

The Effectiveness of Partnership Systems between NGOs and Smallholder Farmer Groups on Rural Development: The System Theory Perspective

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ABSTRACT

The system theory has become a popular approach in the social sciences because it recognizes that interactions of parts of a phenomenon influence its functioning. Therefore, the paper presents the system theory perspective to hypothesize the factors that influence the interactions within parts of the systems of partnerships between NGOs and Smallholder Farmer Groups for the case of Uganda. The probit regression model was used to analyse survey data from a sample of 87 respondents from NGOs and SFGs working in partnership. Critical factors influencing interactions within partnership were identified under the elements of factors that: define the basic parts of partnership systems; drive partnership system; influence activities of the partnership system; influence feedback within partnership sub-system and the whole system; determine the nature of management of communication flaws; and the major communication channels external to the partnership. The greatest contribution lies in the need to recognize that system interplay influences system effective functioning. The effectiveness of the partnership system between NGOs and SFGs depends on how factors under each of the elements above supports or restrains the other, and how the dynamic interactions are balanced between them. Therefore, for the partnership systems to be effective, they should have a number of interactive variables under their control, or otherwise, where such factors dilute and/ or undermine each other, the negative influence is bound to be registered. In effect, the result indicates that partnership systems have particular drivers which maintain them in motion and/or facilitates the interactions between the different parts. For the system of partnerships between NGOs and Smallholder Farmer Groups to effectively influence rural development, the interactions of the different parts of the partnership system should effectively reinforce, complement and/or strengthen each other.

Key word: Effectiveness; Partnerships Systems; Rural Development; System Theory

I INTRODUCTION

Public Private Partnerships, or PPPs, are increasingly popular in the field of international development cooperation and sustainable development.

Partnerships remain popular in the field of development including rural development in both developing and developed countries. The popularity of partnerships in policy circles has steadily increased since the late 1980s to the extent that their preferment has become an overriding endorsed development strategy (Entwistle and Martin, 2005) to a variety of service delivery and fixing development problems.

Numerous streams of studies claim that partnerships are intimately linked to social perspective in which they operate. Meaning that Partnerships are conventionally perceived principally in the perspective of what they can do as organizations in their location (Clarke, and Glendinning, 2002) whether rural or urban. William & Sullivan (2011) argue that partnership is very much about learning from and with partners, and sharing and creating

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knowledge imminent to address interdependent societal problems. Seldom however, does this kind of literature address the ideological underpinnings of partnership preferment for rural development, nor does it interrogate the notion of partnership and the inherent interactions within systems in a partnership. Other studies concern themselves more on detailing the failures of many partnerships (Clarke and Glendinning, 2002; Weiss, Anderson, and Lasker, 2002). These studies are quick to point out the reason for partnership failures and often to criticize the postulation that all partners are equal in a partnership. Yet, comprehensive case studies of how inherent interactions are managed and affect partnership functioning are still rare (MLauri, 2005; Ndandiko and Jamie, 2010).), to have a positive impact of development (whether rural or urban).

Given the increasing popularity of partnerships as a development strategy for service delivery towards rural development, it is important to understand how to explicitly conceptualize and understand the interactions at play within systems that make up partnerships as wholes. In relation to this, this study attempted to identify the critical factors influencing interactions within partnership using the case of partnership between NGOs and SFGs in Uganda. This provides specific guidance about the mechanism and factors through which given factors supports or restrains and how the dynamic interactions are balanced within partnerships to influence their effectiveness. A system theory perspective of partnership is provided is presented in the next section.

A System Theory Context of Partnerships

The systems theory recommends shifting the thinking from focusing on isolated entities to their context, from separate parts (sub-systems) to the whole (single system) (Eisler, and Montuori, 2001; Alter, 2007; Yoon and Kuchinke, 2005) or partnership. Based on this argument, (De Savigny and Adam, 2009) points out that a system is a set of two or more elements whose individual behavior affects the behaviors of the whole. Hall et al, (2002) adds that the system is shaped by the behaviour, interactions, and practices of all and among actors embedded in series of relationships that evolve with time.

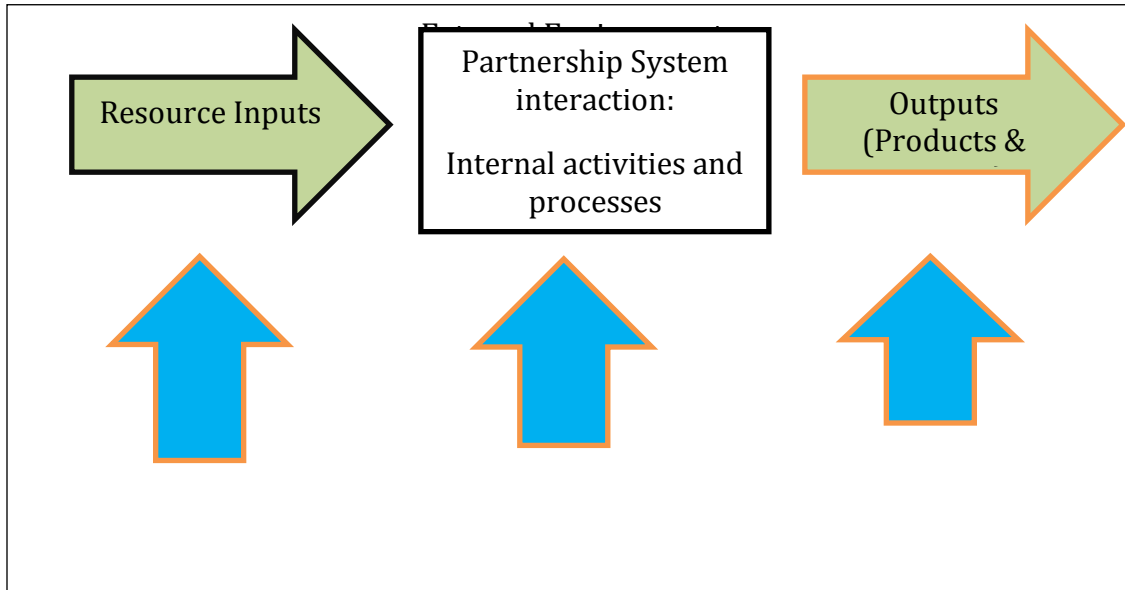
To Hall et al, (2002) the system theory and partnerships are both about interdependence and interrelationships. This means that the units in the partnership system structure are sub-systems of groups of people playing different roles in organizations. These subsystems in partnership system structure are in practical patterns of relationships or interactions. They are in fact webs of connections which may be formal with others mostly tacit and informal. The subsystems derive their existence from their relationships with each other, and periodical interact to determine the functioning of the entire partnership system. The interactions are in terms of scheduled meetings for planning, monitoring, evaluation and/or learning depending on the development agenda being pursued by a given partnership system. Thus, the system theory approach views the partnerships as a whole system comprising of interacting subsystems, all of which are engaged in complex interactions with each other and the external environment (Dawson, 2006).

The Role of Interactions within a partnership

In effect, partnership functioning is regarded as structural arrangements consisting of entities (Chia, 1995) with the use of organograms as a way of representing relationships. This suggest that in partnerships operation, while the relative emphasis may differ, there are clear synergies between the principles, rationales, and benefits of the key parts (parties, departments, sections, etc.) that make up the partnership system – these synergies can be maximized through ensuring effective interactions among them. In partnerships, a relationship is viewed as the interactive connection and exchange between the different subsystems such as departments and sections in a partnership. There are sustained interactions within and outside the partnership systems, which underscores the prominence of multiple channels of interaction. By interacting with other, parts of the partnership system, will have an effect on the whole (rest of the system). In so doing a relationship is created between the parts through back and forward feedback loops. In this context, partnerships are visualized as “input-transformation – output systems” that competes for resources.

Partnerships between NGOs and smallholder farmer groups as systems to function require input and output of different parts / unit in order to exist and function well. Figure 1, looks at how such interactive process among different actors using a diversity of modes informs effective partnership between NGOs and Smallholder farmer groups to influence rural development. Looking at this interaction between the system and subsystems and the input and output, one again understands how partnership systems between NGOs and smallholder farmer groups operate.

Figure 1: Approaches to partnership system effectiveness. (Source: Author)



From diagram the partnership system employs an approach which assesses effectiveness by which it gets its resources required to implement its activities. The ability to interact and utilize well the acquired resources determines effectiveness of the partnership system at the input level. At internal process approach considers internal functioning of the partnership systems in terms of how they implement their activities and processes include empowerment of the human resources. The three level approaches shown in the diagram, each has something to offer to partnership system effectiveness, but the interactions are at different levels.

In relation to this idea, Partnership must be understood and managed as a system in order to understand why they operate the way they do. This is based on the argument that partnership system between NGOs and SFGs will be more effective and more sustainable if there is balance across the full range of processes of interactions of the sub systems.

The study here demonstrates the usefulness of using the framing of the system theory to the understanding of determinants of the partnerships system whose factor interaction influences rural development. This is aimed at establishing how partnerships as wholes and their subsystems interact within themselves and with each other (enhance cohesion and coexistence) to bring about effective delivery of rural development.

Measurement of Partnership System Effectiveness

Systems theory indicates that all parts of the system must fit properly for it to work as intended (Bailey, 2007). It is on this basis that Olbrich, and Jost, (2006) argue that a partnerships systems' strategy, its structure, and its

are used in this paper (list in Table 1&2). While x_i 's in relationship from the question above may be tangible measures, of PSE on the left-hand side, based on the MAIN null hypothesis, the relationship is causality rather than an equality relationship in nature.

The Probit Model

In this work, a probit regression model was adopted to investigate the relationship between various potential factors (given in Tables 1). In this study, the dependent variable considered is the effectiveness of the partnership systems between NGOs and SFGs that were categorized and recorded as 1 for agreement (strongly agree and agree) and 0 for no agreement (strongly disagree and disagree).

In order to analyze the relationship mathematically, a system must possess special properties. For instance, first the relationship must be known explicitly, secondly the attributes of importance must be quantifiable and not so numerous as to defy listing. Finally, the mode of behavior under the given set of relationship must be known. Unfortunately it is a rare system indeed that possesses all these properties, more exactly systems possess these qualities in degrees.

The probit model to estimate the effectiveness of the partnership systems between NGOs and SFGs, is as follows:
 $Y_i = a_1 + \beta_i \sum_{n=1}^n X_i + \varepsilon \dots\dots\dots(2)$

Where Y_i is a vector of binary variables, such that $Y_i = 1$ if the i^{th} s respondent is in agreement that a factor influences the effectiveness of the partnership systems between NGOs and SFGs and 0 otherwise; X_i s are vector of explanatory variables of the i^{th} respondent. It is assumed that X_i s is independent of the zero mean random variable. In the specific case of this study, the empirical model estimated is as follows:

$Y_i = a_1 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots\dots\dots + \varepsilon \dots\dots\dots(3)$

Where: Y_i is the effectiveness of the process of partnership systems between NGOs and SFGs; $X_1, X_2, X_3, \dots\dots$ are the specific factors that where generated for each partnership systems during the study pilot study and verified through literature reviews and confirmed by running a simple probit model as in the process described in the section on choosing the independent explanatory variables and collinearity.

Independent variables are the values that can be altered in a specified model or equation (Arulmozhi, and Nadarajan, 2003). Independent variables offer the “input” which is adjusted by the model to change the “output.” A general empirical probit model was used as one of the preliminary criteria to choose variables to be incorporated in the econometric analysis. In the first instance, a probit model equation was calculated to establish the relationships between each of independent variables (factors that influence the effectiveness of the partnership system) with the dependent variable (the effectiveness of the partnership systems) in the survey. Different sets of variables drawn from each of part of the survey were considered in this preliminary procedure. The information set in table 1.1 – 1.7 above has a binary response (outcome, dependent) variable. There are several predictor variables listed under each element of the partnership system, which are all binary and taking two score 1 (one) or 0 (zero). Explanatory variables with a score 1, mean respondents stated that they agree that it has an influence (strong/ weak) on the partnership system while those with score 0 means respondents stated that they disagree that these have influence on the particular element of the partnership systems.

III RESULTS AND DISCUSSIONS

By means of the probit model technique, equation (2) was run to yield regressions results and provide marginal effects of the various independent variables on different measures of effectiveness partnership systems between NGOs and SFGs. These results are presented in Table 1.1 – 1.7 in the appendix. The parameter estimates of probit model results for only statistically significant factors that influence effectiveness of the partnership system in order to inform rural development are discussed below:

Estimation of the Model for Basic Parts of Partnership Systems

The study sought to explore the basic internal parts of the partnerships between NGOs and SFGs, based on the system theory. The results reveal that only the he techno-structure (analysts that design systems, processes, etc.) and the support staff (support outside of operating workflow)are the most significant internal parts that can be considered by partnerships between NGOs and SFGs to be effective enough to inform rural development as in table 8.2 below.

Table 1.1: Basic internal parts of the partnership system structures

Independent Variables	Probit Regressions	Probit Marginal Effects
Strategic apex	-1.080	-0.421
	-1.62	-1.62
Operating core	0.505	0.197
	0.74	0.74
Middle line	0.484	0.189
	0.79	0.79
Technostructure	0.875	0.341
	2.21**	2.21**
Support staff	-1.098	-0.428
	-2.57***	-2.59***
Ideology	0.373	0.145
	0.9	0.9
	0	0.413
Intercept	0.984	5.63
Number of obs	78	78
LR chi2(6)	16.51	16.51
Prob > chi2	0.0113	0.0113
Log likelihood	-29.987558	-29.987558
Pseudo R2	0.2159	0.2159

* and *** denote 10 and 1 percent levels of significance respectively

Therefore, the findings of the significant factors are discussed below.

The techno-structure as one of the basic parts of partnership systems between NGOs and SFGs has a positive (0.875) and is statistically significant at 5 percent level. This means that investing in interactions of the techno-structure is a positive influence in the partnership system effectiveness. The marginal effect has a coefficient of 0.341 with a z-statistics of 2.21 which is also statistically significant at 5 percent level. This suggests that agreeing rather disagreeing that this is a critical basic parts of partnership systems, increases the probability of increasing the partnership system effectiveness by 0.875 points. The result is not unanticipated as it supports the findings of McNamara (2009); and Appelbaum (1997) who observe that the aim of techno-structural interventions improve the overall performance of an organization by improving procedures, technology, operations, structures and roles. Cummings and Worley (2005) add that techno-structural interventions are focused on improving the organizational effectiveness and human development through technological innovation and structural improvements. The existence of partnerships between NGOs and SFGs in Uganda that have for long embraced implementation of rural initiatives perhaps might be a result of embracing an interactive techno-structure as one of the basic parts of their partnerships. This would therefore mean that good interactions of techno-structure with other basic parts of partnerships between NGOs and SFGs in Uganda creates their effectiveness and efficiency(Cummings and Worley2005) and the reason for the critical mass and greater impact being registered in Uganda’s rural development.



The support staff as one of the basic parts of partnership systems between NGOs and SFGs has as a negative of -1.098 in the probit regression and probit marginal regression of -0.428 ($z = -2.59$) both statistically significant at 1 percent level. The latter suggest that investing and focusing on interactions of the support staff as one of the basic parts of partnership systems, affects effectiveness of partnership systems between NGOs and SFGs negatively. In other words, investing in positive interactions of the support staff if agreed as one of the basic parts decreases the probability of effectiveness of the partnership systems between NGOs and SFGs by 1.098 points. In this case, investing positive interactions of the support staff as one of the basic parts of partnership systems is necessary but not crucial effectiveness of partnership systems between NGOs and SFGs in order to result into rural development in Uganda. The negative result of investing and focusing positive interactions of the on support staff as one of the basic parts of partnership systems is startling as it contradicts the findings of several studies such as Appelbaum (1997); and Cummings and Worley (2005) who argue effective partnerships must have strong and interactive support staff unit and in adequate numbers to in turn provide quality specific services to the other section or departments. The result may be explained by the fact that often than not in many partnerships between NGOs and SFGs like other organizations in Uganda, investing in support staff roles are underestimated or even excluded from the team. This is because, support staff are not directly involved in the primary process but providing an indirect operational support to other sectional staff. Nonetheless, in reality the indirect roles of an interactive support services include maintenance, clerical, food services, driving and provided by people such as accounts, transporter, administrators, and secretaries among others need to be acknowledged and recognized for the partnerships between NGOs and SFGs to be effective and promote rural development of the country.

The implication is that a partnership system is not an arbitrary group of organizations (partners) that come together by chance. Instead, they are consciously and formally established to accomplish certain goals that the member partners would not be able to achieve if they worked in isolation. Furthermore, the findings contribute to people those that may want to establish effective partnerships for rural development to consider investment in more techno-structures as being critical. In conclusion, the positive and/ or strong interactions of the techno-structure (analysts that design systems, processes, etc.), and the support staff (support outside of operating workflow) with other basic parts of the partnership is critical if partnership system effectiveness are to deliver rural development, while enabling the participation of the local population. Shaping the partnership system and sub-systems into an effective entity is clearly one of the challenges that have to be met in successful rural development drive in Uganda.

Critical internal factors that drive the activities of partnership systems

The study also sought to investigate the factors that drive (activities) the interactive abilities of partnership system between NGOs and SFGs. From the six factors identified (see table 1.2) only three - technological capacity, management systems, and financial management, were statistically significant.

Table 1.2: Critical internal factors that drive the activities of partnership system

Independent Variables	Probit Regressions	Probit Marginal Effects
Machinery Organ & equipment	0.475	0.164
	1.02	1.02
Technological capacity	0.875	0.303
	1.84*	1.83*
Organizational culture	0.466	0.161
	1.31	1.33
Management systems	1.322	0.458
	3.15***	3.11***
Financial management	-0.880	-0.305
	-2.1**	-2.11**



Employee morale	-0.616	-0.213
	-1.29	-1.29
	-0.759	0.297
Intercept	-2.76	4.98
Number of obs	78	78
LR chi2(6)	26.89	26.89
Prob > chi2	0.0002	0.0002
Log likelihood	-37.288695	-37.288695
Pseudo R2	0.265	0.265

* and *** denote 10 and 1 percent levels of significance respectively

From the six factors identified (see table 1.2) only three - technological capacity, management systems, and financial management, were statistically significant and their discussions are presented below:

The results in table 1.2, promoting technological capacity being one of the critical internal factors that drive the activities of partnership system between NGOs and SFGs has a positive of 0.875 and the marginal regression of 0.303 ($z=1.83$), both statistically significant at 10 % level. This implies that promoting technological capacity being one of the critical internal factors that drive the activities of partnership system has a positive interactive effect and agreeing that it is an important factor rather than disagreeing increases the probability of the effectiveness of the partnership systems between NGOs and SFGs to achieve rural development by 0.875 points. Therefore, the result is as expected, that promoting technological capacity is necessary and crucial in increasing on effectiveness of partnership system in order to inform rural development in Uganda. The result agrees with the findings of scholars such Collis (1994); Ernext et al. (1998); and Rousseva (2008) who assert that technological capacity improves the quality of health care process by enhancing communication, standardizing processes and enhancing workflow. Ernext et al. further claim that introducing technology increases the impact of employees in practical ways. While Rousseva observed, that technological capacity, supports and drives innovative work practices, improves work processes and impacts on efficiency and productivity of the organization. For instance, communication and information technologies increase the interactive levels and allow teams in partnerships between NGOs and SFGs to share and learn from each other. Notwithstanding the positive impact of Technological capacity, there are challenges for employees including the need for enhanced training, development of leadership, financial resources and personal and organizational relationships among others as noted by Hobday and Rush, (2007). Based on this note, the result may be informed by the fact that like other African countries such as Uganda has displayed.

Equally, from the results from table 1.2, promoting better management system as one of the critical internal factors that drive the activities of partnership systems has a positive effect evidenced by a positive coefficient of 1.322, with a marginal effect of 0.458 and both statistically significant at 1 percent level. The marginal effect of 0.458 infers that promoting better management system, if agreed as a positive influence on the critical internal factors that drive the activities of partnership systems increases the probability of effectiveness by 1.322. Result is not startling at all as it agrees with the findings of Davis, and Olson, (2004) that contends that existence of good management systems are mutually agreed and proven framework to manage continual improvements in an organization's policies, procedures and processes. This means that promoting better management systems allows increased interactions within partnership systems between NGOs and SFGs achieve their set goals which in turn informs rural development. The result may also be explained by the fact that whether in rural or otherwise improved management systems are essential to ensure presence and functional partnerships policies, procedures and processes that continuously promote improvements in delivery of services by partnership systems. Example for the partnerships studied, the presence of executive, and partnerships committees among others help in defining roles and responsibilities, policies, procedures and processes ensures increased efficiency and decision making, which result into beneficiaries' satisfaction but also the overall success of the partnerships.

Finally, the estimated coefficient of promoting better financial management as one of the Critical internal factors that drive the activities of partnership systems was a negative oft -0.880 with the marginal coefficient of -0.305 ($z = -2.11$) and both are statistically significant at 5 percent level. This means a 1 point increase in agreeing that enhancing financial management affects interactive abilities positively decreases the probability of effectiveness of partnership systems between NGOs and SFGs by 0.88 points. The result is not as expected, therefore surprising in a sense that it does not agree with the findings of Van Horne and Wachowicz (2015); and Andrew and Gallagher (2003) who argue that strong financial management in an organization offers solutions to major decision making regarding regular and adequate supply of funds through profitable investment decisions, financing decisions and dividend decisions. Perhaps, this may be attributed to the existing barter transactions resulting e from the high poverty levels in the rural areas of Uganda, which uses more of non-cash aspects such as improving financial management skills and the benefits that they may gain from this, like increased access to financial services in rural areas. Therefore financial management is crucial for the effectiveness of partnership systems between NGOs and SFGs in Uganda in order to inform rural development.

Factors that drive the activities of Partnerships as Wholes

The study furthermore, investigated the unique factors that drive the activities of the whole – partnership systems between NGO and Smallholder farmer groups in Uganda.

Table 1.3: Factors unique to the partnership that drive the activities

Independent Variables	Probit Regressions	Probit Marginal Effects
Common interest	-0.082	-0.032
	-0.13	-0.13
Cost-benefit relationship	2.287	0.910
	3.17***	3.19
Choice of right partners	-0.543	-0.216
	-0.74	-0.74
Inadequate inv. resources	0.200	0.080
	0.37	0.37
Managerial core competencies	-2.358	-0.938
	-3.57***	-3.62
Transparency	-0.452	-0.180
	-1.01	-1.01
Partners' Commitment	-1.721	-0.685
	-2.36	-2.4
Share authority	0.267	0.106
	0.38	0.38
Involvement of key parties	-1.366	-0.544
	-1.73*	-1.73
	2.801	0.529
Intercept	2.08	5.96
Number of obs	78	78
LR chi2(9)	45.88	45.88
Prob > chi2	0	0
Log likelihood	-30.894993	-30.894993
Pseudo R2	0.4261	0.4261

* and *** denote 10 and 1 percent levels of significance respectively



Below is a presentation of the detailed discussions of only significant factors:

The estimated coefficient of cost-benefit relationship as one of the unique factors that drive the activities of the whole – partnership systems between NGO and Smallholder farmer groups was positive of 2.287, while the marginal effect was 0.91 ($z=3.19$) and both were statistically significant at 1 percent level. This suggests that enhancing cost-benefit relationship increases the probability of achieving effectiveness of partnership systems between NGOs and SFGs by 0.91 points. In other words, investing in cost-benefit relationship is necessary and more important for effectiveness of partnership systems between NGOs and SFGs to foster rural development in Uganda. The results in this case is not surprising at all as it concurs with the findings of Beauregard (1998); Mullin (2002); and Erberts, Randall, and Erickcek, (2002) who all argue that always in partnership agreements the public-private participation and the explicit sharing of risks, is always specified for costs and financial benefits. This result may probably be explained by the fact that success of partnerships between SFGs and NGOs in Uganda has always put emphasis of their existence to each partners bringing genuine value, and transferring real resources (value) as well as exercising shared responsibility for the outcomes of the action in what they have terms as “value for money”.

The marginal regression coefficient of -0.438 ($z=-3.62$) means that promoting Managerial core competencies decreases effectiveness of partnership systems between NGOs and SFGs by 0.438 points. Also the estimated coefficient of predictor (managerial core competencies - competent personnel) was negative of -2.358. Both coefficients were statistically significant at 1 percent level. In other words, investing in Managerial core competencies is necessary but not crucial for effectiveness of partnership systems between NGOs and SFGs needed to promote rural development in Uganda. The result is surprising in that it refutes the findings of scholars such as Rolland et al (2002); and Jean et al (2002) who argue that managerial core competencies is one of the factors that drive the activities of the partnership since it involves planning, organizing, staffing, directing and controlling. The argument of Jean et al is backed by Boydell and Rugkasa (2007) who observe that partnerships brings together institutional and human capacities in the form of skills, experiences and ideas to tackle common challenges that are often beyond the capacity of a single organization. Possibly, the result may be explained by the fact that most of the partnerships studies in this study rural based where issues of competencies is not appreciated for it is a scarce commodity. Most of the people employed especially in the stallholder farmer groups are the semi-illiterates. Among other factors, non- appreciation of managerial core competencies is one of the factors that drive the activities of the partnership may be the cause of the limited role played by SFGs in rural development in Uganda. Notwithstanding this, promoting managerial core competencies should be emphasized as one of the factors that drive the activities of the partnership, where it is limited will need enhancement.

Similarly the estimated coefficient of enhancing the involvement of all the key parties in the project planning and implementation was negative (-1.366), while the estimated marginal effect was -0.544 ($z=-1.73$), and both statistically significant at 10 percent level. In other words, investing in involving all the key parties is necessary but not crucial for the effectiveness of partnership systems between NGOs and SFGs in order to spar rural development in Uganda. The result is surprising and inconsistent with for example Child, Faulkner, and Tallman, (2005); Morrissey (2000); and National Research Council (2002) who note that involving partners with a stake in the planning and implementation of partnership systems activities, not only increases the level of understanding and support of the activities, but also reduces potential conflict and the need for heavy investment. Morrissey further adds that involving all the key parties during project planning and implementation empowers the people by building their capacities through the expanding leadership base, strengthening individual skills, sharing of understanding and visions, setting development agenda and goals, development of more effective community organization, institutions and use of resources. Perhaps the result may be attributed to the fact that partnerships considered in this study increasingly in the past decade or so had limited involvement of all the key parties during project planning and implementation. It should be observed that most partnership were managed from the superior – inferior relations, meaning the NGOs on hand imposed the type of interventions because they often mobilized the money through their ability to network, write proposal and easy access the donors. Besides, active

participation requires particular skills which often are lacking in rural areas. Otherwise, as the literature seem to reveal, involving of all the key parties enhances understanding and garnering public support, thus compliance because stakeholders are more knowledgeable about, committed to, and supportive of joint actions, thus very necessary for the effectiveness of partnership systems. Enhancing the involvement of all the key parties in the project planning and implementation is a worthwhile investment and should be embraced by systems between NGOs and SFGs in order to spar rural development in Uganda

Elements Influencing Activities of the Partnership System

The study on another hand sought to establish the different elements of partnership systems between NGOs and smallholder farmer groups and how they interact within and their environments. Respondents were required to indicate the extent to which each of the eleven elements listed on the questionnaire influence activities of the partnerships.

Table 1.4: Elements influencing activities of the partnership systems

Independent Variables	Probit Regressions	Probit Marginal Effects
BoD 'rs recruitment	-0.13235 -0.19	-0.051 -0.19
Planning system	-1.35609 -1.61	-0.521 -1.73*
Program outcomes	2.270702 2.36**	0.872 2.64***
Information Management	-0.96421 -1.99**	-0.370 -2.01**
Personnel	0.78098 0.72	0.300 0.72
Finance mgt	-1.09776 -1.62	-0.422 -1.68
Communication	0.201408 0.38	0.077 0.38
Insurance	2.075926 2.91***	0.797 3.18***
Legal	-1.08683 -1.23	-0.417 -1.22
Facilities mgt	2.233658 2.88***	0.858 2.89***
Volunteer management	0.400023 0.31 -0.76646	0.154 0.31 0.609
Intercept	-1.68	5.51
Number of obs	78	78
LR chi2(11)	50.21	50.21
Prob > chi2	0	0
Log likelihood	-28.260606	-28.260606
Pseudo R2	0.4704	0.4704

* and *** denote 10 and 1 percent levels of significance respectively

For Critical elements influencing activities of the partnership systems between NGO and SFGs in Uganda, only information management, insurance, and facility are significant and their discussions are presented below:



Enhancing the panning system as one of the key elements influencing activities of the partnership systems has a negative coefficient of -1.356 in the probit regression which is significant and therefore, this element has a slightly negative influence of on effectiveness of partnership system between NGOs and SFGs. Equally, enhancing the panning system has a marginal coefficient of -0.521 ($z=-1.73$). Both coefficients are significant at 10 percent levels. The result is shocking as it negates the views of Chamber (2002); and UNDP (2001) who maintain that enhancing the panning system provides the information management needed to make effective decision about resource (financial and human) allocation in a manner that enable achievement of partnership program objectives. In fact Chamber alludes that investing in panning encourages the development of the “what – if” scenario, where partnership system manager attempt to envision possible risk factors and design contingency plans to mitigate them. Possibly, this particular result may be explained by the belief that for the studied partnerships, the rural people are not well facilitated to participate in partnership system program design and implementation. It could be the major reason why Matove, (2006) notes that promoting planning in a partnership is an expensive act financially and time wise. Besides, as argued by Bakebwa, (2001) in Uganda due to poverty and illiteracy effective participation in program planning is difficult. Notwithstanding, the above argument, embrace planning that is participatory in nature increases program ownership, help address the actual community challenges and creates a competitive advantage, thus worth its investment.

From the result in Table 1.4, a promoting program planning and outcomes evaluation has a positive probit coefficient of 2.271 and a marginal coefficient of 0.872 ($z= 2.640$. Both are statistically significant at 1 percent level). It may be concluded that promoting program planning and outcomes evaluation is necessary and important to increasing the effectiveness of partnership systems between NGOs and SFGs in order to enhance rural development in Uganda. The result thus is not surprising as it concurs with the findings of Pinto, (2012); Malone, Mark, and Narayan, (2014) who claim that promoting program planning & outcomes evaluation can provide a mean to gauge whether a given program has been successful or not. On this Malone, Mark, and Narayan, further observes that it is necessary for leaders to assess where a program is in relation to its expected outcomes in order to make better informed decisions. The result could be explained by the known facts that in order to continuously improve implementation of program, necessary for managers of partnership systems between NGOs and SFGs, to continuously assess where the program is in relation to its outcomes. It may be on this basis that Hauge, (2001), in his study on “*Strengthening Capacity for Monitoring and Evaluation in Uganda*” observes that conducting program planning and evaluation helps in tracking specific indicators to promote accountability.

The result of promoting information management also has a negative coefficient of -0.964 and therefore a negative effect on the effectiveness of partnership system which is statistically significant at 5 percent level. The marginal effect of promoting information management is also negative of -0.371 ($z=-2.01$). The estimated marginal effect shows that promoting information management is likely to reduce the probability of achieving effectiveness of partnership systems between NGOs and SFGs by 0.371 points. In other words, promoting better information management is necessary but not crucial for effectiveness of partnership system between NGOs and SFGs in order to inform rural development in Uganda. The result is astounding as it contradicts the findings of Atta, and Parvyn-Wamahiu, (2003); and Maceviciute and Wilson (2002) who maintain that encouraging information management supports in decision making, to ensure good quality information is utilized by the organization (in terms of access, accuracy and reliability, effective sharing) to become more competitive and effective in its operations. Therefore, perhaps, this result is based on the assertion that for the partnerships studied, didn’t manage information effectively for reasons of lack of good infrastructure in form of existing information systems, and expertise to capture relevant inform. In respect to this, understanding as well, a good model of effective information management should be selected suited the environment in which the partnership operates or as Choo (2002) referred to as work ecology that takes into account the social perspectives in influencing the fulfillment of information needs in an organization, in this case the partnerships between NGOs and SFGs in Uganda.

The result in Table 1.4 reveals that promoting insurance covers has a positive coefficient of 2.076 and statistically significant at 1 percent level. While the marginal coefficient of 0.797 ($z= 3.18$) also statistically significant at 1



percent level. This suggests that promoting insurance covers if agreed rather than disagreed that it is one of the key elements Influencing Activities increases the probability of achieving the effectiveness of partnership system between NGOs and SFGs. In other words, promoting Insurance covers is necessary and crucial for the effectiveness of partnership system between NGOs and SFGs in order to influence rural development in Uganda. This result is not amazing and it agrees with Buchmueller, et al (2005) who argues that having health insurance boosts personal wealth and financial health. This agrees also with USAID (2006), that claims that insurance covers contributes materially to economic growth by providing the investment climate and promoting a more efficient mix of activities that would be undertaken in the absence of risk management instruments. The result however may be surprising on another hand given that the rural areas of Uganda, insurance aspects are un heard of nor their services do exists. In rural areas of Uganda use informal insurance system such raring livestock, crop farming and in social schemes such as merry go round. Nonetheless, investment in insurance have diverse returns that evolve over time, reputational gains in the short terms, knowledge in the medium terms and growth in the long terms, thus the need to promoting insurance covers where possible.

Providing required facilities has a positive coefficient of 2.234, with the marginal coefficient of 0.858 ($z= 2.89$) and both statistically significant at 1 percent level. The results implies that providing required facilities is necessary and fundamental in fostering effectiveness of partnership system between NGOs and SFGs which in turn cause rural development in Uganda. The result is not unanticipated as it agrees with Connor (2003); Barrett and Baldry (2003); and Atkin and Brooks (2005) who assert that better facility management offers an integrated approach to maintaining, improving and adapting the building and other infrastructure of an organisation in order to create an environment that strongly supports the organization objectives. In line with this Atkin and Brooks further observes that facility management creates processes that deliver and sustain a quality working environment and quality support services to meet partnership system strategic needs and goals. Barrett and Baldry also add that facility management affects not only revenues and costs but production, quality of life of employees, health and safety, the working environment and increasingly, the ability to retain employees. The result may be explained by the fact that the studied partnerships were involved in agriculture with much of their produce requiring post-harvest facilities, thus facility management seen as a critical aspect for the effectiveness of the partnership but also for many individual SFGs and NGOs.

Feedback within Partnership Sub-system and the Whole System

The partnership system between NGOs and smallholder farmer groups exchange information in the form of idea, feeling, among other things through several feedback loops which are either electronic in nature or otherwise as in Table 1.5 In this perspective communication is seen as the tool through which parties of a partnership use to solve problems and make decisions.

Table 1.5: Major feedback channels among partners

Independent Variables	Probit Regressions	Probit Marginal Effects
Face to face meetings	0.991	0.281
	1.82*	1.88*
Video conference	0.500	0.142
	1.11	1.09
Internet	1.160	0.329
	2.03**	1.98**
Telephone conversations	1.562	0.443
	2.04**	2.13**
Hand deliveries	-1.723	-0.489
	-2.06**	-2.14**
Written letters & memos	2.911	0.826
	4.46***	4.67***



	-2.893	0.204
Intercept	-4.33	3.04
Number of obs	78	78
LR chi2(6)	53.21	53.21
Prob > chi2	0	0
Log likelihood	-25.61768	-25.61768
Pseudo R2	0.5095	0.5095

* and *** denote 10 and 1 percent levels of significance respectively

From table 1.5, the major feedback channels including only the face to face e.g. meetings held at different levels, telephone conversations, hand deliveries, and written letters & memos were significant and their discussions are presented as follows:

The result in table 1.5 show that promoting face-to-face interaction has a positive coefficient of 0.991, while a marginal coefficient of 0.281 ($z=1.88$). One would still conclude that promoting face-to-face interactions in necessary and important to increasing the effectiveness of partnership systems between NGOs and SFGs to in turn induce rural development in Uganda. The effect is weak but statistically significant at 10 percent level. The result is not surprising as it is congruent with the findings of Duke (2001); and McLeod, (1997) who observe that face-to-face contacts facilitate the transfer of tacit knowledge or knowledge that is not written or definable but gained through experience. McLeod further argues that with face-to-face, the speaker can draw on visual clues from the audience to gain quick, immediate feedback and make quick response, which make participant to easily learn about one another's skills, experience and expertise. The result possibly may be explained based on the fact that face-to-face meetings in studied rural partnerships in Uganda are used for planning, delivery and evaluation purposes among others. This may explain the many responses from the focus group that face-to-face interactions provided them with immediate feedback and riches information medium which increases efficiency, satisfy beneficiaries, improves quality and creates innovations.

The result demonstrates that promoting internet use has a positive probit coefficient of 1.160 and a marginal coefficient of 0.329 ($z=1.98$). This means that promoting internet use increases the probability of effectiveness of partnership system between NGOs and SFGs in rural Uganda by 0.329 points. The result is statistically significant at 5 % level. Therefore, investing in internet services is necessary and essential in effectiveness of partnership system between NGOs and SFGs in order to foster rural development in Uganda. This result is not surprising in that it concurs with the findings of scholars such as Batinic, (2013) who asserts that the advent of the internet and the development of computers and telecommunication technology have made the world a global village a reality. Batinic, further argues that internet provide a better access to several sources of information required for development decisions. The result however, may be explained by the rapid spread of the internet to Uganda's rural areas especially the use of mobile phones which has sparked off excitement among the rural dwellers giving them hope for future flourishing businesses through easy communication with the outside world. This may also be a result of the country wide introduction of district Information Portals which has seen internet expansion to rural areas through internet kiosks and setting up internet points in every district headquarter (UCC, 2009).. As the internet is the world's biggest library and an essential source of information superhighway (Matsamura, 2001), it makes sense that partnership systems between NGOs and SFGs in Uganda embrace its use to ensure that those in rural alike are empowered to transform their lives and contribute to rural development, which in turn contributes to the whole country's socio-economic development of the country.

The results show that promoting telephone conversation has a positive probit coefficient of 1.562 and the marginal coefficient of 0.443 ($z=2.13$). This means that promoting telephone conversation is necessary and vital in improving on the effectiveness of partnership system between NGOs and SFGs to in turn lead to rural development in Uganda. The effect is statistically significant at 5 percent level. This result as expected and fits with the findings of scholars such a Ulrich (2004); and Etta, and Paryn (2003)who argues despite the fact that



email use is taking over, telephone communication is one of the most common and important forms of communication by which to manage both internal and external communication within organizations. Etta, and Paryn notes that telephone use has several benefits such as the where the interlocutors do not see each other, which may help to solve tricky or unfavourable situations, and it can be used simultaneously while taking notes, searching on the computer, and so on. Perhaps the result is what it is based on the argument that almost everybody from the studied partnership including those in rural areas of Uganda seem to have a mobile phone today (whether personal or for a close friend), making the phone one of the most important communication tools including in partnerships between NGOs and SFGs. This makes phone conversations not only critical for the effective functioning of partnerships but also contributing to effective community members' interactions which a vital component for the effectiveness of the partnerships between NGOs and SFGs to inform rural development. However, Scoot and Mckemey,(2004) also confirm that rural areas in Uganda remain un served under the current license arrangement as access to services is restricted to public booths and private individuals with mobile phones – *several communities reported use of personal handsets, which to them offered a public spirited gesture rather than a commercial service.* Therefore, it is evident that there remains a need for greater investment in telecommunication infrastructure to enhance Telephone Conversations among others for rural development.

Promoting hand deliveries has a negative probit coefficient of -1.723 with a marginal coefficient of -0.489 ($z=-214$) and both are statistically significant (t 5 percent level. Equally, the estimated marginal effect of promoting hand deliveries decreases the probability of effectiveness of partnership system between NGOs and SFGs by 0.489 points. This means that improving hand deliveries is necessary but not crucial on effectiveness of partnership system between NGOs and SFGs in order to cause rural development in Uganda. The result is not unanticipated it negates the views of scholars such as Clarke and Stewart (1997), who affirms that hand deliveries is costly in terms of time, energy and money as the deliverer has to travel from the information source to where it is supposed to be received. This result could be explained by the fact that though hand deliveries communication is still an option for some people in rural Uganda including among the studied partnership, it has become the least applied channel of communication due to its slowness and emergence of more fast means of communication such as email, Skype, telephone, etc. However, in many instances hand deliveries is seen as a critical option for instance in legal related communication such as sermons. Notwithstanding the above drawback, hand deliveries may present an opportunity for more direct contact with information recipient, who could give a feedback immediately facilitating quick decision making as noted by Davis (2000), which in turn could increase effective partnership systems to inform rural development.

Similarly, the results show that promoting written letters & memos has a positive probit coefficient of 2.911, and a marginal coefficient of 0.826 ($z=4.67$). This is to say that an increase in promoting written letters & memos increases the effectiveness of partnership system between NGOs and SFGs by 0.826 points. The effect is strong and statistically significant at 1 percent level. Bonner and Chaney (2003); Larson, and Kleiner, (2004); and Holz, (2005 found similar result that written messages including letters & memos provide documentation of the communication which enables recipient to take time in reviewing the message in order to provide an appropriate feedback. in fact Holz, add that written forms of communication is advantageous in that they do not have to be delivered on the spur of the moment; instead can be edited and revised several times to be shaped to the maximum before delivery. Holz, further notes that other benefits of Witten letters and memos are commonly associated with improved in-organizational efficiency, which is associated with need to increase the effectiveness of partnerships between NGOs and SFGs in order to inform rural developments. Therefore, for some people in rural Uganda even letter writing is still not an option, given that most of them do not own a post box so the others means especially cell phone has become good alternative. Perhaps the result could be explained by the down side of this is that whether in rural or urban areas of Uganda, written letter communication is still being used but on a limited scale due their ineffectiveness as means of communication. In the contrary given the fact that respondents included smallholder farmer groups members in rural areas of Uganda with the majority illiterate one would expect lack of and/or good writing skills and lack writing facilities such as computers, thus a surprising result. For instance in many instances letters and memos may be interpreted by different people differently based on their own



perspectives, experiences and position in the organization, making unlikely common understanding of written letters & memos by all who receive them. This may limit the levels of interactions to cause ineffectiveness of the partnership systems between NGOs and SFGs in rural Uganda, thus hampering likely development in rural areas.

Management of Communication Flaws

Equally, the study sought to understand the management of communication flaws prevailing among the partnership systems between NGOs and SFGs for addressing various communication huddles that may spring up.

Table 1.6: Successful and workable management of communication flaws factors

Independent Variables	Probit Regressions	Probit Marginal Effects
Downward communication	2.182 4.32***	0.731 4.58***
Upward communication	-1.849 -3.33***	-0.620 -3.59***
Lateral / Horizontal communication	-0.760 -1.95*	-0.254 -1.95*
Diagonal Communication	-0.615 -1.28	-0.206 -1.33
External Communication	0.233 0.68 -0.173	0.078 0.68 0.277
Intercept	-0.43	4.44
Number of obs	78	78
LR chi2(5)	30.65	30.65
Prob > chi2	0	0
Log likelihood	-36.896268	-36.896268
Pseudo R2	0.2935	0.2935

* and *** denote 10 and 1 percent levels of significance respectively

However, only four factors: downward flow of communication, upward flow of communication, lateral / horizontal communication, and diagonal communication were significant and are discussed as follows:

The result show that promoting downward flow of communication as a one of the key successful and workable management of communication flaws is statistically significant at 1 percent level with a positive probit coefficient of 2.182. The marginal effect has a coefficient of 0.731 which suggests that this management of communication flaws, if agreed as a positive influence on partnership systems between NGOs and SFGs increases the probability on effectiveness by 0.731 points. In other words, promoting downward flow of communication is necessary and key in rural development in Uganda. This finding is not unexpected and it resonates with the findings of Canary, (2011); and Keyton, (2011) who contends that downward flow of communication are used by manager of organizations to transmit work-related information to the stakeholders (who require the information to perform partnership tasks) as lower levels. Keyton further claims that promoting downward flow of communication provides a motivation of the partnership system stakeholders to adopt the institution's mission and cultural values. The result on the other hand is surprising given that the studied partnerships being rural based, and in rural areas of Uganda there are tremendous communication obstacles including poor network coverages for cell phone, where "no service" is a frequent message on the screen, lack of airtime and electricity for charging; absence of newspaper – if one was gotten, then it would more than a few days old; many people are not literate, radios are unaffordable – yet many lack radio stations within the range, computers, emails and internets are non-existent. Therefore, partnerships between NGOs and SFGs should design appropriate flow of information systems that are

suitable for the rural setting to make communication for development efficient and meet the needs of their rural target communities.

The results show that promoting upward flow of communication has a negative probit coefficient of -1.849 and a marginal coefficient of -0.62 ($z=-3.59$). The negative marginal effect means that promoting upward flow of communication decreases the effectiveness of partnership systems between NGOs and SFGs by 0.62 points. In other words promoting upward flow of communication is necessary but not vital in rural development in Uganda. The coefficients are both statistically significant at 1 % level. The result here appear to refute the findings of Keyton, (2011); and Lunenburg, (2010) who argues that bottom –up communication creates more commitment and royalty of workforce in a partnership, due to the fact that employees are given the chance to raise and speak dissatisfaction matters to the managers. furthermore, Lunenburg, (2010) reasons that upward communication is participative in nature since it allows the subordinates to convey their feeling, constructive suggestion and opinions and the work related in the decision making process. Whereas upward communication is merited with many benefits, such as feedback of information up the hierarchy of the partnership systems, perhaps, the result can be explained by the fact that for the studied partnerships, it is not easy for them to have a smooth upward flow as there are some deterrents within partnership between NGOs and SFGs which may prevent a good return flow. Kyakulumbye, Olobo, and Kisenyi, (2013) argues that challenges in rural setting such as intentional distortion of any communication, fear and reluctance by employees to engage in upward communication, among others affects their interactions within organizations. These in turn affect the effectiveness of the partnerships between NGOs and SFGs in Uganda, thus hampering rural development. Therefore, there is need for management of partnership between NGOs and SFGs to assess, design and utilize an appropriate communication flow that suits existing communication infrastructure with the partners.

Equally, the results show that promoting lateral / horizontal communication has a negative probit regression coefficient of -0.760. with a marginal coefficient of -0.254 ($z=-1.95$), which means that an increase in promoting lateral / horizontal communications decreases the effectiveness of partnership systems between NGOs and SFGs by 0.254points if this was agreed as a beneficial rather than disagreed. Therefore, promoting downward flow of communication is necessary but not essential in rural development in Uganda. This effect is weak and statistically significant at 10 percent level. This finding is surprising in that it is in variance with the findings of Canary, (2011); and Keyton, (2011) who asserts that horizontal Communication is essentially communication between peers, managers as the same levels and that it works well for big and complex partnerships. This means that the bigger in size and complex a partnership system becomes the need to embrace lateral / horizontal communication also increases. Keyton, further discusses that lateral / horizontal communication is time saving, facilitates coordination of tasks, facilitates co-optations among team members, is good for application in resolving conflicts of sections/ departments with others at the same level. However, perhaps the result may be explained by the fact that communication structures, functions, and accountability mechanism in the studied partnerships in Uganda including in rural areas are undeveloped. According to the Government Communication Strategy, 2011, the absence of clear structure and accountability mechanism results into poor coordination of information flows within and without government and other agencies. This could be the reason why horizontal communication flows within partnership between NGOs and SFGs in Uganda have not enhanced coordination by permitting flow of lateral information flows, enabling subsystems to interact productively with others without having to follow rigidly down and up channels. The partnership system studied were observed not keen at using taskforces, committees, liaison staff all of which can be viewed as very important to facilitate coordination of their tasks and their effectiveness in order to influence rural development.

Major Communication Channels External to the Partnership

The study finally sought to unveil the basic channels used for external communication among the partnerships. Using the inferential statistics to test the effect of management of communication flaws external to the partnership on the effectiveness of partnership systems between NGOs and SFGs in order to inform rural development, the

study identified the critical factors that affect management of communication flaws external to the partnership and whose focus in terms of investment is likely to influence rural development shown in Table 1.7.

Table 1.7: Probit estimates Major Communication Channels

Independent Variables	Probit Regressions	Probit Marginal Effects
Websites	1.754 4.16***	0.535 4.05***
Press Releases	0.156 0.38	0.048 0.37
Email and Newsletters	-0.771 -1.99**	-0.235 -1.98**
Telephone Calls	-1.475 -3.41***	-0.450 -3.5***
Media Interviews/Conferences	0.012 0.03 -0.306	0.004 0.03 0.231764
Intercept	0.85	3.86
Number of obs	78	78
LR chi2(5)	37.87	37.87
Prob > chi2	0	0
Log likelihood	-30.751278	-30.751278
Pseudo R2	0.3811	0.3811

* and *** denote 10 and 1 percent levels of significance respectively

The detailed discussions of the significant variables are presented below.

Promoting use of website has a positive probit coefficient of 1.754. Similarly the marginal effect was 0.535 ($z=4.05$), which means that an increase in promoting use of website increases effectiveness of partnership system between NGOs and SFGs by 0.535 points. This amounts to saying that promoting use of websites is necessary but also fundamental for the effectiveness of the partnership systems between NGOs and SFGs to cause rural development in Uganda. This effect is strong and statistically significant at 1 % level. This result is not surprising and agrees with Huizingh (2000); Aladwani and Palvia (2002) who argues that a website not only gives credibility, but also helps give an impression and success of the partnership system. Huizingh adds that a website introduces the activities of the partnership system throughout the world. Aladwani and Palvia further assert that it is not the website that is critical but its contents (features, functions,

information and products offered) that play an important role in supporting communication for effectiveness of an organization which may include partnerships. The result may be explained by the fact that in today's time of internet popularity and globalization, a website is viewed as a dynamic tool for effective communication, which almost all the studied partnerships had developed and were operational or those that did not have them had the desire. However, on the contrary, it worth to note that for some of the studied partnerships between NGOs and SFGs, being in the rural areas, lack ICT infrastructure. The lack of application of the website like any other ICT intervention in this case is likely to have significant direct and indirect impact on enhancing agricultural production, marketing and post-harvest activities (Okoboi, 2010), to in turn can further rural development .



The results show that promoting email and newsletters use has a negative probit coefficient of -0.771 and statistically significant at 5 percent level. This means that a unit increase in promoting email and newsletters decreases effectiveness of partnership system by 0.771. Correspondingly, the estimated marginal effect has a negative coefficient of -0.235 ($z=-1.98$), implying that that an increase in the promotion of email and newsletters decreases the effectiveness of the partnership system between NGOs and SFGs by 0.235 points if this was agreed as a benefit rather than disagreed. This effect is averagely strong and statistically significant at 5 % level. This result is yet another surprising one, as it negates the findings of some scholars including Yell (2003); Seshadri and Carstenson, (2007); Hewitt (2007); and Cunningham and Greene (2008), who generally confirm that emails have grown from a small and exclusive means of communication to a major communication medium with about 210 billion email exchange per day. They further postulates that emails have been embedded within organizational and social effective communications for several benefits such as their comparable cheapness, free online email address that can be personalized to an extent (yahoo, g-mail, hot-mail, etc.). It could therefore be that this result is explained by the fact that within the studied partnerships in Uganda, use of promoting email and newsletters is made difficult, given that rural areas in Uganda present a difficult environment for deployment of telecommunication infrastructure due to shortage of energy, high poverty levels, and illiteracy among others. This may be evidenced by Kawooya, (2004); Madanda, (2006); and Serumaga, et al (2013) who maintains that Uganda's potential for rural areas to benefit from email and newsletters is a persistent question as the rural areas have lag behind and suffers acute shortage of electricity in the interconnected grid and the un served rural areas, which constrain development. The partnership systems between

NGOs and SFGs in Uganda to have email and newsletters in rural areas where their target group lives, there is need to address factors such as low literacy levels, rural electrification, under developed access network and lack of appropriate technology areas among others.

Lastly, the results show that promoting use of telephone calls external to the partnership has a negative probit coefficient of -1.475 and a marginal coefficient of -0.45 ($z=-3.5$). The marginal effect here means that promoting use of telephone calls external to the partnership has a negative effect and agreeing that it is an important factor rather than disagreeing reduces the probability of the effectiveness of partnership systems between NGOs and SFGs by 0.45 points. The implication is that promoting telephone calls external to the partnership subsidies is necessary but not critical in rural development in Uganda. This effect is strong and statistically significant at 1 % level. This result is surprising as it does not agree with Ulrich (2004); Etta, and Paryn (2003) who debate that applying the most appropriate telephone techniques is essential to get the most out of the communication tools for the effectiveness of the partnership systems between NGOs and SFGs to inform rural development. The result further contradicts the fact that the phone device is widespread and diffused among the population representing one of the most profound changes in rural Uganda, as discussed by Samajiva (2007) who argues that mobile phones have formed one of the great revolutions of the twentieth century, as it has provided communications than any other devices before. In fact to Samajiva, smallholder farmers, agricultural processors and marketers have transitioned to the use of mobile phones on a daily basis. The results perhaps may be explain by the number of limitations studied partnerships face with telephone calls such as the difficulty in reaching agreement by telephone which usually require written follow – up to provide a record of the agreement. In rural areas receivers may not



always be easy to reach given the poor network connections. Possibly the result may also mean that what has been done so far in promoting use of telephone calls in rural areas of Uganda is just a drop in the ocean. Meaning further investment in Uganda's rural telecommunication infrastructure is still needed to promote rural development.

Recommendations

From the system theory angle, therefore, managers must always ensure that systems are interacting amongst themselves for partnerships to function well and achieve the mission for their establishment. The implication here is that a partnership system between NGOs and smallholder farmer groups is not arbitrary group of organizations (partners) that come together by chance. Instead, they consciously and formally establish to accomplish certain goals that the member partners would not be able to achieve if they worked in isolations. This is because the management coordinates by direct supervision of the technocrats for successful implementation of rural development efforts. The internal structure of partnerships, according to Thompson et al. (2003) contributes to their effectiveness in terms of meeting their set goals.

The partnership systems between NGOs and SFGs shall be dependent on presence of good interaction and feedback within and without the partnership systems. This should be in terms of quality and productive regular meetings, conferences and consultation exercises. The different systems within the partnership system between NGOs and SFGs must be facilitated to interact productively to ensure effective delivery of partnership objectives.

Therefore, partnerships should continuously evaluate the different feedback channels that are appropriate and effective for a given rural setting to consult and give messages on rural problems

and their solutions. Identifying specific feedback tools will go a long way to increase rural people's participation in their development concerns. Such tools could include but not limited to briefings, community mailings, exhibitions, open house, fact sheet, public meetings, and small (focus) group meetings.

Drawing from the finding, the determinants of the partnership systems are used to understand the variables that influence their functioning for rural development. It does not however, "prescribe" actions to create change because different prevailing rural situations will shape both the desirability and feasibility of possible structural actions. Therefore, those planning to pursue rural development through partnerships such as those between NGOs and smallholder farmer groups, should embrace the use of systems theory perspective in partnership operation.

Therefore, for the partnership systems to be effective, they should have a number of interactive variables under their control, or otherwise, where such factors dilute and/or undermine each other, the negative influence is bound to be registered. In effect, the result indicates that partnership systems have particular drivers which maintain them in motion and/or facilitates the interactions between the different parts. For the system of partnerships between NGOs and Smallholder Farmer Groups to effectively influence rural development, the interactions of the different parts of the partnership system should effectively reinforce, complement and/or strengthen each other.

Conclusion

Using the system theory, this study offers partnership approach proponents a familiar perspective. From this perspective, the study in this paper attempts to identify and describe interactive factors that influence effectiveness of



the partnership systems that are embedded in whole. The application of the system theory by the study produced results that provide grounds for deriving some general insights relevant and beneficial, although several factors need to be taken into consideration for the success or failure of partnership systems' effectiveness. Findings presented in this paper clearly note that effective partnership arrangements help address development challenges in rural areas.

In the context of joint working, a partnership system must be perceived of as the totality of all elements. Effective partnership delivery of rural development efforts calls for effectiveness of each of the elements of the system and effective links amongst them. This means that if one system element fails to work well, the effects adversely affect the other elements, which negatively reinforces the outcome. The outcome in this case are the result of the system interaction of a large number of the studied partnerships and members each of which influence their activities by adapting behaviours and shaping the environments in which they operate.

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