"Antecedent of sustainable cooperative within the social capital networks"

AUTHORS	Noxolo Somhlahlo Thokozani Patmond Mbhele Lindiwe Kunene
ARTICLE INFO	Noxolo Somhlahlo, Thokozani Patmond Mbhele and Lindiwe Kunene (2016). Antecedent of sustainable cooperative within the social capital networks. <i>Environmental Economics</i> , 7(4), 48-58. doi:10.21511/ee.07(4).2016.05
DOI	http://dx.doi.org/10.21511/ee.07(4).2016.05
RELEASED ON	Friday, 09 December 2016
JOURNAL	"Environmental Economics"
FOUNDER	LLC "Consulting Publishing Company "Business Perspectives"



[©] The author(s) 2024. This publication is an open access article.



Noxolo Somhlahlo (South Africa), Thokozani Patmond Mbhele (South Africa), Lindiwe Kunene (South Africa)

Antecedent of sustainable cooperative within the social capital networks

Abstract

Sustainable agricultural system contextualizes cooperative practices to reflect competitive economic returns, the continuous supply of essential and life-supporting ecosystem services, and enhanced food security. The study seeks to establish the challenges of small scale farmers in transforming into mainstream sustainable commercial farming and accessing competitive markets through greener economic functionality of the agricultural cooperative. To address these challenging phases and gaps towards growth prospects, this paper provides a comprehensive literature review and phenomenological approach on the underlying paradigm of personal knowledge and subjectivity. The purpose of this paper is twofold: to assess the extent of sustainable socio-economic network influence of Sicabazini farming cooperative on the potential shift in the living standard, and to examine the antecedent economics of environmental farming cooperative challenges to traverse the growth prospects with the context of cooperative social capital networks. The paper adopted the qualitative paradigm using interviews as data collection instrument on fifty participants from Sicabazini farming cooperative. In providing richer understanding and more insightful and inductive discussions on the phenomena, the rigorous application of case study content analysis reveals credibility assurance that the role of the sustainable farming cooperative benefits the economics of dual objectivity (social and economic nature) while simultaneously elevating environment of agricultural prosperity and creating sustainable job opportunities in remote rural areas. Furthermore, to transferability value of this study, the lack of resources and less accessible larger markets coupled by languishing commercial growth prospects influence the progressive phases of environmental cooperative.

Keywords: cooperatives, sustainable farming, social capital, stakeholder theory. **JEL Classification:** Q13, Q56, Q58.

Introduction

Sustainable agriculture is using farming practices considering the ecological cycles. In simpler terms, sustainable farming is farming ecologically by promoting methods and practices that are economically viable, environmentally sound and protect public health to generate sustainable food security. The current food security challenge in South Africa consists of two dimensions: the first tries to maintain and increase South Africa's ability to meet its national food requirements, and the second seeks to eliminate inequalities and poverty amongst households that is made apparent by inadequate and unstable food production, lack of purchasing power, and poor nutritional status and weak institutional support networks. Growth in agricultural production to meet rising global needs using prevailing farming practices is unsustainable - a transformation is needed, especially on the small scale farming under greener cooperative schemes. The demand on

agriculture to feed a larger and more urbanized population through global markets over the years will continue to grow, placing additional pressure on available rural land such as Sicabazini farming cooperative and other scarce natural resources. Sustainable agricultural intensification can be the answer to enhanced food security, environmental protection and poverty reduction. For ecosystem services to become an integral part of farming, further insights are needed into the economic benefits and costs associated with ecological intensification.

1. Background on sustainable agricultural cooperatives

Policymakers have sought to redress inequality of the past and to address the rural enrichment by encouraging the sustainable development of economic networks, and social collaboration between actors and firms in rural areas. The sustainable rural economic and industrial development activities bring environmental economic emancipation relating to achievement of economies of scale, economies of scope in sustainable production, and facilitation of better knowledge exchange. Agricultural cooperatives, like all other types of cooperatives are, by their nature used by members as sustainable ecological collective. The formation of cooperatives allows for groups of these small scale farmers to come together and work as

[©] Thokozani Patmond Mbhele, Noxolo Somhlahlo, Lindiwe Kunene, 2016.

Noxolo Somhlahlo, School of Management, IT and Governance, University of KwaZulu-Natal, South Africa.

Thokozani Patmond Mbhele, Ph.D., Lecturer of School of Management, IT and Governance, University of KwaZulu-Natal, South Africa

Lindiwe Kunene, School of Management, IT and Governance, University of KwaZulu-Natal, South Africa.

consolidated agro-environment farming individual groups. Social capital as a social network and the associated norms of reciprocity trustworthiness in using sustainable agriculture (Stiglitz, Sen and Fitoussi, 2010) is critical for cooperative economics to thrive and development to be sustainable. Putnam (2000, p.19) defines social capital as consisting of "social networks (among individuals) and the norms of reciprocity and trustworthiness that arise from them". Herbel, Rocchigiani and Ferrier (2015, pp. 24-31) astutely point out that social capital is a critical resource for efficient collective action and able to transform farming potential into environmental economic growth and sustainable development.

2. Supply chain cooperative networks

Cooperative members' ability to successfully form, develop and compete in a cooperative form is highly dependent on the well-configured sustainable supply chain networks. Supply chain is "a network of organizations that are involved, through upstream and downstream linkages, in the different processes and activities that produce value in the form of products and services delivered to the ultimate consumer" (Mentzer, De Witt,

Keebler, Min, Nix, Smith and Zacharia, 2001, p. 3). Collaboration among supply chain's stakeholders uses limited resources and attempts to coordinate sustainable production through the entire supply chain (Caridi, Cigolini and De Marco, 2005, pp. 4191-4218). Supply chains can derive significant benefits from a closer engagement of stakeholders within the network willing to share information up and down the chain (Mazzarol, Limnios and Rebound, 2013). In a macro perspective, the cooperative membership relates to the creation of joint investments, as well as pooling of risks. In increasing their chances of growth prospects, the antedate development into second-tier cooperatives enhances the realization of social and economic vision of the cooperative. Second-tier cooperatives are viewed as stakeholders that have developed the sophistication of running as larger business entities, which can supply and engage with other businesses at similar levels. Research has defined cooperatives as either being primary cooperatives also known as first -tier cooperatives; secondary cooperatives also knows as second-tier cooperatives or as tertiary cooperatives (Fujimoto, Hat, Otarola & Sacerdote, 2012). Figure 1 depicts these different levels and the Sicabazini farming cooperative is still at the primary phase.

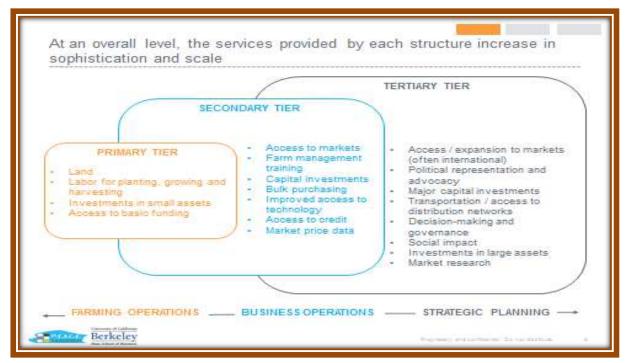


Fig. 1. Three tiers of cooperatives

Source: Fujimoto, Hat, Otarola and Sacerdote (2012).

3. Background of Sicabazini farming cooperative

Sicabazini farming cooperative needs to evolve to the level of a secondary tier. The 'shifting control' in the growth path into the second-tier cooperative (Bijman and Hanisch, 2014) includes the exposure to markets, capital investment, technology and appropriate training in the context of a sustainable agricultural growth (Fujimoto, Hat, Otarola and

Sacerdote, 2012; World Bank Organization, 2014). Puzzlingly, the Department of Trade and Industry (DTI) (2014) argues that user-owned cooperatives are designed to meet employment needs of their members through a collectively owned and democratically controlled enterprise. Worker-owned cooperatives, on the other hand, have members who own and control the business, on the basis of one member one vote (DTI, 2014), and the cooperatives combine worker ownership with mechanisms for the democratic control of production within the enterprise such as Sicabazini farming cooperative (Isaacs, 2011). Smallholder farming systems are very diverse, and contribute considerably to global sustainability and agricultural output of a variety of crops. Smallholders produce the bulk of food in developing countries. Greater and more-sustained yields may increase access of households to a larger food supply as discretionary anticipation of elements of stakeholder theory.

4. Theoretical framework

The movement of social responsibility encompasses the economic, legal, ethical and discretionary expectations that society has toward the business and social undertaking activities. Cooperatives play an increasingly important role worldwide in facilitating growth, creation, economic and development. According to stakeholder theory, companies must consider their responsibility toward different stakeholders such as investors, local educational communities. and environmental institutions, and employees in their decision-making (Tuominen, Uski, Jussila and Kotonen, 2008). Cooperative members have simultaneous roles as owners, controllers and economic partners. According to Nilsson (1996), cooperative values and principles have guided cooperatives to operate honestly and openly and consider the needs of the surrounding society and sustainable agricultural practices. The stakeholder theory emphasizes the individuals or groups with a stake in or claim on an undertaking that creates economic, social and ecological value for all their contacts, especially the local community. The stakeholder practice stresses the cooperative networks and interaction between the cooperative and external actors and institutions as stakeholders for sustainable farming and environmental cohesion programs.

5. Literature review

The Sicabazini farming cooperative as other cooperatives in South Africa (SA) draws from seven international principles which are universally accepted guidelines in establishing and managing cooperative businesses (King and Ortmann, 2010; DTI, 2014), such as voluntary and open membership, democratic

member control, member economic participation, autonomy and independence, education, training and information, cooperation among cooperatives, and concern for the community. Rural development emphasizes the enhancement of productivity levels in rural areas (Gajanana, Gowda and Reddy, although SA government endorsed cooperatives as a special measure to support job creation (employment) (Isaacs, 2011). Gajanana et al. (2010, p.1) asserts that rural development is the "process of improving living conditions, providing minimum needs, increasing productivity, employment opportunities and developing potentials of rural resources through integration of spatial, functional and temporal aspects". In South Africa, cooperatives are defined and legislated for under the Cooperatives Act 14 of 2005, which was later amended to the Cooperative Amendment Act, No. 6 of 2013. This Act astutely points out that these entities are economicand social development proponents in this country under the similar auspices of small, medium and micro enterprises (SMMEs). The Sicabazini farming cooperative which specializes in the production of paprika and chillies, is near Manguzi town and Sikhemelele area in uMhlabuyalingana Municipality. This cooperative comprises of fifty members from the rural northern KwaZulu-Natal, working on five hectares of land, donated by the Tembe Triba l Authority. Funding to kick-start the enterprises was provided by Toyota Tsusho Africa, government departments amongst many others through the Peace Foundation Trusts' facilitation process (Peace Foundation, 2010). There is a need for the Sicabazini cooperative to develop further to meet the aspirations as provided for by Cooperative Act of 2005, of playing a critical role in economic development. South Africa requires a more sustainable approach, or the welfare of our nation – both current and future generations - is at risk. Mismanaged agricultural industrialization and intensification could compromize food safety and unemployment and environmental degradation. South Africa has a dual agricultural economy, with both well-developed commercial farming and smaller-scale communal farming (located in the former homeland Agriculture contributes a relatively small share of the total GDP, but is important in providing sustainable employment and earning foreign exchange. Sustainable solutions will require collaboration between government, industry, producers and the scientific and conservation community in the framework of stakeholder theory.

6. Contextual challenges of cooperative

KwaZulu-Natal (KZN) province, where Sicabazini is situated, there is a high concentration of a poor rural population. Agriculture is often dominant; smallholders are, therefore, the potential drivers of agricultural and economic development (Mmbengwa, Ramukumba. Groenwald. Gundidza, Schalkwyk, and Maiwashe, 2011). According to Mmbengwa et al. (2011, p. 38), "smallholder agriculture is simply too important to employment, human welfare, and political stability in Sub-Saharan Africa to be either ignored or treated as just another small adjusting sector of a market economy". In the South African context of challenges. however, due to the previous structure of the apartheid system most of the cooperatives in rural areas are populated by the black race, who more often than not lack the adequate skills and resources, thus, face the challenges such as financial stability for cooperatives, asset infrastructure (shortages, asset acquisition), intragovernment coordination, market place and formal education and labor (Satgar, 2011; Derr, 2013). Sustainable agricultural intensification involves scaling up farming practices that maintain the resource base on which smallholders depend, so that it continues to support food security and rural development into the future. A greener agricultural system should be based on and bring about competitive economic returns, the supply of essential and life-supporting ecosystem services, decent jobs and livelihoods, a smaller ecological footprint, increased resilience to climate change, and enhanced food security.

7. Antecedent of growth prospects

Sustainable cooperative enterprises are built on the idea of an association of individuals and/or entities (Jussila, 2012), and it is noteworthy that agricultural cooperatives are viewed small scale business (producer) cooperatives of coalition of independent businesses reflecting the network alliance nature of the cooperative business model (Mazzarol, Limnios and Rebound (2013, pp. 27-40). Haase, Roedenbeck and Sollner (2007) define lock-in as getting stuck with traditional styles of thinking and acting in a manner that is hard to escape. Woerdman (2004) looks at optimality in terms of efficiency, and industrialized agriculture's normative standard of cost leadership where lock-in is defined as the dominance of a suboptimal situation such as open competitive markets in the presence of a superior alternative such as industrialized agriculture and greening agricultural supply chain. Greenwood, Raynard, Kodeih, Micelotta and Lounsbury (2011, pp. 317-371) argue that industrialized agriculture brings a new institutional logic (rationale for organizational diversity) to agriculture by putting efficiency and profitability first and using vertical integration to bypass farmers'

decision-making power over agriculture. Green industrialization is market driven, seeking growth in identifying and satisfying consumer preferences. The antecedents that influence the decision by a small scale firm to engage within a network are the characteristics of the entrepreneur that include the propensity to collaborate or desire to seek resources or influence their external environment (Mozzarol, Limnios and Rebound, 2013). The cooperative lifestyle theory (Cook, 1995) assists to explain why some producer cooperatives often change their structure or even demutualize as they seek to adapt to external forces and internal pressures from their members (Brewin, Bielik and Oleson, 2008). Cook (2013) postulated a five-stage cooperative life cycle that seeks to explain the formation, growth, and eventual decline of cooperatives. Ortiz-Miranda, Moreno-Perez and Moragnes-Fan (2010) support these findings and emphasize that there is a need for new regenerated strategic thinking for agricultural cooperatives. Even though cooperatives may have initially served a useful purpose, some authors believe that, due to some of their weaknesses, conventional cooperatives will have to exit the economy as a business form or reorganize as the market evolves (Zheng and Wang, 2012).

8. Supplier perceptions

For an organization to move to a secondary-tier status, it requires access to markets, it also relies on perceived supplier relations and the feasibility of cooperatives as suppliers to corporate fast moving consumer goods (FMCG) companies. It is essential to identify the role that suppliers' perceptions play in establishing and maintaining a successful buyer/supplier relationship. The supplier perception model identifies how suppliers see a purchasing organization by focusing on two aspects: the value that the purchasing business offers in terms of supplier turnover levels, and the level of attractiveness of the purchasing business (Crouch and Ritchie, 2011). Hugo, Badenhorst-Weiss and Biljon (2011, p. 105) describe four quadrants such as the nonessential marginal relationship (non-worth developing), exploit relationship (least positive), develop relationship and core relationship quadrant. The matrix indicates that the results from the low value of business on the supplier offering, added to the low level of attractiveness for the purchasing organization. An increase in the level of value of the business offering leads to the exploitation, while an increase in level of attractiveness leads to the supplier's willing to develop a buyer/supplier relationship and, ultimately, leads to the core quadrant of the supplier perception matrix (Hugo et. al., 2011; Crouch and Ritchie, 2011). The effects of information sharing through community cooperatives are key features of producer cooperatives as the coordinators of supply chain networks and relationship management value process.

9. Research problem and objectives

Small scale farming cooperatives are well-embedded in modern economy as one of the dominant socio-economic organizational forms seeking access to mainstream value chain network, operating within social capital networks affected various challenges and exhibiting propensity to growth within the dual objectivity nature. The study aims to assess the extent of sustainable socio-economic network influence of Sicabazini farming cooperative on the potential shift in the living standard, and further, to examine the antecedent challenges of cooperative to traverse the sustainable growth prospects with the context of cooperative social capital networks.

10. Research methodology

10.1. Research design. A research design provides a framework for the collection and analysis of data, whilst research method is simply a technique for collecting data (Bryman and Bell, 2011). Exploratory research design was being used to determine the core challenges faced by Sicabazini farming cooperative in pursuing the growth prospects and also to explore possible solutions that can be suggested to alleviate these challenges. Exploratory study seeks new insights, clarifies an understanding of a problem, requires to understand designs outside their experience and adapt research strategy, data collection and analysis according to the constraints of the subject (Saunders, Lewis and Thornhill, 2009).

Furthermore considering that such occurrences are ever evolving, the researcher adopts the interpretivist research philosophy (Saunders, Lewis and Thornhill, 2009). Realizing that the research is building theory by gaining a very close understanding of the Sicabazini farming cooperative, the researchers are part of the research process, the research approach is subjected to inductive case study approach (Saunders, Lewis and Thornhill, 2009). Baxter and Jack (2008) posit "that a case study allows for in-depth examination of events, real-life context because of the nature of the study". A case study method of research was chosen, to describe, decode, translate, and, otherwise, come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world. According to Yin (2013), case studies are the generally preferred strategy when "how" or "why" questions are being posed, when the investigator has little control over the events, and when the focus is on a contemporary phenomenon within a real-life context. The research is a case study for which data will be collected through an interview guide to be conducted over a short period of time. Such a snapshot time horizon is called cross-sectional.

10.2. paradigm. Phenomenological Research research philosophy to describe an experience through inductive approach as it is actually lived by the Sicabazini Farming Cooperative members. Qualitative paradigm brings powerful element for understanding experience, subjective gaining insights cooperative members' personal knowledge, motivations and actions. Cresswell (2009:4) defines qualitative research approach as "a means for and understanding the meaning of exploring individuals or groups ascribe to social or human problem". It provides for the respondents to express their answers in detail as interviewed and epitomises appropriateness when the sample is small like Sicabazini Framing Cooperative (Koonin, 2014). phenomenological The interpretation to enrich the corpus of findings is inextricably tied in with human senses and subjectivity without relinquishing the richness and credibility of quality and trustworthiness of qualitative research results of this study. An inductive case study relates to the development of theory and formulation of patterns of meaning on the basis of the textual form of data collected. This bottom-up approach explores the phenomena on the guidance of stakeholders theoretical lens as the provision for framework under investigation. This study opted for recording, analysing and attempting to uncover the deeper meaning of significance of Sicabazini Farming cooperative members' behaviour and experience, including contradictory sentiments, behaviours emotions.

11. Sampling and sample size

A non-probability, convenient sample was used to select the research population of this study. The research population of this study is Manguzi town Sikhemelele area in uMhlabuyalingan Municipality, and it's situated in rural northern KwaZulu-Natal. According to Creswell (2009), sampling techniques can be divided into two broad categories of probability and nonprobability sampling. Purposive sampling is a non-probability sampling method suitable for selecting sample respondents when the researcher can clearly identify people who could be in possession of valuable information that will add value to the study. The use of purposive sampling is to identify and reach key respondents that are in possession of valuable information as a result of being members of Sicabazini farming cooperative society. The total sample size of all fifty members of Sicabazini farming cooperative constitutes the representation of population of this demarcated agricultural region uMhlabuyalingana

Municipality. Qualitative measures may sometimes be used to infer small sample to a larger population (Silverman, 2009, p. 128). A small sample size was chosen for this research work for an in-depth qualitative study, while purposive sampling increases the credibility of the outcomes of this study.

12. Data collection instrument

The interview guide consisted of open-ended fifteen questions that were intended to elicit views and opinions of the interviewees (Creswell, 2009). The researchers collected both secondary, as well as primary data through synthesized reading and interviews, respectively, using a semi-structured interview guide for data triangulation. According to Eisenhardt and Graebner (2007), case studies can accommodate a rich variety of data sources, such as interviews, which serve as a highly efficient method of gathering rich empirical data. Qualitative data is based on meanings expressed through words (Bryman and Bell, 2011). Creswell (2009) concurs that qualitative data analysis is conducted concurrently with data collection through making interpretations, and writing reports. As such, data analysis is a continuous and an interactive process from the time the researchers started data collection, onwards to allow the researchers recognize important themes, pattern and relationships in the data (Saunders, Lewis and Thornhill, 2009). Qualitative content analysis was used as a data analysis method. An inductive analysis was used to review the transcribed data without a particular frame of reference in order to understand the context and content of our study better. We organized the data again by using thematic analysis with an aim of identifying, analyzing and reporting patterns forming themes within the data (Braun and Clarke, 2006, pp. 77-101).

13. Discussion of results

13.1. Improving prospects of standard of living for member households. "The standard of living has not sufficiently improved, although the change is being noticed on improvement in taking better care of their children and providing better feed for their family. The affordable better lives yields more continuous income for a chance to open bank accounts, and creation of opportunities to build and improve on their homes from contribution towards stokvels".

Ninety two percent of the respondents indicates that there are improved growth prospects of living standards for member households, while eight percent of the respondents perceives minimum/less sufficient improvement of living standards. The set up towards positive outlook provides for member households and families at the survival phase away from dreaded poverty. Insufficient positive change within the households and the families limits capacity to overcome the members' diseconomies of scale in realizing a multiplier effect to fully benefit dual objectivity approach. The dual objectivity approach points out that the primary social responsibility of the community is to organize employment opportunities for its members through mutual effort, while the secondary economic responsibility ensures financial stability to secure the continuity of its members' employment (Pattiniemi and Tainio, 2000; Burdin and Dean, 2012). The cooperatives are described as having an economic mission with social impacts and positive social outcomes to build competitive idea (Mozzarol, Limnios and Rebound, 2013), while simultaneously cooperatives are driven by collective economic orientation and self-interest in ensuring the efficiency and capability to generate sufficient profit for longterm survival.

13.2. Shifting in the standard of living for community. "The cooperative produces sufficiently to feed a large number of community members who are a part of the motivated members on the propensity to diversify their products. As the members feel knowledgeable about further farming concepts and business management, the prospects of providing work and income for a number of community members contribute to the interest of national imperatives of elevating agricultural prosperity while creating more job opportunities especial in remote rural areas. Enabling environment facilitates procurement of produce at lower prices, as well as saving on the costs of travelling to far towns to get a more complete range of vegetables".

The role of the cooperative has benefits to the community who save money on transportation, as well as acquiring or purchasing fresh produce within the proximity of community household reach. It further attests that an increased interest in farming translates into the possibility of more work being created benefitting the local economy.

Sumelius, Tenaw, Bee and Chambo (2015, p. 100) stress that cooperative action at lower level is important to empower farmers to look on other possibilities to address risks, access to financial services, access to mainstream market and information delivery systems and economic empowerment and democratization of processes. The agrarian ideology on cooperatives seems to reinforce the traditions and values of historic agrarianism, while productivitytechnological change enforces enhancing increasingly specialized farm production driven by industrialization, education and social and economic interventions. Hogeland (2013, pp. 97-113) notes that agrarians attributed farmer decline to the decline in open markets, not to productivity increases that make farmers redundant. Lock-in for cooperatives allows them to choose among alternatives such as open competitive markets as the developing suppliers. If agrarian ideology begins with the premise that agriculture is the most basic institution in the South African economy, Hogeland (2013) stresses that agricultural prosperity ensures the nation's prosperity in the environmental economics.

13.3. Benefits of being in the cooperative. "Members perceive that their efforts seem to strengthen their business recognition and support from the government, private organizations and funding institutions. The accessibility to a larger number of resources and skills training improves the capacity and technical know-how of members, and business functionality. The better business communication with other members generates innovative ideas, improves money saving through stokvel and develops exposure to a more vast marketplaces as an organization".

A cooperative proved to be beneficial for all the farmers who, in the past, had operated on a smaller scale. Through this cooperative involvement, their farming prospects were changing for the better. Members appreciate working in the cooperative provided that it granted them the following advantages: pooling of resources; sharing of skills; improved visibility; and bigger 'stokvel' opportunities as individuals (a traditional money saving scheme in SA that permits an informal credit system). Between the sustenance farming and commercial farming, only forty percent of the members thought of the cooperative as a business entity. Sixty percent saw the cooperative as an entity to support their sustenance, be it is through personal use of their own product or earning an income.

These dense and rich social relations in networks or communities assist individuals to learn and share more easily with each other (Johannisson, Ramirez-Pasilla and Karlsson, 2002; Goulet, 2013). In a knowledge exchange perspective, it is valuable for understanding how knowledge flows happen in rural collaborations as indicated by a set of abilities or skills possessed by individual actors working in a collaborative context known as social capital (Klerkx and Proctor, 2013). Rural knowledge exchange further provides the linkage between social relations and learning, particularly for tacit or experiential knowledge from social interaction. Fischer (2013, pp. 13-22) highlights that knowledge exchange and sharing are contingent upon relational dimensions such as power, reciprocity and trust and Tregear and Cooper (2016, p. 102) refer embeddedness and social capital as conceptual anchors stem from an interplay between individuals' skills and

behaviors, and social characteristics and connections of the wider entrepreneurial networks on embedded collaborations. Fischer (2013) and Klerkx and Proctor (2013) alert on knowledge-related reasons for networks and collaborations to exhibit a balance between rich innovative and entrepreneurial internal social relations and multiplicity of open, outward-facing connections to external actors and institutions to enhance bonding while bridging capital.

13.4. Challenges faced by cooperative. "The cooperative evinces insufficient resources and equipment while subjected to extreme heat or cold weather conditions and to a scheduled early farm working time. The major challenges for the cooperative range from low or sparingly paid wages, petty conflict between members from time to time, threat or theft of produce and equipment. Little to not marketing of the business to outside corporations".

What they found challenging in running the environmental cooperative is that a lack of resources, and payment to skills procrastinate their progress towards growth. According to Nilsson (1996), cooperative values and principles have guided cooperatives to operate honestly and openly and consider the needs of the surrounding society. The stakeholder theory on cooperative undertaking is responsible for participating in solving local social challenges by promoting the economic, business and social interests on of internal and external actors. It further aims to invest on the wellbeing and to develop communal social capital by creating a common identity representatives different among of stakeholders and generating social capital within the community. It also important for cooperative to improve the social and psychological conditions of communal networks and collaborations for sufficient solidarity and profitability.

Producer cooperatives whose membership comprised of small firms need to be viewed more as coalitions or networks than single corporate entities. In avoiding silo-oriented approach, Puusa, Hokkila and Varis (2016, p. 29) argue that once individualistic goals gain dominance, a cooperative will become a group of individuals that use it for individual purposes and benefits regardless of those of other members. When cooperator's behavior is based on self-interest, there always a risk of opportunism (Cropanzano and Mitchell, 2005) and without genuine communality, a cooperative will not use all of its available potential benefit the members. Collaborative interconnectivity membership gives a mechanism for networking and accessing information. According to Galappaththi, Kodithuwakku and Galappaththi (2016, pp. 187-194), an efficient network of information sharing is vital for the community's socio-economic wellbeing, as well as social-ecological sustainability. This supports Bokana (2012) and the World Development Bank view which stipulates that greener agricultural cooperative initiatives are vital for sustainable economic development in African countries underpinned by the government, NGOs and private institutions for resource capacity. However, a limit is reached, when only the local community is the main beneficiary of their products and the outside market should be a turnaround strategy for generating sufficient resources. The paradigm shift towards economic orientation and the scope of the competitive market have to go beyond the community if these farming initiatives are to truly be viewed as economic refuge for rural Sicabazini farming cooperative.

13.5. Perceived solutions to these challenges. "The availability of suitable and required expertise and managerial know-how can improve recognition in order to attract business, as well as funding for more farming resources. In underpinning the farming career and trade, the cooperative should contemplate supporting school feeding programs to enthuse children school farming and voluntary participation in the cooperative. The creation of opportunities to sell produce to large retailers has propensity to expansion and diversification into other forms of farming such as animal/livestock farming for extended market place".

Given a chance to express how they thought these challenges could be resolved, cooperative members identified a need for better skills knowledge both in management and in farming. They also identified possibilities of patnering with various government feeding schemes that subscribe to sustainability of resources and environmental yields. FMCG supplier contracts were also important to them, as well as diversification into other forms of farming and increased security measures for the business due to crime. Arguably, Mozzarol, Limnios and Rebound (2013, pp. 9-10) insinuate that cooperatives seek to identify, choose and invest in the market areas that hold the greatest member demand instead of searching for the most lucrative opportunities. According to Thompson (2015, pp. 3-13) the theory acknowledges that 'the competence underlying productive, allocative and strategic decisions is tacit and generated through experience of particularity and idiosyncrasy, particularly in social settings'. Various efficiency enhancing features of cooperatives have been identified as economies of scale, assurance of sale, providing member services and competitive yardstick. Both the market share of cooperatives and the extent of payment differentiation inside a cooperative have a positive effect on the prices received by farmers.

14. Credibility of research findings

A carefully detailed systematic examination and interpretation of data was completed to identify patterns, themes, biases, and meaning as per Berg and Latin's advice (Berg and Latin, 2010). Trustworthiness refers to four aspects that the study should incorporate, namely, credibility, transferability, dependability and confirmability. These tests establish the quality of an empirical social research design. Credibility refers to the accuracy to which the researcher interpreted the data that were provided by the participants (Koonin, 2014, p. 258). The pattern matching and explanationbuilding establish the credibility of this case study inquiry. Sicabazini farming cooperative members serve as key informants and the secondary data increase the chain of evidence for trustworthiness. The interview guide ensures that the questions are clear to all fifty participants and further credibility assurance by the researcher in transcribing the interviews accurately and thoroughly. According to Yin (2013), the advantage of using multiple sources of evidence which is the process of construct validity, is the development of "converging lines of inquiry".

Transferability refers to the ability of the findings to be applied to a similar situation and delivering similar results (Koonin, 2014, p. 258). The study was conducted on a contextual and cross sectional basis and, it is hard to ensure peoples' feelings and emotions will be replicated in future studies. Dependability was ensured through full disclosure of research methods used and in-depth methodological description on the research design and its implementation in this study. Finally, confirmability refers to how well the data collected support the findings and interpretation of the researcher (Koonin, 2014:259). The study ensured confirmability as it made use of volunteer participants for the interviews and recorded all the conversation for confirmatory with the participants. The study therefore, ensured as far as possible that the findings are the results of the experiences and ideas of participants rather than the researchers' beliefs and prejudice. Credibility evaluates the validity of a researcher's reconstruction of a social reality. The study has meticulously carried out a carefully designed and controlled data collection and analysis procedures to ensure the credibility of the research results. Notably, this study did not claim transferability of the research results explicitly, but the disclosure of data collection and process analysis enhance transferability.

15. Findings and recommendations

Although there are still areas of growth that need to be researched further in the conceptualization of sustainable growth potential for the Sicabazini farmers' cooperative, this article reveals that it could be and can

be improved. The study has found that growth is embedded in adequate training, improved business environment, heightened business skills and resource availability, which would enable these cooperatives to venture in the mainstream competitive market.

The role of the farming cooperative benefits the dual objectivity (social and economic nature) while simultaneously elevating agricultural prosperity and creating job opportunities in remote rural areas. Furthermore, the lack of resources and less accessible larger markets coupled by languishing commercial growth prospects influence the progressive phases of cooperative. Insufficient positive change within the households and the families limits capacity to overcome the members' diseconomies of scale in realizing a multiplier effect to fully benefit dual objectivity approach.

The primary cooperative society works as the driving force of cooperative development, business promotion, job creation and poverty reduction. If agrarian ideology begins with the premise that agriculture is the most basic institution in the South African economy, Hogeland (2013) stresses that agricultural prosperity ensures the nation's prosperity. The purview of cooperative was observed by Schoenberger (1997) that "strategy is the way firms envision a social order and their position in it" may explain why agrarian-influenced cooperatives, prompted by the serfdom metaphor, interpreted industrialization as an attack on the established rural social order.

Members appreciate working in the cooperative provided that it granted them the following advantages: pooling of resources; sharing of skills; improved visibility; and bigger 'stokvel' opportunities as individuals (a traditional money saving scheme in SA that permits an informal credit system). Sicabazini farming cooperative sees the cooperative as an entity to support their sustenance, be it is through personal use of their own product or earning an income.

The cooperative is positioned centrally in the network, having a supply or demand (or both) relationship with cooperative members. This element has been overlooked to meet fundamental societal needs and misunderstood how societal harms and weaknesses affect value chains. Market dynamics seems to influence the economic functioning of the cooperative, while the cooperative's business role is embedded on the members' ideology of internalizing the purchasing, selling and/or marketing into a joint enterprise. Neto, Marcelo Rezende Barroso. and (2010.pp. 68-87) state that cooperatives are enterprises with an economic goal, but without a profit maximization goal. In the current global market, the small-scale South African cooperatives are against high odds of accessibility and competitiveness on the main stream economy. Sicabazini farming cooperative seeks better

marketing strategies, capital investment initiatives, secure environment from theft and enhancement of their credit rating for business growth prospects.

16. Managerial implications

When the study was completed, it was found that knowledge and skill acquisition among other reasons were paramount in unlocking the growth potential of these farmers into second-tier status. Unfortunately, some of these farming cooperatives have limited access to large markets, business skills and farming expertise they need in order to become economically significant, such is the case with the Sicabazini farming cooperative. The managerial implication is that enabling environment dictates that the cooperatives have a chance to proceed with phases within the measurable time and transform into fully fledged SMMEs or competitive mainstream participants in value chain network.

17. Contextual implications

The farming cooperatives require better enabling environment for creation of large markets accessibility. The antedate of growth prospects demands proper nurturing of business skills and imparting appropriate farming expertise to become economic viable. The World Bank's Development Report of 2008 recommended that African countries should include in the economic and overall development strategies the use of agricultural initiatives (Bokana, 2012). In a similar report for 2014, the bank has been found to support this view and, thus, backing efforts made by countries in improving agricultural productivity (World Bank, 2014). They have done this by linking farmers to markets and reducing their risk in these markets, thus, minimizing their vulnerability; this has resulted in the increase of rural employment, agricultural activities that are environmentally sustainable,' (World Bank, 2014, p. 9). Bokana (2012, p. 12) states that 'about 70% of the African population lives in rural areas and are dependent on agriculture.' He further says investments in agriculture will, therefore, favor than similar investments poor more manufacturing, hence, the importance of agricultural cooperatives.

Conclusion

In conclusion, cooperatives in the South African context seem to be struggling with growing into second-tier and later third-tier entities due to a number of various factors that are driven by how members of these entities perceive their growth potential amongst other external factors. In the case of Sicabazini farming coorperative, the confusion between whether or not they are

running a business and/or work for it has created a culture of expecting external funding in order to accomplish all that they need to accomplish, making themselves a charity case, as opposed to a business with quality products to offer. In reality, these businesses should be functioning at the level where they can compete with other businesses in the similar markets without fear of not being on par. This means they need to learn about marketing, understanding their market, all sorts of control measures, including physical ones like security.

References

- 1. Baxter, P. and Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers, *The qualitative report*, 13(4), pp. 544-559.
- 2. Berg, K.E. and Latin, R.W. (2010). Validating Pedometer-Based Physical Activity Time against Accelerometer, *ICHPER-SD Journal of Research*, 5(1), pp. 20-25.
- 3. Bijman, J. and Hanisch, M., (2014). Shifting Control? The Changes of Internal Governance in Agricultural Cooperatives in the EU, *Annals of Public and Cooperative Economics*. In print.
- 4. Birchall, J. (2013). The potential of Cooperatives during the Current Recession: Theorising Comparative Advantages, *Journal of Entrepreneurial and Organizational Diversity*, 2(1), pp. 1-22.
- 5. Bokana, G. (2012). Swaying from perfunctory agriculture to agriculture based development: What are the incentives for *Africa?* Presented in June 2011 at the IJAS Conference in Aix Provence-France.
- Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology, Qualitative Research in Psychology, 3(2), pp. 77-101
- 7. Brewin, D., Bielik, M. and Oleson, B. (2008). The evolution of grain trading organizations in Australia: Applying the cooperative life cycle, current agriculture, food and resource issues, *Journal of the Canadian Agricultural Economics Society*, 9, pp. 9-17.
- 8. Bryman, A. and Bell, E. (2011). Business Research Methods. USA: Oxford University Press.
- 9. Burdin, G. and Dean, A. (2012). Revisiting the objectives of worker-managed firms: An empirical assessment, *Economic Systems*, 36(1), pp. 158-171.
- 10. Caridi, M., Cigolini, R. and De Marco, D. (2005). Improving supply chain collaboration by linking CPFR, *International Journal of Production Research*, 43(20), pp. 4191-4218.
- 11. Cook, M. (1995). The future of US agricultural cooperatives: A neo-institutional approach, *American Journal of Agricultural Economics*, 77(5), pp. 1153-1159.
- 12. Cook, M.L. (2013). Governance of Franchising Networks, Cooperatives and Alliances, 34(3-5), pp. 218-229.
- 13. Creswell, J.W. (2009). Research Design, Qualitative, Quantitative, and Mixed Methods Approaches. California: SAGE Publications Ltd, USA
- 14. Cropanzano, R. and Mitchell, M.S. (2005). Social exchange theory: an interdisciplinary review, *Journal of Management*, 31, pp. 874-900.
- 15. Crouch, G.I. and Ritchie, J.R.B. (2011). A Model of Destination Competitiveness and Sustainability.
- 16. Department of Trade and Industry (DTI). (2014). A Cooperative Development Policy for South Africa.
- 17. Derr, J.B. (2013). The Cooperative Movement of Brazil and South Africa' Sustainable Development, *Rosa Luxumberg Foundation*, April 2013.
- 18. Eisenhardt, K.M. and Graebner, M.G. (2007). Theory building from cases: Opportunities and challenges, *Academy of Management Journal*, 50(1), pp. 25-32.
- 19. Fischer, R. (2013). A gentleman's handshake: The role of social capital and trust in transforming information into usable knowledge, *Journal of Rural Studies*, 31, pp. 13-22.
- 20. Fujiomoto, R., Hat, A., Otorola, D. and Sacerdote, A. (2012). *P.E.A.C.E. Foundation: Establishing a Secondary-Tier Agricultural Cooperative Model in South Africa*. Presented at the SMIG-UKZN for IBD at the Haas Business School at Berkeley University, CA.
- 21. Gajanana, T.M., Gowda, I.N.D. and Reddy, B.M.C. (2010). Exploring Market Potential and Developing Linkages A Case of Underutilized Fruit Products in India.
- 22. Galappaththi, E.K., Kodithuwakku, S.S. and Galappththi, I.M. (2016). Can environment management integrate into supply chain management? Information sharing via shrimp aquaculture cooperatives in Northwest Sri Lanka, *Marine Policy*, 68, pp. 187-194.
- 23. Goulet, F. (2013). Narratives of experience and production of knowledge and production of knowledge within farmers' groups, *Journal of Rural Studies*, 32, pp. 439-447.
- 24. Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. and Lounsbury, M. (2011). Institutional complexity and organizational responses, *Academy of Management Annals*, 5, pp. 317-371.
- 25. Haase, M., Roedenbeck, M. and Sollner, A. (2007). Institutional rigidity and the lock-in between mental models and ideologies. 11th annual conference of the international society for new institutional economics on comparative institutional analysis: Economics, politics, and law. Available at: http://www.isnie.org/assets/files/papers2007/soellner.pdf.
- 26. Herbel, D., Rocchigiani, M. and Ferrier, C. (2015). The role of the social and organizational capital in agricultural cooperative' development Practical lessons from the CUMA movement, *Journal of Co-operative Organization and Management*, 3, pp. 24-31.

- 27. Hogeland, J. (2013). From agrarian to global values: How 20th century US agricultural cooperatives came to terms with agricultural industrialization, *Journal of Rural Cooperation*, 41(2), pp. 97-113.
- 28. Hugo, W.M.J., Badenhorst-Weiss, J.A. and Van Rooyen, D.C. (2011). *Purchasing and supply management*, 6th ed. Pretoria: Van Shaik.
- 29. Isaacs, M. (2011). *Individual transferable quotas, poverty alleviation and challenges for small-country fisheries policy in South Africa* [Online]. Available at: http://www.sarpn.org.za/documents/d0000786/index.php. Accessed on 4 August 2012.
- 30. Johannisson, B., Ramirez-Pasillas, M. and Karlsson, G. (2002). The institutional embeddedness of local inter-firm networks: A leverage for business creation, *Entrepreneurship Regional Development*, 14(4), pp. 297-315.
- 31. Jussila, L. (2012). The Journal of Co-operative Organization and Management, *Journal of Co-operative Organization and Management*, 1(1).
- 32. Kanyane, M.H. (2009). Cooperatives as part of social security mainstream for poverty alleviation in selected municipalities. *Journal of Public Administration*, 44(4).
- 33. King, R.P and Ortmann, G.P. (2010). Research on agri-food supply chains in Southern Africa involving small-scale farmers: Current status and future possibilities, *Agrekon*, 49(4).
- 34. Klerkx, L. and Proctor, A. (2013). Beyond fragmentation and disconnect: Networks for knowledge exchange in the English land management advisory system, *Land Use Policy*, 30, pp. 13-24.
- 35. Koonin, M. (2014). Research Matters, Validity and Reliability. Cape Town: Juta Company, South Africa, pp. 252-261.
- 36. Mazzarol, T., Limnios, E.M. and Rebound, S. (2013). Co-operatives as a strategic network of small firms: Case studies from Australian and French co-operatives, *Journal of Co-operative Organization and Management*, 1, pp. 27-40.
- 37. Mentzer, I.T., DeWitt, W., Keebler, J.S., Min, S., Mix, N.W., Smith, C.D. and Zacharia, Z.G. (2001). Defining supply chain management, *Journal of Business Logistics*, 22(2), pp. 25.
- 38. Mmbengwa, V. M., Ramukumba, T., Groenwald, J. A. van Schalkwyk, H. D. Gundidza, M. B., and Maiwashe, A.N. (1990). Factors that influence the success and failure of land bank supported farming small, micro and medium enterprises (SMMES) in South Africa, *Journal of Development and Agricultural Economics*, 3(2), pp. 35-47.
- 39. Neto, B., Barroso, S., Marcelo, F.G. and Rezende, A.M. (2010). Co-operative governance and management systems: an agency costs theoretical approach, *Brazilian Business Review*, 9, pp. 68-87.
- 40. Nilsson, J. (1996). The nature of cooperative values and principles transaction cost theoretical explanations, *Annals of Public and Cooperative Economics*, 67(4), pp. 633-653.
- 41. Ortiz-Miranda, D., Moreno-Pérez, O.M. and Moragues-Faus, A.M. (2010). Innovative strategies of agricultural cooperatives in the framework of the new rural development paradigms: the case of the Region of Valencia (Spain), *Environment and Planning*, 42(3), pp. 661-677.
- 42. Pattiniemi, P. and Tainio, J. (2000). Osuustoiminnan periaatteet kilpailueduiksi. Työosuuskuntien kehittäminen demokraattisina ja osallistuvina. Kansan sivistyonliitto. Vantaa: Hakuprint.
- 43. Peace Foundation. (2010). *Sicabazini 5 year agricultural project*. [Online] Available at: www.peacefoundation.org.za. (Accessed: 2 July 2012)
- 44. Putnam, R.D. (2000). Bowling alone. The collapse and revival of American community. New York: Simon & Schuter.
- 45. Puusa, A., Hokkila, K. and Varis, A. (2016). Individuality vs. communality A new dual role of cooperatives? *Journal of Co-operative Organization and Management*, 4, pp. 22-30.
- 46. Satgar, V. (2011). The globalized agro-food complex: farming cooperatives and the emerging solidarity economy alternative in South Africa.
- 47. Saunders, M. Lewis, P. and Thornhill, A. (2009). Research Methods for Business Students. Edinburgh: Prentice Hall.
- 48. Schoenberger, E. (1997). *The cultural crisis of the firm*. Oxford: Blackwell.
- 49. Silverman, D. (2010). Doing qualitative Research: A Practical Handbook, 3rd Ed. London Sage.
- 50. Stiglitz, J., Sen, A. and Fitoussi, J.P. (2010). *Mismeasuring our lives: Why GDP doesn't add up?* New York/Paris: New Press/INSEE.
- 51. Sumelius, J., Tenaw, S., Bee, F.K. and Chambo, S. (2015). Agenda on cooperatives for development cooperation in Tanzania, *Journal of Co-operative Organization and Management*, 3, pp. 98-100.
- 52. Thompson, S. (2015). Towards a social theory of the firm: Worker cooperatives reconsidered, *Journal of Co-operative Organization and Management*, 3, pp. 3-13.
- 53. Tregear, A. and Cooper, S. (2016). Embeddedness, social capital and learning in rural areas: The case of producer cooperatives, *Journal of Rural Studies*, 44, pp. 101-110.
- 54. Tuominen, P., Uski, T., Jussila, I. and Kotonen, U. (2008). Organization types and corporate social responsibility reporting in Finnish forest industry. *Social Responsibility Journal*, 4(4), pp. 474-490.
- 55. Woerdman, E. (2004). The institutional economics of market-based climate policy. Amsterdam: Elsevier.
- 56. World Bank. (2014) 'Annual Report-Africa' [Online]. Available at: http://www.wprldbank.org/en/about/annual-report/regions/afr. Accessed on 12 December 2014.
- 57. Yin, R.K. (2013). Case Study Research: Design and Methods. London: Sage Publications.
- 58. Zheng, S. and Wang, Z. (2012). Determinants of producers' participation in agricultural cooperatives: evidence from Northern China.