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**Institutional Factors affecting Value Added by Agricultural
Cooperatives in St. Lucia**

A thesis submitted in partial fulfilment
of the requirements for the degree of
Master of Commerce (Agricultural)

at

Lincoln University

By

Randel Wonderful Esnard

Lincoln University

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**Abstract of a thesis submitted in partial fulfilment of the requirements for the
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St. Lucia intends to privatise its marketing and processing parastatals, and expects agricultural cooperatives to play a much greater role in value-adding. For most of St. Lucia's agricultural cooperatives, this will require significant upgrading of their business activities and access to capital to finance value-adding assets. However, cooperatives that operate with traditional institutional arrangements find it difficult to raise significant capital owing to ill-defined property rights. This study examined the institutional, governance, group and management attributes of agricultural marketing cooperatives in St. Lucia and assessed their impact on value added. The objective was to make recommendations aimed at improving the ability of these cooperatives to create and sustain value-adding activities.

A qualitative, multiple-case study approach was used to gather and analyse data. Four cooperatives with different levels of value-adding were purposefully selected for in-depth interviews. Three of the cooperatives were located in St. Lucia and one in Jamaica. The Jamaican cooperative was added to increase variation in value-adding activity. Theoretical propositions relating institutional, governance, group and management attributes to value-adding performance were tested against patterns observed in the data.

The results indicated that all of the cooperatives studied had very conservative institutional arrangements that constrained their ability to finance and sustain value-adding activities. Analysis of the governance, group and management attributes revealed that value-adding performance was highest in the cooperative that marketed a single product, and low in the cooperatives that were unable to hold managers accountable for poor decisions and which had not benefited from grant funding.

It was recommended that St. Lucia's agricultural marketing cooperatives should hybridise their structure to alleviate free-rider, horizon, portfolio and control problems. This will require amendments to the Cooperative Societies Act allowing cooperatives to issue non-redeemable, tradable delivery rights and equity shares that carry limited or no voting rights if sold to non-patron members. It was also recommended that directors should retain the right to hire and fire managers, that managers should report to elected directors, that elected directors should retain a voting majority on the board, and that all elected directors should be nominated by shareholders. In addition, donor agencies should promote these governance arrangements in the cooperatives that they support.

Keywords: St. Lucia, agricultural marketing cooperatives, institutional arrangements, value-adding, hybrid cooperative models

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Abbreviations

AC	– Agricultural cooperative
AGM	- Annual General Meeting
BoD	- Board of Directors
CARICOM	- Caribbean Community
CSA	- Cooperative Societies Act
EU	- European Union
GDP	- Gross domestic product
ICA	-The International Cooperative Alliance
IDB	- International Development Bank
IOF	- Investor owned firm
ISC	- Investor-share cooperative
JMD	- Jamaican dollar
MAFFCR	- Ministry of Agriculture, Food Production, Fisheries, Cooperatives and Rural Development
MIC	- Member-investor cooperative
MSA	- Market Share Arrangement
NAP	- National Agricultural Policy
NGC	- New generation cooperative
NIE	- New Institutional Economics
PIC	- Proportional investment cooperative
POF	- Producer owned firm
SLMB	- St. Lucia Marketing Board
USD	- United States dollar
WTO	- World Trade Organisation
XCD	- Eastern Caribbean dollar

Chapter 1

Introduction

This chapter presents the background on St. Lucia and a synopsis of its agricultural sector. This is followed by the purpose and significance of the thesis and concludes with an outline of the thesis.

1.1 Background

St. Lucia is a small island developing state (615.5km²) in the Caribbean region with a population of approximately 182000 (World Bank, 2015). The country has an open economy that is heavily reliant on international trade and foreign investment. Owing to its size and natural resource endowments, its economy can be characterised as one which is import dependent and export driven and this makes it very susceptible to external economic shocks. Traditionally, agriculture has been the country's major export earner. In the early 1990s, agricultural exports accounted for 60% of the country's total export revenue, of which 96% was derived from the banana industry and less than 3% from non-traditional crops (mango, hot pepper and avocado) (Ministry of Agriculture, Food Production, Fisheries, Cooperatives and Rural Development [MAFFCR], 2000, p. 3). The banana industry not only dominated agricultural land use but also the economic life of the country. The total agricultural land area comprises 11775 hectares, of which banana production accounted for 45% in 2001 (Singh, Rankine, & Seepersad, 2005).

However, the banana industry on the island has declined significantly since 1995 following the erosion of preferential market access to the European Union (EU), its major export market. In the recent past, this decline has been further compounded by severe weather conditions (2010, 2013¹) and the prevalence of the Black Sigatoka disease². These factors contributed to a substantial decline in the sector's share of the economy from 20% of gross domestic product (GDP) in 1986 to less than 3% in 2010 (International Development Bank [IDB], 2013, p. 12). Also contributing to this declining share has been the growth of the services sector, most

¹ Hurricane Thomas, 2010; Torrential rains brought on by a trough system, 2013.

² Fungal disease affecting the Musa species which significantly reduces yield and is resistant to fungicides.

specifically the tourism industry. Over the past two decades, the country has been emerging as a small island tourist economy with the tourism industry contributing 13.3% to GDP and 18.6% of total employment in 2012 (IDB, 2013, p. 13).

Despite the growth of the tourism industry, the bulk of the country's production resources are still located in the agricultural sector of the economy. Agriculture remains a principal generator of employment and capital in the rural areas with the potential to support and facilitate broad based economic development. Furthermore, the agricultural sector provides the opportunity to develop strong linkages with other economic sectors, principally tourism and manufacturing. For this reason, the sector will continue to be of priority for current and future governments. Successive governments have attempted to diversify the sector away from bananas to include non-traditional crops, livestock and fisheries. To achieve this objective, industry policies were designed to increase the competitiveness of the agricultural sector, diversify production and the export base, and create opportunities for rural communities that were adversely impacted by the demise of the banana industry.

From a Ministerial perspective, a major desired outcome of this strategy is to reduce the country's food import bill. As of 2012, the value of the country's food imports was reported at approximately USD350 million (MAFFCR, 2012, p. 2). In light of this, a number of strategic analyses were carried out by the government to inform policy initiatives aimed at increasing domestic production of non-traditional crops, such as cabbages, tomatoes, watermelons, cantaloupes, pineapples, sweet peppers, sweet potatoes and yams; small ruminants, chicken and pork; and fisheries including fresh water species and shrimps (MAFFCR, 2012, pp. 5-14). These commodities were identified for commercialisation based on quantities demanded by domestic and export markets. With the growth of the tourism industry, domestic consumption of these commodities has grown to accommodate the demands of hotels and restaurants on the island. The country's potential for supplying the cruise industry remains largely untapped and, in addition, the opportunities for adding value through processing, branding and product differentiation are not being exploited to their full potential (Scott, 2011).

The agricultural sector in St. Lucia has become vulnerable to higher levels of risk and uncertainty following the structural changes in the global agricultural industry (Boehlje, 1999) and the advent of new trading agreements brought on by trade liberalisation. In particular,

increased pressures from rapid changes in consumer tastes and preferences, especially in developed countries, have created opportunities for producers to differentiate their product offerings to gain a competitive advantage (Boehlje, 2000). In highly competitive global commodity markets, value-adding has become an important strategy for producers to gain and sustain this advantage over time, whether through processing, production and attributes, branding or quality assurance, *inter alia*. Value-adding has proven to be a key element in meeting the quality assurance demands of specialised consumer markets in developing countries (Cowan, 2002). Trienekens and Zuurbier (2008) foresee that differentiation in quality standards, certification schemes and labelling will allow firms and value chains to develop brands based on quality assurance. However, value-adding activities such as processing, branding and certification are usually capital intensive and require substantial upfront investment (Chaddad & Cook, 2004).

1.2 Overview of agricultural marketing in St. Lucia

Agricultural marketing systems play an integral role in developing economies as a mechanism for exchange and coordination of that exchange (Dorward, Kydd, & Poulton, 2008, p .5). In St. Lucia, the agricultural marketing system can be summarised into two main systems based on the flow of agricultural goods from the farmer to the end consumer. The first system represents the flow of traditional commodities for export to the British EU market, most specifically bananas. Before the demise of the banana industry, this system was well organised owing to close coordination between the government, the St. Lucia Banana Growers Association and the British Geest Company.

The second system represents the flow of non-traditional fruits and vegetables to domestic and export markets. This system is characterised by a large number of small producers with heterogeneous produce and interests, direct and indirect marketing channels, government intervention in marketing and processing, and minimal value-adding (La Gra, Leighton, & Oechsle, 1989). The flow of goods through this system to the final consumer is depicted in Figure 1.1 (The heavy shaded lines represent the bulk flow of goods through the system). Historically, the coordination of production, marketing and processing of commodities in this system has been a major challenge facing the sector. Gluts and production shortfalls, inconsistent production and undifferentiated products within the domestic market have been persistent symptoms of the problem and the reason the government established the St. Lucia

Marketing Board (SLMB) in 1967 (Scott, 2011). The SLMB's mandate was to stimulate, facilitate and improve the production, marketing and processing of produce on the island (St. Lucia Marketing Board Act, 2006, p. 14).

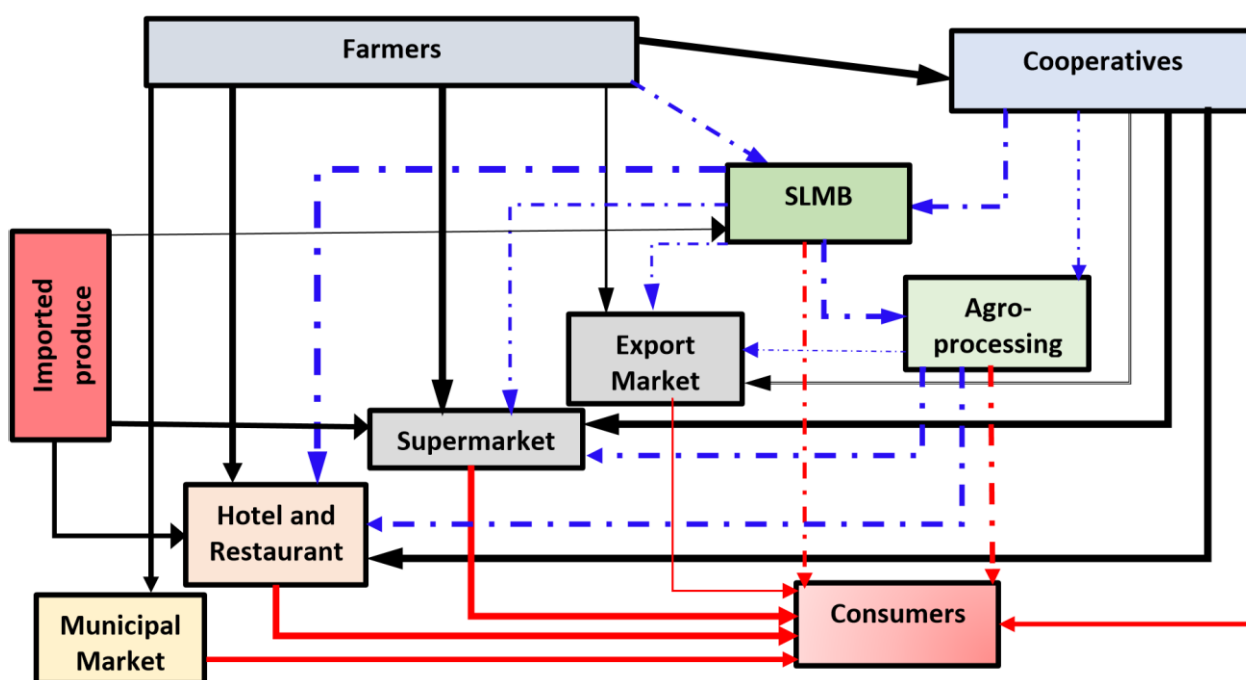


Figure 1.1: Flow of domestic, non-traditional crops through the marketing system

However, after almost five decades, several reports on the SLMB and the current status of agricultural marketing show that this official marketing channel failed to achieve its objectives. More recently, this official channel was expanded to include two agro-processing facilities to stimulate growth within the sector through processing and value-adding. These facilities have not been successful as most of the products transacted through the system do not flow through their channels. One report suggested that these parastatals are viewed as a buyer of last resort by smallholders (MAFFCR, 2006, p. 5). Currently, these parastatal organisations are being considered for privatisation by the government (Scott, 2011; Wilfred, 2013).

As shown in Figure 1.1, most non-traditional crops are transacted through unofficial channels, with producer organisations handling the bulk of these products. Direct links between farmers and hotels, restaurants and supermarkets also exist. However, these buyers are gravitating towards producer organisations and, to some extent, the SLMB. To make up for the seasonality and inconsistency of local supplies, fresh produce is imported, mainly from the

United States of America. At the time of the study, there were eight registered agricultural cooperatives operating within this system, inclusive of both crop and livestock commodities.

St. Lucia intends to privatise its marketing and processing parastatals, and expects its agricultural cooperatives to play a much greater role in value-adding. For most of St. Lucia's cooperatives, this will require significant upgrading of their business activities and access to capital to finance value-adding assets. The government through its National Agricultural Policy (NAP), has committed to providing support for existing cooperatives to broaden their product base and increase their ability to add value along the chain (MAFFCR, 2009). However, very little is done to promote institutional change to hybridise the cooperatives. Studies have shown that cooperatives burdened with traditional institutional arrangements find it difficult to raise equity capital to invest in and sustain value-adding activities such as processing, branding and product differentiation (Beverland, 2007; Sykuta, & Cook, 2007).

1.3 Purpose and justification of the thesis

While the institutional arrangements of agricultural cooperatives have received renewed attention in the academic arena, very little is known about agricultural cooperatives operating in St. Lucia or the extent to which their institutional arrangements influence their ability to add and sustain value-adding activities. A better understanding of these arrangements is essential in view of the key role that agricultural cooperatives are expected to play in diversifying St. Lucia's agricultural sector and enhancing its competitiveness in global markets.

This study is expected to contribute to the literature by documenting the institutional arrangements of agricultural cooperatives in St. Lucia, and generate information about relationships between these institutional arrangements and the ability of St. Lucia's cooperatives to add and sustain value-adding activities. The findings of the study are expected to benefit policy makers, donor agencies that promote the cooperative model, boards of directors and senior management of the agricultural cooperatives, cooperative members and other relevant stakeholders, such as buyers, processors and agricultural financiers.

1.4 Outline of the thesis

The thesis is divided into six parts. Chapter 2 reviews relevant literature to explain the institutional problems that constrain traditional agricultural cooperatives and develops the

theoretical framework for investigation. It concludes with the study hypothesis, research objectives and research questions. Chapter 3 describes the research design and justifies the use of a qualitative multiple-case design. It also explains the sampling, data collection and analysis techniques used in the study. Chapter 4 provides a brief history of each cooperative and describes their business objectives, core business activities, institutional and governance arrangements, management and group factors, and value-adding endeavours. Chapter 5 draws on the case studies described in Chapter 4 to test propositions underpinning the theoretical model developed in Chapter 2 and offers recommendations to policy-makers and managers aimed at improving the performance of agricultural marketing cooperatives in St. Lucia. The thesis concludes with Chapter 6 which draws conclusions from the previous chapter.

Chapter 2

Literature Review

2.1 Introduction

This chapter reviews the relevant literature on the institutional arrangements of agricultural cooperatives and presents an analytical framework to summarise the theoretical propositions as they relate to agricultural cooperatives and their ability to add and sustain value-adding activities.

2.2 Coordination in the agri-food sector

In many developing countries, parastatals and state regulated enterprises play an increasingly important role in linking smallholders to markets (Abbott, 1967). However, the global integration of the agricultural sector and liberalisation in many developing countries have resulted in the dismantling of these parastatals and increasing levels of private sector investments in the production, domestic food retailing and processing of agricultural commodities (Bijman, Muradian, & Cechin, 2011). In these agri-food markets, agricultural products previously traded as wholesome commodities are increasingly being valued for their specific traits and credence attributes, which serve as a basis for their differentiation (Hobbs & Young, 2000).

These structural changes in the agri-food markets offer opportunities for smallholders in developing countries to operate in emerging domestic and international markets. However, this calls for producers to gain better control over inputs, production, marketing and distribution in order to guarantee the quality, consistency and value-adding of their products in a cost-effective way (Trienekens, 2011). Bijman et al. (2011) contend that these changes have resulted in an increased need for varying forms of coordination and integration along the value chain.

With effective linkages, horizontal coordination can range from informal agreements among farmers to coordinate purchases and sales of inputs and outputs to more formal groups that are established to facilitate collective action, such as farmers' associations and ultimately to groups such as cooperatives and investor-owned firms (IOFs) (Lyne & Martin, 2008). These

changes may also lead to vertical coordination in the agri-food markets. Vertical coordination can range from open spot market transactions, where the price forms the basis of coordination to full vertical integration where managerial orders direct the flow of goods along the chain (Hobbs & Young, 2001). Buyer seller contracts, strategic alliances and joint ventures are typical vertical coordination mechanisms in agri-food markets.

There is increasing evidence that collective action and marketing cooperatives can be effective mechanisms to improve smallholders' bargaining power and access to high value markets (Markelova, Meinzen-Dick, Hellin, & Dohrn, 2009; Poulton & Lyne, 2009; Narrod et al., 2009; Rosairo, Lyne, Martin, & Moore, 2012). By pooling their products, smallholders can reduce their unit marketing, processing, compliance and transaction costs (Rosairo et al., 2012). In addition, they can increase their ability to invest in, and manage, value-adding assets by pooling their capital and centralising management. For these reasons, the cooperative model has long been promoted as an appropriate organisational structure to link smallholders to markets in developing countries.

2.3 The cooperative model

The International Cooperative Alliance (ICA) defines a cooperative as an independent association of persons who are united voluntarily to meet their common economic, social and cultural needs and aspirations through a mutually owned and democratically controlled enterprise (International Co-operative Alliance [ICA], 2005). Cooperatives not only provide members with economic and social benefits, but also provide a range of services to members that create opportunities to maximise economic benefits in highly competitive markets. In many developing countries, the cooperative model is viewed as a powerful form of organisation in cases where the marketplace fails to provide the desired goods and services at affordable prices and of acceptable quality (Ortmann & King, 2007).

From a New Institutional Economics (NIE) perspective, cooperatives can be viewed as a form of horizontal integration in which members surrender some control rights to a manager in return for economic benefits and voting rights (Lyne & Collins, 2008). With these arrangements, members gain collective bargaining power and other benefits through size economies that are otherwise unattainable by individual smallholders.

More specifically, agricultural marketing cooperatives can serve to reduce the unit costs associated with transacting, marketing, processing and distributing, while mitigating some of the risks associated with these activities that confront the individual smallholder. In a wider sphere, they play a vital role in meeting the growing demand for safe food within domestic and international markets and, as a result, contribute to poverty alleviation, employment (Philip, 2003) and food and nutrition security (Dorward, Poole, Morrison, Kydd, & Urey, 2003).

2.4 Institutional arrangements of agricultural marketing cooperatives

Although it is argued that horizontal coordination and integration can reduce unit transaction costs for smallholders while linking them to more reliable and high value markets, the institutional arrangements that govern such coordination can introduce new costs and problems that discourage smallholders' participation and investment in these societies (Gadzikwa, Lyne, & Hendriks, 2007; Lyne & Martin, 2008). These problems are particularly dominant in traditional marketing cooperatives that require transaction-specific assets to participate in discerning markets (Lyne & Collins, 2008). In the classical cooperative model, economic benefits are distributed largely on the basis of patronage. Dividends are limited and do not reflect the performance of the organisation. Economic performance is usually reflected in the prices received by farmers (in the case of marketing cooperatives) or the cost of inputs (in input cooperatives) (van Bekkum & Bijman, 2006). For these reasons, many attempts at developing agricultural marketing cooperatives in developing countries have been unsuccessful (Ortmann & King, 2007) owing to their ill-defined ownership and control rights (Cook & Iliopoulos, 2000).

Numerous studies (van Bekkum & Bijman, 2006; Beverland, 2007; Chaddad & Cook, 2004; Cook & Iliopoulos, 2000; Harris, Stefanson, & Fulton, 1996; Lyne & Collins, 2008; Rosairo et al., 2012; Sykuta & Cook, 2001) have shown that agricultural marketing cooperatives governed by the traditional cooperative principles of open membership, democratic member control and member economic participation find it difficult to raise sufficient equity capital to invest in and sustain value-adding activities. These principles underpin the institutional and governance arrangements of cooperatives and are understood to have a direct influence on the overall performance of agricultural cooperatives (Chibanda, Ortman, & Lyne, 2009; Rosairo et al., 2012) and their ability to develop and sustain value-adding activities over time (Beverland,

2007; Salazar & Galve Górriz, 2011). Cooperatives with traditional institutional arrangements find it difficult to raise sufficient equity capital because members have only limited incentives to invest in their cooperatives. Van Bekkum and Bijman (2006) argue that as the global agricultural sector becomes more competitive, cooperative businesses are placed under considerable pressure to adopt business strategies that are focussed on growth, value-adding and internationalisation, all of which require additional equity capital. They found that many cooperatives worldwide have had reason to introduce new and innovative capital structures including external ownership.

La Gra et al., (1989) attributed the under-performance of St. Lucia's agricultural cooperatives to poor management, lack of capital and high external influence. However, developments in NIE and the broad existing knowledge on traditional cooperatives suggest that these factors may well be the symptoms and not the cause of cooperative failure. Cook and Iliopoulos (2000) argue that traditional cooperatives which require significant capital to take advantage of opportunities in high value markets are likely to be constrained by the 'low investment problem'. Institutional deficiencies in traditional cooperatives create free-rider, horizon, influence, portfolio and control problems which discourage member investment (Sykuta & Cook, 2001).

2.4.1 The free-rider problems

'The free-rider problem' is universal and very prevalent in situations where collective action is necessary (Esteban, 2001). In traditional cooperatives, profits generated by the entity are distributed to members largely according to their level of patronage with the cooperative. As a consequence, members have little incentive to invest in the cooperative because the benefits accrue to patrons rather than investors. The 'internal free-rider problem' arises because members do not contribute equity capital that is proportional to their patronage. This problem is compounded in situations where the benefits of collective action also accrue to non-members of the cooperative (Cook & Iliopoulos, 2000); this is referred to as the 'external free rider problem'. The lack of proportionality between investment and patronage can also give rise to the 'hold-up problem'. Poor alignment of patron and investor interests makes it difficult to negotiate and enforce supply contracts. The hold-up problem reduces the incentive for investors to invest in asset-specific investments (Hendrikse & Veerman, 2001).

2.4.2 The horizon problem

Investments in value-adding assets are usually long term projects. Theory suggests that members will be reluctant to invest in such assets if the benefits of these assets accumulate beyond their period of membership. The 'horizon problem' arises in a traditional cooperative because members cannot realise capital gains on their equity shares (Sykuta & Cook, 2001). If they decide to leave the cooperative, their shares are redeemed at par value. This problem is more binding when significant investment is required for tangible and intangible value-adding assets (e.g. branding) that have productive lives exceeding the expected horizon of members (Cook & Iliopoulos, 2000; Salazar & Galve Górriz, 2011). The horizon problem forms the basis for criticism about cooperative business forms being allocatively inefficient. It shifts members' preferences away from retaining earnings in the cooperative that can be used to finance long term assets towards more current benefits such as higher prices for outputs and lower costs of inputs (Nilsson, 2001).

2.4.3 The influence problem

The principle of democratic control within a cooperative dictates that each member, regardless of their level of investment or patronage, is entitled to one voting right. This creates an 'influence problem' as control over the cooperative's investment decisions resides with majority voters and not majority investors. Sykuta and Cook (2001) argue that these impacts are greater in cooperatives where member interests are heterogeneous - as in marketing cooperatives dealing with multiple products. However, Rosairo et al. (2012), found that the relationship between cooperative performance and marketing of multiple products was not strongly correlated where cooperative ownership was clearly separated from control. That is, where investment decisions are not taken jointly by members, but rather by managers and directors who are accountable to members.

2.4.4 The portfolio and control problem

The absence of tradable equity shares and liquid markets in which to trade these shares also discourages member investment in the cooperative. In the absence of such markets, members cannot adjust their own investment portfolios to reflect their personal risk profiles (Cook & Iliopoulos, 2000; Sykuta & Cook, 2001). In the literature, this is referred to as the 'portfolio problem'. In addition, the literature also highlights a 'control problem'. This problem has its genesis in principal-agent theory and refers to the difficult task of monitoring the performance

of management and aligning their incentives with those of the owners. Although this problem is not unique to traditional cooperatives, it is intensified by the lack of a market-driven share price to signal changes in the value of the cooperative and members' inability to sanction managers by disinvesting (Sykuta & Cook, 2001). These institutional problems also limit the cooperative's ability to obtain debt capital since lenders require acceptable leverage (debt to equity) ratios in order to reduce their exposure to loan default. Hendrikse and Veerman (2001) further reasoned that the influence problem accelerates the cost of equity capital faster in a traditional cooperative relative to an investor-owned firm as the level of investment in highly specific assets increases.

New cooperative models have emerged to alleviate these institutional problems. Chaddad and Cook (2004) used ownership and control rights to classify producer organisations ranging from traditional cooperatives to IOFs, with a number of hybrid variations between these extremes. These hybrid models and their main institutional characteristics are summarised in Table 2.1.

Table 2.1: Summary of hybrid cooperatives and their institutional characteristics

Cooperative Model	Institutional Characteristics
<i>Restricted to member patrons</i>	
Proportional Investment Cooperatives (PIC)	Redeemable equity shares; benefits accrue to patrons; investment proportional to patronage; controlled by patron majority
Member-investor Cooperatives (MIC)	Redeemable, tradable equity shares; benefits accrue to investors; benefits proportional to shareholding, controlled by patron majority
New Generation Cooperatives (NGC)	Non-redeemable, tradable delivery rights; benefits proportional to patronage and investment; controlled by patron majority
<i>Not restricted to member-patrons</i>	
Subsidiary Companies (Irish Model)	Cooperative owns non-redeemable, tradable equity shares in a subsidiary company that owns value-adding assets
Investor-share Cooperatives (ISC)	Non-redeemable, tradable equity shares; benefits proportional to investment; controlled by majority investors

Source: (Chaddad & Cook, 2004, pp. 352-358).

In theory, the investment problem shrinks as the cooperative model shifts from traditional to PIC to NGC and ultimately ISC. The MIC, ISC and subsidiaries, however, do not benefit from well aligned incentives in their transactions with patrons (Sykuta & Cook, 2001) because

benefits are not proportional to investment and not all investors are patrons. Thus, patrons will be seeking higher prices on their produce, whereas investors will be seeking higher returns on their investment. The ability of cooperatives to adopt a model that best suits their intended objectives and capital requirements depends largely on legislation governing their institutional arrangements.

A PIC is a deviation from the traditional cooperative model. In these cooperatives, members are required to invest equity capital in proportion their patronage. Cooperatives that adopt these institutional arrangements resolve the internal free-rider problem but are still constrained by the other institutional problems (Lyne & Collins, 2008). The main advantage of PICs is the tight alignment of interests between the members as patrons and investors. This helps to reduce transaction costs in supply contracts.

MICs restrict ownership rights to member patrons (Chaddad & Cook, 2004). Equity shares in MICs are redeemable, non-transferable and appreciable. The profits of the cooperative are distributed to member-investors based on shareholding rather than patronage. Lyne and Collins (2008) posit that MICs alleviate the internal free-rider problem by achieving close proportionality between member investment and member returns by distributing profits as cash dividends and by permitting appreciation of quasi-equity shares.

NGCs are variations from the traditional cooperative structure that relaxes the restriction on residual claim transferability (Chaddad & Cook, 2004) but maintains democratic voting rights (Harris, Stefanson, & Fulton, 1996). The NGC model introduces delivery rights that are proportional to member patronage. These delivery rights are non-redeemable, appreciable and tradable amongst the patron members of the cooperative. In most cases, they are sold to patrons – as in the case of North American NGCs (Harris et al., 1996). In some cases they are distributed freely to members – as in New Zealand's Tatua dairy cooperative. Some authors (Chaddad & Cook, 2004; Harris et al., 1996) contend that the main advantage of the NGC model is that it improves members' incentive to contribute capital to the cooperative, and the cooperative's ability to predict and control the quantity of produce supplied (van Bekkum & Bijman, 2006). Like the PIC, cooperatives that adopt this model also benefit from well aligned interests of members as investors and patrons and therefore benefit from low transaction costs in negotiating and monitoring supply contracts. NGCs' have the added advantage of a

more predictable supply as members cannot redeem their delivery rights in the event of a shortfall. Instead they must either lease or sell their excess delivery rights to other patrons that can supply, or they must purchase product from other suppliers to meet their delivery commitments. This improved predictability of supply makes it easier for the NGC to build contractual relationships with preferred buyers (Harris, Stefanson, & Fulton, 1996).

Subsidiaries are private or public companies established by the cooperative. In most cases, ownership of the subsidiary is split between the cooperative and external investors, with majority equity ownership held by the cooperative (Kraenzle & Volkin, 1979). They are usually established to undertake activities that require significant investment in relation-specific assets. Krenzler and Volkin (1979) contend that cooperatives may also use subsidiaries to facilitate the management of activities that are distinctly different from the activities of the cooperative. Cooperatives that adopt this model tend to be those that are constrained by inadequate capital (Chaddad & Cook, 2004). Subsidiaries are most common in countries where cooperative legislation is conservative and makes no provision for hybrid models. Subsidiaries registered as companies allow the cooperative to seek equity capital from non-patron investors. This model often referred to as the 'Irish Model' (Chaddad & Cook, 2004). The Irish model does not address institutional problems within the parent cooperative. This makes it difficult for the cooperative to match the equity capital invested by its strategic partners in the subsidiary, and control of the subsidiary company and its value-adding assets inevitably transfers to external investors. As a result, the parent cooperative often becomes redundant and is displaced by the subsidiary company (Kraenzle & Volkin, 1979). Producers then have to negotiate supply contracts with investors who are more interested in securing favourable returns to capital than in rewarding farmers with favourable prices.

ISCs are the closest cooperative model to the IOF and acquire equity capital from nonmembers without converting to an IOF. In addition to the equity shares held by patron members in a traditional cooperative, ISCs issue a separate class of equity shares that bundle different ownership rights in terms of control, redeemability and transferability (Chaddad & Cook, 2004). Ownership rights are not restricted to patron members, shares are tradable and benefits are proportional to investment.

2.5 Co-operative legislation in St. Lucia

St. Lucia's Co-operative Societies Act of 2008 defines the process of registration, supervision and management of societies for which members have a common bond of philosophy, socioeconomic objectives and a related purpose (Cooperative Societies Act of St. Lucia 2008, s 1). The Act specifies and makes provision for the institutional and governance arrangements of all registered agricultural cooperatives in St. Lucia.

St. Lucia's Cooperative Societies Act interprets the cooperative principles in a conservative way that prevents significant deviations from the traditional cooperative model. It dictates that voting rights are democratic and makes no provision for cooperatives to adopt proportional voting rights. This differs slightly from the Jamaican Cooperative Societies Act of 1992, which allows agricultural marketing cooperatives to assign voting rights to be determined by reference to the actual or estimated amount of produce marketed (Jamaica Cooperative Societies Act 1992, s 26.6). However, neither of these Acts allows cooperatives to address the influence problem by assigning voting rights in proportion to investment. With regard to the voting procedure, the St. Lucian Act stipulates that members shall vote by a show of hands or through secret ballot if a majority of the members entitled to vote so demands. However, where the number of nominees exceeds the number of directors to be elected, the election of directors should be conducted by secret ballot. Voting by show of hands is likely to exacerbate the influence problem if majority investors are reluctant to reveal preferences for directors that are not popular with the majority of the members.

Membership of cooperatives is restricted to patrons; however, the Act does not require members to invest in proportion to their level of patronage. This introduces an internal freerider problem unless the cooperative insists on such proportionality in its by-laws. Therefore, it is possible for a cooperative in St. Lucia to address the internal free-rider problem by operating as a Proportional Investment Cooperative (PIC) rather than as a traditional cooperative.

Based on the provisions of the Act, shares purchased by members are redeemable and therefore non-tradable which creates a portfolio problem. In addition, shares are also redeemable at par value unless the cooperative adopts by-laws that allow its directors to adjust the share price or to issue bonus shares. In either case, the horizon problem would be

lessened but not fully addressed as capital gains realised on leaving the cooperative would not be market related, and are likely to be understated by directors in order to minimise the cooperative's exposure to share redemption risk. If the cooperative fails to redeem the shares of members that stop patronising the cooperative, proportionality between investment and returns is likely to weaken and aggravate the internal free-rider problem.

St. Lucia's Act does not make any provisions for agricultural cooperatives to introduce nonredeemable, appreciable shares or tradable delivery rights that characterise NGCs and, therefore precludes the options of MICs, ISCs and NGCs. The same is true of the Jamaican Cooperative Societies Act. In some cases, cooperatives have been reorganised as companies (e.g. the Jamaica Producers Group) or have established subsidiary companies in order to successfully compete with other companies.

Lyne and Collins (2008) argue that such constraints ignore trends in developed countries where cooperative legislation has been amended to create incentives for patrons and nonpatron members to invest in hybrid cooperatives. Nganwa, Lyne and Ferrer (2010) found that in cases where these institutional arrangements are too conservative and binding on the ability of the cooperative to raise equity capital, there was a tendency to adopt informal rules to reward investors even though these rules contravened formal legislation.

2.5.1 Proposed changes to the Cooperative Societies Act

During the study, the Cooperative Societies Acts (CSA) of both St. Lucia and Jamaica were under review by the state. Many of the proposed changes are geared towards regulating the financial cooperatives (Credit Unions). The proposed Act (The Cooperative Societies Bill) makes a clear distinction between financial and non-financial cooperatives and financial cooperatives no longer fall within the jurisdiction of the Registrar of Cooperatives. However, it allows for the Registrar to attend Board of Directors (BoD) meetings of the non-financial cooperatives, influence governance and reporting and restrain, suspend or disqualify cooperatives. In the proposed Act, provisions are made for institutional agents to become members in the cooperative; these include merchants and other societies who can utilise the services of the cooperative, whether directly or indirectly through transactions with its members. Institutional agents will be able to buy shares and become registered members in the cooperative and this has the potential to create an avenue for cooperatives to adopt more

hybrid organisational forms such as ISCs. However, these proposals do not adequately address the institutional problems that discourage member investment in the cooperative as all shares remain redeemable, non-tradable and non-appreciable.

2.6 Institutional arrangements, group, management and governance factors and value-adding ability

Value-adding is a term broadly used when discussing the profitability of agriculture (Coltrain, 2000, p. 4). Coltrain (2000, p. 5) defines value-added as “deliberate efforts to economically add value to products by changing their current place, time and form attributes to those more preferable in the marketplace”. However, his definition omits intangible market-oriented approaches such as branding. In the literature, value-adding is widely advocated as a strategy for achieving competitive advantage in an increasingly competitive commercial environment (de Chernatony, Harris, & Dall'Olmo Riley, 2000). Porter (1985, p. 3) defines value in terms of what buyers are ‘willing to pay’. He argues that adding-value, is a business strategy that requires firms to adopt strategies to lower their cost or increase their performance. A key proposition driving this study is that the ability of a cooperative to implement value-adding strategies is influenced by its institutional arrangements.

It is argued that producer owned firms (POFs) hold a unique cost advantage over IOFs in negotiating and enforcing supply contracts (Sykuta & Cook, 2001) because POF’s members are both its patrons and its owners, thus resulting in well aligned incentives. In IOFs, these incentives are not well aligned between shareholders (seeking capital gains on their shares) and suppliers (seeking favourable prices for their produce). Better alignment of incentives means less asymmetric information and more trust in the cooperative, which lowers the cost of addressing adverse selection and moral hazard (Sykuta & Cook, 2001). However, this argument is not strictly true of cooperatives unless investment is proportional to patronage, as in PICs and NGCs. NGCs have the added advantage of meeting quantity and quality requirements with greater certainty as the aggregate number of delivery rights is fixed to match processing capacity (Carlberg, Ward, & Holcomb, 2006). New Institutional Economics (NIE) theory suggests that the choice of organisational form will be a critical determinant of a cooperative’s ability to create and sustain value-adding activities. Hybrids and IOFs should find it easier to attract capital because certain hybrids (like NGCs) benefit from well aligned incentives and greater predictability in product supply.

Rosairo et al. (2012) found that farmer companies in Sri Lanka performed better when their equity shares were tradable among members. Beverland (2007) compared traditional and hybrid cooperatives in New Zealand and found that both traditional cooperatives and NGCs could launch brands, but only the NGCs were able to sustain them. He attributed the success of NGCs over traditional cooperatives to their ability to reward investors with capital gains. This enabled the NGCs to source finance from their members and sustain the brand in the long term. In traditional cooperatives, members confronted the horizon problem and sought short term benefits from higher product prices. This, he argued, undermined brand loyalty as buyers expect certainty in price and delivery. The delivery rights mechanism in NGCs strengthened their ability to sustain brand loyalty by offering buyers greater certainty in quantity and quality of produce. Salazar and Galve Górriz (2011) found that levels of downstream integration were higher amongst agricultural cooperatives in Spain that allowed members to realise capital gains. This empirical evidence suggests that institutional arrangements of cooperatives do impact on their ability to add-value through downstream coordination and integration.

2.6.1 Group factors

Group composition is an important determinant of competing interests within a group (Cyert & March, 1963, pp. 31-32) and of group outcomes (Gruenfeld, Mannix, Williams, & Neale, 1996). It is argued that heterogeneity in dimensions of opportunity cost, political influence (Hackett, 1992), wealth distribution and social identity (Naidu, 2005) affect collective action negatively. In a cooperative setting, heterogeneity that results in the formation of subgroups can - under conditions of democratic voting rights - influence the appointment of directors and managers, and hence the choice of business strategy (Gruenfeld et al. 1996). This influence problem is likely to be more prevalent in cooperatives that do not clearly separate ownership from control.

Heterogeneity increases the likelihood of the formation of sub-groups with different vested interests. Kyriakopoulos, Meulenbergh and Nilsson (2004) contend that influence problems can also encourage potentially large patrons and investors to exit the cooperative in pursuit of more attractive alternatives. Theory suggests that heterogeneous interests (as in multiple product cooperatives) tend to discourage member investment, and hence undermine the ability of a cooperative to sustain value-adding activities. On the contrary, Rosairo et al. (2012)

found that centralised decision making improved farmer company performance by mitigating the adverse effects of heterogeneous group interests.

Österberg and Nilsson (2009) contend that the success of a cooperative depends on the degree of participation of its members. As voluntary organisations, members' participation in the governance of the organisation is a distinctive feature of cooperatives (Barraud-Didier, Henninger, & El Akremi, 2012). Members can influence cooperative governance by attending general meetings and holding positions on the executive board (Pozzobon & Zylbersztajn, 2011). They argue that a higher level of member participation can increase democratic costs in a cooperative as more members participate in the collective decision making process. However, higher levels of member participation can reduce agency costs as more members monitor the management and directors selected to govern the organisation. They found that where heterogeneity exists among members in a cooperative, member participation at general meetings increases until the heterogeneity reaches a certain level where the cooperative lacks a dominant group.

2.6.2 Management factors

It is argued that managers of IOFs have strong incentives to perform their administrative, operational and strategic functions well (Condon, 1987; Caves & Peterson, 1986 & Staatz, 1987, as cited in Cook, 1994, p. 45) because the performance of an IOF can be readily monitored by observing changes in the value of its equity shares, and IOFs can align the interests of managers with those of owners by rewarding them with appreciable equity shares (Royer, 1999). Managers' responses to changes in the business environment are critical to the performance of a firm and may be weaker in cooperatives where these conditions do not hold (Cook, 1994). Strategic decisions relating to value-adding activities such as processing and branding are particularly important. Peterson and Anderson (1996) note that cooperative performance can only be evaluated in the context of strategies adopted by management. Thus, any assessment of a cooperative's ability to add-value must therefore take into account the strategic decisions of the cooperative as set out by management.

The administrative and operational functions of management relate to decisions concerning the establishment of structures and operating processes that the firm needs in order to implement strategic decisions. Ansoff (1969), as cited in Rosario, 2010, p. 15, reports that the

organisational structure of a firm is critical in contributing to its growth and performance. Hobbs and Young (2001) explain that the scope of a firm's activities is influenced by both its management strategies and its managerial competencies. Studies have shown that managers of cooperatives should have a sound knowledge of their responsibilities, finance, business relationships and business decision making (Adrian & Green, 2001; USDA, 1997, pp. 23-24). Directors should play a critical role in making high level policy decisions about strategy (USDA, 1997, pp. 22-23) but Cook (1994) argues that hired managers often assume greater responsibility for strategic choices in cooperatives where the directors are farmers who may be unfamiliar with off-farm business operations. Thus, cooperative success in creating and sustaining value-adding activities may be contingent on the ability of the board to hire, retain and motivate high quality managers who possess the skills required to satisfy the cooperative's management portfolios.

2.6.3 Governance factors

Good governance is characterised by discipline, transparency, accountability, fairness and social responsibility (King, 2002, as cited in Chibanda et al., 2009, p. 297). Good cooperative governance minimises risk and encourages shareholders to finance assets that create value (Amba, 2012). An effective governance system can help ensure a clear division of power among shareholders, directors and management. Cooperative legislation typically holds management accountable to the board, and the board accountable to the shareholders (Rosairo, 2010). The governance arrangements of the cooperative influence who gets to direct and manage the cooperative, to whom the directors and managers are accountable, and the extent to which directors and managers can be held accountable for decisions that impact on the performance of the cooperative. Processes adopted to elect directors, and to hire and fire managers are key components of governance arrangements as they have an impact on accountability.

Transparency through appropriate reporting promotes accountability. Adequate studies have shown that voting by a show of hands to elect directors can aggravate influence problems (Chibanda et al., 2009; Cook, 1995; Rosairo et al., 2012). Rosairo et al. (2012) concluded that all directors should be nominated by shareholders and the right to hire and fire executive managers should remain with the board and not be appropriated by government agencies. They found that influence problems caused by externally nominated directors were the most

important cause of failure amongst the farmer companies that they studied in Sri Lanka. Their findings also revealed bi-directional links between good managers and good governance arrangements; good governance promoted better management, and good managers implemented better governance arrangements. This causal relationship is illustrated by the double-headed arrow (Arrow 4) in Figure 2.1.

2.7 Conceptual model of the internal determinants of the value-adding ability of agricultural cooperatives

The research adopts the conceptual model of the internal determinants of farmer company performance developed by Rosairo et al., (2012). This model is based on the hypothesis that the institutional arrangements of cooperatives that require significant capital for their core business activities will likely be constrained by the low investment problem. The problem may exist in all of the agricultural marketing cooperatives in St. Lucia, but may not be binding in cooperatives that do not require significant investment to conduct their business; for example, cooperatives that facilitate transactions but which do not process, brand or add substantive value to their members' products. Figure 2.1 illustrates the conceptual model of internal factors affecting the ability of agricultural cooperatives to add value to their member's products.

This conceptual model summarises the key theoretical propositions that guide the empirical component (data collection and analysis) of this study. The original model proposed by Rosairo et al. (2012) was modified to focus primarily on the firm's value-adding ability. The adjustment seeks to capture the potential effect (direct and indirect) of the institutional (including governance) arrangements (Arrow 1) and management attributes (Arrow 5) on a cooperative's ability to add value, whether through branding, processing or downstream coordination with other actors in the value chain. This modification is consistent with the approach taken by Beverland (2007), Salazar & Galve Górriz (2011), and the strategic management and competency theory proposed by Hobbs and Young (2001). The other arrows reflect propositions about the interplay between the firm's institutional attributes and the impact on the firm's ability to add value.

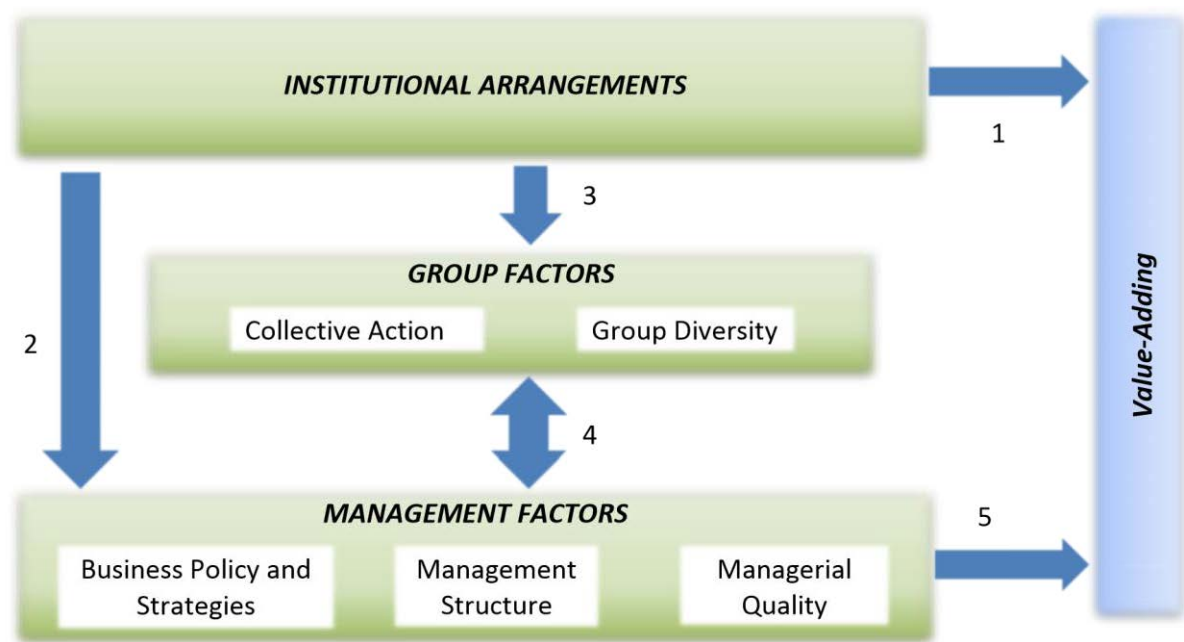


Figure 2.1: Conceptual model of internal factors affecting the ability of agricultural cooperatives to add value. Source: Adapted from Rosairo et al. (2012, p. 508).

Arrow 1 posits that the institutional arrangements can have a direct impact on a cooperative's ability to add value because of the low investment problem. Arrow 2 suggests that the cooperative's institutional and governance arrangements have an indirect effect on its ability to add value. This may arise because these arrangements have a direct impact on management since they determine who gets to direct and manage the firm, whom the directors and managers account to, and the ease and extent to which they can be monitored and held accountable for poor decisions.

Arrow 3 postulates that the cooperative's institutional and governance arrangements may produce outcomes that lead to an influence problem, particularly if voting rights are democratic, directors are not nominated by shareholders and voting is not conducted by secret ballot. Arrow 4 represents the potential impact of the consequent free-rider and influence problems. In theory, these problems are likely to be more severe where members have heterogeneous interests (Sykuta & Cook, 2001). However, Rosairo et al. (2012) argue that the effects of heterogeneity are mitigated when there is clear separation of ownership and control. For example, where key strategic decisions are left to the directors and the executive managers rather than taken jointly by all the members. This arrow also postulates that good management can promote good institutional arrangements because good

managers are more likely to adopt transparent governance arrangements that centralise decision making to accountable directors and senior executives.

2.8 Analytical framework

The literature suggests that a cooperative's ability to create and sustain value-adding activities is fundamentally dependent on its institutional arrangements, although conditioned by group diversity, management factors and a host of external factors such as market conditions and government policy. In addition, theory suggests that the choice of organisational form is a critical determinant of a cooperative's ability to add and sustain value-adding activities (Beverland, 2007). Cooperative hybrid models and IOFs should find it easier to implement and sustain such activities because they are less constrained by the institutional problems, and thus this gives members a better incentive to invest in the cooperative. Furthermore, hybrids such as PICs and NGCs benefit from well aligned incentives and greater predictability in product supply. Figure 2.2 illustrates the overarching propositions that will be tested in this study, *ceteris paribus*. It should not be inferred from Figure 2.2 that some cooperative models are superior to others as cooperatives serve different purposes. Although there have not been any empirical studies to determine the magnitude of these relationships, studies by Rosairo et al. (2012) in Sri Lanka and Chibanda et al. (2009) in South Africa did find evidence to support the propositions embedded in Figure 2.2.

A cooperative established to negotiate favourable terms for its patrons might benefit from the simplicity of a traditional model. If this cooperative broadens its purpose to include warehousing and processing, it may well find itself capital constrained and therefore willing to hybridise its institutional arrangements. The extent and nature of hybridisation will be influenced by its access to alternative sources of capital (e.g. grants and subsidies) and by legislation governing cooperatives. The institutional arrangements will also determine whether or not the cooperative will benefit from well aligned incentives that yield low transactions costs in negotiating and monitoring supply contracts.

ISCs can produce mixed results. While they do offer better incentives to investors, their supply is less predictable than that of an NGC as (a) patron-members can adjust their supply without having to purchase/sell or hire/lease delivery rights, and (b) they lack the proportionality

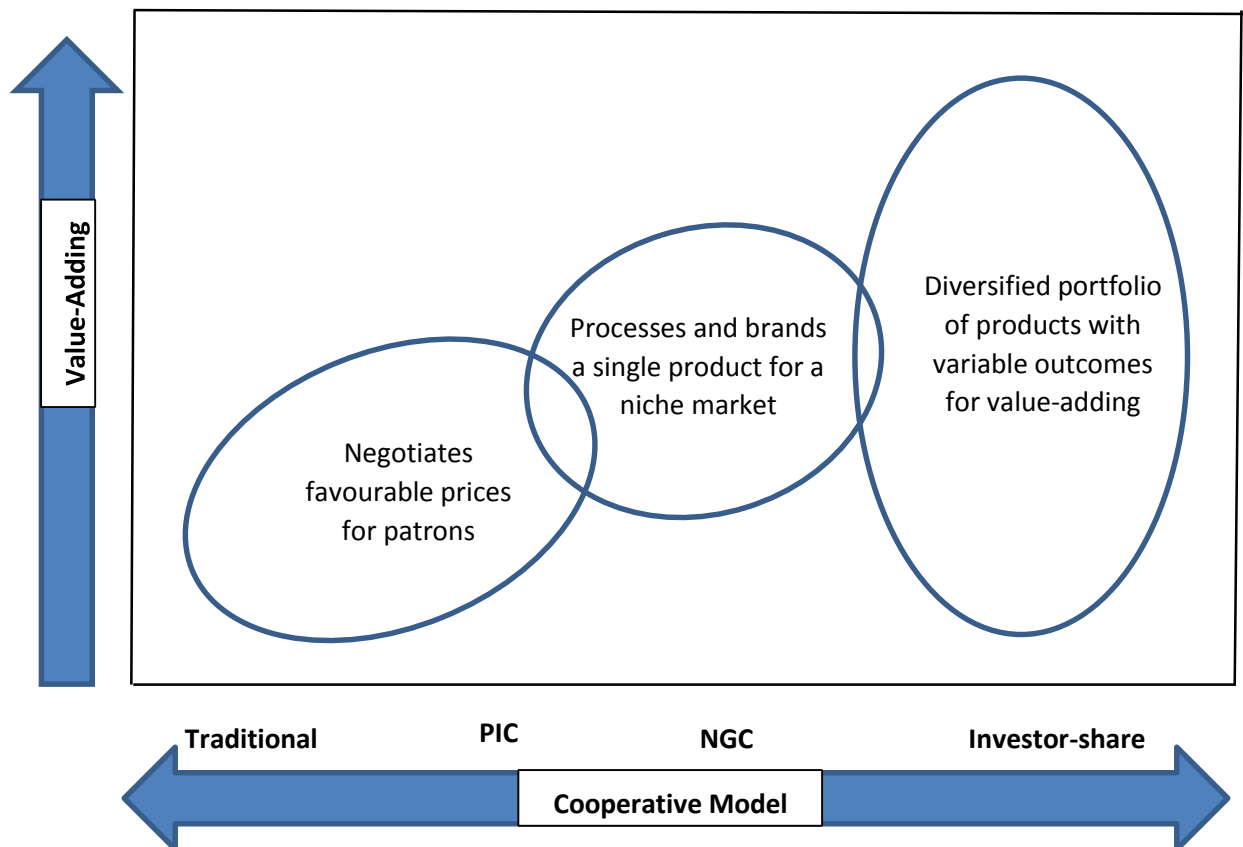


Figure 2.2: Anticipated relationships between cooperative models and value added

between investment and patronage (as in PICs or NGCs) that aligns the interests of members as investors and patrons and therefore they confront relatively high transaction costs in negotiating and enforcing supply contracts. The unpredictable quantity and quality of products makes it difficult to sustain brand-based relationships with buyers.

2.9 Hypothesis, research objectives and research questions

The study hypothesises that cooperatives that adopt less traditional institutional arrangements are more likely to create and sustain value through market orientation strategies. In St. Lucia, there has been no empirical research on agricultural cooperatives. Little is known about these cooperatives, their institutions and activities. The most recent study was conducted by La Gra et al. in 1989 in which the authors documented the profiles of farmers' organisations in St. Lucia and reported on the factors that influenced their underperformance. However, these factors may well have been symptoms of their underperformance rather than the cause. This study examines the institutional, governance, group and management attributes of agricultural cooperatives in St. Lucia and their impact on their observed value-adding performance.

2.9.1 Research objectives

The main objectives of this study are to:

1. Document the institutional, governance, group, management and value-adding attributes of agricultural cooperatives in St. Lucia.
2. Determine whether their institutional, governance, group and management attributes impact on their value-adding activities.
3. Recommend institutional changes aimed at improving the value-adding ability of St. Lucia's agricultural cooperatives.

The two research questions corresponding to these objectives are:

1. What institutional, governance, group, management and value-adding attributes characterise agricultural cooperatives in St. Lucia?
2. How do these attributes influence the ability of the cooperatives to add and sustain value-adding activities?

Chapter 3

Methodology

3.1 Introduction

This chapter describes the research methods applied in this study to collect data and to test propositions about relationships between value-adding and the institutional, governance, group and management attributes of agricultural marketing cooperatives. The conceptual model employed in this study was adapted from the model developed by Rosairo et al. (2012) relating these same attributes to the performance of farmer companies.

3.2 Research strategy: Case studies

The conceptual model described in Section 2.7 was operationalised using a multiple-case study approach (Eisenhardt, 1989). Case studies are ideal for research that seeks to address 'why' and 'how' questions (Yin, 1994, pp. 20-21). They involve a deep qualitative analysis and are typically applied to investigations of phenomena that have a small sample size (Dworkin, 2012). In this instance, case studies of purposefully selected cooperatives provided the data needed to confirm or refute the propositions of the conceptual model summarised in Figure 2.1, and to develop a thorough understanding of ways in which the institutional, governance, group and management attributes of the case studies impacted on their ability to create and sustain value-adding activities.

Information generated by case studies is extrapolated to theory and not to the population of study units owing to the small sample size (Ritchie, Lewis, Nicholls, & Ormston, 2013, pp. 348349). Cooperatives were treated as holistic units for analysis as they had their own stakeholders (shareholders, directors and managers) and sources of data (Yin, 1994, pp. 5051). The reliability and validity of the research design was improved using multiple case studies and multiple sources of evidence as recommended by Yin (1994, pp. 33-37). Multiple case studies provide theoretical replication (Eisenhardt, 1989; Yin, 1994, pp. 48-49).

3.2.1 Selection of cases

Purposive sampling was used to ensure rich data and to generate information that would help to accept or reject the theoretical propositions (Eisenhardt, 1989, p. 537). Four cooperatives

with different levels of value-adding activity were identified as suitable case studies. These cooperatives provided variation in the outcome under investigation while controlling for some important exogenous drivers of value-adding activity. All of the selected cooperatives purchased bulky and perishable fresh produce from their patrons and sold their value-added products into local markets. Three of the four cooperatives were located in St. Lucia. A fourth cooperative located in Jamaica was added to the sample as there was little *a priori* evidence of significant value-adding amongst the agricultural marketing cooperatives in St. Lucia. The cooperatives were also selected for their willingness to participate and to provide quality data.

3.3 Data and data collection method

The case study method requires the researcher to collect different types of data from multiple sources in order to ensure the construct validity of the research through triangulation of the evidence (Eisenhardt, 1989). Tellis (1997) contends that triangulation increases the reliability of the data and the process of data collection. Primary and secondary data were gathered from key informants in each case study over a period of eight weeks between September and November 2015.

3.3.1 Method of data collection

Primary data were gathered by the Researcher in semi-structured interviews conducted with key informants. These informants included; directors, managers, shareholders, staff members, buyers, bankers, Ministry of Agriculture officials and the Registrars of Cooperatives in St. Lucia and Jamaica. Respondents were selected on the basis of their willingness and ability to provide relevant information. Initial discussions with primary respondents (primarily directors and General Managers) helped to identify other key informants for in-depth interviews. The interviews were guided by a list of topics (see Appendix 1) relating to the theoretical constructs summarised in Figure 2.1. A total of 30 interviews were conducted. All of the respondents provided written consent to participate and record the interviews.

Direct observations were conducted through field tours of the various business units of the case studies. Primary data in the form of field notes (including photographs) were also collected by the Researcher. These notes were particularly useful in refining the data during the transcription and coding process. Ritchie et al., (2014, pp. 171-172) advise that field notes

provide Researchers with an opportunity to record what is seen and heard outside the immediate context of the interview.

Secondary data were also collected from each of the sampled cooperatives. These included: annual reports, minutes of annual general meetings, by-laws, business plans, and audited financial statements. Written reports were also collected from the Ministry of Agriculture and the Registrar of cooperatives where available. In some cases, confidential reports were also made available by the cooperatives with their General Manager's approval.

3.4 Data analysis strategy

Data analysis was guided by the qualitative strategies recommended by Yin (2002, pp. 111-115). All digital recordings of interviews were transcribed and combined with related field notes and secondary data for each case study. These transcribed data were grouped on a case by case basis into themes suggested by the theoretical propositions. This approach was particularly useful in selecting relevant data for analysis. Each case was then written up following a standard format describing key features of their establishment, core activities and their institutional, governance, group and management attributes. These descriptions are presented in Chapter 4.

The data were then analysed using Yin's (2003, pp. 111-115) 'pattern matching' and 'explanation-building' techniques. This process tests theoretical propositions by matching them to patterns observed in the data. If the observed patterns are consistent with theory the proposition is accepted. This technique increases the validity of the conclusions drawn if the patterns predicted by theory are supported by the data (Marquart, 1989; Trochim 1989). On the other hand, if the data do not support a proposition, they are examined to explain the lack of consistency or to 'build' an alternative theory. Clearly, it is important that the Researcher remains open to serendipitous findings that are not predicted by theory (Eisenhardt, 1989, p. 544).

3.5 Human ethics consideration

The primary data collected were strictly of a professional nature. Care was taken to avoid questions of a personal or sensitive nature. Prospective informants were advised that participation was voluntary, confidential and anonymous. Respondents provided written

consent to be interviewed and to have their interviews recorded. The consent form is presented in Appendix 2. Informants and cooperatives were coded to protect the identity of respondents. Direct quotes were attributed to these codes and not to the individual.

Chapter 4

Case Descriptions

4.1 Introduction

This chapter presents a brief history of each cooperative and describes their business objectives, core business activities, institutional and governance arrangements, management and group factors, and value-adding endeavours. Data on each case were obtained through in-depth interviews with key informants both within and outside each cooperative studied. The sample consists of four registered cooperatives in the Caribbean, three of which are from St. Lucia and one from Jamaica. The cooperatives studied were selected on the basis of willingness to participate and ability to provide rich information. The abbreviation 'AC' refers to agricultural cooperatives. For the purpose of anonymity, the cooperatives are referred to as AC1, AC2, AC3 and AC4. All respondents are coded in order to protect their identity. In some cases, direct quotations from the interviews are altered to prevent ambiguity.

4.2 Agricultural cooperative 1 (AC1)

4.2.1 Introduction

Semi-structured interviews were conducted with five stakeholders of AC1 during the period 2-5 November 2015. The list of coded respondents include: AC1 respondent 1 (AC1R1), AC1 respondent 2 (AC1R2), St. Lucia respondent 1 (SLR1), St. Lucia respondent 2 (SLR2), Feed producer respondent 1 (FPR1).

4.2.2 Background

AC1 is a poultry cooperative in St. Lucia, and is a merger between two pre-existing poultry associations specialising in eggs and broiler chickens respectively. Prior to the establishment of AC1, these associations operated as separate entities. However, neither of these associations were sustainable and both were phased out. Some stakeholders argue that there has always been a need for both organisations to co-exist (despite the heterogeneity in their products), for their mutual benefit and for the benefit of the poultry industry. In 2012, a few poultry farmers from each of the abandoned organisations met to discuss a unified producers' cooperative. These discussions were facilitated by the Ministry of Agriculture, Livestock

Division. The negotiations were concluded successfully and AC1 was registered as a cooperative on 15 May 2013.

St. Lucia, is a net importer of food, especially meat and meat products. The country relies heavily on local industries such as the poultry industry to supplement imports and to generate employment. Realising its importance, the government facilitates the growth of the industry through a Market Share Arrangement (MSA) that requires the local industry to meet 40% of domestic consumption. SLR2 indicated that this share was increased from 25 to 40% in May 2015 following discussions with key industry stakeholders and AC1. SLR2 informed that with regards to egg production and consumption, St. Lucia has been self-sufficient in egg production for many years. Nevertheless, producers and smallholders within the industry continue to face challenges such as: lack of cooperation among stakeholders, high feed costs, and lack of finance for investment. The cooperative was established to help members, particularly smallholders, reduce their production costs and to capitalise on the opportunities that exist in the supply of fresh poultry products.

4.2.3 Objectives and core business of AC1

According to its by-laws, AC1's overarching objective is to promote the economic and social interests of its members in accordance with the cooperative principles, and to promote, maintain and improve the development of the poultry industry in St. Lucia. More specifically, in the words of AC1R1:

Our main goal is to unify all poultry producers to reduce the individual costs of production, especially the feed, and to ensure that our farmers have a market for their birds and eggs. One of our biggest problems as producers is selling our birds [broilers] out on time. If we do not produce six batches of birds per year, our business is not profitable. The private processors don't care about that as long as they can meet their quota. Therefore, as a cooperative we must provide our members with a steady market to sell their birds. Similarly, with the egg producers, they often compete for the same market to supply wholesome eggs [shell eggs]. Whereas the hotels and restaurants which account for the highest consumption of table eggs are importing liquid eggs. Therefore, our main aim is to ensure that we capitalise on the MSA and maintain self-sufficiency in both wholesome eggs and liquid eggs.

ACR41 pointed out that inefficiencies within the industry had forced some members of the cooperative to cut back on production or to exit the industry altogether. Image 4.1 shows the operation of a shareholder interviewed for this study.



Image 4.1: Broiler house of a shareholder in AC1

At the time of the study, AC1 had been operating for 2.5 years. Its core business was restricted to advocacy and promotional activities. The cooperative was temporarily operating from premises owned by the Ministry of Agriculture's Livestock Division. It did not process or market members' produce, but was actively engaged in negotiating with a local feed producer (FP) and a local hatcher (LH) to arrange procurement contracts on their behalf. Members of AC1 benefited from lower prices for their feed and day-old chicks. AC1R1 also mentioned that the cooperative, along with FP and LH, were in the process of finalising arrangements to establish a joint processing company. The company intends to process the birds produced by members of AC1 on a contractual basis. The cooperative also intends to retail inputs and farm equipment to its members.

Management was also negotiating to represent the local interests of a regional (Caribbean) company that produces heat-repelling roofing materials. AC1R1 was of the opinion that this would allow the cooperative to offer low cost equipment to its members. The cooperative had no intention of making investment proportional to patronage, and some of the registered

members had stopped producing for the cooperative. This suggests an emerging internal-free rider problem when members are called on to finance the cooperative's investments.

4.2.4 Overview of organisational structure, institutional arrangements, management structure, group factors and value-adding

4.2.4.1 Organisational structure and governance

At the time of the study, AC1 had a flat organisational structure comprised of the members, the BoD, one ex-officio director (who assumed the role of the General Manager) and one secretary. The organisational structure of AC1 is illustrated in Figure 4.1.

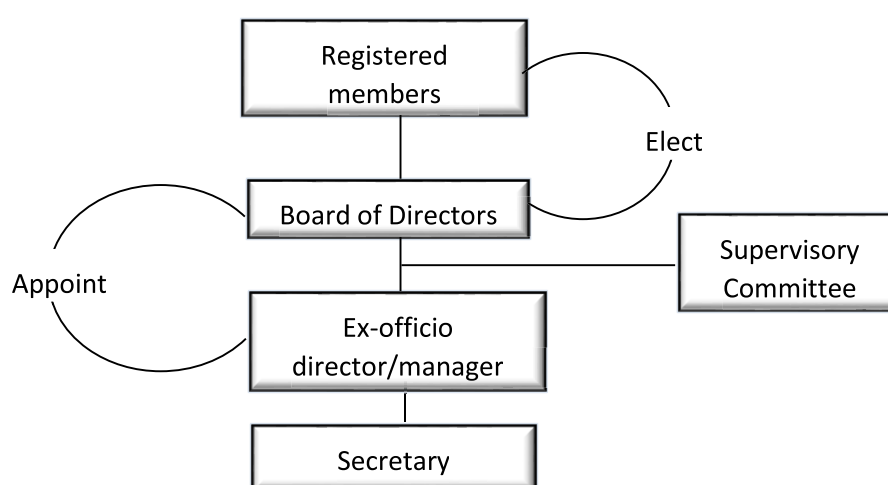


Figure 4.1: Organisational structure of AC1

The ex-officio director is a registered member in the cooperative. Prior to her appointment by the board, she was a public service employee in the Ministry of Agriculture, Livestock Division. She was instrumental in facilitating the revival of the poultry cooperative and her managerial services were offered to the cooperative on a voluntary basis. She reports directly to the directors at board meetings. AC1 was governed by a five-member board elected by and from members at their AGM. The board comprised of three broiler farmers, one egg producer and one farmer who produces both eggs and broilers.

There are no specifications in the by-laws regarding the composition of the board (proportion of broiler farmers to layer farmers). The predominance of broiler farmers on the board reflects their majority membership. The cooperative also has a three-member supervisory committee that is appointed by members at the AGM. The main role of this committee is to ensure that

good governance practices are adhered to, and that directors and managers conduct their duties in accordance with the Cooperative Societies' Act (CSA) and the by-laws of the cooperative.

AGMs are the highest level gathering between AC1's members, directors and management. The cooperative had scheduled its second AGM for May 2016, at which time members will be presented with their first set of audited financial statements, minutes of board meetings for the past year, and the chairman's report. The by-laws require that members be given 10 days' notice of the AGM. Audited financial statements are prepared by an independent auditor nominated by the BoD and approved by the members. Apart from the AGM, the by-laws stipulate that the board must meet with members every three months. However, AC1R2 explained that since the cooperative is in its development stage, it usually meets with its members bi-monthly or as the need arises. These meetings are usually attended by approximately 85% of the members and representatives from FP and LH. The directors and the ex-officio director/manager meet once per month for board meetings.

4.2.4.2 Membership

The membership of AC1 comprises mostly of poultry farmers scattered throughout the country. At the time of the study, AC1 had 67 registered members accounting for 61% of all the commercial poultry farmers in St. Lucia. According to the by-laws, membership is open to any person(s) or owners of micro-businesses connected to the poultry industry who can utilise the cooperative's products and services. For a micro-business to qualify as a member, it must be registered with the Registrar of Companies. Membership, therefore, is not restricted to farmer patrons but rather to natural and eligible legal persons that transact with the cooperative, or whose business is affiliated with the poultry industry. This could further weaken the alignment of interests between members as patrons and owners of the cooperative, thus raising the transaction costs of negotiating and enforcing supply contracts. Patron members of the cooperative will have little incentive to honour contracts with the cooperative if they can find better prices for their produce elsewhere. The cooperative is actively seeking to expand its membership to include non-supplying investors, such as FP and LH. If the cooperative can offer more lucrative incentives to invest, this will not only improve its ability to raise capital but also its pool of expertise and business partnerships.

For an individual to become registered as a member of AC1, he or she is required to pay a nonrefundable fee of 50 Eastern Caribbean Dollars (XCD³) and purchase at least 100 shares with a par value of XCD5 each within 12 months of joining the cooperative. In addition, every member is required to pay a monthly due of XCD30. In the words of AC1R1:

We are a young cooperative, we are not in a position to pay a fulltime manager, that is the reason why the ex-officio director is volunteering her service as the manager. The monthly dues of \$30 contribute to the operation of the office and the salary of the secretary. However, not all members pay the dues. Getting members to pay their dues is a challenge for the cooperative. By law, members who do not pay their dues are supposed to be disqualified. However, we directors must be lenient and understand that some of our members are not able to pay because they are either out of production or producing below capacity because of the lack of access to the market. When we establish the processing facility and members can sell their birds and eggs, I am certain members will not have a problem paying their dues.

This indicates that the internal free-rider problem is aggravated within the cooperative. Like the other cooperatives studied, most of the registered members in the AC1 hold only the minimum amount of shares in the cooperative.

4.2.4.3 Shares and benefit rights

AC1R1 indicated that the cooperative has two classes of shares: permanent shares and 'ordinary' shares, both with a par value of XCD5 each. Permanent shares are non-withdrawable, non-tradable, transferable and redeemable by the cooperative at par value only when a member leaves the cooperative. They are used in the cooperative for expansion and to conduct the business of the cooperative.

He explained that 'ordinary shares' on the other hand, are shares that a member holds in excess of the permanent shares. Members can voluntarily increase their investment in the cooperative by purchasing ordinary shares in excess of the minimum required for membership. Membership shares in AC1 comprise of 50 permanent shares and 50 ordinary shares (100 shares at a par value of XCD5 per share). These share arrangements are not outlined in the by-laws of AC1. However, SLR1 explained that these share arrangements form

³ XCD1= USD0.372 in 2016 (Bank of Saint Lucia, 2016)

part of the amendments to the CSA. She revealed that when the amendments become law, all cooperatives will be required to adopt these arrangements and to amend their by-laws accordingly.

Unlike ordinary shares issued by companies, these 'ordinary shares' do not confer voting rights, are non-appreciable, non-tradable, redeemable at par value and transferable at par value between members with the board's permission. Redeemable shares do not provide the cooperative with a permanent source of capital. They are typically treated as debt capital rather than equity capital on the balance sheet. They also expose the cooperative to redemption risk, thus, obliging the cooperative to retain some of its assets as cash to redeem shares. This further reduces the cooperative's ability to finance value-adding assets. The cooperative's use of the term 'ordinary shares' may well reflect a poor understanding of the property rights typically associated with ordinary shares.

As in the other cooperatives studied, shares in AC1 yield no capital gains. Transactors therefore have little incentive to invest beyond their membership shares owing to the horizon problem. This problem is likely to be more severe in AC1 as its membership is not restricted to farmer patrons. Non-farmer patrons will have no incentive to invest in the cooperative because they cannot realise capital gains on their equity shares and cannot receive benefits through patronage. AC1 is also likely to be impacted by free-rider problems as there is no proportionality between patronage and investment.

4.2.4.4 Voting rights

Voting rights in AC1 are democratic. Every registered member is entitled to one vote regardless of investment or patronage. Members elect directors at AGMs and vote on matters pertaining to the cooperative by show of hands. Members have the right to request voting by secret ballot. In the words of AC1R1:

We have not had any cases so far where voting was done by secret ballot. I personally prefer voting be done by show of hands because I believe there is greater participation. If it is done by secret ballot, disgruntled members may not vote and no one will know who is not in favour of the motion put forward.

Influence problems arising from democratic voting rights and voting by show of hands were likely to be compounded by weak separation of ownership and control as management

decisions were often made jointly by members and managers at their quarterly meetings. Moreover, AC1 deals with two products. Broiler farmers outnumber layer farmers and are able to influence investment decisions in their own favour by virtue of their majority representation within the BoD and at the quarterly meetings. This would tend to further discourage investment from layer farmers and transactors whose business is affiliated with layer production.

4.2.4.5 Management factors, business strategy and value-adding

At the time of the study, AC1 did not have a fulltime paid manager. Managerial duties were undertaken voluntarily by an ex-officio director. This compromised the board's ability to fire the manager and to hold management accountable for poor decisions. SLR1 indicated that the BoD was hoping to hire a fulltime manager within the next 6-12 months. Management decisions were taken jointly with the members at quarterly meetings. Strategic decisions were also made in consultation with the members. AC1's 2013-2016 business plan was prepared by a consultant for the purpose of registration. However, the directors were reviewing the business plan at the time of the study.

With regards to AC1's plans to invest in value-adding activities, AC1R2 (layer farmer) stated:

The main reason why the cooperative was formed was to process the birds our members produce and to convert the eggs our members produce into liquid eggs... the manager that the cooperative will hire has to understand what we as the cooperative want to do and be willing to execute.

This indicates that both layer farmers and broiler farmers expected the cooperative to honour its mission statement, which is to encourage the production and processing of poultry products of international standards. AC1R1, AC1R2, SLR2 and FPR1 cited lack of finance, and lack of experience and expertise in management as the most critical factors constraining the cooperative's ability to add value to members' products. For these reasons, the cooperative was in the process of setting up a joint processing plant with FP and LH. AC1R1 explained that, in the first instance, shares in the joint venture will be split three ways between FP, LH and AC1 with the parties holding 70%, 10% and 20% of the shares respectively. The cooperative will have the option to purchase another 10% from FP within the first 2-3 years. At the time of the study, the cooperative was in discussion with its members, the Ministry of Agriculture, a financial institution and the other investors to determine how best they could finance their

share in the joint venture. Management indicated that they were also exploring the possibility of grant funding.

FPR1 reported that there is a unique opportunity for the cooperative to add value to its members' produce by differentiating their chicken from imported chicken. In his words:

If there is better coordination in the industry, everyone will benefit, the hatchers will be able to sell their chicks, we will be able to sell our feed, the farmers will be able to sell their birds, and the industry will be able to satisfy the MSA. However, the biggest problem is the lack of coordination in the market. We have to find a way to compete with the imported chicken. We produce chemical-free feed here and that is one way we can differentiate the local chicken and add value to the local chicken.

This suggests that there is an opportunity for the cooperative to add value at the farm level by producing organic products and communicating these credence attribute through labelling and branding. Previous studies have shown that one way of adding-value in cooperatives that are constrained by the investment problem is to shift the value-adding burden to the farm level. At the time of the study, AC1 was actively involved in promoting and communicating these benefits to the public. Although this can be seen as prudent management, it is symptomatic of scarce capital within the organisation.

The poultry industry in St. Lucia is very competitive. For the cooperative to achieve its stated objectives, it has to compete with both local processors, and importers who import most of the poultry products consumed in the country. The MSA creates an opportunity for the cooperative to achieve its desired objectives. At the time of the study, the cooperative had not finalised its business plan but was actively engaged in dialogue with its members, strategic partners and other stakeholders to develop feasible ways of achieving their objectives. A summary of AC1's background, organisation, institutional arrangements and value-adding attributes is presented in Appendix Table 3a.

4.3 Agricultural cooperative 2 (AC2)

4.3.1 Introduction

Semi-structured interviews were conducted with seven stakeholders of AC2 during the period 12-18 October 2015. The list of coded respondents include: AC2 respondent 1 (AC2R1), AC2 respondent 2 (AC2R2), AC2 respondent 3 (AC2R3), Financial Cooperative respondent 1 (FCR1),

Financial Cooperative respondent 2 (FCR2), St. Lucia respondent 1 (SLR1), St. Lucia respondent 3 (SLR3).

4.3.2 Background

AC2 was established as part of a vegetable project implemented by the Ministry of Agriculture and the British Development Division in 1972. The project was initiated with 11 farmers in the southern region of the island with an overarching objective to increase food production in St. Lucia. Participating farmers were given access to land and loans to finance machinery, irrigation equipment and farm inputs. To improve sustainability of the project, the farmers were organised as an association.

In the initial stages, a project manager was assigned by the Ministry of Agriculture to provide direction, assistance and supervision. In addition to the manager, the association was governed by a nine-member executive committee elected annually by members. By 1988, membership of the association had increased to 36, including farmers participating in the project and other farmers scattered throughout the southern district who used its services. During that time, farmers joining the association were required to pay an entrance fee of XCD25, a monthly fee of XCD5, and subscribe to a minimum of 10 shares each with a par value of XCD5. Participants of the project farming on land provided by the Ministry of Agriculture were required to pay an annual rent of XCD40 per acre.

The main services provided by the association included: Inputs provision, equipment hire, irrigation for farmers situated on the project site, and marketing. The association also provided credit to members to finance farm inputs, and technical assistance through extension officers assigned by the Ministry of Agriculture. Over the years, the association faced a number of challenges such as poor management, natural disasters and lack of member participation. As a result, prior to 2008, it went into a period of near dormancy and relied heavily on external aid and government support.

In 2008, with technical assistance from the Ministry of Agriculture, a group of entrepreneurial members reorganised the association and registered it as a cooperative (AC2). According to AC2R1, the reorganisation was driven by a need to raise equity capital, to pay off existing debts and to recommence operations. The establishment of AC2 was also facilitated by a financial

cooperative (FC⁴). AC2 operates from its main office located in the south of the island, approximately 10 kilometres away from the headquarters of the FC. Image 4.2 shows AC2's the head office and purchasing depot. Building was financed as part of the vegetable project.

4.3.3 Objectives and core business of AC2

At the time of this study, AC2 had been operating for eight years. Its main objective is to promote the economic and social interest of its members by facilitating production and marketing of their produce. Despite being a new entity, its core activities are deeply rooted in its history as a project aimed at increasing vegetable production and marketing in the southern parts of the island. The cooperative offered two main services to its members: irrigation and marketing.



Image 4.2: Head office and purchasing depot of AC2

The irrigation system was financed with donor funds as part of the fruit and vegetable project. It was offered to farmers who cultivate land that was originally designated for the project. These farmers include both registered and non-registered members of the cooperative.

⁴ A Credit Union based in the south of the island. Most of AC2's members are also members in FC.

Farmers using the irrigation service are required to pay a monthly fee per acre. The cost of operations and maintenance of the irrigation system is covered by the cooperative. One shareholder (AC2R2) lamented:

The irrigation system is poorly managed by the cooperative. There is no monitoring system to ensure that all users pay for the service. In addition, it is unfair that members of the cooperative are required to pay the same price for the service as non-members. Furthermore, there are non-members who are delinquent and don't pay the fees. This is evidence of both internal and external free-rider problems within the cooperative since not all patrons of the cooperative are registered members.

Marketing and distribution of produce is another core activity of AC2. The cooperative markets the produce of both members and non-members. However, registered members receive higher prices for produce sold to the cooperative relative to non-registered members. Management deducts a cess of 18% and 25% on the produce of registered and non-registered members respectively. These fees are used to cover the operational and administrative expenses of the cooperative. This mechanism mitigates the external free-rider problem and creates an incentive for non-registered members to become fully registered members. Management contends that for farmers to actively patronise and participate in the affairs of the cooperative, there needs to be a greater sense of ownership through investment amongst its members.

FC continues to play a key role in managing the finances of AC2. It augments the marketing scheme by absorbing delayed payments from the cooperative's buyers, and allows the cooperative to pay its suppliers within a seven-day period. All cheques received from buyers are deposited in the cooperative's account at the FC. Upon delivery, farmers are provided with vouchers that are redeemed by the FC. The flow of products and payments is illustrated in Figure 4.2.

According to FCR1, the relationship with AC2 is mutually beneficial to all parties involved. Members of AC2 have a consistent and guaranteed flow of income when they sell through the cooperative, they are able to repay their loans on time (which improves their ability to access finance from the FC), it improves the cooperative's cash flows and it extends the FC's client base.

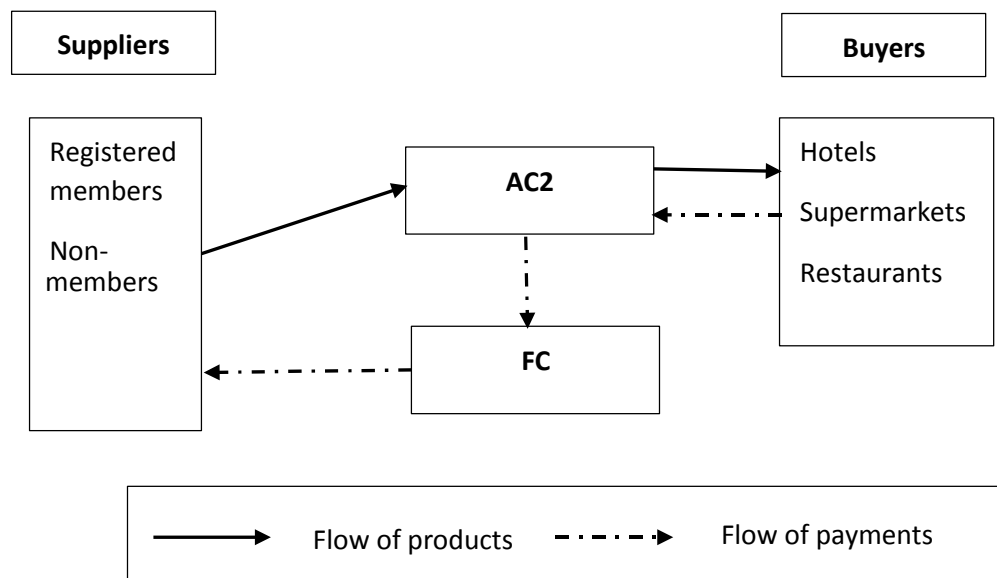


Figure 4.2: Flow of products and payments through AC2's marketing scheme

4.3.4 Overview of organisational structure, institutional arrangements, management structure, group factors and value-adding

4.3.4.1 Organisational structure and governance

AC2 has a unique organisational structure relative to the other cooperatives studied. The equity capital of the organisation is derived from shares purchased by registered members and funds that were transferred to the cooperative when it took over the assets of the association. At present, not all members of the association are registered members of the cooperative, although they still benefit from some of the services offered by the cooperative. AC2 is governed by a five-member BoD and an honorary advisor from the FC. AC2 signed a Memorandum of Understanding (MOU) that allows the FC to have a fully empowered representative present at all of the cooperative's board meetings. The organisational structure of AC2 is presented in Figure 4.3.

At the time of the study, the management and administrative functions were supervised by a temporary manager assigned and paid for by FC. The temporary manager oversees the marketing operations and prepares financial statements for audit purposes. From the FC's point of view, the appointment of the temporary manager was a move to safeguard their interest and investment in the AC2. She reports directly to FC and the BoD of AC2 at their request. In the words of FCR2:

I was a staff member of [FC] and was assigned to [AC2] by my manager. I was sent here since they needed someone to assist the cooperative with their systems of internal control and their books and also to safeguard the interest of the [FC] ... I report directly to my manager and in some cases the president of the board but I am not obligated to since he is not my boss.

This suggests that the BoD has limited control over the hiring and firing of the manager. This has the potential to aggravate the control problem making it difficult to align management's interest with that of the cooperative.

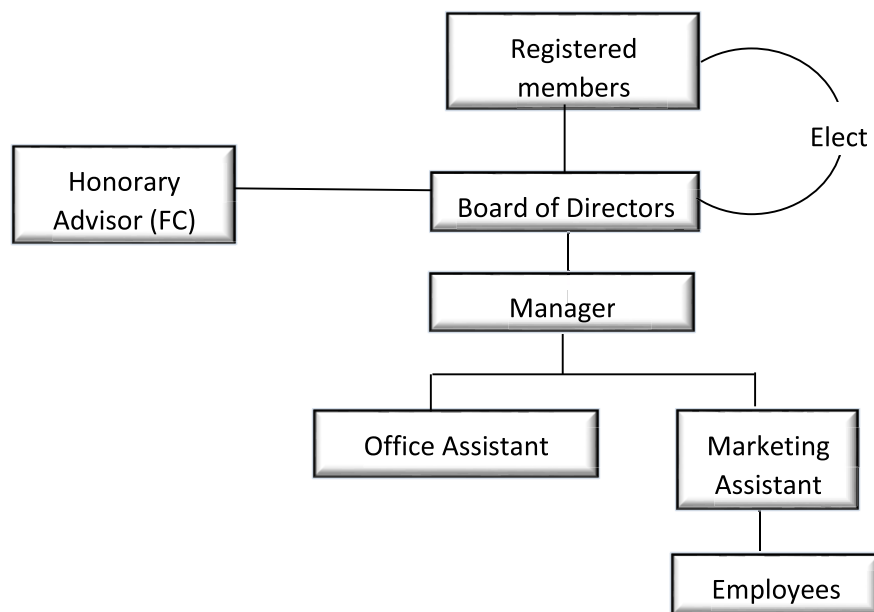


Figure 4.3: Organisational structure of AC2

AC2's by-laws state that directors can serve a maximum of two consecutive terms. However, this restriction is ignored as members lack managerial skills and do not actively participate in the cooperative. In the words of AC2R1:

Member participation at AGMs is low and AGMs are usually attended only by members who regularly sell their produce to the cooperative or hold shares in excess of the minimum... Prior to the [FC] becoming an advisor on the board, board meetings were also poorly attended. Now that he is there and attends all our board meetings, there is more transparency and a greater sense of accountability and responsibility on the part of the directors. He also ensures that all the financial statements are prepared on time for the AGM and presented to the board and members.

At the AGM, members vote to elect directors and on matters pertaining to the cooperative. SLR1 indicated that owing to the small size of the membership, directors have a strong influence on who is nominated for election to the BoD. In her opinion, this made it difficult to contest policy choices. This could also aggravate the influence problem which is created by democratic voting rights. Members who attend the AGM are presented with hard copies of the annual report, treasurer's report and chairman's report. Shareholders of AC2 are given 30 days' notice prior to the AGM.

4.3.4.2 Membership

At the time of study, AC2 had 34 fully registered members and over 100 non-registered patrons, suggesting that a majority of the patrons have no incentive to become shareholders in the cooperative. Membership in AC2 is restricted to farmers situated within the southern district of the country who are actively involved in fruit and vegetable production. Although the cooperative is categorised as a multi-product cooperative, most of its members specialise in cucurbit production, melons in particular.

For an individual to become a registered member, he or she is required to pay an affiliation fee of XCD50, which covers an entrance and administration fees. In addition, the applicant is required to subscribe to a minimum of 200 shares, each with a par value of XCD5, to be paid in full within the first six months of registration. No member is allowed to hold more than 20% of the total shares issued by the cooperative. In reality most of the registered members purchase only the minimum number of shares required for registration and many make no investment at all. All registered members are viewed as patrons and are entitled to the same benefits regardless of investment in the cooperative. This disproportionality in patronage and investment creates a free-rider problem within the cooperative.

4.3.4.3 Shares and benefit rights

AC2 has only one class of shares. All shares in the cooperative are redeemable at their par value of XCD5 per share, non-tradable, non-appreciable and transferable between members of the cooperative at par value. These shares do not provide the cooperative with a permanent source of capital and exposes the cooperative to redemption risk if members decide to leave the cooperative. The by-laws of AC2 make provision for the establishment of a Share Transfer Fund (STF) to facilitate the transfer of shares amongst members, but the cooperative had

never implemented the STF or facilitated share transactions between members. This is not surprising as there is no incentive for registered members to purchase additional shares and very little incentive for non-registered members to purchase any shares. Apart from the free-rider problems caused by a lack of proportionality between benefits and investment, AC2 is likely to suffer from severe horizon, portfolio and control problems. These problems discourage member investment thereby limiting the cooperative's access to equity debt capital from its members. The horizon problem also discourages the accumulation of retained earnings to finance future investments and encourages distribution of short term benefits. Like most traditional cooperatives, AC2 distributes profits through favourable prices rather than dividends paid on shares. The absence of an active market to trade shares creates the portfolio problem and aggravates the control problem.

4.3.4.7 Voting rights

Every registered member in the cooperative is entitled to one vote at the AGM except the chairperson who has the right to a casting vote in the event of an equality of votes. Shares held in excess of the minimum requirement or level of patronage do not qualify members to receive extra voting power. Large investors will be reluctant to invest in the cooperative because investment decisions reside with majority voters and not majority investors. The bylaws stipulate that voting shall be done by secret ballot or by show of hands but, in most cases, voting by show of hands has been adopted. Given AC2's small membership and low levels of participation at AGMs, voting by show of hands could easily be influenced by the views of leading members.

4.3.4.8 Management factors

The acting manager is a non-registered, non-patron employee assigned by FC to oversee the operations and to ensure that there is proper record keeping and management of finances. She has a background in accounting and finance but limited experience in agribusiness management. In addition to the manager, the management team comprises of two other employees. While their skills matched their portfolios, they would require more training if AC2 were to venture into value-adding activities to exploit more lucrative markets. Some shareholders interviewed (AC2R1, AC2R2 and AC2R3) and one buyer (SLR 2), indicated that the manager, along with the influence from FC, has improved the level of transparency in the

organisation and the relationship between management of the cooperative and the members. In the words of AC2R3:

The past managers that were hired by the board had too much freedom in the organisation. They would make decisions that were not in the best interest of members. For example, they would indicate one price when the orders are placed for the produce and offer a lower price on the day of delivery. In addition, there were personal biases, certain members received orders for all their produce whereas others were told that there were no orders from the buyers.

Although the BoD was responsible for hiring and firing the General Manager, this is indicative of weak accountability and the weakness of the BoD.

Outside of the AGM, there is no other forum where management interacts with members to discuss business strategies. The job description of the acting manager as outlined by the FC is restricted to administrative duties and marketing. Strategic decisions are taken by the BoD and the FC. Management of the cooperative did not express interest in value-adding activities.

4.3.4.9 Business strategy and value-adding

AC2 is primarily focused on supplying fresh produce to its customers. Throughout its existence, it has been supplying supermarkets and hotels with fresh agricultural produce. The cooperative is obliged to market all produce supplied by its members that meets quality standards. However, as in many traditional cooperatives, AC2 has no supply control which makes it difficult to honour contracts with buyers and hence to exploit premium markets. This, in turn, makes AC2 vulnerable to competition as there is no incentive for members to patronise the cooperative if they can get better prices elsewhere.

The cooperative did not have a business plan or any documented strategies but was in dialogue with the FC to develop a blueprint for growth. FCR1 mentioned that it would like to see the cooperative adding value through the provision of inputs and the supply of quality, branded fresh produce, but recognised the difficulty of achieving this in a small cooperative short of both capital and entrepreneurial skills. He stated:

The members of [AC2] are very skilled in production, however, when it comes to management and control of the business of the cooperative, they are inept. They lack the skills necessary to take the cooperative to the next level. This is compounded by the fact the

membership of the cooperative is restricted to farmers and fails to attract young, entrepreneurial farmers who can make a difference.

AC2 operates in a very competitive market with little product differentiation. The cooperative competes with large commercial farmers, other cooperatives and fresh produce importers as illustrated in Figure 1.1. AC2R1 declared that for the cooperative to maintain a consistent supply relationship with the hotels, it is vital that the cooperative invest in cold storage facilities to store the produce it receives from its members. He argued that this will not only increase the cooperative's ability to supply the hotels more consistently, but also allow the cooperative to capture better prices when the produce is in abundance and the prices are low. At the time of the study, AC2 added minimal value to the produce of its members. Its value-adding activities were restricted to sorting, marketing and distribution of produce to its buyers. AC2 was also involved in providing irrigation services to its members. A summary of AC2's background, organisation, institutional arrangements and value-adding endeavours of AC2 is presented in Table 3b in the Appendix.

4.4 Agricultural cooperative 3 (AC3)

4.4.1 Introduction

Semi-structured interviews were conducted with six stakeholders of AC3 during the period 514 October 2015. The list of coded respondents include: AC3 respondent 1 (AC3R1), AC3 respondent 2 (AC3R2), AC3 respondent 3 (AC3R3), AC3 respondent 4 (AC3R4), St. Lucia respondent 1 (SLR1), St. Lucia respondent 3 (SLR3).

4.4.2 Background

AC3 is one of the most successful ongoing agricultural cooperatives in St. Lucia. It is located in a rural agricultural community in the southwest constituency of the island. AC3 came about as a result of an intensive programme to support smallholders that was driven by the French Agricultural Mission in the early 1980's. The main purpose of the programme was to promote agricultural development. The initial focus of the programme was to develop a mechanism to supply inputs to farmers at more affordable prices.

Following consultations with smallholders in mid-1984, nine small farmers decided to pool their financial resources and establish a farmers' group to procure and sell inputs such as seeds, chemicals, fertilisers and basic farming tools to other farmers. The founding members

built a retail shop with assistance from the French Agricultural Mission. By 1986, the group had increased to 22 members and extended its services to include bulk marketing of produce. The collective marketing activities of AC3 were the result of increased yields achieved by small farmers in the area.

The cooperative became a registered entity on 4 April 1986. Over the years, the cooperative has grown to become the largest agricultural marketing cooperative in the country. The establishment and development of AC3 was also facilitated by the Ministry of Agriculture which provided technical assistance through dedicated technical officers and training services for members.

4.4.3 Objectives and core business of AC3

AC3 was established with the overall goal of meeting the needs of small farmers, particularly in production and marketing, by promoting the economic, social and cultural interest of its members in accordance with cooperative principles. The cooperative has also been instrumental in representing farmers' interests at government and other levels. These objectives have not changed over time but management indicated that their ultimate goal is to ensure that their members are able to survive in a competitive business environment.

AC3 operated four major business units, an input/retail shop, a plant nursery, a marketing department and an organic farm. In 1987, the cooperative had a credit division that allowed farmers to borrow a maximum of XCD1000 at an interest rate of 2.0% per month for a maximum of 12 months to cover farm operating expenses. However, this facility was not sustained. Members attributed its failure to poor management and weak monitoring and enforcement systems to prevent loan defaults.

The input/retail shop is the oldest department in the cooperative. It was intended to provide members with access to affordable farm inputs. In the early stages of development, the founding members volunteered their time to work in the input shop in exchange for membership shares. This arrangement continued until the cooperative was able to pay a fulltime shop keeper. AC3 also partnered with an input supplier that provides protective structures (greenhouses) and irrigation equipment to members on credit. This arrangement is linked to member patronage and, in some cases, supply contracts with the cooperative. Both

members and non-members patronise the input shop and there is no differentiation in pricing strategy for inputs sold. This creates an external free-rider problem within the cooperative and weakens the incentive for new members to join the cooperative. According to a shareholder, the prices paid for inputs at the cooperative are usually lower than prices paid at commercial stores.

AC3 also sold inputs on credit to members. This credit service was linked to member patronage and 'withdrawable shares⁵' held in the cooperative. These shares were pledged as collateral to curb loan delinquency. However, this arrangement was deemed to be in contravention of the regulations of the CSA and the credit service was discontinued. In the words of AC3R1:

The withdrawable shares were introduced because we wanted farmers to increase the shareholding in the cooperative. It was also done to increase the capital base to provide farmers with better services and credit on inputs... we were asked to cease this activity by the Registrar since we are not a financial cooperative and could not hold member savings. Therefore, we simply redistributed the funds to the members and cut back on some of the services we used to offer.

Management believes that this has had a detrimental impact on the performance of the input shop and the plant nursery. Members identified the input shop as one of the cooperative's most beneficial services for reasons of convenience and affordability. The plant nursery is another input service provided by AC3. The cooperative adds value to seed inputs by propagating healthy seedlings for the farmers. The services of the plant nursery are made available to both members and non-members at the same price. The nursery is well patronised by smaller farmers and female smallholders. AC3R1 mentioned that the plant nursery is one of the cooperative's most profitable departments. The plant nursery was established with the aid of donor funding. Image 4.3 shows one of the tunnel houses used by the nursery.

Collective marketing of members' produce is another core activity of AC3. Members usually harvest and deliver their produce to the organisation on specified marketing days. For small farmers who lack transport, the cooperative arranges farm-gate pickups. On marketing days,

⁵ A patronage deduction of 5.0% on individual member's produce sold to the cooperative credited to their share account.

the products are sorted, and dispatched to pre-arranged markets such as hotels and supermarkets. Otherwise very little value is added. Efforts to sustain a brand name had been unsuccessful. AC3 markets produce supplied by all farmers without differentiation between prices paid to members and non-members.



Image 4.3: Propagated seedlings in poly-tunnel nursery at AC3

The cooperative is highly rated by its customers for quality produce but often criticised for its inconsistency in supply. Every year, produce in excess of XCD1million is transacted through the cooperative. AC3R1 indicated that while marketing of members' produce is one of the cooperative's most important activities, it generates the least income. He attributed this to:

1. High post-harvest losses and lack of cold storage and processing capacity.
2. Unpredictable patronage from members resulting in inconsistent supply. There is little incentive for larger members to sell their produce through the cooperative. Members, including some executive officers, tend to sell their produce directly to other markets if the prices offered are relatively higher. This inconsistency in supply makes it difficult for AC3 to forge contractual relationships with premium buyers.

The organic farm was an initiative identified by the BoD in response to low and volatile returns. The establishment of the farm was facilitated with grant funding from an international donor. The farm operates as a profit centre and demonstration farm for the members. AC3 operates

and markets its organic produce independently of its members, since its members are not primarily engaged in organic farming. Produce from the organic farm is packaged and sold under a brand to hotels, restaurants and supermarkets. This initiative was also financed with grant funding.

4.4.4 Overview of organisational structure, institutional arrangements, management structure, group factors and value-adding

4.4.4.1 Organisational structure and governance

AC3 is fully farmer owned, governed and managed. Registered patrons are the only residual claimants to the assets of the organisation. At their AGM, they elect a seven-member BoD to govern and formulate policy. At the time of the study, the cooperative was managed by a registered member who was hired by the BoD. His role is to oversee the operations of the cooperative and to implement policy and strategies in the best interests of members. The organisational structure of AC3 is presented in Figure 4.4.

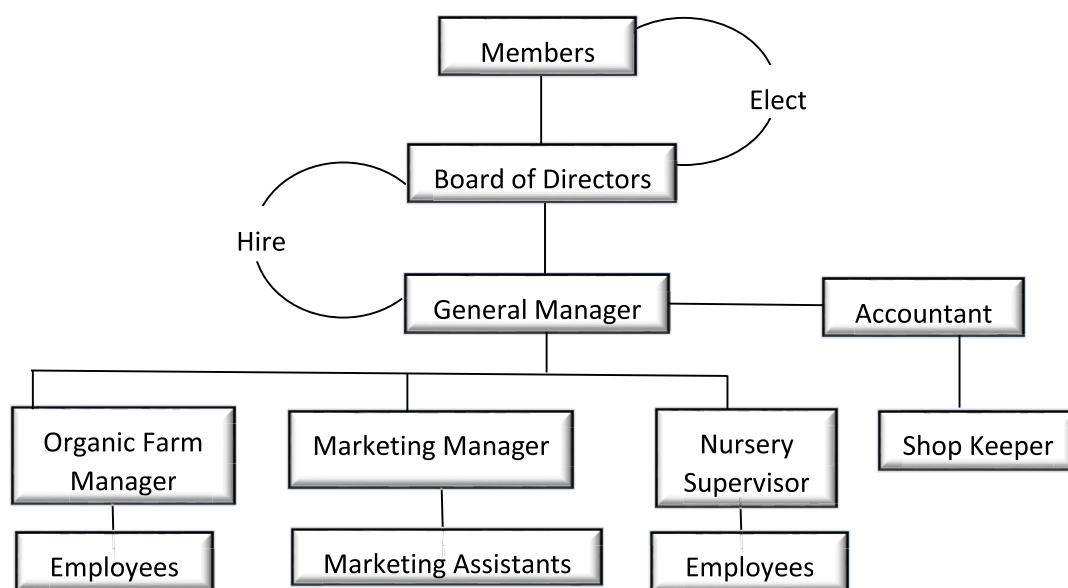


Figure 4.4: Organisational structure of AC3

AGMs are the highest level gathering between the members, directors and management. Members are given 30 days' notice of the AGM. According to AC3R2, these meetings are usually attended by 30-45% of the general membership, most of whom are active patrons. Some shareholders are no longer patrons of the cooperative. This creates an internal free-rider problem. During the AGM, members receive the cooperative's annual report which

presents audited financial statements, the chairman's report and the treasurer's report. One shareholder (AC3R3) indicated that there had been years when AGMs were not called and that the timing of the AGMs was not consistent. AC3 occasionally violated the legal requirement for cooperatives to convene AGMs within 30 days of receiving their audited statements. Members interviewed (AC3R3, AC3R4) attributed this to poor management and weak governance on the part of the directors.

The directors and management usually meet at monthly board meetings. Attendance at these meetings is high at approximately 90%. In past years, members of AC3 elected a supervisory committee to ensure that good governance practices are adhered to. However, in more recent times, this committee had not been active. Audited financial statements are prepared by an independent auditor nominated by the BoD and approved by the members at the AGM. There had been instances where AGMs were postponed due to delays in the audit.

4.4.4.2 Membership

Membership of AC3 is not restricted to a specific geographical location, it is open to fruit and vegetable farmers throughout the country provided that the board deems them eligible to use the services of the cooperative. Nonetheless, membership is concentrated in the southwestern parts of the country. During the study, AC3 had 322 registered members of whom approximately 50-60% were active patrons. Most of the patrons are small subsistence farmers. Larger and commercially oriented registered members usually use the cooperative as a buyer of last resort to market their produce. Management had been trying to extend membership to include sub-societies such as agricultural youth groups and rural women groups.

For an individual to become a member of AC3, he or she is required to pay an entry fee of XCD20, which is carried to the reserve fund, and hold a minimum of 20 shares at XCD5 per share. Upon application, the individual is required to pay for at least 50% of the shares with the balance due within the first six months of membership. According to the by-laws, members who fail to meet these requirements are not permitted to receive the privileges and benefits of the society. All members are viewed as patrons and both members and nonmembers utilise the services offered by the cooperative with no differentiation in pricing strategies. Upon

registration, all members are required to have an equal minimum investment in the cooperative.

4.4.4.3 Shares and benefit rights

As stated in the by-laws of AC3, the equity capital of the cooperative is derived from the savings of its members and the payment it receives as subscriptions on shares issued. Officially, the cooperative has one class of share that represents membership entitlements and individual investments in the cooperative. These shares have a par value of XCD5 per share. Individual members can increase their shareholding above the minimum required for membership to a maximum of 20% of total shares on issue as stipulated by the CSA. The shares are non-tradable, transferable between members at par value and redeemable by the cooperative at par value only when the holder ceases to be a member. As a result, they yield no capital gains and members have little incentive to invest above the minimum requirement for membership. These restrictions create horizon and portfolio problems, aggravate the control problem and also expose the cooperative to redemption risk. In 2013, the share capital of the cooperative was only XCD92625. AC3R4 indicated that low levels of investment by members impacts on their active participation in the cooperative. He explained:

The subscriptions to membership shares are too low, members have a small amount invested in the cooperative and there is no incentive to increase shareholding above the minimum, so, members have no motive to participate in the organisation. Also, it allows for members who were instrumental in the development of the cooperative to have great influence and to behave opportunistically. This makes the cooperative a social entity and less entrepreneurial.

He contended that if the incentive to invest was greater, members would be more proactive in ensuring that good management and governance practices were adhered to, that there would be greater transparency and that management and the board would be held more accountable. Most registered members, including management and directors, do not know how many shares they currently hold in the cooperative. Individual share statements are not issued to members annually.

Since most members hold only the minimum number of shares in the cooperative, this aggravates the internal free-rider problem because patronage is not proportional to investment. Without this proportionality, the interests of members as patrons and investors

are not well-aligned and the potential benefits of low transactions costs in supply contracts are lost. This also makes it difficult for the cooperative to predict and control supply, and hence to honour contracts with premium buyers.

At the time of the study, management reported that a second class of shares had been introduced to help address the under-capitalisation problem five to seven years earlier. These shares were referred to as 'withdrawable shares'. They were basically patronage deductions treated as shares by the cooperative. According to AC3R1, these shares were withdrawable at the value indicated on the ledger, non-appreciable and non-transferable. They were denominated in dollars and not units, and were accepted by the cooperative as collateral for inputs purchased on credit. These funds were used as working capital by the cooperative. However, this *de facto* arrangement was terminated by the Registrar of Cooperatives and the cooperative had to redeem the shares. Members derive benefits through patronage. Although AC3 can pay dividends, profits are distributed through favourable prices for produce and inputs.

4.4.4.4 Voting rights

Voting rights are attached to the membership. Registered members are entitled to one vote at the AGM regardless of level of investment or patronage. This gives rise to the influence problem because control over the cooperative's investment decisions resides with the majority voters and not the majority investors. There is no prior screening of candidates nominated for positions on the board. Members who attend the AGM get to nominate and elect directors and vote on certain matters pertaining to the cooperative. The procedure to elect directors in AC3 is similar to the other cooperatives studied, which is by show of hands. There has been no situation in the past where voting was done by secret ballot.

4.4.4.5 Management factors

The manager of AC3 is a registered patron member of the cooperative. He was also the first manager assigned to the cooperative from 1986-1989 by the French Agricultural Mission. This external intervention influenced strategic decisions that were taken by the cooperative in its early stages of development. The manager was rehired by the board as General Manager in 2001 on a permanent basis. Most of the cooperative's employees are registered members. The manager admitted that although key management positions are occupied by persons who

are not suitably qualified, it is adequate for the cooperative's current level of operations. He views this as a weakness if the cooperative was to venture into more lucrative markets. Clear separation of ownership and control is compromised since the General Manager is a registered patron in the cooperative. This can aggravate the influence problem if the manager behaves opportunistically and does not consult members when making managerial decisions. According SLR1, in such cases where managers of the cooperative are permanent employees and patron members, it becomes difficult to distinguish between the BoD and management, making it difficult to enforce good governance, specifically accountability.

AC3 has no mission statement or documented objectives except those prepared in collaboration with the French Mission upon registration in 1986. The cooperative does not have a business plan or any blueprint for growth. This makes it difficult to evaluate the effectiveness of management and the cooperative's day to day operations. It also leaves the cooperative vulnerable to external influence from donors and grant funders. This is symptomatic of the capital constraint within the cooperative. AC3R3 indicated that decisions reached at the AGMs are seldom acted on by management. He explained:

The board comes up with decisions and when it comes to implementation, the one who is paid to do it does not. The manager is not proactive enough to demand action from the board because he is contented with what he does.

Policies and strategies are developed by the BoD in collaboration with management with little consultation of members. There have been instances where the cooperative has received technical assistance to develop and implement strategies from voluntary organisations such as the Peace Corps and the Taiwanese Mission. Apart from the AGM, there is no other forum through which management interacts with the membership to discuss the affairs of the organisation. Management attributes this to low member participation at previously convened Special General Meetings.

4.4.4.6 Business strategy and value-adding

In the absence of documented strategies and business plans, it is difficult to evaluate the strategic direction of the cooperative. Most of the strategic decisions and projects implemented by the cooperative in the past five years were influenced by donor funding. AC3 competes by providing quality fresh produce to its customers. According to AC3R2:

To remain competitive as a cooperative supplier in the market, we have to find unique ways of doing businesses while encouraging our members to patronise the cooperative... We have seen the need to add value to our products, however, I believe the cooperative lacks the financial and human resource capacity to undertake value-adding activities. We attempted that with a brand but that failed.

In 2007, AC3 with assistance from an international donor organisation embarked on a branding and packaging exercise. The brand was launched and piloted for approximately three months. SLR3 noted that the produce sold under the brand was very competitive relative to other wholesale items and imported produce. However, AC3 was not able to sustain the brand when the project funding ended. The manager claimed it was less profitable to market produce under the brand than in bulk as there was no difference in product price. In addition, they found themselves at a dilemma with the membership seeking higher prices for produce sold to the cooperative. This highlights the horizon problem that encourages members to extract rather than retain profits for reinvestment. As a result, management does not bother to add value and has resorted to simply marketing and distributing its members' produce.

In 2009-2010, the cooperative launched a second brand for their organic produce with donor funding. At the time of the study, this brand was still on the market. Management attributed this to the fact that the produce sold under this brand is produced and supplied by the cooperative independent of the broad membership. As a result, the cooperative is better able to control supply and can increase retained earnings since it does not have to distribute the profits through higher prices.

Although not documented in the cooperative's strategies, AC1R1 reported that there are a number of opportunities through which the cooperative could add value. He expressed interest in branding and packaging but views under-capitalisation and member participation as limiting factors. The value-adding opportunities include:

1. Reducing post-harvest losses by converting goods into convenience packs that are sold at the supermarkets. This can be promoted by branding of the cooperative's products.
2. Expanding services of the retail shop to include cold storage, wholesale and retail of member's produce in the nearby town. This would require investment in cold storage facilities and other infrastructure.

3. Exploring the export market, most specifically the cruise ship market. This would require the cooperative to be able to predict and control supply in order to establish contracts with the buyers.

Throughout AC3's existence, it has established supply relationships with producers, supermarkets and hotels. The board believes that these relationships have been instrumental in the success of the cooperative and its reputation as a supplier of top quality produce. Although these relationships provide market access, they do not yield premiums because the produce sold through these markets is undifferentiated. At the time of the study, AC3's value-adding activities were restricted to farm gate pick-ups, sorting, and distribution to prearranged markets. They also added value through the plant nursery and the organic farm. Management reported that the cooperative has an overdraft loan facility with a commercial bank and a good reputation as a borrower. A summary of AC3's background, organisation, institutional arrangements and value-adding attributes is presented in Appendix Table 3c.

4.5 Agricultural cooperative 4 (AC4)

4.5.1 Introduction

Semi-structured interviews were conducted with seven stakeholders of AC4 during the period 14-20 September 2015. The list of coded respondents include: AC4 respondent 1 (AC4R1), AC4 respondent 2 (AC4R2), AC4 respondent 3 (AC4R3), AC4 respondent 4 (AC2R4), AC4 respondent 5 (AC4R5), Jamaica respondent 1 (JAMR1), Jamaica respondent 2 (JAMR2)

4.5.2 Background

AC4 is one of the longest serving agricultural cooperatives in Jamaica. AC4 is located in a rural district in central Jamaica where the majority of the country's Irish potatoes are cultivated. Since its registration in 1959, AC4 has mainly been engaged in the trading of seed potatoes, table potatoes and agricultural input supplies. As with many agricultural cooperatives in the Caribbean, AC4 was organised primarily for the purpose of providing farm inputs, equipment and markets for local farmers.

The cooperative was initiated by farmers wanting to import seed potatoes to increase their yields. From an initial membership of 200 farmers in the early 1960's, the cooperative grew to a point where it serviced over 30000 farmers in late 1980's. At the time of the study, the cooperative had approximately 5500 fully registered members, approximately 30% of whom

were active members. AC4 also purchases potatoes from 500 contracted growers, some of whom are not shareholders.

Over time, as the production capacity of the members increased, the purpose and services of the cooperative were augmented to include marketing of member's produce. This resulted in the first supply contracts between the cooperative and its members. Members were provided with seeds and in return would market their produce through the cooperative. This significantly reduced farmer's production and marketing costs and encouraged them to increase production. The government, having realised the importance of the cooperative in local rural development, facilitated its expansion by providing infrastructure (such as buildings, land and storage facilities), training and protection from imported potatoes. The latter was particularly important in ensuring the survival of the cooperative when the sector began to attract competitors. In the 1990's AC4 was the sole importer of seed potatoes in Jamaica and provided table potatoes to Jamaica and the wider Caribbean Community (CARICOM). These advantages diminished and ended when the country became a member of the World Trade Organisation (WTO).

4.5.3 Objectives and core business of AC4

The main objective of AC4 is to improve the economic welfare of its members by utilising their united funds and efforts to facilitate better production, processing and marketing of potatoes or any other approved products produced by its members and to perform services in the interest of its members. The cooperative also aims to expand its production base and increase its portfolio to include value-adding to the produce it receives from its members.

AC4's core business involves the planting and trading of Irish potatoes. It operates three strategic business units (SBU's): the farm store, resource centre and a storage and packaging unit. The business aspects of the cooperative have grown and diversified into other areas such as greenhouse vegetable production and marketing and tissue culture.

The farm store is located at the cooperative's headquarters and has been in operation since 1968. The store was established to provide members with affordable inputs such as chemicals, fertilisers, tools and equipment. Farmers were also able to access production information and

technical advice. Over time, the cooperative forged strategic alliances with a number of farm input suppliers. Between 2008 and 2010, the farm store generated an average annual sale of 20.5 million Jamaican dollars (JMD⁶).

AC4 is also equipped with a tissue culture laboratory which was established to produce disease-free and affordable planting materials (Irish potatoes, sweet potatoes, ginger, yams and ornamental flowers). The laboratory can produce in excess of 5000 plants per week. However, due to financial constraints, both the store and the laboratory were closed by management in 2015 with the laboratory being leased to an external investor.

The storage and packaging unit has a modern cold storage and packaging facility with capacity in excess of 900000 kilograms (kg). The facility was developed to cater for the increased growth in members' production. The cooperative is able to store produce when it is in abundance and prices are low. As a result, they are able to pay their suppliers higher prices in peak production periods. In April 2010, it was announced that AC4 had gone into a joint venture with the Government of Jamaica and a private entity to refurbish and expand its storage facility under a new company (AC4R4, personal communication, September 15, 2015)⁷. The cooperative's contribution in this venture was 4000 field crates plus USD20000 grant funding in exchange for a 38% stake in the new company. This is symptomatic of the cooperative's inability to finance its assets internally. Images 4.4 and 4.5 show the storage infrastructure at AC4.

4.5.4 Overview of organisational structure, institutional arrangements, management structure, group factors and value-adding

4.5.4.1 Organisational structure and governance

The membership of AC4 is scattered among its 26 district branches. Officially, the members of each district branch have the right to elect a committee and delegates to represent their branch in AC4. The committees and delegates are responsible for conducting branch meetings to discuss the affairs of the cooperative with their members. However, according to one

⁶ JMD1= 0.0114USD (2010). In 2016, JMD1= 0.0085 (Bank of Jamaica, 2016).

⁷ AC4 Business plan, 2011, p. 10. Confidential document presented at interview with AC4.

delegate (AC4R2) and some members (AC4R3, AC4R4), that rarely happens and this has created a gap between members and their cooperative.



Image 4.4: External structure of storage facility at AC4



Image 4.5: Cold storage chambers at AC4

In addition, there is no regular flow of information to members. In the words of AC4R2:

We as delegates are sometimes informed about the affairs of the cooperative when they are presented at the AGM or special general meetings together with all members present.

The cooperative is governed by a nine-member Board of Directors (BoD) comprising of fully registered shareholders elected by the delegates. Some members hinted that certain positions within the BoD hold significant power and often influence what happens within the organisation. The BoD is responsible for hiring a manager to conduct the operational activities of the cooperative. There have been instances where a manager has been appointed based on recommendations by an external public party. The existing organisational structure of AC4 is presented in Figure 4.5.

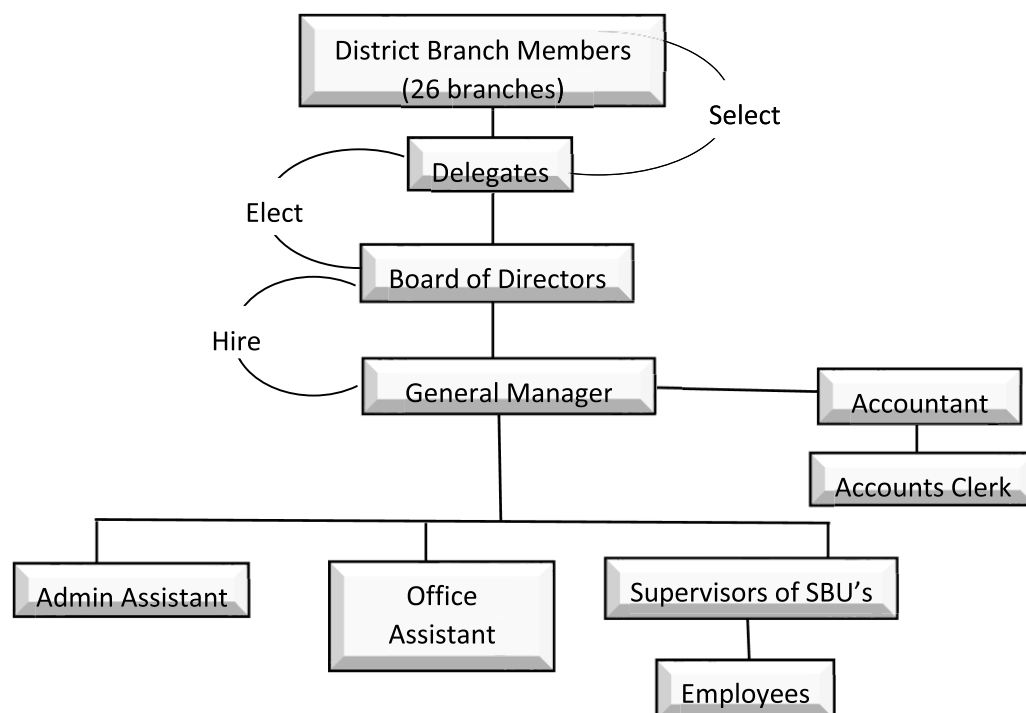


Figure 4.5: Organisational structure of AC4

According to a long standing member (AC4R4), over the past 50 years of AC4's existence, it has held approximately 36 AGMs. There were instances when AGMs were not conducted for 3-4 consecutive years because the cooperative failed to produce audited financial statements. These audits are prepared by the Department of Cooperatives, whose role also includes facilitating and regulating the registration and operation of agricultural cooperatives. Delegates and members are usually given 30 days' notice of the AGM. During the AGM,

documents such as the audited statements and chairman's report are presented verbally in an effort to minimise cost. The BoD and management are scheduled to meet on the last Thursday of every month to discuss the affairs of the cooperative. These gatherings are usually well attended.

4.5.4.2 Membership

AC4's by-laws are not current and do not accurately reflect the institutional arrangements adopted by the cooperative. The rules of the cooperative restrict membership to farmers within a geographical location (50 kilometres radius) of its 26 districts. Membership is also restricted to farmers who can make use of the services of the cooperative. Management of AC4 intends to open the membership to include farmers who cultivate other vegetables such as yams and sweet potatoes.

Other societies can become members of AC4 providing that they can utilise the services of the cooperative. For such societies to be accepted as members, they are required to pay an entrance fee of JMD1000 which is credited to a reserve fund and a minimum of 5000 shares at JMD1 per share. According to the by-laws, individual farmers applying for membership are required to contribute JMD100 entrance fee and subscribe to a minimum of 500 shares at JMD1 per share. However, to address devaluation of the Jamaican currency and under-capitalisation of the cooperative, new members are required to pay an entrance fee of JMD500 and to purchase a minimum shareholding of JMD5000 permanent shares and JMD1000 'ordinary shares'.

Initially, the cooperative issued unpaid shares. For every 45 kilograms of produce that a farmer sold, a cess would be deducted that would grow to the equivalent of a membership share. Farmers who patronised the cooperative and had cess deductions in excess of the minimum requirements for membership would automatically become members of the cooperative. This *de facto* arrangement was never documented and no longer exists. All members are viewed as patrons. However, there are many registered members who are no longer patrons and also non-members who patronise the cooperative. Members usually receive preferential treatment for markets and inputs, but there is no differentiation in the price they pay and receive for inputs and produce sold to the organisation. This inherently creates an internal and

external free-rider problem within the cooperative because of the lack of proportionality between patronage and investment.

4.5.4.3 Shares and benefit rights

AC4R1 reported that the cooperative has two classes of shares: permanent shares and 'ordinary shares'. The permanent shares (JMD5000) plus a minimum of JMD1000 in 'ordinary shares' qualify an individual for membership and a right to vote. Permanent shares are placed in the reserve fund of the cooperative and may be used to conduct the affairs of the cooperative. Unlike the other cooperatives studied, permanent shares in AC4 are indivisible, non-redeemable and non-transferable. These shares provide the cooperative with a permanent source of capital and therefore do not add to its redemption risk. All members are required to have equal amounts of permanent shares in the cooperative regardless of patronage or date of entry into the cooperative.

'Ordinary shares' in the cooperative carry economic benefit rights in the form of dividends paid to members. They are unlimited at JMD1 par value above the minimum (1000 ordinary shares) required for membership. However, individual share limits are restricted to 20% of the total shares on issue. These shares are not linked to patronage, are redeemable at par value by the cooperative, non-tradable but transferable to other registered members or any individual who the BoD deems eligible for membership at the same par value. Like AC2, the redeemable nature of these shares does not provide the cooperative with permanent capital and exposes the cooperative to redemption risk.

To facilitate the transfer of shares, the BoD has the flexibility to establish a Share Transfer Fund. Currently, there is no such Fund and members are not able to freely transfer their shares. The horizon, control and portfolio problems are all present as these shares are effectively not tradable and yield no capital gains. According to AC4's audited financial statements, in 2013, JMD340000 deferred shares were issued to increase the cooperative's capital base. These shares are not withdrawable for a period of five years, after which members can surrender them at par value to the cooperative.

It is stipulated in the by-laws that at the end of each year, every member shall be provided with a share statement evidencing the value of shares held in the cooperative. However, these

statements are not issued to members. According to AC4R4, most registered members including some active directors do not know how many shares they currently hold in the cooperative.

4.5.4.4 Voting rights

Delegates are the only members authorised to vote for directors at the AGM and on matters that require membership approval. Ordinary members of the cooperative seldom exercise their voting rights at the AGM. However, each registered member is entitled to one vote at their district branch. Every district branch is entitled to a minimum of one delegate upon registration plus an additional delegate for every additional JMD500000 worth of produce sold to the cooperative, subject to a maximum of four delegates. District branches with 200 to 400 members are entitled to three delegates, those with 400 to 500 members, five delegates, and those with more than 500 members, a total of seven delegates. In practise, these procedures are not adhered to. AC4R4 reported:

There have been instances where delegates were selected by directors and not by members of the district branch. Delegates should never be appointed by serving directors; it should be the members of the respective district groups. [He added] delegates are supposed to hold regular meetings with their district branches but that does not happen. I believe that it is because management of the cooperative and the directors pay little attention to these things.

Moreover, the committee charged with the responsibility of screening and nominating candidates for election to the board comprises of two active board members and just two delegates. AC4R4 indicated that this was in breach of the by-laws, because active directors are not supposed to form part of the nominating committee. Directors are able to influence the selection of delegates and this could aggravate the influence problem.

Election of directors at the AGM is informed by the nominating committee's report. If only one candidate is nominated for a particular position on the BoD, he or she is appointed unopposed. Otherwise, voting by show of hands is conducted to elect nominees for contested positions. In some cases, the nomination reports are prepared 'en-bloc', meaning that the nominees are selected as a consortium. In the event that there are changes to be made to the report, delegates are required to vote by secret ballot. In AC4, appointing directors 'en-bloc'

is the norm. Since voting rights in AC4 are democratic, the influence problem is most likely exacerbated by director's power in nominating delegates and voting by show of hands.

4.5.4.5 Management factors

AC4 has a general manager who is hired on a contractual basis. These contracts are reviewed every three years by the BoD. The current General Manager has been serving for one and a half years at AC4 and prior to this appointment served in various management capacities in both the private and public sector. The role of the manager, *inter alia*, is to oversee the operations of the organisation and implement the policies set out by the BoD. The manager plays a key role in developing the business strategies of the organisation based on the objectives set out by the board. AC4R2 and AC4R3 indicated that there have been instances where the strategic choices of management were not considered consistent with the objectives set out by the BoD, such as the closure of the input shop. Management seldom consults members when developing strategic plans and members do not participate directly in policy or management decisions. Business plans and strategies for the organisation are reviewed every four years.

Management has a keen interest in value-adding through processing and branding. However, it views under-capitalisation by members as a constraining factor. A motion was referred to the BoD to introduce a new class of shares which would require members to increase their investment from JMD6000 to JMD50000 over a five-year period through increments of JMD10000 per year with a proposed offer of 7% interest per annum on shares. These shares would not be tradable or appreciate in value and could be redeemed by the member at par value after a stipulated period. This investment alternative has all the characteristics of a financial bond and will not alleviate the portfolio, horizon or control problems that constrain a member's incentive to invest in the cooperative.

AC4 has been affected by inconsistent financial performance over the years. In 2013, the cooperative incurred a net loss of JMD20.4million and an accumulated deficit of JMD109.5million. As a result, management took the decision to cut back on some of the services offered to members and to sub-lease some of its assets. Some employees were made redundant. AC4R5 argued that this made it difficult to formulate and implement policies and strategies set out by the BoD. Recommendations from their 2011 business plan indicated that

for the business aspect of the cooperative to excel, management must hold itself more accountable for the operations of the business. They should promote good governance by ensuring that there is transparency and accountability in the day to day operations of the firm. In addition, the BoD must properly govern to exert a stronger sense of good governance over the organisation and develop ways to keep management committed to clear and agreed objectives.

4.5.4.6 Business strategy and value-adding

It is a requirement of the BoD that management prepares a business plan every four years. These documents are usually outsourced to external consultants. During this study, AC4 was operating from its 2012-2016 business plan. In past years, AC4 experimented with a number of value-adding activities on a pilot scale. These included, value-adding to inputs through their tissue culture facility, training of members and staff in appropriate technology and the development of a variety of products to promote cottage industries. However, they had not been able to sustain these activities. Management attributed this to the under-capitalisation problem and dependence on unsustainable sources of funds such as grants and government financial supports. AC4 has received financial assistance from the Ministry of Agriculture, and grant funding from international donors and inter-governmental organisations. The largest grant received was USD100000 for a greenhouse project, USD95000 to upgrade the laboratory and USD40000 to put in alternative sources of energy.

The BoD intends to continue exploring opportunities for creating value-added products. The BoD believes that leveraging their tangible assets through vertical integration with external investors can yield positive benefits to the organisation. At the time of the study, the cooperative was in the process of launching a subsidiary marketing company (SMC1). Its main purpose will be to improve the ability of the cooperative to market and add value to the products it receives from its members. The subsidiary would be involved in processing, packaging and branding. The intention is that the cooperative will hold majority shares in the company with a 60:40% split in favour of the cooperative. The minority shares will be made available to other registered cooperatives and credit unions but not strategic partners that have established brands, formal contracts or other intangible assets. Individual members of the AC4 are not allowed to hold shares directly in the company, rather they are encouraged to increase their investment in ordinary shares in the cooperative. Establishing this subsidiary

company would not relieve the cooperative of the institutional problems and thus, AC4 would still find it difficult to raise capital from its members to maintain majority shareholding in the company. At the time of the study, the cooperative did not have a brand. Its value-adding activities were mainly through marketing, storage, packing and distribution of its member's produce. A summary of AC4's background, organisation, institutional arrangements and value-adding attributes is presented in Table 3d in the Appendix.

Chapter 5

Results and Discussion

5.1 Introduction

This chapter draws on the case studies described in Chapter 4 to test propositions underpinning the theoretical model developed in Chapter 2. These propositions relate a cooperative's value-adding activity to its institutional, governance group and management factors. The case studies were selected to ensure variation in the level of value-adding. This necessitated the inclusion of a Jamaican cooperative as there was little *a priori* evidence of significant value-adding amongst agricultural marketing cooperatives in St. Lucia, even though some of the cooperatives had well-defined value-adding objectives.

Section 5.2 presents a classification of the cooperatives based on their observed value-adding activities and institutional arrangements, and examines the relationship between these activities and arrangements. Section 5.3 examines relationships between observed valueadding activity and observed governance, group and management factors. Section 5.4 draws conclusions from this 'pattern matching' analysis (Yin, 2002, pp. 116-120) and offers recommendations to policy-makers and managers aimed at improving the performance of agricultural marketing cooperatives in St. Lucia.

5.2 Classification of cases

This section uses the framework presented in Figure 2.2 to classify the cooperatives studied. Observed levels of value-adding locate each case on the figure's vertical axis while its institutional arrangements locate its position on the horizontal axis.

5.2.1 Observed value-adding activities

5.2.1.1 AC1

AC1 was established to help small-scale layer and broiler producers reduce their production costs and to capitalise on opportunities in the supply of fresh poultry products. Its main goal is to ensure that members can market a steady supply of broilers and eggs by facilitating production and processing. At the time of the study, AC1 was not processing its members' produce. Its core activities were restricted to advocacy and product promotion. The

cooperative had not met its processing objectives as it could not raise the equity (and hence debt) capital required to finance a poultry processing plant. As a result, the cooperative was in the process of partnering with two external equity investors in a subsidiary company. It was proposed that the cooperative would take a 20% stake in the subsidiary, with an option to purchase another 10% of the shareholding within 2-3 years. At the time of the study, the cooperative was in discussion with its members and other stakeholders to find ways of financing their share of the subsidiary. The cooperative was also considering shifting the value-adding burden to its members' farms. These efforts signal a binding capital constraint in the cooperative. Based on its observed activities it is characterised as the lowest value-adding case in Figure 5.1.

5.2.1.2 AC2

AC2 is a multi-product fruit and vegetable cooperative established to help farmers market their produce. Its main objective is to consistently sell quality fresh produce to premium buyers (mainly hotels and supermarkets) at prices favourable to its patrons. Its core activities are restricted to sorting, grading, marketing and distributing members' produce. The cooperative operates in a very competitive market as it does little to differentiate its products, and members have no obligation to sell their produce to the cooperative if they can find better prices elsewhere. The cooperative also provides an irrigation service. Management would like to invest in a cold storage facility but the cooperative is short of capital. AC2 is characterised as a low value-adding cooperative in Figure 5.1.

5.2.1.3 AC3

AC3 is also a multi-product cooperative established to help farmers overcome production and marketing problems, and to create employment opportunities. Its initial focus was to supply inputs to farmers at affordable prices. The cooperative then broadened its services to include collective marketing and distribution of members' produce. Like AC2, AC3 competes by providing quality, fresh fruits and vegetables to supermarkets, hotels and restaurants with minimal product differentiation. An attempt to add value through branding failed when this externally funded project ended. The cooperative does add value by propagating and selling healthy seedlings to its members. Management attributed this success to a cess-deduction that enabled the cooperative to raise capital for a nursery. This arrangement also introduced proportionality between patronage and investment in the cooperative. However, the cess was

deemed to be in contravention of the CSA and discontinued. AC3 produces and brands its own organic vegetables. The cost of establishing this enterprise was carried by a donor. AC3 did consider value-adding to be an important goal but its achievements were modest despite benefitting from donor funding. AC3 was ranked above AC2 on the vertical axis of Figure 5.1 owing to its value-adding nursery and marketing services.

5.2.1.4 AC4

AC4 is a single product cooperative in Jamaica specialising in production and marketing of Irish potatoes. The cooperative was formed primarily to supply farm inputs and equipment to local farmers. Over time, as the production capacity of members increased, the purpose of the cooperative was revised to include marketing of members' produce. AC4 secured cold storage facilities and a tissue culture laboratory with financial support provided by the government and an international donor. However, the cooperative lacked the capital required to fully equip and maintain the laboratory, and was consequently unable to sustain its supply of disease-free seed potatoes. Nevertheless, the cooperative adds significant value through storage, packaging and distribution of members' produce relative to the other cooperatives studied.

Management recognised the need to add more value to members' produce but faced a binding capital constraint. At the time of the study, the cooperative was in the process of launching a subsidiary company to market and add value through processing, packaging and branding. Like AC1, AC4 was unaware of alternative ways of raising equity capital. AC4 was ranked highest of the case studies in terms of value-adding services offered to members.

5.2.2 Observed institutional arrangements

To avoid unnecessary repetition, the key institutional characteristics of the case studies described in Chapter 4 are summarised in Table 5.1. The attributes are coded as binary variables with a tick (✓) indicating the presence of an investment-friendly attribute or (X) otherwise. These attributes relate directly to the institutional problems expected to constrain investment by members and lenders in a traditional marketing cooperative (TC). The four cooperatives studied are ordered from lowest to highest in terms of their observed value-adding activity.

Table 5.1: Summary of key institutional characteristics of the case studies

Institutional arrangement attributes	Institutional problem alleviated	TC¹	AC1	AC2	AC3	AC4
Capital gains allocated by revaluation of the share price or by issue of bonus shares	Horizon problem	X	X	X	X	X
Capital gains allocated by trading shares at their market price	Horizon, portfolio & control problems	X	X	X	X	X
Investment proportional to patronage	Internal free-rider problem & high transaction costs	X	X	X	X	X
Non-members pay more for services offered by the cooperative	External free-rider problem	X	X	✓	X	X
Cooperative issues tradable delivery rights	All the above problems	X	X	X	X	X
Voting rights are proportional to investment	Influence problem	X	X	X	X	X
Strategic partners admitted as voting members	Influence problem	X	✓	X	X	X
Voting by secret ballot	Influence problem	X	X	X	X	X
Some shares are permanent (nonredeemable)	Redemption risk	X	X	X	X	✓

1. TC = traditional marketing cooperative model

None of the cases exhibited significant variation from the traditional cooperative model. Omitted from Table 5.1 is AC3's cess-deduction that obliged members to invest in proportion to patronage but which was discontinued when concerns were raised about its legitimacy and the cooperative's increased exposure to redemption risk. AC2 was the only case that alleviated the external free-rider problem because members were offered better prices than were nonmembers.

AC1 was the only cooperative that admitted non-farmer transactors. However, there was no distinction between shares offered to farmer patrons and those offered to non-farmer patrons – all of AC1's shares were redeemable and non-appreciable. Under these conditions, introducing another class of patrons (seeking favourable prices for their products) does very little to ease the cooperative's capital constraint. Instead, it adds another layer of conflict that makes supply contracts even more difficult to negotiate and enforce.

All cases were exposed to redemption risk and were obliged to retain some of their profits in cash accounts to provide for redemption obligations. AC4 did not redeem shares that made up the minimum shareholding required for membership. However, any shares purchased in excess of this minimum holding were treated as redeemable and non-appreciable. The absence of any meaningful investment-friendly institutional arrangements is illustrated by the concentration of cases on the horizontal axis in axis in Figure 5.1.

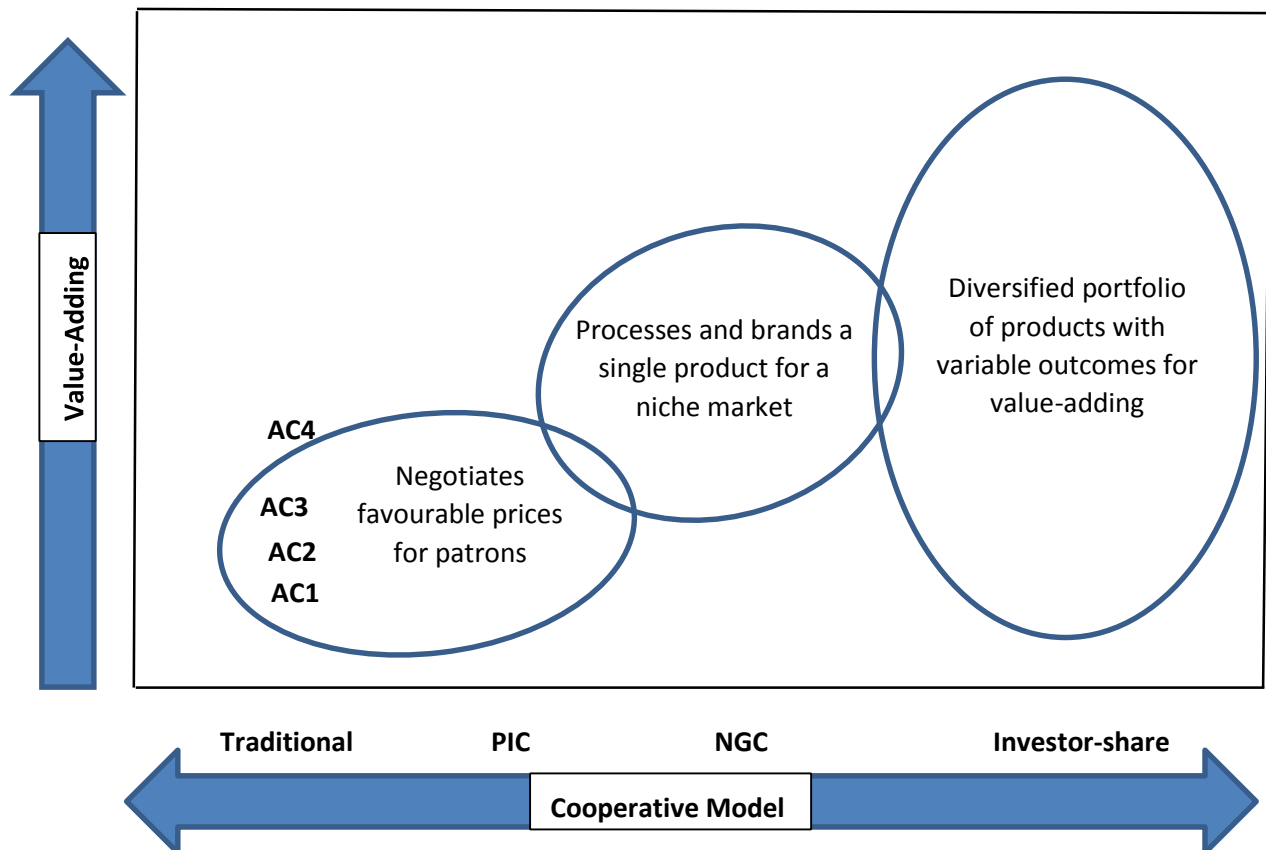


Figure 5.1: Observed relationships between cooperative models and value added

All of the cooperatives studied suffered from the weak institutional arrangements that tend to undermine investment in a traditional marketing cooperative. Capital may not be a binding constraint for AC2 as its core business did not require significant investment. AC3's inability to sustain its branding activity suggests that it was capital constrained. Management acknowledged its mandate to add value, but had settled on a far less ambitious market orientation strategy.

For AC1 and AC4, capital was clearly a limiting factor in achieving their stated value-adding objectives. Without any obvious way of legally adopting more investment-friendly institutional arrangements, these cooperatives were seeking strategic partners to invest in subsidiary companies that would finance and control value-adding assets. As explained, in Chapter 2, the 'Irish Model' almost invariably leads to a situation where the subsidiary company displaces the cooperative as buyer. Although this outcome could be viewed as a solution to the low investment problem, it does not address institutional problems within the parent cooperative. It shifts ownership and control to investors and is likely to come at the cost of less predictable supply owing to poor alignment of patron and investor interests. This, in turn, would make it difficult to build relational contracts with buyers, leaving the subsidiary company with a hold-up problem and reduced incentive to make asset-specific investments. In addition, AC1 was attempting to shift some of the value-adding burden back to farmer-patrons by encouraging them to use chemical-free feed in order to differentiate their products.

5.2.3 Summary of findings

The 'pattern matching' analysis conducted in this subsection produced two main findings. First, low levels of value-adding in all four cases were consistent with their very conservative institutional arrangements as predicted by NIE theory. Second, small differences observed in the levels of value-adding could not be attributed to the institutional arrangements adopted by the cooperatives as there were no meaningful differences in these arrangements. Section 5.3 examines other factors that may account for these small differences in value-adding.

5.3 Relationship between value-adding and observed governance, group and management factors

NIE theory suggests that a cooperative's ability to create and sustain value-adding activities depends on its institutional arrangements and related governance, group and management factors, other factors (such as external support) being equal. The analysis presented in this sub-section focuses on these internal factors and the relationships summarised in Figure 2.1. For convenience, the key governance, group and management attributes of the case studies described in Chapter 4 are summarised in Table 5.2. The presence of investment-friendly attributes is denoted by a '✓', and their absence by an 'X'. Again, the cases are ranked from lowest to highest based on their observed value-adding activity.

Table 5.2: Summary of key governance arrangements, group and management factors

Attributes	AC1	AC2	AC3	AC4
Governance arrangements				
Elections are conducted by secret ballot	X	X	X	X
Elected directors nominated by only shareholders	X	X	X	X
Elected directors have a voting majority on the board	✓	✓	✓	✓
Non-elected directors appointed only for their specialist skills	✓	X	N/A ¹	N/A
Non-elected directors do not influence policy decisions	X	X	N/A	N/A
The board is able to hire and fire managers	X	X	✓	✓
Group attributes				
Cooperative markets a single product	X	X	X	✓
Members do not participate in policy making decisions	X	✓	✓	✓
Members do not participate in managerial decisions	X	✓	✓	✓
Management factors				
Skills of senior executives match portfolios	X	X	✓	✓
Cooperative has a contemporary business plan	✓	X	X	✓
Management has a keen interest in value-adding	✓	X	X	✓
Contemporary mission statement and strategic objectives	✓	X	X	✓
External factors				
Donated capital	low	medium	high	high

1. N/A = not applicable as these cooperatives did not have non-elected directors.

5.3.1 Observed governance arrangements

The theoretical framework illustrated in Figure 2.1 proposes that a cooperative's institutional and governance arrangements have both direct and indirect effects on its value-adding activity. For example, these arrangements have consequences for performance via their effects on management as they determine who gets to direct and manage the cooperative, who the directors and managers account to, and the extent to which they can be held accountable for poor decisions. Governance arrangements can also aggravate the influence problem attributed to democratic voting rights if they allow for a majority of directors who are not nominated and elected by shareholders, or if they allow directors to be elected by a show of hands rather than by secret ballot (Rosairo et al., 2012).

Influence problems were likely in all of the cases studied because voting rights were not proportional to investment, and voting was conducted by show of hands to elect directors. In

AC4, voting was restricted to delegates representing members from different districts. Respondents indicated that procedures to select district representatives were not adhered to. *De facto*, this could either aggravate or alleviate the influence problem but, in both instances, would tend to diminish the accountability of directors to shareholders. Moreover, the directors of AC4 were directly involved in screening and nominating candidates to the BoD. Likewise, in the other cases, it was observed that directors had a strong influence on who is nominated for elections to the BoD. In all cases, this constrained the ability of shareholders to influence policy and to hold directors accountable for their decisions.

An important difference observed between the cases was the level of external influence at board level. The two cases that were adding the least value (AC1 and AC2) had relatively high levels of external influence. In AC2, an honorary advisor played a dominant role in making management and strategic decisions, and the manager was appointed externally. Respondents claimed that the honorary advisor controlled the cooperative. This stripped the board of its power to hire and fire the manager, weakening the manager's accountability and exacerbating the control problem. The situation was similar in AC1 where the board's power to fire the manager was compromised by allowing a member of the board to serve as manager. In both cases, non-elected directors were appointed to assist the cooperative in managing its activities. However, respondents indicated that the non-elected director in AC2 was appointed to safeguard the vested interests of a financier. In this instance, the financier's interests aligned more strongly with those of patrons than with those of investors as most its lending was to the farmers and not to the cooperative. Consequently, it is unlikely that the financier's influence would have favoured the retention of profits to finance value-adding assets.

5.3.2 Observed group attributes

Rosairo (2010, p. 95) contends that an influence problem arises where interest groups within the cooperative are able to influence policy and management decisions that enhance their own interests rather than the firm's net worth. This is more likely to happen when member's voting rights are not proportional to investment, there exists heterogeneity in products and membership, and when ownership is not clearly separated from control. Heterogeneity is therefore expected to discourage investment in value-adding activities, especially when members participate directly in policy and managerial decisions.

AC4's position at the top of the value-adding scale appears to contradict this proposition as it had the largest membership and geographic spread. However, it was the only case that marketed a single product, and – unlike AC1 – its members did not participate directly in board or management decisions. AC1, at the low end of the value-adding scale, allowed farmerpatrons and non-farmer transactors to participate in bi-monthly meetings where policy and strategic decisions were taken. Product homogeneity and the separation of ownership from control appear to outweigh heterogeneity in membership as a determinant of value-adding activity. This finding is consistent with the results of Rosairo et al's (2012) study of producerowned companies in Sri Lanka; companies that centralised decision-making in the hands of directors and managers performed better than those that opted for collective decision-making - even if their members were dissimilar and had equal voting power.

5.3.3 Observed management factors and business strategy

A cooperative's success in creating and sustaining value-adding activities also depends on the board's ability to hire, retain and motivate competent managers. Employing competent executive managers was reported to be a problem in AC1 and AC2 because the cooperatives could not afford capable managers, and directors were not skilled enough to select appropriate candidates. This problem was aggravated by the absence of tradable shares to reward management for good performance. AC1 and AC2 both had narrow organisational structures with small management teams. In AC3, control of the various business units was delegated to senior management executives. These executives were given autonomy to make key management decisions pertaining to production and marketing. The General Manager asserted that the skills of senior executives were appropriate for the current scope and level of business activity. However, AC3's management - like that of AC1 and AC2 - would be acutely tested if the cooperative expanded its core business to include more market oriented strategies.

AC4 had amended its management structure, retaining only those managers whose portfolios were financially healthy. These managers embraced the cooperative's mandate to add-value and made this a priority in their strategic objectives and business plans. This was not the case in AC2 and AC3 where management had given up on value-adding strategies owing to capital constraints and did not have a contemporary statement of objectives or business plans. AC1's managers, like those of AC4, made value-adding a priority objective and had developed

business plans to achieve this objective. In both cases, these plans involved a subsidiary company to circumvent the institutional problems that constrained their cooperatives' access to equity capital. Neither cooperative appeared to be aware of the likely consequences of this approach or of alternative 'cooperative' solutions to the low investment problem within the constraints of the CSA.

5.3.4 External support

In developing the theoretical framework summarised in Figure 2.2, it was recognised that differences in levels of value-adding could also reflect differences in exogenous factors impacting the case studies. A key factor in this regard was the impact of grant capital provided by government agencies and donor organisations to finance value-adding assets or related activities.

AC1 did not receive significant financial support from government or donor agencies. AC2's headquarters and irrigation system were financed as part of a vegetable project funded by the Ministry of Agriculture and other inter-governmental organisations. AC3 and AC4, the cases that added the most value, benefitted from relatively high levels of grant funding from government and donor agencies. However, neither of these cooperatives had been able to sustain all of their externally financed value-adding initiatives. AC3 had to abandon its branding initiative once it had exhausted the donor's project funding. AC4 had to close its tissue culture facility and was obliged to enter a joint venture with the Jamaican government and a private firm to refurbish and equip its storage facility. Even then, the cooperative's share of the joint venture was financed by a donor.

The level of value-adding observed was influenced by grant capital. This suggests that the cooperatives studied were capital constrained and relied on public support and gratis capital. While the evidence emphasises the fundamental and common problem of their weak institutional arrangements, it also suggests that some grant capital is required, not just to establish these cooperatives, but also to help finance and initiate modest value-adding services like grading, storage and packaging.

These findings are consistent with the results of Beverland's (2007) study of marketing strategies adopted by traditional cooperative and New Generation Cooperatives in New

Zealand. Both types of cooperative had succeeded in introducing brands, but only the New Generation Cooperatives had been able to sustain them. Beverland attributed this finding to the horizon problem that encouraged members of traditional cooperatives to seek immediate returns through higher prices. This made it difficult for traditional cooperatives to build predictable contractual relationships with buyers and retain profits.

5.3.5 Summary of findings

The analysis in Section 5.3 identified four attributes that distinguished cases with higher levels of value-adding from those that added little value to members' products. First, the ability of the board to hire and fire managers and hold them accountable for poor decisions was compromised in the lower value-adding cooperatives. Second, the highest value-adding cooperative (AC4) specialised in marketing a single product. At the other end of the valueadding spectrum, AC1 admitted non-farmer transactors as members and failed to separate ownership from control. Third, in the absence of investment-friendly institutional arrangements, cooperatives are not able to capitalise on the technical and operational skills of management even when these skills are relevant to their portfolios. Finally, the case studies require grant capital to help finance and initiate value-adding activities. However, without ongoing external support and appropriate institutional arrangements the cooperatives cannot sustain these activities.

5.4 Recommendations

This section presents recommendations based primarily on the empirical findings reported in Sections 5.2 and 5.3. The recommendations are targeted at policy-makers, directors, managers and other cooperatives in an effort to improve the value-adding ability of the agricultural marketing cooperatives studied. Particular attention is given to institutional changes that would help to ease capital constraints, taking into account changes possible within the limits of existing legislation, and alternative solutions that require amendments to the CSA.

5.4.1 Recommendations for institutional arrangements

The 'pattern matching' analysis revealed that low levels of value-adding observed in all of the cooperatives studied were consistent with their conservative institutional arrangements. Such

‘traditional’ marketing cooperatives struggle to attract the equity (and hence debt) capital required to finance value-adding assets as they undervalue capital and overvalue produce (van Bekkum & Bijman, 2006). As a result, member-patrons have little incentive to invest their own capital in the cooperative, and prefer to extract the cooperative’s profits immediately through favourable prices rather than reinvesting them in value-adding assets (the horizon problem). In addition, members have no incentive to supply products to the cooperative if they can find better prices elsewhere. This makes it difficult for the cooperative to predict supply and to build contractual relationships with buyers.

5.4.1.1 Cooperative solutions

Van Bekkum and Bijman (2006) describe two ‘cooperative solutions’ to the problem of undervaluing capital relative to produce. A ‘cooperative solution’ is defined as one which aligns the interests of members as both patrons and investors by making benefits proportional to both investment and patronage. Apart from solving a number of the institutional problems that discourage member investment in traditional marketing cooperatives, well-aligned interests help to reduce transaction costs in supply contracts with members.

The first cooperative solution is to link member investment directly to member patronage, i.e. to convert traditional marketing cooperatives into Proportional Investment Cooperatives (PICs). While this approach addresses the free-rider problems and helps to reduce transaction costs in supply contracts, it obliges rather than encourages members to invest as they still confront horizon, portfolio and control problems. Nevertheless, this partial solution may be sufficient for a marketing cooperative like AC2 as its core business does not require significant investment. Conversion to PIC status would not require any amendments to St. Lucia’s CSA.

The horizon problem could be alleviated by rewarding members with capital gains on their investment in the cooperative. However, this requires appreciable shares. The directors of a PIC could make its redeemable shares appreciable by revaluing them from time to time, or by issuing bonus shares. However, it is unlikely that these discretionary mechanisms would provide members with market-related capital gains. Directors tend to be conservative when using these mechanisms as any increase in the value of redeemable shares exposes the cooperative to additional redemption risk. Consequently, it is unlikely that the horizon

problem would be fully resolved by discretionary increases in the value of shares held by members.

The second cooperative solution is to sell non-redeemable, tradable delivery rights (supply entitlements) to members in proportion to their patronage, as in a New Generation Cooperative (NGC). Capital raised by selling non-redeemable delivery rights is permanent capital and does not expose the cooperative to redemption risk. Given sufficient liquidity in the market for delivery rights and an accessible trading platform, this NGC approach addresses the horizon problem and mitigates the portfolio problem as members can realise market-related capital gains when they sell or lease their delivery rights. The control problem is also alleviated as market prices paid for delivery rights provide information about a cooperative's expected performance. Another important advantage of the NGC approach is that the quantity and quality of product supplied by members in aggregate is more predictable. This helps the cooperative to build contractual relationships with preferred buyers. Patrons who are unable to meet their supply commitments have an incentive to sell or lease their delivery rights to other patrons, thereby improving the likelihood that the cooperative will still receive the full amount contracted. This is not the case in other cooperative models, including the PIC.

Notwithstanding, a weakness of the NGC approach is that it is best suited to marketing cooperatives that process a single product. Of the cooperatives studied, conversion to NGC status is most applicable to AC4 - a single product cooperative that intends to add value through processing and branding. This approach may also be applicable to AC1, a two-product marketing cooperative looking to differentiate its members' produce. In this instance, the cooperative would have to sell two different classes of delivery rights, one for broiler producers and the other for egg producers. Management would then have to dedicate these different pools of equity capital to value-adding assets that preserve proportionality between benefits, patronage and investment.

Although the NGC approach holds promise for some of St. Lucia's marketing cooperatives, its application would first require that the CSA be amended to allow cooperatives to introduce non-redeemable, tradable delivery rights into their ownership structure. Introducing delivery rights does not impact the critical cooperative features of member control and use. Hence, it is recommended that policy makers should amend the CSA to accommodate NGCs – a model

credited with the revival of agricultural marketing cooperatives in rural North America (Harris et al., 1996). Directors and managers of single product cooperatives like AC4 should give serious consideration to this option. Cooperatives that choose to convert from traditional to hybrid status should have access to expert advice and guidance sponsored by the Department of Cooperatives. In addition, cooperatives should maintain trading platforms to facilitate and record transactions between approved buyers and sellers, and to disseminate anonymous information about prices and quantities of delivery rights traded.

5.4.1.2 Non-cooperative solutions

Cooperative solutions would not be sufficient if cooperatives require additional equity capital that cannot be obtained from their own patron members. One alternative is to pursue 'non-cooperative solutions' (van Bekkum & Bijman, 2006). Non-cooperative solutions separate supply relationships from investment relationships. When capital requirements exceed levels that members are willing and able to invest, the cooperative could look to strategic partners or even to the public for equity contributions. In this instance, the cooperative converts to an investor-share cooperative (ISC) that offers B-class shares to non-patron members. This raises transaction costs in supply contracts owing to a conflict of interests between investors (seeking higher returns to capital) and patrons (seeking favourable price). As a result, the quantity and quality of product supplied by patrons is less predictable. Moreover, the ISC loses the advantage that a NGC has over an investor-owned company when building relationships with preferred buyers. This situation prevails even though B-class shares carry no, or limited, voting rights to prevent patron-members from losing control of their ISC.

Nevertheless, the ISC model is recommended when capital and other (less tangible) assets contributed by strategic partners are more critical than the efficiency advantages of a NGC. It is also recommended for cooperatives that handle multiple products as NGC's lose their advantage when conflict arises between members with different interests. The ISC model is certainly recommended over the 'Irish Model' involving a subsidiary company. As explained in Section 5.2.2, the Irish Model does not address institutional problems within the parent cooperative and this inevitably shifts value-adding assets to the subsidiary company, and control to the strategic partner.

Current proposals to amend the CSA include a provision for membership to be extended to strategic partners. However, the proposals make no provision for cooperatives to issue non-redeemable, tradable, B-class shares that carry no or limited voting rights. In New Zealand, cooperatives can list B-class shares on a public stock exchange, but owners of these shares cannot nominate more than 40 per cent of the elected directors even if they are, in aggregate, the cooperative's majority investor (Woodford, 2008). It is recommended that St. Lucia's CSA be amended to provide for a class of non-redeemable, tradable equity shares that carry limited or no voting rights if sold to non-patron members. This allow cooperatives to raise capital by selling B-class shares (with no or limited voting rights) to non-patrons, or by selling tradable delivery rights (with or without voting rights) to patrons. If the cooperative confines the market for these financial instruments only to approved buyers, management would need to maintain a trading platform to facilitate, monitor and record transactions of these instruments.

5.4.2 Recommendations for governance, group and management factors

The analysis in Section 5.3 supported proposals that value-adding performance would be higher in cooperatives where the board can hire and fire managers, and lower in cooperatives where externally appointed directors influence board decisions. It is recommended that the right to hire and fire executive managers should remain with the BoD and that executive managers should report to elected directors. In addition, where non-elected directors are appointed to the board, the elected directors should retain a voting majority to influence and make decisions. It is also advisable that all elected directors should be nominated and elected by shareholders to mitigate the influence problem. The results were consistent with the view that value-adding performance will be higher in cooperatives that clearly separate ownership from control by centralising decision making in the hands of accountable managers and directors. Members should be consulted but should not participate directly in decision making because of the influence problem.

The results also suggest that the ability of fledgling cooperatives to create and sustain value-adding activities is positively influenced by grant capital. While the evidence emphasised the fundamental problem of weak institutional arrangements that affected all of the case studies, it also indicated that some grant capital is required not just to establish cooperatives but also to help finance and initiate modest value-adding services like grading, storage and packaging.

Therefore, it is recommended that donor agencies should give more attention to the structure of the cooperatives that they support, and ensure that their institutional arrangements and governance practices are sufficiently robust to sustain the value-adding activities for which grant capital is provided.

Chapter 6

Conclusions

6.1 Introduction

The main objectives of this study were (a) to examine the impact of institutional, governance, group and management attributes on the value-adding activities of agricultural cooperatives in St. Lucia, and (b), to make recommendations aimed at improving their ability to create and sustain value-adding activities. The study drew on New Institutional Economics (NIE) literature and the conceptual model developed by Rosairo et al. (2012) to identify key propositions about relationships between these determinants of cooperative performance and their valueadding activity. Theory suggests that marketing cooperatives that adopt traditional institutional arrangements are less likely to add and sustain value-adding activities owing to the presence of institutional problems (namely, horizon, free-rider, portfolio, influence and control problems).

This study was particularly relevant in light of the key role that agricultural cooperatives are expected to play in diversifying St. Lucia's agricultural sector and enhancing its competitiveness in global markets. The study sought to answer two research questions:

1. What institutional, governance, group, management and value-adding attributes characterise agricultural cooperatives in St. Lucia?
2. How do these attributes influence the ability of the cooperatives to add and sustain value-adding activities?

The study employed a qualitative, multiple-case study approach to gather and analyse the data. Four agricultural marketing cooperatives were purposefully selected for in-depth interviews. Three of the cooperatives were located in St. Lucia and one in Jamaica. The Jamaican cooperative was added to the sample to increase variation in value-adding activity. The theoretical propositions derived from the conceptual model in Chapter 2 were tested against the data using a 'pattern matching' approach.

The remainder of this chapter synthesises the key findings and recommendations of the study in relation to the two research questions. It concludes with the study's contribution to the literature, its limitations and recommendations for future research.

6.2 Key findings and recommendations

At the time of the study, none of the cooperatives studied were actively engaged in processing or branding of their members' produce. Agricultural cooperative two (AC2) and agricultural cooperative three (AC3) were multi-product fruit and vegetable cooperatives that marketed their members' produce to local hotels and supermarkets with minimal added value. Agricultural cooperative one (AC1) was a poultry cooperative established to assist small-scale layer and broiler producers in production and marketing of their poultry products. It was the lowest ranked value-adding cooperative in the sample because its core activities were restricted to advocacy and product promotion. Agricultural cooperative four (AC4) was the only single-product cooperative in the study. It was the highest ranked value-adding cooperative because of its cold storage facilities and tissue culture laboratory.

The main empirical findings are chapter specific to the two research questions and were presented within the respective empirical chapters (Chapter 4 and Chapter 5). The first research question and objective was satisfied by documenting the institutional, governance, group, management and value-adding attributes of the agricultural cooperatives sampled. These findings revealed that all the agricultural cooperatives studied had very conservative institutional arrangements, and were capital constrained. Some have succumbed to the pressure and continued their activities with minimal added value (AC2 and AC3), while those most constrained (AC1 and AC4) were taking the route of the Irish Model (i.e. subsidiary company). Although the levels of value-adding differed between the cases, none of the cooperatives added substantial value to their members' produce by way of processing or branding. The findings documented in Chapter 4 were then used to test the theoretical propositions by relating the cooperative's observed value-adding activities to its institutional, governance group and management attributes.

Classification of the cases based on their institutional arrangements and observed value-adding showed that low levels of value-adding in all four cases were consistent with their conservative institutional arrangements. All of the cooperatives studied were exposed to the horizon, free-rider, influence, portfolio and control problems that constrain access to capital in traditional marketing cooperatives. The ability of the cooperatives to finance value-adding assets was also weakened by share redemption obligations. It was concluded that the

institutional arrangements adopted had a negative impact on the ability of the cooperatives to add and sustain value-adding activities. The institutional arrangements of the cooperatives did not create strong incentives for members to deliver produce to their cooperative. This creates uncertainty in supply and as a result, creating uncertainty in supply and, as a result, makes it difficult for the cooperatives to build relationships with premium buyers.

All the cooperatives studied had very similar, conservative institutional arrangements. As a result, the small differences observed in their levels of value-adding could not be attributed to differences in their institutional arrangements. However, differences in other attributes did correlate with the differences observed in value-adding. First, the ability of the board to hire and fire managers and hold them accountable for poor decisions was compromised in the lower value-adding cooperatives. Second, the highest value-adding cooperative specialised in marketing a single product. Third, in the absence of investment-friendly institutional arrangements, cooperatives were not able to capitalise on the technical and operational skills of management even when these skills are relevant to their portfolios. Finally, all of the cooperatives studied required grant capital to help finance and initiate value-adding activities. It was concluded that the cooperatives' need for ongoing external support signal the capital constraints and weak institutional arrangements of the cooperatives studied.

Section 5.4 presented recommendations to improve the value-adding ability of the agricultural cooperatives studied. These recommendations can be synthesised into three scenarios, depending on the cooperative's current need for capital and marketing strategy. Scenario one relates to cooperatives whose intentions are simply to market their members' produce with minimal added value. Management can look to convert the cooperative into a Proportional Investment Cooperative (PIC). This would assist the cooperative to address the free-rider problems and reduce transaction costs in negotiating and enforcing supply contracts. Converting to PIC status does not require amendments to St. Lucia's Cooperative Societies Act (CSA).

The second scenario relates to single-product cooperatives that require additional capital to add value or access preferred buyers, and can obtain that capital from its members. These cooperatives should introduce and sell non-redeemable, tradable delivery rights to members in proportion to their patronage. This solution would address the horizon, portfolio and

control problems, and would not expose the cooperatives to redemption risk. Cooperatives that adopt this approach would also benefit from greater predictability of quantity and quality of product supplied by members, thereby helping the cooperative build contractual relationships with preferred buyers. However, it was concluded that conversion to New Generation Cooperative (NGC) status would be most applicable for single product cooperatives.

The third scenario targets both single and multi-product cooperatives that require additional equity capital that cannot be obtained from their own patron members. In such a case, it is recommended that the cooperative convert to an Investor Share Cooperative (ISC) that offers B-class shares to non-patron members. Although this approach may incur efficiency losses in the cooperative, it is recommended over the Irish Model involving a subsidiary company, because this model does not address the institutional problems within the cooperative. This is likely to result in a situation where ownership of the value-adding assets shifts to the subsidiary company and in the control of strategic partners. In addition, the lack of proportionality between investment and patronage can expose the cooperative to a hold-up problem. This problem reduces the incentive for investors to invest in asset-specific investments. It was concluded that whether the cooperative adopts the NGC or the ISC model, the CSA would have to be amended to accommodate a class of non-redeemable, tradable equity shares that carry limited or no voting rights if sold to non-patron members.

Owing to lack of variation in the cases, some of the theoretical propositions could not be tested empirically. For example, in all the cases, directors had a strong influence on who is nominated for election to the BoD. Therefore, it was not possible to test the proposition that directors' influence on shareholder nominations to the BoD weaken the cooperatives' valueadding performance. Nonetheless, it is advised that elected directors should be nominated by only shareholders to avoid aggravating the influence problem caused by democratic voting rights.

For all the cooperatives studied, it is recommended that good governance and management practices are implemented and adhered to. This means that the right to hire and fire executive managers should remain with the board of directors, and that executive managers should report to elected directors. It is also recommended that there is clear separation between

ownership and control by centralising decision making in the hands of accountable managers and directors. These recommendations would be particularly vital if the cooperatives decide to hybridise their structure. Finally, it is advised that donor agencies give more attention to the structure of the cooperatives to ensure that the value-adding activities that they support are sustainable.

6.3 Study's contribution, limitations and future research

This study contributed to the literature by documenting the internal arrangements of three agricultural cooperatives in St. Lucia, and generated rich information about relationships between their institutional arrangements and value-adding endeavours. The research also generated evidence-based recommendations for improving the value-adding ability of agricultural cooperatives in St. Lucia. Although not generalisable to all marketing cooperatives, many of the findings and recommendations are relevant to other cooperatives in the Caribbean. In addition, the findings and corresponding recommendations also highlight the need for policy makers in St. Lucia to amend the Cooperative Societies Act to allow cooperatives to hybridise their structure to support more market-orientated strategies.

A key limitation of this study was the lack of significant variation in the levels of value-adding between the cases. This made it difficult to conduct cross-case comparison of the case studies. In addition, due to the small number of agricultural cooperatives in St. Lucia and budgetary constraints, selection of the cases did not take into account the age (years of existence) and financial performance of the cooperatives studied.

Going forward, action research is required to pilot institutional change in one or two single and multi-product cooperatives. Such research could contribute significantly to the learning and experience required in St. Lucia for widespread innovation in these important agribusiness organisations. This would also entail training of staff in the Registrar of Cooperatives to identify and facilitate the changes required to help cooperatives with different business strategies and capital requirements, not just in St. Lucia but in the broader Caribbean region.

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Appendices

Appendix 1: Outline of the interview topics that were used to conduct the semi-structured interviews.

1. Cooperative characteristics

- 1.1 History and background of the cooperative
- 1.2 Membership
- 1.3 Services offered
- 1.4 Organisational structure
- 1.5 Strategic objectives, goals, vision and mission
- 1.6 Core business activities
- 1.7 Major successes/achievements and challenges encountered from time of establishment
- 1.8 Financing, growth in assets, financial position

2. Institutional arrangements

- 2.1 Membership requirements
- 2.2 Voting entitlements of members
- 2.3 Nature of benefit rights accrued to members

3. Governance arrangements

- 3.1 Organisational structure
- 3.2 Selection and election of directors
- 3.3 Procedure for electing directors and chairman
- 3.4 Procedure for reporting to membership
- 3.5 Duties, power and composition of the board of directors
- 3.6 Performance based measurements

4. Group factors

- 4.1 Composition of membership, average age, shareholding, level of patronage and investment
- 4.2 Product categories produced by members (single product or multi-product)
- 4.3 Level of participation in policy and managerial decision making
- 4.4 Level of on-farm investment

5. Management factors

- 5.1 Portfolio and qualifications of senior management
- 5.2 Leadership qualities of senior management
- 5.3 Senior executive modus operandi
- 5.4 Management perception of constraints with regards to value-adding

6. Value-adding ability

6.1 Funding sources

6.2 Financial position (performance) of the cooperative

6.3 Growth in membership

6.4 Relationship with business partners

6.5 Credit worthiness: ability to secure loans from a commercial bank

Appendix 2: Consent Form



Consent Form

Project Title:

Institutional factors affecting the ability of Agricultural Cooperatives in St. Lucia to add value to member products

-
- I have read and understood the description of this project;
 - I agree to take part in the project;
 - I understand that the information I have provided can be withdrawn at any time before Friday 29th, July 2016;
 - I understand the results of this study will be published, but my identity will remain anonymous.

Name: _____

Signed: _____

Date: _____ Participant Identification Number: _____

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Appendix 3

Table 3a: Summary of background, organisation, institutional arrangements and value-adding attributes of AC1

Attribute	Details
Date of establishment	May 15th, 2013
Initiation	Ministry of Agriculture, poultry farmers
Assistance received	Ministry of Agriculture (technical). Have not received financial assistance
Registered members	67 (2015)
Degree of external influence	Moderate-Strategic partners
Separation of ownership and control	low
Membership (average age, % active)	40 years, 70-80% active.
Types of shares	Redeemable, non-tradable equity shares
Product category	Poultry products (meat and eggs)
Core business	Marketing, product promotion with intentions to engage in processing
Voting rights and procedure	Democratic; Show of hands
Number of directors	5
Membership	farmer patrons and transactors affiliated with poultry industry
Benefits basis	Patronage and dividends
Status of General Manager	Temporary volunteer, registered member
Preparation of financial statements	Manager and auditor
Number of employees	1 (2015)
Value-adding activities	Advocacy and product promotion. Intends to process poultry products, product differentiation
Subsidiary company	In the process of setting up a subsidiary company to process its member's produce
Long-term business relationships	Yes. Input suppliers, private hatcher, feed producer
Markets	Mainly local with opportunities for regional trade

1. At the time of the study, information pertaining to member equity capital and total assets were not provided to the researcher.

Table 3b: Summary of background, organisation, institutional arrangements and value-adding attributes of AC2

Attribute	Details
Date of establishment	April 22 nd , 2008
Initiation	Ministry of Agriculture, Inter-governmental organisation
Assistance received	Ministry of Agriculture, Taiwanese mission, Peace Corps (financial and technical)
Registered members	34
Degree of external influence	high
Separation of ownership and control	Medium
Types of shares	Membership shares. Redeemable, non-tradable, transferable
Members' share capital	XCD34074 (2013)
Voting rights and procedure	Democratic; show of hands
Product type	Multi-product
Core business	Marketing, distribution
Number of directors	5
Non-registered patrons	Yes
Benefits basis	Patronage and dividends
Non-Patron investors	No
Status of General Manager	Temporary
Preparation of financial statements	Temporary manager. Prior to her appointment, auditor
Number of employees	Fulltime: 4, temporary: 3
Value of total assets	XCD538125 (2013)
Value-adding activities	Irrigation, sorting, marketing and distribution of produce
Subsidiary company	No
Long-term business relationships	Yes. Mainly supply relationships with supermarkets, hotels
Markets	Local

Table 3c: Summary of background, organisation, institutional arrangements and value-adding attributes of AC3

Attribute	Details
Date of establishment	April 4 th , 1986
Initiation	French Agricultural Mission, Ministry of Agriculture
Assistance received	Ministry of Agriculture, French Agricultural Mission, donors (financial and technical)
Registered members	322 (2015)
Degree of external influence	Moderate-strong by funding agencies
Separation of ownership and control	medium
Membership (average age, % active)	Majority over 50 years, 25-30% active.
Types of shares	Membership shares; redeemable, non-tradable, transferable
Members' share capital	XCD92625 (2013)
Product category	Multi-product fruit and vegetable
Core business	Input supply and marketing
Voting rights and procedure	Democratic; Show of hands
Number of directors	7
Non-registered patrons	Yes. With no differentiation in pricing strategy
Benefits basis	Patronage and dividends
Non-Patron investors	No
Status of General Manager	Permanent. Registered member
Preparation of financial statements	Accountant and manager
Number of employees	20 (2015)
Value of total assets	XCD2015802 (2013)
Value-adding activities	Seedlings, sorting, marketing and, organic farm, brand
Subsidiary company	No.
Long-term business relationships	Yes. Input suppliers, supermarkets, hotels
Markets	Mainly local with opportunities for regional trade

Table 3d: Summary of background, organisation, institutional arrangements and value-adding attributes of AC4

Attribute		Details
Date of establishment		23 rd March 1959
Initiation		Founded by Irish Potato farmers with assistance from government.
Assistance received		Ministry of Agriculture, International donors and Intergovernmental organisations
Registered members		Approx. 5500 (2013)
Degree of external influence		Moderate influence by the Ministry of Agriculture
Separation of ownership and control		High
Membership (average age, % active)		Majority over 50 years, <30% active.
Types of shares	Permanent	Non-redeemable, Non-tradable, non-withdrawable
	‘Ordinary’	Redeemable, non-tradable, transferable to members, withdrawable
Members’ share capital		JMD454229 (2013)
Deferred shares		JMD340000 (2013). Not withdrawable before 5 years
Product category		Mainly Irish potatoes
Core Business		Input supply, storage and marketing
Voting rights		Delegates system. Democratic at the district branch.
Number of branches and delegates		26 branches, 40 delegates.
Voting procedure		Show of hands
Number of directors		9
Presence of non-registered patrons		Yes. With no differentiation in pricing strategy
Benefits basis		Patronage and dividends
Non-Patron investors		No. Only in joint ventures
Status of General Manager		Contracted on 3 year basis
Preparation of financial statements		General Manager
Number of employees		30 (2014-2015)
Value of total assets		JMD154.6 million (2013)
Value-adding activities		Inputs, marketing, grading, warehousing, packaging , distribution
Subsidiary company		Yes. Handles processing and marketing
Long-term business relationships		Yes. Input suppliers, supermarkets, hotels
Markets		Mainly local with opportunities for regional trade