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Sustenance of the Results of Livelihood Projects: A Case Study of the Rural Livelihood Program in Uganda

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This study assessed the extent to which the results of the rural livelihood projects were sustainable in Nyimbwa sub county Luwero District, Uganda. Data were collected using a questionnaire survey from a sample of 110 respondents namely, heads of household and staff of the Tripartite Rural Livelihood program. The results revealed that rural livelihood projects were sustainable. The results also revealed that gender, age, education level, and occupation significantly affected uptake and sustenance of livelihood projects. It was thus recommended that in introducing sustainable livelihood projects, community development interventionist should have in mind the background characteristics of their rural beneficiaries that make sustainability of the projects achievable.

Keywords: Livelihood, Projects, Rural Programmes, Sustainability.

INTRODUCTION

Sustainable livelihood projects are premised on the Sustainable Livelihoods Approach (SLA). This is an example of the “multiple capital” approach where sustainability is considered in terms of available capital (natural, human, social, physical and financial) and an examination of the vulnerability context (trends, shocks and stresses) in which these assets exist. Once these assets have been identified and assessed in terms of the contribution they make, vulnerability context in which they exist is explored that is trends, shocks and stresses such as depreciation, natural disasters and cash volatility. Sustainable Livelihoods approach helps establish the principle that successful development intervention must begin with a reflective process of deriving evidence and this has to be broad in vision and not limited to what may seem like a good “technical fix” (Morse et al., 2009).

In the 1970s, many development practitioners were concerned about the famines that were taking place in Africa and Asia, and a concerted effort was made to put more resources into increasing food supplies globally. Out of this concern, significant increases in food supplies were created through crop research. However, transitioning into the 1980s, many development practitioners realised that even with significant national-level surpluses, many households were still not obtaining adequate amounts of food for a healthy life. It was determined that many households did not have enough income or resources to exchange for food to meet their food needs. This led to a shift from national food security
to a concern with the food security and nutritional status of households and individuals. Farming systems research, focusing on the production activities of poor households, provided a new perspective on the way to view the production and consumption decisions of households. In the mid-1980s to the early 1990s, researchers began to widen their perspective from food security to a livelihood perspective (Albareti and Carloni, 2000).

In Uganda, the government integrated development into country policies, and programs, and various policies, laws, institutions, regulations and standards to guide the management of natural resources (MGLSD, 2012). For instance, the National Environment Management Policy (1994) gave birth to the National Environment Statute (1995) and institution of NEMA to manage environment and natural resources. Other programs and plans included the Poverty Eradication Action Plan (PEAP) and National Development Plan (NDP) (MDGs report for Uganda 2010). There was also implementation of the Plan for the Modernisation of Agriculture (PMA) that started in 2001. This was a national agricultural policy whose livelihoods perspective was to ensure that it served the needs of national rural development. The PMA was effectively a national livelihoods strategy focused on rural areas (Hussein, 2002). The government also introduced National Agricultural Advisory Services (NAADS) to sustainably enhance rural livelihoods by increasing agricultural productivity and profitability. The first phase of NAADS (2001/2-2007/8) cost US $108 million and the 2nd phase (2010/11- ) would cost 120 billion Uganda shillings (Rwakakamba, 2011).

RELATED LITERATURE

Sustainability of results of the rural livelihood projects

Adopting better production practices is an indication of sustainability of projects. DFID (2002) argued that sustainable livelihood approach can challenge some key environmental narratives that poor people cause or cannot adapt to environmental degradation. This approach fully adopts the new problem closure offered under sustainable livelihood approach because it allows poor people to define both environmental problems and sustainable development because they are linked to activities that may reduce their vulnerability and secure sustainable livelihoods. This approach therefore gives precedence to poor people’s definitions and uses of natural resources as a way to reduce vulnerability, rather than necessarily allow resources or environmental problems to be defined by other means. However, the gap a rising from the above literature is whether people in the area under study have adopted better production approaches and this was investigated by the study.

Increased productivity is an indicator of sustainability of the results of a livelihood project. Hasan et al. (2013) in a qualitative study, on the impact of agriculture extension in Uganda established that sustainable livelihood projects improved production. In their findings they indicated that participation in agriculture extension programmes significantly raised crop productivity and household expenditure per capita in most cases with a few exceptions. However, the emerging gap is that there has been criticism of the failure of the extension agricultural services in Uganda leading even to the suspension of the NAADS programme. This study thus investigated whether the sustainable livelihood projects in Nyimba increased productivity.

Willingness of community members to procure services is an indication of sustainability of the results of the project. James et al. (2013) studied the effect of participation in the Ugandan National Agricultural Advisory Services on willingness to pay for extension services. Qualitative results revealed that farmers are willing to pay for extension advice (US$0.20), which was higher than that found for most other African extension systems) if they saw they were given good information, though they were not be asked to pay the full cost. Longer association with NAADS promoted the adoption of new crops, reduced the vulnerability of farms by increasing technology adoption and improved farmer welfare. The gap that emerges is whether the people in the area under study are willing to pay for the services. This study was thus investigated to find out if the people are willing to pay for such services.

Challenges to sustaining results of rural livelihood projects

Poverty is a challenge facing sustainability of the results of rural livelihood results projects. Kamaruddin and Samsudin (2014) studied the sustainable livelihoods index with the rural poor in the district of Baling in the state of Kedah, Malaysia as units of analysis. Their descriptive results revealed that in hard core poor households with low income, sustainable Livelihoods Index (SLI) was low. However, the context of the study was poor people in Malaysia, this contextual gap leaves the question of whether the level of income affects the sustainability of projects and this was investigated by the study.

In relation to the above, Ekou (2013) carried out a review on eradicating extreme poverty among the rural poor in Uganda through poultry and cattle improvement. The findings of his review revealed that the strategies used by the government of Uganda to fight poverty and hunger did not favour the rural poor but supported the rich and thus failed to cause a notable impact. However, the study was a review which makes it necessary to investigate whether the sustainable livelihoods projects
have not taken care of the poor. Also this was investigated by the study.

Mismanagement of projects is a challenge to their sustainability. Mwesigwa (2012) studied relationship between National Agricultural Advisory Services (NAADS) programs and poverty reduction in Uganda. This sample of this study was farmers from two parishes of Busisi Sub County, Hoima district in western Uganda. Both quantitative and qualitative results indicated that NAADS had failed to deliver results because it was mismanaged. Qualitative results revealed that beyond reasonable doubt, the NAADS program had the potential to transform the rural poor if well managed. However, the management of the livelihood projects in the area under study has not been empirically studied. This thus calls for an empirical study of the management of the livelihood projects in Nyimbwa Sub County.

There are also challenges that come with donor funded projects. Busiinge (2010) studied the impact of donor aided projects through NGOs on the social and economic welfare of the rural poor. The basis of the study was an indigenous organisation, Kabarole Research and Resource Centre, located and operating in the Rwenzori sub-region of Uganda. The qualitative results of the study revealed that the larger proportion of project beneficiaries continued to struggle to realise economic and social effects mainly due to the structural approach favoured by both the NGO and the donors. Largely, more social and economic effects occurred at the non-primary target level that is NGO workers, and the private sector. A significant proportion of community members had been pushed to the periphery of the ‘Very poor’ including those that had been targeted by the projects due to; imposition of project ideas by the donors through the local counterpart NGO, failure to critically assess the local contexts on the part of the NGO and the donors and limited individual capabilities among the targeted active poor to fully participation and benefit from projects that were given to them. Besides, donor-aided projects accelerated the donor dependency syndrome and a consumption mentality among their beneficiaries. Thus, the projects were unlikely to be sustained, as they were purely dependent and tagged to the NGO and the donors and not to their beneficiaries or government. This literature will be the basis for investigating how donor funding is a challenge to livelihood projects in the area under study.

**Strategies for ensuring sustainability of rural livelihood project results**

Strategies for ensuring sustainability of rural livelihood projects results are important. Ahebwa and van der Duim (2013) carried out a study entitled “conservation, livelihoods, and tourism” on the Buhoma-Mukono community- based tourism project in Uganda. In their qualitative analysis, they established that the Buhoma- Mukono community tourism project successfully contributed to resolving the conflict between the community’s livelihood and the protected area’s conservation needs and reduced the vulnerability of the community. Apparently, this was because of location and direct access to the market. They also indicated that the Buhoma-Mukono venture was well integrated in a set of other tourism, as well as non-tourism (e.g., education and agriculture development programs) related conservation and development interventions. Further, they indicated that the project arrangement showed the importance of sound institutional pre-conditions, which effectively contribute to the realisation of the desired policy outcomes. Accordingly, the institutional framework of the Buhumo-Mukono Community Development Association positively shaped people’s livelihood capital assets, which in turn positively influenced livelihood outcomes in terms of jobs, income, and well-being. For community tourism ventures to be successful, they need to be coupled with other conservation and development interventions, be built upon strong institutional pre-conditions, and should meet the basic benchmarks of any other viable tourism enterprise. However, the emerging gap is whether the projects in Nyimbwa are strategically located, have direct access to the market and sound institutional pre-conditions. These were thus investigated by the study.

Sustainable livelihood projects require that management which is transparent. Gupta et al. (2003) indicate that local population participation can be very useful in monitoring the use of program funds and of service delivery. Accordingly, this is especially strong when those being monitored have close ties to the community sanctions for offences are hard to ignore when they come from people with whom one necessarily has multi-stranded and longstanding relationships. For instance, Taniguchi (2012) in a qualitative study in the Philippines established that community people instilled transparency especially, because many people were involved promoting checks and balances in the financial use of the money disbursed to the projects. However, with corruption in the country, it is not clear whether the management of the sustainable projects enhance transparency which attracts the investigations of this study.

Fonchingong and Fonjong (2003) state that local-level development provides a major force in activating the utilisation of local resources (land, water, labour) and therefore constitutes one of the most effective methods of promoting people’s participation in determining their own development. In their study in Cameroon, qualitative results revealed that community members were increasingly shouldering the adverse consequences of the economic downturn and the growing inability of the state to provide economic and social development by initiating, mobilising and galvanising their own resources in the quest for improving their standard of living. This study will try to
establish how through sustainable livelihood projects local people mobilise resources to improving their standards of living.

With sustainable livelihood projects, there is need for local people to determine resources utilisation through budgeting. According to Breskin et al. (2005), participation in budgeting leads to stakeholder acceptance of decisions related to goals, services, and resource utilisation. Ahura (2011) in an empirical study found out that when stakeholders involve in planning the resources, there is increased transparency, making them identify with the budget and so support its implementation. Basing on this literature this study investigated how community participation in budgeting resources enhances sustainability of the results of livelihood projects.

Sustainable livelihood projects place people at centre of development and focus on poverty reduction interventions, empowering the poor to build on their opportunities while supporting their access to assets and developing on enabling policy and institutional environment. These approaches are based on core principles which include; people-centred, responsive and participatory, multi- level, conducted in partnership, sustainable and dynamic. Potential livelihood outcomes can include increased income, increased wellbeing, reduced vulnerability, improved food security, more sustainable use of natural resource base and recovered human dignity (Krantz, 2001). However, the missing link is whether the implementation of the sustainable projects puts the people at the centre of development and this was investigated in this study.

Bhandari (2009) states that special attention should be devoted to improved monitoring and evaluation systems that facilitate and document progress towards sustainability. Apparently, effective measurement and evaluation of field operations supports sustainability in multiple ways. First and foremost, it identifies strengths and weaknesses in project implementation, which makes possible needed adjustments in response to changes in the operating environment. Second, it can highlight potential linkages among individual project components that enhance the overall impact of programme interventions. Finally, it can establish reliable indicators of project sustainability, which is a critical step in gauging progress towards key benchmarks and formulating effective exit strategies. However, the monitoring of the projects in Nyimbwa Sub County has not been empirically studied and this attracts the investigations of this study.

Practitioners and scholars across a variety of disciplines recognise that good project management goes beyond implementation and that effective project management is integrally linked to well-designed monitoring and evaluation systems. Approaches and motivations for monitoring and evaluation vary. For project management, monitoring and evaluation can help demonstrate accountability and project impact, an increasingly important function in the current climate of budgetary constraints. Monitoring and evaluation answers questions related to how well a project or strategy is working independently of or in relation to other possible projects or strategies. Monitoring and evaluation is also critical for improving project management. It can help identify the conditions under which a project is likely to succeed or falter. Moreover, it can also serve as an early warning system for potential problems, and it can lead to ideas for potential remedial actions. As such, effectively delivered monitoring and evaluation results often provide the basis for improved decision making (Stem et al., 2003). Basing on this literature, this study will investigate how evaluation systems enhance sustainability of projects.

**METHOD**

**Instrument**

Using the quantitative approach, and in particular the survey design, data were collected using a self-administered questionnaire (SAQ) - appended. The SAQ comprised two sections, namely A and B. Section A were on the background characteristics of the respondents that included gender, age group, education levels and occupations of the respondents. Section B covered three aspects namely; success of rural livelihood projects, (with six items for Success at $\alpha = 0.868$) challenges to sustaining results of rural livelihood projects (with seven items for challenges at $\alpha = 0.7954$) and strategies for ensuring sustainability of rural livelihood project results (with twelve items at $\alpha = 0.703$) all adopted from Allen and Meyer, 1990.

The validity of the instruments was also guaranteed basing on the ground that an instrument cannot be valid unless it is reliable (Tavakol and Dennick, 2011). However, still after data collection, the respective items were subjected to confirmatory factors analysis and reliability test to reconfirm validity and reliability.

**Sample**

The sample size comprised 110 respondents that were 97 farmers and 13 staff of the Tripartite Rural Livelihood program. To attain the sample size, the researcher used two-stage sampling whereby in the first stage, the farmers were clustered according to parishes. In stage two, the farmers were stratified according to farmer groups and in each parish; there was at least a farmer group in each parish. Each farmer group comprised 20-25 people. Four farmer groups from two parishes that each had two farmer groups were selected more
especially because these farmer groups were the most active. The sample of the staff of the Tripartite Rural Livelihood program that provided interview data was determined using purposive sampling.

**Data Management**

The data analysis was carried out using descriptive and inferential analyses. Descriptive analysis involved the use of percentages and mean. Inferential analyses involved the use of Student t-test and ANOVA. The Statistical Package for Social Scientists (SPSS) facilitated the data analysis.

**FINDINGS**

**Background characteristics of the respondents**

The background characteristics studied include gender, age group, level of education and main occupation. The data on background characteristics of the respondents of the study in Table 1 show that majority of respondents involved in the study were males 59.8%, on age groups majority of respondent were between 31-40 years, on highest the level of education majority of respondents have were primary education 51.5% and main occupation, majority of respondents were are farmers only 66%

The results in Table 1 reveal that on average, the means male responders is (3.7915) scored on uptake and sustenance of livelihood projects marginally higher than the means of female respondents (3.6480). The Student’s t (t = 2.278) was large and the probability or level of significance (p = 0.033) was smaller than α = 0.05 (p < 0.05). Since the level of significance was below 0.05 uptake levels between males and females was significantly different with males having a higher uptake level than females. Since the mean for the male respondents was greater than the mean for Female respondents, it can be concluded that male respondents were able to significantly uptake and sustain livelihood projects than Female respondents.

The results in Table 1 show that the mean score on uptake and sustenance of livelihood projects was higher for respondents in age group 41-50 years that scored (mean = 3.8325), followed by 50 years (mean =3.8117) followed by those 30 years and bellow (mean = 3.7000) and then least were those of 31-40 years (mean =3.6573). The uptake and sustenance of livelihood results differ significantly among the four groups (F 3, 93) = 15.007, the probability or level of significance (p = 0.000) lower than α = 0.05 (p < 0.05). Since the level of significance was less than 0.05, this meant that the variation in the uptake and sustenance of livelihood projects according to their age groups was statistically significant.

The results in Table 1 show that the mean score on uptake and sustainability of livelihood projects was higher for respondents that had Secondary level education (mean = 3.8636), followed by Tertiary level (mean = 3.7424) followed by no formal education (mean = 3.6653), and the least were primary level (mean =3.6627). The uptake and sustenance of livelihood results differ significantly among the four groups (F 3, 93) = 3.172, the probability or level of significance (p = 0.028) lower than α = 0.05 (p < 0.05). Since the level of significance was lower than 0.05, this meant that the variation in the uptake and sustenance of livelihood projects according to their level of education was significant. Therefore, uptake and sustenance of livelihood projects was determined by the level of education.

**Sustainability of the Results of the Rural Livelihood Projects**

To measure sustainability of the results of the rural livelihood projects, all the items were scaled using the five-point Likert scale from a minimum of 1 for the worst case scenario (strongly disagree) to a maximum of 5, which is the best case scenario (Strongly agree). Table 2 gives the resultant respective means, factors and Cronbach alphas. Therein it is illustrated that the respondents overall rated themselves highly all question items with overall mean = 3.92 ≈ 4, corresponding to Agree). Further according to Table 2, Factor Analysis suggested that the items one factor, having eigen value of 3.668. The factors explained over 61%, of the items constitute a factor. Considering a factor loading which was at least 0.5 as high (Demo et al., 2012). Table 2 makes it clear that each item loaded highly on the corresponding factor, meaning that all items were valid measures of the corresponding construct. Finally Table 2 illustrates that the Cronbach alpha of 0.868 is above the recommended 0.7 (Tavakol and Dennick, 2011). This means that each item was a reliable measure of the corresponding construct. This means that each cluster of items was a reliable measure of the corresponding construct.

**Challenges to sustaining results of rural livelihood projects**

To measure challenges to sustaining results of rural livelihood, all the items were scaled using the five-point Likert scale from a minimum of 1 for the worst case scenario (strongly disagree) to a maximum of 5, which is the best case scenario (Strongly agree). Table 3 gives the resultant respective means, factors and Cronbach alphas. Therein it is illustrated that the respondents overall rated themselves highly all question items with
Table 1. Respondents Background Characteristics (n = 97)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Category</th>
<th>Percentage</th>
<th>Mean</th>
<th>Std</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender of the Respondents</td>
<td>Male</td>
<td>59.8</td>
<td>3.7915</td>
<td>.27260</td>
<td>3.461</td>
<td>0.033</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>40.2</td>
<td>3.6480</td>
<td>.34628</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>Below 30 yrs.</td>
<td>5.2</td>
<td>3.7000</td>
<td>.24393</td>
<td>15.007</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>31-40 yrs.</td>
<td>51.5</td>
<td>3.6573</td>
<td>.38637</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>41-50 yrs.</td>
<td>36.1</td>
<td>3.8325</td>
<td>.17248</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50 &amp; Above</td>
<td>7.2</td>
<td>3.8117</td>
<td>.06654</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest level of Education</td>
<td>No formal education</td>
<td>11.3</td>
<td>3.653</td>
<td>.36493</td>
<td>3.172</td>
<td>0.028</td>
</tr>
<tr>
<td></td>
<td>Primary level</td>
<td>51.5</td>
<td>3.6627</td>
<td>.37167</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secondary level</td>
<td>34.0</td>
<td>3.8636</td>
<td>.09841</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tertiary level</td>
<td>3.1</td>
<td>3.7424</td>
<td>.02624</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Occupation of the Respondent</td>
<td>Farmer only</td>
<td>66.0</td>
<td>3.8139</td>
<td>.23427</td>
<td>6.155</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Formal Employment</td>
<td>17.5</td>
<td>3.5936</td>
<td>.36734</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business entrepreneur</td>
<td>11.3</td>
<td>3.4669</td>
<td>.45002</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local leader</td>
<td>5.2</td>
<td>3.7727</td>
<td>.15414</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100.0</td>
<td></td>
<td></td>
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</tbody>
</table>

Table 2. Means, Factors and Cronbach Alphas on Success of Rural livelihood projects

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>Overall mean</th>
<th>Factors Loadings</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adopted production methods taught</td>
<td>4.21</td>
<td>3.92</td>
<td>.892</td>
<td>.868</td>
</tr>
<tr>
<td>More productive farm</td>
<td>3.64</td>
<td>.863</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willingness to contribute to extension service</td>
<td>3.93</td>
<td>.858</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigen value</td>
<td>3.668</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% variance</td>
<td>61.127</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Means, Factors and Cronbach Alphas on Challenges to sustaining results of rural livelihood projects

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>Overall mean</th>
<th>Factors</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of income affects sustainability of project</td>
<td>3.57</td>
<td>3.75</td>
<td>.832</td>
<td>0.7954</td>
</tr>
<tr>
<td>The projects did not target rural people</td>
<td>3.68</td>
<td>-.624</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mismanagement of project affects sustainability</td>
<td>4.21</td>
<td>.612</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donar funding promoted dependency</td>
<td>3.55</td>
<td>.836</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigen value</td>
<td>2.317</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% variance</td>
<td>33.093</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

overall mean = 3.75 ≈ 4, corresponding to Agree. Further according to Table 3, Factor Analysis suggested that the items one factor, having eigen value of 2.317. The factors explained over 33%, of the items constitute a factor. Considering a factor loading which was at least 0.5 as high (Demo et al., 2012). Table 3 makes it clear that each item loaded highly on the corresponding factor, meaning that all items were valid measures of the corresponding construct. Finally Table 3 illustrates that the Cronbach alpha of 0.7954 is above the recommended 0.7 (Tavakol and Dennick, 2011). This means that each item was a reliable measure of the corresponding. This means that each cluster of items was a reliable measure of the corresponding construct.
Strategies for ensuring sustainability of rural livelihood project results

To measure the strategies for ensuring sustainability of rural livelihood project results, all the items were scaled using the five-point Likert scale from a minimum of 1 for the worst case scenario (strongly disagree) to a maximum of 5, which is the best case scenario (Strongly agree). Table 4 gives the resultant respective means, factors and Cronbach alphas. Therein it is illustrated that the respondents overall rated themselves highly all question items overall mean = 3.75 ≈ 4, corresponding to Agree. Further according to Table 4, Factor Analysis suggested that the items one factor, having eigen value of 4.628. The factors explained over 38%, of the items constitute a factor. Considering a factor loading which was at least 0.5 as high (Demo et al., 2012). Table 4 makes it clear that each item loaded highly on the corresponding factor, meaning that all items were valid measures of the corresponding construct. Finally Table 4 illustrates that the Cronbach alpha of 0.703 is above the recommended 0.7 (Tavakol and Dennick, 2011). This means that each item was a reliable measure of the corresponding construct. This means that each cluster of items was a reliable measure of the corresponding construct.

DISCUSSION

The study revealed that gender of respondent had a significant effect on uptake and sustenance of livelihood projects with males having higher uptake levels than females. This emphasizes the importance of gender as found in other studies, especially those investigating factors influencing perception of economic wellbeing (Leach et al., 1999). All these studies highlight the importance of gender as they argue that socialization engenders the viewpoints that men and women have and would therefore influence how they perceived their economic situations. The issue of considering gender in development initiatives has also been emphasized by other development studies (Lija and Dixon, 2008).

The study revealed that Age of respondent had a significant influence on uptake and sustenance of results of livelihood programs with 41-50 years having a higher uptake and sustenance levels.

This agrees with adoption studies that reveal that Age is said to be a primary latent characteristic in adoption decisions. However there is contention on the direction of the effect of age on adoption and sustenance of technology. Age was found to positively influence adoption of sorghum in Burkina Faso (Adesiina and Baidu-Forson, 1995), IPM on peanuts in Georgia (McNamara et al., 1991), and chemical control of rice stink bug in Texas (Harper et al., 1990). The effect is thought to stem from accumulated knowledge and experience of farming systems obtained from years of observation and experimenting with various technologies. In addition, since adoption pay-offs occur over a long period of time, while costs occur in the earlier phases, age (time) of the farmer can have a profound effect on technology adoption. However age has also been found to be either negatively correlated with adoption, or not significant in farmers’ adoption decisions. In studies on adoption of land conservation practices in Niger (Baidu-Forson, 1999), rice in Guinea (Adesiina and Baidu-Forson, 1995), fertilizer in Malawi (Green and Ng’ong’ola, 1993), IPM sweep nets in Texas (Harper et al., 1990), Hybrid Cocoa in Ghana (Boahene et al., 1999), age was either not significant or was negatively related to adoption. Older farmers, perhaps because of investing several years in a particular practice, may not want to jeopardize it by trying out a completely new method. In addition, farmers’ perception that technology development and the subsequent benefits, require a lot of time to realize, can reduce their interest in the new technology because of farmers’ advanced age, and the possibility of not living long enough to enjoy it (Caswell et al., 2001; Khanna, 2001). Furthermore, elderly farmers often have different goals other than income maximization, in which case, they will not be expected to adopt an income-enhancing technology. As a matter of fact, it is expected that the old that do adopt a technology do so at a slow pace because of their tendency to adapt less swiftly to a new phenomenon (Tjornhom, 1995).

The study revealed that education level of respondent had a significant effect on uptake and sustenance of livelihood projects with educated respondents having higher uptake levels than uneducated respondents Nnadi and Akwiwu (2008), revealed that educated farmers are more likely to participate in agricultural projects in order to put into practice the knowledge they may have acquired in school. Farid et al. (2009) and Khan et al. (2012) however observed a negative relationship between education and women’s participation in agricultural activities. Oladejo et al. (2011) and Nxumalo and Oladele (2013) did not observe any significant relationship between education and the decision to participate in an agricultural project.

CONCLUSION

Summary

The study revealed that in Nyimwa Sub County, the uptake and sustenance of the rural livelihood projects were marginally higher in males than females. The students t-test (t = 2.246) was larger and the level of significance smaller (p = 0.035). Since the level of significance was below 0.05 uptake levels between males and females were significantly different with males having a higher uptake levels than females.

It was also found out that uptake and sustenance of
livelihood projects was determined by age. Ages 41-50 years and 31 to 40 years were the most significant ($p = 0.00$ less than $\alpha = 0.05$ ($p < 0.05$) in the uptake and sustenance of livelihood projects. The study also found that primary and secondary levels of education of respondents were the most significant ($p = 0.004$ lower than $\alpha = 0.05$ ($p < 0.05$) in the uptake and sustenance of livelihood projects. The results on occupation of respondents do not play a role in uptake and sustenance of livelihood projects. Individuals carrying out farming as the only activity are significant ($p=0.014$ less than $\alpha = 0.05$ ($p < 0.05$) in sustenance of livelihood projects.

The results also indicated that there is improvement in household food security, income and assets as a result of sustaining results of rural livelihood project. The community also contributed to the sustenance water project and service. For instance, people made contributions for operation and maintenance of boreholes. Community members also adapted to the production methods they were taught such as planting crops in lines, use of manure, housing animals like pigs, kitchen gardening, planting in time and making compost manure among others.

The findings of the study revealed a number of challenges that affected the sustenance of the results of rural livelihood projects. These include, level of income affecting sustenance of projects since some of inputs needed to take up the projects were out of the financial ability of the poor community members like water harvesting tanks and polythene sheets to use in the dug ponds to harvest running rain water. Some community members could not sustain poultry because they had to buy feeds for the chicken and yet they didn’t have the money.

In the findings of the study, a number of strategies for ensuring sustainability of rural livelihood project results were established. These included enabling participants in projects to access the market. Another strategy, the project to be integrated in a set of other projects (e.g., education and agriculture development programs) and establishing sound institutional pre-conditions such as having sufficient staff, training community based trainers (CBTs) and forming farmers groups. There should also be involvement of community people in planning for the projects and involvement of community participation in nontechnical decisions.

### Implications

From the above findings it is confirmed that for sustainability of the results of livelihood projects to be realised, stakeholders so called “beneficiaries” should be brought on board at every stage of the project cycle in order to contribute their knowledge, resources and time for success of the prose projects.

### RECOMMENDATIONS

The findings and conclusions of the study lead to the making of the following recommendations on sustenance of the results of livelihood projects.

There is a need to ensure that the results of the rural livelihood projects become sustainable. This is by ensuring that community members adapted to the production methods taught and ensuring that there is increased productivity because of the projects. Besides, community members should be made to be willing to contribute to access extension services.

However a number of challenges were identified hamper the progress of project success which include; low levels of income of the beneficiaries, mismanagement of the projects and donor funding promoting decency syndrome.

Efforts should be made to put in place strategies for ensuring sustainability of rural livelihood project results. These strategies include increasing market access,

### Table 4. Means, Factor and Cronbach Alpha for strategies of ensuring sustainability of rural livelihood project results

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>Overall mean</th>
<th>Factors</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct access to market</td>
<td>3.70</td>
<td>3.75</td>
<td>-.745</td>
<td>.703</td>
</tr>
<tr>
<td>Livelihood project well integrated</td>
<td>3.46</td>
<td></td>
<td>.813</td>
<td></td>
</tr>
<tr>
<td>My participation ensured that money was properly implemented</td>
<td>3.92</td>
<td></td>
<td>.862</td>
<td></td>
</tr>
<tr>
<td>I participated in budgeting for financial utilization</td>
<td>3.25</td>
<td></td>
<td>.783</td>
<td></td>
</tr>
<tr>
<td>As a community members I was at centre of implantation</td>
<td>4.36</td>
<td></td>
<td>.853</td>
<td></td>
</tr>
<tr>
<td>Proper mechanism of monitoring performance of projects</td>
<td>3.82</td>
<td></td>
<td>.785</td>
<td></td>
</tr>
<tr>
<td>There are evaluation systems for the project</td>
<td>3.75</td>
<td></td>
<td>.717</td>
<td></td>
</tr>
<tr>
<td>Eigenvalue</td>
<td></td>
<td>4.628</td>
<td></td>
<td>38.568</td>
</tr>
<tr>
<td>% variance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
integrating projects in a set of other projects, involvement of the community, ensuring effective monitoring, evaluation systems of the project.

REFERENCES


Altarelli V, Carloni (2000). (Editors), Operationalising household livelihood security. Forum proceedings Department for International Development of the United Kingdom


Businge C (2010). The impact of donor aided projects through NGOs on the social and economic welfare of the rural poor. A research paper Supported by the Royal Geographical Society (with IBG) with a Royal Dutch Shell plc International Leadership and Capacity Building Programme Bursary


