

COLLECTIVE ACTION FOR ACCESS TO INPUTS, FINANCE, MARKETS AND EXTENSION FOR SMALLHOLDER FARMERS IN ESWATINI

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ABSTRACT

Smallholder farmers' access to inputs, finance, markets and extension is key to their success and contribution to rural development. In a study that was conducted in the Hhohho region of Eswatini, with a snowballed sample of 82 smallholders, it was found that most smallholder farmers are elderly women who generally had low levels of education. They predominantly held land that is less than 1 ha which was on Swazi Nation Land (SNL). Even those who were part of farmer groups operated as individuals, since group committees had difficulties in managing the groups. Farmers who had export market contracts were more likely to access bank finance, while those with NAMBoard market contracts were not. However, grouped farmers were more likely to access NAMBoard marketing contracts and extension services. The results suggest that collective operation for farmers is key to market and extension access but not finance. Therefore, as much as extension officers (EOs) should encourage and assist smallholders to form formal groups like cooperatives, they still need to go further to create strategies to assist the farmer cooperatives to raise capital. Cooperatives can raise capital through joining fees and shares, but the traditional cooperatives are inefficient in raising additional capital from capital endowed members and strategic partners later on in their life. This creates a niche for hybrid cooperatives, which are efficient in this regard. Thus, there is an urgent need to train EOs on the development of cooperatives and equally lobby for legislative innovations. This may allow the development of efficient cooperatives and improve the viability and sustainability of farmers.

Keywords: Access to markets, Cooperatives, Institutions, Role of extension, Smallholders

1. INTRODUCTION

Smallholder farmers have been identified as a strategic component for economic growth and development in Eswatini (African Development Bank (AFDB), 2018:23; Magagula & Faki, 1999:17; World Bank, 2011:3). However, to achieve this economic contribution, access to inputs, capital (finance), produce markets and effective extension services remains pivotal for smallholders' success. In the 1960s-1970s, governments and non-governmental organisations (NGOs) have tried to subsidise inputs and improve extension services for farmers to improve food security and rural income, however, these strategies were proven to be unsustainable and detrimental to the microeconomics of countries (Crawford *et al*, 2003:278-279; Kelly, Adesina & Gordon, 2003:380), subsequently farmers had to find these resources at market prices and on their own. This situation became a difficult hurdle for most smallholder farmers, and therefore the need for farmers to organise themselves and coordinate with the financial, inputs

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and produce markets became inevitable. Although it is clear that extension is central to smallholder success especially in coordinating farmers with markets, it is also regrettable that the provision of public extension services to poor smallholder farmers has declined over the years and has faced general neglect from governments (Connolly, Ndlangamandla & Sikhondze, 2011; Oladele *et al*, 2009).

Kelly *et al* (2003:400) argued that governments and donors should focus on providing public goods that improve the use of inputs rather than directly putting subsidies on inputs. These public goods include rural infrastructure (roads, markets, electrification), basic education particularly in rural areas, agriculture research and extension, market information systems, grades and standards (establishment and enforcement), improved contract law and enforcement procedures, World Trade Organisation (WTO) negotiations that improve Africa's competitive position, and a stable policy environment (Kelly *et al*, 2003:400). Governments seem to have a lot to do with limited resources, which limit their potential to fully assist smallholder farmers, therefore, the involvement of strategic partners (private sector) and entrepreneurial individuals into farmer groups may alleviate these challenges.

The literature remains consistent regarding the fact that cooperatives are central to smallholder farmers' access to inputs, capital, produce markets, value adding operations, and services (Berdegué, Biénabe & Peppelenbos, 2008:1; Devaux *et al*, 2009:2; Hellin, Lundy & Meijer, 2009:17; Louw *et al*, 2007:540; Louw *et al*, 2008:296; Markelova *et al*, 2009:2; Ortmann & King, 2007:20-21; Reardon, Timmer & Minten, 2010:1233; Simelane, 2011; Xaba & Masuku, 2012:112). Therefore, extension officers (EOs) should encourage and assist farmers to develop formal groups such as cooperatives; however, they need to understand the institutional limitations around traditional cooperatives (Cook, 1995:1156). The challenges of traditional cooperatives have given rise to hybrid cooperatives called new generation cooperatives (NGCs) in most developed countries (Hensley & Swanson, 2003; van Bakkum & Bijman, 2006). The NGC structure attracts capital from capital bestowed members and is flexible to become an investor shared cooperative (ISC) which brings strategic partners (private sector) to invest into cooperatives.

2. DEFINITION OF PROBLEMS

The literature on smallholder farmers throughout developing countries, including Eswatini, reports that they reside in awkward rural areas with underdeveloped infrastructure (roads), they are poor, lack assets, cannot access finance, have small land parcels usually with low fertility, low levels of education, poorly coordinated value chains, and are elderly (Dorward, Kydd & Poulton, 2005:81-83; Jari & Fraser, 2009:1133; Magagula & Faki, 1999:14; Masuku, Masuku & Mutangira, 2016:58; Ngugi, Gitau & Nyoro, 2007:13-14; Ortmann & King, 2007). The overarching recommendation is that smallholders should organise themselves into formally institutionalised groups such as cooperatives to alleviate some of these socio-economic barriers. As much as this may be true, the literature on cooperatives in Eswatini suggests that even farmer cooperatives still face most of these challenges. Farmer cooperatives in Eswatini were found to have challenges relating to accessing capital (risk capital), markets, and were clouded with poor management (Hlatshwako, 2010; Masuku *et al*, 2016; Mavimbela, Masuku & Belete, 2010). Some cooperatives in Swaziland were developed by external development agents, governments, and private companies (Levin, 1987), however, after the external support ceased they collapsed. While acknowledging other factors that may be at play for the poor performance of cooperatives in Eswatini, mention should be given to the general poverty in

rural areas, land tenure (Levin, 1987), weak extension (Connolly *et al*, 2011; Keregero, 2000:80; World Bank, 2011), and inefficient institutions which cooperatives are built on. Therefore, as we suggest cooperatives to farmers, we need to also suggest how these organisations can be strengthened.

There is a general poor performance of horticultural smallholder farmers in Eswatini. They struggle to access capital for investing in value adding activities and have poor management (Masuku *et al*, 2016). These farmers still struggle, even when they are organised into cooperatives, and these challenges diminish the positive impact that rural agribusiness can contribute to rural economic growth and development. This paper supports the role for cooperatives in strengthening rural smallholder farmers, but it also advocates for institutional evolution on cooperatives legislation to enhance their viability and sustainability. It used a case of smallholder farmers in the Hhohho region of Eswatini and literature review to build a case for strengthening the viability of farmer cooperatives in Eswatini.

3. METHODOLOGY

3.1 Study area

The study was conducted in the Hhohho region of Eswatini. This region is in the northern part of Eswatini with coordinates 26°00'S31°30'E. It has an area of about 3625.17 km² with a population of 1.4 million (Worldometers, 2019). The Hhohho region is predominantly overlaid by the Highveld and Middleveld geographic regions. The Highveld has the highest altitude of 900-1400 masl; the Middleveld ranges from 400-600 masl with an annual rainfall of between 500-1500 mm [Ministry of Tourism and Environment Affairs (MTEA), 2011:4]. This makes the Hhohho region to be less prone to drought; hence most rural communities still practice rain-fed subsistence agriculture alongside semi-commercial practices to purely commercial agriculture.

A total of four Rural Development Areas (RDAs) are spread across the Hhohho region. The RDAs are government driven strategic points for decentralising public extension services to rural communities and EOs are housed here. The centres provide extension services to both subsistence and commercial farmers. The services include general farming information and technical services ranging from soil testing, subsidised tractor services, agronomic services.

3.2 Sampling and data collection

Within the four RDAs, there were only 13 EOs dealing with horticultural activities in the region. The other few EOs were dealing with the other technical services. The study sampled all 13 EOs who filled a questionnaire with both structured and open-ended questions. Focus group discussions were conducted with RDA extension leaders during their meetings. Alongside this data collection from EOs, a snowballed sample of 82 horticultural smallholder farmers was interviewed. The interviews were conducted using a questionnaire with both structured and open-ended questions.

3.3 Data analysis

Data from questionnaires and individual interviews were coded and entered into the Statistical Package for Social Science (SPSS), version 10. The small data sample of EOs limited in-depth

data analysis for the study, thus only descriptive analysis was done. The data was presented and supported by data from group discussions. However the farmers' data was analysed on descriptive statistics and correlations.

3.4 Literature review on strengthening of cooperatives

Kherallah and Kirsten (2002) argued that the new institutional economics (NIE) theory provides an economy with both theory (neo-classical economics) and institutions (classical economics) to explain the determinants and evolution of institutions over time and evaluate their impact on economic performance, efficiency and distribution. Recent studies on cooperatives have been dominated by the NIE theory (Chaddad & Cook, 2004; Cook, 1995; Cook & Burrell, 2009; Cook & Iliopoulos, 1999; Harris, Stefanson & Fulton, 1996; Rosairo *et al*, 2012; Sykuta & Cook, 2001; Woodford, 2008), and they come into consensus that traditional cooperatives suffer from ill-defined property rights that cause conflicts over residual claims and decision control. They then recommend that countries should evolve their legislation to allow institutional innovations in cooperatives by-laws which enable them to give incentives for capital investment. This would concomitantly result in the development of new generation cooperatives (hybrid cooperatives) which would provide incentives for capital more than the traditional structures which only promoted patronage. This innovation has gained importance as the markets have evolved to push value adding activities to farmers and they impose standards which require frequent investments to meet (Louw *et al*, 2008:296). Moreover, formal financial markets view rural farmers as high risk.

4. FINDINGS

4.1 Demographic characteristics of smallholder farmers

The results indicated that 52 farmers were above 50 years of age and the modal age group was 61-70 years. The modal age suggests that a large number of the farmers were pensioners since the retirement age in Eswatini is 60 years. The youth (<31 years) only consisted of five farmers as shown in Figure 1. The dominance of the aged group may suggest that farming was more of a livelihood strategy (food security and income) for elderly people.

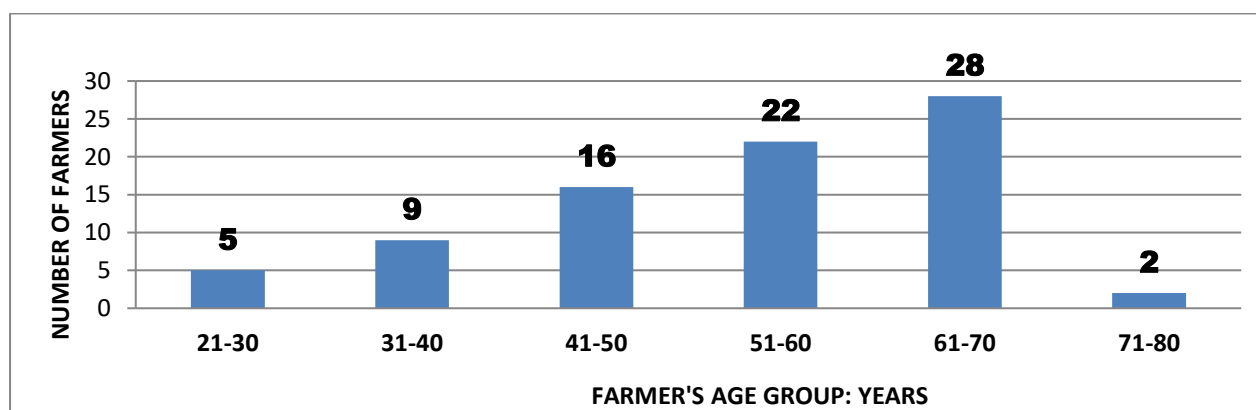


Figure 1: The number of smallholders as categorised in age groups

According to Table 1, most of the smallholder farmers were females across all the age groups, except for the age group of 21-30 years. The dominance of female farmers may mean that males have better access to non-farm jobs than females. The gap between the two sexes

widened from age group 31-60 years, however, it converged at age groups of 61 years and above. This may reflect that even males start farming after they retire from their off-farm jobs.

Table 1: The relationship between farmers' age group and their gender

Farmers' Gender	Farmers' Age Groups						Total	% Total
	21-30 Years	31-40 Years	41-50 Years	51-60 Years	61-70 Years	71-80 Years		
Male	4	2	1	8	13	0	28	34.2
Female	1	7	15	14	15	2	54	65.8
Total	5	9	16	22	28	2	82	100
Total % Farmers	6.1	11.0	19.5	26.8	34.2	2.4	100	100

A total of 65.8% of the farmers were married while only 9.8% were still single (Figure 2). If the percentage of widowed farmers is added with the percentage of the married farmers, it is found that 89% had families. Furthermore, the correlation results analysis showed that marital status was positively correlated to farmers' age ($r=0.416$, $p=0.000$) and to farmers' gender ($r=0.337$, $p=0.002$) at 99% confidence level. These results show these farmers were generally married female and who were aged.

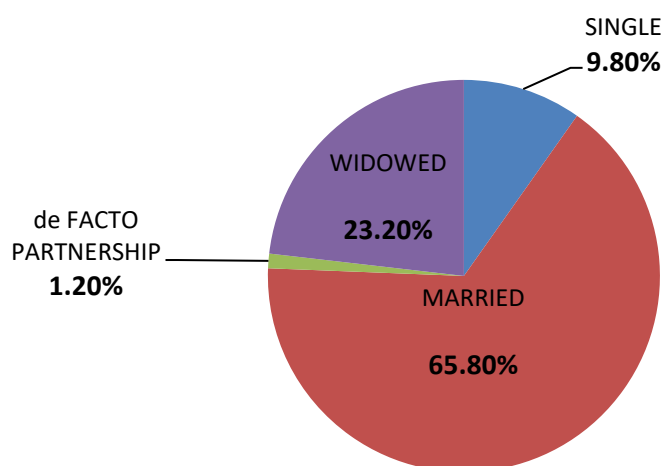


Figure 2: The marital status of farmer respondents

The farmers who participated in the study were well experienced in farming (Table 2). More than 70% had farming experience of above five years. About nineteen (19%) percent had been farming for more than 30 years. Notable, is the fact that female farmers were generally more experienced in farming than their male counterparts. The high experience for females is in line with the results shown in Table 1 where it is seen that females start farming earlier than males. However, this experience cannot be simply translated to mean production proficiency and efficiency; it is merely years of practice.

Table 2: The farming experience of farmers in relation to gender

Experience Categories of Farmers	Farmers' Gender		Total	% Farmers
	Male	Female		
0-5 Years	11	13	24	29
6-10 Years	5	13	18	22
11-15 Years	2	8	10	12
16-20 Years	4	4	8	9
25-30 Years	1	6	7	9
31-35 Years	1	3	4	5
36-40 Years	2	2	4	5
41-45 Years	2	5	7	9
Total	28	54	82	100
% Farmers	34.1	65.9	100	100

Approximately 60% of the farmers dropped out of school before they reached the higher secondary level of education (Figure 3). Only 3.7% had tertiary education, while the percentage of those who never went to school at all stood at 14.6%. This showed that the levels of education were generally low amongst farmers. Therefore, they need proficient EOs to advise, guide and mentor them with agribusiness issues from institutionalisation to production and markets.

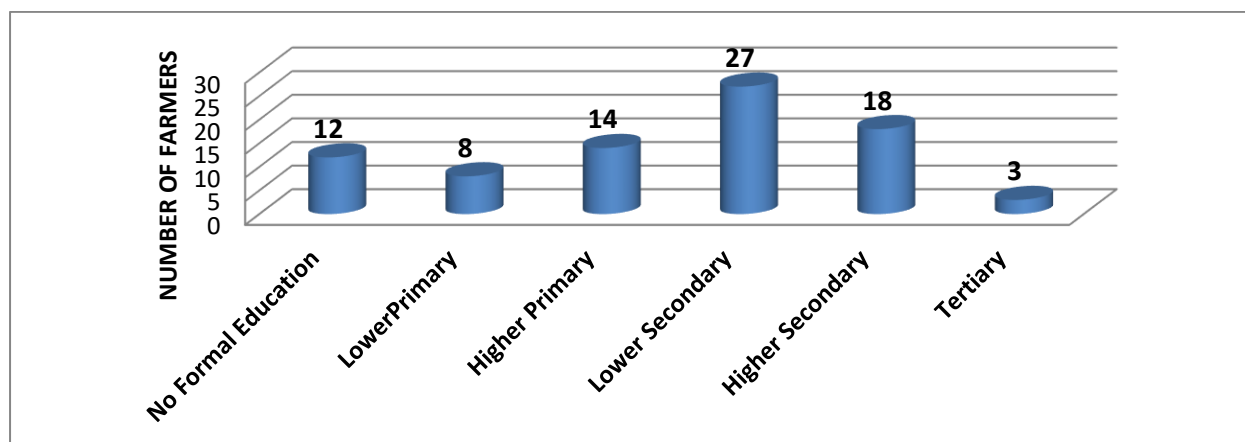


Figure 3: Level of education achieved by farmer respondents

Male farmers had more access to formal education than female farmers as shown in Table 3. The most alarming statistics is that 92% of the farmers who never went to school were female, however, at higher secondary level of education there was parity between the sexes. The results analysis revealed that there was a negative correlation between highest level of education and farmers' age ($r=-0.294$, $p=0.007$) and for marital status ($r=-0.378$, $p=0.000$) at 99% confidence level. When viewed in line with the results, the analysis shows that the higher the level of education, the lower the age of the farmers and the higher likelihood of being single. It means younger farmers were more likely to have higher levels of education and single. Therefore if older farmers work together with younger farmers who have better chances of comprehending scientific and agribusiness technological innovations, the chances for efficient business skills adoption are higher, than if the old farmers are on their own.

Table 3: Comparison between male and female farmers regarding access to formal education

		Farmers' highest level of education					Total	% Farmers	
		No formal education	Lower primary (G1-G4)	Higher primary (G5-G7)	Lower secondary (F1-F3)	Higher secondary (F4-F5)			Tertiary Level
Farmers' gender	Male	1	2	4	11	9	1	28	65.9
	Female	11	6	10	16	9	2	54	34.1
Total		12	8	14	27	18	3	82	100
% Framers		14.6	9.8	17.1	32.9	22	3.7	100	100

Figure 4 demonstrates the trend between males and a female in as far as access to education was concerned. There were more female dropouts at the lower levels of education than males; however, the disparity diminishes at the higher secondary level to tertiary level. Although, it still remains that the majority of farmers dropped out of school without completing secondary education. This makes it difficult for them to get non-farm professional careers and thus they resort to farming. The general low levels of education may hinder the ability of farmers to manage their businesses well and form effective linkages with markets (finance, inputs, produce) because such linkages are technical and can be complicated even for professionals.

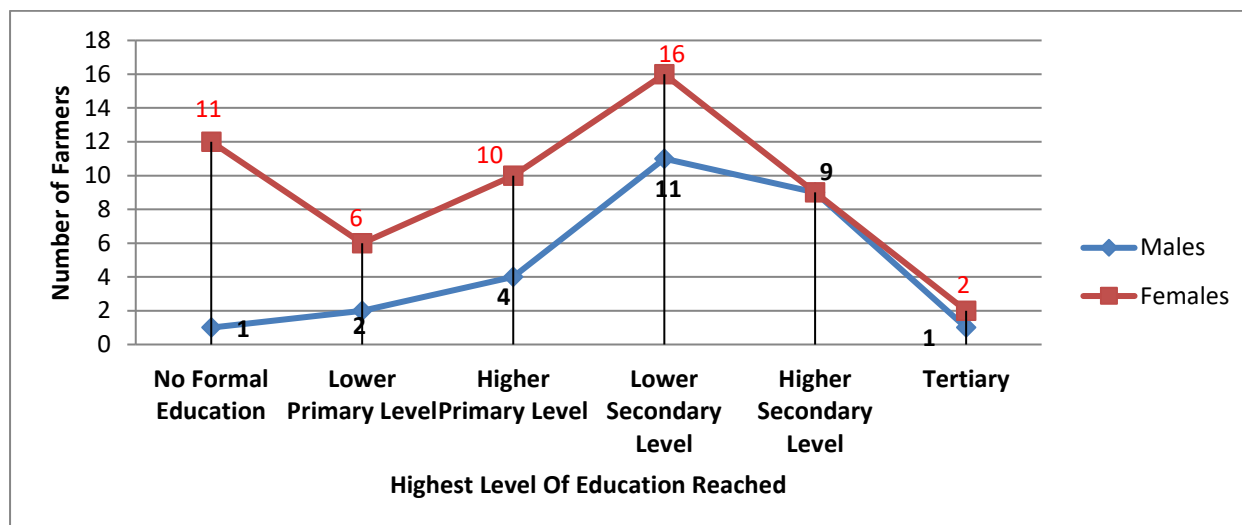


Figure 4: The trend regarding access to education for male and female farmer respondents

4.2 Operations

Farmers grew field crops in summer (warm season crops) and vegetable crops in winter (cool season crops). All the farmers grew maize in summer for substance reasons, however, some sold the maize as green mealies while others sold surplus of dried maize. Those who had access to more land also grew sweet potatoes, cassava and beans on the extra fields, while others would intercrop beans, pumpkins, melons and jugo beans with the maize. Rice and yams were grown on specifically designed fields, namely rice paddies and wet lands for yams. After harvesting the warm season crops, they grew cool season crops (vegetables) mainly on their

fenced fields. The main vegetables grown were tomatoes, cabbages, onion and carrots. The field crops were predominantly rain-fed, except for rice, while the cool season crops were irrigated.

A total of 97.6% of the farmers were farming on Swazi Nation Land (SNL)⁴ and 89.1% owned a hectare or less of land (Table 4) and extra land was generally not accessible (see Table 6 in Appendix 1). These results meant that the large majority of the farmers owned small land parcels with unsecured⁵ tenure. Levin (1987) also reported similar findings on farmer schemes. The farmer-schemes were grouped farmers who were operating individually. These schemes had farmer absentees and hence more land in the schemes laid fallow as owners were no longer interested in farming or have passed on and it is difficult to allocate it to others or families are failing to decide who shall inherit the land. Dlamini and Masuku (2011:301) reported that the tenure insecurity in SNL resulted in underinvestment on farm infrastructure and it undervalues the land as an asset. Deininger and Jin (2008: 67) as well as Huy, Lyne, Ratna & Nuthall (2015: 476) found that secured tenure improves the efficiency of land transfer (rent it out, sales). Therefore, the land rights on farmland in Eswatini needs some improvements (to enable ease of transfer), and the capacitation of capacity of chiefs to govern the rights. This may enable efficient use of the land and reduce fallow arable land. The small parcels of land reduces the potential of individual farmers to access affluent markets since they cannot meet scale and also diversify their production using the small land parcels. Therefore, in the current situation farmers need to coordinate and collaborate their operations to improve their capacity to meet market scales and pool resources to invest in farm infrastructure (like irrigation) as they generally lacked access to such resources (see Table 6 in Appendix 1).

Most of the farmers (72%) targeted the spot market while only 1.2% had access to export market. Access to contract markets like NAMBoard and exports was low, which may largely be contributed by lack of information on markets and the generally non-market led farming strategies. Moreover, this may be a factor of farmers unable to meet standards, scale, low farm investments, lack of knowledge of those markets and low bargaining power. Collective action (working together) may alleviate these challenges (Ortmann & King, 2007) and EOs need to facilitate the formation of formal farmer groups and provide market information to assist farmers adopt market-led production strategies

⁴ It is a type of land tenure in Swaziland which represents communal land. By definition it is the land the King holds in custody for the nation and is managed by chiefs who allocate it to subjects. Farmers only have use rights and no ownership rights.

⁵ The land is given to families rather than individuals which makes the transfer of tenure difficult for larger families when the parents pass on.

Table 4: Characteristics of the farmers' projects in general

Characteristics	Variables	Frequency	%
Type of land tenure	Swazi Nation Land (SNL)	80	97.6
	Title deed Land (TDL)	2	2.4
Acquisition of land	Bought it (TDL)	1	1.2
	Personally <i>khonta</i> -ed	25	30.5
	Belongs to my family	19	23.2
	Borrowed by neighbour or friend (TDL)	1	1.2
	Communal farmer group fields	36	43.9
Farm size	<1Ha	55	67.1
	1Ha	18	22.0
	2Ha	3	3.7
	>3Ha	6	7.3
Target market	Export	1	1.2
	Local homestead & shops	59	72.0
	Urban Vendors	5	6.1
	NAMBoard	7	8.5
	Urban shops and Export	10	12.2
Possession of any marketing contract	Yes	19	23.3
	No	63	76.8
Rate current production	Poor	1	1.2
	Below Average	11	13.4
	Average	36	43.9
	Above Average	31	37.8
	Excellent	3	3.7
5-year projection of yield	Increase	28	34.1
	Same	21	25.6
	Decrease	33	40.2

According to Table 5, fifty-one (51%) percent of the farmers were organised in communal farmer groups, but operating individually, and 41.5% were not in any group. The percentage of farmers who wished to work as a cooperative (46.3%) and those who were not interested (43.9%) was almost equal. This showed that farmers were not sure if collective action could help them. Such perception may have emanated from bad previous experience with cooperatives that were poorly managed. From the group discussions, it was found that farmers found it difficult to form formal groups as others disrespected those in farmer-groups' leadership positions. There was a highly negative significant relationship between the way farmers are organised and farm size ($r=-0.301$, $p=0.006$) and with the access to EOs ($r=-0.289$, $p=0.009$). This analysis indicated that if farmers had a small piece of land, they were more likely to be in groups while those with larger land sizes were more likely to work individually. Although this was just a description of farmer schemes that grouped farmers on one location but did not work together. The analysis further suggests that grouped farmers were more likely to be visited by EOs. Therefore, the government and NGOs should assist EOs to organise farmers into formal groups to pool their land parcels and also get more access to EOs. They should become an integral adviser of the group.

Table 5: How the farmers were organised in the Hhohho region

Organisations	Variables	Frequency	%
Farmer Organisation	Individual farmer	34	41.5
	Registered cooperative	6	7.3
	Farmer group with individual operations	42	51.2
Are you willing to work as a cooperative?	Not interested	36	43.9
	Not sure	8	9.8
	Definitely interested	38	46.3
Are you registered with NAMBoard?	Yes	31	37.8
	Still to register	10	12.2
	Will never register	39	47.6
	Have withdrawn my membership	2	2.4
SNAU membership	Yes	12	14.6
	No	70	85.4

A total of 50% (47.6% + 2.4%) of the farmers did not want to work with NAMBoard (Table 5). The correlation results analysis revealed a negative correlation ($r=-0.274$, $p=0.013$) between farmers who had marketing contracts with NAMBoard and farmers working as individuals. This suggests that NAMBoard used to target farmers who were in groups mainly because they will meet scale and it is easier to provide extension, monitor production and collect produce. NAMBoard provided these farmers with inputs, capital and extension. The results analysis further revealed a highly significant (99% confidence level) positive correlation ($r=0.385$, $p=0.00$) between farmers who were members of Swaziland National Agriculture Union (SNAU) and those who had marketing contracts with NAMBoard. This shows that grouped farmers were more likely to obtain marketing contracts with NAMBoard and further join the farmers' union (SNAU). Therefore SNAU and NAMBoard need to work together to support farmers.

Farmers perceived bank loans were not accessible (Table 6 in Appendix 1). This challenge may have also been aggravated by the fact that the smallholder farmers were aged, less educated to draw bankable business plans, keep proper business records, have market contracts and collateral which banks required. There was a highly significant positive relationship between access to export markets and access to business loans ($r=0.402$, $p=0.000$). This shows that financial institutions viewed exports market contracts as a factor that reduces loan default risk. Therefore, EOs need to help farmers gain access to viable markets through assisting them to formally coordinate with reliable produce markets. This may provide them with access to credit to invest into value adding assets. However, to meet these market requirements, they also need to meet required grades and standards.

5. LIMITATION OF TRADITIONAL COOPERATIVES AND COPING STRATEGIES

The New Institutional Economics (NIE) theory on cooperatives suggests that traditional cooperatives are inefficient in attracting investment (risk capital) either from members or investors (Beverland, 2007:480; Chaddad & Cook, 2004:4; Cook, 1995:1156; Cook & Iliopoulos, 1999:528) since they suffer from ill-defined property rights. The risk capital is required for farm upgrades to meet grades and standards, services, research, information, inputs and other expensive value adding assets with high specificity. The capital may be contributed

by capital bestowed members, strategic partners and investors. The ill-defined property rights of cooperatives as argued by Cook (1995) stem from cooperatives founding principles. These principles discourage members from investing additional capital into their cooperatives. This is because even if a member invests extra capital in a traditional cooperative, it does not give him/ her more power in decision making, or access to more benefits (patronage or cash incentives), and the capital cannot be traded or used as collateral nor does it accumulate interest. Cook (1995:1156-1157) categorised these limitations into five major problems, namely (i) free-rider problems⁶, (ii) influence problem⁷, (iii) horizon problem⁸, (iv) portfolio problem⁹, and (v) control problem¹⁰. Therefore, traditional cooperatives can obtain finance (investment) from founding members or new members' joining fees but would struggle to raise value adding capital later on in their life time. This situation forces cooperatives to demutualise into companies and lose their incentives and status as pro-poor organisations. The worst part is when they become dormant or collapse because they cannot access value adding capital.

Esnard, Lyne and Old (2016), Lyne and Collins (2008:180), as well as Rosairo *et al* (2012:514-515) found that these limitations of traditional cooperatives in attracting additional capital can be alleviated by allowing cooperatives to offer a B-Class share on top of the membership shares. This B-Class share should be tradable (non-redeemable) and appreciating at market¹¹ value. It can be conferred limited voting rights not. This share can be positioned as a preferred share that carries higher dividend for non-patron members (in multipurpose cooperatives) or paired with patronage as a "delivery right"¹² or be listed in the open stock market to attract strategic partners and investors (non-members). This alleviates the free-rider problem, horizon problem, portfolio problem and control problem. They also recommended that there should be separation of power between ownership and management rights, and that strategic decision making should be given to capable managers and directors who are democratically elected to alleviate the influence problem. These directors must have full autonomy to run the cooperative without bureaucratic interference. These institutional innovations allow farmers to develop hybrid cooperative structures like the NGCs and ISC which dominate several countries in the developed world (Hensley & Swanson, 2003; van Bekkum & Bijman, 2006; Woodford, 2008). They reward capital fairly as patronage without losing all the cooperative's principles. These institutional innovations have the potential to revive farmer cooperatives.

A desktop review of the Eswatini legislation for cooperatives using the NIE theory (Simelane, 2017) suggests that cooperatives formed under the Swaziland's Cooperative Societies Act (2003) and Swaziland's Cooperative Societies Regulations (2005) would alleviate the influence and partly the free rider problem. This is because it gives directors full autonomy over strategic decision making and control over managers. These directors are all member patrons and are elected through a secret ballot. However, the horizon, portfolio and control problem would still persist since it provides little incentive to trade shares and these shares do not appreciate. The legislation allows companies to join cooperatives but the incentives are

⁶ Benefits accrue more to patronage than capital investments and they cannot fix membership.

⁷ Voting is egalitarian.

⁸ There are no capital gains on shares (shares redeemed at par value).

⁹ Shares are not tradable (but redeemable) when a member leaves the cooperative.

¹⁰ Shares do not have market signals and cannot be used to incentivise managers since they only have value to patron-members.

¹¹ The market can be amongst members or even open market.

¹² The right to deliver certain quantities of the commodity of defined quality and time

discouraging. This is because non-patron members would get a 5% capped dividend on capital and their capital would be fixed and not appreciating.

6. CONCLUSION

Smallholder farmers were generally female, elderly, less educated, small land holders who lacked access to coordinated markets, individually operating and generally full-time farmers. The individualism, lack of coordinated produce markets, and low levels of education may be barriers to finance access since it increases the risk profile of farmers. The lack of access to finance worsens their challenges as it limits their capacity to invest in value adding to access better markets. The correlation analysis suggested that organised farmers were more likely to gain access to local markets contracts and extension support. However, only export markets contract could give access to bank loans. Therefore extension officers should strive to bring farmers into cooperatives. However, the literature on cooperatives in Eswatini suggests that cooperatives also struggle to access markets and finance. This supports the literature that traditional cooperatives suffer from ill-defined property rights; hence they are inefficient in accessing risk (additional) capital. The challenges acquired by traditional cooperatives limits their business efficiency and the concomitant socio-economic development of their members who are usually poor rural people. Developed countries have long ago realised the limitations in traditional cooperatives and developed hybrid cooperatives called NGCs and ISC. This is because such cooperatives are able to attract investment from capital endowed members and strategic partners into the cooperative for value adding which also strengthens the management of the cooperative. This innovation can be adopted by allowing cooperatives to introduce a B-class share that would be tradable (non-redeemable) and appreciable with limited or no voting rights.

7. RECOMMENDATIONS

The Eswatini government should work with NGOs to drive the process of organizing and institutionalising smallholders into formal groups through qualified (trained) EOs to because they are trained on group dynamics, communications and behaviour change. It is also recommended that the EOs form part of the cooperatives' management to provide strategic advice and guide cooperative directors in managing their organisation. The EOs should have no decision making powers but knowledgeable in agribusiness. Then the government should allow cooperatives to form hybrid structures as they have shown viability in other countries. If the government adopts the legislative transformation in-line with the NIE theory on cooperatives, it would be advisable that both farmers and EOs are trained to understand these institutional innovations to make an informed decision on how they adopt them. .

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Appendix 1

Key: A – Accessible (mean: 1.0 – 1.50); LA – Less accessible (mean:1.51 – 2.5); NA – Not accessible (mean:2.51 – 3.0)

Table 6: The level of accessibility of important resources to farmers as perceived by farmer respondents

Resources needed by farmers	N	Min	Max	Mean	Std. Dev	Comment
How accessible are inputs i.e. seeds, fertilizers, pesticides, seedlings?	82	1	3	1.75	0.56	LA
How accessible are insurance products?	82	1	3	2.90	0.34	NA
How accessible is the labour if needed?	82	1	3	2.21	0.67	LA
How accessible is irrigation water?	82	1	3	1.91	0.60	LA
How accessible are export opportunities?	82	1	3	2.78	0.50	NA
How accessible is information on good markets?	82	1	3	2.64	0.53	NA
How accessible are reliable local markets e.g. shop/restaurants contracts?	82	1	3	2.62	0.56	NA
How much access do you have to technical knowledge?	82	1	3	1.50	0.74	A
How accessible is more arable land?	82	1	3	1.83	0.67	LA
How accessible is the tractor and other new technology?	82	1	3	1.65	0.57	LA
How accessible are business loans for you?	82	1	3	2.64	0.53	NA
How accessible are Agribusiness workshops?	82	1	3	2.05	0.65	LA