their adherents to have more skills in processing and marketing their products, investing in equipment, increasing their productivity, and protecting their rights. Cooperatives in Bamako have received processing and business management training from NGOs and private organisations as part of the state agricultural development project directed by the Ministry of Agriculture and local DNPSES. In this regard, three of the five cooperatives in Bamako launched innovative businesses within their groups. They also acquire skills in exploring additional markets while supplying commodities that meet their customers' needs. Accordingly, Fatoumata, the leader of the Djigui Seme cooperative, said:

We no longer fear taking risks and launching new business ventures. The cooperative course of entrepreneurship has vested our members in three ways:

financial safety, expansion of entrepreneurship actions, and improved assistance to the household (Focus group discussion at Djigui Seme cooperative, February 25, 2020)

Thanks to the income I received from the cooperative, I launched my kiosk. Now I take products from the cooperative and sell them overseas at better prices. There is more unity among females in our group; we feel satisfied and united. Some males are also dedicated to gender equality within our organisation, added Safoura (Interview at Benkandy cooperative, January 29, 2020).

Racky added:

Since its creation, our cooperative has joined several training and workshops organised by the government and NGOs in capacity building and leadership. Thanks to these training and workshops, our members gained better skills and are more visible in the community. Members improve their skills and sell their goods in better marketplaces. Another crucial advantage of our cooperation is trading abilities and knowledge with experienced and successful producers and businesswomen. We want our younger members to have role models and references (Focus group discussion at Yereta ton cooperative, January 27, 2020).

Similarly, Nafiassa from Yereta Ton cooperative purported:

Our cooperative hired both formal and informal women employees well embodied into the organisation structure. Through our microfinance activities, women can gain access to cash to perform their income-generating activities and support their households (Focus group discussion at Yereta Ton cooperative, February 13, 2020).

Cooperative members in Bamako believe that the primary benefit of being united is to exchange opinions and the likelihood of gaining admission to credits from the state or other financial organisations as was the case in Kati. Cooperative organisations currently provide their members with microcredit and food processing skills based on domestic and regional standards. Most cooperatives in Bamako operate in the entrepreneurship sector, which offers members prospects and encourages some of the most vulnerable women like the widowed. Cooperatives establish profitable options for disadvantaged women in fields usually undervalued.

Accordingly, Djalika from Binkan cooperative stated:

Our cooperative assists women in direct and indirect employment creation. It generates work prospects by streamlining female members' entry to commercial venture capital, market, credit, legal systems, and essential services and gaining access to these facilities solely tailored to our associates' needs by empowering them to launch and expand their businesses. Our organisation trains women in food processing and business management to accelerate their economic improvement (Focused group discussion at Binkan cooperative, January 30, 2020).

The level of agency and commitment members grant to their organisation activities and the responsibilities and guidelines within the groups influence these costs and gains, as explained by Kabeer in the theoretical framework section. Thanks to their cooperative involvement, women's bargaining power and skills improve due to their joint engagement leading to access and control of resources, including credit, training, and capacity building. Recognising the advantages mentioned above in the oral accounts indicates that members' involvement in cooperatives can be beneficial in constructing successful business endeavours and improving women's income-generating activities. Cooperative engagement further offers members prospects to contribute to decision-making stances, leadership regarding organisation management, and asset supervision.

Suitably, Kone stated:

Although many difficulties in achieving gender equality persist in Mali, the growing membership of women in cooperatives and their contribution to leadership positions are changing the disparity between females and males in accessing assets and their involvement in decision-making (Interview at Agroforestry, February 10, 2020).

Likewise, Jeanne from Benkady cooperative stated:

Thanks to my leadership role in the cooperative, I am now more engaged in local politics and the administration of community matters. We make our voices and opinions heard by participating in public meetings. Since our community folk now recognise our leadership skills, we can pledge for change. We get our opinion heard as agents of change due to our cooperative membership (Interview at Benkady cooperative, January 28, 2020).

Similarly, Asy, the leader of the Yereta Ton cooperative, believed:

Things are emerging; I have more influence, better management skills, and expertise. All females in the community listen to me. Before that, I faced many challenges in visiting households and persuading other women to join our organisation (Focused group discussion at Yereta Ton cooperative, February 5, 2020).

Equally, Tamboura from the local DNPSS detailed:

Cooperatives in Bamako raise women's revenue over employment improvement, increasing their incomes and offering them chances and strategies to be managers through independent membership monitoring. Thanks to cooperative organisations, thousands of female entrepreneurs were empowered. Women have uncovered a path to personal empowerment and promotion over mutual exchanges, addressing their concerns (Interview at the local DNPS of Commune IV, February 15, 2020).

This type of cooperation at the micro-level places each woman at the centre of their own life as an agent to transform and question established patterns related to their inadequate access to credit, decision-making, and governance, thus limiting their socio-economic empowerment. Agency as a process is characterised by identifying the challenging structures that constrain agents' lives change regarding their socio-economic status. Women generally participate in social and economic matters in Bamako and subsequently mediate through their ways of doing things and demonstrate the advantage of being united. Although not unequivocally holding power at the highest stance, the agency level achieved through their involvement in cooperatives over bargaining allows them to convey their concerns, needs, and preferences by harnessing individual and social networks. As evidenced by the oral accounts, women utilised their membership paradigm as agents to improve their economic and social conditions.

It is essential to highlight that most cooperative members in Bamako were educated and knew more about their individual and collective rights than members in Baguineda and Kati. Being in the capital city also adds additional advantages to their easy access to government services. As a result, many cooperatives in Bamako were politically active, as they have connections in public office, at the Ministry of Agriculture, or with NGOs supporting cooperative organisations. The political leverage of cooperatives in Bamako is thus higher than those in Baguineda and Kati, as most Bamako members are educated. They have ties in

administrative offices and dedicate much time urging politicians and administrative staff about their concerns. Members feel that their cooperatives help defend their rights and needs since their managers will take their problems to the next level. Toure from the local DNPSS of commune IV asserts that smallholders and entrepreneurs in Bamako understand their constitutional rights and are more dynamic politically.

What tangible impact do these numerous gains have on women's livelihoods? The survey found that women generally spent their incomes improving their household members' life quality by investing in children's education and other household basic needs. This is prominent in expanding economic growth in the long term and empowering disadvantaged people. Children are essential individuals in any country's development. Although women are not the leaders or decision-makers in strategic positions but as caregivers and household food providers, their role in children's education is essential. The decisions they make daily significantly impact the nation's citizens' betterment.

Additionally, women's interaction with their partners at the household level increased as they gained individual agency, gaining more influence and decision-making power. It shapes women's capabilities to deal with social norms and unequal power relations with existing patterns. The more females gained profits and negotiating power, the lesser domestic violence they faced. This also has a significant effect on other household members, mainly children.

Hence, the role of cooperative organisations in Bamako was to empower their members by expanding their income-generating activities. Many respondents in Bamako stated that their income was adequate to meet their households' necessities since their living conditions improved than their colleagues that were not members of cooperatives. Within the family, access to resources can impact the bargaining power of entities. For example, household heads usually manage family resources and exercise authority over their children and other family members. Studies prove that females who govern and hold power over resources tend to have more decision-making power on household matters.

5.2.4 How Effective is the AOL Applied in the Study Areas?

The post-independent land legislation in Mali is based on the principles of citizen equality, state ownership, decentralisation, access to property through registration, title deeds to land and recognition of customary rights (Coulibaly et al. 2004). Regarding women's land ownership in the post-independent era, it is essential to highlight that women's property rights and control are not homogenous in Mali. An individual's sex, status, education, financial means, and location impact their property rights. For example, women in urban areas such as Bamako

have no discriminatory gauge for housing plots; the sole challenge remains women's financial ability to buy them, which generally remains lower than men, as previously mentioned. In the northern regions of Gao, Timbuktu, and Kidal, where ample land exists, the plot goes to the entity that wishes to farm it. Women farmers in the northern regions encounter no challenges in acquiring farming land. Both men and women hold equal access to land since very few individuals practice agriculture.

Regarding the data of the surveys, the author found a couple of interesting issues regarding women's land acquisition in state-managed and non-managed areas. In managed areas, women farmers are excluded or have limited access to plots due to prejudices about their ability to exploit land efficiently and their lack of financial resources. In non-managed areas, female farmers own a few plots of land at the edge of villages or near their husbands' fields. In contrast, men are allotted reasonable-sized plots to produce various crops (rice, millet, sorghum, sugarcane, etc.) while women cultivate small, less lucrative fields for market gardening purposes (Diallo, 2022).

Among the properties designated as managed, the survey found that most property owners are investors not settled in the rural areas of Baguineda. This implies that the state services allocate lands according to its strategy of promoting agribusiness to foreign and non-rural local investors at the disadvantage of the rural population. It is also essential to highlight the existence of women owners that cultivate large parcels of land by hiring local farmers. These women come from other cities like Bamako. The communities consider them the new investors responsible for their hardships (social inequality, land confiscation, and paid labour).

These findings contrast with Articles 8, 24, 83, and 89 of the AOL. To further understand how efficient the AOL is applied regarding women's land tenure rights as stipulated in current land legislation, the study asked respondents about their land access and ownership in the three study sites. Respondents were asked whether women and men farmers have equal access to agricultural land as stated in the AOL. The interviewees gave positive and negative answers. Thirty-seven percent of the respondents in Baguineda disagree that women have equal access to land, while 33% of respondents agree that they do. In Kati, 67% of the interviewees were pessimistic about equal land access, against 63% of negative answers in Baguineda. In Bamako, 55% of respondents gave negative responses. Overall, 65% of the respondents stated that women's access to plots remains a challenge even though the AOL attempts to address that issue. The results thus reveal that even though most of the active rural population in Baguineda and Kati are women, the bulk of them can only access land through a male relative. Usually, men retain fundamental entitlements over land and its resources. Women still enjoy lesser rights,

mainly regarding land privileges and inheritance, guaranteeing equitable land access between men and women in Mali (Diallo, 2022).

These outcomes also reveal that, while men benefit from land ownership, women only have the right to use or exploit infertile land. Accordingly, most respondents indicated that women have temporary access to unproductive land. Since formal registration of claims over land is more complicated, women frequently get access to land by securing utilisation rights through traditional systems, gifts, or purchases among villagers or their cooperatives. In this vein, a female farmer reported:

We are never denied access to land, but our threat remains access to land with legal documents and the type of plots we are allocated. We constantly change agricultural fields. Our spouses assign us infertile plots of land, which are difficult to exploit, but once they are productive, they repossess them (Focus group discussions at Yereta Ton cooperative, February 14, 2020).

Another interviewee added:

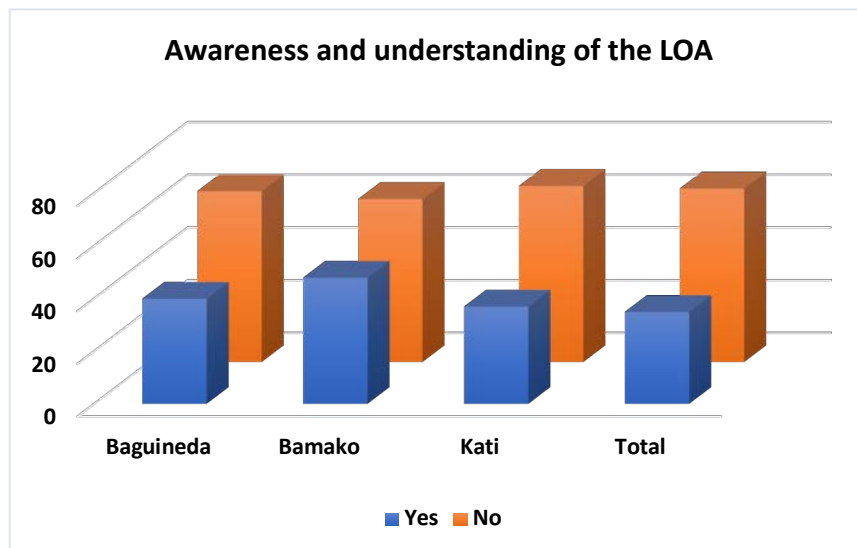
Women farmers still encounter dire challenges in acquiring land titles through formal systems in our communities. Most of us poorly understand the legal land tenure acquisition procedures due to our lack of education and information about these systems. Even the well-informed ones are constrained financially in tackling these procedures, which remain complicated, expensive, and heavily bureaucratic (Interview at Benkady cooperative, February 12, 2020).

The respondents were also assessed regarding their general knowledge of the Agricultural Orientation Law (AOL) and its provisions for women. Regarding their understanding of the AOL, 63% of the respondents affirmed that they had never heard about it. Specifically, the study found that 40% of the respondents in Baguineda had heard about the AOL, compared to 38% of the respondents in Kati and 50% of the respondents in Bamako. In contrast, 65% of the respondents in Baguineda were not aware of the advantages of the AOL, compared to 67% in Kati, and 50% of the ones in Bamako, as indicated in Figure 5.2.

In compliance with the pillars of Articles 8, 24, 83, and 89 of the AOL, human rights legislation, and Mali's constitution, men and women remain equal in accessing agricultural resources. Following the exclusion of small-scale female farmers in land allocation, the AOL, enacted in 2006, stipulates in its Articles 24 and 83 that women, young people, and vulnerable

groups must be granted agricultural land. Approximately 15% of the farming land should be allocated to them on any surface managed by the state and its circumscriptions.

Figure 5.2: Respondents’ Awareness of the AOL in the Study Areas



[Source: Outcomes from SPSS made from field survey, 2020]

In addition, Article 8 of the same text promotes gender equity in rural areas, particularly on the family farm. Article 89 also endorses equitable access to land and other agricultural resources to women, who will benefit from positive discriminatory measures in allocating plots managed by the government and its institutions. Yet, the respondents contended that neither the constitution nor the AOL fully instigated equal land rights between the sexes. Accordingly, a respondent claimed:

Even though Mali’s Agricultural Orientation Law foresees positive discrimination against women, the challenge remains to implement this law. None of the articles of the AOL is effectively enforced regarding women’s empowerment in owning farming plots in state-managed areas (Interview at the Ministère de l’Agriculture, February 2, 2020).

Another interview added:

One of the purposes of our cooperation is to address the discriminatory challenges regarding our tenure rights. Much of our members’ activism has strengthened women’s land rights and access to finance. Within our cooperative, women have become more vigorous and informed about their rights, steering to empowerment pursuits through joint action (Focus group discussions with Fassou Bara cooperative, February 12, 2020).

Another interview said as follows:

Women's lesser access to formal plots through statutory regulations persist not due to the existence of rights protecting them. They continue because of the non-application of these rights by those supposed to implement them. There is a lack of political will to fully enforce laws and policies about women's socio-economic empowerment in Mali (Interview at the Ministry of Women and Children, February 2, 2020).

Despite considering the interests of women and young people as farmers, there is a shortcoming in implementing gender equality in the AOL. Articles 8, 24, 83, and 89, which deal with women's land ownership issues and access to other farming outputs, do not include specific provisions or assessments for women acquiring land in state-managed areas. Although the interests of women and young people as farmers are taken into account, there is a lack of implementation of gender equality prospects. Titles IV and its nine chapters, and V and its eight chapters of the AOL respectively deal with factors of production and output and markets. They do not provide specific provisions or perspectives for women and youth. The information provided in these chapters is crucial for the long-term implementation and promotion of sustainable agricultural development for women and young people.

Additionally, the question of fair representation of women in the mechanisms used to update, monitor, and evaluate the law is not fully addressed. Although the AOL provides rooms and opportunities for dialogue, consultation, and communication to encourage the participation of all stakeholders, women's representation is not governed by measures to promote gender equality. The stakeholders in the agricultural sector identified by the AOL are the State, local authorities, individual farming organizations, farmers, associations, cooperatives, inter-professional organisations, NGOs, and other civil society organisations. They must jointly work to design, implement, and evaluate the AOL. If the AOL grants more rights of land protection to women, it has yet to be applied since power remains predominantly in the hands of men. The adoption of the AOL represents only an initial step since it is now to be implemented. The challenges involved in applying these principles will overturn patriarchal customs and traditions.

For this reason, the mechanism has been supplemented by the provisions of the CDF passed in 2000 (amended in 2002), specifically by the recognition of family farms and agricultural enterprises. It further recognizes the implementation of the land law and the new Malian Agricultural Land Policy (PFA). It is expected to give more weight to customary rights

(already recognised by the Land Law) and decentralisation (implemented in 1996) in land management.

Notwithstanding the principle of equality enshrined in laws and regulations, shortcomings such as recognising customary rights and enforcement provisions remain significant obstacles to women's equitable access to land and natural resources. Moreover, politicians have been reluctant to reflect gender equity agendas in land policies due to the issue's sensitivity. It also emerged that existing texts governing land issues are unknown to the majority of the population. They are often contradictory, with gaps in the text, and written in a language often not understandable to most people.

Despite all these efforts by the government, women are still discriminated against in land management due to socio-cultural constraints preventing them from inheriting land in most communities. This challenge restricts women's contribution to the fight against food insecurity since land ownership is one of the most important determinants of food security. In the farming sector, women are active throughout the agricultural value chain. However, they still lack the necessary means to increase their production and productivity (lack of access to, control over, and ownership of land and means of production, mainly land).

Hence, some interviewees mentioned that policies promoting gender equality in the AOL are not fully implemented in rural areas. Seventy percent of the women stated that they do not know the legal requirements for claiming their land rights. In other words, the legislative and regulatory guidelines, and other texts on land administration in Mali, are unknown to the rural population. This lack of knowledge is explained by their illiteracy, lack of awareness of the texts, lack of representation in land committees, and lack of information and awareness-raising mechanisms on adequate land acquisition processes in rural areas. As a result, awareness-raising mechanisms on the laws guaranteeing women's entitlement to land remain a challenge for small-scale female farmers and the state. Land legislation proposed by the post-independent state is neither applied fully nor applied in some situations as it remains complicated.

5.3 Agency for Change in Women's Access to Resources: Economic Achievement in Accessing Farming Inputs

5.3.1 Land

The land has a significant social function in Mali as a source of life and village formation in rural communities. Its access and management remain essential for livelihood activities. Access to land for men and women varies according to the geographical area. In rural farming communities, the land remains the family's property, which established the village.

Landowners who are settler families allocate their land to farm managers at the village level. The latter share the plots of land among heads of households, who may grant land to their family members. As highlighted throughout the thesis, generally, husbands allocate plots to women. Access to land is often subject to specific social constraints. For example, in Dogon county, as in much of the country, the borrower cannot plant or collect wild fruits from the trees in his field.

In Mali, access to land and other agricultural inputs is mainly based on customary law rather than statutory law. The customary law is usually not conducive for women. Traditionally, women in most farming communities in Mali only have indirect access to land. They typically benefit from plots of land acquired through a third party (usually a man: husband, head of the lineage, other male relatives with the consent of their spouse, etc.) for their production or utilisation but have no control over the resource. Land management and tenure holding discrimination against women are more related to cultural and socio-economic barriers, as most communities do not allow women to inherit the land. Women cannot inherit land in most southern and central Mali agricultural societies. They usually have precarious access to plots mainly located on the peripheries or at the edges of their husbands' farms.

Besides women's limited access to factors of production, the time spent working in their fields is limited due to the gender division of work. Malian societies are linked to tradition and religion as around 90% of the population are Muslim. Contemporary Malian societies are thus based on rules and norms reflecting the country's socio-economic, political, and cultural realities, which date back to traditional Malian communities and Islamic values (Diallo, 2021). These rules and values established patterns and customs for household structures, social relations, and interactions between men and women. They also recognise and legitimise the domination of men as the head of households for family management and resource allocation. Within these systems, women manage complex household duties and pursue multiple livelihood strategies that men do not. Women's activities typically include productive and reproductive roles like ensuring household chores, collecting firewood, and water, caring for family members, etc.

In comparison, men are engaged in more lucrative sectors of the economy, such as formal employment in government or private enterprises, trades, and other informal activities. Men are also the key decision-makers within households (Diallo, 2021). Married women must often obey socio-cultural norms and rules in conducting entrepreneurship activities or joining a collective group. These norms and patterns affect women's educational attainment, access to resources, quality work, and decision-making stances.

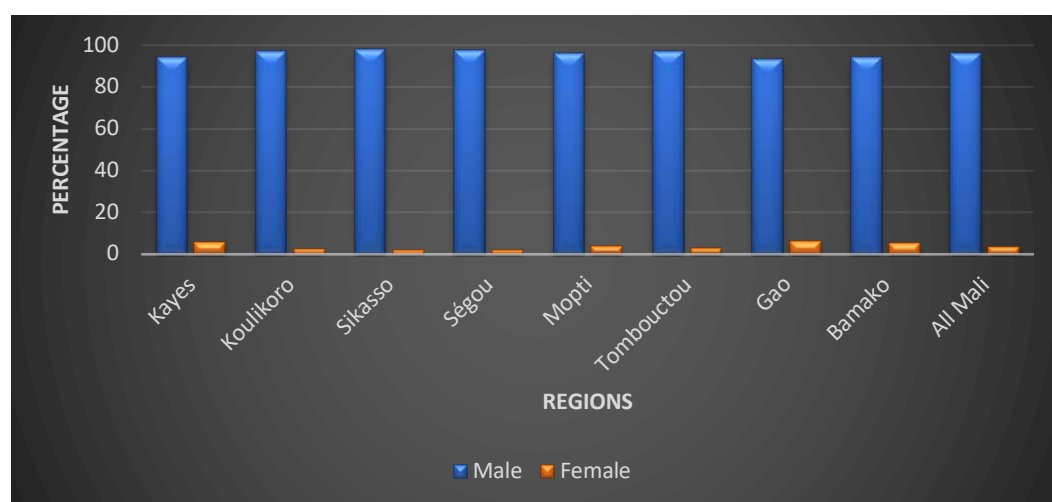
The traditional gender division of labour throughout Mali results in an arbitrary division of agricultural activities between men and women. This division is usually based on traditions and customs. For example, a woman is initially considered a mother and wife responsible for managing the household chores and care work for children and the elderly in most parts of Mali. To be appreciated within their family and community, societal norms require a woman to be submissive and obedient toward her husband and relatives. Likewise, she must be friendly to guests, a good chief, caring, diligent, discrete, and enduring. Deeply entrenched stereotypes bolster social expectations, maintaining gender relations and gender roles across generations. As a result, women cannot fully contribute to productive employment and access leadership positions like men due to these expectations. On average, women spend 7 to 8 hours a day on unpaid care work in Mali, compared to 1 hour for men (USAID, 2011). In rural areas, women spend 6 to 8 hours a day on unpaid household chores such as cleaning, cooking, fetching water, and firewood, farming activities, and caring for children and the elderly.

The specificity of women's activities is also linked to the local culture and ethnicity. In agricultural communities, women are primarily involved in joint farming activities (from family fields). Women work on the family farm from 9:00 a.m. to 4:00 p.m., implying that they can only cultivate their small plots of land early in the morning before moving on to the common fields. Generally, one day is set for cultivating individual plots, allowing women to grow their fields on that day. Women's intense involvement in household farms will impact their production level from the private field (usually market gardens) due to their limited time devoted to farming these later.

Consequently, women are granted access to small amounts of fallow land. As an illustration, in a survey conducted by the Agricultural Survey data (2014-2015), they found that women encounter several challenges in accessing land. The average land area cultivated by women was 404 m² or 4 acres. According to the same survey of 3,216,337 plot owners, only 454,085 (14%) of the agricultural plots were owned by women, compared to 86% by men. Male plot owners have an average of 1.7 ha compared to 0.6 ha for women (Enquête Agricole de Conjoncture 2016-2017).

Men own more plots than women at the national level. This phenomenon is closely correlated with men's access to and control of resources. They are the ones who allocate plots to women. This certainly impacts women's income generation. Women's land ownership in Mali remains challenging, as disclosed in Figure 5.3.

Figure 5.3: Distribution of Farms by the Head of Household by Region and Sex in 2016



[Source : CPS/SDR Enquête Agricole de Conjoncture 2016-2017]

NB: Kidal was not concerned by the survey

Figure 5.3 reveals a substantial gender disparity in land allocation in Mali and all the regions. Similarly, another survey conducted by CPS/SDR (2016-2017) shows the same gap regarding women's land access. Their survey uncovers that as of 2016, women held less than 10 percent of agricultural land throughout Mali.

Although women's land access, ownership, and involvement in agricultural activities are not homogeneous in Mali, Figure 5.3 indicates that men own five times more plots at the national level than women. In Kayes, men have twice as many plots as women. This ratio is 5 in the Koulikoro region, 6 in Sikasso, 16 in Ségou, and 10 in Mopti. Although female plot owners hold less than 15% of all plots, it should be noted that these are tiny areas, especially for the cultivation of cereals. Male plot owners have an average of 2 ha compared to 0.22 ha for women.

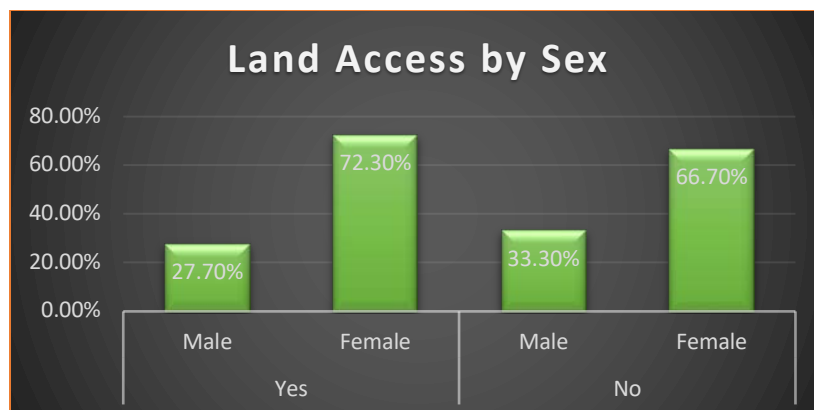
In contemporary farming communities, even though the modernisation of agriculture (multi-tillers, herbicides, etc.) has reduced women's involvement in communal fields, women do not have opportunities to cultivate large land areas. Fulani or women from pastoral communities do not participate in farming activities. Similarly, women do not participate in communal farming activities in the Kayes region, where the Soninke ethnic group dominates. Since the Kayes region is an area of high immigration, women in these communities can exploit their absent husbands' fields; as a result, there is less land tenure pressure in these areas.

As revealed in Figure 5.3 Kayes region remains the only southern region to be better off regarding women's land ownership. Mali's two largest agricultural regions, Sikasso and Segou, fare poorly. In the Sikasso region, women of the Minianka, Senoufo, and Bamanan ethnic

groups are extensively involved in cultivating the common fields. In contrast, women are not actively engaged in agricultural activities in the country's northern regions. They do not have an interest in land due to desert conditions. Their activities mainly focus on seedlings, weeding, and winnowing, which could be explained by the lack of arable land for farming as 2/3 of Mali is made of the Sahara desert, predominantly found in the northern part of the country.

Hence, in major farming communities of the south, all possible strategies are used to maintain women's dependence, as their self-reliance will influence their submission. Regarding the low rate of land allocation to women, several reasons are at play: including the weight of tradition (the man being the head of the household); the weight of female workload in rural areas (90% of time spent on household chores); their low income (the improvement of their lands requires investments that are beyond their capabilities, etc.) In this challenging atmosphere around land ownership and access, the question remains what role agricultural cooperatives have played in addressing women's land ownership and access in the study areas.

Figure 5.4: Land Access by Sex



[Source: Results made from SPSS from field survey, 2020]

In contrast with Figure 5.3, Figure 5.4 demonstrates that women's participation in cooperatives impacts their land access and ownership in the study areas. On the one hand, Figure 5.3 reveals that in 2016, women barely held land in all the regions in Mali. The overall amount of land owned did not reach 10 percent in any region; on the other hand, this survey conducted in 2020 by the author discovered that women's land ownership has increased with their involvement in agricultural cooperatives, as evidenced in Figure 5.4. Within cooperatives, women's land access reached 72 percent. The oral accounts further support this finding from women in the fifteen cooperatives in Baguineda, Bamako, and Kati regions heightened above.

The oral accounts explained in the previous section evidence several approaches through which women as agents use their bargaining power to influence discriminatory

practices and gain improved access to land. The changes in agents' life choice to increase opportunities remains an indispensable basis in bargaining with conventional patterns which influence agents' land entry at the group level. The accounts from women members in the three study areas contend that their involvement in cooperatives positively influenced their agricultural resources access, namely their land access and ownership, compared to overall females' access to land in Mali, as indicated in Figure 5.3.

Hence, women disclosed that their cooperative membership allowed them to negotiate informal land access with customary leaders. Their memberships in cooperatives also create room for owning land formally with local state authorities in government-managed areas. Additionally, women benefit support from NGOs and local extension agents in capacity building to address their land issues with both customary and statutory leaders within their communities in Kati, Bamako, and Baguineda. In line with this, the ex-President of the cooperative Alliance, Dame Pauline Green, stated in 2013 during a lecture on the momentum of International Women's Day that:

A significant amount of support had been provided to females through cooperative enterprises. That raises public esteem, judicial acceptability, and authority. Cooperatives grant women opportunities that may have been inaccessible to them. They allow women to join and create a financial system and boost their negotiating power in the marketplace.

Similarly, President Leroux appealed for cooperation to close the gender gap, affirming that:

The UN declared gender equality as a part of the sustainable development goals. Women's collective engagement helps them confront dominant norms that control their social, political, and economic empowerment. It also allows them to make decisions, negotiate and restructure institutions that subordinate them.

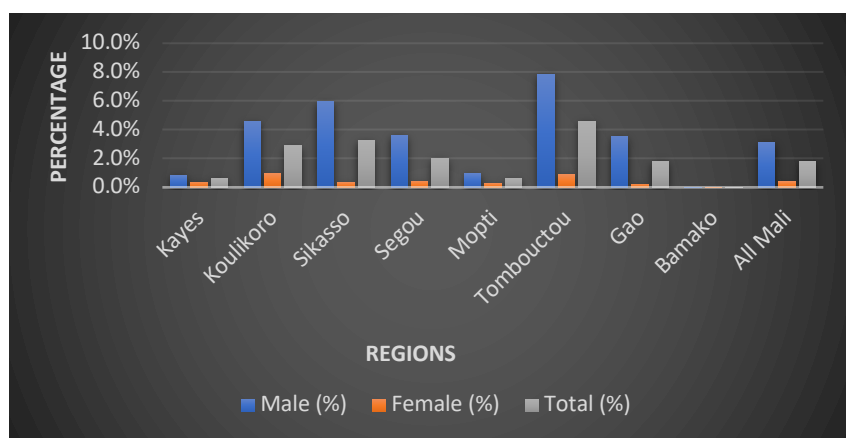
The change in women's agency implies that they can currently request plots of land, especially those managed by the state. Women further develop skills to challenge the biased social patterns by bargaining with customary structures to increase their land access vital for their agricultural activities. Women's memberships in cooperatives encourage collective engagement through establishing bargaining networks between them and the agents, detaining control over resources. This strategy in mainstreaming women's needs through cooperatives contributes to building networks that encourage cooperative members' resources access. The bargaining occurs within cooperatives, state authorities, and other local actors at the household

level. These procedures and approaches finally led to women’s agency enhancement, opening prospects for their socio-economic empowerment.

5.3.2 Credit

Credit is a vital tool in increasing the poor’s well-being precisely through expenditure rising which lessens their susceptibility to temporary revenue (Okurut et al. 2004). Credit can also help the poor improve their economic power via venture capital. In Mali farmers, access to credit remains a challenge, primarily for smallholder rural women, as revealed in Figure 5.5.

Figure 5.5: Percentage of Farmers with Credit by Region and Sex in 2016



[Source : CPS/SDR Enquête Agricole de Conjoncture 2016-2017]

According to the CPS/SDR report (2016-2017), the number of female farmers with access to credit remains low (1.1%). It is even lower among women in Sikasso, Mopti, and Gao regions (0.3%) than men. Available loans to farmers were estimated at 52.9 billion, of which men made 99% compared to only 1% for women in 2016.

In Mali’s rural areas, men and women do not have the same opportunities regarding access to finance. Less than 5% of producers have access to loans for farming. Credit granted in the agricultural sector is generally in the form of loans, in cash, or in-kind (agricultural equipment, oxen, bicycles, mopeds, inputs, insecticides, herbicides, etc.). Cash credit is given during the lean season. It is important to note that agricultural credit is repayable with cotton or rice money in flooded areas, which doesn’t benefit women. When analysing agricultural production in Mali, women are more involved in groundnut and vegetable production, while men produce millet, sorghum, rice, corn, and cotton.

It should be noted that women produce more than half of the groundnuts at the national level (approximately 50.4%). Women represent 56% of all market gardeners (CPS/SDR report

2016-2017). Also, agricultural credit services do not directly deal with women because they do not have a source of guaranteed or stable income. In most cases, men (husbands) are responsible for endorsing women.

More than 75% of Malians are employed in the agricultural sector, as mentioned in chapter one. To make credit accessible to all farmers, la “Banque Nationale de Developpement Agricole” (BNDA), the National Banque for Agricultural Development, was created in 1981. The purpose of this bank was to enhance farmers’ access to agricultural credit; unfortunately, BNDA has a 6% interest rate which most farmers cannot afford. As an illustration, a woman entrepreneur in Bamako was denied FCFA10 million loans after bringing a title deed to BNDA; she said:

I did everything I could to obtain a 10 million FCFA loan from BNDA as my business was thriving. Unfortunately, the bank did not trust me enough to lend me that money despite bringing a title deed. Many banks still do not believe that a woman can adequately manage a significant amount of money. It is time to make agricultural credits “womanlier” (Interview at Femme Rurale, January 2018).

As stated by the interviewee, banks are reluctant to grant a large amount of money to women, even when they comply with their requirements. Unlike her, many women do not usually hold land titles, making credit access more difficult for financial institutions. Additionally, le Fonds d'Autonomisation des Femmes et l'Epanouissement des Enfants (FAFE), a national fund for children and women empowerment in business and leadership, was launched in 2011 by the government to support women’s economic activities. The FAFE fund targets the development of women’s entrepreneurship in Mali. The fund also aims to improve the sustainability of women’s economic activities through capacity building, the creation of processing facilities, and the provision and access to credit and financing. Its primary targets are rural women and women involved in informal transborder trade. Unfortunately, many women still do not know about this funding opportunity, mainly in rural areas. As a result, women’s access to credit remains a challenge, as indicated in Table 5.2.

Table 5.2 uncovers that few women get credit for improving their farming activities; instead, most of the credits women access in Mali are meant for household consumption needs and event-based celebrations. Even though they receive credit for launching their businesses, the bulk of their capital is spent on household expenses.

Table 5.2: Access to Different Types of Credit by Sex in %

Credit Types	Total	Men	Women
Access to Credit	4, 19	5, 94	2, 55
Education Credit	0, 89	0, 56	1, 60
Health credit	4, 95	3, 95	7, 15
Agricultural Equipment Credit	6, 28	9, 15	0, 00
Household equipment credit	1, 99	1, 63	2, 79
Credit for home building	3, 68	5, 13	0, 51
Credit to start a business	8, 76	4, 01	19, 16
Credit for financing business	5, 70	4, 51	8, 30
Farm Input Credit	32, 71	44, 60	6, 66
Household consumption credit	20, 95	20, 69	21, 54
Event-based credits	10, 36	2, 45	27, 71
Other credits	3, 71	3, 31	4,23

[Source : CPS/SDR Enquête Agricole de Conjoncture 2016-2017]

Women rarely receive finance for purchasing agricultural equipment, educating, or training themselves. It also denotes that men have more credit for income-generating activities than women, who usually spend their money on household consumption needs or event planning. The political will to make credit accessible to women needs to be reinforced, especially for business purposes. In this regard, a respondent stated:

Through banks, the micro-credit system has more impoverished women due to the challenging conditions in accessing them and the bureaucracy of these institutions. Most banks have high-interest rates and lack tangible investment, monitoring plans, and programs in mainstreaming women borrowers' necessities. She suggests involving financial and technical partners to enhance follow-up plans and programs on access to credit for women (Interview at WILDAF on January 29, 2018).

To further understand women's access to credit, the survey asked participants about challenges related to their lack of access to credit. The findings reveal that individual female farmers encounter several difficulties accessing credits from financial institutions for the following reasons. Firstly, the participants pointed out that banks generally asked them to bring land title deeds as collateral or valuables like gold to guarantee access to credit. Limitations on women's ownership of title deeds persist as they continue to access land from their husbands or male relatives through the customary tenure system, which does not offer any legal guarantee or stable income.

Women's employment remains mostly informal, undertaken at the household or village level, disqualifying them from accessing formal recognition or other economic services from financial institutions. Thus, women work in occupations or sectors with limited employment

stability and lower-level positions, with no prospect of career advancement and no income improvement. About 95% of working women are concentrated in agriculture, livestock, fishing, trade, processing, domestic activities, hotels, and restaurants (INSAT, 2009). Women's low level in skills employment, lower education level, lower salaries, disparities in time spent on unpaid domestic and care work, and precarious employment leave them at a disadvantage in many respects. They also have weak access to credit and microfinance due to the micro size of their businesses and their financial inability to expand or develop them. These also impact women's land ownership and access to other productive assets.

Women further fear humiliation if they fail to pay back the loans; their most important valuables are sometimes seized, or they are jailed. Suppose women can bring other guarantees than a title deed. In that case, they fear credits because once they contract the loan, they use it on household expenses such as children's education, buying medicine for a sick family member, or purchasing essential foods for domestic consumption. The remaining capital is spent on petty trading. Once women's basic needs are met, they invest the leftover money in expanding their income-generating activities like buying equipment and machinery. This implies that women usually get credit for solving their household issues through supporting their family members, including their husbands, and investing in business endeavours. If they do not have stable families or supporting husbands, they find it challenging to spend their capital on promoting their small businesses. Accordingly, a respondent stated:

We are bound to help our husbands under any circumstances. We cannot see them in financial need and not assist them if we have money. Another added that either we are forced to help them with these loans, or the money will be stolen. We cannot complain about it for fear of being divorced (Interview with Baguineda women's association on February 12, 2018).

Secondly, banks also request legal documents such as bank accounts, national IDs, cards, or other formal documents. Most women in rural areas still do not have birth certificates, let alone a standard bank account. This is progressively changing with the advancement in girl schooling and women's engagement in grassroots organisations like cooperatives which usually assist them with legal procedures in obtaining those documents.

Thirdly, the distance to access banks or financial institutions was another problem mentioned by some participants. Although the majority, around 70 percent of Mali's population, resides in rural areas, few banks are located in the countryside. Women must travel

long distances to reach banks and follow lengthy and expensive administrative procedures to access credits.

Lastly, women encountered socio-cultural barriers, such as requesting spousal approval before inquiring about credit. In short, women's lack of access to credit in Mali can be mainly explained by their lack of collateral, complicated and lengthy bureaucratic procedures, high-interest rates, and socio-cultural factors limiting women's ability to finance their income-generating activities.

Facing these challenges and uncertainty in accessing formal credits from banks, some cooperatives in the study areas are now addressing these constraints by creating their financial mechanisms. Through microcredit activities, cooperatives developed services to accommodate their members' financial needs and expand the economic benefits of their associates. Rotating savings and credit associations in cooperatives do precisely this. Under this system, a group of savers comes together and decides on a regular payment by each participant. The amount collected each time is given to one of the savers. Instead of every investor in the group waiting to collect the capital, the first beneficiary must invest right away. In the following period, another shareholder can acquire the venture. The mandate of receiving the weekly cash is done differently in each cooperative. In some cooperatives, the order is concluded by pulling lots. In contrast, in others, it is done over hierarchy, consensus, or by auction (with the top bidder obtaining the first share and the bid going into the cooperative mutual fund).

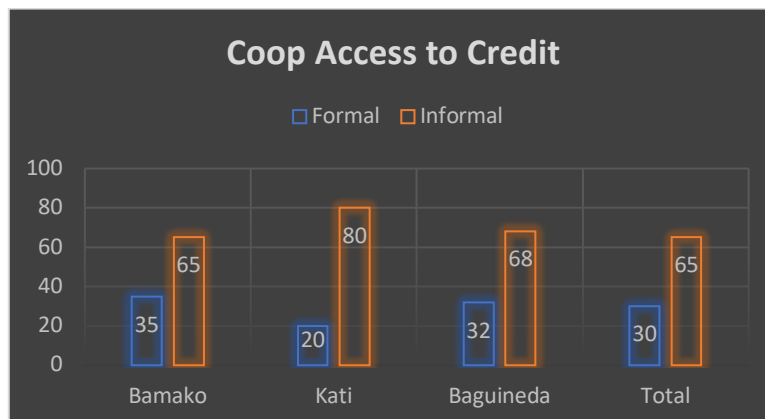
The author's findings from the field revealed that 80% of the cooperatives interviewed in Kati used their financial mechanism to run their organisation. The percentage was 60% in Bamako and 68% in Baguineda, as described in Figure 5.6. This enables women in rural areas to access capital to finance their activities through the informal financial system of their cooperatives. All the surveyed cooperatives have weekly or monthly credit schemes within the group. Through those micro-credit schemes, cooperatives grant their members credits with fewer interest rates at their demands. This process allows cooperatives to be less dependent on financial institutions.

Besides informal credit access, cooperative associates also contend that they could easily access loans from banks than individual farmers. To counteract the barriers to accessing credit, microfinance institutions in Mali provide an opportunity for most Malians, especially those living in rural areas, through decentralised financial services (DFS). In 2008, the CCS/SFD report indicated that 551,918 men were members of SFDs, compared to 403,306 women. Many financial institutions have introduced the mutual guaranteed system to compensate for poor farmers' lack of financial guarantees and promote their credit access. In cooperation with

local women’s associations, they have established savings banks where all participants are collectively accountable for loans. The concept of joint guarantee allows the members to support each other when they have difficulties repaying their loans. The government has also set up a micro-credit network for women, “Layidu Wari”. This Layidu Wari fund aims to enhance women's and youth’s access to credit at a lower interest rate of 4%, and the state is responsible for guaranteeing 50% of the unpaid loans. In this respect, at the end of January 2010, a total of 113 million FCFA had been allocated to 384 women and 27 young men throughout Mali (CPS/SDR report 2016-2017).

Women belonging to a cooperative and working on a collective plot of cash cropland can benefit from these loans. The survey outcomes found that 20 % of the cooperative memberships in Kati, 35% of cooperative members in Bamako, and 32% of Baguineda cooperative members had access to formal credit, as designated in Figure 5.6. Financial institutions tend to trust a group of borrowers more than individuals. Since many banks still have high-interest rates, most cooperatives still use their cooperative capital as a means of credit among their members.

Figure 5.6: Cooperatives’ Access to Formal and Informal Credit



[Source: Outcomes from SPSS made from field survey, 2020]

Many efforts are required to tackle the remaining challenges regarding women’s access to credit. Although cooperatives’ have been able to offer informal credit with a lower interest rate to their members, financial institutions in Mali need to lessen their loan requirements to make credit accessible to most farmers. They can achieve this by rendering their procedures less complex, easy to access, and less expensive.

As highlighted by Kabeer, women’s collective engagement and agency can act as a unifying principle for resource access. The achievement is noticeable in agents’ access to

formal and informal credit. This is particularly important in examining women's economic empowerment over financial access. The informal financial mechanism initiated by cooperatives indicates members' willingness to change their credit access constraints amid the prevailing systems excluding and disempowering them. The indication that economic empowerment is necessary for females' empowerment or vice versa is not decisive. This is subject to debates among scholars. Women's economic empowerment might not benefit them if they do not have decision-maker power and control over those resources. However, most respondents mentioned that their financial empowerment translated into increased intra-household relationships with their family members and better safety as they gained more respect from their spouses and in-laws. Accordingly, Sanata said:

Before joining the cooperative, I used to sell all my potatoes after harvest to get some money as soon as possible to meet my household expenses. Now that I have access to credit from the cooperative, I can keep some potatoes stored to feed my children while expanding my business. As a result, my relationship with my household members improved (Interview at Benkady cooperative, on January 29, 2020).

Ouley added:

Thanks to my involvement in the cooperative, I now have more cash to pay my children's school fees, purchase equipment for my processing activities, and support my husband's retail business. This increased our relationship as I gained more respect from him. (Interview at Djiguiya cooperative on February 15, 2020).

The oral accounts indicated that most women utilised credit from the cooperative micro-credit scheme to expand their working capital and revenues. Membership in cooperatives offers women prospects to spend their capital on socio-economic activities wisely. Microcredit systems within cooperatives are thus offering women opportunities to raise their profits, bolster their bargaining power within the household and weaken discriminatory practices as they gained economic empowerment.

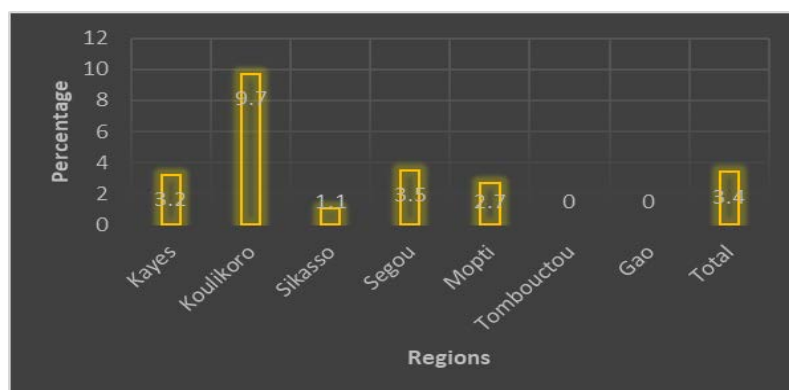
5.3.2 Equipment

The accessibility of farming equipment such as tractors, ploughs, and hoes will likely impact farmers' overall production, including revenues. Access to equipment can have a significant impact on agricultural productivity and output. Equipment is generally owned by those who have substantial amounts of plots. Due to its high cost, equipment access remains

challenging for many smallholders, primarily women. Women’s low incomes and limited access to agricultural credit, in turn, limit their attainment and ownership of farming equipment.

Farmers and cooperatives with farming tools are assumed to have many plots accessible to them. Proprietorship of agricultural technologies and equipment can lower farmhand labour and offer extra time to farmers to engage in other activities than agriculture. Nonetheless, like other farming resources, women’s access to agricultural equipment is still challenging in Mali, as demonstrated in Figure 5.7.

Figure 5.7: Women’s Access to Agricultural Equipment by Region in 2016 (%)



[Source: DNGR Annual report 2016 NB: Kidal was not concerned]

Figure 5.7 unveils how women lack access to equipment in all Mali regions. The highest percentage is in the Koulikoro region, which is still less than 10% as of 2016. In Gao and Tombouctou region, women did not benefit from any equipment from the government in the year 2016.

The survey further indicates that less than 20% of women have access to equipment in rural areas. The plots owned by men are 73% ploughed with a tractor, compared to about 60% of those owned by women. The proportion of women who own fields ploughed manually is 26%. In comparison, this rate is 19% for men who own plots. Seven percent of the farm owned by men are ploughed using a motorised system, compared to 3% of those owned by women (DNGR, 2016).

Likewise, in 2015, the government of Mali distributed 887 tractors among agricultural producers in six regions. The Sikasso region alone was allocated 55.69% (494 tractors), followed by the Koulikoro region with 20.52%. The proportion of women who benefited from this award is deficient. In total, 29 women (3.27%) benefited from the tractors, two-thirds of whom were in the Koulikoro region. Of the 494 tractors distributed in the Sikasso region, only five women were awarded, or 1.01% (DNGR, 2016).

Among women producers who own equipment, 43% have plots, 35% have oxen, and 10% have carts. The other types of equipment are owned exclusively by male producers. This distribution pattern raises concerns about women's access to motorised equipment, which remains very low in 2015: only 29 out of 887 tractors were allocated to women, more than half of which were in the Koulikoro region (DNDR, 2016).

Regarding the survey data, 56% of the respondents pointed out that women have less access to agricultural equipment than men because women generally hold smaller agrarian plots. They said that access to modern equipment requires large amounts of land and financial means. One of the respondents put it this way:

I completed all the mandatory procedures to gain access to one tractor until I was inquired at the last minute to bring 2 million FCFA as a guarantee; another added modern farming equipment is for men and women elites in the offices. Poor rural women like us cannot afford them even when their prices are subsidised (Interview at La femme Rurale, January 31, 2018).

As displayed in Table 5.3, most of the equipment often held by rural women are ploughs, hoes, carts, and seeders. In comparison, men own large threshers, gins, hullers, and pumps. Women farmers are often excluded or have lesser access to farming equipment. Regardless of the type of equipment, women's farms are always under-equipped compared to men's farms. Ploughs are the main piece of equipment used by women. The lack of equipment on women's farms represents an essential constraint to their productivity. For example, women can only have access to equipment when work has been completed on other farms, resulting in delays in the cultivation schedule. In cotton-producing regions, equipment is generally provided with a guarantee of reimbursement from the cotton money. Women are poorly represented in this activity and thus benefit less from such equipment.

The outcomes of the survey reveal that most women in the sampled cooperatives still lagged in acquiring innovative farming equipment and technologies. As an illustration, male members of cooperatives own 68% of agricultural equipment while female-only own 32%. This finding suggests the significance of improving farming equipment and technology access amongst women farmers in rural areas. The percentage of women who have access to farming equipment is still higher than the overall percentage of women. The few members employing advanced equipment for cultivation received their services from the cooperatives.

Table 5.3: Distribution of Agricultural Equipment by Sex in 2008-2009

Types of equipment	Owner	
	Male	Female
Hoe ace	70.4056	18.768
Plough	740.820	11.033
Charrettes	246.815	2.546
Sowing machine	219.871	1.930
Multicultural	171.215	963
Modern hives	65.122	647
Harrow	114.664	213
Tillers	7.759	156
Traditional hives	15.317	76
Sprayer	69.822	0
Treatment equipment	67.129	0
Threshing machine	14.995	0
Motorcycles	2.674	0
Rice peeler	820	0
Corn ginning machine	1.181	0
Rice cultivator	0	0
Manual pump	783	0

[Source: CPS / SDR, Agricultural Current Survey, 2008-2009]

Cooperatives usually purchase the equipment their members need depending on their activities and the group budget. Of the 15 cooperatives, seven were able to buy equipment like mini motorbikes to transport their produce to better markets, solar panels, processing machinery for their agribusiness activities, and other materials from the cooperative savings. Members could collectively use it for their deeds. Four cooperatives also received equipment (grounding machines, solar panels, processing kits) in Baguineda from NGOs and philanthropists to support the cooperative endeavours.

The joint sureties within cooperatives slightly improve access to agricultural equipment. The outcomes indicate that enhancing women's access to farming equipment remains perilous. Despite their less innovative nature, cooperative members have the potential to gain certain types of equipment through collective engagement mechanisms. Women's membership in cooperatives provides a tactical approach to enhance equipment access when their ability is mainly liable to financial constraints and socio-cultural patterns. As agents of empowerment, women utilised collective savings and other strategies to improve their access to agricultural equipment with existing available means to enhance their livelihood activities.

5.3.3 Fertilizers, Seeds, and Water

So far, the chapter covers the difficulties related to women's land ownership, access to credit, equipment, and the strategies employed by cooperatives in the survey areas to address

those challenges. This section will elaborate on women's access to fertilisers, seeds, and water in the study areas.

Providing fertilisers, seeds, and water in agriculture are requirements for increasing productivity. Land issues often restrict access to fertilisers and seeds. The methods of accessing land do not always motivate farmers, particularly women farmers, to invest in fertiliser and seed inputs. The crops which benefit collaterals from these inputs depend on regional and cultural specificities. In the southern part of Mali, cotton remains the main crop on which collateral is provided. There are different types of access to these inputs in rural areas: loans, borrowing, and exchanges between villages or neighbouring towns.

Regarding access to fertilisers, seeds, and water in the study areas, the findings indicated that cooperatives' most crucial achievement has been purchasing inputs jointly at a lesser cost for their members in Baguineda and Kati. Cooperative members in these two survey areas mainly utilised subsidised inputs in yield cultivation. The results reveal that 60% had access to enhanced seeds, 95% had access to fertilisers, and 54.8% had access to chemicals like herbicides and pesticides. Cooperative members are more likely to receive subsidised seeds, fertilisers, and chemicals than non-members, according to the DNPSES staff interviewed. In Baguineda and Kati cooperatives, members have equal access to inputs within the organisations.

Nevertheless, during the study investigation, twenty percent of cooperative members in the Baguineda and Kati regions complained of not receiving subsidised seeds and fertilisers. Local government agencies dealing with subsidised input distribution to farmers delay the process for operational reasons. Likewise, some farmers highlighted corruption among these officials in Baguineda and Kati. Under those circumstances, cooperative members said that they were compelled to buy non-subsidies seeds and fertilisers at higher prices for their members. This harmed farmers' commercial profits. The concerned cooperatives are urging and lobbying their local agents about those challenges through their leaders and agricultural extension agents.

As Kabeer explained, agents' empowerment involves their capability to act and make choices based on their needs while challenging structural and institutional practices built on discriminatory patterns in accessing resources. In this vein, women as cooperative agents act and suggest changes in acquiring subsidised seeds and fertilisers to their members. How women as members of cooperatives led act to shape their conditions over bargaining power and collective engagement can lead to achievements in changing the social practices which disadvantage them.

Regarding access to water cooperatives, members in Kati and peri-urban Bamako mostly rely on rainfall for farming. In contrast, cooperatives in Baguineda can access irrigated water from the OPIB. In Baguineda, farmers cultivate dry crops that depend on rainfall, while their market gardening activities are conducted in irrigated areas. In contrast with Baguineda, access to water remains an enormous challenge for most farmers in the Kati study areas as they are dependent on rainfall for their agricultural activities.

Picture 3: A Woman Farmer Watering her Garden from a Well in Kati



[Source: Photo: Taken by the author during fieldwork in Kati, February 2020]

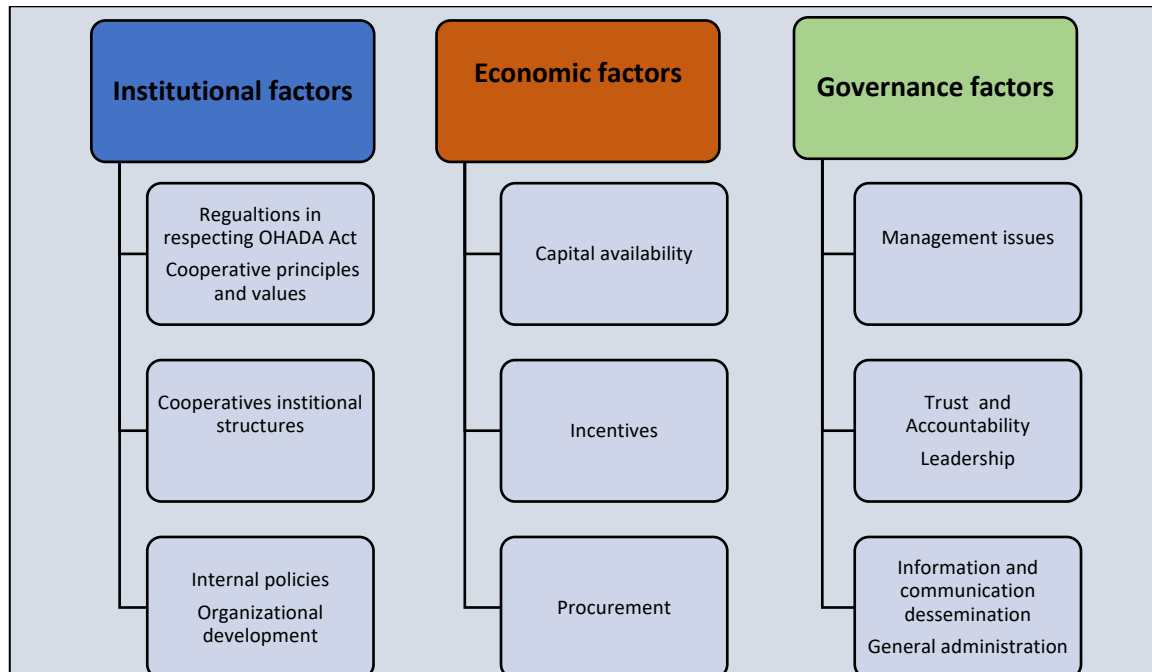
Water accessibility for both domestic and agricultural activities is one of the main factors influencing agricultural productivity in Kati. While rainfall is vital for yield and livestock production, regular streams, wells, and dams are used for farming by rural households. During dry seasons cooperative members rely on collective wells or streams, which often dry out to irrigate their farms, as indicated in Picture 3. With population growth and climate change, rural areas are experiencing an ever-growing need for water resources, leading to drought. Irrigation techniques that are suitable for the local climate and reality should be the focus of projects and NGOs aiming to support and empower small-scale farmers in Kati.

5.4 Shortcomings of Women's Engagement in Cooperatives

Overall, the author elucidated the positive aspects of women's engagement in cooperative activities in her study areas. Besides the advantages mentioned above, shortcomings were also noticed during the survey. Many cooperatives still face challenges in

rural communities, especially those established conventionally and those attempting to comply with cooperative legal procedures. Figure 5.8 summarises these challenges.

Figure 5.8: Factors Affecting Cooperative Performance and Sustainability



[Source: Author based on outcomes from field survey, 2020]

The first challenge is becoming a cooperative member in Baguineda and Kati. Membership acceptance is based on individuals' status. This implies that women members of the cooperatives in rural areas value marriage. Only married women in their communities are entitled to join their cooperatives. This process excludes women who choose not to be married or cannot find a husband for other reasons. Often, some husbands exert their power by preventing their wives from joining such groups, which they believe will give their wives autonomy, threatening their marriage. While on the other hand, unmarried women might possess some skills and knowledge vital for cooperative development, yet they remain excluded due to their status. This confirms what some feminist scholars (Kabeer 2008; Agrawal 2000; Giddens 1979) highlight about women participating in or strengthening the patriarchal structures which discriminate against other women of different statuses or classes.

Another challenge noticed in all the survey cooperatives are incentive issues related to investment, such as common property and free riders. Other incentive issues are control, portfolio, horizon, etc., which stem from decision-making, problems relating to follow-up, and power expenditures. According to Nielsson (2001), these are often investment-related

(common property/free riders, horizon, portfolio difficulties), while other incentive problems arise from decisions (control, follow-up, influence-cost challenges).

Some respondents in the three study areas also mentioned a lack of trust in their leaders. Often some leads divert the common assets for their gains. When members try to undertake legal procedures, the issues are solved through negotiations or passive conventional processes. The analysis of the cooperative's internal forces at work denotes the significance of trust and accountability: how much members believe in the cooperative, and how effective is the cooperative in defending the interests of its members? When closely analysing trust and accountability in management studies, they emerge as an essential source of members' involvement, in conforming with the organisation's ideals and principles and fulfilling their responsibilities as engaged agents.

As an example, Plumptre (2007, p. 10) illustrates why such relationships can make it difficult to achieve group accountability by observing that public purpose organisations have a more comprehensive range of liability relations than private businesses. Associates of a cooperative (like those in the cases highlighted) must believe their cooperatives are acting in their best interest. Likewise, associates will also ensure the efficient use of their resources to be fully engaged in group activities.

Equally, well-educated members generally have better leadership positions than the less and non-educated ones. Leadership initially includes interpersonal interactions between leaders and associates meant to encourage members to act as agents to achieve a common goal or achieve a vision. Leadership in a team involves reaching a consensus and then making collaborative decisions. Members' degree of engagement in the cooperative can be lower if they do not feel included in the organisation's decision-making processes, as was mentioned by some respondents. In this vein, ordinary members' involvement in the management and governance of the group; their ability to participate and foster decisions based on their needs are crucial for group sustainability (Fulton & Giannakas, 2001). Participating in decision-making processes could encourage associates' level of contribution, commitment, and heterogeneity often mentioned as an issue by some respondents in Baguineda, Kati, and Bamako.

Linking and handling the diversity of associates' profit for the benefit of all remains more challenging; if members feel that their interests aren't being considered, they may become passive. A cooperative's governance can thus be complicated, but it is crucial to ensure its continuity as a member-based organisation. Generally, cooperatives' performance and sustainability have been attributed to features such as access to capital, start-up costs; degree

and nature of training available to members; training and experience in marketing and market analysis, appraisal, bookkeeping, literacy, management skills; attitudes towards work; and amount of community development projects (Barratt, 1989; Anderson and Henehan, 2003; Kherallah and Kirsten, 2002). Likewise, the organisation's history, location, economic state, legal context, members' experience, and connections to other organisations also play essential roles in cooperatives' performance.

Despite the assumption that cooperative organisations should perform according to the expected standards of cooperative organisations, Cook (1994) maintained that their management faces a complex challenge in matching the conflicting interests of members. He also noted that the economy, government policies, and legal and regulatory frameworks could worsen conflicts. The contradictory roles of board members were also discussed by Conforth (2004) considering theories including agency theory, stewardship theory, resource dependency theory, and managerial hegemony theory. In his view, cooperative governance is a complex, inherently challenging, and problematic process.

Planning, organising, directing, coordinating, and controlling remain the responsibilities of board members. Using Conforth (2004) as an example, he describes the performance role (requiring the board to ensure that the organisation acts by member objectives and interests). Like agency theory, the performance role (requiring the board to make strategic and operational decisions that improve the organisation's performance) is comparable to stewardship theory. Implementing these aspects remained a challenge in many of the survey cooperatives.

In addition, the author noticed that the election process and leaders' terms in many of the cooperatives do not comply with the OHADA principles. Most cooperatives prefer to elect their leaders based on hierarchy and age. Often the leaders are chosen for an unspecified period. This shortcoming was also mentioned during the interviews with the DNPSES administrative officials. They preferred not to amend the cooperatives which do not comply with their policies for fear of exerting authority on an already vulnerable population. They instead chose sensitisation, awareness raising, and training with cooperative members to reinforce legal procedures. The government bodies supporting cooperatives strive to ensure that cooperative values and principles are followed.

Leadership plays a vital role in shaping the cooperative's objectives. Following the cooperative principles and the OHADA act, cooperative leaders must pledge and safeguard their cooperative's by-laws and code of ethics. These components include procedures for human resource management, finance and accounting, procurement, information and

communication, general administration, concrete business plans, and keeping records of cooperative activities are essential (Fulton, 2001). Hence, bookkeeping and record-keeping are fundamental for cooperatives' sustainability. They must be recorded for official purposes. The critical challenge remains that many cooperatives' structures and regulatory texts often do not meet the OHADA Act requirements. Few of the survey cooperatives were updated regarding their activities and bookkeeping. Insufficient supervisory skills often lead to cooperation failure.

Ground-breaking internal management remains crucial to applying policy measures that progressively stimulate cooperatives' operation. Despite being a democratic organisation, most cooperatives have leadership issues that lead to management and organisational failure. This happens when an organisation fails to adopt the most effective strategy for the benefit of its members. In this sense, cooperative management requires particularly skilled managers.

To safeguard transparency and liability, the survey cooperative associates should be empowered in that sense. As explained in the theoretical framework sections, empowering cooperative members will help them expand their resources access and shape the abilities of the less fortunate members to contribute in, bargain with, impact, oversee and hold accountable bodies who will impact their endeavours. Cooperative associates participate when they are allowed to contribute and are encouraged by an effective communication process (Borgen, 2001). Proficient leadership efficiently involve associates in the communication processes, which will thus enable them to convey their opinions, engage in activities appropriately, and attend group meetings continuously.

Formal institutions motion the standpoint from which cooperatives function. Essential establishments such as the constitution and the rule of law endorse permanence. In management, averting corruption improve shared goals, and defend property privileges from embezzlement by privileged groups or regime (Fulton,1999). A cooperative organisation with weak institutions doesn't just grow gradually over time, as it is weakened by numerous instabilities. Some scholars highlighted that excessive heterogeneity of group associates could lead to failure in cooperative activities (Cook, 1995; Seabright, 1997). The ability of an organization to establish itself as an active agent for its members determines associates' level of commitment. Fulton (1999) and Fulton and Giannakas (2001) resolve cooperatives to remain progressively aware of their associate's opinions and implement them appropriately. The survey uncovered that cooperatives' successful operation and sustainability lay on members being efficient agents. Due to the lack of steering principles in cooperative constitutions, structural bodies face challenges.

5.5 Chapter Summary

This chapter describes the survey's outcomes acquired from SPSS to determine the impact of cooperatives membership on women associates' land ownership and access to other agricultural resources. This purpose has been achieved using variables on the amount of land owned, access to credit, fertiliser, seeds, water, and equipment by cooperative members. Descriptive statistics, correlation, and comparisons were applied using SPSS. Additionally, assessments based on the theoretical framework and women's oral accounts were also utilised to answer the research questions.

The study found that facing diverse land regimes and practices, scarcity, expulsions, and other difficulties in accessing resources, cooperative members join their efforts in the study areas of Baguineda, Bamako, and Kati. They substantially claim their land rights and access to agricultural resources within their communities. Cooperative structures, ideals, level of organisation, and members' commitment impact their members' agency level in bargaining agricultural resources.

Regarding land ownership, the study observed that cooperatives land tenure remained traditional or customary base in rural areas, i.e., Kati and some parts of Baguineda. Women's legal tenure rights decline as the distance from the city centre increases. Additionally, the method of owning and accessing land changes based on the nature of the prevailing property tenure system and the degree of urbanisation of the locality. Access to individual lands beneath the legal system was primarily done through formal leasing arrangements in Bamako.

Security of tenure was a prerequisite for cooperatives' organisation in rural areas, mainly in Baguineda and Kati, while access to credit and training was essential for cooperatives in Bamako. Squatting was common in Baguineda and Kati with rapid urbanisation; members were applying traditional and customary tenure systems to acquire land for their members. Moreover, socio-economic disparities exist amongst cooperatives based on their location. As an illustration, cooperatives in Bamako have more access to formal lands, are more trained in business endeavours, and are better off than farmers in rural areas. While farmers in suburban Baguineda and Kati feel insecure with informal land, they can be disposed of their land at any time.

Facing these challenges' farmer cooperatives have played a crucial role in defending their members' tenure rights by predominantly providing them with access to informal and formal plots for landless members. The surveyed cooperatives voiced the necessity to reinforce legal land access and ownership by suggesting legitimate mechanisms on title deeds that approve them to get reliable tenancy over defined periods in Kati and Baguineda. In

comparison, the general fear amongst peasant cooperatives in Kati remains the necessity to establish a coalition or a union of farmer cooperatives to pressure the government to secure informal land entitlements and safeguard their marketing activities. Cooperatives in Bamako were more concerned about improving the quality of their production through more training and information and better access to processing equipment and technologies.

The survey also found that cooperatives' members positively impacted associates' access to credit, seeds, fertilisers, water, and equipment. Access to these assets substantially influences members' incomes, well-being, and agency level. This was proven by the respondents' oral accounts from the surveyed cooperatives. Farmers as agents of cooperatives contribute to the empowerment of their members through collective engagement and bargaining with customary leaders and government officials.

Their involvement in cooperatives strengthens their agency, allowing them to have more resources and skills in acquiring credits, fertilisers, and seeds, sell more, and get more returns from yield production within their groups and communities. The outcomes further indicate that women's membership in cooperatives is more likely to enhance their improved access to factors and means of production. Women access extra collective land, subsidise seeds, fertilisers, credits, and human capital. Accessing these assets opens more room for empowerment in patriarchal settings.

Lastly, the chapter sheds light on some limitations of women's engagement in cooperative activities. These shortcomings range from the process of becoming a cooperative member, which is generally based on individual social status, such as being married. This practice is not inclusive and may discriminate against unmarried women with significant potential for cooperative development. Likewise, shortcomings in leaders' election, terms, and lack of trust among women leaders and their associates were also elucidated by some respondents as a challenge.

CHAPTER 6: WOMEN'S MEMBERSHIP IN COOPERATIVES IN THEIR FURTHER ACCESS TO AGRICULTURAL RESOURCES

Women smallholder farmers' productivity, market access, marketing opportunities, and decision-making are all affected by the accessibility and convenience of accessing farming resources. Smallholders who maintain assets seem to generate more income and sell their produce at enhanced prices than farmers who do not own resources. This chapter explores and investigates the outcomes of participants' membership in cooperatives. The key aspects dissected in this section involve access to agricultural extension agents and services, information and training, markets and marketing prospects, and access to decision-making stances.

In this regard, the chapter reviews the strategies used by cooperative members to gain access to agricultural outputs. Specifically, the chapter deals with the cooperatives' approaches to accessing information and training, markets and marketing prospects, and extension agents in the fifteen survey cooperatives in urban Bamako, rural Baguineda, and the Kati study areas. It further elaborates on the methods and procedures used by cooperative members to improve their access to decision-making stances. The section highlights the advantages of collective engagement among cooperative members and other external organisations. It lastly assesses the gains and disadvantages that members benefited from joining agricultural alliances in the selected study areas from participants' oral accounts. The section also elaborates on the cooperative strengths and weaknesses and denotes prospects for improving cooperative organizations in Mali.

6.1 Access to Resources: Socio-Economic Achievement in Accessing Agricultural Resources and Women's Empowerment

6.1.1 Agricultural Extension Agents and Services

Agricultural extension is defined as a service or network designed to help rural people, through educational courses, improve their farming practices and techniques, increase productivity and income, expand their living standards, and raise the knowledge and social capital of rural communities. Agricultural extension agents aim to disseminate knowledge among rural people while supporting their personal and communal needs. They are also recognized as mediators since they connect rural people with local state authorities and services in the broader sense.

Agricultural extension agents are, thus, government-trained staff for agricultural development in rural and urban areas. They train farmers and entrepreneurs in valuable

techniques and agricultural production methods. The identified beneficiaries are primarily local people involved in different projects, i.e., residents, women, youth, farm managers, private business operators, and other producers. The second beneficiary group entails structures/institutions in decentralized districts, village associations, cooperatives, management committees, farmers' organizations, and others. It also involves decision-makers, mutual aid institutions and organizations, training agencies, NGOs, and researchers.

The Food and Agricultural Organization (FAO) assessment of ninety-seven countries revealed that five percent of agricultural extension services were dedicated to females, and merely fifteen percent of extension workers were women (FAO, 1993). Agricultural extension agents have often regarded women as lesser active labourers than male farmers. This results in a preference for male extension service providers. This bias is grounded on the idea that males are the decision-makers and producers of essential crops while females are petty farmers with fewer plots to cultivate (if a man has 1 ha, a woman has the right to 0.50 ha). Agricultural extension services are meant for larger industrial farming-oriented businesses, where females remain understated (FAO, 1993).

Another reason for this prejudice is that when males receive training, they are more likely to share the learning outcomes with their family members, including their wives (Meinzen-Dick et al., 2010). Meinzen's hypothesis could be impractical, especially when males and females carry out different responsibilities or cultivate different crops. These barriers prevent women from producing in quantity and quality like their male counterparts.

As explained in chapter five, time constraints due to the gender division of labour might also limit females' involvement in courses offered by agricultural extension personnel. When women have access to extension agents, their workloads exclude them from attending the training; as a result, men usually benefit from the training activity, which they do not share with their wives after the training.

Women's lesser levels of education might also restrict their participation in exchanges when guidance by extension agents necessitates literacy or proficiency in the foreign languages in which the training is conducted. Lastly, social patterns preventing females' mobility, such as asking husbands' permission before joining the training or preventing women from interacting with a male extension agent without her spouse's permission, further hinder females' admission to agricultural extension training and services.

Suitably, Matou⁸ from Binkady cooperative said:

Men usually benefit from the training offered by extension agents in our communities since trainers believe they are the sole household providers and must be supported. Even when women can join the training, they must have their husbands' permission. Women are often compelled to abide by the socio-cultural patterns by requesting their spouses' and neighbourhood leaders' permission before joining knowledge-sharing gatherings where extension agents disseminate vital information. Our cooperative members are changing those dynamics through negotiation with the male leaders of our communities (Interview at Binkady cooperative, February 12, 2020).

Likewise, Aichata added:

Before joining the cooperative, I could not participate in the agricultural extension training programs in the afternoon. That's the time many of us prepare dinner and do other household duties. As a result, most women could not join the training. Thanks to our memberships in the cooperatives, the schedules have been adjusted to meet our timetables (Interview conducted with Fasso Bara women's cooperatives on February 7, 2020).

Agricultural extension agents' services, information, and training activities should be tailored to meet women's needs. Fortunately, extension agents in the study areas pay attention to some of the challenges mentioned above, especially cultural constraints, women's time restrictions, lower education levels, and mobility restrictions. In Baguineda and Bamako study areas, female extension agents were appointed to assist the cooperative members in conducting their activities. Hundred percent of cooperatives members in the three study areas had access to extension agents and services. According to most respondents, female extension agents are more efficient. In the Kati study areas, agricultural extension agents were primarily men; however, the author witnessed that female cooperatives members do not encounter obstacles cooperating with their male extension agents.

Extension agents in the survey regions used adapted techniques and skills in transferring technology and information to women farmers and entrepreneurs in the study areas. They would, for instance, provide information on subsidised seeds and fertiliser costs, literacy training programs, food processing skills, and procedures for accessing credit with banks and

⁸ The author uses pseudo names throughout the thesis to preserve respondents' anonymity

other financial institutions. Agricultural extension agents also adjusted their working schedules to meet women's availabilities in Baguineda and Kati. For example, some meetings and training sessions were conducted at 07:00 am in Baguineda. This was the most convenient time for most cooperative members who must water their vegetable gardens right after the morning meetings before joining their husbands on family farms.

In contrast, meetings and training were conducted in Bamako and Kati cooperatives in the afternoon or during weekends. Extension agents similarly perceived that women might not be able to travel beyond their community. As a result, they would travel to neighbourhoods where cooperatives are located to disseminate important information and knowledge on modern agricultural farming practices and provide them with information on equipment and technologies. Extension agents further assist women in efficiently using the social media platforms like WhatsApp and Facebook. Women utilised WhatsApp groups to share information about market prices and needs, subsidise seeds and fertiliser prices, harvest, and plantation time.

The survey found that agricultural extension agents and services are essential information sources amongst farmers and entrepreneurs as their assistance remains crucial for cooperatives' members' livelihood activities. The extension agents in the study areas operate as intermediaries between farmers and local government representatives. In the study sites of the Baguineda, Bamako, and Kati areas, the availability of extension agents is crucial in bridging the gap between farmers and the government. Accordingly, respondents from Fasso Bara cooperatives contented:

Thanks to our cooperation with agricultural extension agents, we have improved relationships with our local government representatives. Besides, we have made some positive progress in conducting our activities thanks to our constant cooperation. Agricultural extension agents have offered us new ideas and strategies for piloting our cooperative business activities. We constantly receive training in capacity buildings from them at least once a month. The extension agents further brought our concerns to government officials. (Focus group discussion at Fasso Bara cooperative on February 22, 2020).

Extension agents also help cooperative members address gender inequalities, often leading to a more equitable allocation of farming assets among members.

Equally, Fatou from Binkan cooperative said:

Extension agents train us on gender equality and mainstreaming women's needs within the cooperative strategy to achieve greater profits via long-term planning. Even though some men are still reluctant to gender equality, things are gradually changing, especially among our male members. We hope our daughters' generation can benefit from these improvements (Focus group discussion at Binkan cooperative on February 12, 2020).

Agricultural extension agents are deemed essential sources of information amongst farmers as their collaboration with farmers remains imperative. Agricultural extension agents offer crucial knowledge and skills to farmers in extending the cooperative's activities and enhancing members' livelihoods and well-being. These services can be mainly beneficial for women who usually have lesser education, lesser access to training, and operate in the informal economic sector with lesser capital.

6.1.2 Information and Training

Information and training access remains essential component in human capital development in agriculture. Information access is vital as it offers innumerable choices to individuals who hold it. Access to information remains expensive and evolves predominantly through interactions among competitors. Information entries tend to work out inversely for males and females when they amass different types of knowledge. The survey found that when women received expertise or information, they shared the results with other household members. In contrast, when men receive data, they are more likely to utilise the knowledge only to their benefit.

Challenges to women's access to information and training are illiteracy, as earlier mentioned. This lack of literacy affects how training and knowledge are disseminated in a specific setting. Usually, training and information are conveyed in French, even though around 70% of Malian women are illiterate. This number reached 95% in rural areas (INSAT, 2018). This was also evidenced in the author's data, as most of the respondents in the three study areas have a primary education level. Precisely, 35% of the respondents completed primary education, while 9.4% accomplished secondary education. More importantly, 42% of the respondents never received any formal education.

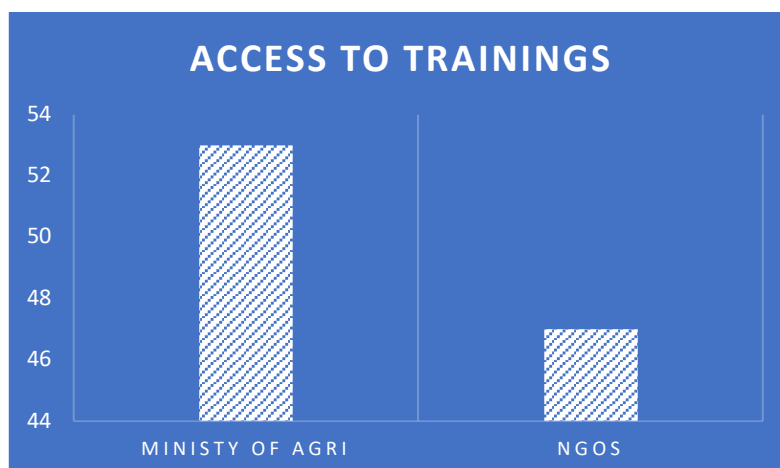
Access to higher education also remains a fundamental challenge for farmers in Mali. The survey outcomes indicate that only 3.5 % of the respondents reached high school, while 8.8 % received a university degree. Women's participation in higher education in agricultural

sciences and studies can be significant in the Malian context, where females comprise most of the active agricultural population. The percentage of females working and studying in Mali's agricultural science and technology field has improved significantly in recent years. It rose from 7.2 % in 2006 to 22.2 % in 2017 (INSAT, 2018). Nonetheless, this percentage remains marginal in rural areas. Female scientists, researchers, directors, lecturers, and professors can offer diverse insights and perspectives in farming and support research interventions to better tackle challenges encountered by Malian farmers. They may also serve as role models for students and other females in farming activities.

Facing these challenges, the study reveals that the survey cooperatives in rural areas are now playing a prominent role in making those services available to their members. The survey outcome demonstrates that cooperatives in rural and urban areas perform a significant role in making functional literacy, training, and information available to their members, who are generally less educated. Cooperative members in Baguineda and Kati were lesser educated than the members in the capital city. As a result, cooperatives in Baguineda and Kati were receiving more functional literacy programs than those in Bamako. Precisely, 65% of the cooperative members in these areas contended to benefit from literacy programs.

The results also determined that most cooperative members, around 53%, have obtained training and information from the Ministry of Agriculture in cooperation with local municipalities and agricultural extension agents, while 47% are receiving training from NGOs, as illustrated in Figure 6.1. All the cooperatives stated that they receive training at least once a year from either of these institutions.

Figure 6.1: Cooperative Members' Access to Training



[Source: Outcomes from SPSS made from field survey, 2020]

The training and information from NGOs and local extension agents are part of the State curricula of agricultural development with the Ministry of Agriculture. The survey outcomes also demonstrated that 60% of the cooperative members mainly depend on agricultural extension agents in rural areas to access information. According to the respondents, extension agents in the survey region mostly visit cooperatives than individual farmers.

Urban farmers and entrepreneurs have better access to international conferences and workshops. Suitably, many respondents in Bamako said that they had attended domestic and international conferences and seminars to improve their agri-business activities. Besides, cooperatives in the study areas provide their associates with training and information in their local languages based on their members' availability.

Functional literacy training helps contain women's subjective feelings of powerlessness and raises their self-consciousness to make their voices heard during meetings. Adult literacy can also be employed to promote the gender equality concept in accessing necessary resources in patriarchal settings. Providing women with functional literacy can further increase their self-confidence and aptitude to contribute to discussions and bargain with traditional and local government officials during important meetings.

Hence, functional literacy can be an essential mechanism for farmers to improve their agricultural activities. Within the survey cooperatives, women benefit from functional literacy, training, and information, helping them boost their subjective feelings about their incapacity to deal with modern farming trends, enhancing their endeavours, and raising their self-consciousness. Women's involvement in meetings also increases their confidence and ability to contribute to group discussions while making their voices heard. Accordingly, Sitan Founé stated:

Instead of perceiving women's education as a threat to men's power, we must perceive it as a chance to expand household and community livelihood. Access to education must become an essential part of gender mainstreaming programs in Mali. Our cooperative promotes win-win literacy access to anyone involved in the group. Other men in the organisation and I discussed the advantages of such practices in women's improved contribution to cooperative activities (Focus group at Fasso Bara cooperative, February 24, 2020).

Similarly, Aminata⁹ affirmed:

Access to education remains crucial for any socio-economic development. Many of us did not know how to read and write in French. Thanks to the functional literacy programs provided to us by extension agents and NGOs, we are tackling that issue (Focus group discussion at Benkady cooperative February 14, 2020).

Picture 4: Extension Services through Group Approach in Baguineda Coop



[Source: Photo: Taken by the author during fieldwork in Baguineda, February 2020]

In other words, most cooperative members in the three study areas allege to obtain either training, information, education, or other social services from their cooperative organisations. Cooperative memberships influence women's access to information and training, shaping their human capital endowments, accountabilities, and access to reliable information—these in turn impact members' income-generating activities. The incentives and capacity-building skills obtained through functional literacy, training, and communication led to an enhanced women's agency level that remains crucial for agricultural development and women's empowerment.

6.1.3 Market and Marketing Networks

Markets are objects (space, place, outlet) or procedures through which a coordination system among various actors is set up to determine product prices and where sales and exchanges of products and services occur. Marketing is an important activity for both men and women. Marketplaces in Mali include men and women individual sellers who peddle different kinds of produce.

⁹ The author uses pseudo names throughout the thesis to preserve respondents' anonymity

Generally, in the marketing realm of Mali's four significant kinds of cereal (millet, sorghum, rice, and maize) commodities dominate the supply chain sector. Women are less involved in this type of marketing. This can be explained by the fact that they are not major cereal producers due to their poor access to means of production. Instead, women are highly involved in marketing agri-food products such as vegetables and processed food commodities. The marketing of cereal involves several stakeholders. Farmers, collectors, wholesalers, semi-wholesalers, and retailers who carry out selling activities with other agents providing additional services such as shipping and storing. Cereal's marketing scheme also involves many gatherers in the farming areas, who are linked to wholesalers driving the economic system as they buy large quantities of cereal crops and supply markets. Wholesalers do not directly buy from farmers, except for a few larger producers who can supply them. Women are mostly excluded from these channels.

In the study areas of Bamako, and Kati, women's role in the agricultural sector, particularly in marketing, is generally recognised as they dominate the marketing realm of vegetables and processed foods in markets. The survey members of these two study areas are active sell agents in various capital city markets, in urban Kati town and rural areas. Still, they operate at different rates depending on their location and resources.

Numerous women of the survey cooperatives intervene as producers, bulk sellers, or retailers in peri-urban and urban areas. In both rural and urban markets, women book halts and sell under the sun or crammed in a small makeshift hangar offered by their village or city hall for a fee disbursement of 100 to 200 FCFA per person. Generally, they sell small quantities to meet their household's urgent needs.

In rural areas, the sale in the local market or leftover production is an essential aspect of small-scale agriculture. Women in rural areas sell lesser quantities from their market gardens than those in urban areas. They also hold no control over weekly market prices as it is frequently determined by retailers, shareholders, or agreed with personal buyers. Usually, buyers fix prices, and the supplier has less control over the price suggested by buyers, broad retailers, distributors, or semi-retailers.

In rural areas, all the producers produce the same type of yield at once. They also lack adequate storing houses or cooling systems to preserve their products. This led to market deflation, with producers having no choice but to sell their produce at any cost offered by customers. Additionally, when women decide to sell their yield in better markets, they must travel long distances to sell small amounts of produce. They also lack information on market prices and fail to safeguard their rights as providers. Women do not want to come home empty-

handed when they are on weekly markets for sale. As a result, they sell out their yields at lower prices. When they decide to sell in distant markets, they encounter robberies, transportation issues, and insecurity as they are often victims of rape or get their yields stolen by thieves. In comparison, women in urban markets face financial constraints, access to transport, and mobility issues. To counteract some of these challenges women in rural areas created joint marketing cooperatives with women retailers in urban areas to access lucrative markets.

Market entry is essential since it connects the peasants to the purchasers. Viable contacts are established between women traders and processors in urban areas with women producers in urban areas to solve their marketing issues. In doing so, women producers became the major yield providers to women sellers in town who buy from producers' cooperatives in rural areas. Rural cooperative members offer raw materials to urban cooperatives, while urban cooperatives offer rural farmers better market access and reliable services. Such alliances foster unity and the strength to accomplish established objectives, creating collaborative groups where associates' needs are addressed through cooperation and collaboration. Women sellers living nearby marketplaces tend to sell their commodities more quickly than those living far away. Cooperatives in urban areas know well about market strategies and prices and face lesser challenges than those in rural areas. Table 6.1 explains the advantages of such cooperation among the survey groups.

As indicated in Table 6.1, most of the surveyed cooperatives in Bamako stated that their access to better produce and markets increased since their involvement in cooperatives. Precisely 85 percent of Binkan cooperatives members asserted that was the case, while the percentage was 70 in Binkady, 65 percent in Fasso Bara and 73 percent in Yerata Ton. Only 35 percent of associates in Djigui Seme indicated that their market access increased slightly after joining cooperatives, and 40 percent of Agroforestry cooperatives members contended that this was an accurate assertion. Compared to Kati, 80 percent of the Jakossoron ton cooperative asserted that their market access increased highly. In comparison, 76 percent of Dabagana cooperative members were also convinced that this was the case. Forty-two percent of Djiguiya cooperative associates said their market access improved, and 38 percent of Bencady cooperative members believed this also applied to them. Lastly, 33 percent of l'Univers des Animaux cooperatives said their market access slightly increased, and 27 percent of Bincady Sabouyouman cooperative members had a similar point of view.

In contrast with Baguineda, 77 percent of Djiguiya cooperative members contended that their market access highly improved, and 67 percent of Sinigne Sigui cooperative members

believed to have highly enhanced their market access. In comparison, 62 percent of Benkady cooperative members affirmed so. Besides, 44 percent of Binkadi associates stated that their market access improved compared to 40 percent of Yiriwa Ton cooperatives. Only 25 percent of Kobeba cooperative members alleged to slightly enhance their market access compared with 22 percent in Nieta cooperatives.

Table 6.1: Cooperatives' Access to Markets

<i>*Coop A</i>	Access to market in Bamako	<i>Male</i>	<i>Female</i>	<i>%</i>
<i>Agro-Foresterie coop</i>	+ - Florist	97	0	40
<i>Binkady</i>	++ Micro-credit and processing	2	60	70
<i>Binkan</i>	++ Processing	1	79	85
<i>Djigui Seme</i>	+ Processing	10	50	35
<i>Fasso Bara</i>	++ Market gardening and livestock breeding	9	3	65
<i>Yereta ton</i>	++ Processing	1	5	73
<i>*Coop B</i>	Access to market in Kati			
<i>Benkady</i>	+ Market gardening and livestock breeding	60	32	38
<i>Bincady Sabouyouman</i>	+ - Market gardening	98	0	27
<i>Dabagana</i>	++ Market gardening and marketing	20	280	76
<i>Djiguiya</i>	+ Market gardening and livestock breeding	22	0	42
<i>Jakossoro ton</i>	++ Marketing	0	80	80
<i>Univers des Animaux</i>	+ - Fishing and livestock breeding	5	2	33
<i>*Coop C</i>	Access to market in Baguineda			
<i>Benkady</i>	++ Market gardening	2	138	62
<i>Binkadi</i>	+ Market gardening and livestock breeding	2	128	44
<i>Djiguiya</i>	++ Market gardening	6	254	77
<i>Kofeba</i>	+ - Market gardening and food processing	3	100	25
<i>Nieta</i>	+ - Marketing and processing	0	120	22
<i>Sinigne Sigui</i>	++ Market gardening	4	260	67
<i>Yiriwa Ton</i>	+ Market gardening	4	138	40

[Source: Outcomes from SPSS made from field survey, 2020]

Key: ++: highly increased, +: increased, + -: slightly increased

Overall, many cooperatives have played a dynamic role in empowering their members to gain better market access. Accordingly, Binta from Binkady cooperative said:

Our cooperation with urban women retailers exemplifies a significant change in accessing markets. This initiative supplements cooperatives' efforts to enhance their members' entry into profitable markets. Before that, we were disadvantaged in accessing improved markets (Focus group discussions at Jakossoro ton cooperative on February 8, 2020)

Likewise, Binta from Binkady cooperative said:

Our coordination with marketing cooperatives in Bamako offers us substantial roles in various domains, including selling at better prices, revenue creation, and declining threats. These returns often lead to increased value in local products, and community development projects for our cooperative members (Focus group discussions at Yiriwa ton cooperative on February 14, 2020)

Two marketing networks emerged due to cooperation between women producers in rural areas and women sellers in urban areas. The study findings revealed that informal marketing networks remained the primary network farmers mainly used. Nearly 60% of yields were sold via unofficial market networks. The selling of harvests includes immediate transactions from producers to buyers in their neighbourhoods. And formal transactions between brokers and other cooperative organisations in urban areas. Many farmers opt for informal marketing (sell to other consumers in villages and roadside) as there are no product quality restrictions. Selling networks employed by farmers vary significantly across the study areas, depending on producers' demands. Through networking with other cooperatives in the capital city, cooperatives in rural areas participate in profitable marketing since these previous are acquainted with existing market circumstances. Using these resources, rural farmers generate and deliver the best kind of commodities needed in the market as they consult with other cooperatives in the city on their necessities.

In the survey areas selling through marketing, cooperatives were common. Producers in rural areas indicated that it is suitable to market with urban cooperatives as they face numerous issues accessing urban markets. Moreover, the costs differ based on the locations. In peri-urban areas, the prices remain higher due to extreme need, while in remote rural areas, the prices are low. Within a cooperative, prices are decided by all members, and all the yields are also traded at the same price. The cost of production, competition rate, demand, and quantity of crops determine the price. When questioned about their knowledge of product evaluations and price settlements, the survey found that (25.9%) of the participants were knowledgeable about ratings of their products, whereas (41.6% utilised their personal experience for categorisation. The knowledge about price establishment differs based on the locations. These procedures shape women's capabilities in regulating their product costs.

Collaborative marketing exemplifies the outcomes achieved over collective engagement and bargaining with commercial agents within and beyond their communities, positively affecting members' control over prices. Women's producers in the peripheries'

collaboration with marketing cooperatives in urban areas allow them to sell their products with no surplus and at improved prices. Cooperatives also decide the cost of their yield based on members' consensus. This gives them more bargaining power for urban trading.

Furthermore, the lack of adequate infrastructure remains a significant challenge, as mentioned by many respondents. Bad road conditions or connectivity to distant places might cause impediments in shifting yield to marketing points, which might cause shortfalls in agricultural products. In the survey, only cooperatives in Bamako have access to better roads. Many farmers in Baguineda and Kati area mentioned bad roads condition or inaccessible roads during the rainy season, particularly muddy roads in accessing markets. Individual non-cooperative members generally used bicycles to ride to better marketing spots. Women, in general, do not know how to ride, even if they know how to ride long distances and unsafe road conditions discourage them. As a result, women find it unnecessary to invest in bicycles.

High transport expenses were also highlighted by several respondents in the three study areas. Accordingly, participants were questioned about transportation fees to better marketing spots. The findings revealed that cooperative memberships pay a lesser amount around (15000 FCFA) for transportation. Cooperative members often utilise leased automobile-like small trucks (56%) or their motorcycles (43%) to carry their products to markets. Since cooperatives sell their yields jointly, the travel expenses are shared among the members.

These new trading prospects among rural and urban cooperatives have been made possible through enhanced collective engagement among different cooperatives in purchasing transport means or sharing the cost of transportation. They market their products in bulk to other cooperatives. While individual farmers must travel longer distances and pay more since their farms are further to marketing places. Cooperative members marketing their commodities operate as an essential linkage and source of information between peri-urban and urban sectors of the economy in Bamako and Kati. Equally, Mariama argued:

Before joining the cooperative, I had difficulties selling my yields because of my minimal procuring power, lack of valuable resources, and socio-cultural obstacles. The cooperative helps me conquer those barriers. Within the group, we are more empowered as we share risks and profits while challenging processes to access better markets (Interview at Djiguiya cooperative on February 15, 2020).

Sale revenue is used for the cooperatives' needs and community development projects. At the same time, the personal benefits are used for the household's urgent nutrition needs, for children's education or medical expenditures, and to buy necessary commodities.

Additionally, cooperatives provide their members with market information; they deliver information about market prices and consumers' needs to their members. Market information allows smallholders to make knowledgeable choices about what to produce, where to sell it, and at what price. More informed farmers are more likely to succeed in markets as they hold market information on fair prices for their yields. The finding indicates that many cooperative members in Bamako (60%) had access to market information, while only 40 % of the cooperatives in rural areas had access to it. Members' involvement in cooperative activities reinforced information sharing via cooperation, which improves access to distant markets and commercial services and empowers members. Accordingly, Safoura¹⁰ indicated:

The collective engagement and social bargaining approach amongst cooperatives in peri-urban and urban areas were an entry point in accessing information. Information sharing has played a vital role in our empowerment, mainly in the diffusion of new practices, new technologies, and opportunities for associates on both sides (Focus group discussion at Fassou Bara cooperative on February 14, 2020).

Aliya, another member, added:

Our collective engagement with marketing groups boosts our members' capability in conducting businesses and provides us access to better markets. Especially, it offers prospects in various economic realms, including income generation, lessening risks, and accessing unavailable services. These improvements led to greater cooperation, members' empowerment, and community development projects (Interview at Bincady Sabouyouman cooperative on February 11, 2020).

Women's involvement in cooperatives is a dynamic process embodying collective engagement among participants. When women effectively use collective engagement and agency, they identify opportunities with existing structures and systems which boost their access and control of resources. Agency as a process enhanced women's contribution to the groups. The strategies employed by women in the cooperatives include the capacity to decide, make good choices, and initiate new approaches based on their socio-economic conditions to access resources, leading to achievements among members. Women's collective marketing helps them confront the socio-economic barriers to their access to better marketplaces.

¹⁰ The author uses pseudo names throughout the thesis to preserve respondents' anonymity

6.1.4 Decision Making

In patriarchal societies including Mali, gender relations are structured according to the principle of “non-mixites,” based on the distinction between females and males in intra-household relations. This gender relation institutes the seclusion of women for the profit of men (Rondeau 1994: 322). This seclusion is reflected at various levels, such as women’s exclusion from the traditional decision-making procedures, in accessing critical decision-making stances at the government level and accessing resources.

Table 6.2: Women’s Representation in Managerial, Elective, and Leadership Positions

Structures/positions/sectors	Sex				Total
	Men	%	Women	%	
Ministers	26	83.87	5	16.12	31
Regional Governors	9	100	0	0	9
Ambassadors	33	91.66	3	8.33	36
General Consuls	8	100	0	0	8
Embassy Counsellors	107	89.16	13	10.83	120
National Directors	226	84.4	43	15.98	269
Secretary Generals	27	87.09	4	12.90	31
Chief of Staff	27	87.09	4	12.90	31
Technical Advisors	99	80.84	24	19.51	123
Chargés de Mission	73	81.11	17	18.88	90
National Advisors	123	83.6	14	9.5	147
Supreme Court	38	84.44	7	15.55	45
Constitutional Court	5	55.55	4	44.44	9
Economic and Social Council	67	90.5	7	9.4	74
High Council of Local Authorities	91	91	9	9	100
National Counsellors	67	91.7	6	8.21	73
Municipal Counsellors	9 844		928	8.66	10 772
Mayors	695		08		
Independent Electoral National Committee	13	86.6	02	13.33	15
Regional Councils	08	100	0	0	08
High Court of Justice	09	81.81	02	18.18	11
Permanent Assembly of Agriculture Chambers in Mali	42	91.3	4	8.7	46
Permanent Assembly of Commerce Chambers in Mali	16	88.9	2	11.1	18
Chambers of Commerce and Industry in Mali	11	84.6	2	15.4	13
National Councils of Employers in Mali	18	90	02	10	20
National Councils of Farmers’ Organizations	08	80	2	20	10
Court of First Instance	10	100	0	0	10
Peace Justice with Extended Jurisdiction	42	100	0	0	42
Army Officers	300	99.99	02	0,7	302
Customs Officers	337	80	84	20	421

[Source : Bulletin Statistique CNDIFE (2009-2010-2012) update /Beijing +10 et +20 et recherche documentaire]

This principle varies according to the areas and socio-historical realities. Women’s lack of representation in conventional decision-making positions in local government, judiciary,

civil services, and head of civil society organisations is apparent in Mali. Table 6.2 illustrates women's political representation in key leadership positions in Mali.

Table 6.2 confirms that the proportion of women in decision-making bodies (elective and leadership positions) remains low throughout Mali. To encounter this lack of representativeness, the government of Mali enacted law No. 2015-052/ of December 18, 2015, to promote women's representation in appointed and elective positions. Precisely law 052, in its first article, stipulates that when appointments are made in public institutions or departments of government services in Mali by decree, order, or decision, the quota of either sex must not be less than 30% (the Republic of Mali, 2015)—implying that in any assigned governmental positions in Mali women must represent 30%. However, this 30% quota application for women in decision-making remains a challenge in practice. Malian women still encounter socio-cultural barriers to their access to important decision-making positions.

Women in Mali have never achieved 20% of all electoral positions despite encouraging efforts by the government, civil society organizations, and development partners. As of December 31, 2013, women represent 1% of mayors, 9% of communal councillors, and 9.52% of deputies; women heads of political parties represent only 2% (CNDIFE 2009-2010-2012). For appointed positions, the number of women ministers has declined to three. Nonetheless, the number has remained more or less the same in the three previous governments, although it is still shallow (less than 10%). In other senior positions in public administration, the situation is gradually changing, with 10.55% in 2011, 11.78% in 2012, and 11.67% in 2013 (CNDIFE, 2015). It should also be noted that at the appointed positions, Law N°2015-052 of December 18, 2015, introducing measures to improve women's representation in appointed and elected positions has enhanced the representation of women in the government with eight women ministers (17.64%) compared to 3 in the previous governments (CNDIFE, 2015). Regarding the challenges related to women's access to decision-making and leadership positions, Mariko stated:

Outdated perceptions of the responsibilities and roles of females and males and their expected behaviours, constructed on socio-cultural arrangements, are prominent to a lesser involvement of females in leadership positions and in profitable economic and important community management activities (Interview at the Ministry of Women and Children, January 29, 2020).

Women are often restricted to work in what is considered the males' sphere, confining them to care and domestic work. It also holds them back from utterly

joining the formal employment sector. The gender division of labour in child, sick, and elderly care confined women to spousal duties and caregiving responsibilities, preventing them from engaging in other lucrative activities, added Madame Diallo (Interview at the Ministry of Women and Children, January 29, 2020).

Women must first discuss and get their husband's approval before engaging in any economic activities. Conventional practices built on biased norms and patterns against women remain essential in determining their entry into decision-making stances. The lack of state willingness to enforce the laws and regulations empowering women and increasing their access to decision-making remains a challenge. Restrictions on women's access to productive assets like land, credit, and equipment persist as significant constraints for women's participation in the labour force, declared Abdoulaye (Interview at the Ministry of Women and Children Gender focal points, February 20, 2020).

Established prejudices about women as incapable leaders, when compared with men, predominate due to the weight of unfair traditions. Women's capability and possibility to engage in crucial leadership positions at the local or higher level are restrained by conventional norms. Males continue to take over females in important leadership, economic, and social spheres. A study conducted by the International Labour Organization points out that if conventional patterns do not impede women's membership in cooperatives, they could still be discouraged from actively joining as associates or managers of the group. For instance, female managers or leaders of cooperatives are generally less active or relegated to minor strategic positions like treasury or secretary since these positions are deemed socially appropriate for women although not beneficial in decision-making (ILO, 2015b, p. 3).

Their findings further reveal that women's extra and practical chores will not compel their husbands to lessen their tasks or share them with their spouses. Women continue to play their roles in child-rearing, household care and protection, and their responsibilities in the informal or formal sector of the economy" (ILO, 2014, p. 3). Cooperatives made of only women might help surmount social and cultural restrictions reducing their involvement in the labour force in male-dominated societies (ILO COOP, 2014, p. 2).

Theoreticians of collective engagement recognise three main objectives in accessing important positions: decision-making, which allows individuals to participate in increased decision-making; relationship development includes building new interactions and expanding existing connections with or within the collective engagement; and the collaborative engagement process, which ensures that group members have better access to communal activities (Michael et al., 2019). The disadvantaged groups can meaningfully participate in

group activities and develop social skills that empower them to participate in social engagement through these processes.

Some respondents further contended a lack of solidarity and support for women's leadership in rural and urban areas. This is because biased cultural and religious patterns influence people's behaviours and attitudes towards female leadership and their ability to lead efficiently. Accordingly, Kadiatou, a woman leader, revealed:

We, as women, do not support each other. Instead of voting for female nominees during elections, we vote for men. Women's associations are disorganised and disunited. There are distrusts and jealousy among female leaders.

We have been brought up with patriarchal beliefs. Our mothers, fathers, and society have taught us that women are mediocre and cannot lead as great as men. We must address these biases as they persist in our contemporary societies, added Zeinab (Focused group discussion at Benkady cooperative, February 14, 2020).

Cooperatives in the study areas are confronting these constraints by granting access to leadership positions to women members. Facing the multidimensional challenges explained above, women could make decisions regarding their organisation management as cooperative members. To further understand women's representation in key positions, respondents in the study sites were asked to clarify the rate of women's involvement in decision-making processes. Fifty-four percent of the respondents assert that women hold better power in making decisions within their cooperatives. Thirty-four percent also stated that this influence in making the decision was expanded in their neighbourhood's political or traditional organisations. Women's decision-making stance remains equally important at their family's level. Correspondingly, Makan said:

The more women are visible in the public sphere, the more influence they gain. Women leaders have more impact on the cooperative's management. Their skills and knowledge are noteworthy; as women grant better respect to guidelines and details than males. Unluckily, women still encounter challenges in making their voices heard at the national level. Men still make the bulk of crucial decisions (Interview at CNDIFE on February 9, 2020).

The majority of women in the agricultural societies of Mali are under patriarchal domination and are often restricted by gendered responsibilities and norms. Social norms obstruct women's ability to lead and participate in significant leadership positions. Facing these

challenges, what key role have cooperatives played in addressing women's access to important functions? Cooperatives increase women members' access to decision-making primarily when they were deprived of doing so within their communities. To counteract the bias against women's ability to lead, extension agents and NGOs constantly sensitise traditional and religious leaders and household heads on the importance of women's involvement in decision-making about community issues.

For example, some husbands were lenient to women joining training and collective engagement in some instances unless the extension agents were female, and all members were women. This illustrates the patriarchal nature of some rural communities where wives still require their husbands' permission to engage in any activities besides the household. As a result of this negotiation, some women were allowed to join the collective engagement group. Even though not fully resolved, the patriarchal attitude is progressively changing with women's involvement in cooperatives. Within cooperatives, women are trained to take responsibilities within the group and bargain with their husbands, community leaders, and local state authorities. As such, membership in cooperatives reinforced women's access to decision-making power as they became more knowledgeable about their rights and abilities as agents of socio-economic change. One interviewee from Yiriwa Ton cooperative contended:

Our collective commitment allows our membership to join training in audit, management, gender mainstreaming, leadership, and personal capacity-building programs organised by NGOs and the government. This training has affected our capacity-building level and offered us prospects for discussion, jointly planning, and making decisions, said Mamou (Interview at Yiriwa Ton cooperative, January 28, 2020).

Moreover, women are not supposed to speak up in public meetings, especially when their husbands or in-laws are present in some rural areas. Conventional patterns deem women to listen and remain silent while assisting mixed meetings. When they want to make their voice heard in a meeting, they delegate one woman, generally the oldest, or the head of women's organisations, to report their concerns. Hence, women tend to remain silent or not convey their thoughts when attending mixed meetings to avoid pressure and judgments. Their involvement in cooperatives is addressing this.

Accordingly, Aichata from Fasso Bara cooperative stated:

Before in public meetings, women would come earlier and thought they would see vacant seats; they would opt to sit on the ground, leaving the chairs for the men. Those on the seats, not on the ground, would participate in the negotiations. With the cooperative, this is changing. We are steadily starting to speak out even in assemblies outside the cooperative (Focused group discussion at Fasso Bara cooperative, February 10, 2020)

Similarly, Nene, a respondent from Fasso Bara cooperative, said:

Our involvement with the cooperative has substantially improved our decision-making skills in household welfare. Several women members account for a positive change in domestic relationships with their partners and other household members. Learning to voice our concerns as members of the cooperative was renowned as an exemplary embodiment of leadership competencies (Focused group discussion at Fasso Bara cooperative, February 10, 2020).

While the leader of the Djiguiya cooperative in Kati claimed:

Cooperatives placed women on the pathway to equality, economic emancipation, and social and political empowerment. This enables its members to treasure themselves, discover their voices; convey their apprehensions, and impact choices at the household, and community level (Focused group discussion at Djiguiya cooperative, February 26, 2020)

The narratives stated above from women members of cooperatives have led women to bargain and often challenge the system to develop their self-confidence and leadership skills through the training provided by NGOs and other organisations.

The cooperative characteristics, including groups' size, structure, and level of organization also affect women's decisions and participation levels. Smaller groups usually allow better collaboration and social unity, guarantying teamwork and preventing free riding. Women tend to voice their opinions more and engage more actively in group meetings in only women's cooperatives.

The size of the organisation and the extent of members' involvement and performance equally affect women's openness in expressing their opinions regarding cooperative activities and accessing leadership positions. The location and members' commitment level might also affect women's decision-making in collective engagement.

As an illustration, cooperatives in Bamako were different from those in rural and peri-urban areas. Unlike cooperatives in Baguineda and Kati, where membership was mainly open to residents with specific social statuses, cooperatives in Bamako were more flexible regarding those characteristics. Their adherence was open to anyone with skills and willing to comply with the organisation's principles. The survey also found that in cooperatives, where membership is only available to men, cultural norms and practices regarding women partaking in decision-making stances are lesser.

In contrast, only women cooperatives and mixed cooperatives overcome gender discrimination and inequalities in accessing decision-making stances. They create environments where both men and women members uniformly lead while jointly receiving training in capacity building and equally participating in decision-making stances and leadership positions. In this vein, gender equality and women's leadership are encouraged in same-sex and mixed cooperatives since women are conventionally discouraged from participating in leadership activities or holding responsibilities. Women's collective engagement through cooperatives empowers them to gain the skills and experiences needed to lead cooperatives.

It also stimulates their participation in decision-making stances in formal and informal establishments. Women recognise the structures that oppress and subordinate them. Attaining empowerment requires women to transform the power structures by instituting self-confidence and self-respect with the socio-cultural norms, patterns, and legal systems to participate in decision-making processes and access resources cost-effectively.

Core values and exemplary practice of collective engagement by the surveyed cooperatives involved the following. The achievement is that any individual as a cooperative member has the right to be engaged in decision-making. Joint decision-making enhances members' capability to access strategic positions. Finally, women believe that balanced opinions among members promote shared concerns and help them make important decisions about their cooperative's activities. Members endorsed and adopted these values in making decisions based on cooperative principles.

Encouraging decision-making where all members vote aligns with cooperative, democratic principles. This also encourages members to partake significantly and be involved in group activities. Based on these findings, the survey argues that women's membership in cooperatives can increase their leadership skills and self-confidence, mainly in rural areas. The oral accounts above illustrate that women's involvement in cooperatives impacts their decision-

making processes by increasing their self-confidence, bargaining power, and access to strategic leadership positions in their groups.

Sustainable economic growth requires women's empowerment to improve their working conditions, productivity, and access to critical decision-making stances so that Mali can emerge from the woes of poverty, and food insecurity and reduce the gender gap in political participation. Women acquiring civil, political, economic, and decision-making rights at the higher level should remain an ongoing educational mechanism within Malian society through dialogue and continuous sensitisation. Women need their fundamental rights to be enshrined in the law and have equal rights in retrieving critical decision-making regarding their access and control over necessary factors and means of production.

6.2 Women's Involvement in Cooperative Activities through Collective Engagement and Bargaining

6.2.1 Collective Engagement Among Cooperative Members

Participants were asked to describe the socio-economic activity that requires cooperation, which individuals cannot do without other cooperative members' help. Regarding that question, 63 percent of the respondents highlighted marketing as the most socio-economic activity requiring all the cooperative members' participation, implying that in all the 15 cooperatives, members cooperate more during marketing time.

In mixed cooperatives, both men and women are involved in marketing activities. They generally collect the collective goods of the cooperative and sell them to local or national markets depending on cooperative members' needs, budget, and availability. Each cooperative in the three study areas has delegated marketing staff overseeing cooperatives' final products to regional and national markets within and between their villages. The study also found that marketing agents are generally male members in rural Baguineda and Kati areas and are paid transportation and handling fees from the cooperative budget.

Even though women are sometimes involved in carrying and marketing cooperative products, men mostly perform them. The respondents' reasons include the availability of men in contrast with women who must deal with their household chores, grating them less time to undertake any extra activity beyond their community. Additionally, national markets are sometimes far from the local community with dangerous and unsafe road conditions. The participants believed that men could more efficiently deal with those challenges than women.

Finally, due to market failures, it might often take several days to sell the cooperative yields in profitable market in case of non-cooperation with other marketing cooperatives.

Women found it difficult to take days off away from their families. For these reasons, men mainly deal with marketing activities in mixed or female cooperatives in rural areas. While in Bamako and urban Kati areas, most marketing agents in cooperatives are women. In these areas, cooperative members are primarily involved in product processing and marketing; as mentioned earlier, both male and female members assist in all the procedures, including processing, packaging, and selling the cooperative products. The activities are shared equally among members depending on their availability and level of expertise.

A respondent in Kati states that women are better than men in selling the final products. They comprehend market conditions better than men; they possess skills in negotiating prices, are better communicators, and invest their incomes wisely. Likewise, Daouda, a respondent from Univers des Animaux, exclaimed:

I acknowledge that females are more accountable, financially cautious, and faithful cooperative associates than males. Name me a female from the group who spends on unnecessary stuff. There are very few, not to say none. Women spent their income on nutrition, medication, and their kids' education (Interview at Univers des Animaux, February 22, 2020).

In contrast with women in rural areas, women in Bamako have more freedom of movement. They hire household maids who assist them with family chores. As a result, they have more time to undertake different activities within the cooperative.

In addition to marketing, 36 percent of the overall respondents alleged that land preparation mainly unites cooperative members in their community. In comparison, 54 percent said they mainly help members during harvest time. This is also important; as mentioned earlier, in Baguineda, cooperative members had collective and individual plots. In that case, all the group members cooperatively perform all the farming tasks (land preparation, crop plantation, and harvest) related to the joint collective land. Failures to do so necessitate compensation (money, extra work, etc.) set by each cooperative based on their needs.

Women can expand their opportunities in the labour force by shifting from individual to joint endeavours when they become cooperatively involved. Collective engagement in cooperatives led to a range of benefits by empowering women socially and economically. The more engaged women are, the better they learn how to negotiate, debate, make decisions, and access resources. Picture 5 illustrates the benefits of women's involvement in cooperatives, translating to increased resource access.

In Kati regions, where cooperatives did not have access to collective land, members usually help with the marketing activities. Depending on members' schedules, they also assist each other in individual land preparation and harvesting. Besides, in Kati, the group also helps its members access subsidised seeds and fertilisers. In all the 15 cooperatives surveyed, the 170 members interviewed contributed to collective activity in land preparation, harvesting, marketing, or processing of farm products.

Picture 5: NGOs Sponsored Solar Panel and Training Centre in Baguineda



[Source: Photo: Taken by the author during fieldwork in Baguineda, February 2020]

Lastly, respondents were asked to identify the following: religion, culture, common problems, politics, traditions, sports, education, agriculture, marketing, tribe, totem, and ethnicity, the prime elements which unite individuals in their community. Seventy-two percent of the overall participants said that common problems mainly bind people in their community. In comparison, 22 percent believed that agricultural activities unite people in their organisation, and finally, the remaining 6 percent said culture-bound people in their cooperatives. This is also important as it demonstrates that people with shared problems, the same vision, and objectives, living in the same community and sharing the same culture come together and create cooperatives to solve their essential issues. Common issues in this study differ by region and sex, as explained throughout this thesis.

Male cooperatives in the study areas usually highlight accessing credits and markets as their common challenge. On the other hand, female members are more concerned about accessing agricultural land, seeds, and fertilisers. Women's engagement in cooperatives has broadened their vision and opportunities. While providing them with access to resources, has

also allowed them to strengthen their social bonds through cooperation and collaboration with other cooperative organisations in the study areas.

6.2.2 Collective Engagement by Types of Activity and Sites

So far, the study has proven that cooperative engagement remains an essential approach in guaranteeing members access to valuable resources and services. Through cooperatives, members can meaningfully participate in voicing their needs and acquire practical capabilities to expand their economic activities fully. This process allows members to be at the centre of their actions. Cooperation also strengthens communication, opinion sharing, skills and knowledge dissemination, development, and resilience in supporting members and community needs. Table 6.3 summarises the advantages that members gained from their collective engagements in cooperatives.

Table 6.3: Gain of Collective Engagement by Sector of Activity and Areas

<i>Cooperatives</i>	<i>Value</i>	<i>Characteristics</i>	<i>Male</i>	<i>Female</i>	<i>%</i>
*BAGUINEDA	Access to land and credit				
<i>Benkady</i>	++	Market gardening	2	138	72
<i>Binkadi</i>	+	Market gardening and livestock breeding	2	128	34
<i>Djiguiya</i>	++	Market gardening	6	254	85
<i>Kofeba</i>	+-	Market gardening and food processing	3	100	25
<i>Nieta</i>	+-	Marketing and processing	0	120	22
<i>Sinigne Sigui</i>	++	Market gardening	4	260	67
<i>Yiriwa Ton</i>	+	Market gardening	4	138	40
*BAMAko	Access to training and information				
<i>Agro-Foresterie coop</i>	+-	Florist	97	0	40
<i>Benkady</i>	++	Micro-credit and processing	2	60	70
<i>Binkan</i>	++	Processing	1	79	85
<i>Djigui Seme</i>	+	Processing	10	50	35
<i>Fasso Bara</i>	++	Market gardening and livestock breeding	9	3	65
<i>Yereta ton</i>	++	Processing	1	5	73
*KATI	Access to market and credit				
<i>Benkady</i>	+	Market gardening and livestock breeding	60	32	28
<i>Bincady Sabouyouman</i>	+-	Market gardening	98	0	17
<i>Dabagana</i>	++	Market gardening and marketing	20	280	76
<i>Djiguiya</i>	+	Market gardening and livestock breeding	22	0	32
<i>Jakossoro ton</i>	++	Marketing	0	80	80
<i>Univers des Animaux</i>	+-	Fishing and livestock breeding	5	2	23

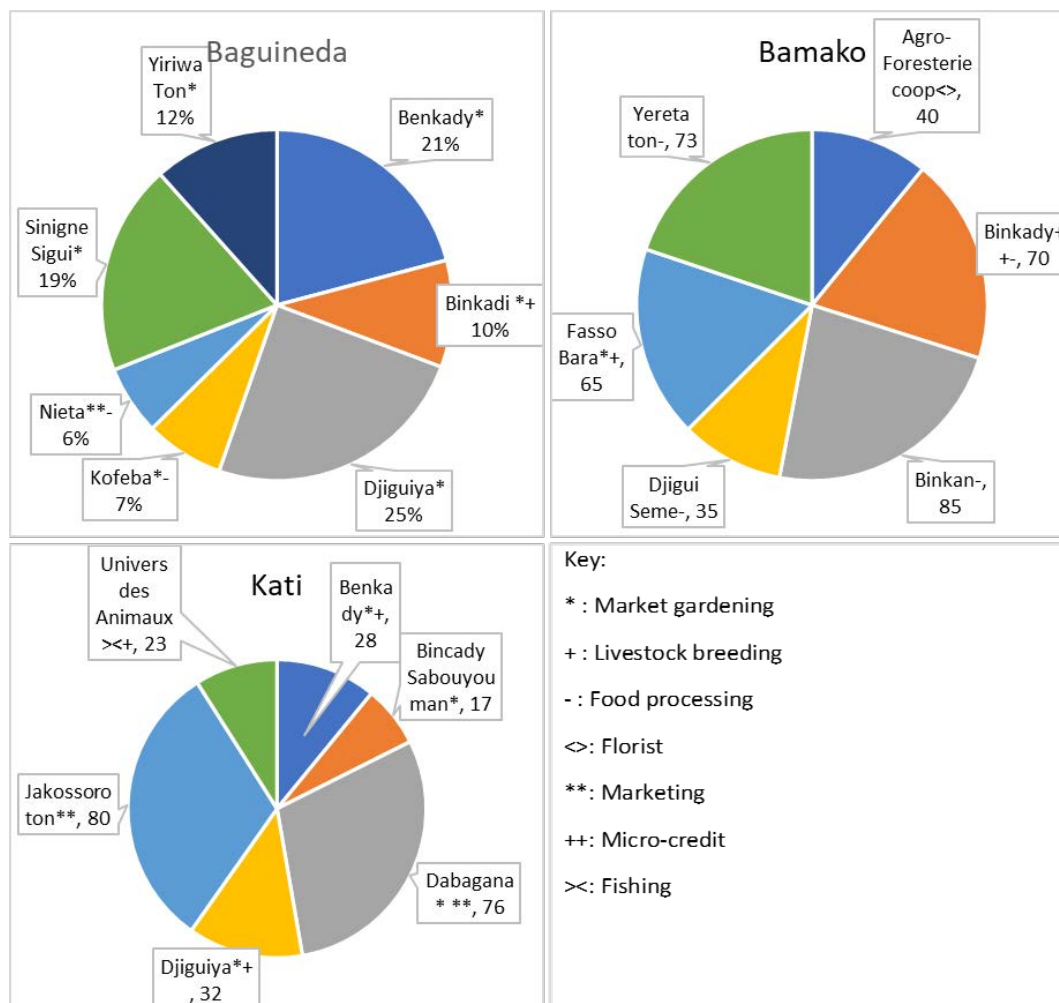
[Source: Outcomes from SPSS made from field survey, 2020]

Key: ++: highly increased, +: increased, + -: slightly increased.

Table 6.3 firstly revealed that 85 percent of Djiguiya cooperative members claimed to have great access to land and credit, while the percentage was 72 in the Benkady cooperative, 67 in the Sinigne Sigui cooperative, and 40 percent in the Yiriwa ton cooperative. A mere 22 percent of Nieta cooperative members had improved access to land and credit in Baguineda, while the percentage was 25 in the Kofeba cooperative and 34 in Binkadi cooperatives.

Secondly, Table 6.3 indicated that most of the surveyed cooperatives in Bamako stated that their access to information and training increased due to their involvement in cooperatives. Precisely 85 percent of Binkan cooperatives members asserted so, while the percentage was 70 percent in Binkady cooperative, 65 percent in Fasso Bara cooperative, and 73 percent in Yerata Ton cooperative. Only 35 percent of associates in Djigui Seme claimed that they had a slight increase in their access to the market after joining cooperatives, and 40 percent of Agroforestry cooperative members contended so.

Figure 6.2: Benefit of Collective Engagement by Types of Activity and Sites



[Source: Outcomes from SPSS made from field survey, 2020]

Lastly, cooperative members in Kati gained high access to market and credit. Table 6.3 showed that 80 percent of Jakossoro ton cooperative members had increased access to credit, while 76 percent of Dabagana cooperative members stated to be their case. In addition, 28 percent of Benkady cooperative associates had improved access to market and credit, and 23 percent of Univers des Animaux members had similar views. Only 17 percent of Bincady Sabouyouman cooperative members had slightly enhanced their access to market and credit.

When analysed by sector of activity, market gardening cooperatives (80%) played an essential role in their members' access to resources, followed by marketing cooperatives (73%) and microcredit and food-processing cooperatives (62%). In the three study areas, cooperatives insured their members' access and control over agricultural resources, mainly land, credit, training, information, and market, as shown in Figure 6.2.

As previously explained in chapter five, all the cooperatives in the three study areas were formally registered with local municipalities when assessed by the study sites. They all have monthly registration fees to join the groups. The cooperatives also have clear guidelines and regulations overseeing the management of cooperatives. They were all involved in economic activities of vegetable gardening, food processing, and marketing. This legal recognition granted them several advantages in various domains.

Cooperative members in Baguineda gained collective farms both formally and informally. They benefited from the collective lands via OPIB, a national irrigation scheme in the province. On the one hand, some lands were obtained informally through customary land tenure systems, while on the other hand, some collective lands were also acquired based on statutory tenure rights with legal documents from OPIB. Three cooperatives out of seven in Baguineda benefited from communal land because they are in the OPIB irrigation scheme managed by the government. Due to the OPIB irrigation system, cooperative organisations are receiving much attention from many agricultural development programs and projects aiming to empower women in that region, to claim their property rights from the state through formal organisations. Subsequently, coming together allowed female members in the Baguineda region to own land with title deeds and benefit from training and information opportunities from the government, NGOs, private organisations, and donors.

In comparison, cooperatives in the Kati area only have individual farms mostly gained from traditional land tenure practices. Cooperatives in Kati were also able to negotiate some land informally for their landless members. Like cooperatives in Baguineda, establishing cooperatives allowed Kati's members to access subsidising inputs such as fertilisers and seeds

from the government. They access credits formally through financial institutions and informally from cooperative micro-credit schemes. The cooperatives also received training and information from the government and other organisms supporting agricultural development programs.

In contrast with cooperatives in Baguineda and Kati provinces, the ones in Bamako were less interested in land access or ownership since agricultural production is not their primary occupation. Few cooperatives in Bamako have agricultural lands in peri-urban areas, which they bought from the cooperative savings. Usually, these cooperatives have legal titles to their farms. However, the number of cooperatives in Bamako with such financial ability is low. For example, only 2 percent of the interviewed cooperatives had the financial capacity to purchase a large amount of agricultural land.

Ninety-eight percent of cooperatives in Bamako were mainly involved in food processing, marketing, and microcredit activities. Around 5 percent of them have an official place to conduct their processing and packaging activities. Most of them perform their activities at a cooperative member house with a bigger space. Like cooperatives in Baguineda and Kati, all the members in Bamako benefited from training, workshop and information courses from the government and donor agencies. They also benefit from formal and informal credits. More importantly, some cooperative members in Bamako participate in national and international conferences and field trips to enhance their agribusiness activities.

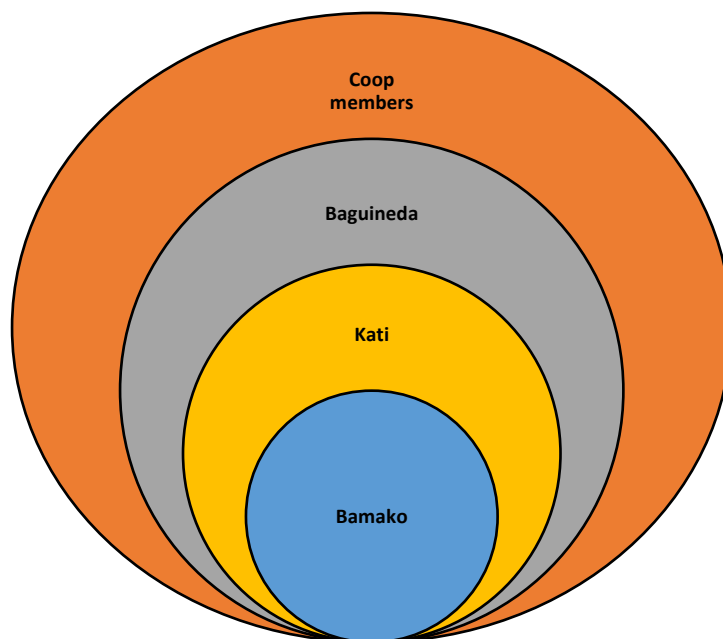
The results above indicated that engagement in cooperative remains an essential instrument in bringing socio-economic changes to expand its members' well-being. Collective engagement regularly requires collaborations and alliances between different cooperatives and their members to help accumulate resources and operate as structures in modifying approaches, procedures, and practices. For example, cooperatives in Baguineda and Kati would come together at least once a year and share experiences in bookkeeping and management. More importantly, they also boost each other's self-confidence in addressing their common issues collectively.

When individuals jointly work, they generally uncover common ground and concerns and create networks like cooperatives through which members thrive. The more cooperative members were willing to work together to identify shared problems, the more likely the cooperative was to achieve its goals. Collective engagement also allows its members to establish prospects for growing and discussing concerns before they become unmanageable. This process enhances trust and control in local groups' organisations. Cooperation further increases dialogue and knowledge sharing in group management.

Participants were also asked to agree whether they are now better off as cooperative members than when they were not. When analysed by regions, 47 percent of the respondents in Baguineda agree that they are now better. In comparison, 29 percent of participants in Kati said so, and 23 percent of Bamako cooperative members believed that they are now better off than before joining the cooperatives, as indicated in Figure 6.3.

Figure 6.3 shows that the larger the circle, the greater the benefit of cooperative engagement. Overall, 84 percent of the respondents strongly agree that they are now better off than before joining the cooperative. While 6 percent agree that they are now better off, and 7 percent were neutral about that question. Only 2.5 percent disagree with the statement. According to them, joining the cooperative did not have much impact on their incomes and well beings. Thus, Eighty-four percent is significant; it exhibits the positive effects cooperatives have on their members' living conditions in the three study areas.

Figure 6.3: Benefits of Collective Engagement by Study Sites



[Source: Outcomes from SPSS made from field survey, 2020]

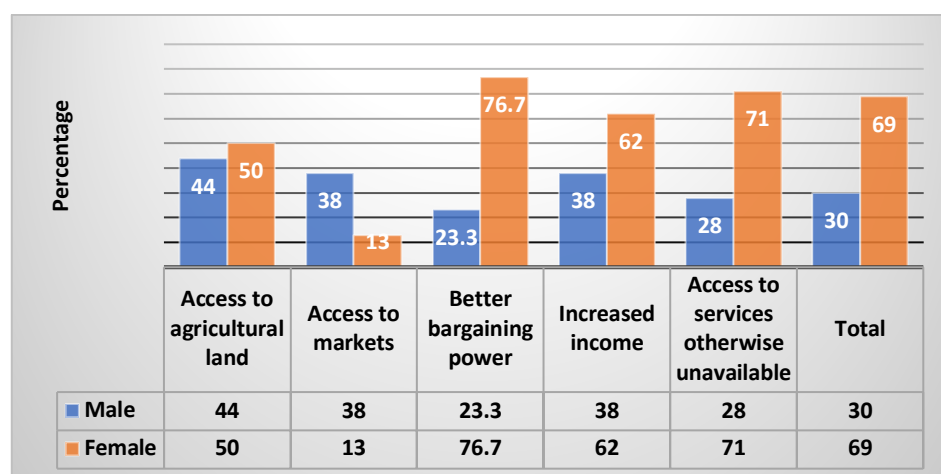
To better understand these positive impacts, respondents were further asked to explain which field they were now better off. Regarding that question, 54 percent of the 170 respondents stated that their income has increased after joining the cooperative. While 25 percent said that they now have better bargaining power than before, and 12 percent said that joining cooperatives allows them to access services that were not available to them. Finally, 8 percent said that joining cooperatives permitted them to access better markets.

6.2.3 Benefits of Collective Engagement by Women-Led Cooperatives

Female farmer cooperatives diverge from other associations as they are owned, managed, and supervised by women for their associates' profit. Women's lack of land ownership and access to other productive resources can lessen their income. For example, a lack of land ownership might reduce women's ability to produce and sell on a scale. Since women generally have access to fertile or small portions of land, their production level and purchasing power are limited, affecting their ability to enhance the household basket and their economic pursuits. With rapid urbanisation triggered by population growth, most women are also dispossessed of their land. They are forced to work as labourers for meagre wages that do not cover their household expenses.

Regarding marketing of yields, women's disadvantaged positions to produce in scale often force them to sell their products at a low price to satisfy their urgent needs. The survey cooperatives are addressing those challenges. The study result indicates that by joining cooperatives, 76.7 percent of the overall female respondents said they now have better bargaining power, 71 percent stated to have access to services unavailable to them before, and 62 percent believed to have increased their income. More importantly, 50 percent of the total female participants could access land, while only 15 percent could own communal land, and 13 percent could access markets, as indicated in Figure 6.4.

Figure 6.4: Benefits of Joining Cooperatives by Sex



[Source: Outcomes from SPSS made from field survey, 2020]

Compared with the author's previous study outcomes in Baguineda and Kati in 2018 with non-cooperative members (Diallo, 2019), Figure 6.4 indicates that women's socio-economic conditions improve when they join cooperatives. If generally, single female farmers

encounter difficulties accessing agricultural resources, their involvement in cooperative activities addresses these challenges. The percentages are higher for female members not because the survey has more female participants than men; it instead symbolises the equalitarian aspect of a cooperative organisation where all male and female members access resources equally. When distinctly analysed by study sites, women’s engagement in cooperatives empowered them in the following areas: land and credit in Baguineda, training and information in Bamako, and market and credit in Kati.

Women members in the three study areas were further asked to state the advantages they gained from cooperatives compared to their profits when they operated their farms independently. The survey’s outcomes revealed that cooperatives provide their associates with many benefits. This is evidenced as follows: increased income (54%), expanded bargaining power (25%), and better access to services and resources, including marketing, credit, skills, and training (12%).

Picture 6: Baguinda Coop Training Center Built by an NGO on Village-Chief Land



[Source: Photo: Taken by the author during fieldwork in Baguineda, February 2020]

When analysed by area about land ownership and access to resources, women in the Baguineda area are said to have access to collective land due to their engagement in cooperative activities. The scarcity of agricultural land in Mali, explained in chapter three, remains an ongoing challenge for small-scale farmers. Joining cooperatives allows some women members in Baguineda to access collective land with title deeds and increase their production and livelihood incomes as evidenced in Picture 6.

Cooperative members in Kati negotiated some informal land from their customary leaders for cooperative members with no land. They were also able to provide their members with access to subsidised fertilisers, seeds, and credit in Kati. In comparison, cooperatives in Bamako provide their members with training, information, and access to credit. In other words, women members of cooperatives in Baguineda benefit from collective land. While those in Bamako received more training and information, the ones in Kati benefit from subsidised seeds, fertilisers, and credits, as previously explained.

Though agriculture plays a substantial role in employing the majority of the rural population, it remains underdeveloped. The findings above thus indicate that if most small-scale farmers still have inadequate income and resources to improve their livelihood activities, this is changing with their engagement in cooperative activities. This change was more noticed among the vulnerable groups, mainly women. Women farmers who joined cooperatives could increase their livelihood by gaining additional plots, accessing farming inputs, or benefiting from training and information from local governments and NGOs. Importantly, joining cooperatives also enhance members' relationship and interactions with customary and statutory leaders as they gain self-confidence, status, and respect within their communities. Additionally, women's relationships with their family members, mainly their spouses, increase as they gain more control and decision-making power in intra-household decision-making matters as their economic power evolves.

Henceforth, the establishment of women's cooperatives in Mali is their reaction to change in their socio-economic environments. Beyond the differences found in their activities, one of the goals of most women's cooperatives is to earn social recognition as women in male-dominated societies. Women's cooperatives' mission is to fulfil their desires through membership. Their objective is to change into something more complex in the context of ongoing global economic changes. According to some scholars, cooperatives can help women farmers become an essential advocacy force in modern agriculture. Others also depict cooperatives as the pillar of farming production in rural areas. When women farmers own and manage their organisations, they create networks, obtain materials, sell their produce in better markets, and negotiate with the structures that disempower them.

Although some men are still reluctant to join the women's movement in most rural areas, they seek to regain or hinder women's needs or discourage their wives from participating in the group. External corporations often have the same attitudes, primarily if men represent the majority of this organisation; either they are ignorant of women's groups or do not involve them in development projects they support. Establishing cooperatives can thus allow women

to negotiate with this organisation and break from family isolation enforced by tradition. Among the benefits of belonging to a cooperative, women describe leaving home, working together, meeting each other, getting to know each other, feeling unified, and gaining self-confidence as one the benefits. A cooperative is also a place where they can implement strategies to preserve their self-sufficiency, carry out their projects, and express their perspective on community-based matters. Women can also gain from development activities from which they are usually excluded, such as accessing land, credit, inputs, equipment, literacy, training, and technical support via cooperatives, as indicated in Figure 6.5.

Figure 6.5: Major Assets Gained by Women in the Coop



[Source: Author based on findings]

Based on these findings, the study predicts that cooperative movement in Mali can lead to improved livelihood conditions for poor farmers. The outcomes also indicate that among Malian farmer organisations' tales, women's cooperatives deserve particular attention due to their extraordinary trend and ability to carry out ground-breaking, innovative, societal, and dynamic roles that some consider indispensable for the future.

6.2.4 Strengths and Weaknesses of the Surveyed Cooperatives

The surveyed cooperatives were requested to determine their greatest strength. Thirty-five percent of the overall cooperatives said that their organisation can now access more services that were not otherwise available to them before creating their groups. While 31 percent stated that their cooperative was successful since it allows their members to increase their incomes. Another 18 percent were convinced that the greatest strength of their cooperative is their better bargaining power. Finally, 11 percent said their cooperative was successful because it provides its members with lower operating costs, while only 4 percent mentioned good management as their greatest strength.

When classified by area, Baguineda respondents mentioned three reasons as their biggest strengths: Increased members' income, better bargaining power, and access to services otherwise unavailable. Those in Bamako refer to increased members' pay, access to unavailable services, and improved management and bargaining power. Finally, cooperatives in the Kati provinces highlighted: access to unavailable services, better bargaining power, and lower operating cost. Overall, the cooperatives that partook in the study positively impacted their members' economic activities and living conditions depending on the associates' needs and the cooperative's vision, as was proven throughout the thesis.

Cooperatives were also asked to explain their most significant weaknesses. Regarding that question, 51 percent of the 15 interviewed cooperatives replied that their greatest weakness is lack of capital. According to them, their organisations are poorly run as they lack the necessary capital to manage their cooperatives as they plan. Thirty-six percent said that their greatest weakness is inadequate infrastructure. Capital and infrastructure are essential elements for any cooperative to make positive and sustainable changes in their members' living conditions. Finally, 9 percent believed they have low qualifications, while 4 percent said their weakness is fewer members' attendance in meetings.

Table 6.4: Summary of the Strengths and Weaknesses of the Surveyed Cooperatives

Locations	Strengths	Weaknesses
Baguineda	<ul style="list-style-type: none"> - Increased member's income - Better bargaining power - Access services otherwise unavailable 	<ul style="list-style-type: none"> - Lack of capital - Low infrastructure - Poor members' attendance at meetings.
Bamako	<ul style="list-style-type: none"> -Increased member's income -Access unavailable services -Increase management and bargaining power 	<ul style="list-style-type: none"> -Lack of capital -Low infrastructure -Low qualifications
Kati	<ul style="list-style-type: none"> -Accessing unavailable services -Better bargaining power -Lower operating cost 	<ul style="list-style-type: none"> -Lack of capital -Low infrastructure -Low organisation skills, poor member's attendance at meetings

[Source: Outcomes from SPSS made from field survey, 2020]

When analysed by regions, cooperatives in Kati highlight the following three reasons as their weaknesses: lack of capital, inadequate infrastructure, lack of organisation, and few members' attendance at meetings. Those in Bamako pointed out: a lack of capital, inadequate infrastructure, and low qualifications. Finally, the ones in Baguineda stated: a lack of capital, inadequate infrastructure, and low members attending meetings, as illustrated in Table 6.4.

Each cooperative has its strengths and weaknesses depending on the cooperative members' level of involvement, areas, organisation, and level of education. The study conveys that the surveyed cooperatives' most significant weakness was lower capital and infrastructure development challenges based on the results. Any governmental or NGO programs aiming at supporting cooperative organisations in the author's study areas must consider the challenges mentioned above.

6.3 Remaining Challenges Faced by Women in Agricultural Production

Women farmers are still encountering several barriers constraining their agricultural production ability. In addition to the weaknesses and challenges mentioned by the survey cooperatives in this analysis, the author summarises the remaining difficulties women farmers face in Mali. Producing quantity and quality products, storing them, processing them, and selling them to better markets remain important challenges. Women experience these obstacles as individuals and as a group in cooperatives, resulting in their limited production capacity throughout the country. Additional difficulties include lack of access to better markets due to transportation issues, lack of storage facilities, and processing materials among others. In what follows, the author will elaborate more on these challenges.

6.3.1 Challenges in Accessing Markets due to Transportation Issues

Accessing profitable markets requires quality infrastructure, mainly roads. During the survey, bad road conditions were highlighted by 46 percent of the respondents to be their most substantial challenges in accessing markets. Road conditions and the distance to better marketing spots determine farmers' retail level. Time to supply yields accurately depends also on the availability of transportation systems to markets. Bad road conditions lead to supply disruptions and remain a challenge for farmers who rely primarily on public transport for shipping and carrying their produce. Substandard roads and poor connections to distant locations, and inadequate roads to reach strategic places make it challenging to deliver foodstuff to profitable selling points, causing further rateable losses.

Only cooperatives in urban areas have access to improve roads in the survey. Many farmers in the peripheries complained about bad roads or inaccessible roads during the rainy

season, particularly muddy roads in accessing markets. As a result, marketing their commodities beyond their local communities remains challenging. Buyers who spend more money on produce are attracted to large and quality products. Collecting large amounts of quality produce remains an issue as women usually produce a lesser amount of yield due to the quality and size of their farms and the burdens of their household chores limiting their availability to produce in scale. More importantly, participants also express their need to gain training in certification to add value to their products and access regional and international marketplaces. Participants further indicated that they were unable to resolve these issues.

6.3.2 Challenges in Accessing Agricultural Machinery and Know-how

The nature and convenience of equipment used primarily influence product quality and quantity. Production costs, competition rate, demand, and yield amount determine the price. Many cooperative members have highlighted challenges related to accessing modern agricultural equipment. Although cooperatives that process farm commodities in the study areas are processing their products to meet local market needs, the materials and technologies they use do not often meet regional and international requirements. Most cooperatives still have inadequate materials and infrastructure to conduct their processing activities and store the product appropriately. As previously highlighted, most of the respondents contended that they face challenges in processing their yields due to their inadequate access to loans. The inability to process fresh products like mangoes and vegetables can cause a loss of income. Mali's agribusiness sector is still emerging. Even though women dominate this realm, their businesses are still small, and locally oriented with low or inadequate processing skills and tools. In contemporary Mali, wealthy men are investing more in this sector of activity, often employing women and young people as their labour force.

Additionally, when questioned on their proficiency in product evaluations, the survey found that 41.9% of the participants were unknowledgeable about ratings and scaling, whereas only 25.6% had some skills in professional ranking. Although most of the survey members were optimistic about the positive impact of cooperatives in their empowerment, they also expressed the need to add value to their products. They also emphasize improving their processing and rating skills to sell their products at better prices in regional and international markets. They also hope to access information about market prices in other countries.

Respondents similarly voiced their need to access accurate information and tools to remain well-informed about weather and climate conditions. Using social media platforms to network and disseminate information about market prices and weather conditions should be

encouraged. Building managerial and other skills to adapt to new market requirements, regulations and technologies remains essential. Hence, women want to know more about the market regulations, the macro-economic conditions, policies, laws, standards, regulations, and institutional support services (communications, research, innovation, finance) which form the agricultural value chain. This will increase the creation of formal and sustainable groups and strengthen relationships between farmers and traders, and other key actors involved along the value chain.

6.3.3 Lack of Financial Means

The primary constraint that women producers and traders in the agricultural sector face are inadequate access to financial means, as mentioned earlier. Banks' investment steadily comes from private organisations, reducing government control over financial institutions. National banks in Mali encounter hurdles in meeting farmers' long-term financial needs; institutions like BNDA (the National Bank for Agricultural Development) and BMS (Malian Bank for Solidarity) rank in that category as the bulk of their capital originates from international organisations. Their loan criteria entirely exclude women who do not hold enough collateral to guarantee their credits from these banks. Women similarly face barriers due to their lack of education in applying for loans or creating business plans based on the banks' requirements. Banks' activities are also more oriented toward urban endeavours than rural ones.

Most banks have a high-interest rate of around six percent, which does not benefit women. Paucity in enterprise systems, such as legal policies and lack of property rights, often explains banks' reluctance to finance farming activities in rural areas. The absence of a bookkeeping system among women in the informal agricultural sector remains another perilous obstacle for women to access loans from any financial institution. Title deeds are rare in rural areas; if they exist, they do not have high value for banks which might face problems selling them.

Besides, inadequate access to capital from decentralised financial institutions for rural farmers is linked to their poor financing mechanism. The incredulity instigated by the financial crisis affects banks as only 50 microfinance banks in Mali were operational of the 126 registered ones in 2014, combined with the clientele constraints to offer guarantees (CCS-SFD, 2014).

Another challenge related to agricultural credit lies in severe price instability of farming yields, as farmers have no control over prices during marketing time. The harvest season is typically the time when rural women need cash to meet their household demands. They often

cannot wait to sell to wholesalers, semi-traders, or formal buyers who offer better prices than small brokers. Due to this lack of financial means, women quickly sell their produce in cash at lower prices, yielding to small brokers in their villages. This saves women from paying transportation fees to reach better markets. Women also prefer this method as it takes less time than when they sell their products via farmers' organisations, where they must wait till yields reach large quantities to make a group sale.

6.3.4 Inadequate Access to Storage Facilities

Generating and accessing quality goods in quantities, storing them, shipping them, and placing them on markets for auction remains one of the most fundamental challenges for most Malian manufacturers. The quality of products reaching the market determines how quickly it is sold. As mentioned earlier, the nature and convenience of transportation primarily influence the fresh quality of yield, which can decline in value after over-reaping. Storing products to reach profitable markets remains an enormous challenge for 65 percent of the survey cooperatives. Many cooperative members have highlighted collecting and storing yield in large quantities before marketing time in rural and urban areas as a persistent difficulty.

Due to inadequate storage facilities, women traders' stores have poor infrastructure, mostly leading to damage to their produce. The lack of necessary utilities like electricity and cooling systems makes storage conditions more expensive. If agricultural cooperatives are entities through which women can increase their income by adding value to their products, these organisations' capacity to store and cool yields remain limited. Hence, it remains vital to improving women's access to storage services at lower costs within their localities. Farmers' ability to access adequate infrastructure, tools, utilities, and investment in conducting agricultural activities are also correlated to the country's level of development. Women's lower access and utilisation of up-to-date modern agricultural technology are explained by their inadequate access to plots, credit, lower levels of education, and lower access to modern equipment, which all affect their production and selling capacity. These challenges further affect their ability to influence the structures governing the relationship between the market and the state.

6.3.5 Inadequate Access to Agricultural Produce and Decision-making Power

As mentioned in the thesis, women are represented throughout the agricultural value chain in Mali. However, they do not have the necessary means to increase their production and productivity due to their lack of access, control, and ownership of land and other means of production. They are generally involved in small-scale farming production and all activities

related to the processing and marketing of agricultural products. Women's role as full producers is not always recognised or appreciated as they remain primarily involved in subsistence farming and market gardening to meet their household needs. Gender discrimination lies at the heart of feminised poverty. The social, cultural, institutional, and political factors all influence women's ability to advance economically and make economic decisions. These factors include lack of education and training, unequal access to sexual and reproductive rights, traditional gender attitudes, household responsibilities, discrimination in labour markets, violence, lack of access and control over resources and information, and discriminatory laws, and policies.

The food security challenges in Mali can only be addressed if women's contribution to agricultural production is taken into account and their land ownership rights duly addressed. Women do not control family production (cereal crops for household consumption), as men manage, store, and retrieve them from the granary. Regarding household food management, women in monogamous households are much more involved in decision-making. In contrast, in polygamous households, it is usually the first woman to join the family who is consulted or at least informed of the husband's decisions regarding household food management.

In agricultural communities, men decide about the distribution of the harvest. They offer gifts (yield) to certain family members and poor neighbours towards whom they perceive a sense of solidarity. According to the traditional division of labour women are assigned primary responsibilities for reproductive labour, also refers as unpaid care work which are all the daily activities that sustain our lives in tails. As such women are responsible for housework, and food preparation, they must inform their husbands of the daily rations needed and warn them in case of shortage. When the stock is insufficient, men decide what food to buy, even if the purchase is made from the woman's resources (income from selling livestock or their market garden). The wife will only decide if her opinion is requested.

A woman's attitude seems to be explained by a desire to respect her husband's dignity (so as not to frustrate or humiliate him by exposing his inability to feed his household; fear of his retaliation, insulting the wife; being mad at her; refusing to eat the family meal; an act interpreted as humiliation by most women). Hence, women's contribution to household food security is irregularly and openly required or claimed when the household head fails to provide resources to his family. Having children and other family members to care for puts increased pressure on women to generate resources to fulfil their role as nurturers. Development and feminist scholars have argued that the social and economic value assigned to women's unpaid care work is little compared to the actual importance to families and society at large. Hence

women's unpaid care work is the invisible base of the socio-economic system. With care absence from development and social agencies and policies, individual households are often left to make arrangements to care for their needs. This involves women and girls' migration from rural to urban areas or from one country to another in search of a better life.

6.3.6 Socio-Cultural Barriers

Embedded sociocultural burdens deriving from customs, traditions, religious beliefs, and patterns in rural areas are more considerable. They often deny women fundamental rights. In contemporary Mali, religion and culture significantly shape Malians' socio-economic lifestyle. Even though Mali is a secular country, around 90% of its population is Muslim. They adhere to Islamic law, which establishes various rights and responsibilities between men and women within the household and communities. On the one hand, Islam acknowledges that women hold autonomous, legal, and financial independence as capable individuals. On the other hand, in practice, men have supreme power and rights over women across Mali regarding their economic pursuits and access to farming resources in rural communities.

These conventional patterns affect women's access to means of production or involvement in profitable economic endeavours to improve their incomes or meet their household needs. It also influences women's access to decision-making stances within the household and community level. Socio-cultural bias is well-preserved in that women are rarely consulted during decision-making on issues that affect their lives. Generally, women must have their husband's permission before engaging in any economic activity such as selling or travelling to another place to purchase. Increasing women's involvement in decision-making stances in the community and important governmental positions can heighten women's social and economic conditions. It will offer them possibilities to influence decisions which are vital for their well-being. It can also allow women to empower themselves within their families and societies.

Another challenge women face is illiteracy. Malian women have a lower literacy ratio (25%) which is even lower in rural areas. Studies have proven a correlation between women's empowerment and their literacy level. Educated women are more likely than less, and non-educated women to know and claim their rights. Women's lack of education may lessen their access to resources and decision-making.

6.3.7 Insecurity Challenges Triggered by Political Instability and Terrorism

The political instability triggered by terrorism in Mali's northern and central regions has rendered several women vulnerable. Patterns of women's role and involvement in the

socio-economic sphere changed in recent years in reaction to current security issues, climate change, political and economic instabilities driven by several military coups, and terrorism, worsened by the COVID-19 pandemic. Security, which is vital for economic revival and poverty reduction, remains precarious, with ongoing armed groups attacks on civilians in the northern and central regions of the country. Additionally, the COVID-19 pandemic and the socio-political crisis stemming from the coups have tipped Mali into an economic recession with negative consequences on women. As a result, 1/3 of the Malian population is now in an urgent humanitarian crisis, mainly poverty and hunger, of which 70% are women (World Bank, 2020).

The difficulties resulting from this multidimensional crisis in Mali affect women more than men as it exposes them to further violence and insecurity in conducting their economic activities. For example, in regions under terrorist control, residents face hurdles growing their farms, selling in village markets, or engaging in farmers' organisations that remain controlled by terrorists. Insurgents also force women to wear a burka or hijab before attending local markets or public places. When women can travel, they are victims of robbery and sexual assaults by insurgent groups. These women are forced to remain within their communities and sell in the weekly markets while abiding by the dominant rule. Several women were also abandoned by their husbands due to the conflict or killed by armed groups.

The difficulties mentioned above render women's socio-economic empowerment in Mali challenging. Even though women equally and efficiently participate in economic development as their male counterparts, their contribution often goes unnoticed due to the abovementioned burdens. Ensuring that women are fully involved in the agricultural sector will strengthen sustainable and inclusive development. This implies that women must be supported as commercial agents capable of thoroughly undertaking farming activities. Women's cooperatives and other types of collective organisations address some of these issues. Women's cooperatives could be an efficient alternative mechanism in raising the social, economic, and cultural challenges in tackling gender disparity in accessing agricultural resources, as was found by this analysis. The survey cooperatives lowered their members' business costs, shared risks, improved skills, and developed confidence. Any development programs from the government, private organisations or NGOs should consider the challenges underlined in this study to address the issues, small-scale women, and farmers encounter in Mali.

6.4 Prospect for Cooperative Development in Mali

The fifteen selected cooperatives were asked to state their opinions about Mali's cooperative movement's accomplishments. Regarding that inquiry, 58 percent of the

respondents alleged that Mali's cooperatives are leading their organisations on improved recognition in national and local decision-makers agendas by granting more importance to their members' socio-economic needs. Twenty-four percent indicated that Mali's cooperative movements are helping to alleviate poverty in both rural and urban communities. In comparison, 16 percent believed that cooperatives provide their communities with literacy training opportunities for adults.

All the 170 people interviewed asserted that cooperative movements in Mali are active. They contribute to poverty reduction by offering education and literacy to the less fortunate rural and peri-urban residents. They also lobby traditional elites, local government authorities, national leaders, and decision-makers to meticulously foresee their needs and priorities, differing based on the cooperative location and objectives. The crucial outcome of this analysis is farmers coming together through cooperatives to identify their common challenges and seek joint solutions to those issues to enhance their socio-economic needs.

Respondents were further asked if they knew any non-member who wanted to join the cooperative. Seventy-two percent of the respondents said they know non-members who wish to join their organisation, while 27 percent said the opposite. Many people willing to join cooperative organisations are a promising indication. While cooperatives face challenges, they still hold an attractive reputation within their communities, thereby attracting more people.

The survey reveals that cooperatives support farmers to stay competitive in numerous ways. Cooperatives, for instance, increase the value of the products sold and lessen the cost of goods procured. Independent farmers have slight supremacy; when jointly merged, united with a sole objective, a cooperative can raise market prices of agricultural yields, improve farm changes, and expand yield value and services. They also decrease supplies price by offering products and services to their associates at a lesser cost, reducing transaction expenses. The cooperatives raise farmer's revenue by lessening expenditures, allowing farmers to nurture growth and be successful.

This is to say that cooperatives can help farmers use economies of scale to lessen their expenses while receiving inputs or hiring services such as packaging and transportation. They also allow farmers to develop products and services at lower risks. Cooperatives can also empower their members financially and socially by connecting them to decision-makers that generate additional rural services and opportunities, enabling them to develop more resilience to economic, social, cultural, and other challenges. Although women farmers in the survey cooperatives improved their members' socio-economic conditions by strengthening their access to resources, they still encounter challenges in starting, handling, and growing their

cooperatives efficiently, as stated by the OHADA Act. Much effort is still necessary to further expand women's agency in addressing the remaining challenges in the survey areas.

6.5 Chapter Summary

This chapter enlightens the study's results obtained from the author's fieldwork to determine the impact of cooperatives' involvement on women members' access to agricultural extension agents and services, information and training, markets and marketing prospects, and access to decision-making stances. This objective has been attained by exploiting variables on the rate of training and information, level of market access, and decision-making by cooperative members. Descriptive statistics, correlation, and comparisons of data were applied through SPSS. Moreover, assessments based on the theory of empowerment and agency from women's oral accounts were evaluated to answer the research questions.

The outcomes indicate that women's membership in cooperatives is more likely to increase their improved access to means of production. Mainly, the analysis found that involvement in cooperatives positively impacted members' access to agricultural extension agents, information, training, better market access, and decision-making. Access to these resources significantly affects members' incomes, well-being, and empowerment level. This was demonstrated by the respondents' oral accounts from the surveyed cooperatives. Farmers as agents of cooperatives contribute to the empowerment of their members through cooperation with agricultural extension agents. Women's involvement in cooperatives further strengthens their access to decision-making, mainly decisions concerning their well-being and farming activities, allowing them to have more resources and skills within their organisations, families, and neighbourhoods.

Besides those advantages, the surveyed cooperatives also embody some weaknesses. Regarding the weaknesses, 51 percent of the 15 interviewed cooperatives stated that their greatest limitation is lack of capital. The cooperative organisations remain poorly managed, as they do not have the necessary money to run their cooperatives as they plan. In contrast, 36 percent believed that their greatest weakness is inadequate infrastructure. Finally, nine percent alleged they have low qualifications, while four percent supposed their weakness is lack of organisation and few members attending meetings. When analysed by regions, cooperatives in Kati highlight the following three issues as their weaknesses: lack of capital, inadequate infrastructure, lack of organisation, and few members' attendances at meetings. Those in Bamako mentioned: a lack of capital, inadequate infrastructure, and low qualifications. Finally, Baguineda cooperatives highlighted: a lack of capital, inadequate infrastructure, and few members attending meetings. Additionally, attention was paid to how gender relations

influence cooperative management and collective group dynamics. The author's analysis found that cooperative organisations in different parts of Mali and within the same region are different in size and objectives. They might either challenge or sometimes reinforce conventional practices. Cooperatives entirely made of male members did not have many women empowerment strategies in their organizational framework. They often maintained discriminatory practices against women.

In comparison, in mixed cooperatives and cooperatives solely made of female members' women's needs were more importantly recognised and often met. In hybrid cooperatives, men were more supportive of women's needs and requests than in cooperatives with only male members. The mixed cooperatives and cooperatives only made of female memberships usually negotiate and challenge existing patriarchal structures that hinder women's access to resources. The assessment indicates that women's participation in agricultural cooperatives strengthens gender mainstreaming regarding members' needs, positively impacting their empowerment at the family, cooperative, and community levels.

This chapter also elaborated on the significant remaining challenges women encounter in the agricultural sector. These challenges include lack of access to profitable markets, access to credit, inadequate access to storage facilities, transportation, processing materials, sociocultural barriers and insecurity issues triggered by political instability, terrorism, and the COVID-19 pandemic. Although these difficulties persist, women's cooperatives are playing an essential role in counteracting some of these issues. Through collective engagement, women understand their strengths and expand their skills to impact decisions regarding their socio-economic well-being. The neighbourhood also benefits from their engagements as agents of change, as women were involved in community development projects. A sense of empowerment is not restricted to female cooperative participants; male cooperative participants also feel empowered as their access to resources increases.

In conclusion, agricultural cooperatives can contribute to women's empowerment if they develop a gendered approach regarding discriminatory practices encountered by women. Altering discriminatory gender practices and requirements seems tricky. Yet additional interest should be granted to biased practices to improve females' self-confidence, skills, and access to agricultural resources in patriarchal settings. Cooperative organisations need to retain the good practices and continue their dialogue with traditional and government leaders on the challenges small-scale women farmers face in their localities and at the national level to influence gender-responsive laws and policies regarding their socio-economic necessities.

6.6 Overall Summary of the Findings

Women in Mali offer invaluable contributions to the socio-economic realm and food production. They make up more than half of the agricultural workforce and do much of the food production, processing, weeding, threshing, winnowing, and other farm work. In that regard, national mechanisms to promote women's empowerment have been established as evidenced by Mali's government's political will and legal framework to promote gender equity in the agricultural sector. This is reflected in the Constitution, CEDAW, the Maputo Protocol, the National Gender Policy and its Action Plan, the AOL, etc. Mali also has guidelines, frameworks, strategies, and policies that provide entry points in addressing gender issues. Such approaches and methods include the Agricultural Development Policy PDA, the Growth and Poverty Reduction Strategic Framework CSCR, and the National Program for Investment in the Agricultural Sector PNISA etc. Even though Mali has made great efforts over the past years to reduce gender inequalities, the issue of women's full involvement in the socio-economic sector of the country is still a concern in development policies. Despite women's essential contribution and the adoption of numerous international conventions and agreements on gender equality, discrimination, prejudices, and the lack of implementation of these laws and policies hinder women's empowerment in the agricultural sector. These inequalities can only be understood and addressed through systematically collecting, processing, and analysing gender desegregated data.

In almost all spheres of activity women still struggle to gain recognition for their fundamental roles as economic agents. As an illustration, women's land ownership remains challenging throughout Mali because land tenure systems entail complicated interactions among asset handlers and operators. These relations involved customary and statutory tenure systems where formal and informal rules define land access and control (patterns, guidelines, and regulations) established by either conventional or legal tenure systems. They both persist in determining women farmers' access to land and agricultural resources in rural and urban Mali. The customary land tenure system has not superseded the legal tenure systems based on title deeds under which the notion that land is a vital market commodity remains essential. This commodification of land benefits the state and a few wealthy Malians who can afford title deeds, while disadvantaged farmers who usually access farmlands through conventional systems feel threatened.

Structural adjustment programs and rapid urbanisation in Mali in the early 2000s (triggered by capitalism and population growth further led to the land shortage. While increasing competition around land essentially brought new reforms in land tenure

arrangements: from informal landholdings of the customary rights to formal land ownership. In most Malian societies, farmers continue to access agricultural land in rural areas from customary leaders conventionally. While in urban and peri-urban areas, legal access to land is primarily provided by state systems granting public and private properties to individuals at expensive costs. The costly and complex legal procedures in owning land formally drove most people to acquire land through informal methods. Conventional practices of informal land provision with customary systems are built on confidence and trust between local leaders and their community members.

Even though customary tenure practices remained primarily practised by most Malians, disparities exist between this later and the state's formal land tenure systems. The differences and incoherence between these two tenure systems and their extent of cooperation incite small-scale farmers to cooperate and defend their land rights in rural areas based on traditional landholding methods that have prevailed since pre-colonial times. Tenure arrangements between statutory and customary systems still require further cooperation between the state and traditional leaders in allocating and controlling land. In this hostile atmosphere around land tenure systems, land shortage, and competition for land triggered by urbanisation, capitalism, and population growth, some disadvantaged groups suffer the most, particularly women.

This is because women's tenure rights in formal and informal tenure systems remain precarious despite their crucial role in agriculture; some socio-economic and cultural norms also impede their ability to hold land and access agricultural resources. On the one hand, to address those challenges at the institutional level, the government enacted several gender-responsive laws and policies, as explained earlier. Among many land laws that have governed Mali's agriculture, one of the most important was the Agricultural Orientation Law (AOL) of 2006. This law has emphasised gender equity and supported small-scale family farming, implicitly targeting women's better access to agricultural land (Diallo, 2022). The AOL was designed to improve land access among small female farmers but has not generally benefited women because of the failure in policy implementation. Additionally, the survey found that most women farmers in rural areas were unaware of the AOL's existence. Agricultural extension agents and NGOs are enlightening women about the advantages of this law regarding their land ownership and access to resources while supporting them in lobbying local governments to implement this law effectively (Diallo, 2022). This study further uncovered that women in rural areas are less educated and have less access to training, credit, agricultural technologies, extension agents and services, and markets, among other resources, than their male counterparts. Facing the challenges mentioned above, women often create or join

cooperatives to improve their skills, knowledge, and rights to counteract these multidimensional issues. Women initiated collective engagement by establishing or joining cooperatives to assert their rights and negotiate their access to agricultural resources, including land, credit, equipment, and decision-making stances. Regarding land ownership, the author's surveys with agricultural cooperatives in the three sites found that security of tenure was a prerequisite for cooperatives' organisation in rural areas, mainly in Baguineda and Kati. In comparison, access to credit and training was essential for cooperatives in Bamako. The study observed that cooperative land tenure methods remained centred on traditional or customary tenure systems in rural areas of Kati and some parts of Baguineda. Women's legal tenure rights decline as the distance from the city centre increases.

Moreover, the methods of owning and accessing land change based on the nature of the prevailing land tenure system and the area's degree of urbanisation. Access to individual lands beneath the legal system was primarily done through formal leasing arrangements in Bamako. Yet it remains vital to mention that the cooperative structures, deals, and level of organisation impact their members' agency level in accessing agricultural resources. Additionally, socio-economic disparities were found amongst cooperatives based on their location. As an illustration, cooperatives in Bamako have more access to formal lands, are more trained in business endeavours, and are better off than farmers in rural areas. In comparison, farmers in suburban Baguineda and Kati feel insecure since most of them use informal land; in that regard, they can be disposed of their land at any time. In the face of these challenges, farmer cooperatives have played a crucial role in defending their members' tenure rights, mainly by providing them access to informal and formal land, predominantly to landless members in Baguineda and Kati. Cooperatives have a direct and indirect influence on traditional and legislative tenure systems. Indirectly they support farmers by launching extensive networks for obtaining land informally through dialogue and negotiation with conventional leaders. They directly lobby the local government by claiming their land rights based on the AOL principles. Cooperatives in Bamako were more concerned about improving the quality of their productions through more training and information and better access to processing equipment.

Overall, the sample cooperatives in Baguineda have provided their members with better bargaining power, access to unavailable services, and increased their associate's incomes. While the surveyed cooperatives in Bamako were able to expand their management and bargaining power, enhance their members' revenue, and access unavailable essential services. Finally, cooperatives in Kati achieved better bargaining power, lower operating costs, and access to unavailable services.

Based on these outcomes, the study contends that women's land ownership, access to agricultural resources, and empowerment within cooperatives are more effective when cooperative members use their agency and bargaining skills through joint action. From the case studies, an appropriate sphere of influence was established by cooperative leaders whereby strong and capable women, in collaboration with some men, negotiated with traditional elites and local government agents. To guide and push for more prodigious changes regarding women's access, control, and ownership of agricultural assets. Women could take advantage of the possibilities through collective engagement and bargaining, which opened up prospects for empowerment.

Skills and knowledge were also attained through discussions, seminars, workshops, training, and information sharing among women from different agricultural cooperatives to support their members' needs and develop their agency collectively. This practice was mainly beneficial for women in all the cooperatives in their capacity building, activism, and organisational skills. After becoming involved in cooperatives, women in the three study areas reported having achieved ground-breaking and extra employment prospects and received better wages. Women also testified that their participation in cooperatives raises social bonds, caregiving, and decision-making within the households and the community, enhancing their involvement in social matters.

Besides improving their members' access, control, and ownership of productive assets such as (land, inputs, outputs, training, information, market, etc.) the surveyed cooperatives also allow women to better take care of their children by educating and nurturing them (using nutritional foods practices). They also question the economic, social, and cultural obstacles, by providing greater access to resources within their cooperatives and communities in a more equitable manner to reassure their members.

Despite the positive features, some shortcomings were also noticed within the surveyed cooperatives. The challenges range from the process of becoming a cooperative member, which is generally based on individual social status, such as being married. Likewise, some respondents have also explained shortcomings in leaders' election terms and a lack of trust among women leaders and their associates. Although some challenges prevailed, the sampled cooperatives have had a strong influence in establishing equal opportunities between men and women because cooperatives are instituted on self-help, support, training, education, autonomy, and inclusion. Many of the cooperatives in the three study areas acknowledge that guaranteeing gender equality is the right thing and must be expanded in other socio-economic domains for

a more egalitarian society. Tangible actions must accompany it to grant women better resource access and safeguard their human rights at the personal, household, and group levels.

In this regard, actions to tackle the challenges faced by women farmers were taking place within different cooperatives at various levels with different approaches to guarantee that both females and males can participate and gain from cooperative involvement through accessing and owning productive assets. So, the cooperatives were places of empowerment and self-help where members voiced their needs and concerns. Moreover, through cooperation and bargaining with customary and government officials' women learn to make crucial decisions within their organisations, families, and communities. Beyond taking charge, women acquire better access to credit, training, skills, information, market, and extension agents. Cooperatives in the study areas provide simple financial services with a low-interest rate, training skills, and information to their associates. Cooperatives assist the most vulnerable smallholder farmers and entrepreneurs in the survey areas by establishing better opportunities and environments to improve their household incomes.

Based on these findings, the study alleged that the survey cooperatives play a crucial role as agents of change in modern Mali agriculture despite some remaining challenges. Through their involvement in cooperatives, women gain better access to either formal or informal land, better tenure security, and improved education. They further gained skills and training to be better farmers and counteract discriminatory practices induced by patriarchy that usually hamper women's socio-economic empowerment. The strategies employed by women farmers to negotiate with the existing systems subordinating them in further realising their potential as active economic players should be continuously reinforced.

In other words, the data concluded that the surveyed cooperatives have contributed to reviving the rural and urban economies in Baguineda, Bamako, and Kati. The cooperatives under study have empowered women members to access essential productive resources such as land, credit, seeds, fertilisers, equipment, training, information, market, extension agents, and decision-making. The most obvious benefit was both economic and social. Economically, women improved their income, and socially they gained more respect and consideration from their husbands, family members, and community leaders, leading to better decision-making.

CHAPTER 7: CONCLUSIONS AND POLICY RECOMMENDATIONS

7.1 Conclusions

This study aimed to identify the role of agricultural cooperatives in assisting women farmers to access farming resources, namely land, credit, market, equipment, agricultural extension agents and services, training, information, and their level of participation in decision-making processes. The author's survey in the three regions of Baguineda, Bamako, and Kati in Mali revealed that numerous challenges prevent women farmers from accessing essential production resources within the existing patriarchal norms, and traditional gender attitudes affect their livelihood activities. These challenges include lack of education, unequal access to sexual and reproductive rights, household responsibilities, discrimination in labour markets, violence, lack of access and control over resources such as (land ownership, access to credit, market, information, decision-making processes, technologies, transportation, and limited access to inputs, storage facilities, and processing equipment) and discriminatory laws and policies.

Unequal access to these resources placed smallholder women farmers in a vulnerable position regarding their capacity to supply, manage, and gain new economic prospects. Being underprivileged in accessing productive assets due to systemic and biased practices embedded in societal norms has kept women in the vicious circle of poverty. As illustrations, conventional approaches value and prioritise men's access and control over farming land and resources. Women usually acquire their plots via their husbands' or spouses' lineage and hold inadequate plot privileges over those lands. It is assumed that the household farm managed by men meets the entire family's demands, so in this case, it is contended that women do not need access to individual plots. Women are granted access to small and unfertile parcels to practice market or vegetable gardening to meet personal needs. Besides, women work longer hours on the household farms managed by men while simultaneously performing household chores such as caring for the children and the elderly. Women work fewer hours in paid work than men on average. In part, this is due to women's long hours in unpaid household labour. The greatest gap in women's labour force participation occurs between the ages of 25 and 49 when domestic and childcare responsibilities are culturally assigned to women combined with a lack of childcare options making it difficult for them to continue or enter formal wage labour. For women living in rural communities where the survey was conducted the time dedicated to reproductive work (collection of water, firewood, cooking etc) equals more than half a day, granting women lesser time to work in their market gardens. The time spent in these activities

could be spent working for pay. As a result, women's income remains low compared to men's as many work in the least valued and invisible part of the value chain as home-based or informal workers with low wages.

Moreover, women's financial prospects are lower and undeveloped throughout the country. Inequitable access to financial resources placed women farmers at an important disadvantage, affecting their ability to contract loans, operate on a scale, and gain additional lucrative resources. It further impacts women's access to other farming inputs (such as seeds, fertilisers, equipment, and water), keeping them in the informal farming sector with low profits. The same situation holds for women's access to decision-making stances. Women and men cannot just reach equally upper-level positions. The glass ceiling metaphor has often been used to describe the invisible barriers (glass) through which women can see elite positions but cannot reach them (coming up against the invisible ceiling). These barriers prevent large numbers of women from obtaining and securing the most powerful, prestigious, and highest-paying jobs in the workforce.

The sociocultural setting of Mali's farming societies often considers women farmers as less capable producers since they usually cultivate crops that have lesser value on the market. Females' productive assets limitations are also correlated to their lack of education and training, which placed them at a significant disadvantage compared to their male counterparts. On the other hand, their lack of competencies and representation in decision-making stances hampers their capacity to influence important decisions on their resource access. Furthermore, females' lack of business and technical skills, their lack of expertise in marketing, and supervision of formal economic activities lead to their inefficiency and failure to fully participate in the global market. Within this challenging context, this study raises the following question: What role can agricultural cooperatives play in addressing smallholder women's access to farming resources? The findings were the following:

Regarding women's access and ownership of land, the survey found that contemporary Malian societies practice both customary and statutory land tenure systems that impact women. Rapid urbanisation and population growth of the early decade in Mali brought reforms in land tenure arrangements: from collective landholdings (traditional) to individual land ownership (statutory). The customary land system, which dates back to pre-colonial societies, has not superseded legal tenure systems under which land is becoming a vital market commodity. This commodification of land mainly benefits the state and few wealthy Malians who can afford title deeds. At the same time, the disadvantaged and poor peasants who usually access farmlands through traditional tenure practices feel imperilled. The disparities between the

formal and informal tenure systems exemplify the complexity of handling smallholder farmers' needs in rural and urban areas. The survey found that tenure arrangements between legal and customary systems still lack flexibility in distributing, managing, and supervising land in the three study areas.

The prominence of conventional practices in accessing agricultural plots within rural communities implies that ultimate government control over property is often ineffective in these areas where unconventional approaches dominate. The AOL was enacted to improve farming activities, and smallholders' access to land encountered some challenges. The AOL has thus not been fully implemented nor acted in addressing farmers' land rights, mainly women's tenure rights. There is a need for close cooperation between legal tenure systems from local government representatives and informal tenure systems of conventional leaders in distributing and handling rural and urban land to resolve land disagreements.

The survey outcomes conducted in Baguineda, Bamako, and Kati within agricultural cooperatives show that diverse and distinct issues affect women within each of the survey cooperatives. The most important finding is the lack of access to agricultural land. Access to land and other assets remains a challenge for most farmers, particularly for the disadvantaged ones who are generally women. Women are deprived of possessing agricultural plots because of systemic discrimination and barriers, affecting, in turn, their access to credit from financial institutions that typically request applicants' title deeds as collateral. This also affects women's access to other farming resources (seeds, fertilisers, equipment, markets, and technologies).

Encountering these multidimensional challenges, women create or join cooperatives to improve their resources access and control and enhance their skills and knowledge regarding their rights. The survey results indicate that the dilemmas between traditional and legal tenure systems, land insecurity and access to other agricultural resources remain crucial motivations for women farmers to establish or partake in cooperative activities in rural areas.

Collective engagement in cooperatives strengthens women's agency in initiating strategies to improve their resource access and control in dominant masculine societies. As a result, few cooperatives offered informal and formal entry to plots for their associates. Some women smallholder farmers in cooperatives have successfully acquired formal and informal land (under customary and statutory systems). Particularly, some cooperatives have played a crucial role in defending their members' tenure rights, by providing them access to informal and formal land, mainly to landless members in Baguineda and Kati. Cooperatives in Bamako were more concerned about improving the quality of their productions through more training and information and better access to processing equipment.

Cooperatives thus have a direct and indirect influence on traditional and legislative tenure systems. Indirectly cooperatives support farmers by launching extensive networks for obtaining land informally through dialogue and negotiation with conventional leaders. They directly lobby the local government by claiming their land rights based on the AOL principles.

The same situation holds true for women's access to credit, seeds, fertilisers, equipment, market, and marketing networks, as explained throughout the thesis. Overall, the sample cooperatives in Baguineda have provided their members with better bargaining power, access to unavailable services, and increased their associate's incomes. While the surveyed cooperatives in Bamako were able to expand their management and bargaining power, enhance their members' revenue, and access unavailable essential services. Finally, cooperatives in Kati achieved better bargaining power, lower operating costs, and access to unavailable services. These cooperatives are regularly leading the path for women to gain better access to valuable utilities and production services and gain extra revenue through additional activities from the cooperatives. All the cooperatives interviewed positively impacted their members' income and well-being.

The study's second question was: What strategies and approaches were taken by women to empower themselves within the cooperatives?

Regarding this question, the survey found that cooperatives in the agribusiness sector in the survey areas provide smallholder women producers with valuable services. Through collective engagement and negotiation with the traditional leaders and local authorities, women could negotiate with the customary and modern structures, often excluding them. Over their collective engagement, women gained agency through adult literacy and various training offered by agricultural extension agents, increasing their self-confidence and ability to bargain for their personal and collective needs. This, in turn, raises their understanding of the importance of equitable gender relationships in accessing resources.

Besides, cooperative memberships have also streamlined women's access to resources, assisting them and creating more openings for their involvement in leadership, training, information, and access to affordable markets. The cooperative involvement has further expanded women's access to farming inputs and other resources (in skill management, knowledge, information, capacity building, etc.), achieved through collaboration amongst cooperatives and, more importantly, bargaining with traditional elites and local authorities within their communities.

As an illustration, marketing cooperatives in the urban areas increase productive ability and market access to women small producers in rural areas. When working as individuals, they

would be unable to gain from these prospects because of their low purchasing power, lack of resources, and social barriers. The cooperation principle of the groups also influences members' agency in negotiating with customary and government officials to better access resources. It enables farmers and entrepreneurs in the agricultural sector in the study areas to bound together for resolutions in obtaining resources, production inputs, and selling their yield.

The surveyed cooperatives in the three study areas have further helped close the issue of lower resource access by encouraging collective bargaining practices and strategies that allow women to hold or access land. Bargaining with traditional leaders and government authorities managing resources has increased women's agency skills in accessing land formally and informally, improving their access to informal credit access through the cooperative's micro-credit schemes, access to training, and extension agents and services. These benefits led to women's better access to decision-making within their families, cooperatives, and communities, influencing their socio-economic empowerment.

The significant findings of the survey further involved the continuing bond of confidence among local extension agents and cooperatives. Agricultural extension agents and their services strongly fortify female leaders' activities and experiences. Additionally, they encourage the political will to recognize and support the cooperative's vital role in promoting gender equality in land ownership and other resources. Women's engagement in cooperatives also provides them with social or human capital, which means formal and informal social networks and interactions with other individuals in the cooperatives to obtain and enhance their livelihoods. Networking with other cooperatives helps women get information, bargain, control, and claims their fundamental rights. Human capital also offers a space for women to voice social concerns, as cooperatives provide psychological support to members.

Institutionalising gender equality principles and values in cooperatives have been ground-breaking for women, as mentioned by some respondents. Cooperative involvement represents significant potential and benefits for its members' empowerment when they make fair use of their agency and bargaining power through cooperation with those who hold power. Through passive negotiation, women implicitly expressed that they attempted to modify and question the ingrained cultural beliefs and practices in rural areas. The oral accounts from women in the three study areas prove that their engagement in cooperative activities was vital. As housewives, mothers, caregivers, and farmers, women in rural and urban areas are increasingly choosing to organise themselves in cooperatives to claim their rights in accessing the primary resources for their agricultural production and livelihood activities. The assessment shows compelling evidence that cooperative participation improves women's yield, revenues,

and livelihoods for the associates and the neighbourhood. Joining cooperatives bring women not only economic benefits but also social recognition.

As highlighted in the theoretical framework, empowerment and agency might present limitations. Agency alone cannot bestow empowerment if it fails to transform the agents' life choices. Thus, agency, collective engagement, and bargaining power must be accompanied by agents' willingness and awareness of the systems that oppress them to foresee better possibilities within their immediate environment. Most of the surveyed cooperatives play this role of consciousness arising regarding women's status in accessing resources. They also learn to negotiate and cooperate with customary and government officials regarding other concerns.

From these outcomes, the study concludes that cooperatives can increasingly be identified as necessary platforms for mitigating poverty whilst enhancing women's empowerment in Mali. Women members of the sample cooperatives experienced significant growth as agents of change upon joining cooperatives. The cooperative pattern of friendship, collective success, and unity was apparent from the surveyed cooperatives and improved members' self-worth and confidence. Furthermore, the cooperatives have several sound practices which remain especially beneficial to women, including guaranteeing their access or ownership of land, providing them with credit, equipment, training, information, support members, and access to improve markets. The sample cooperatives have gone beyond economic empowerment by helping challenge conventional and social obstacles that prevented women from acquiring and owning resources. They have also allowed women to collaborate over common issues and offered collective assistance, particularly to members in acute predicaments, including gender-based violence, losing partners, or being victims of expulsions.

Women's contribution to development must be recognised and fully taken into account. It must be acknowledged that economic policy and planning are inextricably linked to the analysis of sex-disaggregated data, and this can be achieved through the systematisation of gender-based data and analysis. This is indispensable for decision-making and developing relevant policies, especially in agriculture. This dissertation attempts to fill this gap by providing data on agricultural cooperatives' role in empowering women. Sustainable economic growth requires women's empowerment; the improvement of their livelihood activities and productivity must be enhanced if Mali is to break out of its poverty and food insecurity traps. For this reason, women need better legal protection of their human rights, greater recognition of their property rights, and better access to other agricultural resources.

The surveyed cooperatives are playing a role in attaining that. Based on the evidence from the three study areas, the study argues that women's involvement in cooperative

endeavours can no longer be deemed a question of prosperity but must be strengthened and encouraged throughout developing countries to voice the marginalised groups. In Mali and elsewhere, development experts must recognize that cooperatives dominated by women can significantly contribute to socio-economic development if they are provided with the appropriate resources and opportunities. There is an increasing unanimity that improved commitment of women in all phases of development is substantial for the practical exploitation and development of resources which was previously underestimated and overlooked. Cooperatives can play that role as they serve as a bridge between women and the systems which oppress and subordinate them.

7.2 Policy Recommendations

Based on the findings above, it can be inferred that cooperatives can play a vital role in fostering and attaining gender equality and women's empowerment in the appropriate atmosphere and with the right assistance. Even though some positive cases were found throughout the study, cooperatives not empowering their members also exist; the author argues that additional efforts are still required to push forward gender equality in governance and access to assets for rural farmers.

Although women's involvement in cooperatives has had some beneficial results on their access to resources within their groups, they continue to face sociocultural barriers in fully accessing resources, especially for non-cooperative members. If not tackled appropriately, these discriminatory practices could encumber and undermine cooperatives' efforts in strengthening equal access to agricultural resources between men and women. To sustain the evolution of women's cooperatives activities in the study areas, the following actions should be carried out by different stakeholders:

7.2.1 Cooperative Level

The cooperative groups could expand gender equality practices by promoting women's participation in community matters beyond their activities. To achieve this, the cooperative can encourage more women in the community to participate in cooperative activities, act, and speak out during group meetings. The cooperatives should strengthen and create unions in each region to better pledge to their members' needs. The bigger their organization, the stronger they become, and the more attention they receive. Cooperative unions will help establish gender commissions within each cooperative in each region to identify major gender concerns regarding members' agribusiness activities and ratify resolutions to lessen those challenges throughout the organisation's development process.

Since farmers' access to credit remains a challenge, the cooperative union can also use their voices to lobby the state on that matter. This can pressure financial institutions to make credit accessible to both individuals and groups of farmers and entrepreneurs. Cooperative unions can also launch monetary services (in-kind loans) with the public and private financial institutions at lower interest rates, with a better scope and payment modalities adapted to members' needs, interests, and financial capabilities.

Once cooperatives associates have better access to credit, they can invest in appropriate technologies and equipment such as transportation, machinery, packaging tools, cooling, and storage houses adapted to local environments. Having better access to these assets can support women with mobility challenges, access better marketplaces, and add value to their products in reaching the regional and international market and improving their incomes. More importantly, it will enable women to bring about positive changes in their lives and societies as a result of their participation in economic activities. These activities include their ability to function effectively in the economy, participate in labour markets on equal terms with men, shape the gender division of labour within the household, accumulate their assets and influence the structures governing the relationship between the market and the state.

Cooperative unions could also set up marketing networks among the cooperatives by encouraging groups to sell their produce collectively. Cooperatives from the same locality can establish storage and cooling facilities. They can connect to the warehouse delivery schemes and trade within and beyond their communities via the union.

Optimising the value chain of agricultural products in Mali requires a comprehensive approach to commodity value chain development. This entails assisting cooperatives in obtaining the facilities to meet international standards on product quality, safety, health, and the environment. It further involves building managerial and other skills to adapt to new market requirements, regulations and technologies. Through unions cooperatives will support women farmers' organisations with training in production, processing, storage, and marketing skills. Food processing centres should be created and reinforced. Applying a gender lens to promoting quality and standards can ensure that small-scale producers have access to knowledge and faculties relevant to quality and standards and can meet the various regulations and requirements that are a precondition for trade participation. To promote the growth of supply chains via cooperatives, a certification system for Made in Mali food products should be designed. This will increase the competitiveness of Malian products and obtain additional market share in national, sub-regional, and international markets through measures intended to

encourage the production and competitiveness of supply chains. Women's cooperatives will be systematically engaged in value chains through farmers' organizations.

As an umbrella organisation, unions can urge members to develop and enlist supplementary self-help and marketing endeavours between rural and urban cooperative organisations. Through cooperation, exchange, and knowledge sharing, they can tackle various challenges and address discriminatory practices on their member's socio-economic empowerment and establish gender equality approaches and strategies to counter the persisting barriers.

Though women could access some leadership positions within the survey cooperatives, the assessment reveals that women are still inadequately embodied in some cooperative leadership positions and decision-making structures in mixed cooperatives. Therefore, cooperative unions can initiate quota principles for women to occupy certain strategic positions in each organisation, mainly in hybrid cooperatives, to boost women's self-confidence and leadership skills. In collaboration with the government, civil society, and NGOs, unions should provide cooperative members with additional support and training in leadership, governance, management, business, and marketing skills. They should also actively support and encourage gender-responsive policies from women's voices within and outside the cooperative and accordingly plan based on those needs.

7.2.2 Government Level

Assisting women farmers in the complex Mali socio-economic contest can thrive in lessening poverty in rural areas. Females' inequitable access to productive resources, mainly lands and credit, place them in disadvantaged positions to finance, run to scale, and gain from new profitable prospects. National economies lose out when a substantial part of their population cannot compete equitably or realize their full potential. When women have the right skills and opportunities, they can help businesses and market growth. Through the following policies, government assistance to female farmers at the national and community levels can tackle these concerns.

The government should provide conducive environments to empower marginalised women, and farmers, to the extent that they can launch and run cooperatives efficiently. To do so, the government can create local agencies in each region to assess the challenges faced by women farmers through in-depth research to recognise women's struggles and needs in rural and urban areas and design plans, programs, and guidelines to fulfil those demands and requirements. As mentioned throughout the thesis, women's involvement in economic

activities is crucial; however, their access to financial resources and leadership positions remains unattainable. The government and its partners could close this gap by strengthening women's economic access to loans and representation in key leadership positions. They can also encourage farmers' and entrepreneurs' awareness to register their businesses and promote the creation of more female cooperatives and enterprises in the formal sector. Organisations enrolled legally with the government will pay taxes, this can ensure their entry into profitable markets and credit while benefiting other opportunities.

Besides, the government and its partners might urge financial institutions such as banks to offer Malian women farmers and entrepreneurs easy access to credit, become guarantors to the loans, and offer them technical assistance and training in responsibly managing the money they borrow. Even though women have access to credit through decentralised financial institutions, the amounts remain small which does not allow women to participate in sustainable economic activities. Additionally, they should also support women's cooperatives at the grassroots level, tackling some of the barriers in rural, urban, and peri-urban areas. In this vein, the government can support and sponsor start-up cooperatives through unions. Over partnerships with cooperative associations, the government will develop women's capacity building through training and education in fields where there are huge disparities, especially in accessing credits, title deeds, and equipment. A similar approach should be taken to supporting women in building administrative skills in the fiscal sector, in municipal councils, in auditing, and in applying for funding to improve their activities.

At the institutional level, the government should revise laws and texts about gender to make them gender-sensitive and operationalise the national gender policy implementation mechanism. The government can also include gender studies in educational institutions with a curriculum so that consciousness-raising around the crucial necessity for gender equality is attained at an early age. Thus, the government should go beyond policymaking and uphold empirical evidence regarding women's land ownership, access to credit, equipment, and decision-making stances. In this regard, it should cooperate with the Ministry of Agriculture and the Ministry of Women and Children to implement measures and integrate women in the informal sector of the social protection system, especially within the formal social security system through cooperatives.

- **Ministry of Agriculture**

The government could closely cooperate with the Ministry of Agriculture to improve the socio-economic empowerment of women, youth, and vulnerable groups in decision-making bodies to strengthen their access to productive resources; train them in leadership, lobbying,

and negotiation skills. Additionally, it should support rural women with infrastructure, services, and processing equipment while developing a program to support entrepreneurship activities among women and other vulnerable groups. Activities to promote agricultural mechanisation (animal traction, motorisation, maintenance), support for purchasing tractors and other motorised equipment (especially power tillers and accessories), and multi-functional platforms should be encouraged.

The agricultural ministry should establish a monitoring committee to oversee the implementation of the National Gender Policy and regularly publish sex-disaggregated data in the annual statistical report on rural development. It should assist the government in the execution of the provisions of gender mainstreaming in the agricultural development policy by giving priority to women in all segments of the value chain (recruitment, decision-making, leadership positions, participation in meetings, workshops, seminars, training sessions, research, extension, procurement). More importantly, the agricultural ministry should harmonise and disseminate texts governing land issues and offer a follow-up mechanism for resources allocated to women in the agricultural sector. Lastly, it should closely work with the Ministry for the Promotion of Women, Children, and the Family to strengthen and lead partnerships between various actors and stakeholders on gender issues.

- **Ministry for the Promotion of Women, Children, and the Family**

The Ministry for Women and Children should intensify its communication activities with the government and other stakeholders. Importantly it should change attitudes on the ground to eradicate harmful practices preventing women from exercising their rights in the agricultural sector regarding their access to (land security, production factors, processing materials, access, and control of income). It should also strengthen women's capacities through literacy, vocational training, and participation in decision-making over their cooperative unions. The women's ministry should further facilitate and improve access to and control of resources and recognise women's rights to decent work and inclusion in the formal sector. It should also encourage and support women's access to agricultural credit, capitalise, exchange, and make visible gender activities in the sector through audio-visual publications to better enhance partnerships between stakeholders and integrate gender needs in the farming industry.

The women's ministry must develop partnerships with women's cooperatives and other groups to incorporate gender in their modules and seek strategies to encourage and motivate girls to join and stay in agricultural institutions and strengthen and operationalise mechanisms to monitor gender initiatives on the grounds. Lastly, the ministry should review its approach and methodology targeting beneficiaries on the ground, while ensuring the actual participation

of women and men in different stages of their project. As part of mainstreaming gender into its project cycle, it is particularly important to collect sex desegregated data, qualitative and quantitative data, conduct awareness raising and capacity building as well as support achieving gender parity within communities, cooperatives, groups, and organizations. It should further establish specific indicators and undertake dedicated gender research, engage in advocacy and awareness-raising work to facilitate gender parity in training and project teams, and develop gender strategies and policies. More importantly, it should also launch mechanisms and systems to monitor the implementation of the revised laws and texts to create a framework for collaboration between the Ministry of Agriculture and other departments and cooperative unions to ensure that gender is mainstreamed along the agricultural value chain. Developing and implementing capacity-building programs for all stakeholders involved in mainstreaming gender in plans, projects, and government programs. This will enable the adaptation of gender awareness and the integration and analysis of gender in scheduling, planning, implementation, and monitoring-evaluation.

7.2.3 Extension Agents, NGOs, and Individual Level

- **Extension Agent Level**

Local extension agents should supervise the application process of the various state laws and policies about women's access to assets and give government feedback. They should also support cooperative organisations in areas where land regulations and resource allocation procedures discriminate against women. In places where farmers rely on rainfall farming, extension agents can also draw stakeholders' attention to climate change to adopt fundamental adaptation actions. Mainly, they should encourage the government and NGOs to create irrigation schemes in arid localities. In this regard, rainwater and stream build-up skills must be advertised and promoted through training with extension agents. Extension agents should further emphasise men's consciousness arising intensification, particularly regarding gender equality and women's full inclusion in accessing essential decisions in their communities.

- **NGOs Level**

NGOs could support cooperative unions in creating and employing gender equality policies to accelerate women's empowerment in all spheres of life. Besides, they can provide women with education, training, and financial and technical support. NGOs can also cooperate with civil society organisations to strengthen policies and guidelines supporting women's participation in socio-economic activities and political representations.

- **Individual-Level**

In the Malian context, men are considered solely responsible for the households. The economic empowerment of women is not sufficient if men are not also engaged in collaborative decision-making at the household level and in taking on a greater role in caregiving in the home, without these perspectives policies may end up increasing women's burden in the household without asking much of their role as partners and parents. Involving men in mainstreaming gender equality is thus essential. They should actively encourage women's economic inclusion and gender equality and aspire to access more leadership positions in rural and urban areas. Men should further endorse connecting and bridging trustworthy relationships with cooperative unions to facilitate interactions and cooperation with existing conventional structures, which represent some obstacles to women's empowerment. Thus, traditional, religious, policymakers, scholars, donors, civil society, peasant organisations, and cooperatives must collaborate to include marginalised individuals, mainly women, into the social-economic spectrum for their well-being. These interventions are most effective for advancing women's economic empowerment and rights, strengthening their entrepreneurship activities, access to markets, quality education and skills, and linking agricultural productivity and food security. Making gender central to individual and private sector human resources management is crucial. Women's economic empowerment remains the prerequisite for sustainable growth, upholding rights and creating equitable societies. This thesis has proven that gender equality thrives in economies. When women can find decent jobs, and acquire assets, they can earn incomes, accumulate savings, help themselves and their families and reduce poverty.

7.3 Realistic Contributions

Although the findings of this study cannot be overgeneralised to the entire cooperative movements in Mali, it offers a practical advocacy and entry point on the status of cooperatives and the institutional and regulatory frameworks overseeing them. It also highlights the role of government, NGOs, private organisms, donors, and other stakeholders in supporting cooperative activities and women farmers' empowerment in rural areas. The outcomes further suggest implementing appropriate policy measures at different levels, as underlined in the recommendations for the sustainable growth of small scale farmers' cooperative organisations in Mali.

This study questions the various laws and strategies adopted by Mali's government to improve women farmers' livelihood activities, namely, by enhancing their land ownership and access to other farming resources. Implementing these policies and legal frameworks remains challenging due to the weight of socio-cultural practices firmly embedded in community

patterns which influence individual daily interactions and resource access and control. These practices often disempower women in several realms, such as in social life, undertaking economic activities, making decisions within their households or communities, or involving in political or important decisions making stances at the government level.

Whether in rural or urban areas, women's socio-economic status remains precarious throughout the country. With the improvement in the legal environments, in girls' schooling and in women coming together through grassroots organisations to claim their rights, positive changes are being noticed primarily within cooperative organisations.

Unlike in other Muslim countries, one crucial finding of this research was the support provided by men to women members in mixed cooperatives. The agricultural extension agents' training on women's inclusion in economic development and their capabilities in undertaking leadership roles and responsibilities encourage most male members to adhere to gender equality, women empowerment, and leadership within their organisations. This type of training should be encouraged throughout Mali, mainly in agricultural communities with strong socio-cultural norms and values.

Many of the cooperative activities in the study areas are noteworthy as they are setting the ground for their member's socio-economic empowerment. Yet their actions remain marginal and local; in this vein, there is a constant need to strengthen and restructure cooperatives as umbrella organisations in advocating marginalised farmers' land tenure rights with conventional chiefs, state leaders and institutions. The OHADA Act, the AOL, the CDF, and other laws regulating cooperative organisations and women's empowerment in land tenure systems should be revised and enforced to improve women's income and well-being.

If the recommendations made at different levels in the study are implemented, this will offer an adaptable atmosphere in affording cooperative organisations with the appropriate legal framework, in accessing training, equipment, technologies, supervision in planning and applying for investments opportunities, getting funding or credit from financial institutions, donors, NGOs and private organisations to enhance their endeavours and livelihood activities. The recommendations should also be carried out in compliance with the international and national legislative policies, strategies, and regulatory bills such as the constitution, the CEDAW, the Maputo protocol, the AOL, the CDF, and the PNG, among others amended by the government of Mali to promote and support women's empowerment in all the socio-economic activities of the country. Lastly, the outcomes of this dissertation could guide stakeholders in the research and academic realm in devising training, and curricula for

grassroots cooperative sustainability and development, in designing manuals in local languages on the creation, administration, and supervision of cooperative organisations in Mali.

7.4 Future Research Needs

The fundamental role played by cooperatives as a social and economic platform in facilitating small-scale farmers' access to agricultural resources, as well as the methods and strategies employed by the group members to govern, organise, and negotiate with traditional leaders and local officials, is deemed to have a noteworthy outcome on their empowerment. It helps members to grow and thrive in the environment offered by their cooperatives. Even though smallholder farmers' cooperatives in Baguineda, Bamako, and Kati revealed some differences in the processes employed and the functional and governance strategies used to oversee the groups, the level of influence employed to achieve collective results were noticed in all the cooperatives. In light of the different methods and approaches adopted by cooperatives to improve their members' access to resources, to resolve common issues afflicting them, the question remains how individual farmers can be empowered without relying on cooperatives and whether rising farmers' organisations can utilise cooperatives as platforms to improve their livelihood activities in the long run.

In this regard, the author observed that women increasingly depend on cooperatives to achieve more successful operations in the agricultural sector. Women's activism in the cooperative allows them to act as economic and social agents. As a result, the study argues that women as agents are a process rather than an end in themselves.

The challenge for women remains to overcome their dependence on cooperatives to realize their purpose. A future study is necessary to shed light on this aspect.

Additional studies are also necessary to test the results of this analysis over a longer timeframe, using a sample representing a broader range of cooperatives in Mali. A future study should focus on smallholder cooperatives in other parts of Mali and other agricultural activities than market gardening, food processing, and marketing.

Likewise, additional assessments are needed on the impact of social, religious, and cultural factors on the structure, creation, and supervision of agricultural cooperatives in Mali. Prospect studies on these matters require more preliminary information about the chosen cooperatives for each survey, using a broader set of variables and other theoretical dimensions.

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