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Development and Effectiveness of Agricultural Cooperatives: Case of Maize Producer Cooperatives (MPCs) in the Republic of Benin

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Abstract: In the Republic of Benin, the last decade has witnessed initiatives that resulted in a boom in agricultural cooperatives. However, many research outcomes indicated agricultural cooperatives' poor performances and lack of sustainability. To understand why this is the case, this research uses a comparative case study approach to analyze maize producer cooperatives' (MPCs) institutional environment and internal governance at different levels in two districts of Benin: Kandi and Djidja. Analysis showed that MPCs' development follows different trajectories influenced by specific contexts and multiple factors. MPCs in the district of Djidja proved to be more effective than those in Kandi. In both cases, institutional factors—such as the government's role, source of establishment initiative, political and administrative context, and support system—have greatly affected the current condition of MPCs. Moreover, the internal governance—mainly the structure of MPCs, the profile of leaders, the network, and the business—and notably joint-selling also contributed to the current situation of MPCs being either not operating, revived, or genuine, therefore implying different levels of effectiveness. The originality of this study lies in its qualitative approach, which provides a rigorous understanding of the MPCs' development and effectiveness based on cooperative practitioners' experiences.

Keywords: maize producer cooperatives (MPCs); institutional environment; organizational structure; network; effectiveness; Republic of Benin



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1. Introduction

Benin is a low-income country where agriculture accounts for 25% of gross domestic product (GDP) and 47% of the country's employment [1]. Over the 926,539 households directly involved in agriculture, 95% are crop producers [2]. Maize is one of the most important crops produced in Benin, covering 31% of harvested areas. Despite the importance of agriculture in the country, it faces numerous challenges, such as land tenure, lack of access to inputs, and reliance on traditional means of production, that impact its productivity. Additionally, the production system is highly fragmented and essentially smallholder-based [1].

Given that agricultural systems in Sub-Saharan Africa (SSA) are typically fragmented into a myriad of small or micro-farms over vast and remote rural areas, the role of agricultural cooperatives (ACs) has become increasingly important [3]. The cooperative model provides a framework that offers scale to farmers, which brings associated advantages that would not be achieved if acting individually [4,5]. Still, their implementation over time was subject to many challenges. From the state interferences [6] to their independence

nowadays, AC's legal and institutional environment in Benin progressed and gradually promoted autonomy [7].

Thus, to improve the legal environment and economic development, the Uniform Act related to Cooperative Societies (UA-COOP (The 9th Uniform Act of The Organization for the Harmonization of Business Law in Africa (OHADA), entitled the Uniform Act Relating to Cooperative Enterprises (UA-COOP), is applicable to all economic sectors. Although negotiations on the Act began in March of 2001, it entered into force in the 17 OHADA Contracting States on 15 May, 2011 (article 397). Its objective is to standardize law relating to cooperative enterprises in the OHADA area with a view to improving legal clarity and economic development [8].) was adopted in Benin [8]. As a result, ACs are found in different sectors of production [9]. For instance, up to 2019, there were more than 2439 ACs officially registered in Benin, of which a significant number were grain producer cooperatives [10]. However, empirical research on maize producer cooperatives (MPCs) using household-level data showed their non-significant impact on farm performances and members' access to services [11].

While there is a growing body of literature on ACs in Africa and particularly in Benin, research has primarily focused on quantitative analysis of farm household data and cooperatives' output figures [12–16], with less emphasis on the collective performance, mainly referred to as effectiveness of AC. To our knowledge, very few examples of research have accessed AC effectiveness in Benin. Therefore, this study aims to analyze the current conditions of MPCs in Benin by using a comparative case study approach to investigate the institutional environment and internal governance, particularly the organizational structure, governance, and network system, and how they contribute to MPC effectiveness.

This study contributes to the broader literature on ACs in sub-Saharan Africa, particularly in Benin, by providing a different insight, based on a qualitative approach, into the specific challenges and opportunities ACs in Benin face. Specifically, it brings some evidence-based answers to why ACs have such performances in particular contexts. It also contributes to stakeholders' knowledge and understanding by showing the importance of a stable institutional environment and internal governance for ACs.

The paper is organized into five sections. The next section briefly shows the overview of ACs in Benin and alternatives in ACs' performance assessment. Section 3 outlines the materials and methods of this research, while Section 4 shows the findings of the case studies. Lastly, final considerations and further discussions are presented in Section 5.

2. Background

2.1. Brief Overview of ACs

Collective action in rural SSA often occurs within Farmer or Producer Organizations (POs), which can be formal or informal entities. In this study, a PO is defined as a rural business owned and controlled by producers and engaged in collective marketing activities [17]. These organizations can take various legal forms, such as self-help groups, associations, farmer-owned companies, village groups known as GVs, and cooperatives. Among these, GVs are the most prevalent in Benin. These are pre-cooperatives set to promote participation in the rural community [8]. They were either driven by economic purposes (input supply, farm output collection, and marketing) or technical purposes (vulgarization and members training on cooperatives principles) and were intended to evolve and formally become cooperatives [18].

The UA-COOP defines a cooperative as an autonomous group of individuals who willingly come together to fulfill their aspirations and meet their common economic, social, and cultural needs to form a corporate body whose ownership and management are collective and where power is exercised democratically and according to the cooperative basis (Art 4). In Benin, ACs can be found at different levels (Figure 1). At the village or intra-village level are village-based or primary cooperatives, which are grassroots organizations and are made exclusively of farmer members. At the next echelons are federated cooperatives. First, communal unions cover a critical geographical area and are constituted by primary

cooperatives. Second, departmental unions of Producers cover a regional area and are made up of communal unions. At the top is the national federation of producers, comprising departmental unions. However, the relationship between primary and federated cooperatives, so-called unions, differs greatly depending on the region. Additionally, not all ACs perform well.

Both primary ACs and unions can be deemed as having ceased operating or genuine. According to Zhang and Donaldson [19], cooperatives that have ceased operating are cooperatives that often started as authentic cooperatives but ultimately failed or shut down for various reasons. Genuine ACs are those who possess dedicated and competent leaders who have helped their organization withstand various challenges. In practice, they continue to provide benefits to members and follow the fundamental principles of cooperatives.

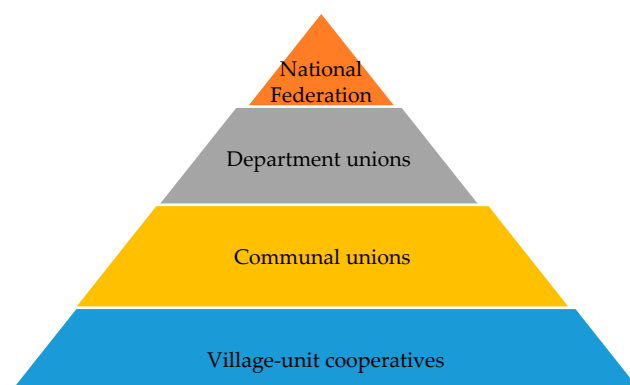


Figure 1. Structure of agricultural cooperatives in Benin. Based on Berthomé and Pesche [20].

2.2. Assessment of ACs' Effectiveness

Cooperatives are, in essence, hybrid institutions characterized by member ownership, member control, and member benefits [21]; the benefits members obtain arguably depend on the performance at both collective and member levels. As such, members will benefit from the way cooperatives function [22], and the cooperative itself benefits from members' patronage to the cooperative [23]. Following these combined features, Benos et al. [24] observed that the performance evaluation in agricultural cooperatives is even more complex, as the agri-food environment is fluctuating and rapidly changing in the market.

Common measures of performance are effectiveness and efficiency [25]. Effectiveness is determined by choosing the right goals (i.e., doing the right things), while efficiency depends on the degree of rational use and engagement of available resources (i.e., doing things in the right way) [26]. The use of financial indicators alone may not provide a complete picture of a business's performance as they may not consider the entity's specific goals and objectives. Assessing organizational performance is important for any organization to make decisions since it provides process improvement and innovation, as well as helping improve understanding of the influence of organizational attributes on strategic attributes [24,27].

Alternative performance criteria should also be taken into account to have a more comprehensive understanding, especially for ACs in Africa, which, despite their similarities with Western cooperatives, have some particularities and specific challenges. They were traditionally creations of the government, staffed and controlled by government employees [6], usually as the result of institutional transplantations [28]. Though they evolved according to cook's LCF, they face life-cycle phenomena related to changes in their internal organization and external market position [29] since their creation and exit are mainly associated with contextual factors [30]. As a result, they have a short life expectancy translating into a lack of sustainability and poor performance.

Finally, as the interest in ACs is on the rise, it is necessary to consider and study their performance from a different perspective, particularly in analyzing their institutional environment and internal governance. By examining these factors, we can gain a more comprehensive understanding of their different trajectories and performances. It is essential to consider the institutional environment and internal governance of ACs as they are unique organizations that operate differently from traditional businesses. Without investigating these factors, it would be difficult to fully appreciate the potential and challenges that cooperatives face.

The following section describes the materials and methods, specifically the study areas and research methodology employed in this research.

3. Materials and Methods

3.1. Study Areas

Investigations were carried out in MPCs located respectively in Kandi and Djidja, two districts of Benin in West Africa.

The district of Kandi, as shown in Figure 2, is located in the center of the department of Alibori and covers an area of 3421 km², subdivided into 39 villages and 9 cities. The topography of the region is highly irregular, with a plateau as the dominant feature. The morphological features of the topography consist of a series of flat-topped ridges, known as *cuestras*, formed from ferruginous sandstone or *cuirasses*. The dominant type of soil in Djidja is tropical ferruginous, and the vegetation is comprised of wooded savannah, shrubby areas, and gallery forests. According to the last national census in 2013, the total population is 179,290 inhabitants [31]. The economy of Kandi is mostly based on agriculture, involving 16,046 households [2]. Maize is the second-largest crop produced in Kandi, behind cotton. MPCs emerged in Kandi in 2012, following many initiatives. Two types of MPCs were identified in Kandi: MPCs that have ceased operating and revived ones.

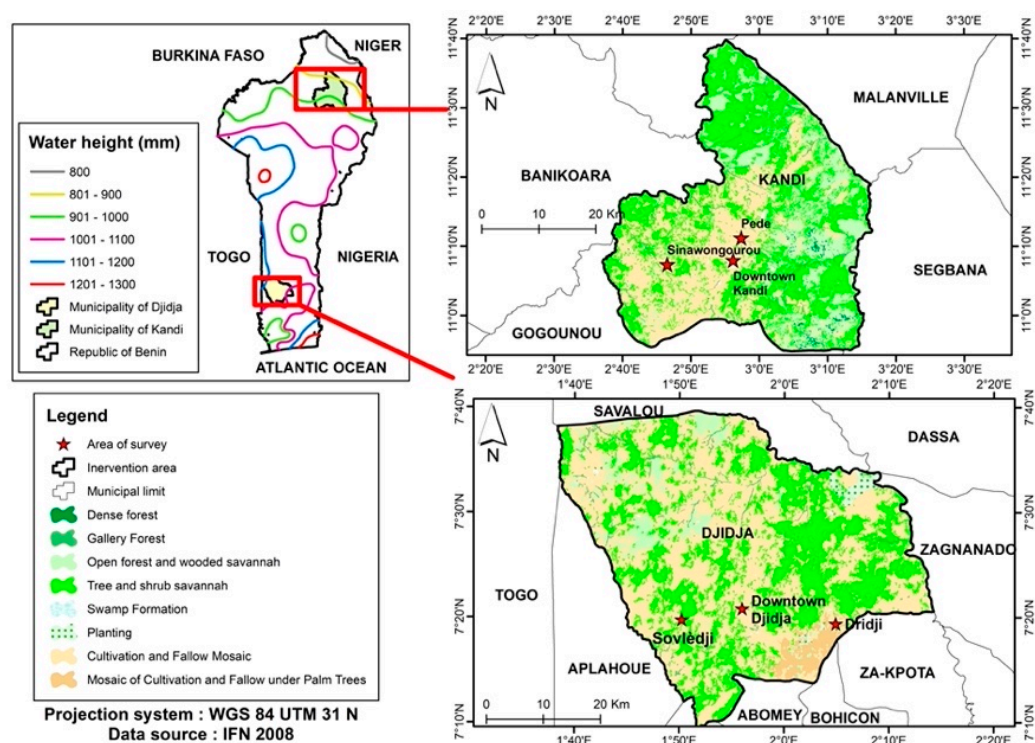


Figure 2. Location of the cases under study in Benin.

The district of Djidja is located northwest of the department of Zou (see Figure 2) in the central part of Benin. It is subdivided into 79 villages grouped into 12 boroughs. Djidja covers an area of 2184 km², on which 982 km² is arable land. The climate in Djidja is

sub-equatorial, with a tendency towards the Sudano-Guinean type in its northern parts. The topography is characterized by plateaus with depressions and granitic outcrops. The types of soil are approximately 70% ferruginous, 26.8% hydromorphic, 3.3% ferralitic, and others. The natural vegetation is comprised of patches of forest [32]. According to the latest census in 2013, the total population in the district is 123,543 [31]. Agriculture is the main economic activity in Djidja and mobilizes 20,106 households [2]. The district of Djidja stands out as the leading cereals producer (14,973 t) in the department of Zou [33]. Based on our survey, MPCs emerged around 2017, and all are genuine.

Based on previous descriptions, Table 1 below summarize the different characteristics of our 2 study areas in 2019.

Table 1. Summary of study areas characteristics.

Characteristics Location	Kandi North	Djidja Center
Total land (Km ²)	3421	2184
Total population	179,290	123,543
Density	52	57
Agricultural households	16,046	20,106
Total maize production (T)	50,639	31,704.75
Yield of maize (T/ha)	1.2	1.5

Source: Authors' computation based on data from [2,31,32].

3.2. Research Methodology

Qualitative methodology was employed in this research using a case study approach. According to Fossey et al. [34], qualitative research addresses questions to develop an understanding of the meaning and experience dimensions of human lives and the social world. We selected the case study method since it is appropriate for addressing research in which the researcher has little or no control over events [35].

Our case studies comprised two districts in Benin, where MPCs were developed in the last years. According to regional bureaus of cooperatives, in 2020, 10 and 23 MPCs were officially recorded in Kandi and Djidja. Because of time and resource limitations, within each district, we chose three MPCs based on the following criteria: (1) being officially registered or having submitted a registration file to the local authority. (2) The location of village-based MPCs, was chosen following extension officer recommendations to satisfy our needs for accessibility and in reflecting the trend in the district. (3) The geographical coverage area—two village unit cooperatives and one cooperative union—were selected as they perform differently in scale and scope of business and are closely linked to maize producers' collective action. (4) The current state—In the absence of statistical data on cooperatives performance, we rely on a briefing with stakeholders, to identify cooperatives that have ceased operating, revived cooperatives, and genuine cooperatives. A total of 6 MPCs (Table 2) were surveyed and divided as two primary or village-unit coops and one federated cooperative per district. The survey was conducted in late 2021.

Table 2. Profile of Surveyed MPCs.

Area of Survey	Kandi			Djidja		
Location of coop	Kandi city	Pede	Sinawongourou	Djidja city	Sovlegnin	Dridji
Tier (level)	Union	Village	Village	Union	Village	Village
Current state	Non-active	Revived	Revived	Active	Active	Active
Date of creation	2016	2016	2016	2017	2017	2017
Number of members	N/A	150	65	12625	410	83
Informants	Treasurer	Chairman 2 Members	Chairman 2 Members	Secretary Manager	Chairman 2 Members	Chairman 2 Members

Primary data were collected through in-depth interviews with selected MPCs stakeholders. Interviewees included MPC leaders and members. Based on their availability, representatives of each MPC were selected purposely. Additionally, two farmer members were interviewed to double-check their leaders' narratives. They were chosen randomly from the list of members provided by MPC's leaders. Details on the exact number of informants are found in Table 2. The interviews were recorded and transcribed for further analysis. The interview aimed to collect data on MPC's institutional environment and internal governance. The institutional environment in this research encompasses the legal framework, the establishment process, the government's role, the support system, and policies that facilitate the emergence of MPCs. In addition, internal governance, namely the organizational structure, the network, and the business of MPCs, were investigated. Secondary data were collected through reports from the agricultural bureau, development Programs, MPC bylaws, and thesis.

Finally, the effectiveness of MPCs is analyzed through the lenses of the factors mentioned above, and their causal relationship with MPC performance is established. This research investigates MPCs based on the views of Chaddad [36] and Lee et al. [37], which analyzed ACs in developed countries through organizational structure, governance, and network.

4. Findings

As previously mentioned, we will be analyzing the current conditions of MPCs from two perspectives: the institutional environment and the internal governance. Further, the relationship between these two factors and their impact on MPC's effectiveness is examined.

This section starts by providing an overview of our cases and then comparing them. Finally, we will delve into how the institutional environment and internal governance affect the performance of MPCs, specifically in terms of their effectiveness.

4.1. Cases Description

- MPCs in Kandi

Analysis of the registration process in Kandi revealed irregularities and haste in the MPCs' establishment under the tutelage of extension officers who played a vital role in the emergence of MPCs. Consistent with leaders' and members' narratives, small unstructured groups of farmers involved in maize production were approached and incentivized to officially register as cooperatives. The chairman of Pede MPC echoed the government promises with the following statement:

“First, the promise of increasing government support, mainly in acquiring inputs; second, the existence of partners willing to support them; and lastly, a guarantee of a market for maize products.”

In addition, the study found that there was a lack of training in cooperative principles and management—and an excessive involvement of extension officers in designing MPC rules and bylaws. Additionally, extension officers were responsible for submitting registration files, which were ultimately not completed because of administrative problems and further relocation.

Investigations show that MPCs in Kandi are made up of three central bodies (see Figure 3): the General Assembly (GA), which is a decision-making body composed of all members; the Board of Directors (BoD), which serves as the management body; and the Control Committee (CC), both made up of elected farmers. Analysis showed a traditional governance structure with the management of MPCs' affairs restrained to only educated board members. Consequently, members' participation and transparency were affected as only educated board members were entrusted with significant decisions and essential resources. Moreover, the scarcity of meeting records was justified by the low level of

participation by members in both village-based MPCs. MPCs' leaders and members interviewed unanimously recognized the following:

“A large majority of members are disheartened by the discontinuation of support programs and the new registration process required by extension officers... This new registration process required them to pay another subscription fee and contribute to forming a new capital, which they deemed unfair and demotivating.”

Due to this, the leaders of the MPC, particularly the union, are unable to provide the exact number of their members, as indicated in Table 3.

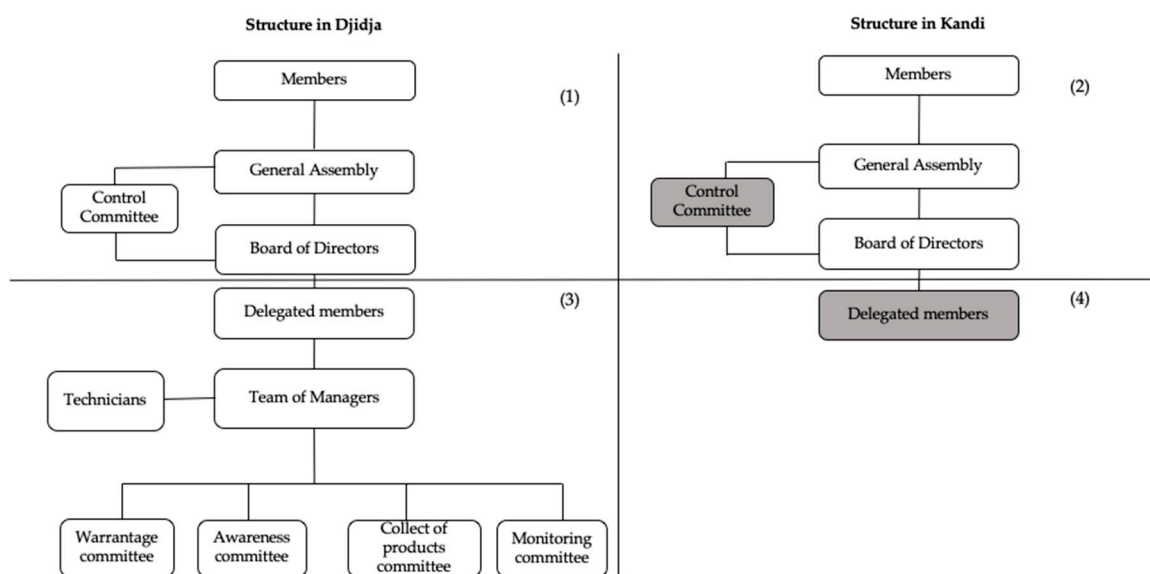


Figure 3. Organizational structure of MPCs in Benin. Notes: (1) (2) Village level (3) (4) District level (Union) ■ Non-active.

Table 3. Bodies composition of MPCs in Kandi.

Core Bodies	Number of Members					
	Union		Pede		Sinawongourou	
	Men	Women	Men	Women	Men	Women
General Assembly	N/A	N/A	135	15	57	8
Board of Directors	N/A	N/A	6	0	3	0
Supervisory board	N/A	N/A	2	0	0	0

Source: Data from MPC officials in Pede and Sinawongourou.

Extension officers incentivizing MPCs establishment and members' disappointment in the absence or at the end of support programs prove that the establishment of MPCs was not based on economic justifications but rather driven by support and incentives. As noted by Saarelainen and Sievers [38], for organizations like cooperatives, the most important actors are members, and their engagement and sense of ownership are critical.

Kandi's union of MPCs inactivity can be explained by the successive failure in joint selling and conflict of leadership, resulting in the absence of business and activities. The conflict between the president and the secretary of the union is explained by the treasurer, who reported the following:

“The secretary, due to his level of education, holds a crucial role in the cooperative's affairs, particularly in support and aid coordination. However, this has caused resentment from the president, who feels that the secretary and his allies are disproportionately benefiting from the cooperative, thereby causing division and hindering the union's progress.”

The failure in joint selling due to leaders' insufficient oversight and enforcement of contracts denotes organizational and management issues that also affected village-based MPCs, where services declined due to a shortfall in expertise and resources, with only storage for maize being provided. According to the chairman of Pede's MPC,

"The group was considering selling maize grain at 12000XOF per 100 kg but switched to a higher offer of 14000XOF per 100 kg. However, the higher offer fell through, and the maize was sold at a lower price of 8000XOF, leading to a loss. This negative outcome made some members question the cooperative's joint selling efforts."

In summary, despite a well-formed governance structure in Kandi following the UA-COOP's requirements, realities showed a weak structure with poor governance by non-trained members who lack participation as board members. Further, they do not keep records and demonstrate an inability to hold general assembly meetings. Additionally, some cases have non-operational bodies, especially control committees, where elected members are all passive and, therefore, not fulfilling their roles. These challenges are characteristic of some GVs' where only secretaries are educated and are the most active [18]. Moreover, they were pointed out in the past and are characteristic of POs and their umbrella, whose diagnosis revealed they are thriving under poor governance and management challenges, marked by leadership conflicts [39].

- MPCs in Djidja

In Djidja, many initiatives such as alphabetization, training on cooperatives, and access to market aimed at promoting maize production through collective activities of POs. As a result, the establishment of MPCs in Djidja found favorable grounds as producers were already familiar with collective action around maize production. Discussions with extension officers showed that, in line with the government's policy to develop specialized production areas, extension officers initiated POs' transition to MPCs. The chairman of Dridji's MPC stated that,

"Extension officers emphasized the importance of a legal framework for recognition, opportunities for securing markets through contracts, and working with more partners to increase maize production and marketing in Djidja."

Analysis of the organizational structure shows that village-based MPCs are composed of three central bodies: GA, the BoD, and the CC. All bodies are active and tend to be inclusive by electing women, as shown by the figures in Table 4. Analysis of MPCs' leader's profiles showed that although they are largely uneducated; they received training on the basic management of cooperatives. Further, a team of managers, made of democratically elected members and hired professionals, is appointed at the union level. The manager of the union declared that,

"Their primary role is making decisions related to maize production and marketing, representing cooperatives, keeping books, and help in looking for partners and donors ... "

Moreover, transparency and members' participation are enhanced by regular meetings and joining members in resource management, as shown by committees (see Figure 3) of Djidja's union. All producers interviewed in village-based MPCs recognized that these committees allow them to stay informed about their cooperative affairs and participate in transparency and accountability.

All informants in Djidja agreed that the effectiveness of the producers' union in Djidja is attributable to the continuous support provided by its partners through training, equipment, and infrastructure. Such a support system has equipped leaders and enhanced union services over the years, especially joint selling business. However, sales figures showed there is a low rate of collective marketing. The chairman of Sovlegnin pointed out the following factors:

“The low ability in contract enforcement, inability to satisfy members’ demand for higher prices, and absence of market.”

Despite a well-organized structure of garden producer cooperatives, the same challenges were found by Houessou et al. [40], who identified a lack of managerial capacity required for the betterment of collective action and reduction in transaction costs.

Table 4. Bodies composition of MPCs in Djidja.

Core Bodies	Union		Number of Members Sovlegnin		Dridji	
	Men	Women	Men	Women	Men	Women
General Assembly	12,625	1768	410	69	83	15
Board of Directors	12	3	5	2	4	3
Supervisory board	3	0	3	0	3	0

Source: Internal data of the communal union of MPC in Djidja.

Additionally, various programs have been implemented to aid producers in producing and marketing cereal crops. One notable program mentioned by informants is the ACMA2 (ACMA2 is the “Communal Approach for the Agricultural Market of Benin—Phase 2” program, implemented by a consortium led by the International Fertilizer Development Center (IFDC). It aims to improve rural populations’ food and nutritional security by enhancing agricultural productivity and increasing income in 28 districts, among which Djidja) program, which trains farmers on access to market and supports them with various infrastructures and equipment, as shown in Table 5. Another initiative related to enhancing maize marketing is the communal platform for maize value chain stakeholders. It provides information on price changes through radio shows. It is made possible through the efforts of regional political authorities in collaboration with the union and key players in the maize value chain.

Table 5. Support of ACMA2 to MPCs in Djidja.

Program	Duration	Type of Support	Details	Total Cost of Support
ACMA2	2018–2021	Infrastructure	1 warehouse of 500 T; 1 drying yard; and 1 toilet	245,298 USD\$
		Equipment	100 palletes; 1 sewing machine; 1 moistener; 2 electronic scales; 1 generator; and others	
		Training	Access to market	

Source: reports from ACMA2 and MPCs’ union in Djidja.

Table 6 shows an increase in the volume of maize sold by Djidja’s union of MPCs. Further, it displays a significant increase in maize volume sold through *warrantage*. However, the amount of maize sold is still low and represents less than 20% of the communal output in 2020.

Table 6. Sale business of Djidja Union.

Years	Communal Output (T)	Sold by Coop (T)	MPC’s Share (%)	Sold through Warrantage (T)	Unit (Bag)	Price/Bag (XOF)
2018	25,053	1600	6.39	448	100 kg	16,000
2019	26,177	2400	9.16	1200	100 kg	15,500
2020	31,704	4800	15.14	1650	100 kg	21,000

Source: Internal data of the communal union of MPC in Djidja.

4.2. Comparative Analysis of Cases

• Institutional Environment

Regarding the institutional environment, the legal framework, the establishment process, and the level of support provided by the government and partners are factors that impact the development of MPCs. The legal framework supporting the development of MPCs in Benin is the UA-COOP. An analysis of the establishment process of MPCs in Benin revealed that MPCs are not new organizations but rather the result of existing GVs being transformed, following political and administrative wills, along with various support and incentives.

Although common institutional factors are identified across the two survey areas, MPC development in Kandi and Djidja occurred under different circumstances. The background of MPCs, the support system, and the political and administrative context vary from one area to another and, as such, have played a significant role in the respective development of MPCs.

It is noteworthy that maize producers' solid background in collective action, through POs thanks to successive programs and partners that supported them over time, has significantly contributed to the positive dynamic in Djidja.

In addition, while the government has initiated MPCs in both cases, the extent of its intervention has varied in terms of empowering producers or providing incentives for establishment. In the first scenario, members are actively engaged. In contrast, in the second scenario, there is a high risk of members becoming passive, mainly when incentives or promised support are discontinued, as demonstrated by the cases in Kandi.

Lastly, the set-up of the poles of agricultural development (PADs) in 2016, driven by the development of specialized areas of production, has strengthened the government and partners' interventions on cotton in the district of Kandi at the expense of other sectors. In the same way, in 2017, it favored MPCs development in Djidja, where cereals are the primary production. PADs represent the new operational framework for agricultural policies, programs, and project implementation. They correspond to a territory organized around priority sectors driving a district's economic development according to accustomed agricultural activities, market opportunities, and endogenous know-how [41].

Table 7 summarizes the differences in institutional environment factors between Kandi and Djidja.

Table 7. Comparison of institutional factors between Kandi and Djidja.

Topics	Sub-Themes Emerging	Kandi	Djidja
Institutional environment	Legal framework	UA-COOP	UA-COOP
	Initiator	Government	Government
	MPC's Background	-Unstructured POs only in villages	-Structured POs at the village and district levels
	Rules and bylaw	-Involvement of extension officers in the design phase	-Independently designed by producers
	Administration	-Unstable	-Stable
	Registration	-Irregular	-Regular
	Support provided	-Initial support (equipment + infrastructure of poor quality)	-Continuous support (training + equipment + infrastructure of quality)

• Internal Governance

The organizational structure of MPCs is quite similar, unlike the implementation of the initial build-up and experimentation phase, leaders' profiles and skills, accountability, transparency, members' participation, network, and services. In both cases, village-based MPCs were given 2 to 3 years of initial build-up and experiment phase before official registration. That phase serves to train members and leaders on ACs principles and management, and it helps to put in place the basic infrastructure and equipment required

to run the cooperatives. Though basic infrastructure and equipment were donated in Kandi, training of leaders was not achieved like in Djidja.

Analysis showed that despite traditional governance observed in both cases, the profile of leaders ruling decision-making bodies, especially their level of education, skills, and ability to work with a team of management or professionals, significantly participated in a poor or good organizational structure. In Kandi, an uneducated and untrained staff, conflict, and reliance on external sources are translated into a lack of venture initiatives and failure to provide essential agricultural services to members, especially the joint-selling business, which reflects their low effectiveness. Oppositely, in Djidja, MPCs are more effective, benefiting from a wide range of support. However, their ability to sell members' products should be increased. Similar results were found with Benin's cotton cooperatives, wherein issues with internal governance and inadequate leadership were highlighted [42]. Overall, these findings are equally observed by Markelova et al. [43], who emphasized that group leaders should be knowledgeable and skilled in collective enterprise.

As revealed by the case studies, federated cooperatives at the district level, known as the unions, are the type of network used by MPCs to extend their geographic area and participate in the market with a more significant production volume. Unions of MPCs exist in the two areas of survey and are distinguished in their effectiveness through the services provided to members and resource mobilization.

Kandi's union of MPCs inactivity can be explained by the successive failure in joint selling and conflict of leadership resulting in the absence of business and activities. The failure in joint selling due to leaders' insufficient oversight and enforcement of contracts denotes organizational and management issues. These challenges were already pointed out in the past and are characteristic of POs and their umbrella, whose diagnosis revealed they are thriving under poor governance and management challenges, marked by leadership conflicts [39].

On the contrary, the producers' union in Djidja's current state is attributable to the continuous support system provided by its partners. The union is supported mainly through training, equipment, and infrastructure related to cooperative management as well as maize production and marketing improvement. Such a support system has equipped leaders and enhanced union joint selling business over the years. However, sales figures indicated low effectiveness in collective marketing due to low ability in contract enforcement, inability to satisfy members' demand for higher prices, and absence of market. Despite a well-organized structure of garden producer cooperatives, the same challenges were found by Houessou et al. [40], who identified a lack of managerial capacity required for the betterment of collective action and reduction in transaction costs.

Table 8 summarizes the differences in internal governance factors between Kandi and Djidja.

Table 8. Comparison of internal governance between Kandi and Djidja.

Topics	Sub-Themes Emerging	Kandi	Djidja
Internal governance	Structure	-Well-defined (GA, BoD, and CC); Reliance on extension officers for technical decisions; Inactive bodies or inactive board members	-Well-defined (GA, BoD, and CC); Rely on a team of managers with professionals at district level; Active bodies and board members
	Leaders' profile and skills	-Largely non-educated; non trained leaders	-Largely non-educated; Trained in AC management
	Accountability and transparency	-No update of official records	-Update of official records
	Member's participation	-Sporadic General Assemblies meetings; Weak participation of members	-Regular meetings; Participation promoted through comities; Active participation of Members
	Network	-Non-active union because of conflict between board members	-Active union

Table 8. Cont.

Topics	Sub-Themes Emerging	Kandi	Djidja
		-Limited shared resources and infrastructure	-Significant shared resources and infrastructure
	Services	-Failure of joint selling	-Low ability in joint selling

4.3. Discussions

Much of the existing literature on related studies have focused only on business while neglecting other aspects of agricultural cooperatives' performances. The results of this study clarified that AC, particularly MPC effectiveness, is determined mainly by the institutional environment and the internal governance they chose.

The assessment of the two cases analyzed in this research displayed MPCs' development following different trajectories influenced by specific contexts and multiple factors. MPCs in the district of Djidja proved to be more effective than those in Kandi. In both cases, institutional factors—such as the government's role, source of establishment initiative, support system, crop diversification policy, and political and administrative context—have greatly affected the current condition of MPCs in both areas. Moreover, the internal governance—mainly the structure of MPCs, the profile of leaders, the network, and the business, and notably the joint-selling service—also contributed to the current situation of MPCs being either not operating, revived, or genuine, therefore implying different performances.

The demise of MPCs in Kandi was caused by a combination of factors—such as the unstable and detrimental institutional environment, the poor internal governance marked by the shortfall in expertise, lack of participation, the failure to reap benefits that could have derived from the union of MPCs, limited services to members, and conflict of leadership. As a result, the case of Kandi depicted MPCs that have ceased operating and revived ones. The same results were recorded in Malawi by Nkhoma [44], who concluded that the main reasons for the demise of agricultural cooperatives in Malawi were a lack of contract enforcement mechanisms, government policies, dependency on external support, provision of subsidized services by the government, limited managerial skills, limited business capacity, governance problems, and poor leadership.

In contrast, genuine MPCs found in Djidja can be explained by their favorable institutional environment and good internal governance. Nevertheless, two factors deserve particular attention: the background of MPCs and the continuous support. Firstly, before choosing cooperative as a legal form, maize producers in Djidja were quite familiar with collective action and were market-orientated despite facing shortfalls. Secondly, continuous support is also a decisive factor in developing MPCs in Djidja, providing infrastructure and training in many ways. However, external support can also create dependency syndrome, which affects the cooperative's performance and sustainability. Further, Wanyama et al. [3] warned that attracting so much attention from governments and donors, cooperatives became aid or subsidy lobbying organizations. Members and leadership developed a highly opportunistic, passive, and instrumental attitude toward their cooperatives.

Our study reiterates the previous findings of Garnevska et al. [45], who found that successful farmers' cooperative development is influenced by a stable legal environment, dedicated initiators and leaders, the availability of financial and technical support from the government, farmers' participation in cooperative activities, and the appropriate external support from the professional NGOs. Similarly, Mubirigi et al. [46] evaluated the potential internal and external factors that affect performance, including cooperative structure, governance structure, managerial skills, training skills, and the impact of government policies. Liang et al. [47] also emphasize the significant influence of intangible factors on cooperative performance. These intangible factors consist of management capabilities to (1) manage intellectual capital, (2) encourage members' active participation, and (3)

execute social roles efficiently. Overall, our research provides further evidence that various institutional and internal governance factors are essential for ACs' effectiveness.

Our study fills an important gap in the literature, as no prior research has focused specifically on the development of MPCs within the current legal framework in Benin. Our findings have practical implications for a range of stakeholders, particularly decision-makers and their partners, who can use our results to inform the development of policies and programs that support the growth and success of MPCs. Additionally, we highlight the limitations of using output figures alone to measure the performance of MPCs, emphasizing the importance of a comprehensive and nuanced approach.

5. Conclusions

The development of MPCs in Benin has been strongly influenced by the political and administrative context and can be deemed at their early stage. Although the UA-COOP aims to promote successful cooperatives, the level of development of MPCs varies between districts and is influenced by different institutional and internal governance factors. Institutional factors identified in this research are the legal framework, initiator role, PO's background, administrative context, and continuous support. Internal governance factors identified in this research are cooperative structure, leaders' profile, management, member participation, network, and services. An appropriate institutional environment and internal governance participate in establishing and developing ACs and therefore determine their effectiveness.

This research is limited as it proved no clear benefits of developing AC under government tutelage, as the situation in Djidja is attributable to different stakeholder efforts. Lastly, we did not explore the informal institutional environment of cooperatives, particularly trust among production participants, the lack (or weakness) of motivation to work together according to cooperative (democratic) principles, and the many risks of opportunistic behavior of partners, etc. [48,49].

Following this research, some recommendations are formulated to support the sustainable development of MPCs in Benin:

1. Members should be the starting point that motivates an AC establishment. MPCs should be established based on producers' will and shared values instead of being reduced to a simple get-together of producers.
2. The government must redefine its roles in establishing and developing cooperative societies. Training on agricultural cooperatives is of the utmost importance, and emphasis should be placed on the organizational design of their cooperation. It is essential that the state also regulates support systems, particularly cooperatives' relations with partners, to avoid the possibility of leading them astray or in the wrong direction.
3. Despite a build-up and experiment phase, knowledgeable or trained leaders are essential to rule cooperative bodies and stimulate members' participation.
4. Services to members, especially joint selling, is a business that deserves capacity building in cooperative management to guarantee that cooperatives fulfill the primary mission for which they were set up.
5. Given some MPCs' small size and the limited resources on which they operate, strengthening collective action through cooperation with other cooperative societies operating at the same level would constitute an opportunity to reach a meaningful scale.
6. Conflicts between leaders or members, affecting the MPC's performance sometimes to the point of turning them inoperative, deserve careful investigation to understand the causes and, above all, to strengthen the mechanisms for managing these conflicts.

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