

Lessons learnt from the Community Based Adaptation in Africa (CBAA)

# COMMUNITY BASED CLIMATE CHANGE ADAPTATION (CBA)

Bettina Koelle &amp; Wendy Annecke

## What is Community Based Adaptation to Climate Change?

At this stage community based adaptation has not yet been clearly defined. We understand community based adaptation as an approach that is putting people in the centre of their own development, by facilitating a learning process that increases resilience and anticipatory capacity. It is not just a response to climate events and shocks, but rather a complex and holistic process that includes personal development and organizational development to ensure an enhanced problem solving capacity, and the capacity to anticipate events and plan so that future shocks are buffered.

Aiming at a positive vision instead of trying to preserve the (often undesirable) status quo is a positive approach to engage with vulnerable communities and to support their development path.

*"Learning by shock is neither an empowering nor an ethically defensible pathway."* (Tschakert and Dietrich, 2010)

## How to plan a CBA project?

There are many ways to plan a CBA project – the most important aspect is that the process of identifying the need for action and formulating the project are undertaken in true partnership and collaboration with all participants and stakeholders. There should be no hidden agendas and the process and roles and responsibilities should be transparent (including the budget!).

The identification process is important and should focus on vulnerable groups and available information, including the latest data on climate change predictions and other indicators of climate variability and change. A participatory process to formulate a joint project will raise expectations. Be clear on what you can promise and focused on making this project work. Ensure that good



communication channels are established and that you are ready to work as a team.

In the process of planning it is important to also consider how you are going to monitor the process and how to pay special attention to the gender component (see additional boxes on PM&E and Gender).

## The Adaptation - Capacity Development interface

Importantly the development process and the adaptation to climate change process are going hand in hand in the Suid Bokkeveld. Firmly rooted in an action research approach, the basic idea of this approach is to foster true empowerment in the local community to ensure an increased resilience to external shocks and challenges. These may or may not be climate related. If an increased resilience includes an increased problem solving capacity while having access to expanded networks, we anticipate much more robust livelihoods able to address challenges that might be encountered. Especially in the face of uncertain climate predictions on the local scale for the next decades it is important to not just look for technical solutions to address climate change adaptation, but to rather increase the capacity in problem solving. This process is inclusive and should encompass all aspects of the farmers' livelihoods, as articulated by the farmers. A process like this is not a short term intervention, but rather a long term commitment that addresses varying issues over time and supports a consistent capacity development fostering problem solving ability while strengthening networks.

## Facilitation of the Adaptation process

In facilitating community based adaptation processes a consistent and participatory process is the key element. Only once the process is sound and driven by its members will we be able to achieve. Humanity faces unprecedented environmental, economic and social challenges that demand innovative and effective solutions. The natural systems upon which we depend for ecosystem services are infinitely complex. Yet we have crudely manipulated them through agriculture, mining and other interventions for survival or material gain. Globally most ecosystem services are in decline, some to the point of collapse. At the local level, global change is impacting negatively on these systems and the services they provide. Under these circumstances farmers must develop a deeper understanding of natural systems to manage them sustainably in a changing world. If they do not understand how ecological systems are likely to be impacted on by global change, or what mitigatory actions they can take, farmers are likely to exacerbate global environmental problems.

We would argue that if natural and human scientists intend to help farmers improve their management of the natural resources that they control, and to derive greater or sustained benefit from the ecosystem services that they provide, partnerships based on mutual respect and shared concerns are vitally important. This calls for a research paradigm that will incorporate these elements and contribute actively to creating a "community of practice" (Oettle & Koelle 2003) between land users and scientists.

Participatory Action Research (PAR) practice requires critical reasoning that is informed by practical reasoning, uses the technical reasoning of the natural sciences and is able to transcend them both. PAR is an approach that actively involves all relevant players (especially women and the poor who are usually disregarded, intervenes and acts to improve the situation that is being researched (rather than just observing it) and involves a process in which knowledge is developed, abilities to solve problems are enhanced and theory is critically reviewed in an on-going process of action and reflection.

Within Participatory Action Research processes the research agenda is open and is developed collaboratively with all role players. The values that underpin and inform the process, interactions and transactions that take place are explicit and not just assumed, so as to ensure that role players are able to participate fully and without suspicion of manipulation or hidden agendas. The participatory research process is not an extractive one: instead, data is gathered and analysed in ways that are inclusive. Responsibility for the process and outcomes is shared by all participants, and the research process is open to influence and (if necessary) re-design by all participants.

Armson & Ison (2001) argue that enthusiasm is a phenomenon at the core of social life. The emotion or driving force of enthusiasm has long been recognized as central in psychology. Motivation is understood as a "drive from within" that is satisfied by whatever action a person is taking. Armson & Ison (2001) have shown that providing people with the experience of being actively listened to while recounting stories of their past, present and anticipated future was a route to triggering enthusiasm. The action research process in the Suid Bokkeveld has drawn on this notion of the telling of histories and envisaging the future as ways of eliciting the necessary enthusiasm and energy to drive the processes of adaptation. By taking the initiative and initiating measures and actions to enhance resilience, people are able to take ownership of the adaptation process.

## Exploring adaptation opportunities in the Suid Bokkeveld – Wild Rooibos Case Study

Farmers in the Suid Bokkeveld decided at a community workshop to explore local weather patterns and to engage with and test seasonal forecasts. Especially seeing that the livelihood strategies are often complex, and local micro-climate can vary strongly from farm to farm, it was decided to embark on an integrated process including monitoring of local weather patterns, engaging with seasonal forecasts and long-range forecasts, exploring existing and new adaptation strategies in an action research approach and to steer this process with quarterly report back and reflection workshops. It is crucial to emphasise that this process did not take place in isolation but was rather integrated in a larger development process in the Suid Bokkeveld, taking cognizance of the multiple stress factors farmers are facing in devising their most robust livelihood strategy. It is vital to integrate adaptation with development.



## Climate Change Preparedness workshops

The core of the climate change adaptation process is the quarterly climate change preparedness workshops, conducted every 3 months and providing a platform for reporting back to the larger community, to share new ideas with fellow farmers and scientists, and plan next steps. Importantly the workshops fulfill a host of needs and are also social events to exchange personal and farming news and experiences outside the formal programme (Max-Neef 1991). Designing the workshops in a way that they become events that enable participants to satisfy their basic needs, including those for understanding (learning), subsistence, participation, understanding, idleness, protection and identity is crucial to maintain the momentum of the entire process.

Parallel to the climate change preparedness workshop for adults, workshops are held for children. The children's workshops were instituted after the idea emerged during the evaluation of a previous workshop. The innovation has been taken up with a lot of enthusiasm by the children and provides a platform for them to learn about climate change actively, while the adults can focus on their workshop process. The sharing of experiences between the participants of both workshops is important as it provides rich opportunities for learning and focuses the attention on different perceptions of the generations.

## Seasonal forecasts and climate monitoring

Four different farmers volunteered to monitor the local weather with a simple digital max/min thermometer and a rain gauge at their homes. It was agreed that the monitoring would take place every Monday morning for the maximum and minimum temperatures of the week, as well as precipitation on a daily basis. This data was recorded in "Climate Diaries" detailing the following information for each month:

- weekly minimum and maximum temperatures
- rainfall events and mm
- observation
- farming activities of the month
- planning for the next month.

The actual weather data collected was then compared to the seasonal forecast prediction for the respective timeframe. This allowed for a better understanding of the seasonal forecast and an increased awareness of how particular weather patterns would impact on farming approaches, disaster management and livelihood strategies.

This monitoring process is also supported by automated weather stations, managed and maintained by the farmers. This data is presented at the quarterly climate change workshops. As it allows hourly recordings of temperature and rainfall it allows farmers to analyse the finer patterns across the Suid Bokkeveld and engenders a better understanding of the local micro climate.



## Gender and community based adaptation

Adapting to climate change is about reducing vulnerability and increasing resilience. However some people and communities are more vulnerable than others. This is largely because of the inequitable distribution of rights, resources and power, as well as repressive cultural rules and norms which constrains individual's ability to act on climate change and its hazards. This is especially true of women, and thus an understanding of gender (the relationship between men and women) is crucial in understanding vulnerability and developing resilience.

If we understand the different roles, responsibilities and power that men and women have, we can understand the different ways in which they experience climate change and we can adapt our strategies and mind-sets to incorporate women's knowledge and strengths and decrease their vulnerability. For example women are likely to be based at home where they look after children and the elderly, grow subsistence crops and own small livestock. Women may not have attended school and are likely to have little cash income and little say in decision making either at home or in the community. These are the structural components that render them vulnerable.

Through a participatory (men and women although not necessarily together) gender analysis of vulnerability to climate change, communities can engage in transformative activities which strengthen the position of women and are of benefit to the community as a whole. In Bangladesh and Ghana the inclusion of women in community organizations and local government has tapped into women's knowledge systems, shared information, decreased inequalities and contributed to the resilience of households and communities.





## Participatory monitoring and evaluation for CBA

Community based adaptation calls for new and creative approaches to monitoring and evaluation. While there is a need to ensure project money is well spent and the objectives are met, the emphasis is on using the M&E process to empower communities to make their own decisions about future activities and direction of the project. In participatory monitoring and evaluation, communities develop their own targets, indicators and priorities. PM&E supports reflection, learning and improvement and focuses on a joint learning process, underpinned by the following principles and actions:

- \* The success of a project is best monitored by the participants themselves at agreed regular intervals.
- \* The process should take account of people's values, priorities and judgments.
- \* The role of the evaluator is to listen to the beneficiaries, facilitate dialogue between the different stakeholders and to develop some consensus about the project's impact, while also paying attention to areas where there is no agreement.
- \* PM&E should be part of the project design
- \* Ownership of the project, indicators and monitoring process are important
- \* Be clear on what is monitored and what is measured, and how.
- \* Create space for reflection and adjust process if needed
- \* It is useful to have a baseline from which improvements, shifts and changes can be measured or observed.
- \* Ideally the baseline should be established before the project starts
- \* If the baseline is established in a participatory way, monitoring participatory will be more meaningful.
- \* When developing the baseline this is the stage at which indicators are best jointly developed: they can be revised if necessary
- \* The focus should always be on learning rather than targets or policing
- \* Evaluation is done at longer intervals than monitoring – about every two and half to five years.
- \* This is because evaluations assess impacts which can only be noticed over time.
- \* The participatory evaluation is intended to be an empowering process, giving voice to the vulnerable and most marginalized groups - including women

## Concluding reflections

Adaptation is place based and requires specific strategies. In order to create an enabling environment for adaptation it is important to firstly create the determination to adapt, and secondly create co-operation and networks to foster adaptation processes (Leary 2008). The participatory action research process and the development of local and national networks has contributed towards creating a more enabling environment for adaptation in the Suid Bokkeveld.

The experiences of sharing life stories, experiences, insights and visions for the future within the participatory action research process are a significant driver in the process of pro-active adaptation, which has been described as the "stitch in time" approach. These responses are characterised by enthusiasm on the part of the participants. On the other hand, reactive adaptation that is driven by outside service providers requires far greater effort (the "nine" stitches) and is far less likely to be sustained because ownership of the process and its outcomes will be diminished.



Adaptation and beyond is published by Indigo development & change as a contribution towards effective and participatory adaptation to climate change. The contributions are varied and demonstrate the multitude of adaptation options we can draw on.

Indigo development & change

Nieuwoudtville, South Africa

info@indigo-dc.org

www.indigo-dc.org