Canadian Coalition on

Climate Change & Development

Building multi-stakeholder processes for climate change adaptation in Sub-Saharan Africa

The Adaptation Learning Programme (ALP), implemented in Africa by CARE International, is supporting communities and local governments to use seasonal climate forecasts and information on climatic uncertainty for decision-making, as part of the community-based adaptation (CBA) approach. Participatory Scenario Planning (PSP) is a key component of the ALP CBA approach, providing a multi-stakeholder learning platform that is integrated into development planning and adaptation processes. Seasonal PSP processes facilitate flexible, weather-based planning using forecasts, and thus enable different actors to adapt to seasonal variability, while at the same time building evidence and capacity for longer term adaptation planning.



Noor Jelle on his farm.

Regional Context

Changes in rainfall amounts and seasonal patterns are already being experienced in many parts of the world, including Sub-Saharan Africa. These changes have a profound impact on vulnerable farmers and other land users, presenting challenges in securing their livelihoods and increasing the risks they face. The frequency and intensity of extreme climatic events such as heat waves, droughts and erratic heavy rainfall¹ are set to increase even further, combined with the long-term chronic effects of higher temperatures. The effects of these changes will become even more pronounced in the future,² particularly in Sub-Saharan Africa where livelihoods and ecosystems are highly sensitive to changes in climate. For this reason, effective strategies and plans for adaptation to both climate change and climate variability are of central importance to countries and communities, to ensure that continued development in vulnerable areas is resilient to the impacts of climate change.

Effective adaptation to climate variability and climate change is dependent on access to climate information for the coming seasons and years, to enable decision-making for the present and the future. Flexible planning in the face of a continuously changing climate – a key element of adaptive capacity³ – needs to be informed by climate forecasts and the effects that uncertainties and risks⁴ have on different vulnerable groups and socio-economic sectors. Scenario development of how livelihoods and sectors would be affected by probable climate futures contributes to making livelihoods more climate-resilient, and can be a first step towards mitigating the effects of climate-related disasters on communities.

¹ IPCC, 2012: Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change [Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, UK, and New York, NY, USA, 582 pp.

² IPCC, 2007: Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M.Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

³ See Local Adaptive Capacity (LAC) framework at: http://community.eldis.org/.59d669a8/research.html

⁴ Climate knowledge, uncertainty and risk are recognized as key factors in CARE International's CBA Framework, see http://www.careclimatechange.org/files/adaptation/ALP_Contact_Card.pdf

The Program

Since early 2010, CARE International's ALP has been developing and testing participatory approaches to CBA in 40 communities with 11 local governments and 8 local NGOs across 4 countries (Ghana, Niger, Mozambique and Kenya). Among these approaches, Participatory Scenario Planning (PSP) has emerged as a very promising process for building adaptive capacity at the local level.

Ezekiel Muigai of Kenya's national Meterological Department explaining how the weather forecast is generated.



PSP, as used by ALP, is a process for collective sharing and interpretation of climate forecasts. PSP is conducted as soon as a seasonal climate forecast is available from meteorological services, meaning it occurs as many times in the year as there are rainy seasons in that particular area.

In a workshop setting over one to two days, meteorologists, community members, local government departments and local NGOs share their knowledge—both local knowledge and scientific information—on climate forecasts. The participants discuss and appreciate the value of the two perspectives and collectively find ways to interpret the information into a form that is locally relevant and useful.

Through the process, participants consider climatic probabilities (which are an expression of the uncertainty in the climate forecast); assess their likely hazards, risks, opportunities and impacts; and develop scenarios based on this assessment. Discussion of the potential implications of these scenarios on livelihoods leads to agreement on plans and contingencies that respond adequately to the levels of risk and uncertainty. Participatory Scenario Planning forms part of the adaptation planning process, making the link between community plans and local government responses and support, as well as higher level plans.

THE PSP PROCESS

The ALP PSP process involves the following key steps:

- I. Identify the **meteorological services and forecasts** available for the location where adaptation is being planned and plan the PSP workshop with them and key local actors.
- 2. Invite participants from a **relevant range of stakeholders**, including meteorological services and local/traditional forecasting experts.
- 3. **Exchange** seasonal climate forecasts from local and scientific sources.
- 4. **Discuss and integrate** the forecasts from the two sources.
- 5. **Participants interpret the seasonal forecast** into three probabilistic hazard scenarios, assessing risks posed by the hazards to develop impact scenarios. **Opportunities** in the coming season are also identified for each scenario.
- 6. **Participants discuss the local implications** of the impact scenarios considering the status of food security, natural resources, livelihoods and sectors.
- 7. **Participants discuss and develop actions** for each impact scenario, taking advantage of identified opportunities: What will communities, local government and local NGOs do? How will their actions be mutually supportive and respond to both the current situation and the expected forecast in relation to livelihood and sector priorities?
- 8. **Develop advisories from** the actions discussed: Locally relevant and actionable information, with agreed responsibilities among local actors.
- 9. **Communicate advisories** to users, for e.g. through radio, local monitoring or other institutional systems, religious leaders, chiefs, government departments, local groups, NGOs, media etc.

Results/Impact

Following the PSP workshops held so far, communities have been able to make more informed choices on their livelihood activities. One example of this is in Garissa District of Kenya. During the rainy season in March to May 2012 a farmer there received the advisories from the PSP workshop and chose to plant green grams, which mature in two and a half months and do not need supplementary irrigation like maize, the popular crop in the area. This resulted in better yields for the farmer to meet household food needs, as well as generate some income from sales of the crop. The advisories also had some market information and the farmer decided to sell his harvest at the local market, instead of at his homestead, as he previously did. He was able to sell his crop at almost double the price he fetched when he sold from his homestead (Titus Utungo, District Agricultural Officer).

PSP has also facilitated district government departments to have better access to more localized seasonal climate information and to use it for collective planning. This has resulted in timely support for the communities, especially in terms of passing on information, providing extension services and giving early warning for flooding. In the past, services were limited to emergency measures and provision of relief programs at and after extreme events.

Participation in the PSPs has led to discussions on the need for better multi-sector coordination. The Garissa Climate Change Taskforce (later the Garissa Climate Change Working Group) was formed in 2011, following the first PSP workshop hosted by ALP. The idea came from the government and civil society representatives present at the workshop, in response to the issue of sustainabilility of the multi stakeholder planning and advisory process, beyond the life of ALP. The taskforce is comprised of representatives of different government departments (planning, livestock, KMD, irrigation, gender, agriculture) and three civil society representatives from the four Garissa County districts. It is chaired by the District Development Officer. Its purpose was to ensure effective dissemination of the advisories from the PSP workshops and to facilitate future workshops.

The taskforce has led to more effective planning and coordination of development activities by both government and CSOs at the district level, including advising



new projects on where gaps exist. District government departments are now developing integrated plans that prioritize what is to be done, avoiding duplication and oversights (Silas Oure, District Development Officer).

Since its formation, services to the community--especially in terms of climate, livelihoods and market information; as well as extension services--have been provided in a more organized and complementary manner. In 2012, the taskforce agreed to include advocacy on climate change issues as part of its mandate and has since been invited to act as the technical advisor on climate change to the Garissa and Fafi District Steering Groups. In December 2012, members submitted a memorandum to the medium-term planning secretariat at the Ministry of State for Planning, National Development and Vision 2030 on the need for improving access to climate information necessary for strengthening the community's adaptive capacity.

In the past, most government planning happened at the individual line ministry level, and was coordinated under the District steering committee managed by the Drought Management Office. The meteorological readings and forecasts were transmitted to the national and international level, with little use at the local level. Most CSOs working on livelihoods have also focused their efforts on Disaster Risk Reduction and relief interventions. The PSP process, however, allows a proactive response, based on joint planning and recognition of the value of learning from all stakeholders.

Communities are realizing the importance of their own knowledge and of making decisions using a range of information. The government officers and CSOs feel they are better prepared and informed. The process has also proven to be inclusive, gender sensitive and culturally appropriate.

Lessons Learned

The PSP process has created a platform where local voices reach the government, and the government can forge partnerships and better apply its resources. Key characteristics of success for the PSP process include:

- Effective adaptation decision making should be informed by past, present and future climate information, enabling plans and actions for climate-resilient livelihoods and disaster risk reduction.
- A multi-stakeholder platform enables sharing, understanding, interpreting and communicating climate information, by giving space for dialogue on local adaptation issues and options. Synergising across stakeholders is essential for responding to the challenge of unknown futures.
- Combining local and scientific knowledge systems is important for making climate information relevant locally and for empowering communities.
- Local adaptive capacity is enhanced by including communication and analysis of climate information in adaptation planning processes, enabling communities to manage the uncertainty and risks that climate change presents.

Noor Jelle, farmer in Fafi District, Garissa County



PARTICIPANT REFLECTION

Noor Jelle is a 30-year-old man from the Somali community living in Fafi District, Garissa County. Garissa is located in the north-eastern part of Kenya where communities have traditionally survived as pastoralists. For centuries, Noor's community has used indigenous methods to predict seasonal weather patterns, based on changes observed in the behaviour of birds and insects, the condition of plants, temperature changes and wind patterns among other things. However, with the changing climate patterns, it is becoming more and more difficult for the community to accurately predict and plan for the coming seasons.

"We have been struggling with the concept of climate change but when ALP interacted with us and talked to us about it, we gained some interest in better understanding and using climate information from the Kenya Meteorological Department" reports Noor. "From the PSP workshops we received information on rainfall and temperature, additional advice on what to plant, when, where to get inputs and technical support and information on storage and even marketing in case the harvest was really good. The information is communicated in Somali, our local language, for the two main livelihoods groups—pastoralist and agro-pastoralist."

According to Noor, at the end of the Oct-Dec 2011 rainy season, the community received the first good rains in two years, a bumper harvest and minimal losses. They also received information that has enabled them to plant more drought-resistant and early maturing seed varieties of maize, sorghum and cow peas, as well as fodder which they can later sell to the pastoralist groups.

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Case study adapted from: Participatory Scenario Planning Brief: Decision-making for climate resilient livelihoods and risk reduction: a participatory scenario planning approach. http://www.careclimatechange.org/files/adaptation/ALP_PSP_Brief.pdf

'Building resilience to climate change and enhancing food security in north eastern Kenya' a Community story

http://www.careclimatechange.org/files/stories/ALP Kenya Noor Aug2012 final.pdf

JotoAfrika Issue 11. Community Based Adaptation Experiences from Africa: http://www.alin.net/Joto%20Afrika

and http://www.careclimatechange.org/files/adaptation/lotoAfrika_Speciallssue201212_03.pdf

http://www.careclimatechange.org/adaptation-initiatives/alp