



Category: New ICT Routes to Climate Change Adaptation

Climate Change, Innovation & ICTs Project

Centre for Development Informatics (CDI), University of Manchester, UK With the support of the International Development Research Centre (IDRC)

Participatory Video for Monitoring and Evaluation of Community-Based Adaptation to Climate Change

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Initiative Overview

In recent years, extreme climate events have negatively impacted many parts of the globe, but due to its already high vulnerability, Sub Saharan Africa has been the theatre for some of the early and more dramatic climate impacts. This has affected most significantly the livelihoods and health of the most deprived people. As observed in the countries concerned by this case study (Malawi, South Africa, Kenya and Zimbabwe), droughts, floods, extreme temperatures have caused successive crop failures, the drying up of water sources and the spread of malaria to locations where it was not endemic (Koelle et al 2010; Wakhungu et al 2010; Zvigadza et al 2010).

Between 2008 and 2011, Community-Based Adaptation in Africa (CBAA) – an action research project – tested tools for community adaptation and knowledge generation in eight African countries while building the capacity of its partners and local communities. Through participatory methods¹, the project helped the selected communities to adapt to climate change and share lessons learnt with key stakeholders at local, national, regional and international levels.

The International Institute for Environment and Development (IIED) invited InsightShare to pilot participatory video for monitoring and evaluation (M&E) of this project to support their internal learning processes, inform the action research, and amplify community voices in relation to local adaptation to climate change.

Between 2009 and 2010, InsightShare held workshops in four of the eight participating countries: Malawi, South Africa, Kenya and Zimbabwe. InsightShare passed on skills in participatory video and monitoring and evaluation to build the capacities of community members and staff from the community-based organisations (CBOs) and non-governmental organisations (NGOs) implementing CBAA in each country. This enhanced the partners capacity to listen to the community members in their search for local adaptation strategies, and to monitor their pilot projects and climate-related indicators.

Application Description

Participatory video (PV) is a set of techniques used by a group or community to help them shape and create their own film. Making a video can be easy and accessible to all, and PV is a great way of bringing people together to explore issues, voice concerns or simply be creative and tell stories. This is an empowering process: enabling a group or community to take action to solve their own problems and also to communicate their needs and ideas to decision-makers and/or other groups and communities. As such, participatory video can be a highly effective tool to engage and mobilise people and to help them implement their own forms of sustainable development, based on local needs.

¹ A specific tool for mapping vulnerability called LOCATE (Local Options for Communities to Adapt and Technologies to Enhance capacity) was used prior to the participatory video component of this project. Although the participatory video methodology and LOCATE were not officially integrated, the PV for M&E initiative served to further enhance the findings initially yielded by LOCATE. For more information on LOCATE, please refer to: www.acts.or.ke/reports/RelatedResource/CBAAbrochure.pdf

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When using participatory video for monitoring and evaluation, we combine the iterative and highly responsive nature of the former with the more systematic structures of the latter, providing a rigorous but engaging process that includes triangulation of different evidence sources. In CBAA, PV played a key role in further involving community members in discussing how climate change was affecting their lives and what were their suggestions for pilot adaptation projects (in the baseline process). It also contributed to monitoring and evaluating both these adaptation projects and climate variability.

Both the production of the films and the diffusion of local voices on adaptation to climate change were key aspects in the project as they allowed for increased participation in the action research process. The video products helped raise people's voices so they could be heard by decision-makers who were subsequently shown the films as part of each local dissemination strategy (see discussion below on impacts for more details).

Formal Drivers

The link between climate change and extreme weather events is complex, but it does seem clear that such events are increasing, and will continue to increase, as a result of climate change. Droughts, floods, heat shocks and other extreme weather events are on the rise in Africa. These have huge negative impacts on people's livelihoods, health, wellbeing and the local economy. In South Africa, a severe drought has been affecting the people in the Suid Bokkeveld, south from Nieuwoudtville in the Northern Cape. In Kenya, droughts, floods and above average temperatures have become more frequent. In Zimbabwe, temperatures have increased and rainfall decreased. In all the cases the climate variability has had strong effects on people's access to water. This has directly affected their livelihoods and health, as many of those communities are dependent on rain-fed agriculture (Koelle et al 2010; Wakhungu et al 2010; Zvigadza et al 2010).

The overall CBAA project was driven by these climate-related threats to livelihoods in Africa. In turn, for the CBAA initiative, PV was seen to have potential as an effective and rich learning tool for harvesting new strategies on community-based adaptation. It was seen as a means by which to better inform local NGOs on how to improve aid delivery for adaptation, as well as spread the community-based approach when dealing with the impact of climate change.

Objectives/Purpose for ICT Usage

CBAA decided to use participatory video and M&E as a means to enable the communities to record the impacts and the local adaptation knowledge in their own words. In addition to amplifying voices of the community, the activity also aimed to enhance accountability, support action research, strengthen communication between the NGOs and the communities, and help generate and archive local knowledge.

The aim with PV was for people to easily convey their knowledge, come together to discuss important issues in their daily lives and craft their message in an accessible and inclusive format. These are some of the reasons why CBAA partners considered it an appropriate tool to involve the communities in monitoring and evaluating change linked to the proposed local adaptations as well as climate variability.

Stakeholders

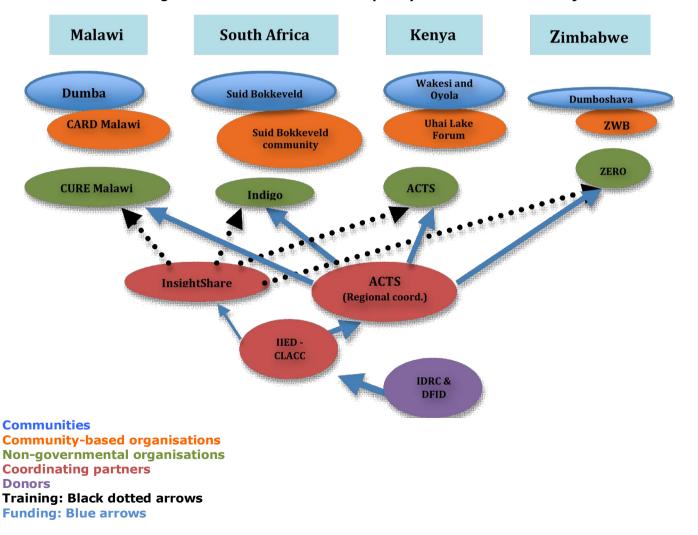
The project stakeholders are summarised in Figure 1. The country level coordinating partners were members of the CLACC (Capacity Strengthening for Least Developed Countries for Adaptation to Climate Change) network, a group of fellows and international experts working on adaptation in least developed countries, coordinated by IIED. The Department for International Development (DFID) and the International Development Research Centre (IDRC) funded the project. The regional coordinating partner was the African Centre for Technology Studies from Kenya.

The in-country partners were:

Country	Non-Governmental Organisation (NGO)	Community-Based Organisation (CBO)
Kenya	The African Centre for Technology Studies (ACTS)	Uhai Lake Forum
Zimbabwe	Regional Environmental Organisation Zimbabwe (ZERO)	Zimbabwe Women's Bureau (ZWB)
Malawi	Co-ordination Unit for the Rehabilitation of the Environment (CURE)	Churches Action in Relief and Development (CARD)
South Africa	Indigo	Suid Bokkeveld Community

CBAA worked with local communities, CBOs, NGOs, national meteorological services, researchers, and national and international policy and decision makers. The partners used a 'learning-by-doing' approach to reduce vulnerability to climate change. This involved identifying ways of communicating climate information to vulnerable communities and then from those communities onto other stakeholders.

Figure 1: Stakeholders for Participatory Video within CBAA Project



Impact: Cost and Benefits

The total cost for running the PV M&E initiative within CBAA was approximately £45,000, including £7,000 for equipment. This was run as a pilot experience, thus considered as an investment from InsightShare. It was therefore costed at lower-than-normal rates and the planning time was for the most part invested and not covered by the grant. This lowered cost allowed for more countries to be covered and therefore more experimentation, but only allowed for one visit per country and a very basic camera kit to be purchased per project.

During the workshop, the trainees and communities carried out a baseline using PV (except in South Africa, where this was conducted after the training), creating a video on the current state of climate-related issues that affected people's lives. The training lasted 12 days and an average of 11-12 trainees took part. Most of them were community members (approximately three quarters) and the rest were CBO or NGO staff.

The trainees initially received PV M&E training and then went into the communities to undertake fieldwork, involving facilitation, filming and reflection: see Figure 2. On return they learned to edit and put the film together. They then went straight back to the communities to screen the films, reflect and receive approval and consent from the communities over the final film. Finally, they planned their monitoring process and the follow-up plans.



Figure 2: Participatory Video in Action

The final film was screened to the wider community, as well as to local decision-makers, and in some cases, to the national meteorology bodies in each country. With permission from the local communities, they were also uploaded to YouTube for further diffusion and presented in international climate change-related events. To view them please visit²:

- Malawi: http://www.youtube.com/watch?v=xHbGpxIumWU
- Zimbabwe: http://www.youtube.com/watch?v=iAOWp4i86KE
- Kenya: http://www.youtube.com/watch?v=n1ikM5ka8JY

² The South African project participants opted to keep their participatory video work offline for the time being. This choice was dictated by the preference of the community members to keep the footage as an internal reflection tool.

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The project funds also allowed for the provision of ongoing backstopping and online support during the monitoring process and a final evaluation as well as a peer-review. The final workshop included another M&E tool: Most Significant Change, and the purchase of extra equipment needed for some of the partners and local communities.

The main benefits included:

- Community engagement in the baseline mapping of climate-related issues
- Development of participatory climate-related indicators, including initial mapping, and ongoing monitoring & evaluation
- Equipment left with the CBOs/NGOs and in some cases (Kenya) local communities
- Participatory videos informing the adaptation strategies and supporting the action research with rich qualitative information not previously available
- Local voices meeting with policy and decision makers at national and international level through film screenings (e.g. local authorities, meteorological offices, COP 15, among others. See below for more details)
- Capacity building of CBOs, NGOs and community members that participated in the training
- Adding value to the accountability and local empowerment process
- Helping community members to archive their local knowledge

Films were used to draw attention from the Kenyan authorities on how climate change was already affecting many rural communities. Charles Tonui, from ACTS, told us: "When we showed the film to the local authority, they were surprised. They hadn't taken into account that climate change was actually impacting communities in their constituencies. It really made them realise they had to do something, now."

The PV activity helped raise awareness on the need for alternative livelihoods at community level that would assist them in facing climate variability. For example, the Kenya Agricultural Research Institute (KARI) supported the planting of a different variety of mango tree in Wakesi, which is expected to perform better in the current climate conditions of that region, which should in turn help farmers access new markets.

In Zimbabwe, the project gained stronger support from the Meteorological Office once they watched the community-made film: "We finally got the climate projections from the Zim Meteorological office. They were chuffed to see the film on DVD, and they have also given us a dedicated person to work with us on the CBAA project, (field and workshop)." Shepard Zvigadza, ZERO Zimbabwe.

Evaluation: Failure or Success

At the stage that InsightShare became involved in CBAA, most projects had already worked with the community using different participatory learning and action tools to identify local problems and potential activities to implement. Despite this, the NGO and CBO trainees were surprised by the amount of new, mostly qualitative, information they were able to gather in the PV baseline. These new insights helped them decide which adaptation activity to pursue as pilot projects.

In Zimbabwe, for example, the PV baseline provided information on the linkage between climate change and HIV/AIDS, soil degradation and livestock climate-related issues. "We realised the extent of the problems, how serious it was and we actually saw it", reflected Shepard Zvigadza from ZERO.

The local screenings of the community-authored films were attended by large audiences (over a 100 people in each country) and attracted participation from young and old, men and women. The debates and information gathered after the screenings was very rich and helped further the research. ZERO, in Zimbabwe, identified new possible adaptation strategies as the community became more involved in identifying problems and suggested improvements through the participatory video intervention. For example: they suggested use of rope and washer water pumps since access to clean water had been getting more and more difficult.

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The PV for M&E activity also enhanced participation. It built common ground between NGO/CBOs and the communities, and strengthened the capacity of the trainees in video, M&E and facilitation. The process raised awareness and mobilised people on the ground. This provided a platform to empower women's voices, intensify the quantity and quality of participation.

Particularly about women's participation, Shannon Parring from Indigo, South Africa, reflected: "Men and women respond to and are able to adapt to climate change differently. Women are not just victims but active agents of change. They possess unique knowledge and skills that should be acknowledged and tapped into to support local adaptation processes. The PV method allows women to share their stories and views from a safe place, with the comfort of being in charge of what will actually be shared with a wider audience."

Some women in Kenya also told us: "I didn't go to school for as long as the men here, so often, in community meetings I just keep quiet. But with the video, I was able to participate and say what I thought! I felt so good!" (Translated by Charles Tonui, ACTS)

Community engagement in the development of indicators was integral to the training. In Malawi, the participatory indicators increased motivation and ownership over the process. As the trainees selected the indicators, they knew what footage to collect and were eager to do it, creating an excellent film. In South Africa, the farmers wanted to monitor water fountains, and they combined the use of participatory GIS mapping of water resources, borehole level monitoring, monitoring of water quality and participatory video. Besides filming and documenting all the participatory baseline process, after they took the GPS points for the map, they recorded short stories about each water source, interviewing farmers.

"In the participatory monitoring process, everybody observes aspects and events that are important to them and if necessary decides how to change the course of action so that further errors are not continued or multiplied. The farmers used participatory video to record the usage, quality and variability of the water source as well as any important stories. The participatory video will be used to review in three years time if and how the water situation has changed. This reflection process offers rich learning – and creates the space for action that will anticipate possible changes in crucial natural resources such as water." Bettina Koelle, Indigo, South Africa.

In Kenya, the trainees and researchers were able to identify community issues and strategies that were not highlighted by the community using other participatory tools. Among these were the effects of drought, floods and socio-economic issues affecting them in general. "Adaptation is a slow process. Through PV, we can capture learning and share it with other groups. It helped us capture a clear and visual baseline that will facilitate the horizontal sharing activities we promote in our farmer field schools. Seeing adaptation on screen, in a peer-to-peer exchange is tangible and the ideas become easier to grasp for the farmers but also local decision makers. We've found the calendar useful, we could adapt it to the actual weather events and this way we kept filming and recording progress in the community." Dan Ong'or, CBO Uhai Lake Forum, Kenya.

The films also allowed the NGOs to share lessons on community-based adaptation to a wide audience. Some of them were part of the "Development and Climate Days Annual Film Festival" that IIED organises around international climate talks every year³.

The films from Kenya and Zimbabwe were screened in Copenhagen for COP15 where representatives of those NGOs were present and taking part in the wider conference. This helped them showcase their adaptation activities and share the climate related issues to an international audience. On a national level, the films were used with decision makers to draw their attention to the importance of climate adaptation.

³ See: http://www.iied.org/climate-change/key-issues/climate-negotiations-capacity-building/development-and-climate-days-annual

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Enablers/Critical Success Factors

1) The success of the process was underpinned by the 'learning by doing' approach of participatory video combined with the commitment by the partners to this way of working. Climate change adaptation is taking shape in a variety of ways across the globe, and because it is an emergent phenomenon, agencies cannot necessarily replicate existing methodologies to analyse its impacts. Only through working together with the people that are on the front lines of climate change can we all learn to provide aid that is relevant and timely.

Projects that link to adaptation must be responsive, receptive and flexible enough to assimilate new information harvested through community processes into project implementation plans. Furthermore, for this initiative, all parties agreed to learn, experiment and develop the tool. This provided lots of freedom to try new approaches and innovate. The logistical support given by the local NGOs was also a key ingredient needed for success.

2) Participatory video is an ideal tool for "putting participation first and foremost" and this fitted perfectly with all of the methodologies used by the CBAA partners that were already based on a deep participatory ethos. This enabled the participants and project coordinators to embrace the participatory-video-for-M&E process as an opportunity to learn and share knowledge harvested at community level. This allowed for ongoing re-adjustment of the project plans and the scope of research; a necessary step in a field such as adaptation, which is highly unpredictable and where new findings are constantly produced.

To allow full participation, the partners were able to make the monitoring and filming process more accessible through multiple visualisation techniques (including drawing of indicators and the creation of storyboards to plan the films).

3) The organisations had a learning agenda, which allowed for experimentation and **openness to unexpected findings from the interaction with community**. Due to the lack of data on current and predicted impacts of climate change, the qualitative information gathered through PV-for-M&E fed and advanced the action research. This counters the more traditional style of monitoring, which may not always allow for information outside the expected categories to be recorded. In climate adaptation, where there is yet so much to be learned, participatory video for monitoring and evaluation can act as a valuable complement.

Being opened to unexpected findings also means not being tied to planned outputs, but instead informing those with new feedback. The partners were open to learn and adapt to the needs of the community and prioritising these actions rather than the implementation of adaptation strategies devised at NGO level. A clear example of this is the project in Zimbabwe where the planned intervention shifted from digging out a dam to installing more reliable wells, as a result of listening to the community needs through PV for M&E.

Constraints/Challenges

There were several challenges in implementing the project, including *managing the expectations of communities* who did not see the immediate benefits of the monitoring and research process. These were addressed through the capacity building aspect of the initiative. The partners built on the skills of community trainees, leaving equipment under community management and creating a forum through screenings and discussions to highlight community action priorities related to CBAA. In particular, leaving flip cameras with the community was an effective motivator in Kenya, enabling the punctual recording of climate events to be shared with the local NGO as well as local authorities. The flip cameras were left with village committees while the PV kit was left with the community-based organisation.

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Demanding time from local people requires careful management – while their basic needs are so pressing it can be difficult for people to see knowledge gathering as beneficial. It would therefore have been unreasonable to ask the community to keep filming a strict set of indicators following a rigid calendar for a period of over one year. The partners therefore created a flexible calendar with a loose set of indicators gathered in broad categories. This was not as systematic as traditional log frames, but it suited the context and purpose of the activity. It was also decided that the CBO staff – being closest to the communities – would visit the villages at agreed periods and facilitate the filming of indicators.

Recommendations/Lessons Learned

These are some of the main recommendations and lessons learnt harvested from the process:

- From blueprint to process: balance consumption- and production-oriented models of participatory video: Climate change adaptation is a long-haul activity where the focus needs to be on building lasting resilience and capacity. One consumption-oriented perspective on PV focuses on immediate actional impacts; asking how the information generated by PV has been used. While this is clearly important, it should be balanced by a production-oriented perspective that asks how the process of creating PV builds skills, knowledge, confidence, etc within communities. It is these latter which empower communities and contribute to the resilience and capacity to adapt to climate change long-term. This like other enablers and lessons reported here can be seen as part of a broader orientation necessary when using ICTs in climate change adaptation: the need to turn from a blueprint to a process approach (Walton & Heeks 2011).
- **Be rigorous about climate change indicators and M&E**: Adaptation is hard to pinpoint and categorise, especially trying to prioritise strategies that focus on climate change adaptation rather than what is already being achieved through development projects. It is therefore important to clarify with the community what the significant indicators are that can relate back to adaptation. It is also important to provide a thorough and rigorous M&E framework to ensure that a broad range of issues are covered and an appropriate sample of the community has participated. This helps build credibility, reinforces a feedback loop and therefore improves accountability. Above all, it enables reflection for learning at multiple levels.
- Involve the community in selecting the participatory M&E tools: PV allowed for communities to identify geographical areas that are becoming vulnerable because of climate variability. They physically needed to prioritise areas to film in where there had been climate impacts and where people are focusing their attention in addressing these impacts with various coping strategies. When using participatory video to establish a baseline it is important to use participatory M&E methods that make sense to the local community, for example when choosing sites for mapping or to develop indicators for other approaches. This will make the monitoring process easier, as the framework is not imposed and is one of which the community feels part of and can make sense of.
- Select appropriate technologies and climate-related indicators: PV can be very powerful in recording climate-related indicators because it gives in situ insights on what is actually happening on the ground. These indicators however need to be carefully selected so that they fit the video medium. More numbers-based indicators, for example, the loss of cattle due to drought over a long period of time, could not be recorded on video. However, the state of erosion of a riverbank or an interview with a woman on her changing access to water are excellent topics to record with PV. In South Africa, the development of a baseline using PV and participatory GIS mapping proved to be a very flexible and adaptive approach that worked well for that specific community.
- **Ensure PV data is manageable:** Adaptation to climate change is a complex issue and PV will be best used when the level and quantity of information is limited to the most important and crucial indicators so as to limit the amount of video data to manage. Video data needs to be logged and

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archived on a regular basis, especially if filming takes place during an extended period of time. This process requires a fairly advanced understanding of data management and can be time consuming. Reducing the number of indicators and frequency of collection, and allocating more training time to data management could solve this. In Malawi, the process was simplified through the identification of specific locations in which to film during weather events, of a targeted list of questions to ask during interviews and of specific crops to monitor.

Participatory video is a powerful tool to ensure that learning is harvested in a human and accessible way about how communities are coping with climate change. But more importantly, it can also be used to help determine the most relevant and pressing adaptation strategies as it promotes listening, sharing and consensus building within communities and across to intervening NGOs.

Data Sources & Further Information

This case study was developed from three main sources: the senior facilitator's and project manager's direct observation and experience in each country; interviews with NGO/CBO staff; and CBAA and InsightShare reports and documentation.

For further information see:

- Videos: http://insightshare.org/watch/video/dumba-malawi
- Photo story: http://insightshare.org/resources/photostory/cbaa

Information is also available at stakeholder websites:

- CBAA: www.acts.org.ke/reports/relatedresource/cbaabrochure.pdf
- IIED: www.iied.org
- InsightShare: www.insightshare.org

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