## **Adaptation** Insights

Addressing Climate Change Adaptation in Africa through Participatory Action Research

### Zimbabwe

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# Mobilizing Local Safety Nets for Enhanced Adaptive Capacity to Climate Change and Variability in Zimbabwe

Climate change and variability have undermined efforts to meet the livelihood needs of vulnerable smallholder communities in Africa. In Zimbabwe, increased frequency of drought, flash floods and unpredictable rainfall have resulted in recurrent food deficits for poor households who depend on rainfed farming on nutrientpoor soils. Despite global advances in agricultural technologies and markets, smallholder farmers in Africa continue to face shortages of seed, mineral fertilizers and agrochemicals that could help them achieve food self-sufficiency. They often depend on external food aid, which has not effectively targeted the most vulnerable households while weakening local safety nets.

## Weakening of Local safety Nets as a Source of Vulnerability

Zunde raMambo is a traditional community safety net mechanism that protects vulnerable groups: widows, orphans, the sick, the elderly and those affected by unforeseen disasters (e.g. fires, drought). This mechanism once reduced food insecurity by providing a platform for collective action by community members. The chief would allocate land for collective production of staple cereals and other produce that would be made available to needy households.

Introduction of food relief and aid schemes by non-governmental organisations and the central

government has effectively eroded the Zunde raMambo, and weakened social cohesion for collectively addressing local problems. The weakening of national social security schemes due to resource limitations, erratic food relief supply chains and politicization of food aid, against a backdrop of declining per capita food production, has rendered local communities even more vulnerable than before. Government agencies and local authorities have tried to revive Zunde raMambo, but lack of community cohesion and poor productivity have continued to pose major challenges. Climate change and variability has begun to widen the scope of vulnerable households, to include those whose



Zunde raMambo has often failed to attract community participation due to low productivity (P. Map-fumo)



Visioning with the Nyahava community to revitalise Zunde raMambo (F. Mtambanengwe)

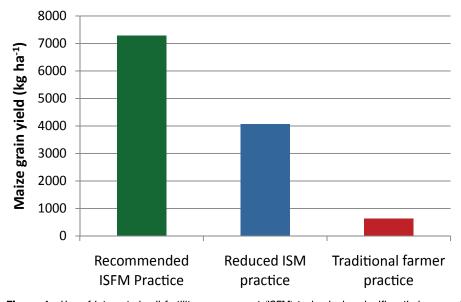
resources no longer enable them to develop appropriate response mechanisms. These experiences point to the urgent need to revitalize local safety nets.

### Revitalizing Traditional Safety nets through Participatory Action Research (PAR)

In a diagnostic and visioning exercise with Nyahava smallholder farmers of Makoni District, eastern Zimbabwe, farmers expressed a desire to strengthen local safety nets in response to the negative impacts of climate change. They said Zunde raMambo was once effective but poor yields from the collectively managed fields was a disincentive for members to continue participating. Integrated soil fertility management (ISFM) technologies combining local organic nutrient resources, inorganic fertilizers, soil and water conservation measures and improved crops and varieties seemed to them a promising means to revitalize local safety nets. Facilitated by an alliance of researchers, extension agents, private seed and fertilizer suppliers and local government authorities, the community mobilized to revitalize Zunde raMambo. The local chief. Maparura, provided 2 ha of land and a Local Management Committee was established. Following a series of planning meetings led by the Committee, community members mobilized organic nutrient inputs and draught power, prepared land and cultivated maize, soya and cowpea following ISFM guidelines developed by a team of technical experts including lead farmers. Eighteen villages participated, using a roster to register activities such as weeding, harvesting and post-harvest processing and storage.

The Zunde raMambo initiative provided a platform for interaction

among farmers, local leaders, service providers and district government who helped mobilize communities, create confidence through government support of the Zunde concept and enhance communication among actors. By the end of the season, the Zunde field was declared a 'big learning centre', exposing participants to improved technologies and promoting information and knowledge sharing. Increased maize and legume yields in the Zunde field (Figure 1) 'silently' resolved the conflict over poor returns to communal labour investments, enhanced community cohesion and created new demands for technical support services. Participants realized the importance of building local-level food reserves to cushion the vulnerable during hard times. Joint reflection enhanced local awareness about the reasons behind failed exogenous agricultural input and food aid programs, including their failure to reward the hardworking and resourceful farmers who tend to contribute to local safety nets. Participatory



**Figure 1.** Use of integrated soil fertility management (ISFM) technologies significantly increased maize yields, attracting community participation in the chief's Zunde raMambo initiative in eastern Zimbabwe.

Action Research (PAR) helped the community to discover their own strengths, to jointly set criteria for effective implementation of Zunde raMambo, to identify and reach out to the most vulnerable households and to articulate capacity building needs (e.g. strengthening collective action, technological innovation and crop storage, popularizing the Zunde raMambo concept). This made it possible for them to overcome key factors leading farmers to resent local safety nets: poor soil productivity and poor incentives for sustained collective action. Dialogue between communities and district authorities on mechanisms to reach out to many households and incentives for assuming social responsibilities in the Nyahava Zunde raMambo have increased.

#### **Conclusions**

Weak local food security systems and the collapse of traditional social safety nets are major factors underlying vulnerability to climate change and variability in Zimbabwe. Integrating knowledgesharing platforms with technical services through PAR generated opportunities for the Nyahava community to revitalize Zunde raMambo, a social safety net, and strengthen community cohesion for collective action to safeguard vulnerable households. In addition to strengthening local institutional capacity to revitalize social safety nets in other villages where Zunde raMambo has also fallen into disuse, the community engagement enabled through PAR's iterative planning-action-reflection cycles has the potential to enhance the effectiveness of external food aid throughout the country.

Strengthening local institutional capacity to revitalize community safety nets is an essential ingredient for supporting smallholder adaptation to climatic shocks.

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