

IMPACT OF AFRICARE'S¹ ACTIVITIES IN NYAKYIBANDE VILLAGE, UGANDA

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ABSTRACT

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AFRICARE is an NGO that has been working in Nyakibande village since the year 2000. In the Nyakibande area, AFRICARE works with existing community groups to improve peoples' livelihood through agriculture and livestock production. AFRICARE also helped to formalize a credit scheme through a local bank that allows participants to save up and take out loans to support their activities. The purpose of this report is to study the sustainability of AFRICARE's project on the livelihoods and resources management in Nyakibande village. To gather primary information livelihood analysis and seasonal calendar were carried out with the community. Besides, semi-structured interviews were done; in this case all respondents were selected randomly. All data was qualitative which was analyzed using inductive approach. AFRICARE provided training and materials that led to diversification in the households. Furthermore it contributes to improve agriculture and livestock production in the village, and to face with some environmental problems in the area. A challenge that was noted with the AFRICARE programs was that, due to different reasons, the poorest farmers did not attend the work groups. Groups' members and non-members said that they were happy about what AFRICARE had given to them and their community, even though they still had some challenges to face. Also, a majority of respondents said that the training and knowledge was the most important thing that they had gained from AFRICARE and that they would continue to use this knowledge whether the organization was still there or not.

Key words: Poor farmers, agriculture, sustainability

INTRODUCTION

Nyakibande is a village located in the Kabale district of southwest Uganda. The village consists almost completely of farmland owned by small farmers.

AFRICARE is an NGO funded through the United States whose purpose is to help communities with agricultural, environmental, health, water and emergency humanitarian problems. In the Nyakibande area, AFRICARE works with existing community groups to improve crop-planting techniques, reduce erosion with trenches, improve Irish potato production and goat rearing, and to train farmers in farming techniques specifically to increase yields. They also have formalized a credit scheme through a local bank that allows participants to save up and take out loans to help them to buy needed farm materials.

Many other outside organizations also support Nyakibande area, including National Agricultural Advisory Service (NAADS), National Agriculture Research Organization (NARO), International Center for Tropical Agriculture (CIAT) and International Potato Center (CIP). These organizations all have mission statements that in one way or another aim towards enabling and empowering rural farmers in the context of agricultural development and ending rural poverty. They follow these mission statements by providing agriculture extension services, improved seed varieties, consultancies and many more that will be discussed later in this report. One of the most important things, though, is that many of these organizations work together and cooperate with AFRICARE.

AFRICARE is leaving the area in a short time, and has already left some of the surrounding villages. The purpose of writing our report is to study the sustainability of AFRICARE's project on the livelihoods and resource management in Nyakibande village. AFRICARE has provided many opportunities for this village, but it is important to find out whether or not AFRICARE has made a lasting difference on the community.

METHODOLOGY

Data collection

Livelihood Analysis

The entire Nyakibande community was invited to participate in a meeting on August, 2006. The first exercise completed by the facilitators and the people was the livelihood analysis. Members and non-members of AFRICARE's programmes, all ages, genders, and occupations, were encouraged to participate for a well-rounded result. The community was prompted with questions as a whole to create a list of the sources of income and

¹Africare is a non-profit, private charitable organization based in the United States. It is established with the mission of improving the living conditions for Africans.

expenditures. All responses were recorded in front of the community on manila posters, with titles in the local language; a translator was utilized for those who did not understand English.

Following the completion of the income and expenditure list, an informal vote took place to identify the community's top items for each category. The major sources of income were requested as well as the major (most important) expenditures on a daily and general level.

Seasonal Calendar

Similar to the previous exercise, the seasonal calendar was formulated on manila posters with participation of the entire community meeting attendance. A table was drawn in advance with headings in the local language; such headings included month of year, rainfall, activities, problems, and special events, to be evaluated on a month-by-month basis. Rainfall amounts were recorded in an illustrative manner to assess a scale, or rating system, for further analysis and ease of communication through interpretation. For the particular project, we emphasized roles and timing of support (from AFRICARE or other organizations) and market opportunities within the discussion of seasonal activities and problems.

Semi Structured Interviews

By carrying out semi-structured interview, we can not only get answers we are searching for, but also learn about individual and collective behaviour, needs, level of information spread and background data. All of this is important to see what impact AFRICARE and other organisations have had/ still have and to be able to come up with future recommendations for the village and for organisations that are planning an approach.

We did not aim at getting a representative sample in a statistically sense but deliberately choose to include both men and women, as well as both members and non-members in our sample in order to assess the project as a variety of individuals in the village saw it. It turned out that the respondents also differ to certain extent when it comes to accessibility of 'capital' (social human, physical, and financial capital). Eighteen households were selected randomly because of hilly areas and one household to another was about one kilometre and one household is bottom of the hill another was top of another hill. So communication was very hard. There was also lack of translator.

We elaborate a checklist which began with basic information of the person interviewed to be able to 'allocate' his or her position. Then we moved towards the household in general to be able to make some comparison to the other interview objects in the same area. We also found it interesting to see what they cultivated, their livestock and how their resources were placed to be able to lead the conversation towards main income and expenditure areas as well as to repeating and/ or consisting problems and benefits of their situation. By gaining such information it could tell us something on how roles within the community are distributed as well as if relationships make strong differences.

After collecting the personal information of the respondent, we moved towards community behaviour and roles. Here we were searching for changes that might have occurred at different levels and which also could affect the households differently. We also wanted to know the relations within the village.

Towards the end of the checklist we entered the area of AFRICARE and/ or other visible organisations. This section was deliberately brought up at the end, to avoid explanations on their situation only in connection to external support or exclusion.

Analytical procedures

Our preliminary knowledge about the AFRICARE project in Nyakibande was very limited. By applying qualitative data it was easier both to gain knowledge about the project, the villagers' livelihood, and how the project is perceived by the villagers themselves; all important aspects of what impacts can be identified as a result of AFRICARE's development initiative. Since the data we collected was mainly qualitative, we chose not to use any software package.

We gained more knowledge about the various organizations that were operating in Nyakibande through written sources on the internet and more knowledge about the community we conducted our research in by direct observations.

Our approach has been inductive, in the sense that as the data we collected gave us information that we built further on. Mikkelsen (2005) describe the inductive approach as one where "one begins with concrete *empirical* details and then works towards abstract ideas or general principles. There is often a 'bottom-up' perspective – seen from the point of view of the subjects – in the empirical analysis" (Mikkelsen 2005).

RESULTS AND DISCUSSION

Rural Livelihood and Security

The village of Nyakibande is a farming community. Subsistence agriculture is the main livelihood strategy. A diverse range of crop growing and livestock rearing are practiced in this small area. Though much of the community's income is in the form of subsistence food production, supplementary food costs are amongst the top sources of expenditure. Major costs in Nyakibande also include household items, education and fuel. In recent years, with the acceptance of outside help, Nyakibande has further diversified its livelihood strategies to include marketing of excess agricultural products and formal savings and credit schemes to supplement traditional ones. Nyakibande is mainly a subsistence agriculture community that faces challenges from the environment and other factors that affect its livelihood security.

The main income generating activities in Nyakibande are Irish potato production, goat-rearing, chicken-rearing and bean production. Other major crops include tomato, apple, avocado, sorghum, sweet potato, peas, and other vegetables. Bee-keeping and cattle-rearing are also practiced. In addition to farming livelihoods, some community members are builders or construction workers, porters, community-based facilitators, and self-employed. Many youth are students of agriculture, economics, planning or geography; contributing to the community's livelihoods as future community leaders and via small employment opportunities during the school year. Adding to the diversity of income sources are music teachers, brick-makers, charcoal producers, and business people such as the re-selling of second hand clothes.

Most of Nyakibande's food supply is produced within the village, however some staples must be purchased from outside such as sugar, salt, milk and bread. Thus the diversity of income sources is necessary. In general, the most pressing costs are those of building, school fees, hiring of additional labor, food, and health services; according to members as discussed during the livelihood analysis. On a daily scale, fuel (paraffin and firewood,) food, soap, and water are the top expenditures of Nyakibande inhabitants.

Basic costs of living include household items such as mattresses, matchbooks, and cooking oil in addition to those mentioned previously. Transport and dowry are additional expenditures mentioned during the community meeting. Some community members purchase medical care when faced diseases like malaria or cough. A free local clinic is available in the village but most of the time villagers are transported to Kabale (bigger village) for enhanced treatments. Many residents do not visit the doctor at all and usually they employ traditional medicine.

Practicing agriculture has its associated costs. Hiring of land and purchasing tools are overhead costs. Inputs of seed, chemicals, and animals are required seasonally. With additionally production, employing laborers has been an incurred cost for Nyakibande residents.

Traditional funding schemes have and continue to function in Nyakibande. Credit programs such as those of mattresses, tupperware, rice, beef, and beans have helped community members to obtain materials for a higher living standard. These programs involve members coming together, pooling resources, and having a greater purchasing power. For instance, a group of individuals joined forces to purchase pots for households. Outside organizations have contributed to such schemes, as well as formalizing other credit and savings schemes (see below). Insurance schemes are also present- if one member gets sick, pooled money may be available to borrow. These informal savings schemes acted as a precursor to formalized savings and credit schemes.

Environmental conditions provide threats to the farming community. Drought, heavy rain, wind, and hailstorms affect crop harvests and animal rearing. Pests and disease also threaten the agricultural livelihoods of Nyakibande. In particular, animal diseases like worms, foot and mouth disease, ticks, and *meningococcus*.

Other challenges to Nyakibande villagers are a lack of money to buy chemicals, and the associated risk of purchasing fake chemicals from district dealers. Farmers have banded together and utilized chemists to tackle this problem of chemical impurities. Land fragmentation is a huge challenge in terms of access, ownership, crop diversity and environmental issues.

Programs from AFRICARE and other organizations

AFRICARE has facilitated mainly three different agricultural programs in Nyakibande: the credit scheme, Irish potatoes and goat rearing. In addition to the AFRICARE programs, other organizations have been responsible for their own programs (often in collaboration with AFRICARE). AFRICARE also provided programs for raising rabbits, cultivating apple trees and NAADS has a bee-keeping program. They give out improved seeds including hybrid varieties that were stronger for potatoes and other crops. Access and testing were also provided through consulting agencies for the buying of pesticides.

The village bank – saving and credit scheme

One of the most recent programs is the formalized credit and saving scheme (from now on referred to as the village bank). One AFRICARE's group, that grew Irish potatoes, initiated the village bank by saving up 33 000 US\$, each

under facilitation from AFRICARE. After 22 individuals had saved up this amount, it was formalized as a saving and credit scheme where members can apply for credit to improve their agricultural production. Ownership in the village bank is organized through a system of shares, where each of the founders that had saved 33 000 US\$ purchased 3 shares each. After the village bank began operating new members wanted to join. Newcomers can become a member by paying an initial membership fee of 5 000 US\$, and then buy shares that cost 10 000 US\$ each. Presently 75 individuals have joined the village bank where approximately 60 per cent are women. Applications for credit must be approved by a committee. In order to avoid monopolization among the owners, there is a limit of 10 shares per person.

Even though the village bank is available for all individuals in the community, extreme poverty limits its accessibility for some of the villagers. Some people are simply too poor to pay the initial membership fee and the one share they need in order to have access to credit and loans. As they do not gain access to capital from the village bank, it remains difficult for them to increase their yields sufficiently to improve their livelihood. In other words, AFRICARE does not necessarily reach the community members that are most in need of their services through the village bank.

As mentioned previously, there are several traditional/informal saving and credit schemes existing in Nyakibande. Many members of the village bank still remain in these schemes, since they to a certain extent address other needs for the community than the village bank.

Goat rearing program

Nyakibande reared goats already before AFRICARE came into the village. The goat rearing program therefore mainly sought to improve goat production. Before AFRICARE started its development projects in Nyakibande, there were many challenges associated with goat rearing. One of the challenges was that the goats easily caught diseases such as the foot and mouth disease. Another was that conflicts arose over grazing since it was not common to keep goats in pens.

A goat rearing group was facilitated by AFRICARE and provided with a new breed. The new breed increased the market value of goats and was more disease resistant than the indigenous. An integrated part of the goat rearing training was to sensitize the group to keeping the goats in pens to avoid conflict between grazing and cultivation interests, and it is now seen as a violation to let the goats out to graze freely. The group initially reared goats collectively but later divided the goats among members. The goats have improved local livelihoods, since they can sell the new goats for 100 000 US\$ to AFRICARE, and 50 000 on the open market, while the indigenous breed is only sold for 30 000 US\$.

Irish potato program

Irish potato production was well established in Nyakibande. AFRICARE has been able to significantly increase farmers yields in this crop, by planting potato seeds in rows and teaching ways of ensuring proper seed procurement. AFRICARE, in cooperation with CIP, also provides initial seed potatoes to the community. This also provides business opportunities for people who can act as distributors.

AFRICARE'S training programs

AFRICARE facilitates various training activities in the communities they target. Existing farms in the area are chosen for this venue. AFRICARE offers training in soil conservation, goat rearing, pest and disease identification, as well as other new farm technologies. As stated earlier, Nyakibande is a highly fragmented farming community where preventing erosion, both due to harvesting and heavy rain is crucial. Most of our interviewees had adopted trench digging and planting of *Calliandra* and grasses to prevent soil erosion. Through observation one can clearly see the extensive use of these techniques as well as hedges between plots.

Pest, insect and disease identification is an integral part of AFRICARE's trainings. Now farmers can do preventative measures when pests and insects are identified as well as distinguishing harmful and beneficial insects. Some of the most frequent crop diseases mentioned in our interviews are bacterial wilts and late blight of potatoes.

Policy Implications

When interviewing the village members we asked about existing regulations and changes within policies and reforms.

When interviewing the village members, their knowledge showed that there had mainly been changes at the district level. None recognized any at a higher level. Their perception on this was that AFRICARE and others have had an indirect intervention on regulations and policy changes. AFRICARE's approach strategy has been to contact village leaders and existing groups with the idea of recognizing the most pressing need so that inputs would trickle down. After elaborating their answers it came out that the elders and local leaders were used as decision makers.

Grazing regulations and sustainable management of the land and wetlands were the policy implications more mentioned. Suggestions AFRICARE has come up with as a resolution for problems on grazing have been to keep livestock in pens. Many farmers have fragmented land and it is therefore difficult to have control at all times on what is happening on the plots that are further away. In addition to keeping the animals in pens, there can be a fine of 25 000 Ush if people are caught encroaching.

For sustainable management, the main areas of policy implications have been about stopping bush fires, conservation of forest, planting trees and management of the wetland. AFRICARE has come up with the suggestion of not burning the soil and bushes, they should use organic fertilizer, made of manure and compost. The importance of rotation has been emphasized to maintain the soil fertility. They have given training in the importance of trees to minimize erosion as well as introduced the *Calliandra*. The wetlands have more restricted regulations now, where previously there was free access in the area.

At the AFRICARE information meeting we were told that they had reached agreement with the government to build roads to have better access to the villages. The roads have increased access and capability of reaching external markets and also improved the access to chemicals like pesticides. In the original agreement with the government, the maintenance was the government's responsibility. This promise has not been kept, so the plans for this area of the project have not been as successful as were hoped.

Traditionally, problems are dealt with within the village. The solutions are first tried out with the participants. If there is no resolution, the plaintiff can carry the complaint further to the elders group and the local chief, since there are no national regulations. Recently, bylaws have been agreed upon that are decided by the elders groups and local chief.

Sustainability

Sustainability defines how the community will continue to live and work based on their own livelihoods and the interventions that AFRICARE and other organizations have enacted. This section will discuss personal and environmental aspects, as well as whether or not AFRICARE's project will continue to sustain Nyakibande village after AFRICARE has left the area.

Household Sustainability

By asking how the household maintained their income over the entire year, and also what plans the household had for saving in times of need, we got a clearer idea of what options Nyakibande village has for sustainability.

The most important thing that we saw from interviews was that AFRICARE and other organizations provided training and materials that led to diversification in the households. People are growing a larger variety of crops, including livestock and trees. The livestock and trees can be sold at different times of the year for more than one purpose. So, if no one wants to buy trees for timber, they still may want to buy them for charcoal-making instead. Also, crops are harvested at different times of the year, so income is supplemented throughout the year instead of just at one harvest time. Included is the security that if one crop dies, or needs to be replanted, the family knows that they have other opportunities for making money or supporting themselves.

Another option that was discussed was that when one household finished their harvest, they either helped for free or sold their labor to others who needed help to bring in their harvests. A challenge that was noted with the AFRICARE programs was that the agricultural improvements gave higher yields, and that there is a labor shortage to take care of the increased production. By sharing the labor throughout the community, it means that individual crops will not go to waste and this cooperation adds to the sustainability of the community as a whole. The lack of labor due to higher production will always be a problem, however, especially if organizations continue to provide assistance that will continue to increase crop yields.

One last major method of ensuring household sustainability was saving money, but not necessarily in the credit schemes. We asked farmers if they saved any money to help out during months that they knew were going to be difficult, and most responded by saying that they used one credit scheme or another. The ones that did not belong to the credit schemes, however, said that they just saved their cash themselves to help during the months of drought or sickness.

Environmental Sustainability

Environmental sustainability is imperative in a community like Nyakibande. When almost the entire village relies on agriculture for their livelihood, the land and natural resources need to be managed in a way that will allow the environment to continue to be productive.

When AFRICARE came to the area, they implemented training and consulting programs that helped to increase the environmental sustainability. These programs have already been discussed, but the environmental impact of the

programs that respondents were aware of should be mentioned here as well. Farmers mentioned that they have started rotating their crops, spreading manure from their livestock, and adding inorganic fertilizers to their land for increased soil fertility and nutrient levels.

There are some challenges associated with these practices though. Spreading manure might not add enough nutrients back into the soil, and so inorganic fertilizers are necessary to maintain a higher crop yield. The difficulty arises because commercial fertilizers cost money, which not everyone has, and there might not be easy access to a supply source. It is also important not to overuse commercial fertilizers because it may lead to the community relying on them to produce what they need. If there is a time when they cannot purchase these fertilizers, they will suffer more losses than they may be able to cope with.

Farmers also began using preventative measures to avoid pests by applying pesticides. This program has been viewed as very helpful by the majority of respondents, but there are also challenges with this practice. Once again, it may be difficult to find pesticides, and once found, one must make sure that the chemicals are actually pesticides, as some people sell fake chemicals.

Maintaining higher yields is a large part of the sustainability of the area. However, the land itself, including the topography, is not necessarily conducive to the continually increasing production. While farmers now are experiencing corresponding increases in their income, at some point, the soil will not be able to support any more increases, and there will still be a labor shortage.

In the lower areas of the valley, there is runoff from the road and other farmers' land that ends up on valley crops after heavy rains. AFRICARE has attempted to fix the problem by encouraging the planting of *Calliandra*, enacting some community by-laws to prevent the burning of land and digging trenches. Once again, most people have embraced these practices, and most respondents were happy with the results. But not everyone follows these guidelines, and farmers in the valley said that they still have trouble with runoff.

AFRICARE itself stated that some environmental challenges that they wished to alleviate were limited amounts of land, including land fragmentation, the ease with which the soil is depleted of nutrients, and a lack of inputs, such as fertilizers, into the soil.

Project Sustainability

AFRICARE is leaving the area and without their support, it is important to see whether or not the community can maintain a level of sustainability, or even add new ideas and techniques, for their future.

AFRICARE has an exit strategy that was outlined to us during our first information meeting with them. This exit strategy is generalized for the entire area of Kabale that they are working with, not just Nyakibande. The plans include a task force to deal with banana bacterial wilt, distribution of materials (inputs), and monitoring and outbreak control. They also plan to strengthen tree seed production, seed banks and nurseries. They would like to hold stakeholder workshops to share challenges, needs and results with other groups. This is similar to their plan for community-based growth promoters linked to various organizations. They also wanted the communities to continue working for themselves to maintain their sustainability.

While interviewing, we asked about respondents' plans for the future with and without AFRICARE, and several issues were brought up. It is important to note that people in general, both members and non-members said that they were happy about what AFRICARE had given to them and their community, even though they still had some challenges to face. Also, a majority of respondents said that the training and knowledge was the most important thing that they had gained from AFRICARE and that they would continue to use this knowledge whether the organization was still there or not. We thought that people showed a lot of enthusiasm, especially since after AFRICARE leaves, people still planned to use the credit scheme and their knowledge in order to buy pipes and set up an irrigation system, since water is such an important resource in the area.

Respondents gave us many specific examples of how AFRICARE has affected them. First, the organization has expanded their market opportunities by giving them a link to restaurants to buy their Irish potatoes, they are buyers for goats, have given them an access to improved seeds and breeds of livestock, and indirectly helped access to and from markets. A challenge that will be faced, however, is that once AFRICARE leaves, they will no longer be buying livestock at inflated prices. People who have been used to selling new breeds of goats at 100 000 US\$ will not have that option and may have to adjust their income accordingly.

Farmers also stated that if a new organization came to take over what AFRICARE has been working on, that they should work together for implementation, and not add to conflicts between both the village and other NGOs in the area.

Other practices that AFRICARE has started that were thought to be positive were better methods of food storage, saving seeds for planting, and replanting techniques during droughts. This also relates to the fact that people are now aware that they should use their crops for selling and saving to plant instead of just for consumption.

It was also noted by non-members that they still can see their neighbors and friends using their new techniques and that they also gained at least something from AFRICARE. However, it is a problem that some people are denied access to the various village groups because of a lack of money. It is difficult to come into the group after the original initiation, and the people that could not afford it at the beginning, can afford it even less now. These people are some of the poorest, and may be the ones that need provisions and knowledge the most in order to improve their livelihoods or sustainability.

Other challenges that we discovered included the fact that almost everyone wanted more seeds than were provided. They also questioned the priorities of AFRICARE, because access to water and irrigation are both problems that many respondents faced, especially during seasonal droughts. AFRICARE did not address this problem in the time that they were active in the area.

Conclusion

The people were content with AFRICARE's role in their community because their livelihood experienced changes. The community adopted new agriculture technologies and practices that helped them to improve their way of living. Although the poorest farmers had some disadvantage to attend meetings or join groups through time restraints and membership conditions it seemed that they also had access to the benefits given by AFRICARE through knowledge sharing with their neighbors and friends.

It seems that the activities supported by AFRICARE in Nyakibande village will continue being practicing because the farmers had already experienced its positive consequences. Furthermore, villagers expected to continue working together and with other organizations that would come to the community.

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