

Examining Success Factors for Sustainable Rural Development  
through the Integrated Co-operative Model

## Final Research Report

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## Abstract

**T**HIS IS THE FINAL RESEARCH REPORT for the CCA-IDRC research project titled “Examining Success Factors for Sustainable Rural Development through the Integrated Co-operative Model.” The research was carried out between March of 2013 and March of 2016 in four partner countries: Uganda, Rwanda, Tanzania, and Canada. The research applied quantitative and qualitative methods to examine the potential of the Integrated Co-operative Model (ICM) in their particular contexts. The report concludes that the ICM in Uganda has yet to meet its full potential, but that the model is sound. In practice, the financial co-operatives (Savings and Credit Co-operative Societies, or SACCOS) and marketing co-operatives (ACEs) are not fully performing their expected roles within the integrated model in providing services to the farmers of producer co-operatives (RPOs). The report provides recommendations for improvement. In Tanzania, the model is not formally adopted, but many aspects of the model are taking place in practice informally on the ground. The study concludes that there is great potential for the model in Tanzania. It is recommended that the model be formally adopted into co-operative policy to support the development of ICM in Tanzania. In Rwanda, similar to the case of Tanzania, the model has not been formally adopted. However, upon close examination of the features of the model and co-operative policy and practice in Rwanda, the study concludes that in Rwanda as well, there is much potential for the model to contribute to rural sustainable development. In Canada, the model also has much potential.

**Keywords:** Co-operatives, integrated, rural development, Tanzania, Rwanda, Uganda

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The Independent Institute of Lay Adventist of Kigali also became a university during the time of the research. The institution is now the University of Lay Adventists of Kigali

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# Examining Success Factors for Sustainable Rural Development through the Integrated Co-operative Model

## Section One

### Synthesis of Country Research Results

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## 1 Introduction

**A**GRICULTURE IS THE BACKBONE of the majority of economies in the developing world, accounting for between 30 and 60 percent of the gross domestic product of many countries. Yet the majority of farmers in developing nations are poor and face serious challenges, such as an inadequate resource base, labour bottlenecks, lack of access to capital, high cost of inputs, low prices for commodities during harvest seasons, limited infrastructure for storage and transport, little social protection, and climate change. These challenges are reflective of personal and societal poverty and are often exacerbated by a vicious cycle in which farmers borrow money at high interest rates to purchase seed and other inputs, often experience low yields under increasingly unpredictable climate conditions, and then must sell their products at harvest time, when the market is flooded and prices are low. As a result, they experience difficulty in repaying loans and in accumulating savings. Ironically, this may deepen farmers' dependence on markets and expensive credit and undermine farmers' ability to sustain their livelihoods. There is a high correlation between poverty and rurality (Anriquez and Stamoulis 2007). Major barriers to poverty alleviation and "the sustained improvement of the (rural) population's standards of living or welfare" (Anriquez and Stamoulis 2007, 2) noted by the International Fund for Agriculture and Development (IFAD) include lack of social services in remote rural areas, lack of access to markets, and lack of power to influence decisions on service delivery at the local, regional, and national levels (IFAD 2001).

Research has indicated the benefits of co-operatives for addressing several of the problems faced by rural dwellers; particularly smallholder farmers. Birchall (2003) examined the historical record of co-operatives around the world in poverty reduction, and has concluded that co-operatives can play an important role in reducing poverty in developing countries. He argues that not only do co-operatives "succeed in helping the poorest and most vulnerable people to become organized" (62), but where there are several possible forms of organiza-

tion “cases demonstrate that the co-operative form is — for the aim of poverty reduction — superior” (62). Further, there is broad agreement on the positive role played by co-operatives in view of economic development and poverty reduction (Wanyama, Develtere, and Pollet 2008; Birchall 2003; Birchall et al. 2008).

Co-operatives have developed widely in Canada in numerous kinds of communities (MacPherson 1979; Fulton 1990; Fairbairn, MacPherson, and Russell 2000; Fairbairn 2001). They have proven to be a sustainable model for rural development (Fulton and Hammond Ketilson 1992; Hammond Ketilson et al. 1992; Hammond Ketilson et al. 1998; Gertler 2004) and play an exceptional role in northern communities (Hammond Ketilson and MacPherson 2001).

Case studies examining the co-operative movements in Tanzania and Sri Lanka show that co-operatives both reach the poor and raise members’ incomes (Birchall and Simmons 2009). Chambo, Mwangi, and Oloo (2007) found that co-operatives have contributed to the reduction of income poverty as well as directly and indirectly increasing employment levels. One of the recommendations of the study was that co-operatives should work towards vertical and horizontal integration to be more effective (Chambo et al. 2007).

Other research points to the positive socio-economic impact of co-operatives in Africa, such as individual empowerment, increased involvement of women and youth in community decision-making, and improved leadership skills and succession planning, as well as addressing their institutional context and impact on the policy environment. Co-operatives have also been shown to be resilient in times of economic crisis (Birchall and Hammond Ketilson 2009).

A 2011 study commissioned by the Canadian Co-operative Association highlights some of the benefits of membership in credit unions for Ghanians: For example, 83 percent of members surveyed felt that they were better off than five years previously, against only 40 percent of nonmembers. In addition, credit union members reported the acquisition of more assets in the last five years than non-credit union members (van Oosterhout and Dzandu 2011, 2).

### **1.1 Integration in the Co-operative Context**

It is recognized in the business literature that integration is important for business efficiency, but that it must also be balanced with differentiation (Lawrence and Lorsch

1986). Lawrence and Lorsch defined integration, for a single organization, as the “state of collaboration that exists among departments that are required to achieve unity of effort” (1986, 11). This research looked across and between co-operative organizations rather than departments within a single organization. Co-ops work together to “achieve unity of effort” to meet the needs of members.

The word integration can mean different things in different contexts. Co-operative organizations can be integrated horizontally or vertically, or can be part of vertical financing systems involving other organizations, which may or may not be co-operatives. Some types of integration, and co-ordination, among co-ops include the following:

Vertical integration includes joint administration, in the same company, of two or more stages of production and marketing (Harte 1997). Hobbs, Cooney, and Fulton note that vertical integration involves multiple functions within a single organization, and that this should be seen as distinct from vertical co-ordination, which involves multiple organizations in a vertical value chain network (2000).

Value chain financing is another area in which a type of co-operative integration may take place. Access to sufficient and well-timed financial services for all actors in the value chain is a key element for business success (see, for example, KIT and IIRR 2010). This financing can come in many forms — through other businesses involved in the chain, through banks, micro-finance organizations, or financial co-operatives (credit unions). The inter-dependent linkages of a value chain and the security of a market-driven demand for final products can provide those throughout the chain (suppliers, producers, processors and marketing companies) with more secure channels for access to and sale of products. Financial instruments developed or adapted for use in financing value chains include warehouse receipts, forward contracts, and guarantees (FAO 2012). The World Council of Credit Unions (WOCCU) supports co-operative value chain financing.

Multipurpose co-operatives are another way that multiple member needs can be met, particularly in rural areas. A multi-purpose co-op may offer financing, produce and sell inputs, and process, package, and market products. A multipurpose co-operative offers advantages through the vertical integration of a variety of functions that all lead to the final sale of a product or service to the ultimate user (USAID 1985). It may also engage in several unrelated lines of business, a form of horizontal integration.

One of the reasons that co-operatives work together is in keeping with the 6th Co-opera-

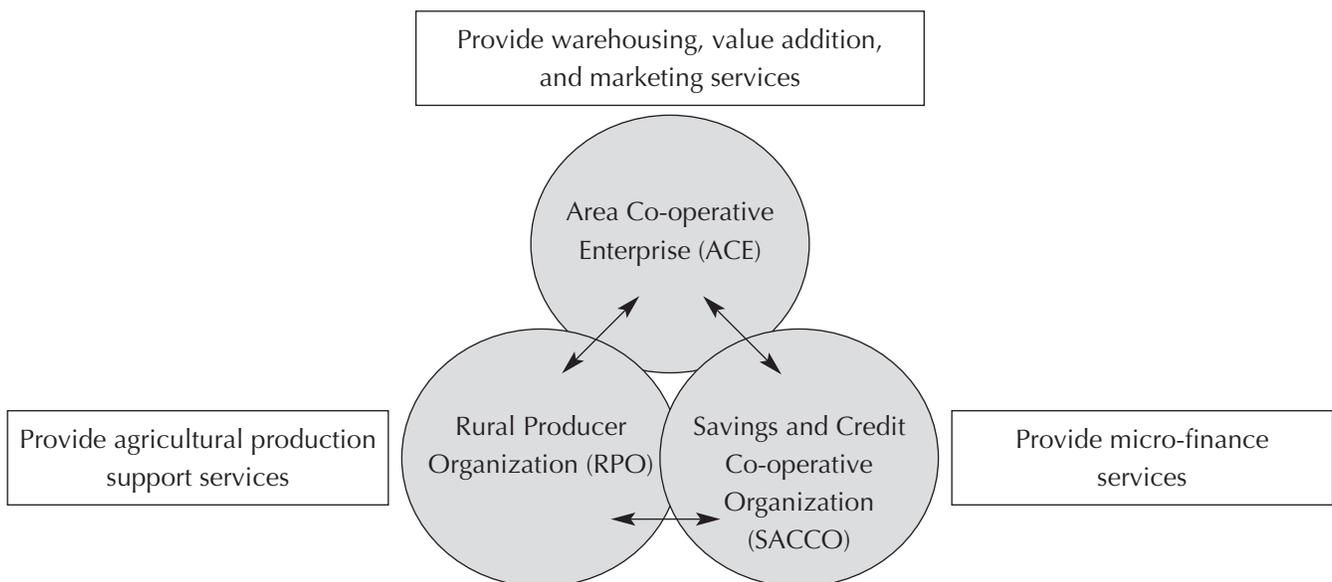
tive Principle — “Co-operation among Co-operatives.” This principle states that “Co-operatives serve their members most effectively and strengthen the co-operative movement by working together through local, national, regional and international structures” (ICA 2012). In this research, integration is used to refer to ways in which co-operatives work together to increase their own business success, thus better meeting the needs of their members. For example, in some cases producer co-operatives work together with financial or marketing co-operatives with the idea of improved services in all three; others do not operate this way but have access to other kinds of co-operatives.

## 1.2 The Integrated Co-operative Model

One model that has emerged — the Integrated Co-operative Model (ICM) — aims to improve the livelihoods of rural farmers in the developing world through the integration of three functions:

- Agricultural production
- Marketing
- Access to financial services

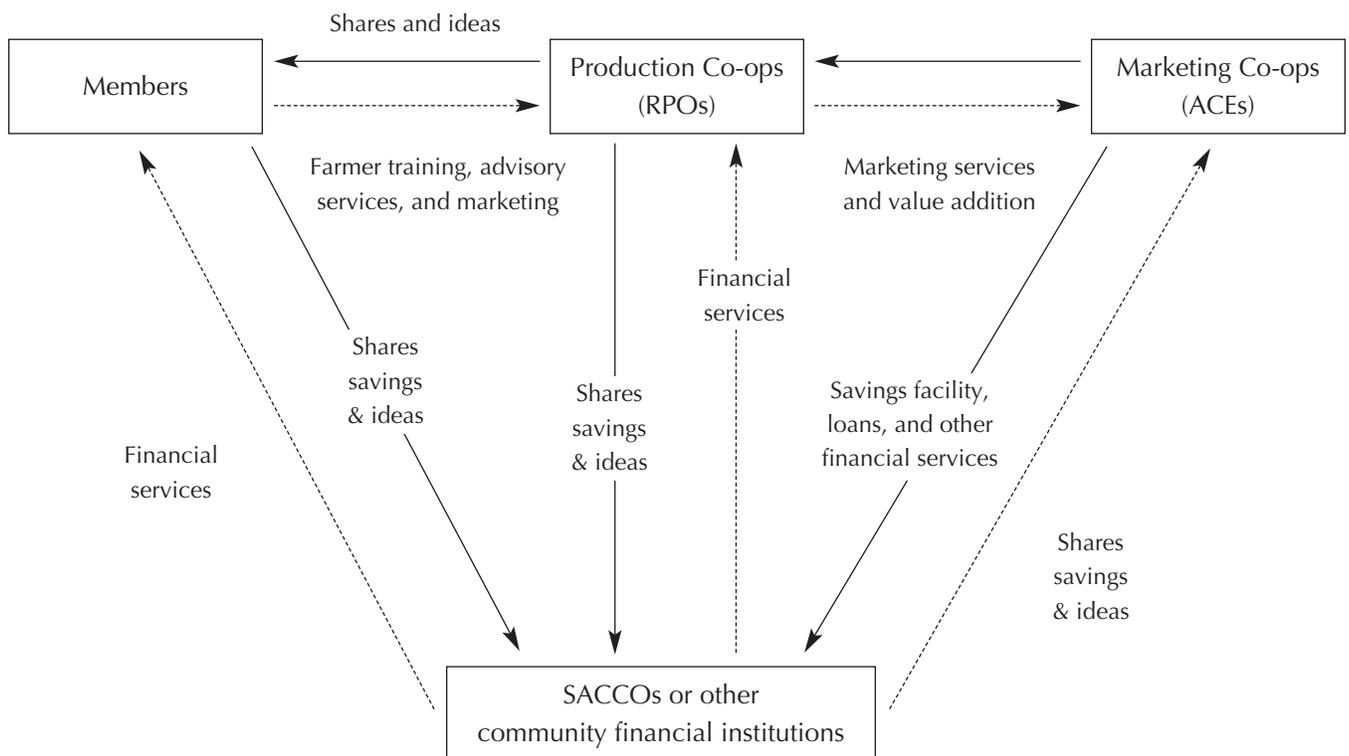
The model can be pictured as follows:



NB: The inter-linkage implies all serve the members of the same community. Source: Innocent Muhereza 2015

In this model currently in use in Uganda, production, marketing support, and financial services are interlinked yet separate. Rural Producer Organizations (RPOs) are made up of individual smallholder farmers, who join together to increase their agricultural production and productivity, and to bulk, or aggregate, their production for sale. Area Co-operative Enterprises (ACEs) are second-tier co-ops focused on marketing, typically made up of six to ten production co-ops working together to take advantage of economies of scale. These co-ops provide market information, source agricultural inputs in bulk, assist with strengthening of market linkages, and help to negotiate bulk sales at good prices. They also help to supply training, and offer various other services to members. Savings and Credit Co-operative Societies (SACCOS) are the third element of the model: co-operative financial institutions that act as engines for the development and growth of the two other types of co-operatives involved. SACCOS provide the finance that is needed in order to enhance agricultural production and productivity and run sustainable farm businesses.

### Integrated Co-op Model Summarised



Source: Innocent Muhereza 2015

Working within this integrated model, co-op members identify opportunities and make choices, to attain both individual and collective goals which include increased food production and productivity, linkages to larger markets and access to better prices, and access to affordable financial services. Accumulated research and experience show that while small farmers acting alone do not always benefit from higher market prices, those acting collectively in strong producer organizations and co-operatives are better able to take advantage of market opportunities and mitigate the negative effects of food and other crises (FAO 2012).

Whereas much co-op development focuses on supporting a single co-operative or group of co-ops at a time, this model supports the joint development of three distinct but interconnected, networked co-operatives (production, marketing, and finance) to achieve rural development goals.

## 2 Purpose of the Research

**M**UHEREZA AND KYOMUHENDO (2010) have studied the integrated model in practice. They found that through the integrated model, farmers have improved access to markets and extension services through their production and marketing co-ops, and improved access to credit through their membership in financial co-ops. They found that implementation of the integrated model had resulted in improved household incomes, as well as increased food security for both male- and female-headed households. They note how the co-ops involved mutually reinforce each other: “SACCOs [financial co-ops] provide financial services but also gain from the growth through increased demand and savings deposits; ACEs [marketing co-ops] offer services but also earn from increased commissions when more players come in” (Muhereza and Kyomuhendo 2010, 97). Mugisha et al. (2012) and others indicate that access to credit is among the most important determinants of whether or not farmers adopt new agricultural training and technology. This suggests that the integrated model may assist farmer co-op members in a number of ways.

The purpose of this research was to add to the existing body of knowledge regarding how to improve rural livelihoods and reduce poverty and inequality in a sustainable way, specifically through the implementation of an integrated model of co-operative development. The general objective of this research was to improve programming in rural develop-

ment both in Africa and in Canada by obtaining new knowledge about integrated co-operative models in practice.

The research explored the added value of an integrated approach to co-operative development as a tool for rural development, as compared to the benefits offered by development of a single co-operative. It also examined the enabling conditions necessary for the integrated model to be developed and work effectively.

### 2.1 Specific Objectives

- Assess the Integrated Co-operative Model as it is currently employed in Uganda, identifying strengths, weaknesses, and recommended modifications
- Explore selected other models of co-operative integration to seek new knowledge that could be applied to the Integrated Co-op Model
- Compare the livelihood assets, satisfaction, and social capital of farmers who are involved in the Integrated Co-op Model with those of farmers who are not
- Compare development at the co-op level (considering business linkages, access to inputs and market, presence of warehouse receipt system, etc.) of the co-op businesses involved
- Identify key elements of an enabling environment that allow the model to achieve rural development results (in terms of poverty reduction, increased economic activity, etc.)
- Identify necessary conditions for implementing the model with beneficial results

## 3 Conceptual and Theoretical Framework

**A**LIVELIHOOD COMPRISES THE CAPABILITIES, assets (stores, resources, claims and access) and activities required for a means of living; a livelihood is sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long-term” (Chambers and Conway 1991, 7). People and their relationships are at the centre of the livelihoods concept. People’s capacity to make a living exists at the nexus of a set of inter-related constraints and possibilities that affect how

they are able to put together their livelihoods. The ability of people to get access to and use their assets is strongly conditioned by their vulnerability context, which is the way that social, economic, political, and environmental circumstances actually affect the way people make their livelihoods, through such factors as seasonality, trends, and shocks. “Livelihoods emerge out of past actions and decisions made within specific historical and agro-ecological conditions, and are constantly shaped by institutions and social arrangements” (De Haan and Zoomers 2005, 43). Although the livelihood concept is often dealt with as primarily voluntaristic or as a matter of agency on the part of rural actors, livelihood possibilities and outcomes are largely structural in that they are offered by the pathways, trajectories, tactics, strategies, constraints, and ways of understanding inscribed by the wider context in which rural people find themselves (Van Dijk 2011). Conditions of constraint and opportunity vary for different categories — including gender — of farmers, meaning those with different access to assets or those farming according to different scope or scale (Bryceson 2002).

For many small farmers in Sub-Saharan Africa, life and livelihoods are precarious, vulnerable, unpredictable, uncontrollable, and characterized by deprivation along multiple dimensions (Chambers, 2010). Poverty, when described only in income terms, does not capture the insecurity, uncertainty, marginality, and powerlessness that is its result. Poverty arises out of people’s unequal social relations, which dictate unequal relations to resources, claims and responsibilities. However, it is also through social relations (for example, through networks of family and friends) that many poor people survive.

Researchers (Chambers 1983, 1995, 2010; Hickey and du Toit 2007) have identified six dimensions of poverty:

- 1) Income or consumption poverty; the lack of basic needs; material deprivation. This is the lack of adequate income or assets to generate subsistence and income, and is the most basic perspective on poverty.
- 2) Physical weakness, which is characterized by under-nutrition, sickness, or disability.
- 3) Isolation, social exclusion, and adverse incorporation. This exclusion may be physical, as well as social, and may be caused by location, lack of access to goods and services, ignorance, illiteracy, or marginalization. Conversely, poor people may be included in society, but to their detriment (Hickey and du Toit 2007).
- 4) Insecurity and vulnerability. Poor people are insecure and vulnerable to emergencies, contingencies, and to becoming poorer or losing their livelihoods altogether.

- 5) Powerlessness, which has many dimensions — social, economic, political, cultural — and includes dependence and subordination in relation to access to assets, and the poor bargaining position of small farmers and asset-less labourers.

Because the experience of poverty has a strong subjective dimension and is specific to each context, development researchers should also be cognizant of:

- 6) The way the poor themselves would define their own situation.

These difficulties can lead to those oft-noted characteristics of poor farmers, often described as the cause of their problems, but actually their effect; this is the source of their well-known conservatism and tendency to risk minimization, for example. Many of these farmers find themselves caught in a ‘simple reproduction squeeze’ (Bernstein 2010) in which they pursue coping strategies that undermine their long-term capacity to maintain themselves (Ayele 2008). Still, poor rural people must possess a number of strengths and considerable local knowledge as they practice a “diversified portfolio” strategy of one sort or another in order to survive. This includes reducing vulnerability through social means by establishing and maintaining substantive relationships with other households, through which they get access to labour, land, networks, and other assets to make a livelihood. In the face of this complicated reality, successful pro-poor strategies for development must be complex and dynamic, as well as oriented towards reducing capriciousness, vulnerability and exposure to events and conditions that threaten livelihoods; enhancing security; and heightening people’s resilience and their capacity to respond effectively to opportunities, challenges and threats (Scoones 2009).

Risk factors operate at multiple levels of social reality and may have contradictory effects: through social interaction at the level of immediate social life, at the institutional level, and at the level of system, large structure, and discourse. This provides many places of entry and many things to study (Scoones 2005). At the level of the individual and household, livelihoods and livelihood security depend upon access to the healthy components of livelihood: land, labour, knowledge, healthy soils, seeds and other inputs, animals, markets, tools, and so on, and on the vulnerabilities faced. As rural livelihoods are in some sense community-based, they are also conditioned and affected by relations with family and neighbours. At the institutional level, they depend upon such things as government policies, institutional arrangements, and the role of the private sector. At the societal level, sustainable livelihoods require the establishment of rights and appropriate discourses, and are influenced by the

broader social arrangements of gender, class, ethnicity, and so on, that structure the relations of power within society (Jutting 2011; Pretty 2011; Jaffe and Gertler 2008). These issues all require study to get a full picture of livelihoods and their possibilities for transformation.

Rural development may be defined as those processes that substantially transform these conditions. Rural development is a multi-level, multi-sectoral process in which efforts at one level of human action create effects and the conditions for action at another. In an ideal world, efforts to enhance quality of life and livelihood would work across levels and sectors; they would enhance capacities and capabilities of individuals and households; increase the total productivity, flexibility, and diversity of livelihoods and the assets on which they depend; amplify the density and competencies of appropriate institutions and organizations — as well as strengthen public and common goods and resources available to the population at large; and improve programmatic and policy-making abilities — all while enhancing flows of information and responsiveness (Hodge and Midmore 2008; Scoones 2009). In contrast, research and development efforts often focus at only one level, that of the level of the individual or household. Even if successful, improving the situation of some individuals without regard to the broader context paradoxically runs the risk of deepening inequalities and poverty, especially for those who are relatively limited in resources. The success of the few can result in increased vulnerability, insecurity and unpredictability for the many. Given the importance of equity and reducing inequality to sustainability, it is questionable whether this situation should rightfully be called rural development. An alternative is also to pay attention to points of leverage in developing the level of the social — to the practices, organizations and institutions that channel people’s efforts, shape immediate conditions for production, and create new sources of strength for rural people and communities (Pretty et al. 2011; West et al. 2014). The role for co-operatives here is clear.

To the degree that rural development has relevance, it is to address the problems of Korten’s (1995, 21) “global three-fold human crisis — deepening poverty, social disintegration and environmental destruction.” According to Sen (1999), development should enhance the capacity for freedom, meaning that it should develop the autonomy, capabilities, entitlements and endowments of people through the creation of a society that enables this. This is accomplished in a variety of ways and the improvements are principally social, political, cultural and economic in nature. It is done by building sustainability; reducing inequality and the depth and number of people below the poverty line; building democracy and democratic institutions; increasing institutional complexity and creating an improved and appropriate

organizational ecology; creating and widening the middle class; and reducing the risk experienced by those least able to bear it. Development also includes encouraging social cohesion, which does not mean somehow creating a society without conflict but rather having appropriate ways of mediating divisions and differences. Co-operatives can play an important role in building democratic practice and improving the organizational ecology, as well as enlarging the collective capability space, of rural communities (Nunes 2015).

## 4 Research Methodology

**T**HE STUDY WAS FRAMED as community-based research (CBR), which can be defined as an approach to conducting research that sees communities as participants in knowledge production, dissemination, and implementation of results (Israel et al. 1998). The research results were also to be of some practical significance to the community. Given the principal of participatory democracy played out in co-operatives and the goals of our study on integrated co-operative development, we envisioned CBR as a way to embrace both the principles and practices of co-operatives in community work. To carry out the research, mixed methods — quantitative and qualitative - were used. Each method included multiple methodologies. Research conducted in Canada did not include household or primary co-operative level data collection due to the expense of utilizing such methodologies in the Arctic.

The intention of using multiple methodologies was to build both a breadth and depth of knowledge about the success of integrated co-operatives to rural development. All of the countries involved trained students in data collection techniques. Some of the methodologies used, particularly those common to qualitative research, were relatively new to the researchers, so additional capacity development was acquired in the research process.

### 4.1 Household Surveys

The primary data collection tool was a household survey used to measure the difference between single co-operative, double or multiple co-operative (integrated co-operatives) and nonmember (of a co-operative) households. The household survey asked both closed, quantitative questions and open-ended questions where study participants could

elaborate. A common household survey was developed for data collection in all three sites (see appendices in each country report), with some modification made to reflect country specific differences. A breadth of data was collected from household characteristics and demographics to variables concerned with agriculture production and dimensions of livelihoods. The household data was analyzed using Strata in Uganda, and SPSS in Tanzania and Rwanda.

**Table 1: Tools Application**

<b>Target Respondents</b>	<b>Methods</b>	<b>Tools for Data Collection</b>
Households (co-operative and non-co-operative)	Household survey	Survey questionnaire
Community Profiles	Focus group Community inventory Census materials	Interview guide Data collection template
Informal Groups	Focus group	Structured Interview guide
Members of Co-operatives	In-depth interviews Focus group Validation workshop	Structured interview guide
Leaders and Managers of Co-operatives	In-depth interviews Validation workshop	Structured interview guide
Policy Makers	In-depth interviews Document analysis	Structured interview guide

## **4.2 Focus Group Discussions**

A second data collection methodology was focus group discussions (FGD) used to develop profiles of the co-operative and to deepen understandings of how the co-operative worked in practice. The teams discussed what should be included in the FGD and guidelines were provided on how to analyze the data. Once the FGD was held, the researchers used the data to develop a profile of the co-operative in each site. The profile was to be central to the case studies. A structured interview schedule was employed including a standard set of questions across countries.

## **4.3 Case Studies**

The case studies were to be used as a way of contextualizing and deepening the analysis of the research at the sites. The actual case studies were more descriptive than ana-

lytical (see each country study). Case study writing was not widely understood and it was new to most of the researchers.

Because of the cross-sectional nature of the research, as opposed to longitudinal, proving direct causation was difficult. In order to address questions related to whether particular characteristics of co-op members contributed to improved livelihoods as opposed to causation being linked to a specific model, interviews were conducted to develop profiles a “typical” member. This information was used to enhance the overall understanding of the co-operative, its context and impact on the members.

#### **4.4 Validation Workshops**

A discussion of the results with the community was envisioned as an important part of this community-based research. These discussions or validations were used to ensure that the community concurred with what the research team had interpreted or understood about the community’s input and the data collected/analyzed and/or an opportunity to clarify and add additional information. The validation workshops provided a way to explore issues in the household survey or FGD which were seemingly unclear or in need of elaboration. See Annex 12 for guidelines provided to the research teams about validation workshops.

Working with the community to validate and discuss knowledge sharing and transfer is widely supported as part of community-based research. Minkler (2005) describes it as “a co-learning process to which community members and outside researchers contribute equally, and achieve a balance between research and action” (4). The validation workshops aimed to further distribute power over the research results and the community members consulted in the validation workshops were widely surprised to learn about the preliminary results and to be asked to elaborate on various points because validating results and discussing points for clarification was not a common research practice in the participating countries. The validation workshops were received as an important mechanism to achieve effective knowledge transfer and implementation of recommendations. The validation workshops both validated the findings of the researchers and in all countries and sites, they provided the researchers with additional data.

#### **4.5 Data Collection and Policy Research**

The policy research for this study was gathered through stakeholder and key informant interviews and document analysis. The Tanzanian team was responsible for collecting policy data for each of the three East African countries.

#### 4.6 Study Sites

The research was conducted in Uganda, Tanzania, and Rwanda, as well as Canada. Because Uganda is the only location of the three countries where examples of the Integrated Co-operative Model can be found, comparable models were sought for comparison in the other three countries.

In Uganda, data was collected from households and co-operatives in Western Uganda (in Ntungamo district) and Northern Uganda (in Nebbi district). In both regions, household members belonging to a co-operative that was part of an integrated model (ICM), those belonging to a single co-operative (SCM) as well as households where no one was a member of a co-operative of any kind, were selected and interviewed, and the co-operatives studied.

**Table 2: Ugandan Study Sites**

Location	Model Type	Co-op	Household Survey: # of Participants	Focus Group: # of Participants	Validation Workshops: # of Participants
Ntungamo (Western Uganda)	Integrated co-op model	Many	Rural: 141 Urban: 140		44
	Nonmembers	n/a	Rural: 50 Urban: 50		
				96 total	
Nebbi district (Northern Uganda)	Single co-op model	Many	Rural: 60 Urban: 59		49
	Nonmembers	n/a	Rural: 50 Urban: 50		

In Rwanda, two rice-growing co-operatives were chosen to be the focus of the research. In the Jabana Sector, Nyarugenge District, close to the City of Kigali, data was collected from members of Corika, an integrated co-operative, as well as nonmember rice growers in the immediate area.

In the Ntyazo Sector, Nyanza District, a province in southern Rwanda, data was collected from members of Agasasa an example of a single co-operative, and again, nonmember rice growers in the same area.

**Table 3: Rwandan Study Sites**

<b>Location</b>	<b>Model Type</b>	<b>Co-op</b>	<b>Household Surveys: # of Participants</b>	<b>Focus Group: # of Participants</b>	<b>Validation Workshops: # of Participants</b>
Urban: Jabana Sector, Nyarugenge District, City of Kigali	Integrated co-op model	Co-operative Rizicole de Kabuye (CORIKA)	100	16	80
	Nonmembers	n/a	~ 90	5	11
Rural: Ntyazo Sector, Nyanza District, a Southern Province	Single co-op model	Cooperative de Production du Riz d'agasasa (coproriz-agasasa)	100	17	75
	Nonmembers	n/a	~ 95	6	17

In Tanzania, data was collected in Moshi District (Kilimanjaro Region) as well as from Mbinga District (Ruvuma Region). Members of both agricultural marketing and financial services co-operatives (DM), members of only one co-operative society (SM), and nonmembers of both were included in the study.

**Table 4: Tanzanian Study Sites**

<b>Location</b>	<b>Model Type</b>	<b>Co-op</b>	<b>Household Surveys: # of Participants</b>	<b>Focus Group: # of Participants</b>	<b>Validation Workshops: # of Participants</b>
Moshi District (Kilimanjaro Region) (N=127)	Double members	Mruwia Agricultural Marketing Co-operative and Mruwia Savings and Credit Co-operative	26	Max 7	18
	Single members	n/a	59	Max 7	
	Nonmembers	n/a	42	Max 7	None

Mbinga District (Ruvuma Region) (N=101)	Double members	Kimuli Agricultural Marketing Co-operative and Muungano Savings and Credit Co-operative Society	27	<28	Unknown
	Single members	n/a	54	<28	Unknown
	Nonmembers	n/a	20	None	Unknown

The closest example in Canada to the ICM is an integrated service federation, Arctic Co-operatives Limited. In-depth interviews with key informants, document analysis, and participant observation contributed to the development of a case study.

## 5 Policy Environment

**T**HE POLICY ENVIRONMENT has been demonstrated to be key to creating enabling mechanisms for co-operative development. Achieving the correct balance between support and intervention, however, is a challenge. Experiences in African countries has been mixed on this front (Develtere 2008). This research examined the legislative and policy frameworks in each of Uganda, Rwanda and Tanzania with an eye to identifying the factors contributing to the development of the Integrated Co-operative Model in Uganda, and to identify the potential and challenges existing in each of Rwanda and Tanzania with regard to the ICM.

### 5.1 Uganda

In Uganda, co-ops were organized in a vertical, top-down structure for decades, but when the country's economic liberalization began in 1987 (Bazaara 2001), co-ops, having been heavily state supported, began to crumble. The co-operative sector in Uganda went through a dynamic process of restructuring and adjusting to the conditions of a liberalized economy (Afranaa-Kwapong 2012). In the late 1990s, the Uganda Co-operative Alliance

(UCA) and primary co-ops came together to try to develop a new model that would serve farmers' needs in the new context; the Area Co-operative Enterprise (ACE) was created. The ACE, a marketing co-op, meets the needs of the farmers by specializing in the marketing of multiple crops, as distinct from its predecessors.

In the early 2000s, the finance component was added. Since 2004, the Uganda Co-operative Alliance (UCA) has been working with outside agencies such as the Canadian Co-operative Association and the Swedish Co-operative Centre to develop and support an integrated co-operative model for sustainable rural development. There has been explicit support for co-ops from President Museveni, and co-operative organizers are thinking carefully about how government support can help to develop an enabling environment, while later being moderated to allow co-operatives to function independently as sustainable, community-based businesses.

## **5.2 Tanzania**

Co-operatives have a long history in Tanzania. As in Uganda, they flourished following independence, but then became part of state structures in a top-down approach, used as a tool for government policy. These co-ops were unequipped to deal with the competition that resulted from the trade liberalization of the 1990s (Bibby 2006), and suffered a substantial decline in business success and reputation. In 2000, a special commission was established to attempt to rejuvenate the co-operative sector in the country, and concerted steps began to be taken to support co-operatives. New legislation was passed in 2003, and in 2005, a Co-operative Reform and Modernization Programme (CRMP) was approved by the government. The CRMP, supported by the International Labour Organization, focuses on the themes of member empowerment and commercial viability, and is due to be in place from 2005 to 2015 (Bibby 2006).

The form of integration that exists in Tanzania is different from the Ugandan version. Savings and Credit Co-ops (SACCOS) are numerous and strong, and their federated model is an example of the way in which the co-ops integrate to better serve members. Meanwhile, farmer and marketing co-ops work together in some areas.

## **5.3 Rwanda**

Rwanda's first official co-operative was formed in 1953, and the co-operative movement in Rwanda has developed and changed considerably since then (Sentama 2009).

The first co-operatives were top-down structures largely benefiting the colonial government, and even after Rwandan independence, co-ops remained heavily influenced by the state and by donors on whom they depended (Sentama 2009). According to Sentama, since the 1960s, co-operatives have been dealt with by at least seven different ministries (2009).

During the genocide that began in 1994, many Rwandan co-operatives failed. Since then, however, the number of co-ops has risen significantly, to well above pre-1994 numbers (Sentama 2009). In 2006 Rwanda adopted a national policy for the promotion of co-ops, and the movement is strongly supported by the government, in particular through the Rwanda Co-operative Agency, a public institution in charge of promotion, registration and regulation of co-operatives in the country (RCA 2012). Its mission is to develop the co-operative sector, so that it “serves its members equitably [and] efficiently and empowers them economically” (RCA 2012). According to an official of the Rwanda Co-operative Agency, there are over 2 million co-op members in Rwanda, of whom half are members of agricultural co-operatives (Nkubito, no date). It is a promising time for co-operatives in Rwanda, with government support for revitalizing the co-operative movement, while aiming for it to remain autonomous and economically viable.

#### **5.4 Canada**

In the late nineteenth century, farmers in Quebec, Ontario, and Atlantic Canada developed co-operative creameries and cheese factories to meet the needs of the growing dairy industry. Canada’s first *caisse populaire* was founded by Alphonse Desjardins in Lévis, Quebec, in 1900. And in western Canada through the first decade of the twentieth century, farmers organized co-operatives in an effort to market their products (Co-operatives and Mutuals Canada 2016). Since that early beginning, co-operatives have developed widely in Canada in numerous kinds of communities (MacPherson 1979; Fairbairn 2001). They have proven to be a sustainable model for rural development (Fulton and Hammond Ketilson 1992; Hammond Ketilson et al. 1998; Gertler 2004) and play an exceptional role in northern communities (Hammond Ketilson and MacPherson 2001). Newer types of co-operatives such as those involved in health, housing, childcare, alternative energy generation, and neighbourhood development address the economic needs of low-income and other urban as well as rural groups (MacMurtry 2010).

Despite Canada’s relative wealth, rural dwellers — remote rural dwellers in particular —

continue to experience a lack of access to services, quality housing, affordable and healthy food, and accessible finance. Several models that support sustainable co-operative development have emerged that can facilitate people's work towards poverty alleviation and community development. In Canada's North, Arctic Co-operatives Limited (ACL) has evolved a multipurpose co-operative model to meet member needs. Research has demonstrated that where a co-op structure already exists, it is often more efficient to develop additional services to meet additional needs, rather than creating a new co-operative or other organization (Hammond Ketilson and MacPherson 2001). Thus, members have access to numerous products and services through a single co-op.

### 5.5 Results of Comparative Policy Analysis for Uganda, Tanzania, and Rwanda

In his research into the legislative and policy frameworks in the three countries, Chambo<sup>1</sup> identifies four conditions that led to the introduction of the Integrated Co-operative Model in Uganda.

There are four conditions which made the Uganda Co-operative Alliance discover the integrated co-operative model. First is its existence as a registered confederation of co-operatives since 1961. As a co-operative at the national level, the UCA has suffered all the negative aspects of a declining co-operative movement. The decline was either caused by government, but also in the years of the military rule when co-operatives were destroyed. The second condition is a continued exercise of the open conflictive model of government relations with the co-operative movement. As pointed out earlier, after independence, the government embraced the co-operative movement as an instrument of rural development, receiving open assistance such as subsidies and cheap credit. The third condition, was the attitude and position of the NRM government on the co-operative movement. While the 1991 Co-operative Act gave a substantial degree of autonomy, liberalization and privatization policies imposed strict competitive conditions which could not be absorbed by the co-operative movement previously embraced by government. Co-operatives had to learn through the hard way. At this point, the government assumed a temporary offloading stance. "If the co-operatives

1. Section 2 of this report (Policy Review) presents a comprehensive review of the history of co-operative development and associated legislation and policy frameworks in place in Rwanda, Uganda, and Tanzania.

cannot compete, let them go.” Responding to the decline and stiff competition, the Uganda Co-operative Alliance provided the fourth condition for the integrated co-operative model in Uganda. The Uganda Co-operative Alliance initiated the transformation process by first rejecting its hierarchical position to become an umbrella organization serving the co-operative movement through service delivery on education and training, capacity building and lobbying and advocacy. Second, the transformation process rolled back the co-operative enterprise at the local level in terms of members taking up responsibility for doing and controlling business outcomes.

The emerging outcome of co-operative business in agricultural co-operatives is the situation whereby the government has come up with a new co-operative policy of a complementary nature that recognizes the existence of the integrated co-operative mode in Uganda. While the legislation remains that of 1991, the new policy underscores the critical importance of the integrated model as we show in references to different sections of the policy.

Chambo conducted a comparative policy analysis for Rwanda, Uganda, and Tanzania, and concluded that there is both potential for, and challenges to, developing an integrated model for co-operative development similar to the ICM found in Uganda.<sup>2</sup> He identified that the integrated model is operating effectively in Uganda and the Ugandan policy has explicitly recognized the model. Co-operative policies in Rwanda and Tanzania have not formerly recognized the integrated co-operative model. However, in the two countries’ co-operative policies and laws, he identified aspects of an enabling environment which can favour the introduction of the integrated model. Such areas include organizational mechanisms leading to the integrated model as an outcome, a gradual process of moving toward autonomy and independence of the movement, and strategic capacity building for entrepreneurship development with the co-operative movement.

Chambo further concludes that structures for the integrated co-operative model do exist in all the surveyed countries. But, critical success factors emerging from the policy discussion above include the following:

- there is need for a policy and strategy of transformation from traditional co-operative societies to entrepreneurial co-operatives

2. Please refer to Appendix III of Section 2 (Policy Review) for a summary of similarities and differences found across the African countries included in this research.

- countries need strategic administrative models with strategic exit plans where some government responsibilities are handed over to the co-operative movement as it grows into a competitive system of organizations
- youth participation in agricultural marketing co-operatives is critical for the generation of new ideas and innovative co-operative business practices
- financial services by way of SACCOS, co-operative banks, insurance co-operatives and co-operative based social security funds are needed as part of the strategy for the integrated co-operative model in the East African countries
- the integration process may need to be located geographically at village or cell levels where all members have easy access to co-operative services
- there is need to improve private sector relations with the co-operative movement in an all-round strategy for promoting interaction between investor owned firms and co-operative enterprises. This includes the shareholding participation by co-operatives in investor-owned firms

### **5.6 Co-operative Development Policy in Canada**

In her review of co-operative development policy in Canada, Hammond Ketilson concludes:

It is quite evident that where legislative and policy support is present, coupled with access to funding or other types of incentives, such as tax credits, and supported by agencies whether government or sector-based, co-operative development proceeds and is often the model of choice. In Canada, however, because responsibility for co-operatives is divided between the federal and provincial or territorial levels, co-operatives are often caught between the differing policy agendas of the jurisdictions, falling through the cracks in between. Nowhere is this more true than in Canada's North.

Examples are numerous but one in particular stands out. In the late 1980s Arctic Co-operatives Development Fund invested considerable amounts of human resources, time, and money in their attempt to facilitate development of much needed credit unions in the North. They co-ordinated and participated in feasibility studies, recruited consultants, lawyers, and credit union experts from the south, and worked with various levels of government. Despite all of this, by the mid-1990s fiscal constraint and the creation of Nunavut preoccupied governments, and the idea of establishing of a credit union system lost support. Access to financial institutions remains an urgent need today.

## 6 Conclusions

**A** GREAT DEAL OF DATA was collected by the four participating research teams. Methodologies in the three African countries included comprehensive household surveys, extensive community and co-operative case studies, as well as in-depth interviews, focus group discussions, and workshops conducted in the communities to receive feedback and validation of the interpretation of the data. More than twelve hundred co-operative members and just under five hundred general community members were involved in these activities.

A summary of the major results from each country is provided in the next section. For a much richer and more in-depth review of the research results, please refer to the individual country reports.

### 6.1 Uganda

The study of the four co-operatives found in two regions in Uganda came to the following conclusions:

- Benefits of the integrated co-operative model (ICM) extend beyond members to the entire farming community. As a result, there were fewer differences than expected among participating households based on co-op membership.
- Co-op members within ICM experience fewer severe problems in production and marketing than those in single co-ops and non-co-op members.
- Co-operative integration fosters greater financial inclusion of smallholder farmers including women who have traditionally been avoided by financial institutions. There is greater financial literacy and access to credit among farmers as a result of co-op integration.
- Shared knowledge, access to good quality inputs and mutual support are key benefits from participating in co-operatives. Co-operatives expose farmers to better farming practices, training opportunities, markets and financial services. There is also increased social capital among co-operative members.
- Financial co-operatives (SACCOS) and marketing co-operatives (ACEs) are not per-

forming their roles in supporting producer co-operatives (RPOs) adequately. As a result, the benefits of the ICM are not being fully realized. There are a variety of reasons for this, from problems with limited markets, storage, and available capital to competition from middlemen (and even from some producer co-operatives) for marketing co-operatives and problems with staffing competency, trust, poor public relations, and competition from other financial institutions, as well as competition from Village, Savings and Loans Associations (VSLAs) for financial co-operatives. Both are affected by problems stemming from climate change and pests and diseases as that translates to unpredictability in supply, problems with repayment, and so on.

- Co-operatives have not significantly improved market access among smallholder farmers. Fewer farmers than expected sold their produce through the marketing co-operatives due to delayed payments, difficulties in transport, poor storage facilities and failure to secure markets. The warehouse receipt system meant to address the need for immediate cash to solve urgent financial needs such as school fees after farmers have bulked their produce, failed to take off. Further, there is currently reported some distrust of financial co-operatives (SACCOS) by small farmers due to a history of corruption and misappropriation of funds.

In general, however, the research showed that the integrated co-operative model has a great potential to improve livelihoods among smallholder farmers.

Unfortunately, in the regions studied, the model has not been working to its potential. The marketing co-operatives (ACEs) did not adequately address farmers' marketing challenges. The financial co-operatives (SACCOS) failed in their anticipated role of financing activities of producer co-operatives (RPOs) and marketing co-operatives (ACEs).

## 6.2 Tanzania

In Tanzania, small-scale farmers have opted for horizontal integration in the form of double membership in two types of co-operatives — Agricultural Marketing Co-operative Societies (AMCOs) and Savings and Credit Co-operative Societies (SACCOS) — as a strategy for improving livelihoods. The results of research into co-operatives in two regions led to the following conclusions:

- Members involved in the integrated model have relatively more wealth and have the comparative advantage of accessing various services provided in the community.
- Double members have opted for diversification of income sources as a livelihood strategy.
- There are very few women co-operative members due to the traditional land

inheritance system. Youth are not participating in co-operatives and agriculture. There is a need to diversify the traditional cash crop marketed through agricultural co-operatives to food crops, livestock and value addition activities to increase the participation of women and youth in rural primary co-operative societies.

- Nonmembers have identified financial liquidity as a factor denying them membership in co-operatives. In addition, members have identified nonpayment of loans as a major problem that is facing them in financial co-operatives (SACCOS). Some have resorted to informal financial services that are not secure. This indicates that SACCOS have a great role to play in the integrated co-operative model because farmers need funds. Further, some members indicated that they prefer Village Savings and Credit Associations (VSLAs) which have a long history in the area, offer uncomplicated structures, and are well trusted. There is a need to revisit the current conditions and services offered by SACCOS to suit various groups of people in the community and the production cycle.
- The role of the primary co-operative societies as a safety net through facilitation of social services and provision of social capital is recognized by the community. There is a need to enhance this role in the integrated co-operative model. Such responsibilities will enhance social inclusion in the respective communities.
- Most of the small-scale farmers who remain in the rural areas have only primary level education. This has implications for capacity building approaches, technological advancement and the conceptualization of policy and legal documents disseminated by the government. There is a need to use appropriate capacity building and mobilization approaches that take into account this level of education. In relation to policy and legal documents, there is a need to translate them into Kiswahili, which is a language that the majority of the people can read and understand.

### 6.3 Rwanda

In Rwanda, the research concluded that:

- The institutions of production, marketing, and access to financial services through co-operatives are integrated in a vertical, sector-based manner.

By working within the integrated model in place, co-operative members could:

- identify opportunities and make choices
- work together to attain both individual and collective goals such as to increase food production and productivity, create linkages to larger markets, access to better prices, and provide access to affordable financial services

And while the co-operative sector is doing fairly well, more needs to be done under the combined efforts of the policy makers, actors, practitioners, development partners, and all

other end-users, to make the movement more viable and vibrant, and for it to respond to its members' needs. More efforts are needed to support capacity building — skills and knowledge provision to members, leaders, and employees of co-operatives, as well as the co-operative extension services providers.

#### **6.4 Findings in Common**

The three African cases analyzed the results of the household surveys using a series of indicators and indices relevant to the question of how co-operatives might interact with or contribute to sustainable livelihoods and rural development. While a fuller picture is offered in each of the three separate country reports, some interesting commonalities are noted here.

Members of the integrated (ICM) or double model tend to have more money, are wealthier in land and consumption items and have better houses than single or nonmembers, but may not be higher in food security. In Uganda, members of the integrated model may be spending their money on expensive schools or getting involved in competitive consumption. Female members, however, are less wealthy and have fewer consumption items than males. ICM and double members have larger households, but higher dependency on the productive members of the household, which may reflect greater available labour as well as higher monetary demands on the household. Further, the households tend to be older. ICM and double members (particularly male) tend to hire more on-farm, casual labour, while single members and (especially) nonmembers tend to be those who hire themselves out.

ICM and double members are more diversified in terms of their production, have more livestock and report buying more as a result of their co-op involvement. ICM and double members are more likely to use “improved seed” and other inputs, but all farmers are much more likely to use local seeds, technologies, inputs, and breeds. Male ICM and double members tend to borrow more for production (as opposed to consumption), whereas female ICM and double members report borrowing, but more often using the loans for consumption or replace subsistence shortfalls. Access to markets and other market-related benefits are cited as some of the primary reasons people are integrated and double members across all three countries.

Integrated/double membership may have nonstraightforward effects as it relates to gender in the three countries. Female ICM and double members generally farm on a smaller

scale and have less — and perhaps different crops — to sell than male members. Membership, however, may give increased access to training and markets for women than they could access otherwise. In some cases, however, integrated/double membership is associated with increased work-load for women. It may also be associated with decreased education for teen-aged boys as compared to teen-aged girls. It does, however, seem to be related to the benefits of household production and consumption being shared more equally across the family, as compared to single or nonmembership.

ICM and double members are also active in other community groups, so co-ops do not replace their other involvements in organizations, social networks, or sources of social capital. It does appear, however, that some faith-based groups may be competitors to co-operatives for nonmembers. ICM and double members are more likely to see both good and bad changes over the last 5 years in farming, their households and their communities.

### **6.5 Canada**

Although the context — historic, political, economic, and cultural — of northern Canada is quite distinctive, there is much that can be learned from the case study of the Arctic Co-operatives Limited and Arctic Co-operatives Development Fund that is transferable to other settings, in particular remote rural communities challenged by poverty, geography, and climate in many parts of the world.

- The need for training and support — both in relation to the business of the co-operative but also its functioning as a co-operative association, is critical. The Arctic Co-operatives Development model provides this very effectively.
- Where a co-op structure already exists, it is often more efficient to develop additional services to meet additional needs, rather than creating a new co-operative or other organization. Thus, members have access to numerous products and services through a single, multipurpose co-op.
- The Arctic Co-operatives Development Fund would not have happened without government intervention in the form of policy and funding. The intervention, however, ended with that step. Subsequent direction came from the leaders of Arctic Co-operatives Limited, with guidance and support from leaders in other sectors of the Canadian co-operative movement. Ownership and control rested with the co-operative.

## 7 Recommendations

### 7.1 Uganda

Based on the research findings and conclusions, the following is recommended:

(1) To the Co-operatives and Uganda Co-operative Alliance:

- The different tiers in the integrated co-operative models, that is, the RPOs, ACEs, and SACCOS, should respond to their obligations by improving the services they offer to farmers. Farmers and their VSLAs should be encouraged to save in SACCOS so as to increase the deposits in the SACCOS so that they can have enough money to lend out to farmers.
- Train farmers on the roles of the different co-ops in the integrated model for improved understanding of how the model is supposed to work. There is a lack of understanding among farmers on the modus operandi of SACCOS. Training should be widespread and using methodologies that encourage high levels of participation and follow-up.
- Provide enhanced leadership training and possibly training of local trainers to pass knowledge on to members more widely.
- Strengthen the capacity of ACEs to provide the needed marketing services. Currently, most ACEs lack human and physical infrastructure capacity to perform their roles effectively within the integrated model.
- Create awareness in communities about co-operatives and their potential benefits. Particular attention needs to be paid to forming a gender-sensitive team and reaching out to places where both men and women have equal chances of getting the information. Emphasis on co-operative benefits should focus on social and community as well as economic realms.
- Explore ways to attract youth to co-operatives. This can be done by broadening the focus to include activities of interest to the youth.
- Provide appropriate training for leaders, management staff, and the general membership, and training for women in leadership and marketing, among other areas.
- Improve the quality and quantity of farmers' produce.
- Provide leaders with additional knowledge to pass on to the membership, as suggested by governance and leadership issues in co-operatives.

(2) To the Government of Uganda:

- Encourage co-operation and support from local leaders in co-operative development.
- Create favourable political and economic policies that promote co-operative development. Develop some legislation that specifies punitive measures for SACCOS to prevent loss of money through mismanagement and corruption.
- Improve the physical infrastructure, including roads.

## **7.2 Tanzania**

Based on the research findings and conclusions, the following is recommended:

(1) To the Government of Tanzania:

- Because the 2013 Co-operative law is not familiar to most members, each primary society should have a copy of the co-operative law in Swahili to share with members.
- Introduce a demonstration project on how the integrated co-operative model works.
- Researchers should communicate with the government and other policy makers to lobby in favour of reduced tax charges and tax relief for small farmers on, for example, coffee. A 26 percent tax is charged per kilogram, which is a burden to coffee farmers; coffee beans do not receive a subsidy from the government.
- Members are encouraged to lobby co-op members who are also board members of the Tanzania Coffee Board to take the challenges faced by the coffee producers to the respective authority.

(2) To the Co-operatives:

- Moshi Co-operative University should provide education to farmers and co-operatives due to current changes in co-operative legislation and a liberalized market.
- Mruwia and Kimuli co-op members should meet to exchange different ideas regarding marketing and processing, among other activities, to enhance the existing integrated model.

## **7.3 Rwanda**

Major recommendations from the validation workshops include:

- Update the co-operative policy, as the one being used was formulated and approved in March 2006. It should be updated to cater to the current situation.

- Intensify training for co-operative members, leaders, and employees, particularly in governance, to increase members' feeling of ownership, thereby transforming co-operatives into organizations that are member-owned, member-controlled, and member-benefiting.
- The national confederation of co-operatives (NCCR), local authorities, and development partners are urged to support the mobilization of youth and women, encouraging them to join and actively participate in the affairs of their co-operatives.
- Increase the focus on the gender awareness in co-operatives.
- Mobilize nonmembers to join or form formal co-operatives and help them to become legally registered.
- Government and development partners should continue their support to co-operatives, especially with regard to capacity building.
- The co-operative movement of Rwanda should intensify the level of networking with other regional co-operative movements to gain information and share best practices.

#### **7.4 Canada**

Based on the research findings and conclusions, it is recommended that:

- Implement a model for co-operative development similar to that utilized by Arctic Co-operatives Limited in communities where resources are limited or constrained.
- Develop training materials and opportunities to promote and support strong governance within co-operatives.
- Create a co-op development fund to ensure access to not only developmental funding (including financing inventory where appropriate) but also funds to support growth and expansion, using a model similar to the Arctic Co-operatives Development Fund.
- Make more information available to communities across Canada regarding the structure and operation of multipurpose co-operatives.

#### **7.5 General Recommendations for Policy Makers**

- Extend the affirmative action policies already available for women in leadership positions to the membership to ensure greater participation and equity for women.
- Ensure that policies on co-operatives are linked to other government policies. For example, how are co-operatives linked to broader government goals of sustainable development?

## 8 Areas for Further Research

In addition to the conclusions reached on the questions under study, new questions or issues inevitably arise that could benefit from further exploration. Below are a number of areas for future research.

Co-operative scholars are encouraged to:

- Conduct further studies to understand the mechanisms (path) through which co-operatives facilitate or impede improvement in livelihoods among smallholder farmers.
- Conduct longitudinal studies of the integrated models in use in Uganda in order to demonstrate causation more clearly.
- Investigate the use of SACCOS versus Village Savings and Credit Associations (VSLAs) to better understand the dynamics, and strengths and weaknesses of either approach in improving access to finance among small landholders, and how best to communicate and develop financial co-operatives in the communities studied.
- Conduct further studies to understand the obstacles and enablers toward women and youth belonging to co-operatives and strategies for changing current conditions.
- Adopt community-based research methodologies to facilitate enhanced participation of co-operative members beyond the data collection phase. Consider models such as participatory action research and action research.
- Include case studies that include dynamics at the household level, which may hinder/enhance co-operative membership involvement.
- Review training materials used at the local level and develop a train-the-trainers package using participatory approaches. The training must go beyond entrepreneurial training to training on benefits of co-operative models, gender awareness, and other key themes.
- In the Canadian context, the Arctic Co-ops Limited approach to co-operative development — both initial development and longer term growth and/or expansion — has demonstrated success in remote rural communities challenged by poverty,

geography, and climate. The existence of the Arctic Co-operatives Development Fund (ACDF) is central to the success of this model. ACDF had its origins in a particular piece of government policy targeting a vulnerable population — Indigenous communities of Canada — where access to capital for enterprise development was difficult if not impossible. The issue continues to plague Indigenous communities today. More research is required to identify if a fund similar to ACDF could be established in today's economic and political context.

## References

- Afranaa Kwapong, N. (2012). *Making Rural Services Work for the Poor: The Role of Uganda's Service Reforms in Marketing and Agricultural Extension*. University of Berlin. Retrieved October 7, 2012, from <http://edoc.hu-berlin.de/dissertationen/kwapong-nana-afranaa-2012-07-24/PDF/kwapong.pdf>
- Anriquez, G., and K. Stamoulis. (2007). *Rural Development and Poverty Reduction: Is Agriculture Still the Key?* ESA Working Paper No. 07-02. The Food and Agricultural Organization of the United Nations. Retrieved October 19, 2012, from <ftp://ftp.fao.org/docrep/fao/010/ah885e/ah885e.pdf>
- Ayele, T. (2008). "Livelihood adaptation, risks and vulnerability in rural Wolaita, Ethiopia." Doctoral thesis presented to the Department of International Environment and Development Studies, Noragric, Norwegian University of Life Sciences, Oslo.
- Banson, K.E., N.C. Nguyen, and O.J.H. Bosch. (2015). "A Systems Thinking Approach: 'The Greater Push Model' for Growth and Sustainability in Africa — Evidence from Ghana." *International Journal of Markets and Business Systems* 1(4): 289–313.
- Bazaara, N. (2001). *Impact of Liberalisation on Agriculture and Food Security in Uganda*. Centre for Basic Research. Retrieved October 30, 2012, from [http://www.saprin.org/uganda/research/uga\\_liberalization.pdf](http://www.saprin.org/uganda/research/uga_liberalization.pdf)
- Bernstein, H. (2010). *Class Dynamics of Agrarian Change*. Black Point, NS, and Winnipeg, MB: Fernwood.
- Bibby, A. (2006). *Standing on Their Own Two Feet: Cooperative Reform in Tanzania*. International Labour Organization. Retrieved October 19, 2012, from <http://www.andrewbibby.com/socialenterprise/tanzania.html>
- Birchall, J. (2003). *Rediscovering the Cooperative Advantage: Poverty Reduction through Self-Help*. International Labour Organisation. Retrieved September 19, 2012, from [http://www.acdivocacoopex.org/acdivoca/CoopLib.nsf/dfafe3e324466c3785256d96004f15a8/e23f0c803fc6060485256ef400575ed8/\\$FILE/Rediscovering%20the%20Cooperative%20Advantage.pdf](http://www.acdivocacoopex.org/acdivoca/CoopLib.nsf/dfafe3e324466c3785256d96004f15a8/e23f0c803fc6060485256ef400575ed8/$FILE/Rediscovering%20the%20Cooperative%20Advantage.pdf)
- Birchall, J. et al. (2008). "The Role and Potential of Co-operatives in the Poverty Reduction Process: Full Research Report," ESRC End of Award Report, RES-155-25-0077. Swindon: ESRC <http://www.esrc.ac.uk/my-esrc/grants/RES-155-25-0077/outputs/FullResearchReport/Read/7f75b5f0-8b1c-46e1-a4bc-75d7468d7b48>

- Birchall, J., and L. Hammond Ketilson. (2009). *Resilience of the Co-operative Model in Times of Crisis*. Geneva: International Labour Organization, Sustainable Enterprise Programme.
- Birchall, J., and R. Simmons. (2009). *Co-operatives and Poverty Reduction: Evidence from Sri Lanka and Tanzania*. Co-operative College. Retrieved September 19, 2012, from <http://www.co-op.ac.uk/wp-content/uploads/2010/07/Co-operatives-and-Poverty-Reduction.pdf>
- Bryson, D. (2002). "The Scramble in Africa: Reorienting Rural Livelihoods." *World Development* 30 (5): 725–39.
- Capra International Inc. (2012). *Thematic Evaluation on the Co-operative Model*. Deliverable 7, Final Evaluation Report. Cumberland, ON: Capra International Inc.
- Canadian Co-operative Association. (2012). *Co-operatives in Aboriginal Communities in Canada*. Ottawa: Canadian Co-operative Association.
- Chambers, R. (1983). *Rural Development — Putting the Last First*. Essex, England: Longmans Scientific and Technical Publishers; New York: John Wiley.
- . (1995). "Poverty and Livelihoods: Whose Reality Counts?" *Environment and Urbanization* 7: 173–204.
- . (2010). "Paradigms, Poverty and Adaptive Pluralism." Institute of Development Studies Working Paper 344. <https://www.ids.ac.uk/files/dmfile/Wp344.pdf>
- Chambers, R., and G. Conway. (1991). "Sustainable Rural Livelihoods: Practical Concepts for the 21st Century." Institute of Development Studies Discussion Paper 296. <https://www.ids.ac.uk/files/Dp296.pdf>
- Chambo, S.A. (2009). "Agricultural Co-operatives: Role in Food Security and Rural Development." Paper Presented to Expert Group Meeting on Co-operatives, 28–30 April 2009, New York.
- Chambo, S.A., M. Mwangi, and O.O. Oloo. (2007). *An Analysis of the Socio-Economic Impact of Co-operatives in Africa and Their Institutional Context*. Geneva: International Co-operative Alliance, and Ottawa: Canadian Co-operative Association.
- Conway, Gordon. (2004). "The Paradoxes of Integrated Development." In *An Integrated Approach to Rural Development*. New York: UN Dialogues at the Economic and Social Council.
- de Haan, Leo, and Annelies Zoomers. (2005). "Exploring the Frontier of Livelihoods Research." *Development and Change* 36 (1): 27–47.
- de Janvry, Alain. (2004). "Achieving Success in Rural Development: Tools and Approaches for Implementation of an Integral Approach." In *An Integrated Approach to Rural Development*. New York: UN Dialogues at the Economic and Social Council.
- Develtere, P. (2008). "Cooperative Development in Africa up to the 1990s." in *Cooperating*

- Out of Poverty: The Renaissance of the African Cooperative Movement*, ed. P. Develtere, I. Pollet, and F. Wanyama. Geneva: International Labour Organization.
- Fairbairn, Brett. (2001). "The Co-operative Tradition in Canada." In *The Co-op Alternative: Civil Society and the Future of Public Services*, ed. John Restakis and Evert Lindquist. Toronto: Institute of Public Administration of Canada.
- Fairbairn, B., L. Hammond Ketilson, and P. Krebs. (1997). *Credit Unions and Community Economic Development*. Saskatoon: Centre for the Study of Co-operatives. Retrieved November 16, 2012, from <http://usaskstudies.coop/pdf-files/CreditUnions.pdf>
- Fairbairn, Brett, Ian MacPherson, and Nora Russell, eds. (2000). *Canadian Co-operatives in the Year 2000: Memory, Mutual Aid, and the Millennium*. Saskatoon: Centre for the Study of Co-operatives.
- Food and Agricultural Organization (FAO). (2012). *Agricultural Cooperatives: Key to Feeding the World*. Food and Agricultural Organization. Retrieved October 19, 2012, from [http://www.fao.org/fileadmin/templates/getinvolved/images/WFD2012\\_leaflet\\_en\\_low.pdf](http://www.fao.org/fileadmin/templates/getinvolved/images/WFD2012_leaflet_en_low.pdf)
- Fulton, M.E., ed. (1990). *Co-operative Organizations and Canadian Society: Popular Institutions and the Dilemmas of Change*. Toronto: University of Toronto Press.
- Fulton, M., and J. Kennett. (1999). *New Generation Co-operative Development: The Economic Environment in North Dakota and Minnesota and Lessons for Saskatchewan*. Report prepared for Saskatchewan Economic and Co-operative Development. Retrieved November 16, 2012, from <http://usaskstudies.coop/pdf-files/NGCDevelopment.pdf>
- Fulton, M.E., and L. Hammond Ketilson. (1992). "The Role of Cooperatives in Communities: Examples from Saskatchewan." *Journal of Agricultural Cooperation* 7: 15–42.
- Gertler, Michael. (2001). *Rural Co-operatives and Sustainable Development*. Saskatoon: Centre for the Study of Co-operatives. Retrieved November 16, 2012, from <http://usaskstudies.coop/pdf-files/Ruralcoopsd.pdf>
- . (2004). "Synergy and Strategic Advantage: Cooperatives and Sustainable Development." *Journal of Cooperatives* 19: 32–46.
- Hammond Ketilson, L., and K. Brown. (2009). *Financing Aboriginal Enterprise Development: The Potential of Using Co-operative Models*. Saskatoon: Centre for the Study of Co-operatives. Retrieved November 16, 2012 from [http://usaskstudies.coop/social/economy/wp-content/uploads/report\\_cl2\\_041.pdf](http://usaskstudies.coop/social/economy/wp-content/uploads/report_cl2_041.pdf)
- Hammond Ketilson, L., M.E. Fulton, J. Bold, and B. Fairbairn. (1992). *Climate for Co-operative Community Development*. Report to the Federal/Provincial Task Force on the Role of Co-operatives and Government in Community Development. Saskatoon: Centre for the Study of Co-operatives, University of Saskatchewan.
- Hammond Ketilson, L., M. Gertler, M.E. Fulton, R. Dobson, and L. Polsom. (1998). *The Social and Economic Importance of the Co-operative Sector in Saskatchewan*. Saskatoon: Centre for the Study of Co-operatives.

- Hammond Ketilson, L., and I. Macpherson. (2001). *A Report on Aboriginal Co-operatives in Canada. Current Situation and Potential for Growth*. Saskatoon: Centre for the Study of Co-operatives.
- Hickey, S., and A. du Toit. (2007). "Adverse incorporation, social exclusion and chronic poverty." Manchester: University of Manchester. CPRC Working Paper 81.  
[http://www.chronicpoverty.org/uploads/publication\\_files/WP81\\_Hickey\\_duToit.pdf](http://www.chronicpoverty.org/uploads/publication_files/WP81_Hickey_duToit.pdf)
- Hodge, I., and P. Midmore. (2008). "Models of Rural Development and Approaches to Analysis Evaluation and Decision-Making." *Nouvelles frontières entre les politiques rurales en Europe* 307: 23–38.
- International Co-operative Alliance (ICA). (2012). "Co-operative Identity, Values, and Principles." Retrieved November 10, 2012, from <http://2012.coop/en/what-co-op/co-operative-identity-values-principles>
- International Fund for Agricultural Development (IFAD). (2001). *Rural Poverty Report 2000/2001 Fact Sheet — The Rural Poor*. International Fund for Agricultural Development. Retrieved October 19, 2012, from <http://www.ifad.org/media/pack/rpr/2.htm>
- Israel, B.A., A.J. Schulz, E.A. Parker, and A.B. Becker. (1998). "Review of community-based research: Assessing partnership approaches to improve public health." *Annual Review of Public Health* 19 (1): 173–202.
- Jaffe, J., and M. Gertler. (2008). "Sustainable Development in the New Economy: Risk, Vulnerability and Eco-Social Justice." *Currents* 7 (2): 1–23.
- JA-ZENCHU. Central Union of Agriculture Co-ops, Japan. (2008). Website viewed November 12, 2012, at [http://www.zenchu-ja.or.jp/eng/ja\\_a\\_multipurpose/index.html](http://www.zenchu-ja.or.jp/eng/ja_a_multipurpose/index.html)
- Jutting, J. (2011). *Assessing Gender Equality through a New Lens*. Washington, DC: OECD/World Bank.
- Korten, D. (1995). *When Corporations Rule the World*. West Hartford, CT: Kumarian Press.
- Krantz, L. (2001). *The Sustainable Livelihood Approach to Poverty Reduction: An Introduction*. Swedish International Development Co-operation Agency. Retrieved January 7, 2013, from [http://www.forestry.umn.edu/prod/groups/cfans/@pub/@cfans/@forestry/documents/asset/cfans\\_asset\\_202603.pdf](http://www.forestry.umn.edu/prod/groups/cfans/@pub/@cfans/@forestry/documents/asset/cfans_asset_202603.pdf)
- Land O'Lakes. (2012). "Dairy Co-operatives in Kenya and Uganda." Retrieved November 12, 2012, from <http://www.idd.landolakes.com/PROJECTS/Africa/ECMP2-0138056.aspx>
- Lawrence, P.R., and J.W. Lorsch. (1986). *Organization and Environment: Managing Differentiation and Integration*. Harvard Business School Classics.
- MacPherson, I. (1979). *Each for All: A History of the Co-operative Movement in English Canada, 1900–1945*. Toronto: Macmillan.
- Minkler, M. (2005). "Community-based Research Partnerships: Challenges and Opportunities." *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 82 (2): 3–12. doi:10.1093/jurban/jti034.

- Meinzen-Dick, R., M. Di Gregorio, and N. McCarthy. (2004). *Methods for Studying Collective Action in Rural Development*. CAPRI Working Paper No. 33. International Food Policy Research Institute. Retrieved October 12, 2012, from <http://www.ifpri.org/sites/default/files/publications/CAPRIWP33.pdf>
- Mugisha, J., B. Ajar, and G. Elepu. (2012). "Contribution of Uganda Cooperative Alliance to Farmers' Adoption of improved Agricultural Technologies." *Journal of Agriculture and Social Sciences* 8 (1): 1–9.
- Muhereza, I., and G.B. Kyomuhendo. (2010). *Integrated Agricultural and Finance Co-operation Model*. Ottawa: Canadian Co-operative Association and Uganda Co-operative Alliance.
- Nkubito, E.H. (nd). "NUR Offers Cooperative Training Manual to MINICOM." Retrieved January 9, 2012, from <http://www.nur.ac.rw/spip.php?article742>
- Nunes, T. (2015). "Cooperatives, Capability Spaces, and the Idea of Justice." DPU Working Paper No. 125. London: Development Planning Unit. <https://www.bartlett.ucl.ac.uk/dpu/latest/publications/dpu-working-papers/WP175.pdf>
- Prakash, D. (2003). *Development of Agricultural Cooperatives — Relevance of Japanese Experiences to Developing Countries*. Rural Development and Management Centre. Retrieved September 27, 2012, from [http://www.uwcc.wisc.edu/info/intl/daman\\_japan.pdf](http://www.uwcc.wisc.edu/info/intl/daman_japan.pdf)
- Pretty, J. (1999). "Can Sustainable Agriculture Feed Africa? New Evidence on Progress, Processes and Impacts." *Environment, Development and Sustainability* 1 (3–4): 253–74.
- Pretty, J., C. Toulmin, and S. Williams. (2011). "Sustainable Intensification in African Agriculture." *International Journal of Agricultural Sustainability* 9 (1): 5–24.
- Rwanda Co-operative Agency. (2012). Website: <http://www.rca.gov.rw/spip.php?article30>
- Scoones, I. (1998). "Sustainable Rural Livelihoods: A Framework for Analysis." Institute of Development Studies, Working Paper 72.
- . (2009). "Livelihoods, Perspectives, and Rural Development." *Journal of Peasant Studies* 36 (1): 171–96.
- Sen, A. 1999. *Development as Freedom*. New York: Oxford University Press.
- Sentama, Ezechiel. (2009). *Peacebuilding in Post-Genocide Rwanda: The Role of Cooperatives in the Restoration of Interpersonal Relationships*. Gothenburg University. Retrieved January 7, 2013, from [https://gupea.ub.gu.se/bitstream/2077/21377/5/gupea\\_2077\\_21377\\_5.pdf](https://gupea.ub.gu.se/bitstream/2077/21377/5/gupea_2077_21377_5.pdf)
- United Nations Economic and Social Council. (2003). *An Integrated Approach to Rural Development*. Dialogues at the Economic and Social Council. United Nations Publications. Retrieved October 16, 2012, from <http://www.un.org/en/ecosoc/docs/integrated03.shtml>.

- Van Dijk, Tara. (2011). "Livelihoods, Capitals and Livelihood Trajectories: A More Sociological Conceptualization." *Progress in Development Studies* 11 (2): 101–17.
- van Oosterhout, H., and E.S. Dzandu. (2011). *The Impact of Credit Unions on Poverty Alleviation in Selected Communities in Ghana*. Ottawa: Canadian Co-operative Association.
- Wanyama, Frederick O., Patrick Develtere, and Ignace Pollet. (2008). "Encountering the Evidence: Cooperatives and Poverty Reduction in Africa." Working Papers on Social and Co-operative Entrepreneurship: <http://www.microfinancegateway.org/gm/document-1.9.52645/Encountering%20the%20Evidence.pdf>
- West, P.C., J.S. Gerber, N.D. Mueller, K.A. Brauman, K.M. Carlson, E.S. Cassidy, P.M. Engstrom, M. Johnston, G.K. MacDonald, D.K. Ray, and S. Siebert. (2014). "Leverage Points for Improving Food Security and the Environment." *Science* 345: 325–28.

