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FARMING AT THE EDGE

FARMING FOR SURVIVAL IN EASTERN AND SOUTHERN AFRICA

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Abstract

Farmers the world over face many common problems in the early part of the 21st century. However there are none so dependant on farming for their very survival than many smallholders in Africa, who often rely entirely on production from their limited land area to provide both staple foodstuffs and an income to purchase the bare necessities of life for themselves and their families.

Over the last fifteen years on the initiative of a group of farmers in South West England, an organization has developed from humble beginnings to a main stream body, providing much needed assistance to vulnerable farming families in Uganda, Kenya, Rwanda and Ethiopia. The original concept of providing one animal on loan to farmers has been transformed to the provision of a sustainable farming package enabling the recipients of stock to better realize the potential of their limited resources.

The history of this assistance and the manner in which it has evolved to enable small farmers "living on the edge" to transform their lives and become respected members of their communities is described and graphically illustrated in this presentation.

Introduction

"Send a Cow" (SAC) came into being in 1988 following the visit of a Ugandan bishop to the U.K.
He observed that there was a surplus of dairy production in the E.U. at the same time that many people in Uganda were suffering from malnutrition. Some British farmers came to hear about this and the result was that in June of that year an aircraft was loaded at Gatwick near London with 32 Friesian cows destined for Entebbe. This shipment was the first of many to take place over the next eight years. In fact the idea of providing small farmers with an animal and expecting them to pay back by passing on the off spring to a neighbour was not a new one. Heifer Project International had been established much earlier in Little Rock, Arkansas in the U.S.A. to do precisely the same.

SAC celebrates it's fifteenth anniversary this year having progressed from humble beginnings to a mainstream charity in it's field. In 2001 SAC carried out a survey of recipients who had received assistance since their inception. This enabled a database to be established for future monitoring activities.

Beneficiary Census 2001

During the last 5 years, two fund raising activities combined to more than quadruple the income of SAC. At the same time donor funds were obtained from various agencies. From being a small band of dedicated well doers plus their supporters the organization became a major player in the ngo field. With the stringent requirements of the major donors it became apparent that it was critical to have an efficient evaluation of project activities.

In 2001 with the aid of some local consultants a census was carried out in Uganda which at that time was the only Country in which SAC had worked directly. Almost every beneficiary that had received animals from 1988 onwards was visited by an enumerator who completed a questionnaire which covered the following broad sections:

- Household information
- Crop production and nutrition
- Financial situation
- Project participation and support
- Livestock data

The results are discussed in the following sections.

The Target Group

Typically priority was given to widows and single parents, households caring for orphans, households with disabled members, child headed-households and impoverished households with no sustainable source of income. During the Census, data were collected on 1,855 households with over 21,000 members, representing about 90% of known beneficiaries. Approximately half the children under six years of age were either adopted orphans or unrelated children being cared for by the household. 85% of the beneficiaries were women, with the highest proportion of men being found in households where disability was the

main criteria. Close to 30% of beneficiaries were single, widowed or separated. Unmarried beneficiaries cared, on average, for a higher number of widows than married couples. A relatively small proportion of beneficiaries were aged over 65 (8%). Projects in the north had the highest rates of illiteracy, with over 30% of the target group having no schooling. 90% of beneficiaries defined themselves, first and foremost, as farmers.

Training

In order to achieve the stated objectives of the various programmes (empowerment, building of confidence, capacity and cohesion) SAC has had to implement a holistic training programme that goes well beyond the technical issues of animal husbandry and organic farming. During the Census all farmers were asked to indicate what topics they had been trained in and how useful they found these to be. The results show that virtually all farmers had been trained, to some extent, in the key topics of animal husbandry (95%) and organic farming (81%). Significant numbers were trained in gender issues (62%), family planning (60%) and human rights (60%). Older project had the least rounded training and need to be brought 'up to speed' with some of the topics introduced more recently. Although the courses which were most practical scored highest in terms of perceived usefulness the others were scored as being either a little useful or very useful by at least 50% of those who attended.

A large proportion of beneficiaries (between 70% and 80%) had attended at least one follow-up workshop after training. These were highly appreciated with 91% of those who had been to workshops describing them as "very useful". Study tours were equally appreciated by 45% who have benefited from these. Regional differences emerge with the number of workshops attended by the StockAid North beneficiaries still being relatively low compared to the older projects. The number of follow-up visits was high, but showed strong regional differences. For example, in the StockAid South project groups 97% of farmers had been visited by project leaders, while in the Community Fund Project in the north, 71% had been visited. A similar pattern prevailed for visits by extension workers and staff.

Project Impact on Farming Practices and Food Security

To assess the extent to which the training, extension, workshops and livestock provided have had any impact on people's actual farming practices and their food security the Census looked at which key practices farmers had implemented. What emerged is that there is strong difference between the intensive cultivation that takes place in the southern banana and coffee zone and the cereal zone further to the north. In the southern projects farmers have rapidly adopted the organic farming practices promoted by SACU in collaboration with the St Jude Training Centre near Masaka. In the northern projects the adoption of these practices has been slower – even for projects of a similar age. This is partly because of differing interests and abilities of the Extension Workers, but more so because northern farmers are more concerned about how to grow cereal crops on relatively large areas of land as opposed to the intensive cultivation of matooke, sweet potatoes and vegetables on small areas of land.

There is evidence that the training has been very effective in terms of reaching beyond the immediate beneficiaries: 80% of the beneficiaries have been asked by neighbours about the activities they saw being implemented; 71% say they have been copied (this could not be verified) and 49% said they had been out to other farms to offer advice. The projects where new organic farming practices were given greatest emphasis have also attracted the greatest attention of neighbours.

The impact of the Programme on food security was measured using a wide variety of indicators. The first relates to the type of crops grown and how the yields compared before and after joining the project. The results show little variation in the type of crops grown, but very significant reported yield differences. A large proportion of farmers (57%) said they were now growing "a lot more" matooke, as was the case for those growing sweet potatoes (46%), cassava (45%), beans (43%) and maize (41%). The second was to look at what key foods were available in the home. For this it was found that 84% of the households had salt at the time of the visit, 55% had sugar and 53% had oil. A very small percentage (4.6) had only eaten one meal the day before the interview. Just over one third (37%) had eaten two meals, whilst just under half (46%) had enjoyed three meals. The mean number of animal proteins (excluding milk) eaten in the last week was 2.64. The Community Project group (where the use of beans is high) had the lowest score (1.69) while the New Other projects had the highest (3.33). 42% felt their food security situation was better since the project, while 25% said it was much better. The remainder, primarily those in the newer projects, felt that it had yet to improve (29%), while a small minority (3%) felt that it was worse than before.

Different measures were used to determine how food security fluctuates during the year. The results all show the same pattern: the vast majority of SAC farmers are self reliant in staple food and are able to get through most of the year using what they grow themselves. In fact 84% of SAC farmers are able to get through the most difficult times without having to buy food. There is, however, a significant difference between southern and northern projects, with 55% of those in the Community Fund projects having to buy some staple food during the worst months. Overall the SAC farmers come through as being remarkably food secure. Results from the older projects indicate that there is a very significant improvement in food security over a five to ten year period, suggesting that this can be attributed primarily to the project.

Participatory Project Management

Ensuring group functionality and cohesion beyond the period of initial funding is critical if the chain of passing on female offspring is to be maintained. This is done, in part, by encouraging all partners to take a participatory and democratic approach to the management of their projects. Overall 94% of the farmers interviewed said they had been to group meetings where they were able to discuss issues relating to the project. Most farmers (75%) felt they had been given ample opportunity to participate in decision making at a group level, while just over one third (38%) said they have been involved in some aspect of leadership.

Project Impact on Community Leadership and Advocacy

The results of the Census confirm early studies suggesting that SAC beneficiaries are very likely to be involved in other community initiatives or organisations. There appear to be two distinct reasons for this. Firstly, many members of groups that apply to SAC for support are people with more than average levels of initiative. Secondly, involvement in the project – particularly the training they receive - results in higher levels of confidence and respect, which in turn results in the beneficiaries being chosen by their communities to participate in other groups. Over one third of beneficiaries had been elected to positions of leadership outside the project since receiving SAC support. In Anasumagira Group, members have been elected to positions in local government, and some intend to go beyond. This clearly demonstrates that the socio-economic security brought by the project, the confidence generated by training as well as the experience of project management are a solid foundation that enables farmers to go on to become advocates for further change in their communities. It is naïve to imagine that a capacity for advocacy can be built at farmer level upwards without addressing their livelihood needs.

Project Impact on Gender and Family Life

During the Census an attempt was made to quantify beneficiary perceptions of project impact on their lives. Using indicators developed by farmers, interviewees were asked about issues such as the use of funds and other decision making at the home; sharing of work loads; family relations and marital harmony; feelings of isolation, self value and respect before and after the project. By and large the Census findings confirm the smaller, more in-depth studies carried out in the past: in time the project has a significant non-material impact on beneficiaries in ways that extend from the immediate home environment to the broader community. Over 90% control the funds generated; 45% have experienced better sharing of labour; 47% of married couples report greater harmony; and 90% of households reported improved family relations as they worked increasingly together to raise livestock and farm their land. There were equally significant improvements in the areas of increased self-value and respect. Interestingly, high scores on non-material impacts did not necessarily correlate with improved economic status; in other words farmers did not necessarily have to be materially better off to enjoy the non-material impacts described.

Material Benefits

A variety of measures were used to determine the extent to which the projects had improved the material well-being of the households. The first was based directly on beneficiary perceptions, where farmers were asked directly: "How much economically better-off do you feel since you started receiving SACU support?" Very few farmers (1.9%) reported feeling worse off (usually as a result of non-productive cows). In the new Community Fund projects where many of the local animals have yet to produce nearly one third (32%) reported no change; in the Old Projects this figure was much lower (13%), indicating that benefits are realised in time. Over 59% reported being a bit better off while 21% said they were "a lot" better off. Again differences between project point to material impacts increasing over time. One of the key outcomes of improved economic status was diversification into other income generating activities, with 90% having invested their income into one or more activities. Improving the educational status of children was given high priority: 51% had been able to send their children to "better schools", as a result of the project; 67% felt the education status of the household had improved since the project. Housing had also been improved, in 55% of cases. Acquisition of new household possessions took place, but not to the degree one might have expected (about 10% of possessions were post project), possibly because of higher priority being given to the investments listed above.

Livestock

Training is intended to provide a solid foundation for farmers to make the best of livestock provided. Since 1996 all livestock have been procured locally. In the south the policy has been to encourage the zero-grazing of all livestock, while in the north a more extensive approach has been taken, involving restocking with local cows intended to assist households in cultivations. Regardless of the type and breed all beneficiaries undertake to pass-on female off-spring to others as form of repayment. A revolving fund was established in 1997 to assist farmers in constructing animal shelters.

The Census found 2,782 cattle, 454 pigs and 1,019 goats on beneficiary farms. Half of the cattle had been provided directly by SAC; 15% were pass-ons received from other group members; 17% were cattle raised by beneficiaries after having met their contractual obligations to pass-on; 13% had been purchased by beneficiaries, usually using income generated since the project; 3% were cows being raised to be passed-on. The proportion of pigs and goats purchased by beneficiaries themselves

was much higher, 52% and 49%, respectively. Further questioning confirmed such purchases to be a common form of investment as farmers use income generated from cows to diversify their types of production.

Focusing on cattle, the Census revealed that the majority of cattle (53%) are local breeds, due primarily to the large number of local breeds that have been placed in the StockAid North project that was aimed primarily at restocking and increasing ploughing capacity for cereal crop production. Nearly one third of the local cattle kept are male – not a surprising finding given their use in ploughing. Close to 93% of cows had had at least one calf at the time of the Census, with 27% having had four calves or more.

Findings on milk yields show that the difference between locals and cross breeds is very significant: cross breeds produce, on average, four times (400%) the amount of milk that locals produce. By contrast the next step (from cross towards pure) is not so dramatic, representing a 25% increase. While the value of an additional two litres per day (as much as one local produces) should not be underestimated it has to be seen in view of the costs. Pure breed cows, particularly the large Holstein-Friesian types, require considerably more feed and care then the less demanding crosses. The data show that only 5% of farmers produced over 15 litres per cow per day, indicating that the number who are able to get optimal benefit from pure breeds is small.. In 24 hours SAC cows of different breeds produced enough milk to provide 23,165 children with a mug of milk (200ml) each day, more than enough to prevent malnutrition.

During the Census farmers were also asked about those livestock that have come and gone from their farms in order to shed light on the number of animals that farmers have benefited from, the reasons for mortality, and the numbers passed-on, sold or given away. In all, data on 2,900 absent animals was recorded. Mortality was the main reason for absence (44% of cases) followed closely by stock that have been sold. In most cases the stock that are sold are male off-spring (61% vs 21%). In all 488 of the absent animals had been passed-on to others, with 381 of these being cows. 88% of the cows that farmers kept to pass-on to others survived and were successfully passed-on. Tick-borne diseases account for 35% of reported deaths. The next single most common cause of reported death was consumption of a foreign body, responsible for 11% of fatalities. This is followed by calving (7%), accidents (5%) and a poison (4%).

Farmers, project partners and staff have learned that a single zebu heifer has very little immediate impact on an impoverished household. The few who opted for goats have been able to achieve more immediate benefits and there is growing interest in poultry as means of providing daily nutrition. The original plan contained a high number of households to receive pass-ons generated by the Soroti project (695). This is partly because goats reproduce rapidly so with the high number of goats in the original plan it was envisioned that many more households would soon benefit from off-spring. It also appears that the slow process of maturation and reproduction in local cows was not fully appreciated or taken into account.

The per capita costs of projects varies considerably, with the per capita costs of the Soroti projects (£276) being less than one third of the costs of the Kawule project for the disabled (£964), and less than half the Bakuseka Majja costs (£877). This is not only attributable to these projects being at different stages of development, but also to the difference in approach, with the later projects involving high quality livestock and more residential training. This highlights the dilemma as to whether it is better to plan to help larger numbers, with lower costs and slower impact, or few people with higher costs and more immediate impacts.

Future Objectives

SAC has already expanded it's operations into Rwanda, Kenya (financing projects managed by Heifer International - Kenya) and Ethiopia. It's office in Kampala is staffed entirely by Ugandans and a management board with representation from SAC U.K. has now been formed. The long term plan anticipates moving into additional Countries such as Zambia or Malawi. This will depend very much on the results of a proposed alliance between SAC, Heifer Project International and various other national organizations which is presently under discussion.

Author Details

Tim Roberts trained in tropical agriculture and has spent most of his working life (25 years) on projects in East and Central Africa. Until 1992 he was employed mainly by the British Overseas Development Administration but since 1995 he has worked as a consultant, mainly with ngos such as "Send a Cow".