# RESILIENT WATERS PROGRAM BASELINE STUDY RUNDU

USAID's Resilient Waters Program aims to **build more resilient and water-secure communities** in the Okavango and Limpopo river basins. Resilient Waters focuses specifically on transboundary water security and resource management; safe, sustainable drinking water and sanitation services; climate change adaptation; and conserving biodiversity and ecosystems.

The purpose of this document is to:

- Provide the community of Rundu with feedback from our study;
- Highlight priority areas for Rundu to become more resilient; and
- Facilitate a planning session based on the information we have collected.

#### **RUNDU AT A GLANCE**

#### We interviewed 85 people in Rundu

Most of the people interviewed were younger than 35 years.

Older than 35 (36%)

Younger than 35 (64%)

Most of the people interviewed were female.

Female (54%)

Male (46%)

In Rundu, natural resources are very important to the wellbeing of households, while farming is a key sources of income.

#### Understanding of resilience in Rundu



Sources of natural shocks and stressors in Rundu are droughts, poverty/lack of income and lack of food



These shocks and stressors negatively impact households; and result in there being **limited** water for the community.



In Rundu, resilience is seen as **starting a business or finding employment**.

#### What is resilience?



**Resilience** is the ability to respond to shocks and stressors. There are four dimensions of resilience.

### **Absorptive Capacity**



Can we protect ourselves and cope with events?

### +

### **Adaptive Capacity**

Can we **adjust** the way we live after an event has happened?

#### **Anticipatory Capacity**



Can we make a **plan** for other events that might happen to us?



### Transformative Capacity

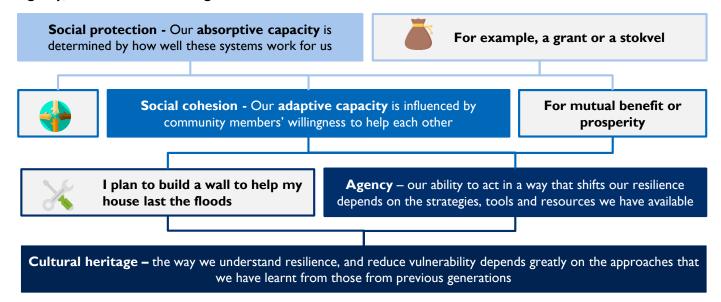
Can we change the way that we do things based on what we have learned?

### **BASELINE STUDY**

We did a baseline study in 13 communities in seven countries in the Limpopo and Okavango river basins. We did this to find out how households understand resilience, how communities are building resilience, and what this means for our work. One of the areas that we surveyed was Rundu, Namibia. Rundu falls into the Okavango River Basin which covers central Angola, Namibia and Botswana.

#### WHAT DETERMINES RESILIENCE?

Our baseline study found that resilience is determined by four factors: I. Social protection, 2. Social cohesion, 3. Agency, and 4. Cultural heritage.



### WHAT DID WE FIND OUT IN RUNDU?

Water shortages are the biggest challenges in Rundu. Natural resources are a source of food and income, but also pose a threat for households in Rundu. Weather and climate, insects/animals and health are the forms of shocks and stressors. The effects of shocks and stressors have been less access to food and water, income/resources and less social support. The effects of the shocks and stressors were widespread across individuals and communities.

### WATER SHORTAGES ARE THE BIGGEST CHALLENGES IN RUNDU



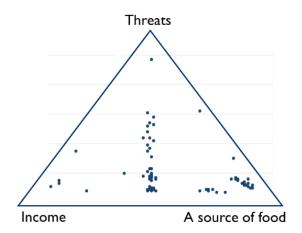
Water shortages, caused by droughts, are the biggest source of stress for households in Rundu. Households in Rundu reportedly face a lack of food as a consequence of the water shortages.

Expensive water bills were also highlighted by the community as a concern. Water concerns are exacerbated by unemployment resulting in poverty amongst Rundu households.

### RUNDU AND NATURAL RESOURCES

Natural resources are source of food and income, but also pose a threat for households in Rundu

The heatmap below shows that water is a source of both income and food in Rundu. Where water is considered a threat, it is because of the droughts in the area increasing the availability and cost of water.

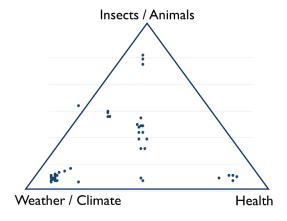


- Plants are seen as both a source of income and food.
- Animals are seen as both a source of income and food; and as a threat because of the human-wildlife conflict experienced in the area.

# THE CAUSES OF SHOCKS AND STRESSORS

Weather/climate are the main forms of shocks and stressors, but also insects/animals and health cause shocks

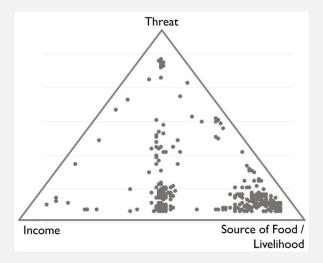
Rundu is affected by climate, particularly droughts and water constraints. Insects and health also cause shocks and stressors.



## RUNDU COMPARED TO THE OKAVANGO RIVER BASIN

As with Rundu, natural resources in the Okavango River Basin are a key source of livelihood, but can be threats.

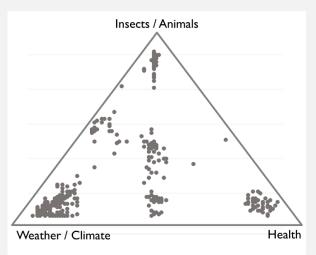
When compared to Ramotwa, water is more acutely seen as a source of food / livelihood in the Okavango River Basin. Similar to Rundu, water is also a threat in that the whole basin has been subject extreme droughts.



- As with Rundu, plants are largely seen as both a source of income and food.
- Animals are seen as both a source of income and food; and as a threat.

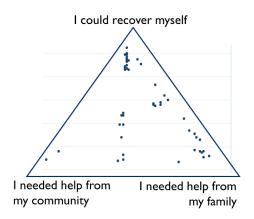
### THE CAUSES OF SHOCKS AND STRESSORS

As with Rundu, weather and climate are the main forms of shocks and stressors in the Okavango River Basin. There are far fewer instances of shocks and stressors in the form of insects and animals likely due to the urban nature of Rundu. This differs from the basin as a whole.



### RECOVERY FROM SHOCKS AND STRESSORS

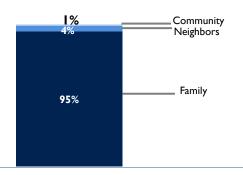
Households in Rundu had varying levels of recovery. Some were either self-sufficient and able to recover themselves or with help from their family.



# SUPPORT AND PLANNING FOR SHOCKS AND STRESSORS IN RUNDU

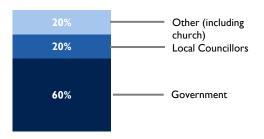
### 83% of households have people that they can turn to for support

There are very high levels of support in Rundu. Of those that **do have people to turn to**, most could turn to family, their neighbours or the community.



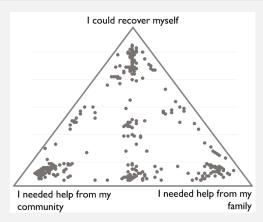
### 54% of households have organizations that they can turn to for support

Respondents turn mainly to government or local councillors when seeking support from organisations



# RUNDU COMPARED TO THE OKAVANGO RIVER BASIN

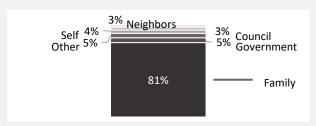
As in Rundu, households in the Okavango River Basin can draw on a combination of community and family or themselves to recover from shocks.



# SUPPORT AND PLANNING FOR SHOCKS AND STRESSORS IN THE OKAVANGO BASIN

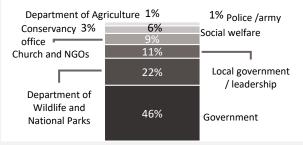
### 48% of households in the Okavango River Basin have people that they can turn to for support

Compared to Rundu, substantially fewer households in the overall basin have people to turn to for support. Similarly, of those that have people to turn to in the Okavango River Basin, the vast majority (81%) could turn to family.



### 54% of households in the Okavango River Basin have organizations that they can turn to for support

Of the 54% who have organizations to turn to, the majority (as in Rundu) rely on various government departments.



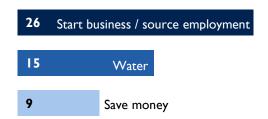
#### PLANNING FOR THE FUTURE

Overall, households in Rundu felt that more resources, information and stronger networks would help them to respond better to shocks and stressors in the future.

Personal beliefs, information received as well as community actions were critical to people's decision-making. Therefore, there is a need to ensure that communities have access to reliable and helpful information so that they can plan better, but also creating opportunities for community members to learn from each other.

82% of households in Rundu have a plan for future natural shocks and stressors. Of the 82% of households in Rundu that have a plan, these plans were largely related to starting a business or finding employment. Other plans centred around extra water and saving money, the latter in order to have the funds in the case of an emergency or 'shock'. Examples of the plans that people reported include:

- Start a business or source employment: Earn income through a job or business
- Water: obtain water tanks, saving water in buckets, paying for water on time.
- Saving: Regularly saving a portion of income for emergencies.



**Number of people** 

A lack of resources and support prevents people in Rundu from implementing their plans.

# HOW COULD RUNDU BECOME MORE RESILIENT?

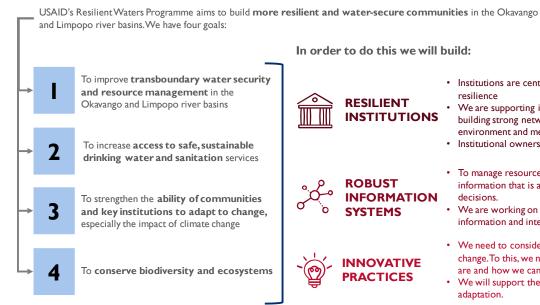
In Rundu, residents sited lack of resources, information and strong support networks limited their ability to plan

appropriately and thus weakens the community's resilience. To improve their resilience, residents in Rundu may benefit from the following actions which have been developed understanding the context of the community, its climate and initiative feasibility:

- Maximising food gardens: In communities like Rundu where unemployment and poverty are concerns, developing food gardens can be valuable as a means to supplement either food or income. Given the increasingly dry climate, climate smart agriculture such as drip irrigation is a worthwhile investment.
- Collective seed purchasing: a collaborative approach to purchasing seeds may provide additional opportunities for funding through government or non-profit organisations. Such an approach also allows for a wide variety of seeds to be shared between residents thus broadening the types of crops grown, and thus nutrients available from which all residents can benefit. This type of approach reduces individual risk thus increasing overall resilience of the community. Furthermore, such an approach can present self-employment opportunities which was regularly sited as a 'solution'.
- Community information sessions:
  Residents in Rundu have relatively high levels of support, and entrepreneurial ambitions, which means they might be diversifying their sources of income. Our research shows that communities who build business opportunities have strong communication channels. This suggests a need to establish a regular community forum to support sharing of ideas, solutions and offering support networks. This may also be frequented by the local government officials providing a platform to share any updates with the entire community.

Based on the findings of our research, the effects of shocks and stressors are experienced in the form of reduced resources, income, social support and access to food and water. The initiatives highlighted above seek to enable the community of Rundu to improve their preparation for future shocks, and to recover from these shocks quicker. This is enabled by creating more resilient methods of communication, food production and water collection.

### **OVERVIEW OF USAID'S RESILIENT WATERS PROGRAMME**



In order to do this we will build:



- **RESILIENT INSTITUTIONS**
- · Institutions are central to managing resources and building resilience
- We are supporting institutions in building capacity to plan, building strong networks, enhancing an enabling environment and meeting their objectives.
- Institutional ownership is important for sustainability.



**ROBUST INFORMATION SYSTEMS** 

- To manage resources better and build resilience, we need information that is accessible and that can be used to make decisions.
- We are working on filling information gaps, synthesising information and integrating it into decision-making.



- We need to consider new ways to live to adapt to climate change. To this, we need to understand what these practices are and how we can use them.
- We will support the innovation and systems of dynamic adaptation.