



Climate & Development  
Knowledge Network

# LEARNING STORY

October 2021

## Key messages

- Alignment with stakeholders' institutional mandates and priority issues opens the door for obtaining their collaboration and support, and for influencing policy and government action.
- Being responsive to needs, and looking for and seizing windows of opportunity for influencing policy and practice, is fundamental to impact. However, this requires flexible funders and funds, capacity to analyse the governance landscape, and openness to learn and change course.
- Knowledge products are just one ingredient for evidence to inform decisions and practices. These materials need to be accompanied by continuous awareness-raising to gain sufficient traction at multiple governance levels, as well as a range of effective, regular activities to engage target actors and assist them to pave the way for action.
- Those who share and 'broker' knowledge need to be dedicated, persistent and savvy; have a vast network of strong relationships; and have good convening power to bring together diverse stakeholders across local, regional and national spheres. Their success may, however, unintentionally also lead to them being overwhelmed and burnt out.
- Continuous engagement by knowledge brokers with actors in the governance system, and being able to build on previous projects' achievements, relationships and outputs, is key for long-term impact.

### Authors:

Lucia Scodanibbio, CDKN, with contributions from Lisa McNamara, CDKN; Margaret Angula and Cecil Togarepi, University of Namibia; and Bernadette Shalumbu-Shivute, Namibia Ministry of Environment, Forestry and Tourism.

### Editing and review

Amanda April, Emma Baker, Mairi Dupar, Shehnaaz Moosa and Charlotte Scott, CDKN; and Georgina Cundill Kemp, International Development Research Centre.

**This learning story forms part of the CDKN *Knowledge for Change* series, which reflects on the common challenges, lessons and successes CDKN and its partners have encountered in facilitating evidence-based decision-making to accelerate climate action. The aim of this work is to investigate different tools and approaches for enhancing the use of knowledge in decision-making, the barriers encountered in facilitating change, and useful lessons for others who navigate similar challenges.**

## Lessons from mainstreaming climate change in Namibia

This learning story recounts the lessons learned by the University of Namibia (UNAM) and Desert Research Foundation of Namibia (DRFN) over seven years of implementing different research projects on climate adaptation and resilience (from 2014-2021).



Aerial view of arid area of Namibia, 2016. © Sophie Lashford

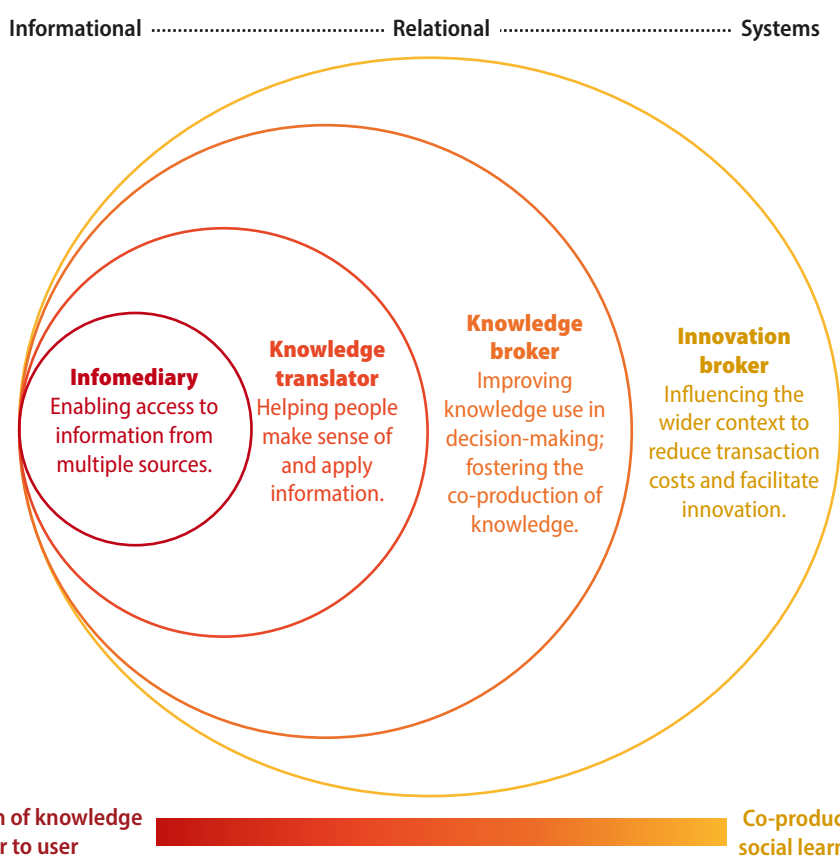
Since 2014, researchers and practitioners within UNAM and DRFN have worked to produce knowledge and robust evidence on climate impacts to influence decision-making and implementation of climate action. CDKN understands this process of facilitating knowledge-into-action as knowledge brokering. Box 1 provides a definition of this concept.

**Box 1: What is knowledge brokering and who are knowledge brokers?**

Knowledge brokers act as the link between producers and users of knowledge, to facilitate the dissemination, exchange, co-production and use of relevant information for changes in policy and practice.<sup>1</sup> Knowledge brokers are involved in a range of activities, which can be plotted along a spectrum<sup>2</sup> that goes from working with information flows to seeking to bring about systemic change (see Figure 1).<sup>3</sup>

- **As infomediaries**, they can help ensure information is accessible (such as through online portals); guide stakeholders to identify and filter information that is relevant to their needs; and raise awareness of an issue.
- **As knowledge translators**, they may help to summarise and synthesise research findings, translate these into more understandable language, ensure they are credible and contextualise them to user needs (i.e., increase their relevance) for the specific target audience. They may also work with stakeholders to help them interpret the information and make the knowledge legitimate and actionable.
- **As knowledge brokers** (in the middle of the spectrum), they assist in identifying, engaging and connecting stakeholders to facilitate collaboration and the use of knowledge in decision-making. They may help to collectively make sense of and create knowledge; to understand each other’s abilities and needs; and/or to support learning and create feedback loops between producers and users of knowledge, which can assist in identifying and addressing further knowledge gaps. Knowledge brokers also play an important role in strengthening individual and institutional capacities, and maintaining and facilitating social networks.
- **As innovation brokers**, they seek to bring about change at a systemic level, such as through re-organising social, economic or institutional practices and behaviours at different levels, including by addressing gaps tied to legislation, the market, or infrastructure. They may also seek to bridge divides and silos, such as those created by power imbalances, or different values, priorities, incentives or knowledge systems. In some cases they may also help to increase access to political support or capital, through their connections and championing activities.

**Figure 1. Spectrum of knowledge broker roles, adapted from Harvey, Lewin and Fisher. (2012).<sup>4</sup>**



From 2014-2018, the Adaptation at Scale in Semi-Arid Regions (ASSAR) project was implemented in six African countries, including Namibia, as part of the Collaborative Adaptation Research Initiative in Africa and Asia (CARIIA). In Namibia, a team of researchers and practitioners from UNAM, University of Cape Town (UCT), Oxfam GB and DRFN sought to understand the factors that make people vulnerable to climate change, and the barriers and enablers of more effective and sustained adaptation action. With a focus on the Onesí Constituency in the Omusati region, and working with stakeholders from national to household levels, the team sought to produce high quality evidence that could influence policy and practice. They also aimed to strengthen the capacities of the internal project team, and those of the stakeholders they worked with from the local to the national level.

From late 2018, the team pursued a number of funding opportunities that could build on the findings, relationships and activities started during the ASSAR project. A number of these proposals were successful, including a project (2019-2021) developed under CDKN to better integrate climate issues in the government's gender and rural development programme portfolio, as well as in its activities at the regional and local level. An expanded geographic focus in this project saw the inclusion of the Ongwediva Constituency in Namibia's Oshana region. The team also grew to include a number of government and non-government partners at both national and regional levels, beyond UNAM and DRFN colleagues.

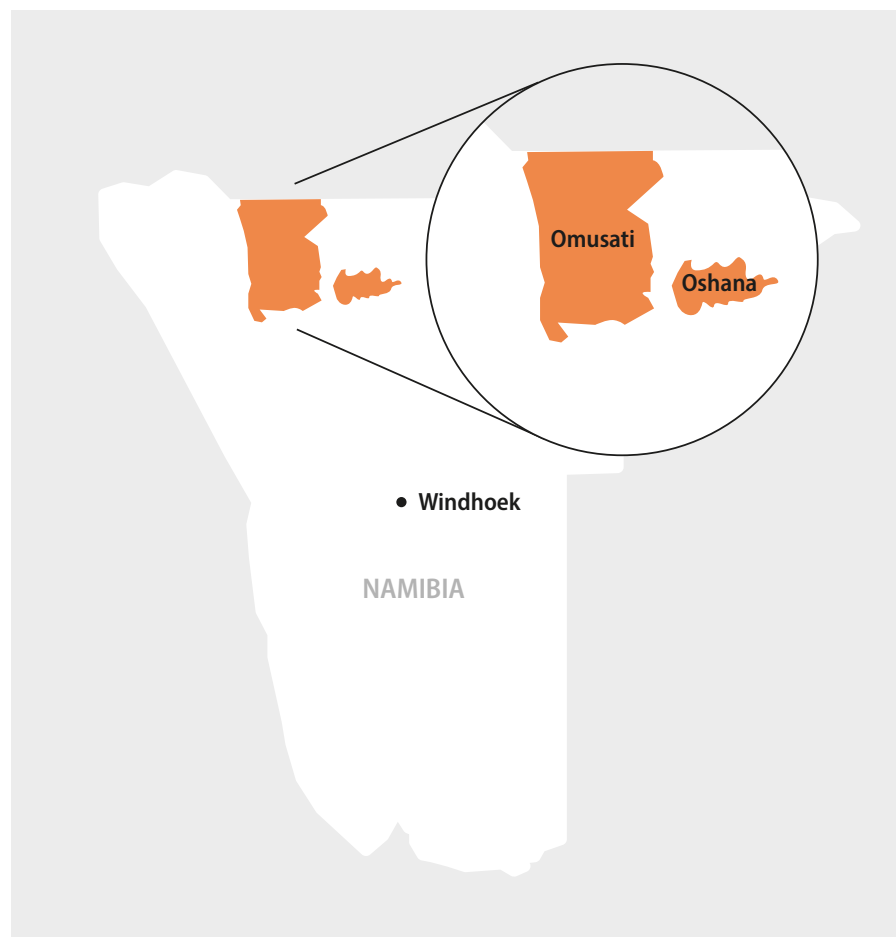
In March 2020, CDKN facilitated a reflection process with the UNAM and DRFN teams to better understand

the role of knowledge brokering in influencing climate change policy and practice in Namibia. This reflection highlighted the rich learning around linking research to action, and revealed a number of enabling factors that have helped the team to strengthen relationships and partnerships with diverse stakeholders. This has resulted in further mainstreaming of climate issues at the sub-national level and in the gender and development sectors. The eight enablers for mainstreaming are outlined below, followed by an assessment of the key factors for effective knowledge brokering in this context.

### THE NAMIBIAN CONTEXT

Namibia is a climate change hotspot that has already warmed by 1.7°C.<sup>5</sup> It is increasingly suffering from rainfall variability and extreme weather events like droughts and floods that make its population, which is highly dependent on natural resources and small-scale agriculture, increasingly vulnerable. For this hot and arid country, water access and availability is one of the biggest challenges, threatening food security and economic activities. The expected impacts of a 1.5°C and higher temperature change on water resources will affect Namibia's key economic sectors such as agriculture, tourism, human health, mining and industry.<sup>6</sup> Governance challenges, which include poor coordination amongst ministries and between national and local government levels, make addressing climate impacts difficult. Yet the urgency to act is becoming clearer with increasingly unpredictable seasonal rainfall patterns.

Figure 2. Map of Namibia showing the Omusati and Oshana regions



# 2015

**2014-15**  
Baseline research and stakeholder engagement activities

**Mid'15**  
Presenting ASSAR to the National Climate Change Committee

**July'15**  
Stakeholder mapping exercise

**Dec'15**  
Local-level stakeholder mapping and ASSAR presentation to Traditional Authority

**Mar'16**  
Vulnerability and Risk Assessment in Omusati

**May'16**  
Transformative Scenario Planning Training, Windhoek

# 2018

**Late 2017/2018**  
Research and brief on impact of 1.5°C temperature rise on Namibia

**Feb'18**  
National Climate Change Committee feedback

**Mar'18**  
Drafting concept notes for funding with Regional Council

**Mar'18**  
Omusati Conference on Water, Food Security and Adaptation to Climate Change

**Feb, Mar, Apr'18**  
Onesi Constituency Development Committee training

**Mar'18**  
Oxfam internal workshop

**May'18**  
Journalist training

**Aug-Sep'18**  
ASSAR radio show

**Sept'18**  
Omusati feedback event

**Oct'18**  
National feedback event

**Dec'18**  
UNAM presents 1.5°C findings to Namibia and Botswana negotiating teams at COP24

# 2020

**Feb'20**  
CDKN community engagement & stakeholder mapping

**Mar'20**  
National Climate Change Committee radio series

**June-Sep'20**  
1.5°C infographic developed and translated into Oshiwambo

**Oct'20**  
Capacity building workshop for the gender and environment ministries

**Oct'20**  
Vulnerability and Risk Assessment with Oshana Regional Council

# Timeline of events



## 2016

**Mid '16**  
National Climate Change Committee feedback

**Sept '16**  
Omusati Region Drought Resilience Consultative Meeting

**Aug '16**  
Africa Drought Conference, Windhoek

## 2017

**Feb '17**  
ASSAR session with the National Climate Change Committee (where request for tailored climate modelling for Namibia is made)

**Apr '17**  
Transformative Scenario Planning writeshop, Cape Town

**Jul '17**  
Transformative Scenario Planning 2 Omusati

**Jan '17**  
Experiential learning training and research-for-impact internal workshop, Cape Town

**Feb '17**  
Transformative Scenario Planning 1 Omusati

**Mar '17**  
Needs assessment Onesi Constituency Development Committee

**Apr '17**  
Constituency Development Committee training on their roles and functions

**Oct '17**  
National Climate Change Committee feedback

## 2019

**Nov '18-Jan '19**  
CDKN proposal drafted

**Feb/Mar '19**  
Final ASSAR feedback session at the National Climate Change Committee

**Mar '19**  
Climate-smart App launch

**Apr '19**  
CDKN workshop for proposal development

**May '19**  
Proposal to influence Parliamentarians (through IDRC funding) is approved

**Aug-Sep '19**  
Climate Change Youth Kopanos

**Oct '19**  
CDKN inception meeting, Oshana

**Nov '19**  
Vulnerability and Risk Assessment training for the gender ministry

## 2021

**2021**  
Gender ministry uses the VRA tool to select projects for community grants

**Jun '21**  
Training of Parliamentarians

**Mar '21 - ongoing**  
Two income-generating projects supported by small grants in Oshana and Omusati

**Jul-Aug '21**  
Oshana radio series



## Key enablers of success

### 1. Focussing on stakeholders' priority issues and alignment with government institutional mandates opens the door for support and buy-in

ASSAR's approach prioritised 'research-for-impact' where – in addition to producing rigorous evidence – emphasis was placed on influencing policy and action through capacity building, stakeholder engagement, strategic partnerships and targeted communication. The project's focus since its inception on addressing topical issues, including droughts, floods, rural development, gender and strengthening resilience, was critical to its success. The relevance of its content areas to not only the government's national and regional agenda, but also to local people's lived realities and needs, helped build legitimacy and credibility for the project team at the different governance scales (national to local) in which they worked.

ASSAR's alignment with the National Climate Change Strategy and Action Plan (NCCSAP) resonated with national priorities, as became clear at the 2015 introduction of the project to the National Climate Change Committee (NCCC). Led by the Ministry of Environment, Forestry and Tourism (MEFT referred to as the 'environment ministry') and with representation from government and non-government stakeholders with an interest in climate issues, the NCCC received the project very positively:

**"Thanks to ASSAR's project orientation, and its cross-scalar and Research-Into-Use approach with a focus on the most marginalised and on current hot topics, MEFT realises that ASSAR is not just a research project."**

– Margaret Angula (Senior Lecturer, University of Namibia and ASSAR/CDKN project lead).

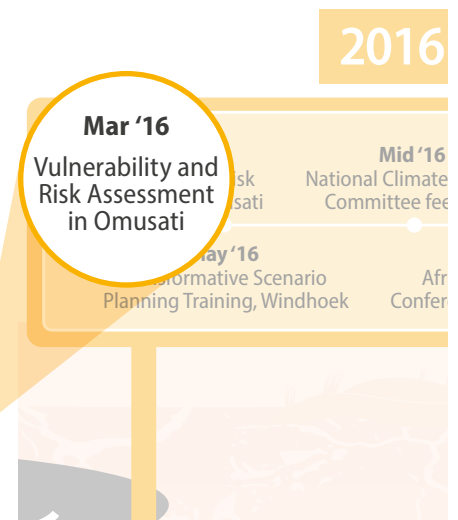
From the start, the project revealed the importance of well-regarded and well-connected knowledge brokers in research impact. Thanks to the strong reputation of the UNAM lead and her existing membership to the NCCC, ASSAR could be easily introduced during one of its sessions.

At the sub-national level, alignment was found with the priorities of the Regional Council, the government arm in charge of regional development issues, particularly around food security, disaster risk reduction, and other areas the project targeted.

Similarly, subsistence and small-scale farmers in the Omusati region, a climate change hotspot,<sup>7</sup> have become more and more concerned by the changing climatic patterns and increasingly erratic rainfall witnessed over the past few decades. At ASSAR's first public event in Omusati (a **Vulnerability and Risk Assessment (VRA)** two-day workshop convened in March 2016 –

see Box 2), participants discussed how hazards such as drought, floods and high temperatures affect the Onesi Constituency.

Focusing on issues of interest to stakeholders meant that they brought energy into the events they attended and were motivated to find solutions to address their needs.



### Box 2: Vulnerability and Risk Assessment

Following a period of on-the-ground and desk-based research, ASSAR convened its first public event in Omusati in March 2016. The Vulnerability and Risk Assessment (VRA)<sup>8</sup> two-day workshop helped to develop a common understanding among the 22 stakeholders of the main hazards and issues affecting the Omusati region in order to identify opportunities and responses to increase resilience and wellbeing. The VRA workshop also fostered relationships among the varied workshop participants, which included officials from different local, regional and national government departments; NGO representatives; the traditional authority; academia; and community members including farmers, livestock herders, wild food harvesters and handcraft producers. Having a platform to discuss drought and flood impacts enabled stakeholders from Omusati Region to foster stronger relationships and respect, in addition to helping the project team establish initial contacts and networks in the region.



Onesi, Namibia, 2016. © Sophie Lashford

ASSAR's relevant, catchy evidence was also recognised at the **Africa Drought Conference (ADC)**. This was the first public event in Namibia where ASSAR team members were invited to present their early research findings and participate in the committee, providing important input for the conference outcomes. Held in August 2016, the Africa Drought Conference was hosted by the secretariat of the United Nations Convention to Combat Desertification and the Republic of Namibia with the aim of developing a drought risk management framework that could better prepare countries to be drought resilient.<sup>9</sup>

At the conference plenary, ASSAR presented the local risks and hazards discussed at the VRA process in Botswana and Namibia, highlighting the distinct vulnerabilities for different social groups (also known as “socially-differentiated vulnerabilities”) that emerged from the study. Plenary contributions about drought governance across scales from an ASSAR PhD student, and a side-event presentation on approaches for assessing vulnerability through a wellbeing lens, influenced the drafting of the Windhoek Declaration for Enhancing Drought in Africa. Through these varied contributions, key concepts from the VRA, such as the importance of uncovering differential vulnerabilities across and within social groups, were included. The description of the VRA process itself also highlighted the importance of convening and fostering dialogue between stakeholders from the national to local levels and across sectors. The team’s reputation grew as these highly pertinent contributions were made.

As the team became increasingly involved in different activities and with varied stakeholders, including government departments that do not include climate change as part of their mandate (such as the Ministry of Urban and Rural Development (referred to in this brief as the ‘urban and rural development ministry’)



and the Ministry of Gender Equality, Poverty Eradication and Social Welfare (MGEPESW referred to in this brief as the ‘gender ministry’)), the team realised how critical it was for project activities to be aligned with the institutional mandates and programmes of stakeholders. In the case of the gender ministry, for example, CDKN-funded follow-up work focused on complementing the ministry’s existing grant support for income-generating activities for women. The team assisted the gender ministry to use the VRA approach to identify the beneficiaries and projects in their programmes,

to ensure the selection process was more sensitive to different features of grantees’ identity (such as marital status, age or ethnicity), beyond only gender. Focusing on an existing gender ministry programme already planned and budgeted for meant it was easier for the Ministry to integrate climate and social differentiation criteria into their decision-making for selecting grantees.

Where project activities were not aligned, the project team sought to build a shared understanding of specific issues with particular ministries, to ensure that their annual institutional work plans (which are drafted at the beginning of each year) included these concepts (e.g. the keyword “climate change”). Paying attention to alignment helped ensure that government staff were allowed to dedicate time to project activities, such as through receiving approval (from their superiors) to attend events and training. To achieve this necessary level of institutionalisation, the team realised the importance of meeting with managers, political leaders and people of influence early in the programme to get them on board. One-on-one or small team meetings (up to three or four people) with each institution that one wants to influence appeared to be most effective.



Namibia rural scene. © Sophie Lashford



Stakeholder mapping with the Oshana Regional Council in February 2020. © UNAM and CDKN

## 2. Seizing opportunities, being responsive to needs and addressing gaps as they emerge

Through both its research and research-for-impact activities, which included extensive stakeholder engagement, the team increasingly understood the gaps it could target as well as identified further opportunities for action. Bilateral meetings and implementing tools in participatory settings, such as stakeholder mapping, power analysis, the VRA and scenario planning workshops, helped stakeholders to formulate requests to the team. In many cases these were responded to.

A number of factors affected the ability to seize opportunities and address gaps and needs as they emerged.

**Openness and ability of the team to respond to requests:** During the VRA workshop, for example, team members were asked for information that would help the participants better understand climate change, including in their local language. The team fulfilled this request later in the project, conducting a capacity needs assessment followed by three training sessions of the Constituency Development Committee (CDC) on different issues related to climate change and disaster risk

reduction. Numerous research outputs were also translated into Oshiwambo and simplified to ensure they would be understandable and appeal to community audiences. The **availability of funds and the team's flexibility** throughout the project were critical elements that enabled the team to carry out these requests.

**Taking advantage of networking opportunities:** At the Africa Drought Conference, networking opportunities were seized upon to open future doors. For example, one of the ASSAR team members connected again with the Governor of Omusati when he recognised her from a visit she had paid his office to introduce the project earlier in the year. After seeing the **relevance and credibility of the VRA findings** from Namibia and Botswana during her conference presentation, the Governor invited her to join him for lunch with two Regional Councillors from northern Namibia. When he proposed replicating this drought conference at a regional level, the ASSAR member immediately offered the team's support, acting on the potential opportunity to influence drought management and resilience issues in ASSAR's focus region. A valuable partnership emerged from this initiative.

**Being flexible and adaptable:** A **flexible donor** (in this case Canada's International Development Research Centre), also made it possible to offer such ad-hoc assistance to government stakeholders and capitalise on these opportunities. It also allowed for a more iterative approach. For example, the **project's lack of rigidity** (often due to the team being experimental and "new" to implementing research-for-impact activities) removed the notion that there was a blueprint to be followed; instead, activities and goals could be continuously revised and refined in light of changing needs and emerging circumstances. A working **environment conducive to learning** (including from failure) – along with the team's flexibility, humility and openness to adapt – were essential elements of their success.

**Identifying the right platforms for impact:** In February 2017, following an ASSAR-dedicated NCCC session to showcase the project's work and progress, the ASSAR research-for-impact coordinator became an NCCC member (as well as an environment ministry staff member a few years later), thereby establishing an important link between the project team and government. The NCCC became not only the primary vehicle through which



ASSAR research results were presented nationally, but also the place where requests to the team were formulated. For example, when **NCCC members requested climate modelling information on Namibia in early 2017**, the ASSAR team produced a brief on the impacts of a 1.5°C or higher temperature rise on different Namibian productive sectors (see enabler 6).

Through its engagement with the NCCC, and the environment ministry that chairs it, the team was able to identify a number of additional areas to support to help mainstream climate issues, both horizontally (across sectors) and vertically (from national to local levels). These included raising awareness of the impacts of climate change across the urban and rural development ministry as well as the gender ministry to increase their involvement in the NCCC. Though part of the NCCC, both ministries had struggled to understand how climate change affected their mandate, the ways in which they were meant to mainstream such issues and, consequently, how they should report on implementation of the **National Climate Change Strategy and Action Plan** to the NCCC.

As a result of the ASSAR team's work, these issues were better understood and became important elements in a follow-up project funded by CDKN, which assisted the understaffed



environment ministry to fulfill its role to support NCCC partners to mainstream and build their capacity on climate action. Identifying and responding to **emerging funding calls** and opportunities was critical to enable follow-up action and address new needs. These was realised through the team's **ability to analyse the landscape** through continuous and iterative involvement with stakeholders and in the course of their activities.

**Seizing opportunities for follow-up:** Once the gender and urban and rural development ministries realised it is within their mandate to mainstream climate change adaptation into their work, they requested capacity building under the follow-up CDKN project. Training workshops with both technocrats and managers created opportunities to discuss how to institutionalise climate change in the country. The

workshops used specifically-designed tools and communication materials to transmit the sense of urgency and initiate climate change actions (see enabler 4). The project team facilitated meetings with the top leadership of the environment, urban and rural development and gender ministries, which served to strengthen horizontal relationships between the three ministries and open up space for them to discuss how to include climate change issues in their work.

Similarly, the follow-up project sought to address the disconnects between the national and regional levels on dealing with climate issues. This process entailed strengthening institutional coordination on climate change (and gender) between national and regional governments, and ensuring that rural development projects are climate resilient and gender responsive.



Stakeholder mapping with the Oshana Regional Council in February 2020. © UNAM and CDKN

### 3. Understanding how to navigate the political and cultural landscape

Through implementing different project activities and interacting with diverse stakeholders, the team gained a better understanding of national, regional and local political and socio-cultural dynamics, and how to navigate these for increased impact. Lessons learnt range from how to catalyse workshop attendance and deal with politically-sensitive issues, to using the right protocol for visiting communities, engaging with government and raising the profile of climate issues. Some of these lessons follow.

#### **Participatory, content-rich workshops help identify avenues for influence and potential partners:**

The issues raised in the VRA provided the team with a deepened understanding of the region. This included the types and causes of vulnerabilities experienced by different social groups, as well as the potential adaptive responses that could be adopted – all of which is important information to feed into decision- and policy-making. Understanding these issues also helped to shape the team's impact pathway, which provided a road map for how the team hoped to influence policy and practice, and maximise research uptake. At the first VRA workshop in Omusati in 2016, seeds were planted in terms of developing relationships with different stakeholders, and these were harvested in later phases of the project. For example, the team realised the Red Cross's level of knowledge and influence, which laid the foundation for a fruitful partnership in jointly implementing the CDC training between February and April 2018.

#### **Understanding the governance landscape helps for following the right protocols:**

At the VRA workshop, one of the ASSAR PhD students from the area explained to the team that the Regional Council is composed of a political and an administrative arm. These play different but equally important roles sub-nationally. The

team learned that both needed to be invited to future events.

**Strong relationships with stakeholders and consistent reminders about meetings help ensure high attendance:** Through the VRA event, the team learned that extra efforts were needed to increase attendance, specifically of minority and marginalised groups, high-level participants and women. Prior relationships with stakeholders could help, and the team realised that these needed to be built upon or new ones established. Forming new relationships could be facilitated by new, better connected individuals joining the team. Regular follow-up and communication was needed to recruit participants in the weeks and days before the event, which required motivation and commitment from the team. Finally, relying on the Traditional Authority to reach marginalised and minority groups was insufficient, and the team learned that some of these groups did not get invited to the workshop, as the Traditional Authority believed it represented them sufficiently. At subsequent workshops, the team started collaborating with village leaders to ensure more representative participation. The team's improved ability to secure meeting attendance was witnessed at the Transformative

Scenario Planning (TSP) workshop (see Box 3). At this event, there was almost 100% attendance as a result not only of the lessons learned from the VRA, but also the improved relationships with different stakeholders and the strong connections, reputation and commitment of a new UNAM team member based in Omusati.

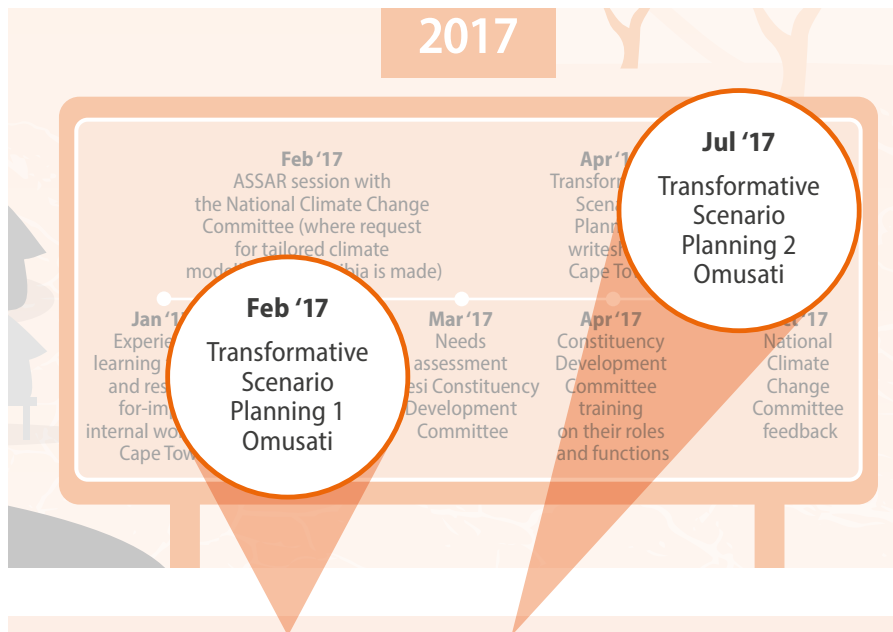
#### **Formal training and learning-by-doing can help develop political savviness:**

In March 2018, the team took part in an internal workshop organised by Oxfam GB aimed at strengthening advocacy skills. New knowledge brokering competencies, insights and approaches were learned, which impacted subsequent activities both within existing projects and in the design of new ones. These insights included:

- Understanding that to approach sensitive issues, such as drought relief, one can work through an influential individual who cares and can advocate for the issue – using their voice and power – without necessarily working on the issue publicly.
- Realising that Namibia, unlike many other countries, has a fertile political environment where decision-makers are approachable and willing to



Vulnerability and Risk Assessment exercise with Oshana Regional Council in October 2020. © UNAM and CDKN



### Box 3: Transformative Scenario Planning on the Future of Water for Productive Use

Developed by Reos Partners, Transformative Scenario Planning (TSP) is an approach that brings together stakeholders who hold conflicting views to gain a deeper understanding of the drivers and perspectives that surround a particular issue. This is followed by the joint development of a range of possible future scenarios, which can help to shed light on what could be done to respond to the problem. At a two-day training workshop (in May 2016),<sup>10</sup> a range of government and non-government stakeholders from Windhoek and the Omusati region learned about the TSP model. Following this, the ASSAR team organised two more TSP workshops in February<sup>11</sup> and July<sup>12</sup> 2017 in Omusati. Here, the TSP focused on the future of water security and, for the first time, enabled stakeholders from diverse national, regional and local institutions to jointly discuss challenges and solutions related to water access and availability, in an open and informal setting. As a result of the workshop, stakeholders' understanding about water governance issues and connections between different stakeholders across scales increased.

listen, and this could be further capitalised on. Furthermore, the country's small population means it is relatively easy to have a vast, continuously growing network of potential partners and individuals who can open doors. At the workshop, the team realised that it is acceptable to use one's personal networks to further some issues, while remaining cognisant of the need to still respect formal channels.

- Acknowledging the high level of influence of Parliamentarians, and the need to work more closely with them. This was then incorporated as a component in a subsequent project in 2021.

- Recognising the importance of sustaining activities and taking them through to the end, which was not always the case in ASSAR when the team had, at times, not been strategic enough in following up on certain activities.
- 4. **Using inclusive and dynamic tools and approaches that seek to identify solutions and build relationships**

The ASSAR project orientation and approach were critical to its success. The following factors all helped to contribute to impact: the emphasis on research-for-impact, a focus on the most marginalised groups and on

current "hot" topics, the cross-scalar nature of its action, and the use of a portfolio of methods to yield results depending on the target audience.

Not only did the team prioritise participatory tools, like the TSP, VRA and stakeholder mapping, but they also developed a range of communications and capacity-building activities. These included **radio shows** to make full use of available research findings and disseminate these to a wider public; **training and collaborations with journalists** to ensure appropriate coverage of research results; a **range of capacity-building activities** that included innovative experiential learning tools designed for low literacy environments, amongst other things. A wide range of actors were engaged, and a broad constituency for support and action was built through these diverse approaches and tools.

**Using tools that foster joint understanding, empowerment and a solutions orientation:** The VRA methodology was developed by Oxfam to enable a range of stakeholders from different sectors and scales to gain a better understanding of a socio-ecological landscape and the communities that depend on it.<sup>13</sup> Through a participatory process, stakeholders identify and prioritise current and future vulnerabilities, risks, capacities and ambitions, while proactively proposing ways to move forward. The methodology aims to foster a sense of empowerment and collaboration among stakeholders. This is forged through the dialogue between community members and regional and local scales of government, as they jointly assess the different vulnerabilities experienced by various social groups, and brainstorm inclusive measures to reduce risk and enhance wellbeing and resilience. In addition, the VRA is generally preceded by a stakeholder mapping exercise – which the UNAM and UCT teams undertook earlier in the ASSAR project – to identify relevant stakeholders in the area and the power dynamics that may exist between them.

## THE IMPORTANCE OF LANGUAGE

Conducting the VRA event in the Oshiwambo language attempted to ensure inclusivity and grant everyone the possibility to actively engage. Possibly for this reason, and for the participatory nature of the tool, the Regional Councillor was highly engaged during the event. Thereafter, it became easier for the research team to be granted permission to visit the nearby communities to undertake their project activities (requiring simply an email or sms, instead of a formal letter of approval from the Regional Councillor).

A critical enabling factor was the **presence of experts and strategic partners who could train the team** in the use of the tools. The ASSAR team included experts in research-for-impact activities with a diverse set of skills in different participatory stakeholder engagement processes. These experts could train the team's researchers who, in many cases, had not been as involved in participatory group activities before. The VRA was facilitated by ASSAR team members from UNAM and UCT, two of whom had attended the ASSAR VRA conducted in Botswana a few months before. There, an Oxfam practitioner who was part of the ASSAR consortium had led the process and, thus, trained the Namibia team.

## REGIONAL COLLABORATION

In the subsequent CDKN-funded work, a former ASSAR researcher from the Botswana team, who had developed strong expertise in the VRA methodology by participating in a train-the-trainers process, helped facilitate the VRA workshop for gender ministry staff in Namibia. Having someone from another southern African country deliver the training added value to the workshop and increased the learning, given the interest of Namibian audiences in understanding how countries similar to theirs (geographically and culturally) tackle issues of climate change and development.

## Using an informal facilitation style with interactive, dynamic activities that strengthen relationships:

As with the VRA, the TSP approach appealed to the participants since it was solutions-oriented, participatory and promoted agency by encouraging those involved to take issues in their own hands and seek responses to the identified problems. At the beginning of the workshop, a proposal was made to avoid the use of titles and address each other by first name in order to decrease the hierarchies between different stakeholders and allow everyone to be "just people". This resulted in a more free-flowing engagement in an environment that could often suffer from excessive formality.

The tools that are used in the TSP – such as paired walks between participants to better understand each other's perspective, group work which includes the use of lego, sticky notes and numerous interactive discussions – enabled stakeholders from different backgrounds to interact for the first time. Most local stakeholders confessed they had not sat at the same table as the Governor or Director before. The process of scenario building itself encouraged participants to think out of the box and appraise possibilities that they normally would not have considered.

Relationships between the ASSAR team and the Regional Council were strengthened as the ASSAR UNAM lead worked in the same scenario development group as the Governor. Later this group kept in touch via WhatsApp, informally sharing information that related to water security and other TSP-relevant

topics. The team's reputation further strengthened as they demonstrated their capacity to facilitate interactive, yet substantive meetings, which lead to brainstorming concrete solutions.

## The team's ability to foster connections across scales:

In addition to convening stakeholders from different governance levels under one roof, the TSP enabled a sharing of knowledge across these scales, which contributed to the generation of more relevant, legitimate and credible knowledge in the group processes. National-level issues, such as those tied to the climate change policy and action plans, were brought to the regional and local levels, while local stakeholders shared their largely tacit experiential and indigenous knowledge with the higher levels.

**"TSP is a good method of planning with different sectors to change the future. It helped me understand the system in which I am working and the relationship between different sectors. TSP can be used by planners and managers who are keen to transform their organisations by bringing up the change they would like to see in the future."**

– Mr Silvanus Uunona,  
Hydrologist, Ministry of  
Agriculture, Water and Forestry

## 5. Building credibility and reputation to prove one's worth is a multi-faceted endeavour

A critical strength of the project team arose from its members' existing reputation, networks, experience, knowledge and roles both nationally (such as being part of the NCCC) and sub-nationally (where the team had often assisted the Regional Governor in multiple requests related to providing input for the State of the Region report, regional projects, speeches and presentations).



Transformative Scenario Planning in Omusati in 2017. © Birgit Ottermann

Such strengths grew over time and were complemented by a range of factors.

As referred to earlier, throughout the ASSAR project, the **relevant, novel, robust evidence base** of the research caught the attention of different stakeholders during various events (e.g. the Africa Drought Conference, VRA, TSP) and kept expanding the team's reputation and credibility. The ASSAR focus on topical issues demonstrated the salience of the results to government and community stakeholders alike.

**“When Margaret [the UNAM lead] first came, we thought she was just a researcher/geographer; now I understand how rural development links to climate adaptation.”**

– Erkki Endjala, Governor of Omusati

Having an **integrated, cohesive and heterogenous team that comprises a mix of knowledge traditions and skills** also helped build credibility.

The complementarity of the ASSAR team's expertise manifested in multiple ways, being composed of researchers, practitioners as well as local experts with experiential knowledge on the ground and a vast range of strategic networks and relationships; and intellectual competence from outside universities and internationally-recognised NGOs, like Oxfam, which bring in globally-tested tools.

At the Africa Drought Conference, for example, the participating ASSAR team members were able to bring their distinct set of knowledge on different facets of drought to the fore. In addition, during the conference, ASSAR colleagues at UCT and Oxfam were on call to revise and provide input on the declaration that was being drafted. In this way, key concepts from the VRA were included.

The team's **willingness to work with little acknowledgment and self-sacrifice** was also evident, particularly in the early phases of the project when they invested additional energy into building relationships and showing the value of partnering with them.

In September 2016, the Omusati Regional Council planned a one-day event to feed back on the outcomes of the Africa Drought Conference to local communities and decision makers.<sup>14</sup> High-level presentations were given by the Regional Governor, the Ministry of Agriculture, Water and Forestry (MAWF) and the environment ministry. The team took on several aspects of the meeting's organisation, such as preparing the agenda with the deputy director of the Regional Council; helping to draft part of the Governor's speech and the presentation given by the environment ministry; and taking minutes of the meeting. Such tireless and unacknowledged work was critical to further strengthen the team's

reputation and demonstrate their reliability and hard-working nature which, over time, meant they came to be seen as a valuable partner to call upon (see Box 4).

The increasingly strong reputation and exposure of the team, however, also lead to the unintended consequence of the members feeling ever more overwhelmed as the number of requests, gaps and needs increased. While on one hand their commitment, dedication and passion for the issues drove their work and precluded them from ignoring potential opportunities,

on the other, feelings of burnout, overburden and stress also became present over time.

The Omusati Region Drought Resilience Consultative Meeting in 2016 had a few shortcomings that the ASSAR team could address when they organised the later Omusati Conference described in Box 4. The earlier consultative meeting was over-represented by politicians and people known to the organisers, possibly as a result of having been organised quickly. Its hierarchical nature, the presence of evident power dynamics, the short duration of the

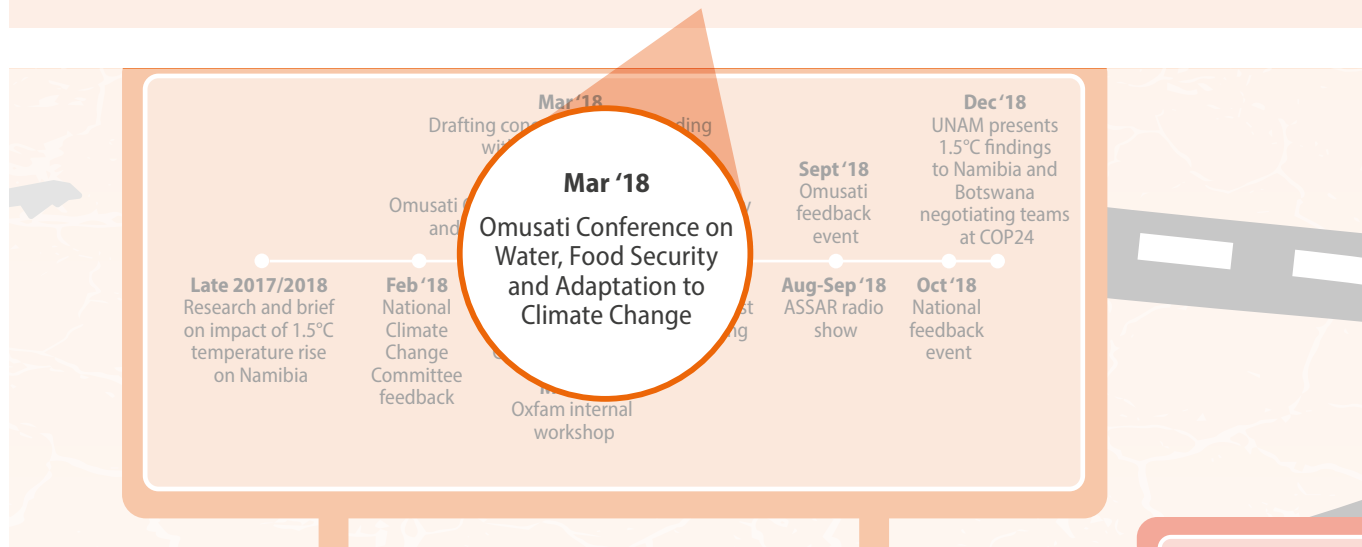
meeting (half a day), and a style of facilitation that did not encourage participation or the breaching of certain formalities meant that there was very little dialogue and most non-government participants did not engage. Here the team learned critical lessons on the importance of overcoming power dynamics and hierarchies, such as through inclusive participation and facilitation that encourage everyone to have an equal voice. These lessons were applied subsequently.

#### **Box 4: Building on previous work: Omusati Conference on Water, Food Security and Adaptation to Climate Change**

In March 2018, the Omusati Regional Council hosted a two-day conference in partnership with the ASSAR team, building on the Africa Drought Conference and the 2016 Omusati Consultative Meeting on drought. During the conference, participants discussed the various challenges facing the region and together developed and prioritised a number of potential intervention areas (such as increasing water access and fodder production). These were then used as a basis for developing concept notes to obtain funding (unfortunately unsuccessful), which were drafted by ASSAR and the Regional Council, with the participation of other stakeholders.

This conference built on previous events and showed the team's growing influence in a number of ways:

- At the request of the Regional Council, and based on the interactive and inclusive nature of previous ASSAR-organised workshops (e.g. VRA, TSP), the project team was charged with developing the programme, facilitating the meeting and organising guest participation.
- The TSP process determined the topic of the conference (water, food security and climate adaptation), and a presentation on its results set the stage at its start.
- The team's reputation and credibility, as well as ever-strengthening relationships with the Omusati Regional Council, resulted in a request for assistance to prepare the Governor's presentation.
- The team supported and covered the costs for the logistics of the conference, thanks to the flexibility in the way Oxfam funds (allocated to ASSAR's research-for-impact activities) could be used.
- The team earned additional respect through the use of local providers (e.g. photographer) and by sourcing the ingredients for the conference meals locally (e.g. from the local horticulture association and local chicken community projects).



**6. Relevant, tailored knowledge products are critical, but as a means to initiate dialogue, not as an end**

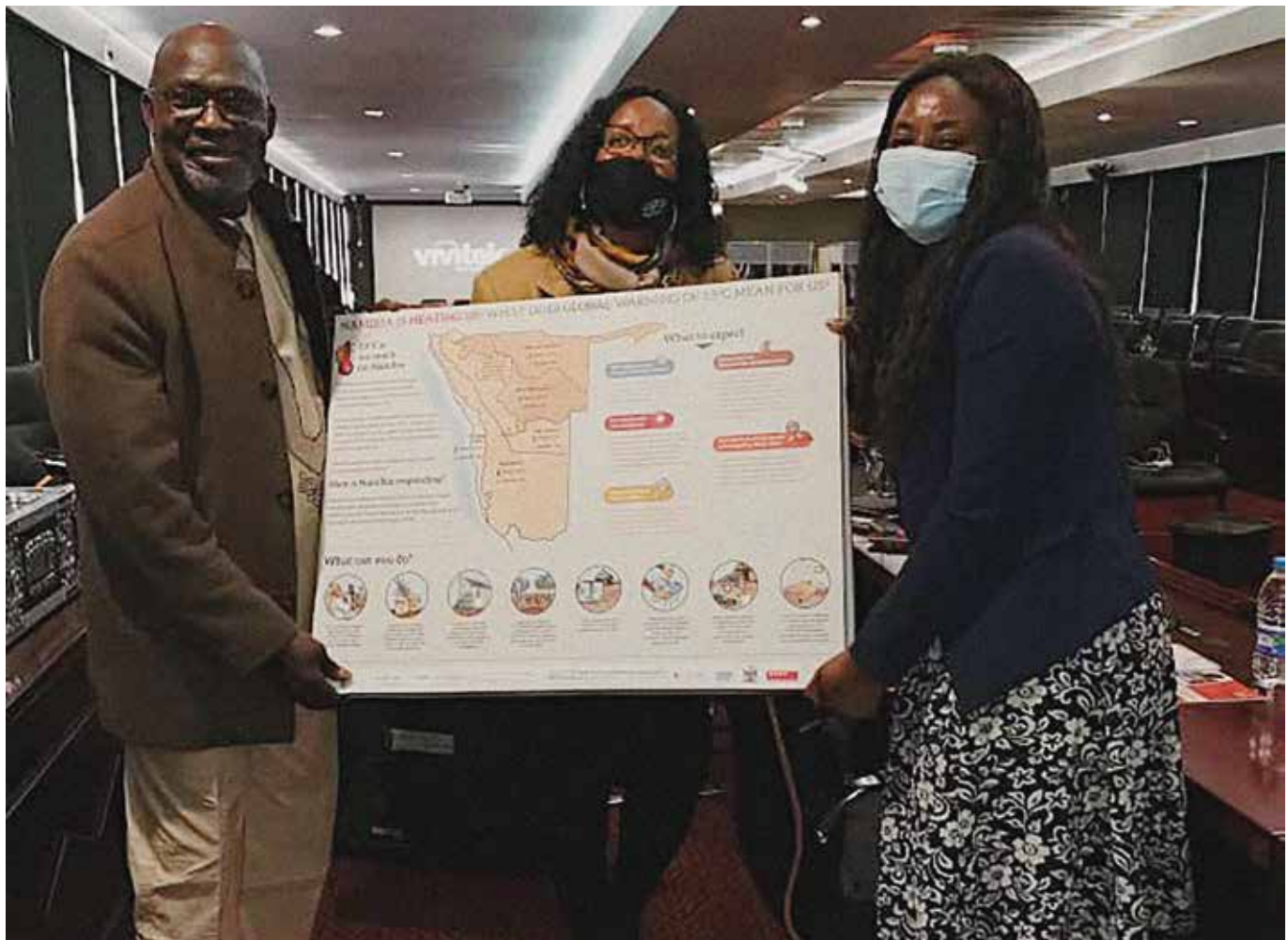
Towards the end of the ASSAR project, the UCT team of researchers produced a brief that explained the impact of a 1.5°C or warmer world on different resources and productive sectors of Namibia.<sup>15</sup> Its ramifications have been significant, as Namibia’s projected climate impacts provide a strong justification for climate action in the funding proposals drafted by a range of actors (such as by the Environmental Investment Fund of Namibia in its Green Climate Fund proposals). The brief also contributed to Namibia’s fourth national communication to the UNFCCC; and was used in government speeches and presentations (e.g. by the Regional Governor and environment ministry).

Through the brief’s **translation** to Oshiwambo<sup>16</sup>, and its **simplification** in an **infographic**<sup>17</sup> made available as a poster in both languages and put on display in regional offices, the brief opened the door for dialogue at multiple levels, showing all stakeholders the urgency of taking swift action.

**“Some of these things we didn’t know. We are willing to learn and then we’ll act.”**  
 – Community member from Omaenene village

**“If you don’t have knowledge, you don’t exist.”**  
 – Constituency Development Committee member from Ongwediva Constituency

**“The posters the Oshana Regional Council received, particularly the office of the Hon Governor and Ongwediva Constituency, are really contributing a lot to the region, as they are in the local language, and communities and Hon Councillors can understand them well. When all Hon Councillors saw them, they asked me if they can also get them in the local language. This information is also good for education, to our youth, etc. when they visit the regional offices in Constituencies.”**  
 – Ndapanda Kanime, Oshana Regional Council

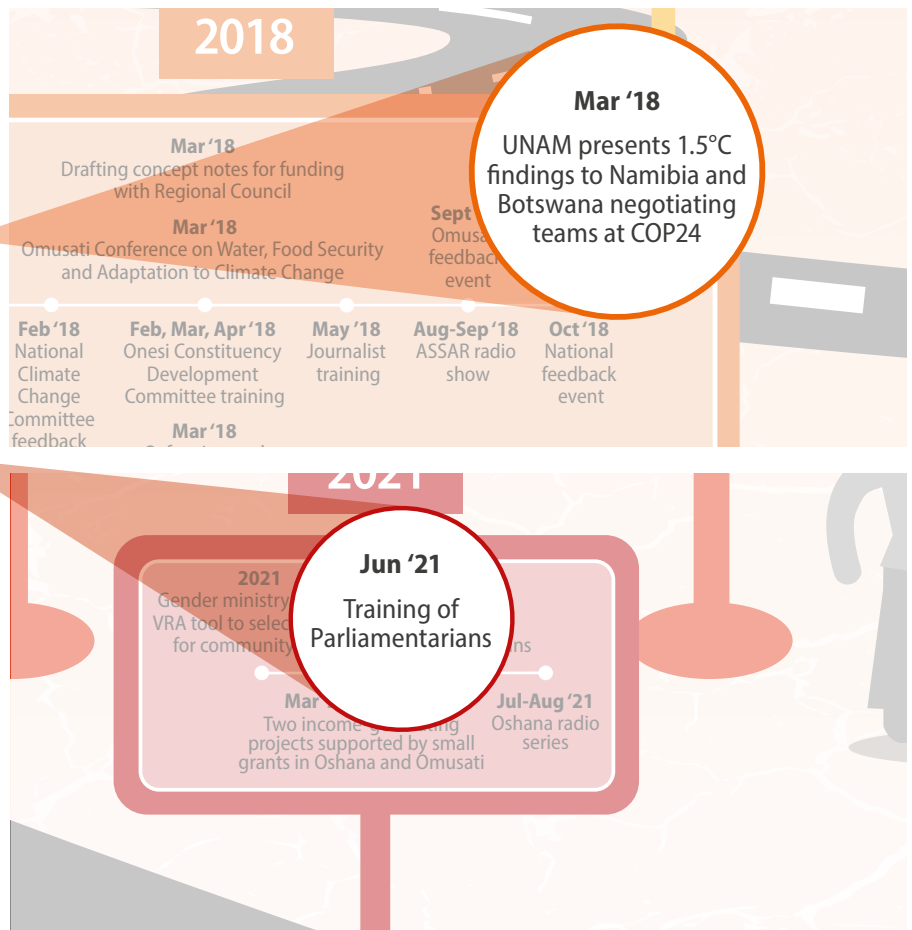


Infographic poster handed over to Hon Tjekero Tweya, Chairperson of the Parliamentary Standing Committee on Natural Resources © UNAM and CDKN

Furthermore, the 1.5°C findings paved the way for much subsequent work to influence policy, opening doors to gain the interest of Namibia's and Botswana's negotiating teams at COP24 in Poland, for example. When the results were presented to **Namibia's delegation at COP24**, they asked for the same information to be presented to all their colleagues. The opportunity materialised when the team was invited to present evidence at a **parliamentary meeting in June 2021**, which was done through an animation developed with the input of multiple ministries. The focus was on the impacts of a 2°C temperature rise, given the perception amongst government stakeholders of the higher likelihood of this scenario materialising globally compared to 1.5°C. This was also accompanied by a short course on climate change for parliamentarians.

Given the potential impact of engaging with this level of government on allocating budget towards climate change activities, influencing parliamentarians was a key activity in a post-ASSAR project funded by IDRC.

The team found that **tailoring the evidence for different users** was extremely effective. Knowledge products were re-packaged as a portfolio of outputs targeted at different users, including (i) two radio series (in 2018 and 2020) for the



general public, (ii) training material for youth and journalists on climate awareness and advocacy, (iii) the use of games and experiential learning to strengthen the capacity of the constituency development committees, (iv) newspaper articles for the general public and, (v) a range of other communications outputs.<sup>18</sup>

**“ASSAR didn’t do something new, nor was it the only one producing research. It’s how the information was packaged, in terms of language and style, [and] the way it was integrated and presented [that made the difference].”**

– Martha Naanda, United Nations Development Programme (UNDP)



Namibian parliamentarians pose after their climate change training course in June 2021. © UNAM

However, the team also learned that communications products are not sufficient to create change by themselves. They are just one ingredient that needs to be accompanied by continuous **awareness raising to gain sufficient traction at multiple levels**, as well as to **pave the way for action**. The **timing of the dissemination** of outputs is also important: in the case of ASSAR, some outputs were ready too late and could, therefore, not be used adequately for influencing.



In the CDKN-funded work, the team improved their ability to grasp windows of opportunity, building on communications outputs produced earlier (such as the 1.5°C portfolio). They also developed their skills to swiftly identify the key messages that needed to be communicated for influencing specific policy processes and programmes (such as assisting the gender and urban and rural development ministries with contributing to the implementation of the national climate change policy highlighted under enabler 2).

**7. Long-lasting change requires sustained engagement and support, including through different projects building on one another**

The continuity provided by the team’s high level of commitment to the project and its issues, coupled with a number of funding opportunities that followed the ASSAR project, has been critical in sustaining the momentum created by ASSAR activities and findings (funding opportunities included CDKN’s knowledge accelerator programme, IDRC funding to follow-up ASSAR activities as well as others the team took advantage of). Through their continuous engagement with stakeholders and their increasing understanding of emerging needs and

gaps, the project team gained a better understanding of the actions that were required and how to include those in subsequent funding proposals.

The team also realised that sustained change does not result from a few once-off workshops and that action must be supported between events. Although the team’s individual VRA and TSP workshops were largely successful, stakeholder expectations that concrete action would emerge from them were not met, despite their solutions-orientation. In the case of the TSP process, for example, a number of limitations were at play, such as:

- The nature of the tool promotes the surfacing of solutions but does not lead to prescribed measures, unless participants take the onus on themselves to act on ideas that emerge during the workshops. Through ASSAR it was learned that TSP works best in conjunction with other tools that can help in the implementation of responses, or follow-up engagement and project funding that ensure that concrete actions result.
- The limits imposed by roles and mandates meant that some of the stakeholders from the national level (e.g. the power utility NamPower) were unable to implement

community-based responses, such as at the ASSAR case study site at the constituency level. Also, UNAM itself, being a university and not a development actor, was limited in how much action it could promote and implement post the TSP. Yet, expectations around the implementation of responses and solutions were raised when discussing issues of an applied nature in concrete terms (as happened in the VRA and TSP). For example, discussions on how to deal with water scarcity during the TSP raised a number of potential solutions, such as water harvesting and the creation of small dams, but without follow-up funding and action, these remained only ideas.

The team, however, managed to overcome some of these limitations in the post-ASSAR CDKN project, where two community projects were supported in villages in the Oshana and Omusati regions, via the gender ministry’s grant support programme. Through the VRA training, the gender ministry was better equipped to identify marginalised and climate-vulnerable groups who could benefit from their grant support programme.

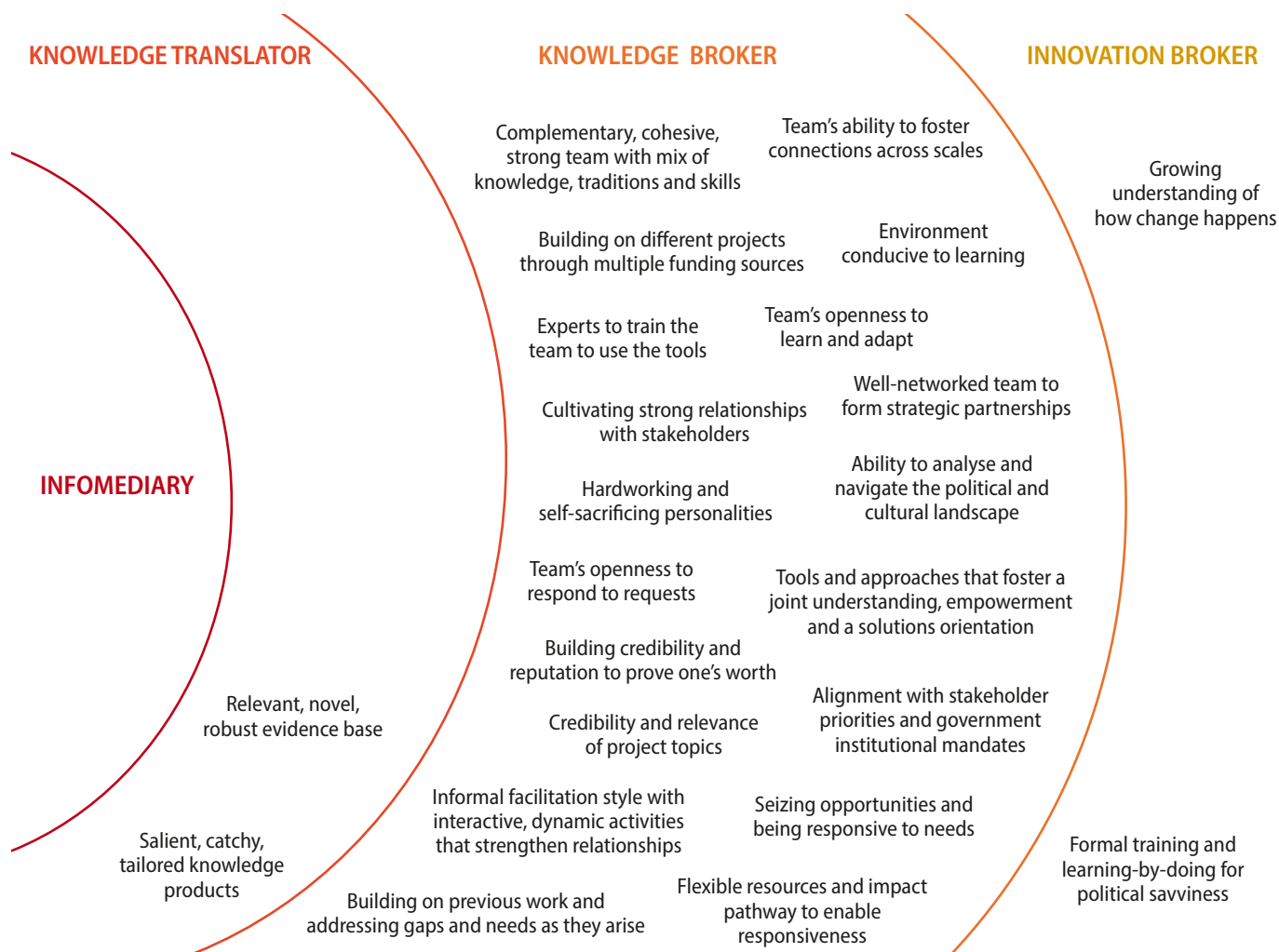
**Two income-generating adaptation projects were funded as a result.**



Community engagement in village of Omaenene in Oshana to identify income-generating adaptation projects. © UNAM and CDKN



**Figure 3: Mapping of enabling factors and lessons along the knowledge brokering spectrum**



### Factors enabling effective knowledge brokering

The lessons explored in this case study have been mapped onto the spectrum of knowledge broker types in Figure 1. This provides an overview of the knowledge brokering approaches and enablers that helped the team to strengthen relationships and partnerships with diverse stakeholders, and contribute to increased mainstreaming of climate issues.

Most of the enabling factors identified in Figure 3 fall within the central knowledge brokering area of the spectrum, with only a couple found in the knowledge translation role, and many straddling more systemic issues located in the realm of innovation brokering. This indicates that while knowledge brokers are often better known for disseminating, translating and

packaging information, when it comes to mainstreaming climate issues across sectors and levels, facilitating processes (such as capacity building, stakeholder engagement and innovative processes that can challenge the status quo) becomes much more critical.

For example, as the team gained an increased understanding of how change happens and how influencing needs to be approached – including by linking with the government’s agenda of the day and their institutional mandates – they took on increasingly complex tasks. Building on the success and lessons learned from ASSAR, the post-ASSAR knowledge brokering work in Namibia sought to bridge governance divides and shift institutional relationships at different levels. The team took on the multiple tasks of paving the way

to decentralise climate change in the Oshana and Omusati Regional Councils; strengthening horizontal governance and relationships between the environment, gender, and urban and rural development ministries, thereby addressing the common challenge of ministries working in sectoral silos; as well as planning capacity building events for the Parliamentary Committee on Natural Resources for Namibia, which has the potential to affect budgetary allocations to climate activities. The team’s fostering of connections across scales, including through the use of participatory tools that built relationships amongst stakeholders who generally have limited interaction, while also increasing empowerment and understanding, were innovative brokering activities.

### Box 5: What makes an effective knowledge broker?

The qualities and competencies the team demonstrated were critical enabling factors of success. These included humility, nimbleness, resourcefulness, a desire to learn and a strong work ethic and commitment shown through passion, tirelessness and persistence. As the team for the new CDKN-funded project was assembled at the end of ASSAR in early 2019, once again different individuals who bring different skills, relationships and reputation were identified.

When reflecting on the features of successful partners, the team recognised the following is important for climate mainstreaming work:

- The right personality, with a strong work ethic and the right fit – “someone who has their heart in it”.
- Someone with the authority to bring about change.
- Someone with an understanding of multiple governance levels (from local to national).
- A person with influence and reputation.
- A person with established personal relationships.
- Someone who gives support to organise project activities and opens doors.

Importantly, formal agreements to partner (such as through MoUs, etc.) make collaboration official (such that one can refer to the agreement in formal communications) and increase ownership.

In Figure 3, one can see how the role of the knowledge generated and brokered by the project, while critical (particularly the relevance, catchiness and tailored nature of the work on the impacts of a 1.5°C temperature rise in Namibia), was only one of many enabling factors. Although the knowledge translation role of the team was critical for action and generating development results, it was the *combination of activities* that took place in the knowledge brokering area of the spectrum that proved to be important in this case. These pertain to brokering processes, more than knowledge

on its own, through identifying and connecting stakeholders, in some cases making sense of and co-creating knowledge together (e.g. through the VRA and TSP), and strengthening capacities in the process.

Responding to requests, addressing needs and gaps as they arise (which are uncovered through both research and stakeholder engagement activities), and being savvy at grasping opportunities became crucial activities. These approaches helped to build relationships, reputation and increasing collaboration between the team and

key government stakeholders, both nationally (e.g. in the environment ministry) and regionally (through the Regional Councils). Here, a critical enabler of success was being flexible in the use of funding and in one’s originally-intended outcome. Continuous engagement in the governance system and building on project achievements (including their relationships and outputs) through subsequent projects were shown to be key. All of these are important lessons for future projects and programmes.



Community engagement in the village of Okasheshete in Oshana to identify potential income-generating community adaptation projects. © UNAM and CDKN



Vulnerability and Risk Assessment training for the Ministry of Gender Equality, Poverty Eradication and Social Welfare in November 2019. © UNAM and CDKN

## Endnotes

- 1 Bielak, A.T., Campbell, A., Pope, S., Schaefer, K. and L. Shaxson. (2008). From science communication to knowledge brokering: The shift from 'science push' to 'policy pull'. [https://www.researchgate.net/publication/226710369\\_From\\_Science\\_Communication\\_to\\_Knowledge\\_Brokering\\_the\\_Shift\\_from\\_'Science\\_Push'\\_to\\_'Policy\\_Pull'](https://www.researchgate.net/publication/226710369_From_Science_Communication_to_Knowledge_Brokering_the_Shift_from_'Science_Push'_to_'Policy_Pull')
- 2 Jones, L., Harvey, B., and R. Godfrey-Wood. (2016). 'The changing role of NGOs in supporting climate services'. BRACED *Resilience Intel*, Issue No. 4. Retrieved from: <https://cdn.odi.org/media/documents/10885.pdf>
- 3 Harvey, B., Lewin, T., and C. Fisher. (2012). 'Is development research communication coming of age?' *IDS Bulletin*, 43 (5), 1-8. 10.1111/j.1759-5436.2012.00356.x. Retrieved from: <https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/7526>
- 4 Ibid.
- 5 ASSAR. (2019). 'What global warming of 1.5°C and higher means for Namibia'. Retrieved from: [http://www.assar.uct.ac.za/sites/default/files/image\\_tool/images/138/1point5degrees/ASSAR\\_Namibia\\_global\\_warming.pdf](http://www.assar.uct.ac.za/sites/default/files/image_tool/images/138/1point5degrees/ASSAR_Namibia_global_warming.pdf)
- 6 Ibid.
- 7 Spear, D., Haimbili, E., Angula, M., Baudoin, M., Hegga, S., Zaroug, M. and A. Okeyo. (2015). *Vulnerability and adaptation to climate change in the semi-arid regions of southern Africa*. CARIAA-ASSAR Working Paper. Adaptation at Scale in Semi-Arid Regions (ASSAR). Retrieved from: [http://www.assar.uct.ac.za/sites/default/files/image\\_tool/images/138/RDS\\_reports/SAFRICA/Southern%20Africa%20RDS%20full%20report.pdf](http://www.assar.uct.ac.za/sites/default/files/image_tool/images/138/RDS_reports/SAFRICA/Southern%20Africa%20RDS%20full%20report.pdf)
- 8 Hegga, S., Ziervogel, G., Angula, M., Spear, D., Nyamwanza, A., Ndeunyema, E., Kunamwene, I., Togarepi, C., and D. Morchain. (2016). *Vulnerability and risk assessment in Omusati region in Namibia*. Retrieved from: [http://www.assar.uct.ac.za/sites/default/files/image\\_tool/images/138/Southern\\_Africa/VRA-Namibia-Mar\\_2016/Namibia%20Vulnerability%20and%20Risk%20Assessment%20Report\\_edit.pdf](http://www.assar.uct.ac.za/sites/default/files/image_tool/images/138/Southern_Africa/VRA-Namibia-Mar_2016/Namibia%20Vulnerability%20and%20Risk%20Assessment%20Report_edit.pdf)
- 9 <http://www.assar.uct.ac.za/news/assar-african-drought-conference>
- 10 Shalumbu, B. and D. Spear. (2016). *Preparing for Transformative Scenario Planning in Namibia: Short report on the TSP training in Windhoek*. ASSAR report. Retrieved from: [http://www.assar.uct.ac.za/sites/default/files/image\\_tool/images/138/Namibia/TSP%20Namibia%20Short%20Report%2015%2011%202016\\_Update.pdf](http://www.assar.uct.ac.za/sites/default/files/image_tool/images/138/Namibia/TSP%20Namibia%20Short%20Report%2015%2011%202016_Update.pdf)
- 11 Perez, T. (2017). *Using Transformative Scenario Planning to think critically about the future of water for productive use in Omusati, Namibia*. ASSAR report. Retrieved from: [http://www.assar.uct.ac.za/sites/default/files/image\\_tool/images/138/Southern\\_Africa/First%20TSP%20workshop%20in%20Namibia%20-%20information%20brief%20-%20April%202017.pdf](http://www.assar.uct.ac.za/sites/default/files/image_tool/images/138/Southern_Africa/First%20TSP%20workshop%20in%20Namibia%20-%20information%20brief%20-%20April%202017.pdf)
- 12 Ibid.
- 13 Hegga, S. et al. (2016). *Vulnerability and Risk Assessment in Omusati Region in Namibia: Fostering people-centred adaptation to climate change*. Retrieved from: [http://www.assar.uct.ac.za/sites/default/files/image\\_tool/images/138/Southern\\_Africa/VRA-NamibiaMar\\_2016/Namibia%20Vulnerability%20and%20Risk%20Assessment%20Report\\_edit.pdf](http://www.assar.uct.ac.za/sites/default/files/image_tool/images/138/Southern_Africa/VRA-NamibiaMar_2016/Namibia%20Vulnerability%20and%20Risk%20Assessment%20Report_edit.pdf)
- 14 <http://www.assar.uct.ac.za/news/discussing-drought-northern-namibia>
- 15 ASSAR. (2019). 'What global warming of 1.5°C and higher means for Namibia'. Retrieved from: [http://www.assar.uct.ac.za/sites/default/files/image\\_tool/images/138/1point5degrees/ASSAR\\_Namibia\\_global\\_warming.pdf](http://www.assar.uct.ac.za/sites/default/files/image_tool/images/138/1point5degrees/ASSAR_Namibia_global_warming.pdf)
- 16 ASSAR. (2019). 'Shoka Elunduluko Lyuupyu Womewangandjo Muuyuni Lyopashiyekitho Shoodigilii Selsius 1.5 noli Vulithe po lya Hala Okutya moNamibia'. Retrieved from: [http://www.assar.uct.ac.za/sites/default/files/image\\_tool/images/138/1point5degrees/ASSAR\\_Namibia\\_global\\_warming%20-%20Oshiwambo%20version.pdf](http://www.assar.uct.ac.za/sites/default/files/image_tool/images/138/1point5degrees/ASSAR_Namibia_global_warming%20-%20Oshiwambo%20version.pdf)
- 17 University of Namibia. (2020). 'Namibia is heating up: What does global warming of 1.5 mean for us?' Retrieved from: [https://cdkn.org/wp-content/uploads/2020/10/CDKN-Namibia-Map-without-cow-web-ready\\_v2.pdf](https://cdkn.org/wp-content/uploads/2020/10/CDKN-Namibia-Map-without-cow-web-ready_v2.pdf)
- 18 <http://www.assar.uct.ac.za/namibia-country-page>

## Climate and Development Knowledge Network (CDKN)

CDKN supports decision-makers in developing countries in designing and delivering climate compatible development. We do this by combining knowledge sharing, research and advisory services in support of locally owned and managed policy processes. CDKN works in partnership with decision-makers in the public, private and non-governmental sectors nationally, regionally and globally. Please visit [www.cdkn.org](http://www.cdkn.org)

## University of Namibia

The University of Namibia (UNAM) is the largest and leading national institution of higher education in the country. UNAM's mission is to contribute to the achievement of national and international development goals through the pursuit of translational research, quality training and innovation. Please visit [www.unam.edu.na](http://www.unam.edu.na)

## Desert Research Foundation of Namibia

The Desert Research Foundation of Namibia (DRFN) was founded in 1990 to enhance decision-making based on applied research, knowledge and understanding of the environment, for sustainable livelihoods and development. Its vision is a Namibia in which people manage the environment for sustainable livelihoods. Please visit [www.drfn.org.na](http://www.drfn.org.na)



[www.cdkn.org](http://www.cdkn.org)

[cdkn@southsouthnorth.org](mailto:cdkn@southsouthnorth.org)

This work was carried out with the aid of a grant from the Ministry of Foreign Affairs of the Netherlands and the International Development Research Centre (IDRC), Canada, as part of the Climate and Development Knowledge Network (CDKN) Programme. The views expressed herein do not necessarily represent those of the Ministry of Foreign Affairs of the Netherlands, or of the International Development Research Centre (IDRC) or its Board of Governors, or of the entities managing CDKN.

© Climate and Development Knowledge Network, 2021. This work is licensed under a Creative Commons Attribution, Non-Commercial Licence (CC BY-NC 3.0).