Community Based Adaptation: An empowering approach for climate resilient development and risk reduction

The challenges facing poor and marginalised communities in today's society are multiple and complex; from economic crises, to natural disasters, to environmental degradation and conflict, all of which are increasing poor people's vulnerability and posing significant challenges to securing their livelihoods. Climate change threatens to exacerbate the problem further by creating an additional layer of uncertainty and risk for vulnerable communities to deal with, increasing the severity and frequency of disasters and jeopardising development gains made to date.The cost of ignoring these impacts will soon become impossible to meet.

Climate change challenges us all to live with on-going change and to make decisions in the context of increased uncertainty and risk. We must continue to help people to recover from shocks and stresses but we must also work with them to try to find a more lasting solution which addresses the underlying drivers of both risk and vulnerability, strengthens existing adaptive capacity and builds long term resilience. Strengthening vulnerable groups to become climate resilient so they are able to absorb stresses and shocks generated by climate changes and climate variability, including extremes such as drought and floods, while continuing on a positive development path is essential to make positive development gains sustainable.

The magnitude of the problem means that working in traditional siloes will not be sufficient to build the resilience of vulnerable populations. Instead what is required is an integrated approach to development, risk management and humanitarian assistance which recognises the current and future impacts of climate change. An approach which draws on all sectors, contexts, levels and actors, from government officials to climate scientists, to vulnerable people themselves, recognising the contribution of the different knowledge, capacities and experiences of each.

This document shows how Community Based Adaptation (CBA) is an invaluable and essential component of the vision for resilient development across Africa. It aims to provide greater clarity on what CBA looks like and how it can add value to disaster risk reduction (DRR) and sustainable development approaches by building the adaptive capacity and resilience of vulnerable communities. It is intended to assist concerned policy makers and practitioners by demonstrating some successful practical approaches to CBA which can be adopted and scaled up. The document draws from CBA lessons learnt by the Adaptation Learning Programme for Africa (ALP), implemented by CARE International over four years of practical experience across four countries in Africa; Ghana, Kenya, Mozambique and Niger.

What is CBA and how does it add value to climate resilient development?

Key messages for practitioners and policy makers:

- Building resilience requires a coordinated approach which goes beyond stand-alone adaptation actions to integrate adaptation into local and national development planning, disaster risk reduction and early warning systems, ecosystem management and sustainable development.
- Empowering vulnerable communities to play a central role in the planning and decision making processes affecting their lives will be more successful than pre-determining solutions.
- Adaptive capacity is central to building resilience and involves developing processes and capacities which enable continued response to a changing and uncertain climate over time.
- Differential vulnerability and capacity of different groups and individuals to respond to the impacts of climate change, along with their valuable knowledge, must be taken into account when developing responses.
- Information from climate science and the ability to understand and work with uncertainty is an essential resource to assist decision making for adaptation and resilience.
- A multi-level, cross-sectoral approach involving a range of different stakeholders is necessary to develop adaptive capacity and build long term resilience.
- Community based adaptation depends upon but also adds new dimensions to good development practice, ensuring that interventions are decided and designed based on understanding current and future impacts of climate change.
- CBA is a cost effective approach to developing adaptive capacity and building resilience; the social, economic and environmental benefits outweigh the costs of implementation in virtually all scenarios.

Building the resilience of vulnerable communities will not happen through isolated actions in adaptation, DRR, early warning systems (EWS), social protection, ecosystems management or development. A coordinated response which works together to achieve resilience over the long term is essential and is more likely to result in multiple wins across adaptation, development, food security, risk reduction and mitigation. CBA provides an effective, practical and integrated approach which strengthens adaptive capacity, and supports planning and implementation of DRR and climate resilient development, informed by knowledge of climate information and risks. It seeks to address broader underlying causes of vulnerability which, if left unchallenged, would prevent the achievement of resilient outcomes.

CBA is about empowering vulnerable communities and their local governments and service providers to understand and analyse how the climate is and will continue to impact on their lives, make informed and anticipatory decisions on priority adaptation actions, and constantly adjust their livelihood and risk management strategies in response to new and uncertain circumstances. This is the starting point for effective adaptation, bringing decisions under the control of those affected by them and avoiding predetermined solutions.

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CBA recognises the inherent adaptive capacity which exists within vulnerable populations and seeks to build on this. Adaptive capacity is central to building resilience because it involves the processes and capacities which enable continued response to a changing and uncertain climate over time. Adaptive capacity[1] is strengthened when climate vulnerable people have more:

- access to, accumulation of and control over assets
- knowledge and information
- confidence in and access to innovation
- access to effective institutions and entitlements
- and when they are making more flexible and forward looking decisions.

CBA acknowledges that within communities, and between men and women of different ages, there are differences in both vulnerability and capacity to respond to the impacts of climate change as well as valuable knowledge, which must not be ignored. Differences in roles, power and access to and control over resources enable some groups or individuals to adapt and hinder others from doing so. This applies in particular to gender based differences. Analysis of these differences is important to guide identification of appropriate, mutually supportive and gender equitable adaptation strategies and ensure future resilience for all groups.

Information from climate science is a relatively new but essential resource which can assist decision making and planning for adaptation and resilience, taking into account the value of local knowledge alongside scientific sources. Given that it is not possible to accurately predict the future, climate information becomes more useful when it is communicated together with expected levels of risk and uncertainty, and is 'translated' into information or scenarios that can be used to make decisions for action. Understanding that climate change is increasing uncertainty already creates the need for more diversified, flexible and anticipatory decision making and risk management by communities.

Building resilience requires working at multiple levels with a range of different stakeholders. Climate resilient development will not be achieved through community action alone. A wider approach is required, in which local to national level actors work together to support community decision making and action in adapting to climate change and building resilience. CBA is a multi-level and cross-sectoral approach which involves working from community level actions to local government planning and capacity building, through to influencing national level polices and plans in favour of approaches which are responsive to the needs of the most vulnerable.

Good development practice provides the foundation for successful CBA. For example, participatory, rights based, gender responsive approaches which do no harm and support analysis and decision making on improved interventions, institutions, linkages, resource management and technology development are important for effective outcomes in any sector. CBA adds to these through focusing on climate risk and impacts analysis, climate information services, adaptive capacity and design of 'climate smart' interventions in the context of different timescales.

CBA is a cost effective approach to developing adaptive capacity and building resilience. This is from a study conducted by nef (new economics foundation) in Garissa County, Kenya. Through forecastive cost-benefit analysis based on empirical and secondary data, nef examined where no adaptation intervention occurs against where there is an investment in adaptation. The results show that the full stream of benefits (economic, social and environmental) of investing in CBA under numerous scenarios outweighs the investment costs and the cost of 'doing nothing' in almost all scenarios. Under the most realistic scenarios, investing $1 in adaptation generates between $1.45 and $3.03 of wealth accruing to communities. Flexible financing mechanisms that support access to information and decision making processes and allow local governments and communities to make their own plans for adaptation action are needed for adaptation programmes, but even more importantly as part of broader resilient development, DRR and sector specific plans and programmes.

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[1]Reference to ACCRA Local adaptive capacity framework: http://community.eldis.org/.59d669a7/ACCRA%20Local_Adaptive%20Policy_new.pdf

Maize harvesting in Garissa, Kenya ©2011 CARE-Ahmed Hassan

Practical approaches to community based adaptation

As outlined above, CBA involves an integrated response which combines livelihoods and DRR strategies with building adaptive capacity and addressing the underlying causes of vulnerability, all of which is informed by climate knowledge and understanding of risk and uncertainty. CBA approaches are inclusive and participatory in order to facilitate meaningful involvement of all community groups, particularly the most vulnerable, alongside other stakeholders in the planning and decision making process.

Participatory Scenario Planning for Climate Communication

Participatory Scenario Planning (PSP) is an approach which enables communities and local governments to use seasonal forecasts to develop climate resilient plans and advisories for livelihoods, DRR and sector services. PSP workshops bring together local actors with meteorological services who share seasonal forecasts and listen to local forecasts generated by communities. Participants collectively interpret the forecasts in light of current conditions, forecast probabilities and inherent uncertainties. They develop scenario based advisories which translate the forecasts and their probabilities into information which can be used to make development and DRR decisions at community and local levels. PSP provides a simple means of collectively understanding, interpreting and using forecasts to take advantage of opportunities and to help overcome the challenges experienced in changing climatic patterns such as shorter rainfall seasons, shifting of the time when rains start, extreme events such as flooding and extended drought periods amongst others.

In Kenya where ALP has been facilitating PSP since 2011, access to advisories produced at the workshops has had a positive impact on local communities. In recent years communities have better prepared themselves for the occurrence of both droughts by planting short season crops and fodder to maintain livestock health, and of floods by moving irrigation pumps from areas that are likely to flood, taking advantage of receding flood waters for additional crop/fodder production and vaccinating animals against disease. They have also used the advisories to make longer term decisions such as on grazing management and the storage of grain and fodder for future dry seasons reducing the hunger gap and the potential loss of livestock.

Implementing community adaptation plans in Niger, ©2012/CARE-Awaiss Yahaya-ALP

Community Adaptation Action Plans

Community adaptation action plans (CAAPs) empower communities to make their own collective decisions on priority actions they can take to better adapt to climate change. The CAAP's contain agreed priorities and plans for adaptation for and by different groups. They are based on a series of participatory community analysis and planning discussions, starting with a climate vulnerability and capacity assessment (CVCA). The CVCA results are validated by the community as a whole leading to identification of potential adaptation actions. Gender based focus group discussions ensure that the priorities of men, women and youth are included. Focus groups deepen their exploration of critical causes of vulnerability and risk, and develop their development aspirations or goals to further refine the priority list of adaptation strategies.

The strategies are assessed against their goals and screened for their economic, social, environmental and technical feasibility and their consequences in relation to climate impacts and to gender equality. Each community then decides on strategies which are suitable for both men and women to adapt to the impacts of climate change. These plans are documented using visual symbols agreed by the community, disseminated to the whole community and posted in a public place. The plans usually include activities which focus on resilient livelihoods, risk reduction and environmental protection, which the community or individual households can plan and implement with minimal external support.

In Niger, 20 pastoralist and agro-pastoralist communities in Dakoro district are implementing their CAAPs, including production and use of improved seed varieties, tree planting for firebreaks and income generation, and goat rearing. Women have particularly benefitted from the CAAP process, through diversified economic activities, savings and loans, reduced debt and increased confidence and voice in their communities. In addition, ALP has enabled the plans to be shared with local authorities and has successfully advocated for their integration into local commune development plans.

Training in DRR planning by SCAP/RU in Aman Bader, Dakoro Niger © 2011/Awaiss yahaya-ALP

Integrating CBA into disaster risk reduction/early warning systems

Disaster risk reduction (DRR) and early warning systems (EWS) are essential responses where extreme climatic events threaten livelihood security. Community based DRR/EWS systems enable more localised information on vulnerability and capacity to be gathered leading to decisions and actions better suited to the local context. ALP is strengthening EWS in Ghana and Niger through training actors in their roles and responsibilities, facilitating external communications with mobile phones and supporting mobilisation of resources.

In Dakoro district in Niger, ALP has supported the implementation of early warning and emergency response committees at community level known as SCAP/RUs, whose members monitor vulnerability on a number of indicators. ALP has enabled the members to access and use weather information, with dissemination of seasonal and short range forecasts, adding climate observations into the SCAP/RU monitoring records and the installation of community rain gauges.

The SCAP/RU in Dakoro collect rainfall records and disseminate these to the vulnerability monitoring observatories (OSV) established at the local government level, which pass them on to local radio as well as higher levels of the EWS system. Community members are able to access the rainfall records directly from the community monitors or through the radio announcements, providing instant information. This is a powerful and localised tool for decision making on crop variety, planting dates and other farming activities which reduces risks of seed loss through multiple replanting and reduced harvests. As a result of the EWS, community information is taken into account at municipal, departmental and even national levels, and emergency responses like food distribution or cash for work are better tailored to reach needy households.

In 2012, pest outbreaks in Niger threatened crop harvests but thanks to information reported by the SCRAP/RU's through the EWS, the Government had enough time to take action to control the outbreaks minimising losses. The EWS has enhanced social cohesion within communities, improved community knowledge on responses to vulnerability and risks and demonstrated the value of local knowledge.

Farmer field school in Mozambique ©2012/CARE-Mario Basilio

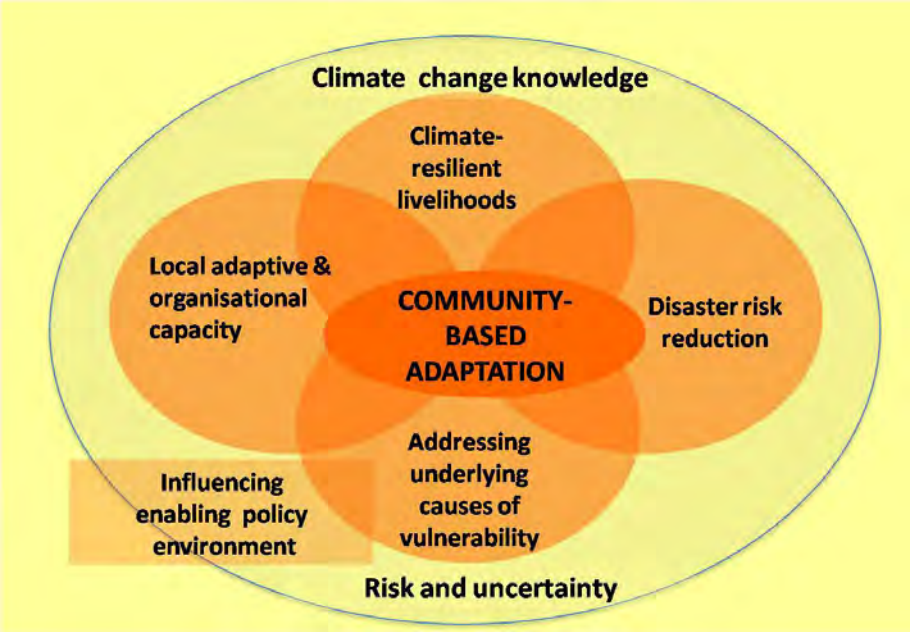
Farmer Field Schools

The Farmer Field School (FFS) approach provides a learning platform through which adaptive capacity of vulnerable farmers affected by climate change can be built, alongside the technical agriculture practices the schools are designed for. Through practical learning on a demonstration plot, farmers are able to share their experiences and observations, analyse their own techniques and local knowledge and assess the value of new practices introduced by extension workers. This promotes experimentation and innovation and leads to replication on their own farms and uptake by neighbours. One discussion which has been generated as a result of ALP supported FFS, is the need for access to weather information via text message sent to local disaster risk reduction agents or through radio. Early warning for cyclones and seasonal forecasts which give rainfall probability amounts and start and end dates can enable farmers to make better informed decisions about which crop and variety combinations to invest in on their own farms. ALP plans to further develop the FFS model by more explicitly including climate change awareness and adaptation planning.

In Mozambique, ALP is supporting 50 FFS with over 1000 farmer participants in vulnerable coastal and inland communities in Nampula province. Community members have already reported that FFS is helping them to address climate change impacts through learning about practices such as conservation agriculture and multiplication of disease free cassava, peanut and new short-season varieties of cowpea, pigeon pea, lablab and mucuna. These new crop varieties and cover crops are improving drought resilience and reducing the length of the hunger season.

A useful framework for Community Based Adaptation

CARE International developed this framework in 2009. It has been a useful guide for ALP's CBA work, representing the holistic and interlinked nature of CBA.



The four components for successful adaptation it presents are:

- Promotion of climate-resilient livelihoods strategies such as diversification of land use and incomes.
- Disaster risk reduction strategies to reduce impacts of increasing climate-related natural disasters on vulnerable households.
- Strengthening capacity in a) community adaptive capacity and b) local civil society and governmental institutions to better support communities in adaptation efforts.
- Local and national level empowerment, advocacy and social mobilization to: a) address the underlying causes of vulnerability, such as poor governance, gender-based inequality over resource use, or limited access to basic services, and b) influence the policy and enabling environment.

Adaptation planning and action in all of these components is informed by climate knowledge and risks - in addition to the range of information on local context and conditions, underlying causes of vulnerability and the enabling environment.

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Reference documents and further information can be found at: http://www.careclimatechange.org/adaptation-initiatives

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