

# Cross collaborative research supporting climate change adaptation



This case study looks at how the Adaptation at Scale in Semi-Arid Regions (ASSAR) project uses interdisciplinary research and academic/non-academic partnerships to support climate change adaptation.

# Introduction

The Adaptation at Scale in Semi-Arid Regions (ASSAR) project aims to produce future-focused and relevant local knowledge to support climate change adaptation in semi-arid regions and improve the livelihoods of local people. The [ASSAR consortium](#) is a partnership between five lead institutions and 12 partner organisations. The project sits within the Collaborative Adaptation Research Initiative in Africa and Asia ([CARIAA](#)) programme that is funded by the Department for International Development (DFID) and the International Development Research Centre (IDRC) from 2012 – 2018.

## The problem

Semi-arid regions are sensitive to the effects of climate change because they already endure high temperatures, low rainfall and long dry seasons. These regions along with deltas, glacier- and snowpack-dependent river basins are called *climate 'hot spots'* ([Targeting climate change hot spots](#), CARIAA). They are termed *climate 'hot spots'* as they are areas where climate change signals overlap with vulnerable people.

People living in these areas depend on their surroundings to provide them with food and a livelihood. Semi-arid areas can be farmed; however, they require a rest period to ensure that the soil, water and other resources recover. There has been an increase of population due to political and economic instability that has led to pressure in these regions. This can cause drought, floods and land degradation which leads to food and nutrition insecurity and at worse – famine. ([Climate Change hot spots: why they matter and why we should invest in them](#), The [Conversation](#))

*'Climate change presents the single biggest threat to development and its widespread, unprecedented impacts disproportionately burden the poorest and most vulnerable'* ([UN Sustainable Development Platform](#))

*'There needs to be a specific approach to tackle climate change hot spots...they cut across boundaries and have limited political representation. As a result are not the focus of direct policy action...'* (Szabo, Nicholls et al, [Making SDGs work for climate change hot spots](#))

## The project

An overview of the ASSAR project focus:

- Aim: To provide regionally relevant research focused on specific socio-ecological risks that affect livelihood transitions, access, use and management of land and water resources
- Research objective: use insights from multiple-scale, interdisciplinary work to improve understanding of barriers, enablers and limits to effective, sustained and widespread adaptation out to the 2030s.
- Geographical focus (seven countries): India, East Africa, West Africa and Southern Africa
- Research areas: The project integrates climatic, environmental social and economic change in case study format
- Cross-cutting theme: Gender roles and relations form a strong theme in ASSAR's approach



## Balancing needs of funders and consortia?

Projects on this scale and scope require adequate time to develop partnerships and refine research questions. There was a two stage process, and funds were provided for shortlisted consortia to develop full proposals.

“The real challenge is to balance funder requirements, institutional – even personal aspirations in the project. Ultimately these would have to come together to ensure that the most important consideration – people living in these areas needs are met,” said Lucia Scodanibbio, Project Coordinator for ASSAR is based in University of Cape Town in South Africa.

To balance these needs, the project makes time to meet regularly to ensure that all stakeholders are on the same page. There are regular meetings amongst the five Co-Principal Investigators, annual meetings, monthly steering committee meetings and electronic email updates.

## Overcoming language barriers

The project partners are based in different countries, are academics or practitioners and also, from different research disciplines. Ms Scodanibbio said “Communication styles vary across countries, disciplines and institutions.”

The project team decided that it was vital to ensure that everyone was on the same page in terms of language. She explained, “A governance specialist will view the word ‘institution’ very differently to a climate scientist.”

To overcome this important barrier, ASSAR developed a series of ‘doctor/patient’ workshops to foster a commonality of language between researchers and also across countries at project meetings. “These workshops paired climate scientists with social scientists to gain an insight into each other’s language and how best to communicate with one another.”

This has fostered an exchange of knowledge between the researchers. Ms Scodanibbio remarked, “Many have said their perspectives have broadened as they are looking at their subject through different viewpoints.”



Image: (CC) Participants at stakeholder meeting by Jen Leavy

## CARIAA Programme

The ASSAR project sits within the CARIAA programme. CARIAA is dedicated to build the resilience of vulnerable populations and their livelihoods in three kinds of climate change hot spots in Africa and Asia: deltas, semi-arid lands, and glacier- and snowpack-dependent river basin. To do this, the programme supports four consortia, which conduct collaborative research on climate change adaptation and resilience in these hot spots. Through the consortia’s research, CARIAA seeks to develop new knowledge, new capacities, and better informed adaptation policy and practice. For more information on the four consortia, visit [CARIAA website](#).

## Broadening horizons—collaborations across consortia

“Most of the consortia are very much researcher lead (including ASSAR), but they focus strongly on stakeholder engagement and long term relationship building in order to support research uptake,” said Georgina Cundill Kemp, Programme Manager of CARIAA, IDRC.

CARIAA encourages collaboration amongst the four consortia. Over the duration of the project, they have found that migration is a theme which cuts across all climate hot spots.

“We have researchers from the four consortia working with one another on a particular topic, at CARIAA we encourage sharing methodologies that could work in different climate change hot spots,” said Ms Cundill Kemp.

## Academic and non-academic partnerships

The ASSAR project partners are not all academics, Oxfam is on board as a partner that focuses on research uptake and research into use. Oxfam has developed impact pathways that are tailored to each in-country partner. This is because they need to be context specific and some projects work at community level and some at the state level.



“The majority of research teams (in country partners) are academic institutions. They have excellent networks but not necessarily at the grassroots/community level. However, some partners were scientific research institutes that have previous experience or stronger ties to communities that were better positioned to take up our approach,” says Jesse DeMaria-Kinney, Programme Co-ordinator for ASSAR, Oxfam.

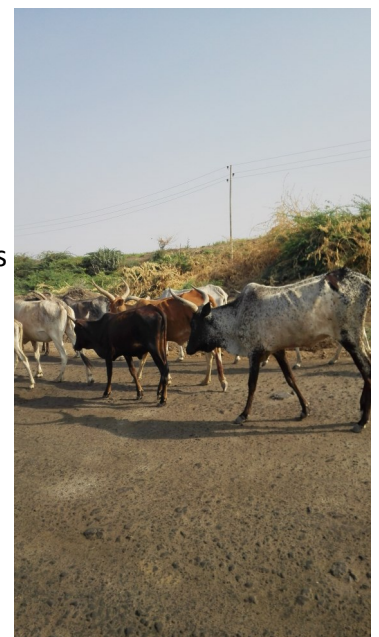
By holding workshops with researchers and encouraging dialogue, Oxfam were able to design impact pathways to foster research uptake.

## Impact

The scale and scope of the ASSAR has meant progress is slow, however, the project is producing interesting results and impact.

Ms Scodanibbio reported, “In Botswana, the planning authorities have asked us to contribute to district development plans that look at adapting to climate change effects. Normally, these plans only look five years in the future. However, the planning authority wants our help with longer term planning – this is where our scenario planning work can contribute.”

Last year, ASSAR contributed to the Africa Drought Conference held in Windhoek, Namibia. The aim of the conference was to create and discuss and drought-risk management framework to help countries be better prepared and resilient to droughts and also help improve lives of rural communities and farmers. ASSAR provided information from research to ensure that social differentiation and governance issues were drafted into the Strategic Framework for Drought Risk Management and Enhancing Resilience in Africa. ([ASSAR at the African Drought Conference](#), ASSAR News).



# Interdisciplinary and inter-institutional working

In the UK and increasingly across the world, funders are focusing more on interdisciplinary and academic/non-academic research projects to tackle development issues. However, more needs to be done to encourage this way of working.

Ken De Souza Research Manager at DFID argues, “There is a need to incentivise interdisciplinary research – such as through the [Research Excellence Framework](#), to encourage the brightest and best academics and institutions to pursue this kind of work.”

The ASSAR project is complex – not just from the problems it is addressing or the knowledge produced but also the range of stakeholders and partners it brings together.

“You need complexity to address complexity,” said Mr DeMaria-Kinney when explaining why interdisciplinary and academic/non-academic projects are needed to solve ‘wicked problems’. “It is an important way of working – we cannot work in siloes to tackle development issues”. This is because development issues such as climate change rarely fit into a neat box that can be tackled by one actor.

“Climate change has often been viewed as a technical issue but it affects socio-economics – such as gender,” says Ms Scodanibbio. The project’s approach is vital to ensure the project synthesises different viewpoints to find the best adaptation solutions to protect vulnerable people from the effects of climate change in semi-arid regions.



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