Using Transformative Scenario Planning to think critically about the future of water for productive use in Omusati, Namibia

ASSAR
Adaptation at Scale in Semi-Arid Regions

March 2017

www.assar.uct.ac.za

Written by Teresa Perez
With input from Dian Spear and Tali Hoffman

The five-year ASSAR project (Adaptation at Scale in Semi-Arid Regions, 2014-2018) uses insights from multi-scale, interdisciplinary work to inform and transform climate adaptation policy and practice in ways that promote the long-term wellbeing of the most vulnerable and those with the least agency.

KEY POINTS

- When asked to explain the current problems related to water in Omusati region, participants most frequently referred to inadequate water infrastructure and the lack of universal water access.
- Participants voted financial resources as the main driver of water problems given the limited funding available for the maintenance of existing water infrastructure and for future water innovations.
- Participants expressed concern about the regional reliance on one water source (the Kunene River which originates in Angola) and the impacts of this reliance on future water and food security.
- Participants saw water harvesting as a crucial way to capture floodwater for use during times of drought.
- Participants believed that the future security of Omusati's water depends on policy makers making water access a top priority.

Transformative Scenario Planning in Namibia

Sometimes social systems get stuck. There is not enough agreement among leading actors about what is happening, or what could or should happen, for the system to be able to move forward. Confusion and conflict impede progress and create the risk of regress.

In such contexts, Transformative Scenario Planning (TSP) can be useful. Developed by Reos Partners, this process enables politicians, civil servants, activists, businesspeople, trade unionists, academics, and leaders of other stakeholder groups to work together to construct a shared understanding of what is happening and what could happen in their system, and then to act on the basis of this understanding.

The focus of TSP is the development, dissemination and use of a set of three or four scenarios (structured narratives or stories) about what is possible. These scenarios provide a shared framework and language for strategic conversations within and across stakeholder groups about the situation they are part of, and what actions they can, must, and will take to address it. TSP thereby offers a way for social systems to get unstuck and to move forward.

Working with a diverse group of relevant stakeholders over two workshops, we are using TSP to imagine what might happen to the provision of water for productive use in the Omusati region by the year 2035.

Here we describe the outcomes of our first workshop that was held in February 2017.

The TSP Process

Step 1: Convene a team across the whole system

TSP workshops aim to construct a safe space where people can talk openly and honestly about complex issues in order to think differently about ways of working together. So we broke with tradition to allow interactions to foster a more informal atmosphere. People addressed one another by first name only and were invited to make use of the translator to encourage a multi-lingual forum. People agreed to keep their interactions respectful and to avoid talking down to others.

To highlight the pressure of conflicting demands people shared what they had sacrificed to attend the workshop, and to begin building relationships across institutional boundaries, people shared their common interests and concerns. Although personal impacts were different, everyone shared a concern about the future of the region's water supply.

Step 2: Observe what is happening

In an iterative process, stakeholders drew on their collective knowledge and experience, along with relevant film and media resources, to determine the driving forces that could significantly impact the future of water for productive use in Omusati. After coming up with 44 driving forces, the group narrowed the list down to the five of greatest concern **(A)**. Then, after much debate, the top five driving forces were condensed into two overarching driving forces **(B)**, which were plotted on axes to form different combinations of future events **(C)**.

A

- Availability of financial resources
- Capacity to harvest water
- Extent of sustainable water management and use
- Rainfall patterns
- Availability of seasonal climate change information

B

IMPACT OF DROUGHT
Encompasses variable rainfall, flooding and the associated effects on agriculture.

POLITICAL WILL
Encompasses financial factors and the behaviour of decision makers.

Step 3: Construct stories about what could happen

Stakeholders were randomly divided into four groups to imagine what the state of water supply in Omusati might look like in 2035 under four different scenarios — *as described in **(C)** on the next page*. Composed of 7-9 people, each group used Lego models to represent the way they pictured the productive use of water in 2035 under their respective scenario. The groups then worked backwards from this future image, to think through what the critical moments might be from now until 2035.

Through several rounds of feedback (from the entire workshop) and modifications, the groups refined their thinking, culminating in the beginnings of a coherent storyline for each scenario. Outlined on the next page are the building blocks that will form the foundations for the final scenarios that will be drafted during a separate meeting in April 2017.

Known as STEEP, a key part of the TSP method is making sure that scenarios take into account different types of driving forces, namely:

- **(S)ocial**
- **(T)echnological**
- **(E)conomic**
- **(E)nvironmental**
- **(P)olitical**

C

MORE

DROUGHT IMPACT

LESS ← POLITICAL WILL

POLITICAL WILL → MORE

DROUGHT IMPACT

LESS

SCENARIO 2:
Low Political Will · High Drought Impact

	S	T	Ec	En	P
2017	Growth in informal settlements	Improved communications		Human-wildlife-livestock conflict	Drilling boreholes
2020	High influx of people to urban areas; Sanitation problems	Early warning systems enhance need	Low yields		Land grabbing
2025	Extension and outreach; Increased vulnerability		Agricultural subsidies; High unemployment rate	Water harvesting	Capacity building; Earth dam excavation
2030	Malnutrition; Food insecurity		Increased food prices		Loss of trust in government; Political instability
2035			Increased poverty rate		Leadership changes

SCENARIO 3:
High Political Will · High Drought Impact

	S	T	Ec	En	P
2017	Reduced job opportunities; Human displacement		Global economic crisis	Pest outbreak	
2020	20% increase in crime; Disease outbreak (human & livestock)			Flooding	Poor policy implement-tation; Increase in social media advocacy
2025	Social unrest			Poor rainfall	Change in leadership; Integrated planning – multi-stakeholders
2030	Inadequate food production; Famine		Ineffective EWS		Green Climate Policy formulated
2035	Livestock mortality; Loss of household income		Source internationa l funds		Green Climate Policy implemented

SCENARIO 1:
Low Political Will · Low Drought Impact

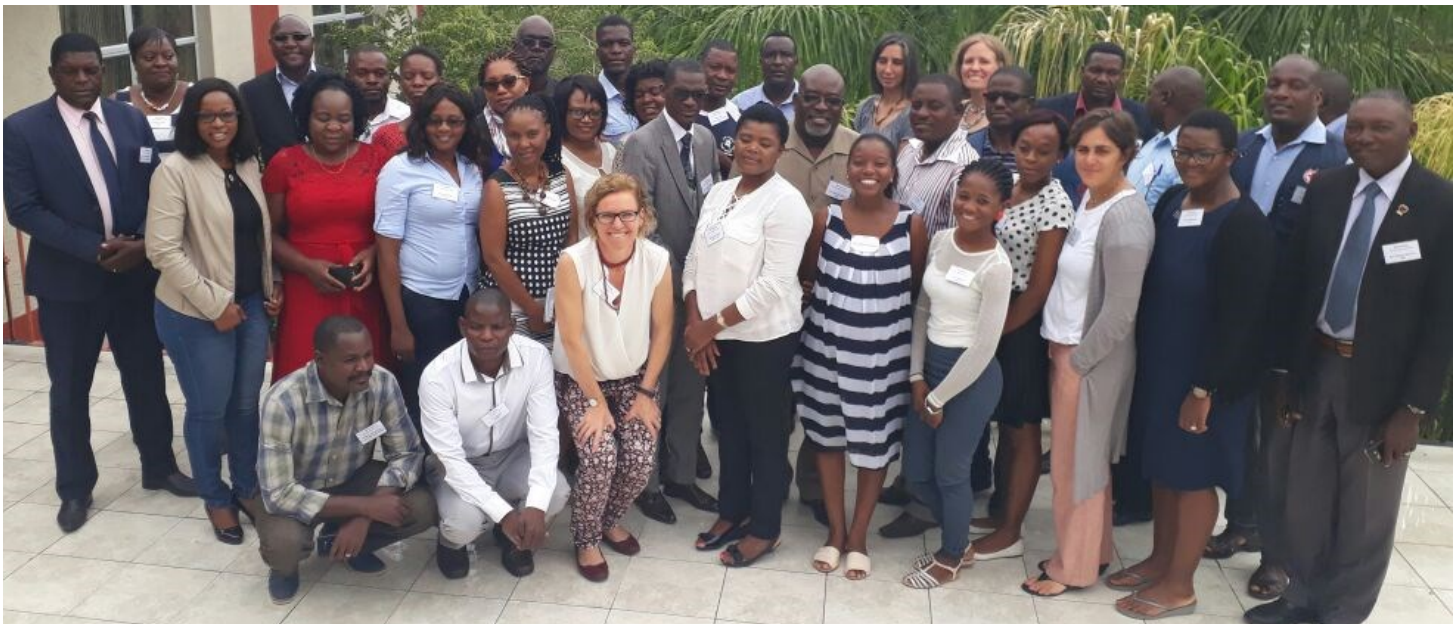
	S	T	Ec	En	P
2017				Good rainfall	
2020	Etaka-Uuvudhiya Canal rehabilitated	Olusahndja Dam deepened to increase water storage	Govt makes donor funds available	Improved grazing for livestock	
2025	Increased food production (small-scale farmers)	Pest control	Increased business opportunities; Surplus food used in agro-processing at Epalela plant	Pest outbreak	
2030	Improved nutrition		Increased job opportunities		
2035	Improved livelihoods				

SCENARIO 4:
High Political Will · Low Drought Impact

	S	T	Ec	En	P
2017	Improved understanding of drought impact		Improved understanding of drought impact	Improved understanding of drought impact	
2020	President launches Tulongeni project	UNDP funds water storage facilities			GRN funding made available
2025		Early warning systems implemented			SADC signs water sharing agreement
2030	Farmers produce surplus food				
2035	Reduced poverty; Increased employment				

Next Steps

In a writeshop in Cape Town, South Africa in April 2017, the draft scenarios will be refined to become more distinct and coherent. Done in consultation with the entire scenario team, this task will be completed by a subset of writers made up of ASSAR team members and volunteer stakeholders from each scenario group. These scenarios will form the foundation for strategic planning during the next workshop (July 2017) with the aim of identifying how to adapt to, and potentially influence, the future.



Thank you to all the stakeholders involved in this workshop. In total 35 people participated, from government (national, regional and local departments), development organisations (The Red Cross, United Nations), service providers (NamWater, NamPower), and local communities (traditional authority, small scale farmers).

Back row: Hon. Leornard Shikulo, Ndapanda Kanime, Peter Muteyauli, Simon Haidula, Isabella Kapolo, Salma Hegga, Veiko Namwoonde, Jacob Hamutenya, Elizabeth Ndivayele, Junias Imbili, Michael Shinyata, Teresa Perez, Dian Spear, Alfons Amoomo, Paulus Hangula,Silvanus Uunona, Tarcisius Shingundu **Middle row:** Victoria Haikali, Mvoyaha Nakaande, Veronica Ekandjo, Margaret Angula, Victoria Shooya, Hon. Erginus Endjala, Hon. Modestus Amutse, Malakia Shoombe, Josef Kandjimi, Timoteus Muhama **Front row:** Gerhard Shaanyenenge, Cecil Togarepi, Colleen Magner, Mirjam Kaholongo, Bernadette Shalumbu, Ester Nangolo, Alice Poniso, Karen Goldberg, Irene Kunamwene, Rev. Phillipus Kashima **Missing from photo**: Cecilia Garises, Birgit Ottermann

ABOUT ASSAR

ASSAR uses insights from multiple-scale, interdisciplinary work to improve the understanding of the barriers, enablers and limits to effective, sustained and widespread climate change adaptation out to the 2030s. Working in seven countries in Africa and South Asia, ASSAR's regional teams research socio-ecological dynamics relating to livelihood transitions, and the access, use and management of land and water. One of four consortia under the Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA), ASSAR generates new knowledge of climate change hotspots to influence policy and practice and to change the way researchers and practitioners interact.

For more information: ASSAR: www.assar.uct.ac.za or email Teresa Perez (tpz031@cariaa.net)
TSP: www.reospartners.com

This work was carried out under the Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA), with financial support from the UK Government's Department for International Development (DfID) and the International Development Research Centre (IDRC), Canada. The views expressed in this work are those of the creators and do not necessarily represent those of DfID and IDRC or its Board of Governors.