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**Project:**  
HyCRISTAL

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### IMPACT

On the ground partners have improved their understanding of the current linkages between weather and services, and the likely long-term impacts of changes in the climate in their sphere of operation. This has enabled HyCRISTAL to identify, formalise and analyse how a typical 'WASH' remit overlaps with other city systems and how these can best be linked at planning, design and delivery, to ensure positive future health outcomes (public health being the main objective of WASH service delivery).

Through project discussions HyCRISTAL have identified key expert 'groups' – within climate science and outwardly to catchment and groundwater hydrologists, identifying where each group have assumptions or expectations about others' data requirements. This enhanced understanding will enable the climate science to be used to generate plausible future rainfall scenarios. These in turn will form the input into flood models that can provide insight into likely future climate impacts in the urban areas of Kisumu and Kampala.

Through events such as the HyCRISTAL annual meetings, HyCRISTAL are sharing the new climate science being developed with partners to facilitate discussions around impacts. Simultaneously these sessions are used to facilitate communication from professionals working in the group, with climate scientists about the real lived-experience of some of the impacts they are already facing, and how things could change in the future.



### THE CHANGE STORY

Within the Urban Water, Sanitation and Hygiene (WASH) sector, there is recognition that climate change is important and will affect the delivery of water and sanitation services. Similarly technical and professional staff within city and utility departments, who are responsible for the design, construction and maintenance of the physical systems that support this service delivery, are also already beginning to include climate considerations into their work, albeit at quite a simplistic level.

HyCRISTAL's work in Kisumu and Kampala therefore initially focused on trying to engage key people in the city to explore the situation with the current and likely future WASH system(s), considering it to be embedded within other city systems such as solid waste, drainage and infrastructure.

At the initial phase, HyCRISTAL focused on linking weather and infrastructure/services to identify critical 'hot spots' where impacts of adverse weather events could be clearly demonstrated. Having achieved a collective understanding, HyCRISTAL could then work with the project climate scientists and bring the two parties together to identify, model and articulate likely impacts of various changes to weather patterns in the future, and link these directly to future climate scenarios.

### FCFA area of change 4:

Approaches that support co-production of decision-relevant climate information and enable channels for on-going dialogue between the providers and users of climate information.

## FURTHER RESOURCES

[Climate change and Urban WASH micro-site](#)

[Video: Story of a flood](#)

[Learning from HyCRISTAL's urban WASH research in East Africa](#)

## LEARNING

Key learnings from the project are primarily around the long lead times needed to develop meaningful relationships. Significant time is needed to draw in the key actors; a period of 3-5 years is short when considering the need to involve multiple technical partners, civil society and finance. Future projects should therefore allow time and resources for this partner identification and relationship building.

In addition, it is worth noting that many of the failures of urban systems are strongly bound up with questions of urban governance, the control of budgeting and expenditure and the probability (or lack of it) of adequate investment in basic urban services. There would be merit in supporting the communication of results of a project such as HyCRISTAL, into parallel projects and frameworks which seek to strengthen governance.

## Future Climate for Africa's Areas of Change are:

1. Enhancing scientific knowledge and prediction of African climate and new understanding of the resulting impact on the robustness of future climate change scenarios.
2. Strengthening scientists' capacities to develop decision-relevant climate information.
3. Increasing the capacities of users/decision making bodies/institutions to appropriately integrate climate information within medium-term decision-making.
4. Approaches that support co-production of decision-relevant climate information and enable channels for on-going dialogue between the providers and users of climate information.
5. Identifying social, political, behavioural and economic barriers to the use of climate information in long-term decision-making, working to elicit solutions which support effective integration of climate risks within decision making across scales, sectors and social groups.
6. Approaches to climate science research and climate-sensitive risks within medium-term decision making which enable active participation and address the specific concerns of women and marginalised groups.

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