# LIVELIHOOD DIVERSIFICATION IN RURAL UGANDA: IMPACT OF AFRICARE'S DEVELOPMENT ACTIVITIES ON THE LIVELIHOODS OF NYABYUMBA COMMUNITY

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**ABSTRACT**

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The study was carried out to determine the livelihood strategies of Nyabyumba community and investigate the impact of Africare's development activities on the livelihoods of the community between mid-August and mid-September 2007. Data were collected using a household survey questionnaire which was administered to 15 purposefully selected households (sample size was small because of the very remote area and total member of the group was 20) in Nyabyumba community-Kabale district, and using key informant interview with the chairperson of the community. The findings showed that crop production was the major income source for all the samples though there were large differences among the households in the types and quantities of crops grown. Surprisingly, few livestock ownerships were reported. According to the key informants, those households who did not own livestock were considered as poor, and the poor people in the area did not take part in community activities. Thus, the participation of the 'real' poor in Africare's activities was found to be very small in Nyabyumba community. Informal discussions with some Nyabyumba residents revealed that some households were reluctant to join in Africare's activities because of the pre-conditions which require land ownership. All the participants in Africare's development activities were very enthusiastic about their continued participation. They alluded that they have been benefited from Africare projects, and they acquired new knowledge and skills which they will always have with or without Africare.

**Keywords:** Livelihood diversification, development activities, Africare

## INTRODUCTION

Livelihoods of rural dwellers in Uganda depend on agricultural and/or non-agricultural activities, with agricultural activities accounting for a lion's share of households' income. In 1972, 70% of Ugandans lived in households where the heads' main activities were crop productions (Appleton *et al.* in Smith *et al*. 2001). In 1997/98 agriculture accounted for 44% of Uganda's GDP (Beijuka in Smith *et al.* 2001). More than two thirds of rural household income was derived from agriculture in 1999, with land comprising about half the value of total asset endowment (Deininger and Okidi in Smith *et al.* 2001).

Newman and Canagarajah, (in Smith *et al*. 2001) calculated that between 1992 and 1996 the percentage of people engaged in both agricultural and non-agricultural activities rose from 18% to 32 % with corresponding drops in both agriculture and non-farm activities. In contrast, Appleton *et al.* (in Smith *et al.* 2001) found no evidence of a move out of agriculture during the same period, "indeed, the [agricultural] sector grew slightly in terms of population share during the surveys" ( ibid ). Deininger and Okidi (in Smith *et al.* 2001), using data for the period 1988-92, found almost 50% of households and one third of rural households starting a non-agricultural enterprise. However, MFPED/UNDP's (in Smith *et al*. 2001) contemporary study found that 78% of rural dweller's primary occupation was agriculture, and only 27% had a secondary occupation.

A livelihood is made up of the capabilities, assets (stores, resources, claims, and access) and activities necessary for a means of living (Ellis, 2000). Livelihood is, therefore, broader than income; it includes everything done to obtain a living. Rural dwellers of developing countries have hitherto been thought to engage only in small-scale agriculture, but this is a misnomer that is continually being disproved with emerging studies of peasant livelihoods showing highly diversified livelihoods. Ellis has defined rural livelihood diversification as 'the process by which rural households construct an increasingly diverse portfolio of activities and assets in order to survive and to improve their standards of living' (Ellis, 2000:15).

Numerous factors determine the abilities of rural households to diversify their livelihood strategies away from both crop and livestock production into off- and non-farm economic activities. These determinants are identifiable both as pre-conditions, namely history, social context and agro-ecology; and the ongoing social change linked with extreme interventions, such as infrastructural and service provision (Smith *et al.* 2001).
According to Ellis (2000), reasons for income diversification are seasonality, risk strategy, response to labour and credit markets failure, accumulation strategy and coping behaviour, and adaptation. (Tefera *et al.* 2004) agree with Ellis, and go to say that there is usually a negative correlation between income and the extent of

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household's reliance on natural resources for livelihood. Households who depend heavily on natural resources and have little in the way of alternative sources of livelihoods have comparatively lower incomes. According to Bryceson and Jamal (in Tefera *et al.* 2004), 40- 45% of an average African household-income is from non-farm employment and has increasing importance overtime.

Ellis contends that livelihood diversification is more than income diversification and includes property rights, social and kinship networks, and access to institutional support (Tefera *et al.* 2004). Empirical evidence shows that activity and income diversification in rural livelihoods in sub-Saharan Africa has become an increased importance (Barret *et al.* in Tefera *et al.* 2004).

Africare is the oldest and largest African American charitable organisation assisting Africa. Founded by African Americans, it receives its financial support from diverse donor bases in the charitable world. One could say that Africa is Africare's speciality. Since its establishment in 1970, Africare has delivered more than $540 million assistance (over 2000 projects) to 36 countries Africa- wide. Africare is presently helping families and communities in more than 26 countries in every major region of sub-Saharan Africa; from Mali to South Africa and from Senegal to Mozambique.

The ultimate mission of Africare is to improve the quality of life in Africa. It, therefore, envisions working in partnership with African communities in order to build healthy and productive societies. Africare's approach places communities at the centre of development activities. Africare believes that only through strong communities can Africa feed itself, exploit and sustain its natural resources and promote the economic well-being of its people.

Africare's worldwide programme addresses needs in principal areas of food security and agriculture, as well as health and HIV/AIDS. Africare also supports water resource development, environmental management, basic education, micro-enterprise development governance initiatives and emergency humanitarian aid.

In Uganda, one of Africare's primary goals is to enhance sustainable household food security in south-western Uganda. This part of Uganda was targeted due to the following reasons: massive soil erosion, high incidence of poverty and HIV/AIDS, the deteriorating nature and poor roads infrastructure, malnutrition, and very low agriculture production and productivity levels.

In order to find a remedy to these problems, Africare's current programmes in Uganda consist of farmers training and improved potatoes production, food security, natural resource management, road rehabilitation, rural community development, water supply sanitation and agricultural production, among others.

The study was carried out in Kabale district which harbours the Nyabyumba community. The district is located in the south-western region of Uganda and is characterised by great diversity of topography and vegetation. Kabale has an area of about 1,729.6 $Km^2$ and lies at an approximate altitude of between 1,219m-2,347m above sea level. It has an average temperature of 17.5 ºC, which often drops to 10º C at night. Rainfall averages 1,000mm- 1,480 mm per annum and the vegetation includes bamboo forests and afro-alpine shrubs.

**Objectives**

1. To determine the livelihood strategies in Nyabyumba community
2. To investigate the impact of Africare development activities on the livelihoods of Nyabyumba community

**METHODOLOGY**

Primary data were collected using household administered questionnaires, key informant interviews and field observations. Secondary data was obtained from literatures on the study area, rural development, livelihood diversification, project management etc from the internet and Makerere library.

Household survey questionnaires were administered to 15 purposefully selected households. The chairperson of one of Nyabyumba's Farmer Field Schools did the selection. This was done because the study was to investigate the impact of Africare's activities in the area and therefore needed to interview residents who had been or were taking part in Africare's activities. Another reason was to select households that were not too far apart from each other to minimise on time spent travelling between respondent households. Only 15 households were sampled due to serious time constraints, hilly areas and household to household distance was very high (about one kilometre). A household survey questionnaire was used as it was felt to be the best way of obtaining detailed information about the activities of individual households. A key informant interview was conducted with the chairman referred to above.

A lot of graphical methods and descriptive statistics have been used to aid in results presentation and quick reference. The data analysis was done using a Livelihood Framework (After Ellis, 2000) and Minitab 14.

## RESULTS AND DISCUSSIONS

### *Framework for Livelihood Analysis of Nyabyumba Community*

In Nyabyumba Community, the assets owned invariably included plots of land, few livestock, and a household's own labour. The average household size was 6.6. This human capital however, tended to mostly include households' heads with only primary level education (Table 1). Health facilities are also scarce in the area; the few that are there only deal with minor cases while the major cases are referred to Kabale Hospital. This is in an area where transport is a problem.

Table 1. Demographic information of households and household heads

| Variables | Mean | Standard Deviation | Coefficient of Variation | Minimum value | Median | Maximum value |
|---|---|---|---|---|---|---|
| Size of households | 6.600 | 1.920 | 29.09 | 3.000 | 7.000 | 10.000 |
| Age (years) of household heads | 46.60 | 15.15 | 32.51 | 27.00 | 42.00 | 80.00 |
| Education level of household heads* | 1.14 | 0.86 | 75.64 | 0.00 | 1.00 | 2.00 |

* indicates: 0. No formal education 1. Junior primary, 2. Senior primary, 3. Junior secondary, 4. Senior secondary, 5. College/ university.

Almost all the households sampled had livestock though the numbers of livestock were not large. All the sampled households owned land (mean size was 5.88, *std* =4.52). The household owning the smallest piece of land had 1.3 acres contrasted with 15 acres for the most landed household (Table 2). This difference in land ownership was assumed to have direct implications for household income. However, statistical analysis showed no significant relationship between income from crop production and size of owned land at 5% level of significance.

Table 2.Average land size of households

| Land size (acre) | Mean | Standard Deviation | Minimum | Median | Maximum |
|---|---|---|---|---|---|
| Owned | 5.88 | 4.52 | 1.30 | 4.00 | 15.00 |
| Rented | 0.995 | 1.051 | 0.000 | 0.875 | 3.000 |

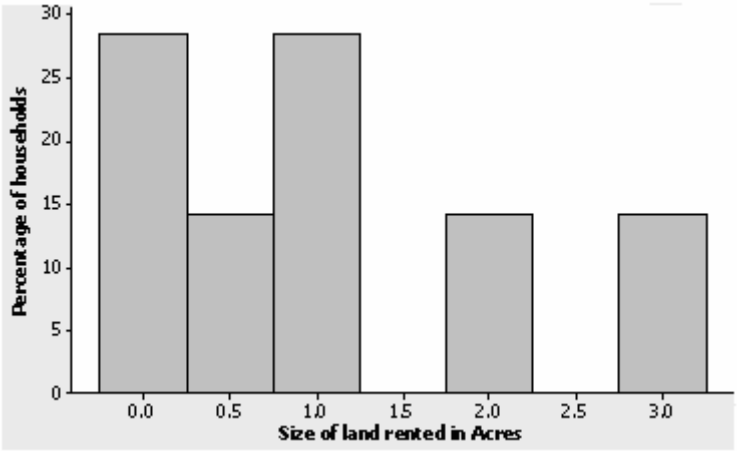


Figure 1. Distribution of rented land

Despite all the households in the study, owning and hiring of land were very common (though two of the most landed households reported renting out land). However, the sizes of the hired land did not exceed three acres (Figure.1). The quality of both owned and rented land was either poor or medium, and the use of fertilizers was widely reported (Table 3).

Table 3: Land characteristics of the community

| Sources of land | Household (%) |
|---|---|
| Inherited from Parents | 78.6 |
| Spouse | 21.4 |
| Bought | 50.0 |
| Land quality | |
| Poor | 13.3 |
| Medium | 86.7 |
| Fertile | 0.00 |
| Land Size | |
| Owned | 100 |
| Rented | 73.3 |

In terms of crop diversity, quite a number of crops were grown (Table 4) for three different uses reported. All the households reported a higher or same percentage of a crop consumed than sold, except for yams. Lower percentages of giving out crops as gifts or in reciprocal exchanges were reported.

Table 4. Crop production of households

| List of crops | Households (%) Growing crops | Consumption (%) | For sale (%) | Gift and reciprocity (%) |
|---|---|---|---|---|
| Irish potato | 93.3 | 93.3 | 93.3 | 6.7 |
| Beans | 100.0 | 100.0 | 86.7 | 6.7 |
| Maize | 73.3 | 60.0 | 53.3 | 0 |
| Sorghum | 100.0 | 100.0 | 93.3 | 0 |
| Millet | 66.7 | 73.3 | 40.0 | 6.7 |
| Wheat | 33.3 | 46.7 | 26.7 | 0 |
| Peas | 86.7 | 73.3 | 46.7 | 6.7 |
| Yam | 20.0 | 6.7 | 100.0 | 0 |
| Sweat potato | 100.0 | 86.7 | 73.3 | 6.7 |
| Banana | 46.7 | 30.0 | 20.0 | 0 |
| Pumpkin | 60.0 | 33.3 | 20.0 | 0 |
| Apple | 6.7 | 0 | 0 | 0 |

Varying amounts of income were derived from the sale of different crops (Table 4). Irish potatoes, despite being a staple crop of the area, were also the highest crop income earner. Apple did not earn any income as it was a recently introduced crop and had not matured yet. The average total income from crop sales per household was calculated to be 679 000UGX (with std of 699 000 UGX). The least total income reported from crop sales was 20 000UGX while the top was 2 580 000UGX (Figure 2). A linear regression between total income and age of household was not significant at 95% confidence level.

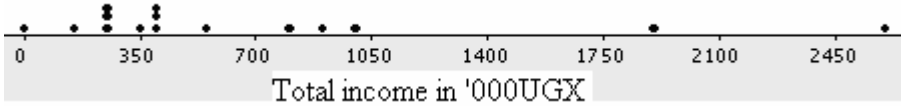


Figure 2. Total income in crop production in ‘000UGX (1US dollar was 1800UGX at the time of data collection)

***Africare in Nyabyumba Community***

Africare started working with Nyabyumba community members in 1998. The aim was to jointly fight poverty, famine and ignorance among community members. Forty locals signed up and got training in Irish potato production and management. Five bags of potato seed were obtained for the members by Africare that resulted in a harvest of 62 bags of potatoes. In 1999, a Farmer Fields School (FFS) was started. Today, the number of FFS has increased to six. Results from the study showed that Africare had undertaken a number of activities in Nyabyumba. Figure 3 shows which activities respondents took part in, and the proportions of respondents that reported taking part in each activity.

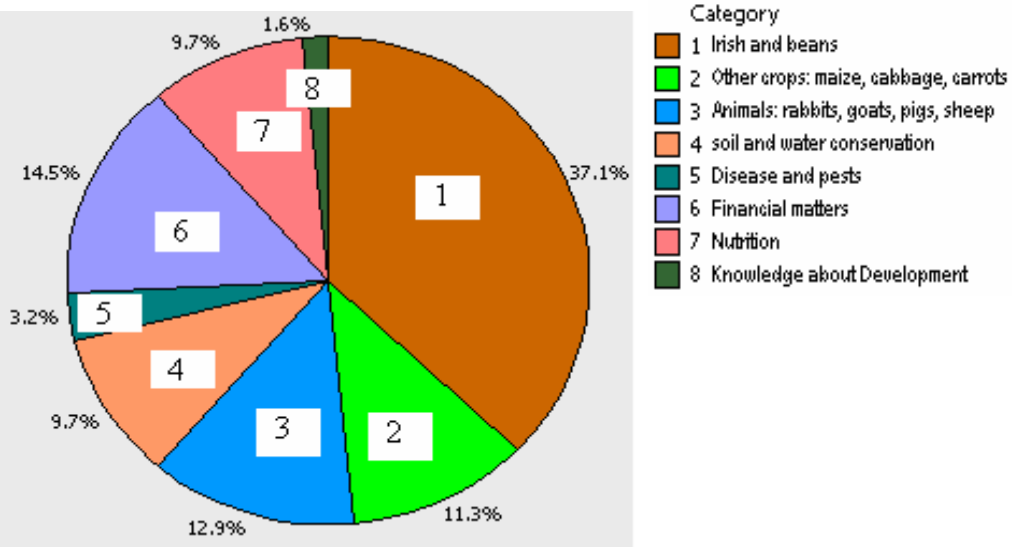


Figure 3. Community participation in Africare activities

Below (Figure 4) is a pie chart showing the different means Africare used to mobilise Nyabyumba Community to take part in its planned activities. It shows that announcements made in churches and by word of mouth through friends together resulted in 63% of the sample learning about Africare's activities in Nyabyumba.

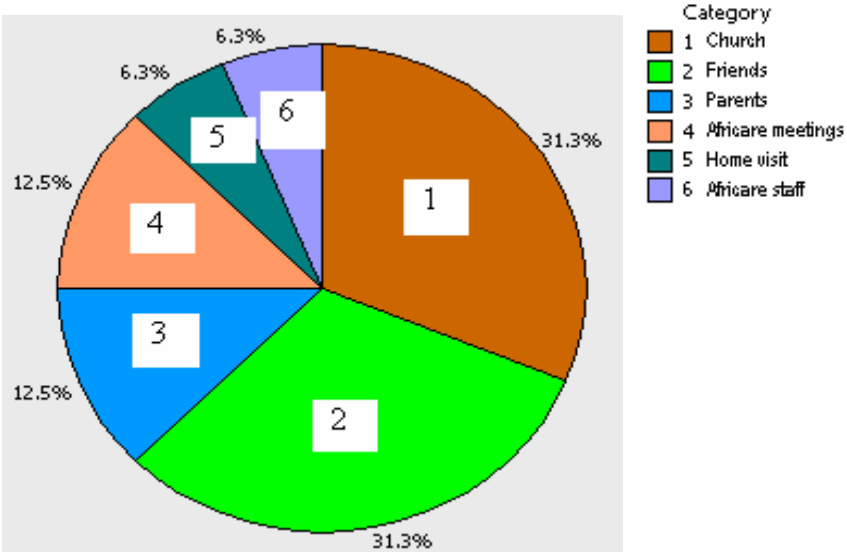


Figure 4. Mobilization of Africare

The study also investigated the impacts of Africare's activities in Nyabyumba by asking the respondents how Africare has impacted their lives. The responses were ranked into five levels as follows:
Impact levels:

1. No impact: New membership
2. Acquired knowledge through trainings: Irish potato varieties, seed multiplication, exchange of knowledge, chemical application, improved farming activities, nutrition, savings, health
3. Increased Irish potato productivity and household food security
4. Increased income: purchasing of animals, home furniture, clothes, school fees, tree planting
5. Increased income: Building a house, purchasing of land, bride-price

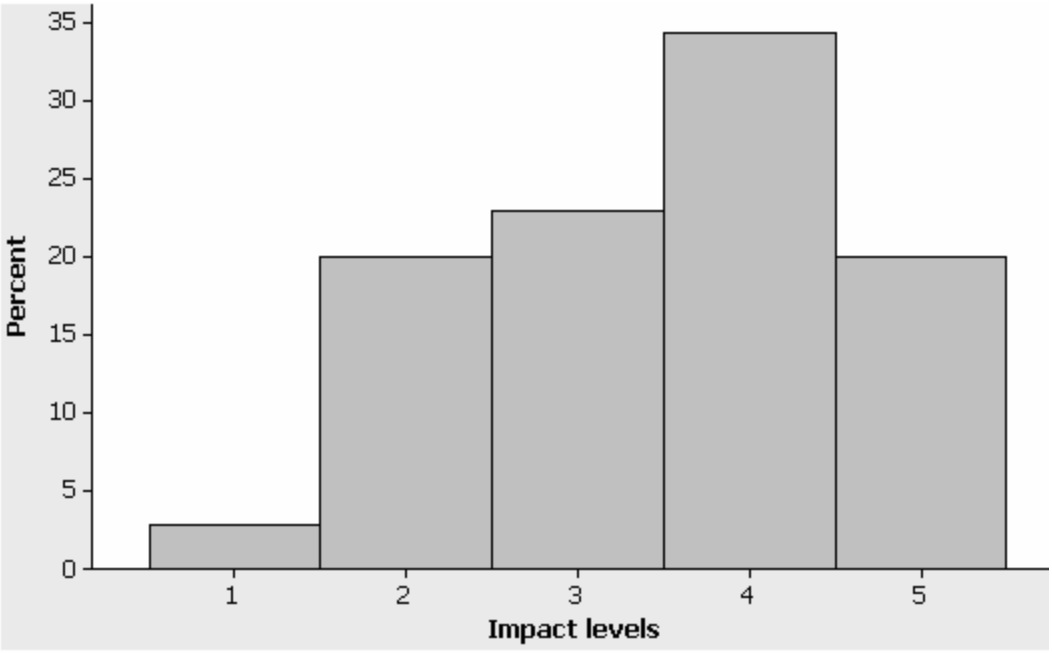


Figure 5. Impact of Africare activities in livelihoods of Nyabyumba community

Over 30% of the respondents reported that they purchased animals, household furniture and cloths, and paid school fees for their children when their incomes have improved (Figure 5). On the other hand, few respondents (below 5%) did not see any change in their income levels as a result of Africare activities, and they were found to be new to the organization's activities.

***Key Informant Interview***

The key informant was Mr. Fred Rukanshingira, a local leader and chairperson of Nyabyumba Community. The interview was conducted on 25$^{th}$ August 2006 through an interpreter.

On being asked to list the major crops grown in Nyabyumba in order of importance, he came up with the following list: Irish potatoes, Beans, Sorghum, Sweet potatoes, Maize, Wheat, Peas, Millet, Banana, and Cabbage. The chairperson informed us that apple was introduced to the area recently, and he hoped that the apple project will be successful and is very optimistic about it. He added that elephant grass is also grown for fodder on a limited scale. Sorghum residues are used for thatching houses and making animal feed, while maize residues are sometimes used as mulch. On the major uses of the crops grown he came up with; for sale; making porridge from wheat, maize and sorghum; and giving to relatives. The crop production related problems faced by farmers in the area, in order of importance, were listed as: (i) dependence on rain fed agriculture; (ii) heavy rainfall, which negatively affects Irish potatoes; (iii) cold spells, also bad for Irish potatoes and beans; (iv) erratic start of rain season makes it difficult for farmers to synchronise their planting; (v) land fragmentation (vi) exhausted soils; (vii) pests; and (viii) wilting in Irish potatoes.

The livestock that is common in Nyabyumba according to the key informant are cattle, goats, sheep, pigs, chicken and rabbits, in that order of importance. These livestock, he said, are commonly used as sources of

income, meat, manure, and as live banks though their most important use is as payment for dowry. These animals are commonly affected by diseases like foot and mouth (cattle). Farmers also face constraints of a lack of feeds, insufficient land, and lack of veterinary services.

For someone to be considered rich by the locals, the person should have cattle (at least 20) and land ( more than three acres in size), he should use hired labour in his farming activities, he should have a house with cemented floors and iron roofing sheets, and he should have an account with a commercial bank and educated children. Based on these criteria, about 10% of the residents of Nyabyumba are considered to be rich. The rich people also commonly engage in activities like business, growing of cash crops, have combined livestock and crop production, and are leaders of local political parties, farmers groups and church committees. Poor people, on the other hand, are those living in thatched houses, own only 0-2 plots of land, have no livestock, provide off farm labour and have little to eat. The chairman argued that the poor do not even join groups or participate in community activities as they find it uncomfortable to mix with the well to do of the community.

On being asked what other activities he would like Africare or other developmental organisations to start in his community, he mentioned the following: Introduction of irrigation systems for upland fields, promotion of draft animals, Africare should link the farmers to organisations dealing in input supply, and implored Africare to talk about general development issues e.g. crop production.

***Discussions***

This study of the livelihoods of Nyabyumba Community has revealed some interesting insights. Crop production turned out to be the major income earner for all the sampled households, though there were large differences among the households in the types and quantities grown. Surprisingly few livestock owned was reported though the reasons for this were not been established. No use of livestock e.g. cattle for draft power was found. Dairying was also uncommon.

All the respondents reported that they felt secure with their land ownership despite not having title to their lands (because there are no titles to customary). Land acquisition was mostly through sales or inheritance from parents. In cases where land was acquired from parents, it was invariably the male spouse's parents. No woman reported having obtained land in her own right, but through males. This is a reflection of the local customs that prevent transfer of land to women. Interestingly, even the widowed women felt secure about their ownership of land, which had initially been availed to them through their deceased husbands.

According to the key informant, poor people do not take part in community activities. This has attributed to the pervasive presence of the local rich as leaders of community initiatives. He also contended that there is no livestock ownership among the locals considered as poor. Going by his assertions, this means that the 'real' poor of Nyabyumba are not taking part in Africare's activities! Informal discussions with some Nyabyumba residents also revealed that some locals are reluctant to join in Africare's activities because one of the pre-conditions is to own land. This could not be proved whether it was just hearsay or fact, as it had not come up during earlier village meetings at which the researchers had been present.

Sustainability in development projects or programmes is usually thought of as the continued positive impacts of a project/programme once it has finished. Are Africare's projects in Nyabyumba sustainable? This is difficult to tell at the moment because Africare is still very active in the area. However, all the respondents were very enthusiastic about their continued participation in all the activities they are currently participating even after the pull out of the organisation. Most of them alluded this to the fact that most of what they have benefited from Africare involved the acquisition of knowledge and skills, which they will always have, with or without Africare. Africare received nothing but praises from its nyabyumba partners. However, it was difficult for the study to establish whether this was a genuine reflection of sentiments on the ground or it had a lot to do with the researchers having been introduced to the community by Africare staff and the community were just careful not to say anything negative about their benefactor to its 'friends'.

## CONCLUSION

It is evident from this study that AFRICARE interventions have greatly enhanced the livelihood of the residents of Nyabyumba, especially those farmers that have embraced the innovations initiated by AFRICARE.

AFRICARE interventions included the introduction of improved crop varieties, education on proper agronomic practices and on livestock management. Other innovations included the introduction of many tree species, the linking of the farmers to markets, the education of the farmers on food and nutrition, cost benefit analysis as well as assisting the farmers in creating a savings and credit scheme.

The intervention has lead to improved crop production (yields from potato has increased more than five folds), increased household incomes leading to the acquisition of more assets like land, building of houses, cattle, and financing education of kids as well as improved food usage. The farmers are also enabled to make decisions concerning the most beneficial crops to grow while the savings and credit scheme provide members credit for the purchase of inputs.

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