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

August 2017

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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, business people, 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 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 and a writeshop, we used TSP to imagine what might happen to the provision of water for productive use in the Omusati region of Namibia by the year 2035.

Here we describe the outcomes of the full TSP process that we followed, and the scenarios we developed, during two workshops and a writeshop in 2017.

Workshop #1

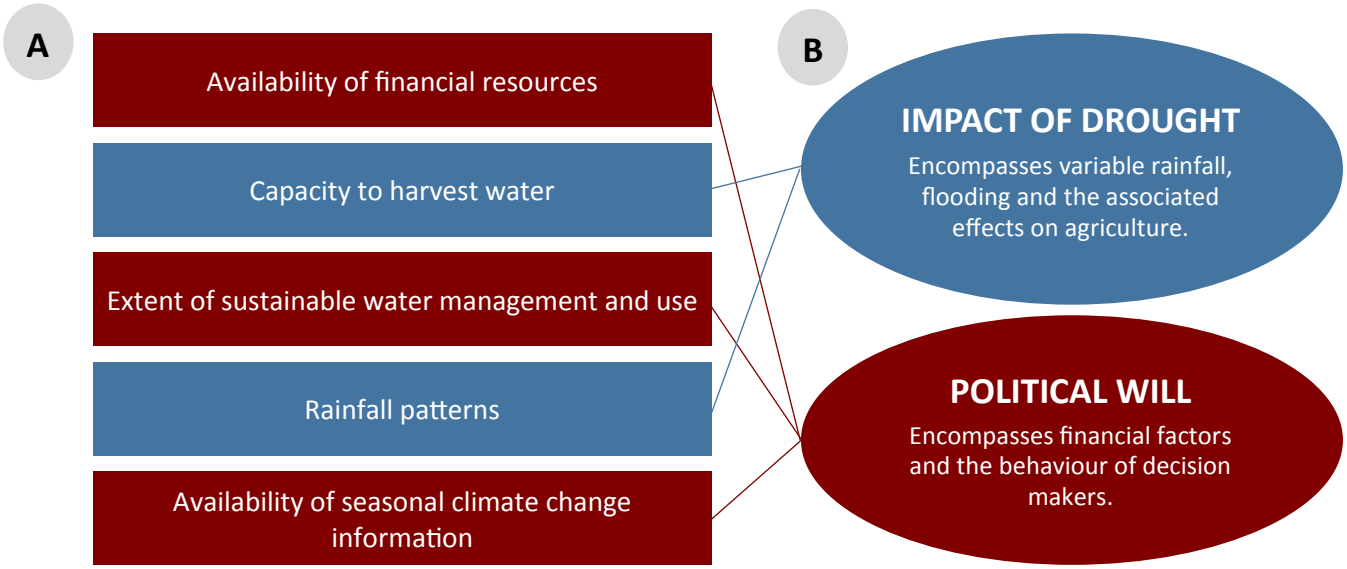
Convene a team across the whole system

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 in our first workshop, in February 2017, 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 issues were different, everyone shared a concern about the future of the region's water supply.

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 (high and low impact of drought and political will).



Construct scenarios 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. Composed of 7-9 people, each group used Lego models to represent their vision of the productive use of water in 2035 under their respective scenario. The groups then worked backwards from this future image, to think through the critical moments that may occur from now until 2035.

Through many rounds of feedback and refinement during the first workshop and at a separate writeshop, coherent storylines were developed for each scenario.

Scenarios must be relevant, challenging, plausible, and clear.

In addition, a key part of the TSP method (called STEEP), ensures that scenarios take into account different types of driving forces, namely:

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

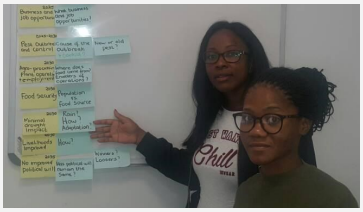
Writeshop

Typically, after the first TSP workshop, each scenario team would edit and further develop the scenarios via email and telephone over the course of a few months. We opted instead to bring team representatives together to refine the scenarios during a two-day writeshop, facilitated by Reos Partners and held in Cape Town, South Africa in April 2017. Twelve participants attended the writeshop, with one volunteer from each scenario group present (see table below). However, using WhatsApp, email and Google Drive, stakeholders who attended the workshop in Ongwediva were engaged throughout the writing process.

	Scenario group 1	Scenario group 2	Scenario group 3	Scenario group 4
Scenario team representative	Victoria Haikali *Namibia Water Corporation*	Silvanus Uunona *Ministry of Agriculture, Water and Forestry*	Jacobs Hamutenya *Agro Marketing Trading Agency*	Elizabeth Ndivayele *Ministry of Fisheries and Marine Resources*
ASSAR participant(s)	Cecil Togarepi Ester Nangolo	Dian Spear	Irene Kunamwene	Margaret Angula
Cross-scenario participants	Karen Goldberg (Facilitator; *Reos Partners*) Dinesh Budhram (Co-facilitator; *Reos Partners*) Birgit Ottermann (ASSAR communications team)			

Refining the scenarios

Step 1: Each scenario group wrote out the main events of their scenarios on coloured cards and posted these on a wall, along with their corresponding comments.



Step 2: The scenario groups responded to each comment and resolved all concerns, thereby adding more depth to each scenario.

Step 3: Each scenario group had 15 minutes to present their scenarios to the writeshop participants. The groups were asked to keep detailed notes of the questions and comments made during their presentations, but were encouraged to not respond to these immediately, but rather to address them during the next iteration.

Step 4: Each scenario group incorporated the comments from their presentations into their scenarios, and then presented these back to the other writeshop groups.

Step 5: Each scenario group summarised their scenarios into one paragraph, thereby producing a version that could be easily added to, and commented on overnight by scenario team members who were not present at the writeshop. These summaries were circulated to some scenario groups via WhatsApp.

Step 6: Based on the feedback, the scenario groups worked towards a final version of their scenarios, adding new information and rearranging existing information. For some groups this meant that the final version of their scenario was different from the original version. However, this was not problematic as long as any large changes made were in line with the scenario criteria and were communicated to the wider scenario team for input before the scenario was finalised.

Step 7: Each scenario group compiled the full narrative of their scenarios and once again presented these back to the writeshop group, for a last chance to receive feedback and refine their scenarios.

Scenario Summaries

HIGH

DROUGHT IMPACT

POOR ← POLITICAL WILL → STRONG

DROUGHT IMPACT

LOW

Scenario 2:
A HUNGRY MAN IS AN ANGRY MAN
Poor Political Will · High Drought Impact

In 2017 an outbreak of African armyworm leads to the destruction of crops. Then a devastating flood causes many deaths and the closure of schools. Unfulfilled water harvesting opportunities catch the attention of NGOs who step in to help. In 2018 a drought leads to low crop yields, livestock losses, reduced spending power and diminished economic activities in rural areas. Public outcry results in the excavation of two earth dams during the 2019 election campaign, although the government's promise of building more dams remains unfulfilled. With the onset of above-normal rainfall in 2025 foreign investment dries up as funders focus on other priority areas. The high rainfall, coupled with infrastructure deficits, results in flooding, disease outbreaks and the displacement of people. Educated youth mobilise and begin to put pressure on the government. From 2030-2035 drought conditions persist and political instability in South Africa causes economic problems and increased food prices. People are hungry and desperate and urban areas cannot support the influx of people. Unemployed youth demonstrate and there is conflict over the provision of food relief.

Scenario 3:
A BLESSING BECOMES A CURSE
Strong Political Will · High Drought Impact

In 2017 the global economic crisis leads to a poor state of affairs amidst flooding and drought. The Chinese government sees this as an opportunity to start farming. Diseases spread as informal settlements expand. In 2019, social media advocacy leads to a change in leadership. In 2020, major flooding affects crop and livestock production with a subsequent and significant reduction in household income. In 2025, social unrest and pressure on the government ensures better collaborative planning by stakeholders. The government partners with the Chinese government but local people are resentful. In 2030, water shortages continue due to poor infrastructure. There is a communication breakdown between stakeholders. In 2035, flooding and drought risks worsen food insecurity and an increasing number of local communities depend on government support.

Scenario 1:
POWER TO THE PEOPLE
Poor Political Will · Low Drought Impact

After three years of drought in Omusati region, above average rainfall is recorded in 2017. In 2018, using funds from presidential election campaigns and with help from NGOs, the government deepens the Olushandja dam to improve water capacity. Despite threats of pest outbreak and social unrest due to corruption in land allocation, in 2020 food production increases through horticulture, and the agro-processing plant creates business and job opportunities for local communities. Local people without land, and marginalised people with poor access to training opportunities remain poor. From 2025-2035, the increase in water capacity in dams leads to better food production, food security and improved local livelihoods despite persistently poor political will.

Scenario 4:
FOOD FOR WORK
Strong Political Will · Low Drought Impact

Drought impacts and economic crises persist into 2017. Youth activism and citizen uprisings cause government, faith-based institutions, research institutions and NGOs to host a national dialogue on how to address water, economic and food crises. By 2019, local communities and politicians are convinced by evidence-based explanations of the impacts of drought on the country. In 2021, a budget proposal submitted to the government, Public Private Partnership and the Green Climate Fund is successful, and Omusati region receives N$400 million to develop and improve the integrated system for productive water use. Farmers from the region are trained in aquaculture and conservation agriculture. By 2030, farmers are increasingly using new technology, and food production has improved. By 2035, surplus food is supplied to the Agro-Marketing and Trade Agency (AMTA) and stored in government silos. Due to the successful drought-preparedness strategy, business enterprises and food security are sustained.

Comparative Scenario Details

	SCENARIO 1: *Power to the people* Poor Political Will Low Drought Impact	**SCENARIO 2:** *A hungry man is an angry man* Poor Political Will High Drought Impact	**SCENARIO 3:** *A blessing becomes a curse* Strong Political Will High Drought Impact	**SCENARIO 4:** *Food for work* Strong Political Will Low Drought Impact
Political situation	More prominent role by NGOs to assist communities as government assistance declines.	Poor government investment in earth dams. Lack of support and buy-in to drought management plan.	Good intentions to serve local communities are hijacked by private and Chinese interests.	Good support from government. Funds made available for water storage facilities.
Drought impact	Flooding, diseases, social unrest, food insecurity, pest outbreaks, dam drenching and excavation.	Water, hunger, poverty, malnutrition, migration, unemployment, loss of livelihoods, crop losses livestock mortality, disease outbreaks.	Urban migration by youth competition for resources, Chinese, dependency on food relief and remittances.	Drought preparedness strategy works, resilience increased.
Who gains?	Small scale farmers local communities, elite, property moguls.	Contractors (earth dam excavations and boreholes), people who grow and sell fodder and dried meat (*edingu*).	Corrupt government officials, Chinese, private sector.	Small scale farmers, private businesses, youth (through employment).
Who becomes more vulnerable?	Marginalised communities, youth.	Local communities People who live far from water sources. The rural poor.	Subsistence and small scale farmers, youths who migrate to urban areas.	People in remote villages, marginalised communities (e.g. San), elderly due to change in technology and lack of labour.
What are the surprises?	Massive crop pest outbreak, social unrest due to landless people movement, presidential election campaign, corrupt land allocation, migration from SADC, xenophobia.	Political instability in South Africa, pests and diseases, use of waste water for fodder production, civil unrest, youth uprisings.	Political will on its own doesn't translate into reduced drought impact, advocacy, climate influence, change in leadership, disease outbreak.	Climate impacts, political pressure, credit ratings, climate variability, drought in 2025, SADC protocol on Kunene river, economic crises, youth uprising.
Other variables	Rainfall, floods.	Rainfall, floods, early warning systems.	Rainfall, floods.	Rainfall, early warning systems.

SCENARIO 1:

Power to the people

Poor Political Will · Low Drought Impact

In **2017**, the Omusati region receives good rainfall after three years of drought. The above-average rainfall causes floods in the area. The government shows little political will to invest in alternative water harvesting techniques; it is not an election year and so many politicians are not under pressure to campaign for votes. The absence of water harvesting technologies makes the area prone to flooding and predisposes it to the effects of drought. As a result, most parts of the region are flooded, some crops are destroyed, and many people lose property.

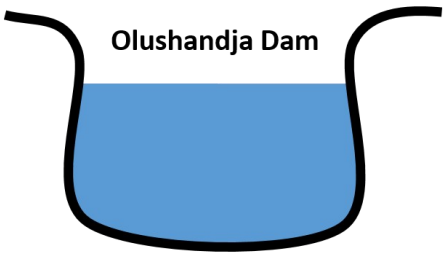
Meanwhile, the Namibian government is facing an economic crisis, which leads to a budget cut in the 2017 financial year. This is highlighted during the tabling of the budget, at a time when the effects of the global economic crisis are felt everywhere. As a result, there are limited funds available for capital projects, such as the construction of new earth dams, water reservoirs and other water storage infrastructure. The limited funds lead to the abandonment of planned projects, such as the deepening of the Olushandja dam and the excavation of earth dams. This maintains the status quo and water problems persist.

Good rains result in good crop yields (pearl millet [*mahangu*] and maize) in most parts of the country, but other areas are severely affected by a pest outbreak which hits maize crops especially hard. Two types of pests appear: an old pest, African armyworm, endemic in the area; and a completely new pest resistant to common chemical pesticides. These pests cause crop losses (especially maize) in and around Etunda in the Omusati region. The government, NGOs as well as researchers try to rescue the situation to no avail. This causes a significant dent in grain supply – especially for the National Food Strategic Reserve that is located in the region – which would compromise food security should drought occur or crops fail in the next harvest. At household level, though, the food security situation seems to be contained, as the pests attacked the maize crop, which is mainly grown in the green scheme project, while the communities grow *mahangu*. The ending of the rainy season eases the pressure of pests, but the outbreak is not successfully contained, which could lead to problems during the next cropping season.

In the same year, two Namibian youth movements increase pressure on the government to provide land due to the recurrent land shortage for agricultural and residential purposes. One movement feels that many working class youths are not able to afford decent housing and that the government should provide land to the youths at affordable prices – most of them can only afford to rent, and rental prices are constantly skyrocketing to the benefit of a few property moguls. Land servicing in urban areas has been slow and not meeting the demand for housing, resulting in huge backlogs and creating a high demand for housing, which is not being met. The other movement, however, is advocating for people to be allocated land for productive purposes (agricultural). The land shortage is a result of an increase in human population and a lack of serviced land in urban areas, which has led to land prices becoming unaffordable for many newly employed youths, while agricultural land is dwindling as a result of the growing population.

In **2018**, campaigns begin for presidential and parliamentary elections. Projects that have been on hold are being fast-tracked in order to solicit votes. Funding becomes available (from the government's campaign budget as well as other transferred funds from projects such as road improvements) for the rehabilitation of Olushandja dam to increase water capacity, including excavation of several earth dams. Agro-processing plants and the rehabilitation of a water desalination plant are also promised for the region. This, however, does not win them as many votes as they wished for. Some old parliamentarians lose their seats to the youth movements, who stood for parliamentary elections, although only a few youths manage to get seats.

In **2019**, the Olushandja dam is deepened, which triples the holding capacity, and there are several earth dams that have increased water availability. The deepening of the dam creates a rush for land for small-scale commercial plots around the dam for horticultural production, but no processing plant is constructed. Instead, the land is allocated corruptly by the traditional authority and the communal land board. Some rich businessmen and politically well-connected people bribe the traditional authorities for land, and fence off larger pieces to the exclusion of many. This further aggravates the youth, who are now at loggerheads with the authorities. The youth confront the traditional authorities and the government about these malpractices and threaten not to cooperate with the government by occupying land on their own. At the same time, these youth movements begin to plan how the younger leaders in traditional authorities can protect the youth's interests, and they mobilise the youth against the traditional authorities in the region (which are predominantly led by older people).



Corrupt Land Allocation

By **2020**, some of the allocated land around the dam is producing high-value horticultural crops and cereals – improving regional food production. However, yields are still being affected by the pests that were not fully contained in earlier seasons, which results in some of the landowners abandoning their corruptly-acquired land. Landowners who produce crops other than cereal, fail to enter the supply chain of the retail markets and end up selling their crops to informal markets as well as the Angolan market. As a result, competition with South African products remains high, as they are cheaper than local products. With assistance from researchers, pesticides are imported in order to deal with pests, which seems to bring some relief.

Strategic food reserves are expanded in **2021** and marketing infrastructure, such as trading floors for wholesalers and commission agencies, are constructed in the region by **2022**, in response to high production. The pressure from concerned groups, including youth, leads to intervention: the government implements measures to allocate land fairly (via a quota system) to youths for productive use. It also secures funds through support from the UNDP, FAO and GIZ for the extension of the water canal. The land allocation is now being done by a representative committee comprising of youth, regional government and traditional authority. The involvement of the regional government calms the social unrest, but only for a while, as the youthful parliamentarians are unable to fast-track their agenda of affordable land and the provision of water for productive purposes to all.

The youthful MPs' initial vigour upon entering parliament in 2019 starts to wane as they realise how the bottlenecks and bureaucracy in government are impeding the implementation of their ideals. They are overstretched by the multitude of issues they need to deliver on, and face opposition from older parliamentarians who initiate some of their great ideas on youth empowerment. The youth realise that other social needs are equally important, and that it is not so easy to prioritise one need above another. The young parliamentarians become part of the status quo in government and, once again, service delivery and projects are not implemented as fast as they should. Water harvesting projects and initiatives are abandoned, including the ones which were promised during campaigns, as some of the funds are channelled away to central government to cater for other pressing needs. This leaves many communities and youth disillusioned.

Despite below-average rainfall, good food production continues as a result of the containment of pests, the deepened Olushandja dam and the other earth dams constructed during and immediately after the elections. The UNDP, GIZ and FAO continue to support farmers by providing water conservation technology and drip irrigation and developing conservation agriculture practices.

In **2023**, the region experiences severe drought. However, food is available, thanks to the strategic food reserves and water conservation technologies that were introduced by the international agencies in previous years (even when government had not prioritised this).

In **2024,** the region experiences good rains. The efforts taken in 2018-2020 to deepen the Olushandja Dam and excavate additional earth dams reduces the impact of high rainfall on communities; only a few places are affected by flooding as most of the excess water is channelled into the reservoirs. Food production also improves drastically as a result of the goods rains, prompting the communities (with the assistance of the NGOs) to establish the agro-processing plant that had never materialised despite promises made by the government during the campaign period.

As a new cycle of elections and political jostling begins, many communities are not impressed by the politicians, including the youth that joined the government, and they decide to organise themselves to seek funds through NGOs and international agencies for their economic advancement. Trust in the politicians is low, and politicians feel that the NGOs are influencing the communities against them, which sours their relationship with NGOs. The government limits NGO involvement at community level. There is voter apathy and, as a result, the status quo of the political landscape status quo is maintained: the communities are disillusioned by the broken promises and government's decision to limit NGO involvement in development activities, which had previously benefited the region.

By **2026**, the communities are even more apolitical. They choose to concentrate on their own development by putting resources together to implement some activities, such as the maintenance of the dam wall and canal repairs. This drastically changes the outlook of the region and leads to economic growth. Employment opportunities and entrepreneurial activity in the region improve, and the approach to agricultural production is now seen as a model for the country, despite limited water resources. Other agriculture-dependent industries (such as fertiliser production and the manufacturing of packaging materials) begin to be established, as purchasing power starts to increase and livelihoods greatly improve, thanks to the increased production. The agro-processing industry improves marketability of agricultural products, which enables entry into the formal markets that were previously inaccessible due to quality concerns. The economic activity in the region attracts a lot of interest from investors for business opportunities. This also leads to an influx of people from other regions seeking job opportunities. As the region gains prominence due to its economic activities, there is also much political jostling, mudslinging and vote buying for support to ascend into higher offices.

By **2029**, aspiring politicians promise to find jobs for comrades and develop infrastructure, and as people start focussing on self-serving interests, the good entrepreneurial spirit that was established deteriorates. Politicians start courting international organisations to assist with the rehabilitation of the long-forgotten desalination plant in the region, which bears fruit as they come on board. There is an influx of people from other SADC countries who are searching for employment opportunities, which sparks a rise in xenophobia. Although the economy is flourishing, an increase in the population is putting pressure on the agriculture-dependent region.

In **2034**, a severe drought breaks out, affecting agricultural production and leading to widespread crop failure as dams dry out. As a result, people are being retrenched in the agro-processing industry and surrogate industries are being shut down. Social unrest follows, with foreigners being injured or killed and the government using force to calm the situation.

It is the onset of a new round of elections. The gains of the community-led initiatives have dwindled and politics take centre stage with politicians wrangling for control of the region, while the social unrest continues. Most of the infrastructure is poorly maintained – the dam is now silted and water is not flowing continuously in the canal.


Transactional Sex
Hunger
Theft
FOOD BANK - TA
Inadequate food
Malnutrition
Poor health
Death
School drop out
Early maturing crops
Drought resistant crops/varieties
Crop failure
Crop diversification
low crop yield
livestock diseases
Social conflicts
Heat wave
Livestock mortality
Fodder production
Poor grazing
low rain
loss of prestige/ status
loss of Social Capital
Poor water supply
Reduced no. of tourists
DROUGHT
Influence uptake of drought management
TSP training
15-16 February 2017
Rev. Phillipus Kashima
ORC

SCENARIO 2:

A hungry man is an angry man

Poor Political Will · High Drought Impact

In **2017**, the Omusati region receives good rains after three consecutive years of one of Namibia's worst droughts in 25 years. Some farmers in the green scheme, however, lose as much as 50% of their crops due to a chemically-resistant African armyworm infestation that also destroys the region's entire maize crop. The above-average rainfall also leads to flooding in many parts of the region, which leads to crop damage, school closure and the displacement of many people – over 1000 are staying in temporary flood relocation shelters, following the destruction of their homes. Despite the destructions, the floods bring fish through the Cuvelai drainage system into the *Lishana*, which creates income opportunities for many communities as well as a source of food. Farmers also suffer a considerable loss of livestock during the drought, due to the late onset of the rainfall season in 2017 and failure to take precautionary herd-management measures during the drought. Although food security is maintained through provision of aid by the Red Cross and others, sanitation is not ideal and there are fears of cholera outbreaks, similar to those experienced over the border in Angola. Luckily, these outbreaks are prevented.

The abundance of water in the region and the plight of the people emanating from the recent drought catch the attention of NGOs, who assist with the rehabilitation of earth dams in the region. Though the government promised to excavate more dams, they cite lack of funding as a limiting factor. Some farmers are trained by the NGOs in disaster risk coping and adaptation mechanisms, such as diversification of activities and income generating projects, as well as the use of early warning system information on climate events. Meanwhile, water scarcity, recurrent droughts and limited job opportunities in the region's urban areas create an opportunity for waste water recycling and the establishment of a vibrant donor-funded urban gardening initiative that assists unemployed youths to earn an income by growing vegetables.

The NGOs play a key role in plugging the void left by government's budgetary constraints: they assist the communities with funding for projects that generate income and empower them to address the ever-increasing unemployment rate.

In **2018**, the region receives below-normal rainfall, causing low crop yields, livestock losses and reduced income opportunities, affecting many livelihoods in rural areas. Most poor families are struggling to make ends meet, as they are not able to purchase supplementary feed for their livestock – only the well-off are able to sustain their livestock. This situation prompts the waste-water re-use project in Outapi to be expanded to include fodder production, which is sold to livestock farmers in the region. The high demand, however, leads to price increases, making the fodder unaffordable for the majority of livestock farmers and, as a result, the already dire drought impact on livestock is worsened as many are unable to save their livestock.

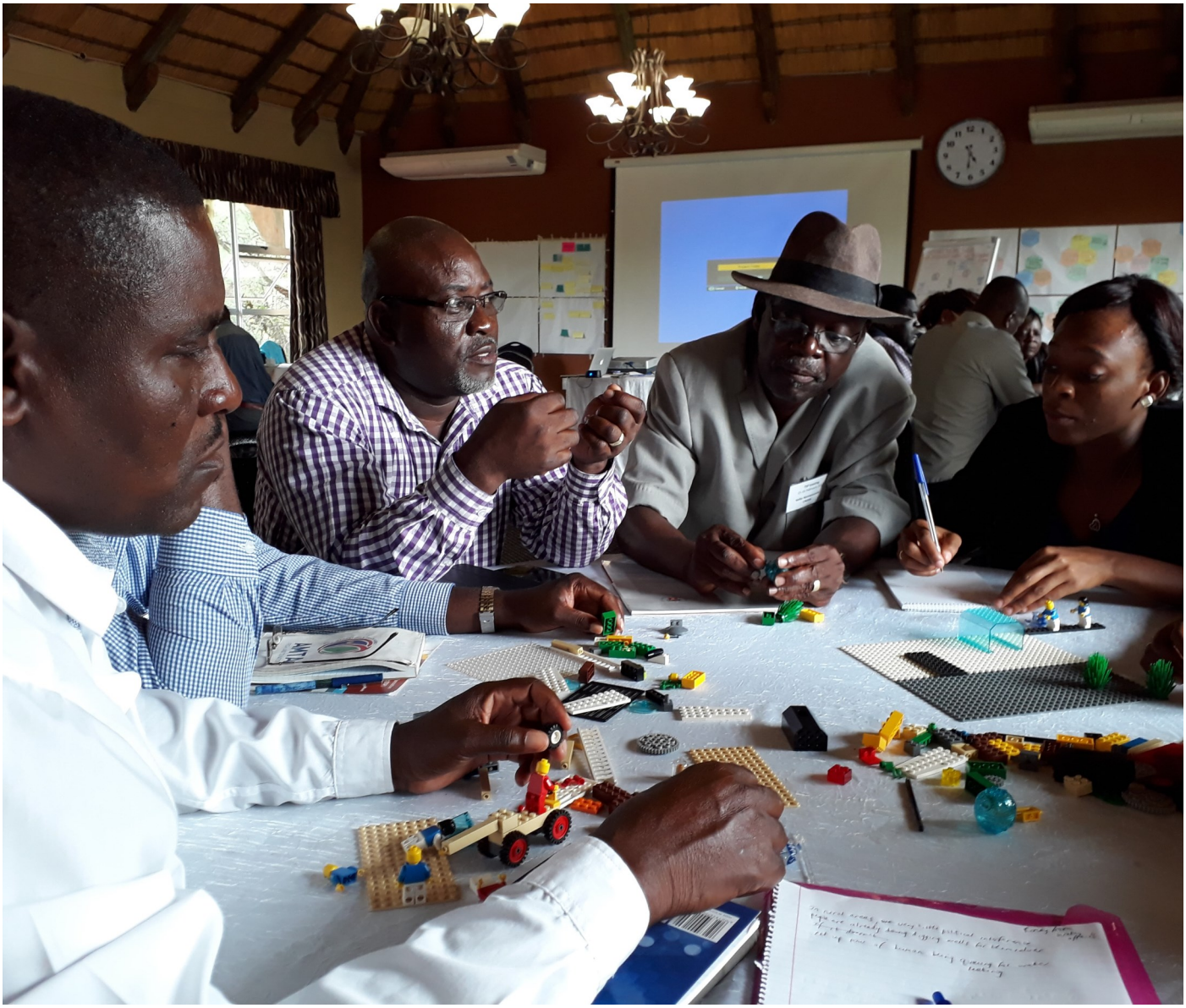
Livestock deaths create panic amongst farmers and the government creates a support scheme to encourage farmers to destock and limit losses by incentivising them with an additional amount per herd sold. This creates business opportunities for a few business people, who come together and start a business of dried meat (*edingu*), as fresh meat demand is very low. This creates some relief for livestock farmers in the region as they are able to make some income from their dying livestock. At the same time, they initiate feedlots by purchasing badly conditioned animals for fattening and then exporting them to South Africa, which greatly helps with the destocking in the region.

Through collaborative efforts of research institutions, a flood and drought management plan is developed and shared with the government. There is no buy-in from the government, though, and the plan is not implemented. The NGOs assist with the training of a few communities in the region on some aspects of the flood and drought management plan, but coverage is limited due to minimal funding and support from the government.

In **2019**, politicians respond to public outcry during their election campaign by excavating two earth dams in Omusati region and promising to excavate more earth dams in the next financial year. When they fail to follow up on their promise in 2020, some of the farmers, who were trained to plan for drought and floods, adopt strategies. With the support of NGOs, research is conducted on alternative water-harvesting techniques and the use of groundwater in northern Namibia. This is done in collaboration with tertiary and research institutions and with minimal involvement of government agencies. Evidence of research findings is used to write proposals to the Green Climate Fund for the upscaling of water harvesting and waste water recycling for income generation (such as was implemented in one of the regional towns).

Although there was no regional political leadership change in **2020**, the communities do not seem to be discontent with the status quo. In **2021**, they continue to fend for themselves with the help of the NGOs and the hope that their fortunes will change. Between **2022** and **2024**, the drought continues, crops continue to fail, and livestock die in large numbers. Communities feel their economic reserve is severely stretched and become agitated with slow and limited government support. They are not able to continue selling the few livestock that they have left, and crops are failing. Donor agencies bring in GMO maize, which the government is unwilling to take. The communities stage protests in the region and start looting local shops for food, which prompts the government to use force to quell the protests. The government relents on its earlier decision to ban GMO maize, however, it does so by accepting maize consignments and distributing milled maize meal, rather than grain, to prevent the cultivation of GMO maize and protect the lucrative beef industry in the south of the cordon fence. This calms the protests somewhat. Tempers still flare up sporadically, though, as the impacts of drought are now also causing retrenchments in agricultural and related industries, resulting in many mouths to feed but little food to feed them. The government seems to be running out of options.

As **2025** approaches, the region receives above-normal rainfall, which brings relief to all. The rain, however, is also accompanied by flooding, since there are only a few excavated dams in the catchment area. The result is the displacement of thousands of people in both rural and urban areas in the region. The floods also disrupt access to services, such as health, education, communication and transport. Because of poor sanitation, there are waterborne disease outbreaks. *Iishana* are full and overflowing, providing an opportunity for water harvesting, as well as fish for consumption and selling. Due to their experience of drought and previous lack of preparedness, communities demand that the government invests in water harvesting. Emergency boreholes that were previously drilled are no longer operational and some people are now getting their domestic water from *Lishana*, causing many to suffer from water-related diseases, such as cholera.

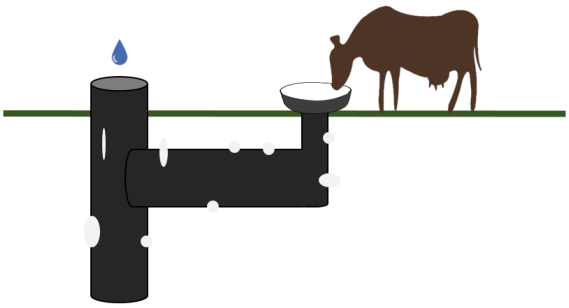


Though there is human capacity to implement water harvesting, the government, yet again, does not support the process. This time, they are citing the sustenance of the tourism sector – especially that of the Etosha National Park, which has a big watershed that depends on the water from the Cuvelai catchment area where the northern regions are situated. Thus, chances for water harvesting are all but gone and communities are staring at a bleak future. They can only imagine their experiences during previous droughts and it is not an experience that they want to relive.

As a result, the educated youth start mobilising and putting pressure on the government to act on the socio-economic problems that are facing the region. Livestock rates start to recover, due to restocking and improved rangelands and pasture. Crop yields also recover, but by **2029**, foreign/donor funding is drying up as funders focus direct their resources to countries with greater needs, and NGO involvement is all but gone. This exerts a lot of pressure on the government to deliver services to the communities.

In **2030**, the entire SADC region experiences low rainfall and in the Omusati region, in particular, the severity of drought is very high as crops fail and livestock die. The food consumption needs are mainly supplemented by the South African market, which is also experiencing drought. However, when political instability disrupts the economy of South Africa, Namibia is not able to import food, which worsens the food situation and causes food prices to skyrocket. There is little locally-grown food available in the rural areas. People are hungry and desperate, and rural-to-urban migration increases at an alarming rate, as people seek employment. It quickly becomes evident, though, that there are few employment opportunities and that the urban structure cannot support the high influx of people. Service delivery becomes stretched and disease outbreaks are rampant, leading to the health facilities being unable to cope with the high number of people in need of medical attention. Furthermore, the construction industry grounds to a halt as there is no water for construction, and many workers are retrenched. The two biggest employers in the region, agriculture and construction, fold, tensions are high, and the politicians panic as they have run out of ideas to calm the situation.

By **2032**, the unemployed youth in the urban centres exercise further pressure on the government by demonstration in the urban settlements. The drought situation continues and, by **2035**, people that live far away from water sources are in a dire situation. Levels of vulnerability among the poor and marginalised communities, including the elderly, are high, and there is severe food insecurity. The availability of labour in rural areas is low; there is no water and there is an underproduction of crops. The cost of drought relief is high, as there is little food available locally, due to the lack of water and consequent decline in food production. The government provides food parcels in the towns and rural areas, using the food bank concept, but there is not enough for everyone (due to the high population sizes), which results in conflict between the people distributing the food and those receiving the food. There is nepotism in the distribution of drought relief and people are unhappy with the government. With the government focusing on maintaining food security in the north and financing water infrastructure for the capital city, there is limited investment in water infrastructure in Omusati region. This means that the situation of insufficient water for productive use and high impact of drought is likely to continue, leading to many hungry stomachs and social unrest.



SCENARIO 3:

A blessing becomes a curse

Strong Political Will · High Drought Impact

In **2017**, the effects of the past three years' drought are still visible. Flooding in the region (following some good rainfall) causes an outbreak of disease and pests, particularly the African and American armyworm, which affects wheat production. However, the rainfall also brings relief to farming communities, while the floods bring along fish from Angola through the floodplains. There is little preparedness for extreme events, such as floods, and the relocation of people seems to be the only coping measure available. There are also no water harvesting measures in place to capture flood waters and prevent flooding in residential and farming areas. The floods cause substantial damage to property and crops in certain parts of the region and, as a result, food security remains a major issue.

The global economy is in a poor state and there is little to no foreign investment in Namibia. The resultant budgetary constraints lead to a reduction in employment opportunities, and less government funding for new projects. The lack of funding also makes it difficult to contain the armyworm outbreak, which results in a very limited supply for the national strategic food reserves, which will make it difficult to assist communities who might need food relief in the near future.

Although there are few job opportunities, youths continue to flock to urban centres in the hope of finding jobs, as employment options seem to be non-existent in rural communities. This influx of people puts pressure on service delivery in informal settlements, causing problems with regards to the provision of water and sanitation. As youths move to urban areas, such as Windhoek and Walvis Bay, labour shortages increase in the rural farming communities. The frail and elderly who are left behind are unable to keep up with the demanding farm work. The result is a shortage of food among the rural communities: fewer areas are cultivated and crop yields are reduced, since the remaining workers don't manage to weed the fields well or to harvest the crops on time.

In **2019**, there is another outbreak of the American armyworm, as it was not contained previously. The infestation causes poor crop harvests, which leads to an increase in rural-to-urban migration. Increased vulnerability to drought and food insecurity then ensues because of the labour shortage in these communities. Disease outbreak, together with reduced grazing, causes high livestock mortality. The livestock numbers drop by more than 40,000, which constitutes about 15% of cattle in the region. Pigs and donkeys also die, taking away another source of livelihood for many. The reallocation of funds to save crops from recurrent pests and disease outbreaks causes water treatment facilities to become dilapidated and leads to a decrease in water quality. Local communities experience poor crop harvests as a result of drought. There is a significant decrease in food production leading to a huge loss of income for local communities.

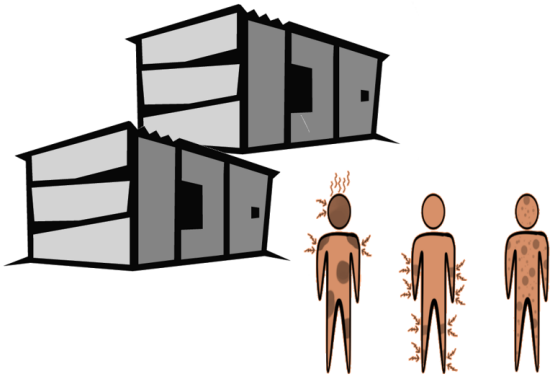
The situation further increases the immigration of young people to urban centres. Overcrowded conditions and poor sanitation in these centres leads to an outbreak of waterborne diseases amongst people. Authorities in Outapi and other urban settlements in Omusati are not coping with service provision, due to the high influx of people in search of work, as well as budgetary constraints. As the population in urban areas increases, food demands increase, but the farms in rural area are unable to produce enough food. The government extends the food bank programme to towns in the Omusati region in order to feed the vulnerable through donations. Insufficient resources in these settlements causes a lot of pressure groups to be formed. Most of these groups consist of disillusioned and frustrated youths who are unable to find employment. Many youths, especially those who are less educated, are now engaged in petty crime, while those involved in political party youth leagues call for youth representation in government, as they feel that the older politicians are neglecting their plights.

There is an increase in social media advocacy that forces a change in leadership after the election. Some of the educated and energetic youth leaders, who are employed in various sectors and active in politics, are included in strategic institutional leadership structures to help fast-track the process of dealing with youth issues in different sectors of the economy. Some of these youth leaders are elected to parliament. Following negotiations with youth pressure groups, a government directive is implemented to ensure that industries employ youths in influential strategic and management positions. However, the youth leadership is unable to restore normalcy following the chaotic social unrest, which causes greater discontent among communities. The government continues with projects that address youth unemployment, but most of them are temporary and do not really fix the problem.

In **2020**, major flooding occurs, leading to another outbreak of diseases and pests. Funds that were allocated to capital projects are instead channelled towards normalising the situation. In rural areas, more people become displaced and incidents of crime escalate. The government continues to provide food relief to affected communities, which leads to dependency syndrome for many. Despite the increased need for food in both rural and urban areas, tracts of land are abandoned. The dire food supply situation creates an opportunity for the Chinese to start farming on Omusati communal land which is given to them by traditional authorities in exchange for monetary benefits and self-aggrandisement. The influx of Chinese in the communal areas causes tension between communities and the traditional authorities. The Chinese farmers, however, continue to produce crops for the growing Chinese community, who do business around the region and the country. They are allocated land close to water sources for irrigation purposes, as water is free. This increases the animosity towards Chinese nationals, which results in vandalism and the looting of Chinese properties by locals. To calm the situation, law enforcement agencies use heavy-handed measures and excessive force, beating up protesters and firing rubber bullets at them. This angers the communities even further. People call for the abolition of traditional authorities in favour of empowering councillors and the communal land board to oversee land distribution. The new leadership, however, is overwhelmed by the inherited problems, many of which are systemic. Social unrest continues in cycles as the political leadership tries their best to provide solutions.

By **2025**, new leadership is ushered in and the government starts with an inclusive engagement approach to tackle problems. This is not only based on their campaign strategy, but also a result of communities and church organisations standing together and demanding intervention from the government and private sector. The government responds by facilitating inclusive stakeholder-integrated planning, which leads to the formulation and implementation of a green climate policy, strategies and programmes. The central government seeks external investment from international funders for water infrastructure. The Chinese try to gain favour with the government and communities by providing the government with soft concessional loans, labour and technical support. In the process, some key government officials and traditional leaders are won over by the Chinese. However, the central government reallocates budget to fund more water infrastructure development. This creates some relief among unemployed youths, as they find work in construction.






Some government officials get involved in corrupt practices during the development of this water infrastructure, and some of the tenders that were previously awarded to local companies are reallocated to Chinese companies. The local companies begin fronting for the Chinese companies in order to win tenders and receive kickbacks.

The amount of tender money lost to these kickbacks is significant. By **2030** the water infrastructure starts falling apart due to poor workmanship, a lack of maintenance, and the use of inferior material. The community becomes agitated as they experience frequent water shortages and resultant crop failures and increased livestock deaths. Xenophobic tendencies start to simmer, as the Chinese do not seem to be affected by the protests. Moreover, there are too many issues to deal with at government level, as temperatures are rising and droughts are becoming more frequent, worsening an already bad state of affairs. The government tries to intervene but, despite their good intentions, tempers flare and communication between the stakeholders breaks down. The community and church organisations continue to pressurise government to remedy the situation. The government runs out of funds and ideas, and begins to use excessive force to try to quash any discontentment among communities.

By **2034**, tensions are high between the Chinese and the local community. This causes the Chinese to be booted out and their businesses to be closed. The political situation, and racial and xenophobic tensions are calmed. However, flood and drought incidences become more frequent and worsen food insecurity. Although technology is available to improve crops and conserve water, and the political environment is improving, it becomes increasingly difficult to adapt to the dynamic natural environment and extreme weather conditions, which are becoming more intense and unpredictable. Policies are drafted that could create a more conducive environment for investors, but it's too little too late, as government actions are being overtaken by drought and extreme weather events. Elders and other vulnerable stakeholders become increasingly dependent on remittances and food relief programmes that are supported with donations from NGOs. Social unrest continues to increase, and some of the more complex issues require funding, which is becoming harder to come by as foreign economies are starting to look inward. Weather conditions continue to worsen and existing adaptation measures begin to crumble.

SCENARIO 4:

Food for work

Strong Political Will · Low Drought Impact

In **2017**, a combination of stressors, including climate impacts, political pressure and the downgrading of Namibia's credit ratings, becomes overwhelming in Namibia. This results in the shelving of many capital projects and planned activities. Moreover, the prolonged drought of 2014-2016 has caused food insecurity. In 2017, though, the country experiences good rains and floods, which cause bumper harvests in some areas and crop failures in others. Although Namibia is still highly dependent on food imports and drought relief, the food security situation improves due to the heavy rainfall received. The economic crises associated with low GDP growth, high debt and the downgrading of the credit rating in 2016/17, still impacts the country heavily: the rate of youth unemployment has increased by 4.5% and now sits at 43.4% nationally, and 54.5% in the Omusati region. As a result, the youth join movements that advocate government action for youth development and land provision.

By **2018**, the combination of stressors is causing widespread pressure from citizens calling for the government to address Namibia's food and water insecurities. A group of NGOs, faith-based institutions and youth groups engage with regional governors to persuade the government to take action. The regional governors, president and government officials agree to host a national dialogue on how to address the economic development crises and food shortage. During the national dialogue, research institutions provide up-to-date information on climate change effects.

In **2019**, researchers, policy-makers and technocrats positively discuss the way forward for food and water security in the country. Researchers employ innovative and simplified communication methods that are relevant for farming communities and policy makers. As a result, local communities and politicians are convinced by evidence-based explanations of how drought impacts Namibia.

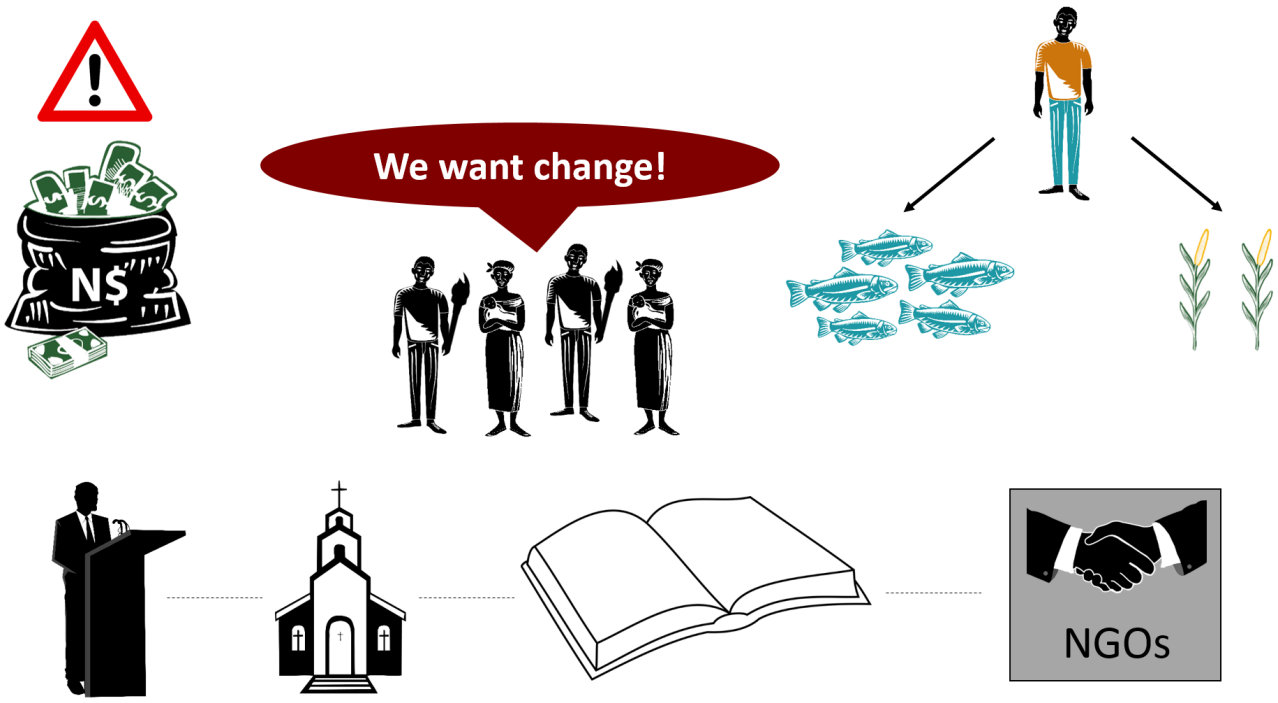
In **2020**, the president — now in his second term — selects a new political leadership that understands national climate risks. The Omusati region hosts a multi-stakeholder consultative workshop to discuss drought and flood preparedness. The new Omusati Drought and Flood Preparedness Committee, together with the constituency development committee, is tasked to conduct a farmers' needs assessment for the productive use of water for food security. Based on the outcomes of this needs assessment, the committee draws up a budget.

In **2021**, a proposal based on this budget is submitted to the government, Public Private Partnership and Green Climate Fund for funding and technical assistance. The government and the Green Climate Fund jointly provide N$400 million to the Omusati region to develop and improve the integrated system for productive water use. The Ministry of Agriculture Water and Forestry (MAWF) is encouraged by the new leadership in Namibia and, to fast-track implementation, designs a monitoring and evaluation strategy for water and agriculture policies.

In **2022**, the governor and regional council of Omusati hold an inception workshop on drought preparedness to discuss activities to be implemented before 2035. The Omusati Drought Preparedness Committee and constituency development committees nominate 30% of Omusati farmers to receive training in climate-smart agriculture, horticulture and aquaculture. This exciting development is publicised by the media in August 2022. The training is accompanied by on-site demonstrations from experienced technicians from all line ministries and the private sector. Farmers are also introduced to methods that improve soil cultivation. The monitoring and evaluation for the implementation of activities is done bi-annually. The farmers actively engage with MAWF meteorology and implement early warning systems.

In **2023**, the funds from the national budget and the Green Climate Fund are used to renovate water ponds, construct earth dams, introduce rainwater capturing tanks and production facilities in villages, and introduce water recycling plants in the town of Outapi. The marketing facilities in Omusati region are improving and the construction of factories for processing *mahangu* and maize has commenced.

In **2025**, as a result of climate change and variability, the Omusati region experiences drought. The early warning systems and water harvested in previous years prove to be useful. The region's drought preparedness strategy works. The Namibian and Angolan governments reach an official agreement to provide an on-going supply of water to Namibia from the Kunene river in Angola. The SADC protocol on water for the Kunene river is signed between the two countries. The Omusati region celebrates this agreement during a Water Day commemoration. The Kunene River SADC Secretariat is established to manage the shared water resources sustainably.



Despite the government's efforts to secure water, the youth are not satisfied with the limited employment opportunities. They demand land and jobs, which leaves the government at a loss. This furore causes an unease in the region, as the youth feel that the government are not addressing their concerns: jobs are stagnating and only temporary jobs are being created. Moreover, the youth feel left out of decision-making as the ruling party continues to appoint older politicians in position of power. This causes a shock among the political leadership, as they do not know how to handle the demonstrating youths. However, they resist the temptation to use force to quell the unrest.

The government tries to reach consensus with the youth and to respond to their plight with greater urgency. In **2029**, many youths are trained in entrepreneurship by the government. At the same time, others are trained to prepare farmers for the uptake of technology that will improve resilience and productivity. Youths are also encouraged to venture into business, while companies that apply for tenders are required by the government to have at least 50% youth ownership. This helps to calm the situation.

An unfortunate consequence of the government focussing so heavily on the issue of youth unemployment is that elderly farmers and marginalised communities are neglected in the process. Their agricultural production is severely affected by a shortage of labour, as youths flock to urban areas to try their luck in entrepreneurship. Farmers who are far away from water sources do not receive training on the new technology that can improve agricultural production, and so their crop yields are low.

In **2030**, the drought preparedness and integrated water system for productive use is up-scaled to the remaining 70% of farmers in the Omusati region. The small-to-medium scale farmers in Omusati are now training other farmers. The Director of the Directorate of Agricultural Production, Extension and Engineering Services (DAPEES) reports that Omusati farmers are now using new technology and combining this with indigenous knowledge to increase the productive use of water.

In **2033**, Omusati region receives good rainfall and, by **2034**, the Omusati farmers make national headlines because of the improved food production in the region. Small-to-medium scale farmers from Omusati region are now supplying grain, maize, vegetables and fruit to the Agro-Marketing and Trade Agency (AMTA). The grain silos are working effectively in Omusati region, and the surplus cereal is now stored in silos. Some of the agricultural produce is given to the food banks that are set up in urban centres to help feed the urban poor.

Although the government has put in measures to ensure that youths have employment and access to tenders, only the few who are politically connected get these tenders. This causes many youth start-up companies to fail, as they do not have access to these lucrative tenders. These youths start to pressure the government, and push for a change of political leadership in the region by injecting young politicians into the leadership.

In **2035**, business opportunities are created from farming products, but these are only benefiting a few people due to corruption and nepotism. There is strong political will to provide funds and implement water and agricultural programmes, but it is being derailed by a few corrupt politicians and powerful business people. There is an increase in food production in the Omusati region. Despite all the success, the elderly, remote villages and marginalised groups are not keeping up with new technology, which hampers the widespread benefits of the government's efforts.

Workshop #2

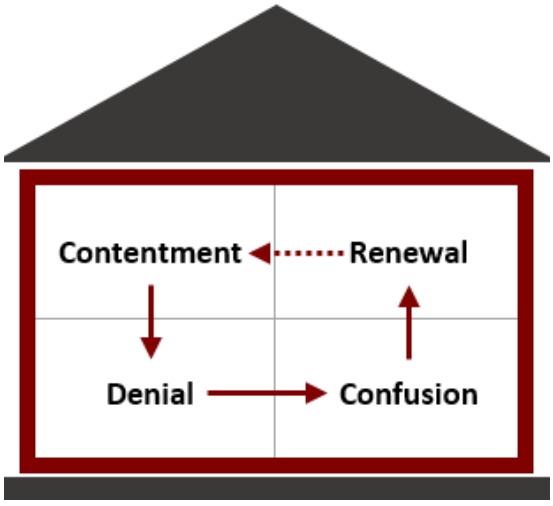
Re-convening the team

This second workshop shifted the emphasis from thinking about what might happen in the future, to focussing on what can and must be done. All those who had participated in Workshop #1 and the writeshop, were invited back to attend two days of activities designed to get a better understanding of what a desired future could look like. As for the first workshop, Workshop #2 involved stakeholders who might otherwise not interact with each other and who hold different views.

A central theme of this second workshop was '**thinking together differently**'. Stakeholders were encouraged to not only use scenarios to think differently about the future of water, but to reflect on their own behaviour, and to let go of staunchly-guarded ideas. This was done to build capacity for collaboration and to lay the groundwork for response strategies, in order to overcome problems of accessing water for productive use in Omusati.

Thinking about change as a process

At the start of this workshop, the facilitators emphasised the need to find new ways of working together, and invited stakeholders to be creative when thinking about how to address the fluctuations in water supply caused by droughts and floods. They used Claes Jannsen's Four Rooms of Change to draw an analogy between the personal experience of change (be it at an individual or group level) and walking through the rooms of a building.



The first room is **Contentment**. Although this is a happy space, this workshop was built on the assumption that none of the stakeholders were in the contentment room. Rather, to address complex problems – like the water challenges in the Omusati region – people need to find their way to the room of **Renewal**: a space where transformation and change is possible with regard to how we think about challenges, and what actions we take to address them.

However, there is no direct doorway leading from contentment to renewal. Instead, moving from the former to the latter requires going through a certain amount of **Denial** (resisting the need for change) and **Confusion** (a lack of clarity about what needs to change and how to achieve it).

The overall aim of Workshop #2 was to guide people through this change process so that they may adapt to the challenges they face around water for productive use in the Omusati region.

Using scenarios to think differently about the future

This was the first time that some of the stakeholders saw how their ideas from the first workshop had been fleshed out into four detailed scenarios. Together, everyone watched a short video of the scenario summaries, and then each person read through one of four detailed scenarios (pg. 6-19 of this booklet).

The scenarios encourage people to think about the future differently, to consider things that they ordinarily may not. Stakeholders were asked to share what surprised them about the scenarios, and what parts of the future they had not thought of before.

Responses included:

- If water initiatives are taken up it is possible that they may be abandoned.
- Political will does not necessarily translate into action.
- Corruption can have a surprisingly damaging impact.

Although there was a temptation to begin debating ways of avoiding the worst outcomes of these scenarios, stakeholders were instead asked to reflect on how they would be affected by the different scenarios, and what their responses would be.

Identifying adaptive responses to the scenarios

In a 'world café' activity, several rounds of small group discussions take place, in a way that allows people to mix without the same point being repeated in multiple discussions. The aim of our world café was to generate ideas about possible adaptive responses to the different scenarios.

In small groups, and over two rounds, people discussed possible effects and responses to the parts of the scenarios that were most relevant to them, both personally and in their role within the water provision system. After the first round, most people moved to another table to have discussions with other people, while one person from each group remained behind to give a summary of the discussion to the arriving group of people.

Different questions were posed in each round of discussion:

Round 1: What opportunities can I use and what threats do I face in each of the four stories?

Round 2: What events or patterns do we need to pay attention to?

Workshop #2 (continued)

Picturing the future we want

After the morning's exercises that helped people to think long term, stakeholders used pen and paper to visualise what they wanted Omusati to look like in 2035. They then explained their pictures to one another.

Subsequent activities were structured around three distinct approaches to thinking about what actions should be taken now in order to achieve these desired futures: 1) a systematic approach, 2) an experimental approach, and 3) a collaborative approach.

1) A systematic approach: composing a shared vision of the future

Working in groups, and drawing on their individual desires for the future, people developed a shared vision of what water for productive use could look like in the region by 2035. They used their individual pictures to identify key themes within their groups. Then, using symbols to represent the themes, they developed a collective, illustrated vision of the future. Each group nominated one person to present their depiction to everyone else.

Some areas of commonality included: earth dams/water harvesting, joint planning, vegetable gardens, and water storage facilities

2) An experimental approach: working towards a shared vision of the future

The next exercise focussed on mapping out what stakeholders might do to move towards their shared vision of the future. This involved two activities that helped them choose an optimal way forward from the range of possibilities that had been identified. This approach was useful given the complexities involved in finding solutions to the issues of water for productive use.

a) 'How might we…'

Groups re-convened to compose a list of questions that needed answering in order to move towards the shared vision of the future. The questions all started with 'How might we…'. Groups were then asked to focus on *one* question that was specific and practical, and which they could explore more deeply. Below is a sample of the questions raised by each group.

How might we…

Ensure all stakeholders collaborate?
Influence communities to get their buy in?
Protect the environment?
Look out for risk and uncertainty?
Secure funds for infrastructure?
Build capacity of local communities?
Ensure the equitable use of earth dams?
Generate funds for our vision?

b) Factoring in failure

Taking a slightly different approach, stakeholders then considered the factors that could completely sabotage their shared vision for the future.

First, the groups listed all the things that would cause their visions to fail. Then, stakeholders used that list to identify all the things that they were *currently* doing, that were inevitably setting them up to fail. Lastly, they made a list of all the things they must *stop* doing.

This activity showed stakeholders how their own actions can prevent their desired future from happening.

Consequently, people realised that before bringing in new ideas and solutions for water problems, they needed to let go of the things that are not working currently.

3) A collaborative approach: working together to change the future

Building on what had come out of the previous activities (the scenarios, systematic and experimental approaches to thinking about the future), each group reflected on 3-5 ideas they wanted to implement and opportunities for collaboration that they wanted to explore. They wrote these on a cards and stuck them on the wall. The cards were grouped into seven clusters, according to how similar their ideas were. Using sticky dots, each stakeholder voted for the four ideas that they felt were worth working on.

Before voting, stakeholders were asked to consider:

- What is possible with the current people in the room/ current resources?
- What needs urgent attention?
- What can help us achieve our desired future?

People grouped together around which of these ideas they wanted to focus on. Each group began formulating an action plan, using the following questions as a way to structure their discussions:

- Who is in your group?
- What are your objectives?
- What can you commit to doing over the next six months?
- What can you doing in the long term?
- Who do you need to involve?

A nominee from each group presented their action plan to other workshop participants. As people listened, they noted down their responses to the plans, including the ways in which they could potentially help them to be realised. A final round of planning centred on what could be done *together*, and what could be done that was *different* to what had come before.

The main ideas that stakeholders want to pursue, and their primary objectives.

Idea	Objective
Resourcing	Identify different funding sources for the construction and rehabilitation of earth dams and other water infrastructure activities.
Integrated planning	Collectively prioritise the strategies and solutions for dealing with the problem.
Capacity building	Create awareness and understanding of the problems of drought, water scarcity and flooding.
Alternative water sources	Identify sustainable alternative water sources for the region.
Participatory needs assessment	Identify and prioritise the needs of different social groups with regards to water for productive.

Final thoughts

To close the workshop, everyone joined a large circle and reflected on what they would be taking away with them. These are some of the thoughts that were shared:

"The process is as important as the end product."

"We are very resourceful. Sometimes we look far away for ideas when we have them within."

"It's difficult to change views and opinions."

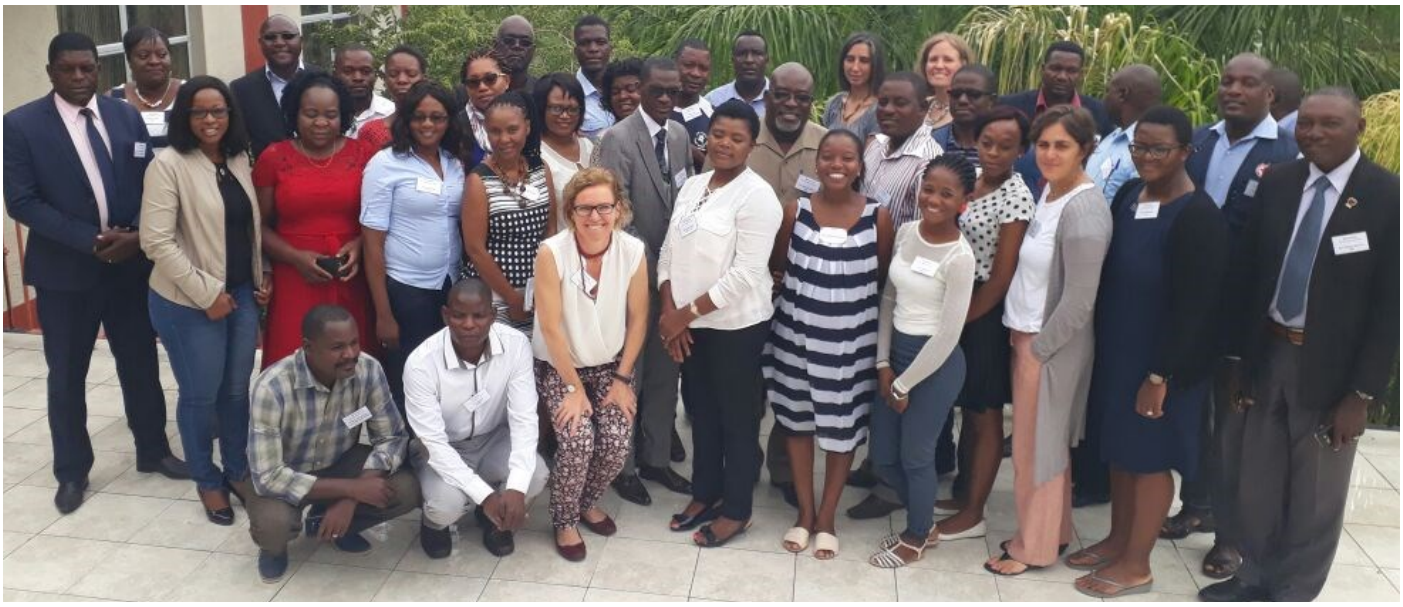
"We have to be open to the possibilities of change."

"We have a common goal but we don't tend to plan together."

"When we want to plan, we must not do it in isolation."

Next steps

The relationships built over the course of these workshops will determine what happens next. The stakeholders and ASSAR team members involved in this TSP process, need to find a way to continue what was set in motion during the workshops, and start implementing the ideas and objectives. The ASSAR team will look into scheduling an additional workshop to support these ongoing collaborative efforts, and to keep working towards a future where people in Omusati have access to water for productive use, regardless of the adverse effects of climate change.



Thank you to all the stakeholders who have been involved in this TSP process, who have come 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. Leonard 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.

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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.