



# Climate resilient development: Experience from an African capacity development programme

## LEARNING BRIEF



Investing in water security for growth and development

### **About AMCOW**

The African Ministers' Council on Water (AMCOW) was formed in 2002, primarily to promote cooperation, security, social and economic development and poverty eradication among member states through the effective management of the continent's water resources and provision of water supply services. In 2008, at the 11th ordinary session of the African Union (AU) Assembly in Sharm el-Sheikh, Heads of States and Governments of the African Union agreed on commitments to accelerate the achievement of water and sanitation goals in Africa and mandated AMCOW to develop and follow up an implementation strategy for these commitments. AMCOW has also been accorded the status of a Specialised Technical Committee for Water and Sanitation in the African Union.

### **About CDKN**

The Climate and Development Knowledge Network (CDKN) supports decision-makers to design and deliver climate compatible development. It does this by combining research, advisory services and knowledge sharing to support locally owned and managed policy processes. CDKN works in partnership with decision-makers in the public, private and non-governmental sectors nationally, regionally and globally. CDKN operates in Africa, Latin America and Asia and the African programme is managed by SouthSouthNorth.

### **About GWP**

The Global Water Partnership is an intergovernmental organisation of 13 Regional Water Partnerships, 80 Country Water Partnerships and more than 2,500 Partner Organisations in 161 countries. Its vision is a water secure world. Its mission is to support the sustainable development and management of water resources at all levels through integrated water resources management (IWRM). IWRM is a process that promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare in an equitable manner, without compromising the sustainability of vital ecosystems and the environment.

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# Introduction

This learning brief presents insights and lessons learned from a capacity development programme on water security and climate resilient development covering eight countries in Africa – Burkina Faso, Burundi, Cameroon, Ghana, Mozambique, Rwanda, Tunisia and Zimbabwe. The programme engaged some 140 participants and 30 lecturers/mentors, and held over 50 workshops. Large investments were made in the development of learning material in three languages (English, French and Portuguese), the establishment of national management and lecturing units, and building a strong sense of programme ownership in each country.

The programme “The Economics of Adaptation, Water Security and Climate Resilient Development in Africa” was run between August 2012 and September 2015. The purpose of the programme was to develop the capacity of planners and technical officers in government departments to be able

to identify, develop and appraise so-called no/low regret investment options and to integrate these into national, transboundary and regional development planning processes.

The capacity to promote water security and integrate climate change considerations into national planning processes is still limited in most of the eight countries. However, following the implementation of this programme, much has been learned by individual participants, their home institutions, and engaged lecturers, and there are now many ongoing initiatives that promote the inclusion of climate change considerations in national development efforts. There is great scope both to extend the programme for several more rounds in the same countries, and to expand to other countries. With significant efforts already invested into the development of learning materials and training of trainers (ToT), the cost per participant will be much reduced in future new programmes.



# Climate resilient development

Climate variability is nothing new. Humanity has lived with "good" and "bad" years throughout history. Floods and droughts are normal and recurrent events in many parts of the world, and people have learned how to cope with them. What is new today, however, is the rate and magnitude of change and how to adapt to such changes in a short time. Affluent communities may do this relatively well, but poor communities are likely to be badly affected. Climate change also exacerbates the effects of poverty and inequality<sup>1</sup>. Those with poor access to household water today are likely to find the situation worsened in years to come as climate change progresses. Climate change is also linked to the danger of exceeding critical ecosystem thresholds and triggering non-linear changes, i.e. when natural and human-caused stresses drive an ecosystem beyond the bounds of its normal state and the system "flips" into another state with significantly different characteristics. If that happens it is likely to have serious negative effects on environment and society alike.

Climate resilient development refers to development activities that will deliver benefits under all potential future climate scenarios and can cope with uncertainties over future conditions. It differs from business-as-usual development in actively considering and addressing potential existing and future climate risks<sup>2</sup>. It also differs from ordinary development work by having a stronger focus on flexibility, robustness and the future, coupled with an identification of climate stresses (e.g. floods, droughts, heat waves) and a reduction of the vulnerability to

these. Compared to ordinary planning exercises, climate resilient development gives greater emphasis to climate variability and how to mainstream climate considerations into development planning. Planning remains the key word here. It is by doing good planning that we can develop the adaptive capacity to cope with climate change. By having appropriate strategies, policies and methodologies, and implementing these, countries can adapt and hopefully thrive – despite the difficulties posed by climate change.

A key term in climate resilient development is *no/low regret investments*. Derived from economics, the concept is defined as investments that bring benefits under both current climate and a range of future climate change scenarios. In other words, it increases the likelihood of getting good returns from investments made whatever climate conditions the future may bring. An example may include to increase the height of a new bridge being built across a river, in order to withstand greater future floods. To raise it during construction does not cost very much, compared to building a new one to replace an old one if washed away. But identifying, appraising and developing such investments is a challenge that is linked to the capacities national and local governments have for carrying out effective adaptive planning. This in turn requires a good dialogue with relevant stakeholder groups, access to information, openness, anti-corruption measures and adequate technical planning capacity.



# The WACDEP capacity development programme

The Water, Climate and Development Programme for Africa (WACDEP) was developed by the African Ministers' Council on Water (AMCOW) as a response to the African Union Heads of State and Government adopting the Sharm el-Sheikh Declaration on Water and Sanitation in July 2008. WACDEP aims to integrate water security and climate resilience in development planning processes, develop partnerships and capacities to build resilience to climate change through better water management, and develop 'no regret' financing and investment strategies for water security and climate change adaptation. It consists of four components: investments in regional and national development; innovative green solutions; knowledge and capacity development; and partnership and sustainability. WACDEP is managed and implemented by the Global Water Partnership (GWP) and partners through its WACDEP Africa Coordination Unit in Pretoria, South Africa.

The third component, the capacity development programme, was launched in August 2011 and focuses on eight countries and five transboundary basins. Following a preparation period in 2013, when learning needs assessments were made, staff engaged, and packages of learning material produced in English, French and Portuguese, implementation started in the eight target countries in early 2014.

The learning material is based on a technical background document titled *Water security and climate resilient development* and the findings of the learning needs assessment undertaken in each target country. These background documents are available on GWP's WACDEP website<sup>3</sup>. Specifically, the document outlines a framework to be followed in working

towards water security and climate resilient development. The framework and its four phases are outlined in Figure 1 and the different phases are presented in Box 1.

During preparations, a unit was established in each country consisting of a management team, a training coordinator, GWP's country partnership staff, and three lecturers. The lecturers

## Box 1.

### Key framework cycle activities

#### Preparations:

1. Using climate change and socioeconomic scenarios to inform development planning. Scenarios play a central role in the framework.

#### Understand the problem:

2. Producing a case for investing in water security for climate resilient development.
3. Identifying stakeholders and their roles in subsequent stages.
4. Identifying studies and evidence for review in next stage.

#### Identify and appraise solutions:

5. Identifying and developing a balanced portfolio of investment options that enhance water security for climate resilient growth and development.
6. Prioritising no/low regret options and making a clear economic case for investment.

#### Deliver solutions:

7. Integrating a balanced portfolio of no/low regret investment options into existing development planning systems and project implementation pipelines.
8. Developing financing strategies for these investments.
9. Mainstreaming climate resilience into development planning processes, as a longer term measure.

#### Monitor and move forward:

10. Reviewing the application of the framework process.
11. Setting up a system for monitoring implementation progress.

The framework is centred on an iterative, cyclical decision-making process split into four phases. As a decision-making process it resembles other existing national planning approaches, although it is focused more on climate variability and unknown future conditions. Key issues are to identify no/low regret investments across a wide range of sectoral interests; ensure measures and investments that take into account current and future climate conditions, socioeconomic development and water use trends; and promote practical, robust decision-making.

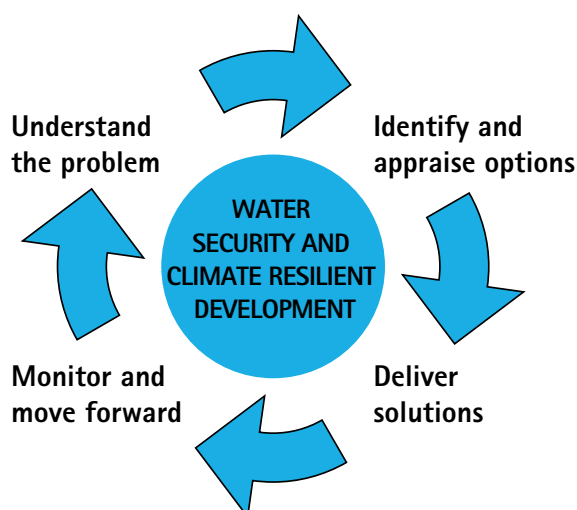


Figure 1 The framework cycle.

represented the programme's three main thematic areas: IWRM, economics and planning. They also acted as mentors to the participants. Benefitting institutions and potential participants were identified based on a combined appointment and application process, and 17 participants per country representing two groups, planners and strategic decision-makers, were selected. The 12 planners received the main thrust of the training, whereas the five strategic decision-makers were only included at the beginning and at the end (due to their busy schedule) in order to gain an understanding about key concepts and how to support the planners' involvement in the programme and promote climate resilient development within their areas of responsibility.

Altogether 170 people in the eight participating countries were engaged in the programme. Programme activities included a start-up meeting and five workshops per country. The workshops followed the framework cycle and included a mix of lectures, discussions, excursions and case study analyses. Between workshops mentor-supported action plans (individual projects) were undertaken. At the end of the programme, participants sat an online exam, for which a pass grade was required in order to gain a certificate for the programme. The exam was administered by the United Nations Institute for Training and Research (UNITAR). Out of the 120 participants who took the exam, 110 successfully passed. An online survey assessed participants' views about the programme and what they had gained from it. Finally, all country management units provided comprehensive reporting on activities performed and results achieved.

## Examples of results from country projects

**Burkina Faso.** Water security issues were enhanced in the National Adaptation Planning (NAP) process document that provides the national framework for interventions to reduce the country's vulnerability to climate change and address medium and long term climate challenges. This happened through the work undertaken by the trainees from the Permanent Secretary of the National Commission for Sustainable Development and

their mentors. They focused on identifying water security related gaps and defining required interventions to bridge these and included both in the NAP process document approved by the Government of Burkina Faso in October 2015.

**Ghana.** Based on the good experience of implementing the WACDEP capacity development programme and how it integrates many different but linked issues, the Ghana Country Water Partnership intends to institutionalise the programme's capacity development curriculum at the Local Government Training Institute under the Ministry of Local Government and Rural Development. This institute is charged with the responsibility to train public servants in subjects important in national development efforts. Similarly, as one of the programme trainers is a senior member of the Department of Civil Engineering at the Kwame Nkrumah University of Science and Technology, Kumasi, the capacity development programme curriculum will be established as a university course.

**Mozambique.** An immediate result of the programme in Mozambique was the development and submission of a project proposal titled "Supporting urban flood management in Maputo towards enhancing climate resilience" to the African Water Facility (AWF) in November 2014. The proposal has subsequently been approved by AWF for funding. The proposal was based on the AU-AMCOW strategic framework on water security and climate resilient development and was developed by the programme participants with guidance from the National Council for Sustainable Development.

**Tunisia.** A mentor-supported participant's project focused on a review of the national standard Terms of Reference for 10-year water and land planning studies in order to integrate climate change. Although the project was limited to modification of a few articles to include climate change in the ToRs, it triggered a comprehensive review of the ToRs and the organisation of a national workshop bringing all involved stakeholders from national and regional levels together to discuss and validate the ToRs<sup>4</sup>. Furthermore, as WACDEP was in a position to provide support to engage a consultant to finalise the revision of the ToRs, a final national seminar was arranged in February 2015 to present and validate the ToRs.



# Lessons learned from implementing a large capacity development programme in Africa

**National ownership.** The programme was initially planned to be managed by Sweden and South Africa in partnership. However, it was soon realised that this would not work. Country staff would not have an adequate sense of ownership and pride in the programme to ensure that all activities were undertaken well and in a timely fashion. It was therefore decided to decentralise programme management, the contracting of national staff, and budget control to each country GWP/WACDEP structure. This proved to work very well. It also had the important and beneficial effect that engaged people – national programme management as well as lecturers – very actively adapted the programme content to their country context and identified many opportunities that exist to bridge training and ongoing processes relevant to water and climate change in their country. This benefitted individual action plans and their WACDEP financially supported implementation.

**National trainers.** When the programme started, it had been assumed that international experts were required since adequately experienced and competent national trainers were not available. This assumption proved to be invalid. National

trainers of adequate expertise and experience were available in all eight countries, including the smaller ones, and in all the various specific subjects. There was no need to engage international experts. National trainers were typically university professors, but also derived from government institutions and independent consultancy firms. Future programmes should try to engage national staff as trainers first, and only opt for international trainers if a specific capacity is missing. This approach generates better results through using motivated local lecturers, as well as reducing both the cost of travel and the emission of greenhouse gases.

**Linking capacity development and ongoing national processes.** Capacity development should not take place in isolation from ongoing political debates and processes that shape society at large, the participants and their home institutions. By linking these together, capacity development can turn into a continuous process that connects training and the application of new knowledge in daily work, thus supporting ongoing processes and in the end delivering tangible outcomes and impacts. The programme did achieve this: by linking the



training to participants' action plans that focused on, for example, the development of national climate change policy papers, five-year strategic plans, and a new university master's programmes, tangible outcomes and potential impacts were generated.

A quote from the national training coordinator in Tunisia exemplifies the ownership, engagement and pride that many had in the programme: *"The capacity building programme wasn't operated as a one way programme where the participants were expected to receive knowledge. Participants were active in the programme through the group exercise and the mentoring activities. One important achievement was that the participants realised the role they can play in mainstreaming water security and climate resilient development in the planning chain. Actually, they became aware that they are entry points themselves, being directly involved as actors in the development process".*

**Curriculum development.** A generic programme curriculum was developed to be used in all participating countries across Africa, providing a common platform from which all participants would gain uniform training and learn a set of defined issues. This enabled professional pan-African discussions and networking to take place. However, countries also differ in terms of needs, contexts and existing capacity. This issue was extensively discussed during the ToT workshop. A flexible approach was therefore adopted, where each country team of lecturers decided on the choice of case studies and excursion sites, how to prioritise between different curriculum topics, and the focus of discussions and exercises. In the event, some countries followed the generic version very closely while others differed from it somewhat. The outcome was that all participants received adequately uniform training, gaining a common knowledge base and the ability to cooperate across the African continent.

**Mentor-supported learning.** A mentor programme was arranged as a complement to workshop activities. Each lecturer acted as a mentor for three mentees and supported them in the implementation of their Action Plan (an assignment each participant undertook as part of the programme and in many cases financially supported by WACDEP). The mentors were much appreciated, as expressed by a mentee in Ghana: *"Mentor-mentee relationship was a brilliant idea. It serves as a platform for continuous learning outside the workshop periods."* This type of mentor programme should be included in future, similar

programmes. As this is a new approach, mentoring skills should ideally be included in the ToT workshop before the programme commences.

**Training of trainers.** Lecturers were given a week-long ToT workshop. This was an important activity and was highly appreciated. Many issues were covered, including the programme structure, roles and responsibilities, how to adapt programme curriculum to country contexts, and the programme's scientific content. However, more time should have been added to this important activity (funding constraints limited the ToT to one week) in order to include issues such as mentoring, general team building and additional scientific presentations. In future programmes the ToT should be given twice; one workshop before the programme starts and one at half time. Once the workshops started, no support mechanism was available for the trainers.

**Linking training activities and action plans.** As noted above, the programme was able to link training activities with ongoing national processes. However, many funding agencies cannot support both within the same budget as they are often linked to, for example, different agency sections or overall development support agreements. This potentially results in fewer outcomes and impacts. The programme was able to circumvent this obstacle by having overarching WACDEP budget support for the participants' action plans. Being adequately comprehensive and thus able to support both capacity development and project implementation was a unique feature of WACDEP.

**Change management.** A key issue is the ability of large institutions to learn and change as conditions change and new capacity becomes available. Capacity development is not only about scientific capacity, it is also about how to apply and use this capacity. This is referred to as *change management*, in which participants become *change agents*. It is an important factor determining overall results and long-term outcomes and impacts. One shortcoming of this programme was that it did not support the inclusion of change management in the curriculum, and ideally it would be included in future such programmes.

**Assessment of results.** It is difficult to assess the results achieved in capacity building programmes because they often take a long time to materialise. Although the programme did implement an extensive system of country reporting, a more formal approach would have addressed the end-of-programme reporting requirements more adequately.



## Conclusions

This programme provided many opportunities to learn. Two are of particular importance. First, with strong national ownership of programme activities, those engaged in each country gained a strong sense of pride in and responsibility for programme activities. This translated into well implemented activities, good learning and tangible results. Second, by having programme management located in each country, it is possible to close the gap between training and participants' work duties. This enables capacity development to be a process that slides in between training and implementation, and over time support activities can turn into tangible outcomes and impacts. Other related lessons learned included the value of using national trainers rather than international experts; how mentors can support participants in the application of new

knowledge, how to balance a generic pan-African curriculum with national conditions, and how to plan, manage and implement a large and complex capacity development programme.

Looking ahead, the need for capacity development in climate resilient development has not ended with the finalisation of this programme. This is the time to reap the benefits of past investments and use the experience, trained staff and training materials available to both offer the programme again in the same countries and expand to new countries across Africa. Future programmes can deliver capacity development and linked results for a much lower cost per person. Such an opportunity should not be lost.



# Endnotes

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