

Community-led climate change adaptation – insights from a project beyond the norm

In a project to strengthen resilience to climate change of a rural community in Malawi, Plan International has taken an unusual course. Instead of planning the project from beginning to end, best practices from its first phase are to serve as a basis for the second phase. And in the course of this, it has become clear that simple approaches developed together with the community can have a big impact.

By Kirsten Ehrich and Lena Hinzke

In the community of Kakungu, Central Malawi, most of the 448 households live from farming and growing maize and tobacco. With heavy rains and extreme droughts taking turns in Kakungu, plants suffer leaving little for the families to harvest. In 2014, Plan International launched a development project in the community to strengthen resilience to climate change through developing sustainable livelihoods. This was to be achieved via optimised agricultural and post-harvest practices, improving nutrition practices to prevent acute malnutrition, better seeds and the provision of livestock as well as a solar-powered irrigation system.

The follow-up project has moved away from the usual course taken. While the first phase (from June 2017 to April 2019) was devoted to the implementation of the planned activities in standard fashion, the second phase, lasting until 2021, proved quite unusual. “Sharing and distribution of best practices identified during the first project phase,” the project documents stated, implying that if any of the above activities from phase one turned out to have worked for Kakungu, Plan International would inform other communities, NGOs and the government to benefit them from that knowledge.

Not only did this approach mean difficulty in estimating a budget for the second phase, it also made the project team highly reliant on a high-quality mid-term evaluation to learn which of the project activities actually worked. The evaluation, carried out by a Malawi-based consultancy firm, took place between May and June 2019. For this purpose, 202 households in Kakungu and 206 households from the comparison community were surveyed. The latter shows socioeconomic, soil and weather patterns close to those in Kakungu; in addition, it was already benefiting from a government-supported project called the “Sustainable Agriculture Productivity Program” (SAPP), through which livestock and cash have been distributed, and improved crop varieties and irrigation supported. As the results show, the

“contaminated” comparison community eventually turned out to be a well-suited yet ambitious benchmark (see Box).

Participatory approach in planning and implementation

During the set-up of the project, a participatory approach inspired by the NGO-IDEAS toolbox was used (see upper Box on page 38). The community was split into groups who were asked what they wanted to achieve for their community and their own lives in the future. This yielded a set of community-owned indicators – such as the number of households owning iron sheets or cement floors, which the community regarded as a sign of increased household wealth – that found their way into the project Logical Framework. The project team also established a community monitoring committee, trained it and relied on its measuring specific community indicators, which increased community ownership.

For the second phase of the project, Plan International organised a review and planning workshop to discuss the results of the mid-term evaluation, to share results with other stakeholders and to plan the second phase on that base. The project team in Malawi invited key climate and evaluation specialists from

other Plan offices, the evaluation team and the private donor family funding this project (and who would like to remain anonymous) and its preceding project. To prepare for the talk, the project team asked the community to answer the following questions: What went especially well? Whom would you like to show this? How do you want to continue and how would you keep yourself informed? The community let Plan visit several community groups and demonstrated what they had learned from the project and how they further developed the practices with their knowledge and ideas. Talking with the community mostly confirmed the findings of the mid-term evaluation and provided much more depth and reasoning why the practices were successful.

It was now clear which practices should be spread in the second phase and with whom the farmers wanted to share their knowledge: with other farmers in neighbouring villages. Here too, a participatory approach will bring to bear, directly involving farmers from Kakungu in the production of radio programmes, which will be broadcast regionally or nationwide, depending on the radio station. Kakungu itself will have “radio listener clubs” holding meetings to listen to and discuss the programmes together. Through a “lead committee”, community members from Kakungu will support the establishment of new farmer field schools

MIDTERM REVIEW – RESULTS IN A NUTSHELL

- Households in Kakungu eat more and earn more than their counterparts in the comparison community.
- Income levels are generally higher in Kakungu than in the comparison community, with Kakungu averaging at 99,182 Malawian kwacha (MK) compared to 85,220 MK in the comparison community.
- About 40 per cent of households have food security in both Kakungu and the comparison community during harvest season, though Kakungu scores significantly higher during lean seasons, with 25 per cent of the population having food security compared to 6.67 per cent in the comparison community.
- 66.7 per cent of female-headed households in Kakungu provide at least three meals a day to their children under 5 compared to 51.5 per cent of male-headed households and 47.6 per cent female-headed households in the comparison community.



Each farmer field school has 39 lead farmers who share their knowledge with their colleagues.

Photo: Alf Berg

and organise open days in neighbouring communities to demonstrate new methods to a broad audience. Neighbouring communities will also make educational visits to Kakungu to see the practical application and learn from experiences.

Success factors

The mid-term evaluation identified some good practices the project team could build upon in the second phase:

Involvement of community structures:

The project progress can be highly associated with community buy-in via the cooperation with and training of government frontline staff and community structures. Frontline government workers in Kakungu are responsible for providing extension services like capacity building and advisory services to farmers and community members but often have limited resources. The project helped them bridge the gap for farmers to access extension services. In addition, pre-existing community structures like community chiefs, the Village Development Committee, the Village Natural Resources Management Committee and the Village Health Committee were also involved right from the start. Furthermore, the project introduced a Community Monitoring Committee. The community structures as well as government frontline staff were involved in the design process, the actual implementation, monitoring and review meetings. This has evidently helped build up communities' self-confidence of capacity for increasing and resilient production.

Farmer Field Schools: An estimated 86 per cent of the households in Kakungu were using at least one of the improved agricultural practices that the project team showcased. This is about 20 percentage points higher than the baseline's 65 per cent. Improved agricultural practices include, for example, the usage of manure, hybrid seeds, crop rotation, no-till farming and pit-farming. The mid-term evaluation showed that Kakungu farmers' increased adoption of improved agricultural technologies could strongly be associated with the Farmer Field School approach. The project established two farmer field schools with demonstration plots and 39 lead farmers per farmer field school. The lead farmers were trained in improved agricultural practices and have transmitted their knowledge with the help of the demonstration plots to 173 other farmers (108 women and 65 men) so far. The three different demonstration plots, one with conventional chemical fertiliser, one with blended organic manure and one plot with no fertiliser at all, were located on a road frequently used by farmers. Thus farmers regularly witnessed how the plants and soil were developing. The uptake of the improved agricultural practices was lagged, taking just as long as the plants from the blended organic manure demonstration plot did to carry yield – as good as the chemically fertilised and much better than the unfertilised plants.

Blended organic manure making and utilisation: Blended organic manure provides an alternative source of fertiliser for increased yields that is cheaper than chemical fertiliser. The Malawian government department of ag-



Health and nutrition trainings are an important component of the project. Two thirds of the women in Kakungu provide at least three meals a day to their children.

Photo: Alf Berg

riculture has begun introducing blended manure in other communities. However, in Kakungu, blended organic manure making was started by the project in collaboration with the Agricultural Extension Development Officer. While so far practised by only about 11 per cent of the households, qualitative data revealed a profound and growing community appreciation of manure making. Since manure and other ingredients are available in the community, the farmers can easily produce blended manure themselves, with no additional cost. Some households were given livestock such as pigs, goats and chicken. When the animals reproduced, their young were passed on to other families in order to provide more households with livestock and its benefits, like fresh milk, eggs and meat, but also dung which can be turned into blended organic manure via adding ash, plant remains, yeast, water and some other locally available ingredients.

Village Savings and Loans Associations:

Before the start of the project, five Village Savings and Loans Associations (VSLAs) existed in Kakungu. In coordination with the community they have been increased to 28, with 181 active members, 41 of them men and 140 women, in midline. The mid-term evaluation found the VSLAs to have contributed to the heightened income security in Kakungu, hence building resilience among many farming households, importantly so among women. Average loan amounts have constantly been on the rise, with women borrowing almost twice the amount of men. The VSLAs benefited from the project via a five-day training on business management and income-generating

NGO IDEAS

NGO IDEAS stands for “NGO Impact on Development, Empowerment and Actions”. The concept was first implemented in 2004 and optimised in the following years. It provides several tools to enable and improve participatory monitoring of outcome and impact of development projects. Self-assessment and goal-setting by the beneficiaries themselves are key aspects of the concept and tools.

More information: www.ngo-ideas.net

activities and follow-up of the trainings during monitoring sessions aimed at diversifying member income. The members were trained to improve household incomes negatively affected through reduced crop productivity as a result of climate change. While improved agricultural practices, better seeds and the introduction of backyard gardens helped generate better and more diverse yields, the VSLAs improved members’ negotiating skills and financial literacy. In addition, contract farming negotiated by the project together with the farmers ensured guaranteed purchase of the agricultural produce by buyers. As VSLAs are led and managed by community members themselves, prospects for sustainability are good.

Some lessons learnt

Based on insights from the mid-term review, some measures were adjusted. One of them concerned the tree-planting intervention, the only measure not entirely developed together with the community but suggested by Plan International and the private donor family to effectively prevent erosion. The mid-term evaluation revealed that fewer high growing trees were planted than planned, and in some cases, these trees did not survive. People planted the trees on private property, and the community woodlot originally designated for big trees was only scarcely vegetated with a fast-growing type of tree resembling a bush and providing much-needed firewood for cooking. In the review and planning workshop, the team decided to adjust the tree-planting activity to also use long-lasting indigenous trees and fruit trees, fruits being an incentive for people to wait for trees to be fully grown. The choice for fruit-growing trees was complemented by an attempt at building energy-saving stoves that require far less firewood than conventional fireplaces. The climate specialist shared a clay recipe used by Plan Zambia for building more heat-resistant while heat-insulating ovens,

which the team could share with the community in Kakungu.

Plan gave these two and some more recommendations for improvement back to the community to vote using Participatory Rural Appraisal (PRA) methods (in this case: do a ranking with the community while avoiding writing to include illiterate community members) on which ones they find most important to improve the organisation’s intervention in Kakungu. The other part of the budget will be used to spread the best practices and lessons learnt with others.

No need for high-tech solutions

To conclude, the project team can highly recommend using the first phase of a project to gather best practices and the second phase to implement them together with the most experienced experts: the target group. It would appear that there is not always a need for high-tech, innovative approaches, since simple, reliable and low-risk ones can be easily adjusted to fit climate change adaptation and prove just as effective if they are well-embedded in the community. For example, seeds for drought-resistant crops and the solar-powered irrigation system made sure crops would grow even during dry spells. Trainings on improved agricultural practices in the context of climate change also helped boost yield in the climate-affected areas of income generation

while contract farming made sure buyer firms would purchase the yield. Nutrition trainings were complemented by trainings on how to start a backyard garden and by the provision of livestock for improved availability of protein-rich food and vitamin-rich vegetables, and were combined with trainings on how to preserve and process food to be better able to store it while being able to achieve higher prices when selling surplus on the market. The VSLAs’ trainings were tailored to include income-generating activities diversifying income in areas not so affected by climate change.

What has also been revealed is the need for project teams to not only consist of technicians but also and especially community facilitators who have experience in participatory project planning and management, the skill to identify and combine local best practices with state-of-the-art knowledge and the ability to mediate between both.

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References: www.rural21.com

COMPLEMENTING INTERVENTIONS FOR CLIMATE CHANGE ADAPTATION

The agriculture, nutrition and income interventions were all developed together with the community and all complement each other, hence closing potential gaps that could be created if a single intervention were implemented. Measures consisted of:

- access to seeds for drought-resistant plants (e.g. sweet potato and cassava);
- foundation of a seedbank and introduction to seed multiplication and a seed pass-on scheme;
- trainings on sustainable agriculture and land management (e.g. no-till farming and using blended organic manure) via the farmer field school approach;
- trainings on post-harvest techniques;
- VSLAs’ trainings on savings, income-generating measures and business management;
- introduction of contract farming on high value crops;
- provision and production of livestock and the establishment of a pass-on scheme;
- introduction of Community Animal Health Workers;
- trainings on backyard gardening;
- food processing and preservation;
- health and nutrition trainings;
- trainings on how to build energy-saving stoves with local material;
- provision of solar-powered irrigation;
- tree-planting.

Some of these measures started during the preceding project from 2014 to 2017 and are being continued during this follow-up project.