

URAdapt Project Briefing Note

1. Project context and rationale

The water resources sector will be among those most affected by changes in climatic conditions. Due to the interconnectivity between upstream and downstream areas, alterations in water quality and quantity in one will have implications for resource availability in the other. Access to basic water supplies is already constrained in much of sub-Saharan Africa, and the situation is expected to be exacerbated by future changes in the climate. Strategies to build climate change resilience in urban water sectors in Africa must adopt a broad perspective; one that recognises the dependence of urban centres on outlying rural areas, particularly where these supply water and food for cities. Simultaneously, resilience strategies must account for the relationships between multiple water-use sectors.

However, analyses that consider the quantitative and qualitative implications of water use and management, across the urban-rural interface and between different water-use applications, are currently lacking. Research on climate change adaptation strategies has to date focused mostly on water resources management for rural agriculture. Simultaneously, urban infrastructure planning has so far ignored climate change and its related consequences for urban per capita water needs and wastewater disposal. The URAdapt project fills these gaps by examining the impacts of climatic and demographic changes on urban water resources management in Accra, Ghana and Addis Ababa, Ethiopia. These sites exemplify problems typical to developing cities in sub-Saharan Africa.

2. Project approach

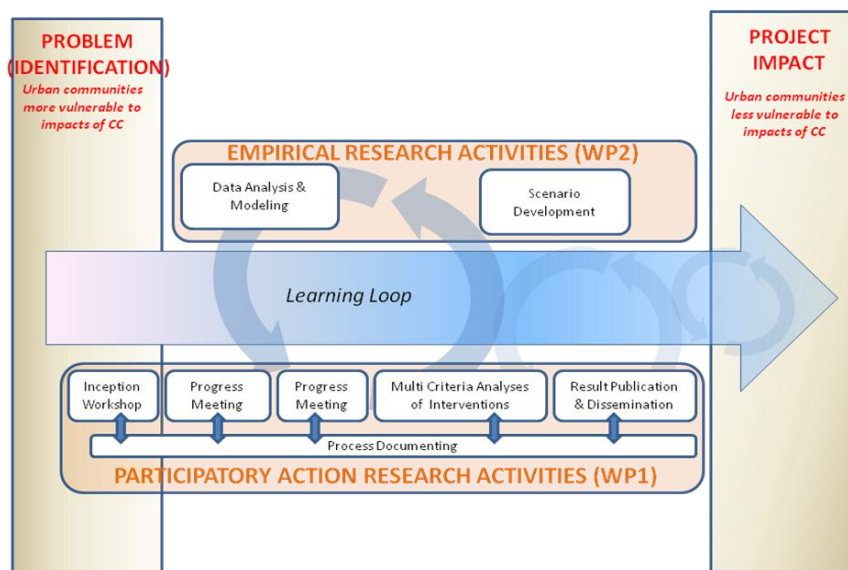
URAdapt has been conceived to address the following question: **how can we assist African cities in making informed decisions to support urban resilience under conditions of economic water scarcity (insufficient investments), weak institutional arrangements and a lack of integrated planning and management?**

Using a modelling approach, the project will analyse different scenarios of urbanisation, water use and hydrological change related to the climate, in order to project possible water futures for the cities and their relationships to rural areas. On the basis of this information, an interactive multi-stakeholder platform will identify adaptation responses for making cities more resilient to climate change. These will be presented to decision-makers.

Social inclusion is an important aspect of the project. URAdapt will enrol city authorities, water resources and sanitation managers, climate change actors, and affected and vulnerable groups and communities – including women’s groups – in the respective cities into the platform.

The project is structured as two interconnected work packages: a multi-stakeholder platform for learning, reflection, feedback, strategy development and evaluation (work package 1); and an analytical research process, which includes various types of studies and modelling (climate change, hydrological, socio-economic) (work package 2).

The analytical research process will assist in identifying solutions for discussion at the platform. These will reflect various combinations of water supply and allocation options, demand management, water-saving sanitation solutions, as well as water reclamation and reuse for agriculture. The resultant adaptation strategies will take into account technical, socio-economic and environmental factors, and the platform will identify institutional roles and responsibilities for the process of adaptation. The diagram below illustrates the interactions between the two work packages:



URAdapt is jointly facilitated by the International Water Management Institute (IWMI), the Water Research Institute (WRI) of the Council for Scientific and Industrial Research (CSIR) as well as the Addis Ababa University. The project builds on ongoing research in integrated urban water management in the two selected cities, and will benefit from similar studies conducted by IWMI in India. In Accra, URAdapt builds on already established platforms at the city-level for integrated urban water management.

3. Project objectives and outputs

The overall objective of URAdapt is **to reduce the vulnerability of cities to climate change through strategic actions for more integrated and improved urban water and wastewater management in two selected cities of East and West Africa.**

The specific objectives of the project are to:

1. To use scenarios to develop a shared understanding of climate change and its effects on water management at the urban rural interface amongst multiple stakeholders.
2. To use scenarios to generate new knowledge on the upstream and downstream implications of urban water demand; resulting wastewater generation; and associated water investments needs.
3. To prepare, in participation with city stakeholders and for the benefit of the most vulnerable groups, a strategic action plan for adapting to climate through improved water resource management.

The project envisions the following key outputs:

- Hydrological scenarios of future water supply for, and wastewater generation in, cities; and their implications for rural-urban planning and agriculture under climate change and urbanization.
- An interactive multi-stakeholder platform with strengthened capacity to discuss the implications of, and adaptation strategies for, these scenarios.
- Decision support for selecting options, and related investments, for integrated urban development, which accounts for urbanisation, climate change, gender and other vulnerabilities, and the mutual dependencies between rural and urban areas.
- Policy and institutional orientations on how to build climate resilient cities.

At the outset, URAdapt stakeholders will have the opportunity to develop a common vision for the project, within the project context and project objectives. By documenting and monitoring progress, URAdapt will generate knowledge that can be scaled out to other cities. The project will actively seek synergies with other networks and platforms in Africa to share its experiences and disseminate its findings.

4. Knowledge sharing plan and roles of stakeholders

URAdapt will identify stakeholders through stakeholder analyses and consultations with key individuals. Subsequent networking meetings with stakeholders will serve to inform them of the project goal and process; discuss their needs and priorities; and build their interest and secure their commitment. Existing platforms in both cities will be linked to this initiative through various forms of information exchange. Further interactions will be developed where possible.

All relevant stakeholders will be invited to the platform, and their expected roles and contributions will be discussed and agreed upon. The tasks of the platform and its *modus operandi* will be defined during platform meetings. Members of the platform will jointly agree on an outcome vision and mission, and on the process of participatory monitoring. They will also decide on the scenarios to be developed and discuss the findings of the scenarios, along with their investment and governance implications. Ultimately, the platform will contribute to identifying the necessary adaptation responses for urban resilience in their cities.

In order to improve impact, individual members of the platform will be asked to identify processes and actors within their organisations that can support the achievement of the project goal; explore their current networks and activities; and determine how these can be brought to bear to strengthen URAdapt. For additional impact, policy roundtables will be organised for local and national key decision-makers with a view to ensure integration of project outcomes into overall development plans.

For more information, contact:

Dr. Liqa Raschid-Sally (project leader) or Ms. Maija Hirvonen (project officer)
International Water Management Institute
Postal address: PMB, CT 112, Cantonments, Accra, Ghana
Visiting address: Martin Odei Block, CSIR Campus, Airport Residential Area, Accra, Ghana
Tel: +233 (0)30 2 784753
Website: <http://uradapt.iwmi.org>