

**PERCEPTIONS OF CO-OPERATIVE GOVERNING BOARDS ON THEIR CAPABILITIES TO INITIATE INNOVATIONS IN PRIMARY CO-OPERATIVE SOCIETIES: A CASE OF KAFUE, KABWE AND CHILANGA DISTRICTS, ZAMBIA**

**Luka S. Njau<sup>1</sup>, Consesa R. Mauki<sup>2</sup>**

**Abstract**

*This study was conducted to assess the perceptions of the governing boards (board members) of co-operative societies on their capabilities to initiate innovations in primary co-operative societies in Kabwe, Kafue and Chilanga Districts, Zambia. Quantitative data were collected using survey questionnaires administered to 70 board members. Purposive sampling was used to select participants. Qualitative data were collected using semi-structured interviews and Focus Group Discussions (FGDs). Data were analysed using Statistical Package for Social Science (SPSS) computer programme. Likert scale and content analysis were used in the analysis of the qualitative data. Multivariate regression (using logit model) was used to test the extent to which some socio-demographic variables influence board members' capabilities to instigate innovations in their primary co-operative societies. The study revealed that 68.9% of the interviewees said that they were capable of instigating innovations in their primary co-operative societies while 28.2% said they were not capable and the remaining 2.9% were of indifferent opinions regarding their capabilities to initiate innovations in their organizations. Innovations identified as originating from board members during this study include; formation of savings and credit groups, setting up of milk collection centers, collective drugs and livestock feeds outlets and out grower irrigation schemes among other innovations as detailed in this study. Despite a significant number of interviewees feeling that they were capable to undertake various innovations in their organizations, FGDs with the same interviewees indicated that they lacked necessary skills and funds to facilitate more innovations. Results further indicated that age, education level, trainings attended and perceptions of board members tested at ( $p < 0.05$ ) indicated that there were no significant difference on such variables among primary co-operative societies where more innovations were recorded and those with little innovations taking place. Capacity building in terms of education, trainings and financial support were identified as key factors for encouraging internally initiated innovations in primary co-operative societies. This study calls for provision of innovations related education and trainings as well as providing necessary financial support to the governing boards of primary co-operative societies so that more innovations can be initiated in such organizations. The study also recommends that the government of Zambia and other key stakeholders collaborate to ensure formulation of innovation development policy which is currently nonexistent so that more innovations can be planned and implemented in primary co-operatives and other organizations. Inclusion of co-operative studies with innovation and entrepreneurship package in the current primary and secondary education curriculum is also recommended. Other recommendations are as detailed in this study.*

**Key words:** *innovations, perceptions, capabilities, governing boards/board members, primary co-operative societies*

**1.0 INTRODUCTION**

Today's co-operative leaders in Africa require a mix of business skills, political acumen and managerial competence as well as vision and conviction (Schwettmann, 2011). The need to compete in an open and globalised market has obliged co-operative societies to rationalize structures and professionalize many boards of directors (Pinto, 2011). The governing boards (in

<sup>1</sup> Department of Community and Rural Development, Moshi Cooperative University (MoCU), Sokoine Road, P.O. Box 474 Moshi. Tel. +255 754 335940 E-Mail : lukanjau@yahoo.com

<sup>2</sup> Department of Extension and Outreach Programmes, Moshi Co-operative University (MoCU), Sokoine Road, P. O. Box 474 Moshi. Tel. +255 767 965544. E-Mail : maukicons@gmail.com

this paper referred to as board members) are ultimately accountable for policies, practices and procedures that will determine whether the co-operative will live or die (Cropp, 1996). Imagination, innovation and willingness to try new concepts and ideas are attributes vitally needed in many organizational boardrooms (Cropp, 1996) as are important characteristics towards growth in globalised world. Just like all other organizations operating under competitive market forces, for co-operative societies to survive under such forces, they have no choice than to embrace innovation. Given its unique structure (i.e. member owned and controlled organization), the board members of a co-operative society are mandated by the owners (members) to oversee all the key operations (acting as representatives and experts charged with driving the performance of the organization forward, ensuring organization conformance and controlling and supporting management) of the organization (Cornforth, 2004) hence championing innovations.

Promoting innovation and ensuring that it is adequately addressed by the co-operatives management should be the key duty of the board members. Board members not only monitor the organization's innovation performance, but they actively contribute to it (Deschamps, 2013). The Stewardship theory apologetics (Hung, 1998; Muth and Donaldson, 1998) emphasizes the need for the governing boards (in this paper, the co-operative societies board members) to add value (innovate) to their organizations. The theorists argue that general managers (motivated by the trust bestowed upon them by the owners) want to do a good job and will act as effective stewards of organizations resources. As a result, senior management and shareholders (members in the co-operative societies) are better seen as partners among themselves. Hence, the main function of the board is not to ensure managerial compliance with shareholders'/members' interests, but to improve organizational performance. The role of the board is primarily strategic, to work with management to improve strategy and add value to the organization. From this perspective, board members should be selected on the basis of their expertise and contacts so that they are in a position to add value to the organization's decisions (Kirkland, 1994; Cornforth, 2004). The value addition features of this theory hold waters in the modern co-operative model since in order for co-operative societies to grow and sustain free market challenges they should have in place capable boards whose prime function is to innovate (add value) in their organizations. Investment in innovations (co-operatives inclusive) in Zambia remains weak (Daka and Toivanen, 2014). Majority of the co-operative societies in the country suffer from incapability to design and utilize innovations. Much of such incapacities are attributed to inadequate innovative management practices and strategies. However, not much is known on how the governing boards of co-operative societies consider themselves when it comes to issues regarding their abilities to design and utilize various innovations. This paper reflects how the governing boards of co-operative societies perceive themselves in terms of their capabilities to create and facilitate innovations within the organizations they are leading.

## **2.0 METHODOLOGY**

This paper reflect on how the governing boards of the primary co-operative societies (defined as the most basic or low level co-operatives) perceive their capabilities. In this paper, board members capabilities is defined as the measure of their ability in terms of innovative skills and

resource utilization necessary for facilitating instigation of innovations in their co-operative societies. The study was conducted in Kabwe, Kafue and Chilanga Districts in Zambia. These areas were strategically selected as smallholder farmers in these districts have managed to organize and operate some successful and enterprising dairy, multipurpose and agricultural marketing co-operative societies as a means of generating income and reducing poverty. The study sample constituted all active dairy, multipurpose and agricultural marketing co-operative societies in the study areas. By the time this study was conducted, Kabwe district had about 513 registered primary co-operative societies of which only 27 were recorded as active organizations. Kafue district had about 110 registered primary co-operative societies of which only two (2) were active while Chilanga district with 71 registered primary co-operative societies had also two (2) co-operatives which were active. This therefore sums to a total of thirty one (31) active primary co-operatives in the three districts where five (5) of them were financial (savings and credit) co-operatives, five (5) dairy co-operatives and twenty one (21) multipurpose/agricultural marketing co-operatives (DCDR, 2016). The study sample constituted all active dairy, multipurpose and agricultural marketing co-operative societies in the study areas. The dormant (no operations undertaken) co-operative societies were left out/irrelevant of this study as they lacked innovation attributes. This study therefore, involved only the active/successful dairy, multipurpose and agricultural marketing co-operatives where a total of 26 (5 dairy and 21 multipurpose/agricultural marketing) primary co-operatives formed the sampling frame for the study. Ten (10) most active primary co-operative societies (out of 26 primary co-operatives) were then purposively chosen for the study. The reason for picking the most active primary co-operative societies was that the study sought to document on the best innovative practices that are occurring in co-operatives and establish its initiators (whether internally facilitated by governing boards or externally instigated). Then, all board members in the selected primary co-operative societies (usually seven) were purposively included in the study. Purposive sampling technique was used because the study intends to specifically involve the board members of the co-operatives as they are considered important in providing the necessary information pertinent to the study.

The board members are the ones that have been mandated by the owners of the co-operatives (members) to oversee the day to day operations and hence championing various innovations in the organizations. Therefore, 70 board members (35 from Kabwe, 14 from Kafue and 21 from Chilanga) formed the sample size of the study. Survey questionnaires, semi-structured interviews and focus group discussions with the governing boards of the studied co-operative societies formed the basis for data collection for the study. Data were compiled, coded and summarized prior to analysis. Distributions and magnitude of individual variables among interviewees which include percentages and frequencies were determined. Likert scale was used to analyse questions relating to respondents' perceptions on their capabilities to instigate and facilitate innovations in their co-operative societies. Logistic regression model was used to test the extent to which some socio-demographic variables influence the governing boards' capability to instigate innovations in studied co-operative societies. Logistic regression is useful for situations in which one is intending to predict the presence or absence of a characteristics or outcomes based on values of a

set of predictor variables. It is similar to a linear regression model but is suited to models where the dependent variable is dichotomous (see section 2.1 for empirical model details).

**2.1 The Empirical Model of the Factors Influencing Innovation Practices**

The study used the governing boards of the co-operatives as the unit of analysis. In practice, logit and probit models yield estimated choice of probabilities that differ by less than 0.02 and which can be distinguished in the sense of statistical significance, only with very large samples (Aldrich and Nelson, 1990). Consequently, there is little to guide the choice between the two. The choice of specification remains fairly arbitrary revolving around practical concerns such as the availability and flexibility of computer programmes and personal preference and experience (Aldrich and Nelson, 1990; Malamsha and Kayunze, 2014).

In this study due to the estimation problems associated with the applications of multivariate regression models that use qualitative dependent variables, the linear probability models were proposed as alternatives (Aldrich and Nelson, 1990). The only problem with the linear probability model specification is that  $b_n X_{in}$  is used to approximate a probability number  $[P_i | P_i = P(Y_i=1)]$ , assumed to be constrained from 0 to 1 while  $b_n X_{in}$  is itself not constrained. One way of approaching this problem is to transform  $P_i$  through logarithmic transformation to obtain the function (Wooldridge, 2003).

$$P_i = \frac{\exp(Z_i)}{1 + \exp(-Z_i)} = \frac{1}{1 + \exp(-Z_i)}$$

This expression commonly referred to as “logistic function” is continuous and can take on any value from 0 to

1. It is near to zero when  $Z_i$  is near negative infinity and then increases monotonically with  $Z_i$ . It goes to 1 as  $Z_i$  goes to positive infinity. The function is in fact as smooth S-shaped curve asymmetric about the point  $Z_i = 0$ . Unlike the linear specification, it satisfies the 0-1 constraint on  $P_i$  without also constraining  $Z_i = b_n X_{in}$ . The characteristics of the function  $P_i = \frac{\exp(Z_i)}{1 + \exp(Z_i)}$  makes it an alternative to the linear probability model for dichotomous dependent variables. The use of monotonic transformations (probit or logit specifications) guarantees that predictions lie within the unit interval (Capps and Kramer, 1985) as cited by Malamsha and Kayunze (2014). The binary logistic regression equation was therefore established as follows;

$$\text{Logit}(P_i) = \log\left(\frac{P_i}{1-P_i}\right) = b_0 + b_1 X_1 + b_2 X_2 + \dots + b_n X_n \dots \dots \dots (1)$$

Where:

Logit ( $P_i$ ) =  $\ln(\text{odds/event})$  that is the natural log of the odds of an event occurring

$P_i$  = probability that the event will occur

$1-P_i$  = probability that the event will not occur

$b_0$  = constant of the equation

$b_1$  to  $b_n$  = coefficients of independent/response variables

$n$  = number of independent variables

$x_1$  to  $x_n$  = independent variables entered in the model

Statistical Package for Social Science (SPSS) computer program was used for performing data analysis where the implications of the results lead to recommendations.

### **3.0 RESULTS AND DISCUSSION**

#### **3.1 Socio-demographic Characteristics of the Interviewees**

##### **3.1.1 Age, sex and marital status**

The study findings established that interviewees aged above 17 years and below 36 were only 2.9% implying that youth referred in this paper as individuals aged between 18-35 years (URT, 2012; GRZ, 2016) participation in co-operative societies' leadership is very minimal since the majority of the board members (92.9%) were aged above 36 years. The inadequacy of youth's participation in co-operative leadership may deny co-operative societies the necessary ideas and skills that could result from such new "digital" generation. Male dominance (65.7%) features in the co-operative governing boards, implying that women participation in leadership posts in co-operative societies is still very low (34.3%). Moreover, the study findings established that majorities (87.1%) of the interviewees were married, 8.6% were widowed, 2.9% were divorced and the remaining one interviewee (1.4%) was single. Marriage is widely accepted to be an important determinant for enhancing individuals' commitment to family and organization management. The study also established a moderate rate of literacy among interviewees where about 30% of them had upper secondary education (grade 10-12), 20% had a college education, another 20% had primary education (grade 7), 18.6% had junior secondary education (grade 8-9), 6.1% had vocational education and the remaining 4.3% had university level education. Such education level is considered to be satisfactory in initiating and facilitating various innovations in the studied primary co-operative societies.

##### **3.1.2 Board members' qualifications criteria**

A question was set to establish how the board members in the ten (10) surveyed co-operative societies were selected as well as the key considerations by members for their choice. The co-operatives include Mulungushi Agricultural Marketing Co-operative Society (Mulungushi AMCOS), Chanyanya Smallholder AMCOS, Kabwe Multipurpose Co-operative Society and New Kafue Multipurpose Co-operative Society. Others were Masengo, Balaka, Fengrove, Mpima, Mapepe and Kasavasa Dairy Co-operative Societies. The study findings indicated that all board members were elected by the members during a democratic general meeting and that the key criterion for their selection was trustworthy. Other criteria such as academic qualifications (e.g. higher education qualification), experience and skills possessed, however important, received little consideration. The by-laws and regulations of the surveyed co-operative societies indicated that board members should be elected based on members' trust in them. The co-operative regulation (the Zambia Co-operative Societies Regulation, 1999) and the current Co-operative Societies Act (Act No.20 of 1998) provide equal opportunities for members to vie for various leadership posts regardless of the academic qualifications, experience, knowledge or skills possessed provided that such individuals meet conditions for

membership and has been approved by the co-operative members (GRZ, 1999). This democratic flaw (i.e. imbalance between trustworthy as a key leadership attribute and other key attributes like academic qualifications, knowledge, experience, skills possessed etc) is likely to deny co-operative societies skilled and knowledgeable board members necessary for initiating and championing various technical innovations in their co-operatives.

The findings are contrary to the contentions by Kirkland (1994) and Cornforth (2004) who asserted that board members should be elected on the basis of their expertise and contacts so that they are in a position to add value to their organizations. Such value additions (innovations) are an important ingredient for co-operative societies' survival and growth in the liberalized market forces. Likewise, Zao (2005) indicated that a combination of entrepreneurship and innovation is a critical attribute necessary for ensuring long term business sustainability. Co-operative societies' board members therefore should possess entrepreneurial and innovative qualities in order for their organizations to withstand competition and emerge as winners in their daily undertakings.

**3.2 Socio-demographic Factors Influencing Innovation Spirit of Co-operatives Boards**

Regression analysis was performed to test the extent to which some socio-demographic variables (age, education level, trainings attended and perception of board members) influence the boards' capability to instigate innovations in their co-operative societies. The data entered in the model was tested using Omnibus test - i.e. a test of capacity of predictors in the model jointly to predict the response. A finding of significance means that there is adequate fit of the data to the model and that at least one of the predictors is significantly related to the response variable (Garson, 2008; Malamsha and Kayunze, 2014). Based on this explanation and looking at the results in Table 1, it shows that there was significance at the 0.001 level ( $p=0.000$ ), hence the data entered in the model adequately fitted it.

**Table 1: Omnibus tests of model Coefficients**

	Chi - df.		Sig.
	square		
Step	44.494	3	< 0.001
Block	44.494	3	< 0.001
Model	53.398	3	< 0.001

**3.2.1 Explanatory variables, coefficients and correlations**

The explanatory variables, coefficients and correlations were tested for the purpose of establishing the significance of such variables in affecting variance responses. Malamsha and Kayunze (2014) indicated that in order to be certain that explanatory variables are significantly important in affecting the variance of the response variables both the values and the correlations should be significant. In this study, the age, education level, trainings attended and perceptions of the board members tested at ( $p < 0.05$ ) indicated that there were no significant differences on such variables between the co-operative societies in which more innovations were recorded and those with little innovations that are taking place (Table 2). The implication is that

even in those co-operative societies in which there were little innovations recorded, the board members were nearly of the same age groups, education levels and had favorable perceptions on innovation and its contribution to co-operative society’s growth. Likewise, there were no significant difference in terms of innovation trainings attended between board members of the co-operatives who attended certain number of trainings (thrice or more) and those who attended fewer (less than three or no) trainings. It was established during FGDs that most of the trainings offered to board members mainly focused on co-operatives governance and none focused on innovations design and utilization. Although education level of the interviewees was not statistically significant (at  $p < 0.05$  and  $p\text{-value} = 0.566$ ) it was established during FGDs that formal education is a key variable when it comes to nurturing innovation practices in co-operative societies. It is widely acknowledged that formal education is one of the key determinants of innovation creation and dissemination since the two are deeply intertwined. Education is useful in the manner that it enables developing of new/innovative practices in co-operative governance system and in translating knowledge and skills into useful values (products or services). Several studies have demonstrated the importance of education and training for the innovative capacity and performance of businesses (Koellinger, 2008; Romero and Martinez-Roman, 2012). However, education alone is not sufficient to bring about desired innovation outcomes in co-operatives. Christensen (1997) indicated that in order for organizations to successfully design and utilize innovations it must have capabilities in terms of prioritizing and making innovation decisions, setting and implementing innovation strategies and allocating necessary resources (skilled personnel, funding etc) for the same.

**Table 2: Variables in the equation**

Variable		S.E.	Wald	Sig.	df.	Exp ( )
Age of the respondents	-0.094	0.104	0.807	0.369	3	0.911
Education level of the respondents	0.161	0.281	0.330	0.566	3	1.175
Trainings attended	0.173	0.295	0.347	0.583	3	1.192

Perception of the boards on innovation -19.988 1.352E4 0.000 0.999 3 0.000

**3.3 Boards Perceptions on their Capabilities to Initiate Innovations in Co-operatives**

Likert scale was used to gauge the board members’ attitudes on how they perceive their capabilities to initiate various innovations in their co-operatives. The average total scores from the interviewees were compared with the points for low (unfavorable), neutral (indifferent) and high (favorable) attitudes. The overall total scores were 980 points obtained from a total of 70 interviewees who responded to all questions using a total of 4 attitudinal questions. The results indicated that about 28.2% of the interviewees had low/unfavorable attitudes regarding their perceptions on their role in initiating innovations in co-operatives, claiming that it is the duty of all other key stakeholders including the government and members to instigate various innovations in co-operative societies. Such category of interviewees indicated that their main function is to manage and ensure smooth operations of their co-operatives but not to innovate. The findings are contrary to the Stewardship theory (Hung, 1998; Muth and Donaldson, 1998) which contends that, the role of the governing boards is not only to ensure compliance with

shareholders'/members' interests, but also to improve organizational performance through value addition (innovation).

Likewise, they indicated that the existing board members in the studied primary co-operative societies were not capable in terms of necessary skills and funding to bring about various innovations in co-operatives because much of what was in place was a result of government and donor support. All of the surveyed co-operatives were established and promoted by the Department of Co-operatives of the government of Zambia; a good number of them had received some support in the form of funding and training from donor agencies. Some of the donor agencies included Land O Lakes, Heifer International and the Netherlands Development Organization (SNV) which supported dairy co-operatives in terms of trainings on livestock keeping, milk production and milk quality assurance. The donors had also helped in the construction of cold rooms and in the supply of milk handling equipment. Pandey and Muliokela (2006) indicated that such donor agencies have been working in close collaboration with the government of Zambia to strengthen the capacities of the smallholder co-operative members and their governance systems.

The other donor agency is InfraCo Africa which supported Chanyanya smallholder farmers Agricultural Marketing Co-operative in the area of innovative co-operative irrigation model. Only Chanyanya AMCOS is still under donor interventions in terms of funding and trainings most of which focused on good agronomic practices and marketing skills. Although 2.9% were indifferent regarding their capabilities to initiate innovations, about 68.9% of the interviewees had high/favorable attitudes, implying that the board members are the key players when it comes to initiating innovations in co-operative societies (Table 3). This category of interviewees also indicated that they are capable of facilitating various innovation practices in their co-operatives. This confidence, however, was not fully translated into practice as significant innovations in the studied co-operatives were found to be externally influenced.

**Table 3: Perceptions of Board Members on their Capabilities to Initiate Innovations**

Attitude level	Frequency	% of responses
Low/unfavorable	79	28.2
Neutral	08	2.9
High/favorable	193	68.9
<b>Total</b>	<b>280</b>	<b>100</b>

Note: n=280 obtained from four likert scale (attitudinal) responses from each respondent interviewed (N=70)

### 3.3.1 Innovations initiated by board members in the studied co-operative societies

To demonstrate board members' capability to initiate various innovations, this study documented a number of innovations that were found to be instigated by the board members in some of the studied primary co-operative societies. The innovations range from those occurring in Agricultural Marketing Co-operative Societies (AMCOS) to Dairy Co-operative Societies

(Appendix 1). Such innovations were reported to be originating from the board members and considered to be useful in their day to day operations. Despite their initiating such innovations, the FGDs with the board members indicated that they lack the necessary skills and funds to facilitate more innovations. Training and funding was found to be highly inadequate in the studied primary co-operative societies. Board members reported also some significant number of innovations that were externally initiated and supported by various stakeholders including the government of Zambia and donor agencies. Some of these innovations include setting up of milk cooler tanks/chillers, cold rooms, milk processing units, milk testing equipment/laboratories, packaging materials, artificial insemination kits (for dairy co-operative societies) and funding renovation of co-operative structures to be used for storage purposes. They also include provision of some initial working capital to some AMCOS to facilitate innovative activities.

## **4.0 CONCLUSIONS AND RECOMMENDATIONS**

### **4.1 Conclusions**

Some conclusions can be made from this study on the perceptions of governing boards of co-operatives on their capabilities to initiate innovations in primary co-operative societies. First, youth participation in leadership positions in co-operative societies is extremely minimal denying co-operatives the necessary knowledge and skills that could be flowing from this important generation. Second, women participation in leadership positions in co-operatives is also very minimal signaling another missing link of the important contributions that could be emanating from this important group. Third, the study findings established that, the key criterion used for considering a co-operative member for a leadership position in the surveyed co-operative societies is trustworthiness while other important criteria (e.g. education qualifications etc) receiving little attention. Fourth, age, education level and perceptions of interviewees on innovations have no significant influence on innovations initiation in the studied co-operatives. This implies that there was no significant difference on innovation initiation between co-operatives whose interviewees (board members) were of varying age groups, education qualifications and innovation perception and those with similar (tested) attributes. Fifth, while 68.9% of the interviewed board members indicated that they were capable of initiating various innovations in their organizations, a good number of them (28.2% said they were incapable while 2.9% were indifferent) felt that board members were not in a position to instigate innovations in their co-operatives.

### **4.2 Recommendations**

Based on the major results of the study, the following are the recommendations arising from the findings.

#### **4.2.1 Minimal youth and women participation in leadership posts in co-operative societies**

The small number of youth in leadership positions is a reflection of how few young people are involving in co-operative activities. At present, most of the co-operative activities such as crop production, livestock keeping and others are all occupations of the elders. This study calls for co-operative societies' management systems, the government and all other key stakeholders to

ensure youth involvement in co-operative activities by encouraging them to join these organizations. This should go hand in hand with enabling youths establish profitable co-operative ventures unlike the current situation where agriculture is associated with poverty and therefore discouraging youths from forming such organizations. Apart from production of traditional crops and livestock, youth programmes could involve other emerging profitable ventures such as green energies, beekeeping, horticulture, floriculture, dairy farming, value additions (small scale manufacturing), mining, etc.

#### **4.2.2 Criteria for considering someone for a leadership post in co-operative societies**

Similarly, women involvement in leadership positions in co-operative societies should be encouraged by all key stakeholders. The discussion with the board members during data collection indicated that women shy away from vying for leadership positions in co-operatives mainly because of many family chores that they are obliged to undertake. Such family chores deny them the necessary leadership qualities including opportunities to acquire the basic education (formal or non-formal) necessary to enable them to confidently practice their various leadership skills. Rwebangira (1996) indicated that generally in Sub-Saharan Africa women are less educated and therefore are more likely to be in unskilled jobs. This study, therefore, recommends to the government and other key stakeholders to encourage women involvement in various leadership posts. This should go hand in hand with advocating for more gender sensitive programme that will include reducing the many family responsibilities facing women so that they can have enough time to participate in various developmental programmes, including participating in leadership positions in various levels including co-operative societies just like the way men do. This will be achieved by ensuring equitable education provision to both men and women as well as involving them in various gender related programmes.

This study established trustworthy (loyalty, honest and integrity) as the key criterion for one to be considered a leader in the studied co-operative societies. Based on the studied co-operative societies' regulations and by-laws it is the right of all members to vie for leadership posts provided that one has met membership criteria. Other requirements such as academic qualifications, one's knowledge and skills, however important but fetched little considerations. This study recommends that, given the current globalized environment, there is no way co-operative societies can withstand the ever changing waves of globalization forces without co-operatives having strong and well equipped (innovative) leadership. It is important therefore that co-operative societies set minimum academic qualifications that should be possessed by individuals who wish to become leaders in co-operatives. The qualifications may include other attributes such as outstanding leadership experience, exposure and external contacts/linkages with other organizations.

The academic qualifications proposed in this study may vary from one co-operative society to another depending on the qualifications of those who formed the organization, for example smallholder farmers, fishermen, petty traders, employees etc. For those co-operative societies that may find themselves lacking individuals with such minimum academic qualifications, they

may consider mobilizing specific individuals with the required attributes to join them so that they may use some of them in future as their board members. It is also recommended that primary co-operative societies solicit external innovative personnel (once the required attributes are missing within the co-operative society) to facilitate initiating and sharing of various innovative spirits in the organisation. This, however, should be undertaken with care to ensure that co-operative principles are observed to avoid losing the co-operative identity. Likewise, co-operative education and training should be provided on regular basis to members and board members so that they are made aware of their duties and responsibilities to enable them discharge their respective functions effectively and efficiently.

#### **4.2.3 Board members perceptions on innovations initiations in co-operative societies**

The majority of board members in the studied primary co-operative societies perceive that it is their role to ensure various innovations are initiated in their organizations. However, the FGDs with the board members indicated that despite their confidence in their capabilities to initiate various innovations, such board members are face an acute shortage of skilled personnel and funding to facilitate innovations in their co-operative societies. It was also established that significant innovations that were found to be occurring in the studied primary co-operative societies were externally supported. This study calls for more capacity building on the side of the co-operatives boards in terms of education and training to facilitate internally initiated innovative idea generation, conversion and implementation. This will in turn encourage sustainability of the various innovations that will be designed and implemented to such co-operative societies.

#### **4.2.4 Other recommendations**

Apart from the aforementioned recommendations, this paper recommends the following:

- Few innovations were found to be originating from the studied co-operative societies' board members. It is recommended that innovation related trainings and financial support should be provided to board members and prospective leaders (members) so that more internally initiated innovations can be nurtured and implemented in primary co-operative societies.
- There is need for scaling up the boards' innovative practices that have been recorded in some of the studied primary co-operative societies. This is because at present few innovations are occurring in very few primary co-operative societies as there are so many of them that are dormant with entirely nothing taking place throughout the year. Such best practices can be introduced to other primary co-operative societies for possible adoption.
- There is need for the government of Zambia to put in place an innovation development policy which is crucial but currently nonexistent. The policy will among other things stipulate roles of various organizations and stakeholders in enhancing innovations creation, diffusion and implementation to various organizations in the country.

This paper calls for the government and other stakeholders to consider inclusion of co-operative education and training in the primary and secondary schools' curriculum so that the young generation can be aware of co-operatives and its social-economic rationale and hence develop the urge to form or join co-operatives in future. This important component is currently missing in the current education curriculum. It is proposed that such curriculum should include among other important co-operation aspects, a strong element of entrepreneurship and innovation skills.

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**APPENDICES**

**Appendix 1: Innovations initiated by board members in the studied co-operatives (N=10)**

<b>District</b>	<b>Name of Co-operative</b>	<b>Innovations initiated by board members</b>
Kabwe	Mulungushi AMCOS	-Using its building as maize store (buy and later sell maize to the government through the Food Reserve Agency (FRA) -Established a village community bank where members access credit (the model is still at its infancy stage)
Kafue	Chanyanya Small-holder AMCOS	-rented its land to a private company -invested some shares in the company -established out-grower schemes for members
Kabwe	Masengo Dairy Co-operative Society	-constructed own milk collection center -formed own association for milk producers -established a collective feed and drug outlet -formed a rotating savings and credit group for members -maintained milk selling contract with Parmalat (a private company buying milk from producers)
Kabwe	Balaka Dairy Co-operative Society	-same innovations as in Masengo Dairy Co-operative Society (operates in the same locality and share some infrastructures- office premises, milk collection centers etc)
Kabwe	Mpima Dairy Co-operative Society	-set milk collection centers -processed the milk it collects and enhanced value addition overtime -employed youths (matching guys) to sell its products in Kabwe town -established products market links with nearby industries -negotiate and maintain milk selling contract with Parmalat
Kafue	Mapepe Dairy Co-operative Society-	-put in place livestock feed and drugs outlet - constructed own dip tank for treating members' livestock -supplied bicycles to members on credit to facilitate milk supply -established own bicycle garage to service members' bicycles -maintained milk selling contract with Parmalat -ensuring timely payments to members for the milk supplied
Chilanga	Kasavasa Dairy Co-operative Society	-established four milk collection centers -set livestock feeds and drugs outlet

		-maintain milk selling contract with Parmalat
Chilanga	Fengrove Dairy Co-operative Society	- established own milk collection centers -established and maintained contract with milk buyers (Parmalat)
Kabwe	Kabwe Multipurpose/AMCOS	-seasonal bulking and selling (at peak season) of maize -operating a retail grocery

Kafue      New                      Kafue  
 Multipurpose/AMCOS

- operated chicken project
- acquired own land-used for office, rent, farming etc
- managed production and selling of river sand bricks, pavements etc
- rented its warehouse (to a private company) as source of income
- ensured yearly dividends to members as motivational package