

Overall Lessons learned

DRM project, Belize

TCP/BZE/ 3202

Introduction

This document outlines the overall lessons learned from project implementation. Firstly, the general lessons learned are provided, which are then followed by specific lessons learned related to four broad categories: technical matters pertaining to resilience and specific challenges, dissemination of information, policy framework and governance and operational management.

General lessons learned

This project has provided several achievements in terms of identifying good practices for risk reduction to natural disasters. The operational challenges faced at times by the project provided an additional set of lessons useful for future replication of project outputs and for planning and design of new DRM projects. The challenges are related to stakeholder ownership, institutional support, communication and project administration:

- Agriculture is one of the most vulnerable sectors to natural disasters and the impacts of climate change. Thus DRR must be institutionalized and mainstreamed within MAF.
- Farmers and communities are interested in DRR. However, in order to become key partners in integrated sustainable development processes, including DRR, farmers need to get better organized among themselves, to enhance economies of scale, and create through farmers organizations (formal or informal) more critical mass to act on markets, and better entry points for partnering with other stakeholders in a coordinated way for planning and implementing DRR as part of integrated agricultural development.
- The institutional support from the Ministry of Agriculture for DRR, which is currently still weak and needs further strengthening. The capacities in the Ministry for DRR (as integral part of agricultural development) need to be further build up so that MAF will be in a position act as a key governmental partner institution for DRR related to agriculture; a formal focal point for DRR should be established in MAF to coordinate all DRR related challenges with ongoing development work.
- Throughout project implementation and for project follow up and institutionalization of project outcomes after project funding has ceased, institutional support, particularly from

the national lead agency is crucial. Strong stakeholder ownership and commitment complemented by institutional support facilitates project achievements;

- Procurement and administration related issues provided constraints for timely implementation of project led demonstrations at field level. It is desirable for the national project coordinator to be a full-time position fully embedded into the lead agencies' formal structure, and that the coordinator be trained in project related procurement procedures; frequent replacement of NPC hampers consistency and continuity of project implementation.
- Communication lines need to be clearly defined upfront and further strengthened as it could cause significant delays in project implementation;
- Dissemination of lessons and technical information gathered should form an integral part of any future DRR project framework and their use in future DRM presentations should be encouraged.
- Patience is essential when dealing with development projects. Frustrations with procurement issues have demonstrated that even funding agencies encounter challenges. However, the ones that are patient are still able to benefit from such projects in terms of material support and training.

Lessons on technical matters pertaining to resilience.

Risk management through diversification: Agricultural risk is better managed through an integrated system of production based on both crops and livestock, which allows for the efficient utilization of resources and enhances the coping capacity of the community/group.

Risk reduction: Shifting areas and seasons for cultivation using irrigation. Significant reduction in losses is possible through the seasonal shifting of crop cultivation from the high risk months when both excessively high rainfall and hurricanes are potential hazards, to the less vulnerable, low rainfall months by using irrigation. Furthermore, diversification in cropping patterns and the introduction of livestock reduces risks in terms of food security. In addition, as demonstrated in this project, working and saving together provided some degree of risk reduction even for the small groups.

Involvement of women and youth in homestead gardens and local fowl enhancement. Bringing women and youth into the value chain development complements DRM efforts through their mere involvement in subsistence farming. Additionally, this improves local food security with possibilities for rural household income enhancement through the sale of excess produce.

Local fowl enhancement. The distribution of improved breeds of roosters to rural households has the potential of influencing 50% of their flocks within the first generation produced within a year, and can therefore be a significant and cost effective disaster risk reduction measure, which

will reduce the impact of disasters. Supplying hens is a much less effective enhancement initiative.

Forage banks. The development and use of forage banks in cut and feed systems by small ruminant producers was essential to survive drought. Stored as hay, these forages provided an additional source of fibre during the period of excess moisture when green forages were low in fibre.

Shelter Modifications. Considerable mitigation is possible even without the introduction of new practices through simple modification of shelters in rural communities to house livestock, both for large and small animals.

Specific challenges.

Challenges of pests, diseases and soil management: Irrigation allowed for the shifting of the cropping cycle to less vulnerable periods, but the new cropping cycles encountered new challenges of pests, diseases, and soil management. The less vulnerable periods, the dry periods, were also those of poor water quality and diminished effectiveness of irrigation.

Challenges of introducing livestock in new areas: Introducing livestock to new areas had its challenges, such as the loss of three animals to rabies which was transmitted by vampire bats.

Dissemination of information.

Entry points to new communities. The importance given to local fowl production in rural food production, whereby almost every household has local fowls, makes enhancement initiatives popular and provides an effective way for engaging the attention of rural households and their respective communities in terms of disseminating information. Food conservation in the form of canning, a powerful DRR tool used by Amish communities, was also very popular among communities and provided an excellent entry point for disseminating DRM information to new communities.

Desire for Training. Training in contingency planning in relation to disaster preparedness is not only desired, but required, as expressed in a gender and culture survey by over 90% of respondents. The enthusiastic responses to DRR training in two new communities strongly supported this finding.

Policy framework and governance.

Institutional Support. Though the request for DRR support in farming communities may originate with MAF, more institutional support for the execution of this type of projects should be drawn from other quasi Government institutions involved in DRM, or institutions with more hands on experience in DRM work and possessing the capacity to continue after the funding ceases.

Road map. Any planning for project implementation should not only consider implementation, but should also include strategies for continuity and dissemination of results even after funding has ceased.

Governance. It will be desirable to have a full time project coordinator for the control and management of the project, who would answer to a steering committee drawn from the supporting institutions and FAO local representative. In many instances more local control of projects was desirable especially with regards to procurement and where changes were deemed necessary during the implementation phase.

Incentives. Persons involved in implementation should be given some form of developmental incentives to enhance their input by making the said process part of a certification and training programme from an appropriate certifying body. Farmers, who are generally satisfied with the assistance they received, still require some form of certification to register their participation.

Operational management.

Project familiarization and Internal Communication. Overseas administrators must be familiar with the project and its layout while the local coordinator must be familiar with the rules of procurement. Clear lines of communication must also be established between all the stakeholders and project focal points both locally and abroad for efficient and effective project implementation

Avoiding social conflict. Establishing appropriate strategies from the beginning is crucial for the use of supplies and rules regarding the use and/or disposal of products of the intervention.

Promote Team Building. As it makes implementation easier, team building should start from the beginning and be guided by an approach of shared responsibilities, which is essential for successful implementation of DRM.

Managing gender and cultural diversity. There is no aversion to living with others in temporary shelters with the exception of females from two ethnic groups, and there is considerable room for promoting activities related to culture and religion and those, which foster collective planning and working together. The specific need of females must be addressed by shelter managers.

Patience is essential when dealing with development projects. Frustrations with procurement issues have demonstrated that even funding agencies have their challenges. However, the ones that are patient are still able to benefit from such projects both in terms of material support and training.