



Food and Agriculture
Organization of the
United Nations



UNITED NATIONS CENTRAL EMERGENCY RESPONSE FUND PROJECT FACT SHEET



MINISTRY OF
AGRICULTURE,
WATER &
LAND REFORM

EMERGENCY LIVELIHOOD SUPPORT TO DROUGHT-AFFECTED COMMUNITIES IN NAMIBIA

Project symbol: OSRO/NAM/002/CHA

Timeline: 28/01/2020 – 14/10/2020

Budget: USD 657 001 (N\$10 million)

BACKGROUND

In May 2019, the Namibian Government declared a State of Emergency after the country experienced poor, erratic and delayed rainfall during the 2018/2019 rainy season. The project “Emergency livelihood support to drought-affected communities in Namibia” was initiated in January 2020 to assist the Namibian Government in its efforts to meet humanitarian needs brought forth by the prolonged drought situation in the country.

PROJECT INTERVENTION

In a bid to avert the devastating effects of the critical drought situation in Namibia, the Food and Agricultural Organisation (FAO), with financial assistance from the United Nations Central Emergency Response Fund (UNCERF), availed USD 657 001 (≈ N\$10 million) to assist a targeted 3 250 drought-stricken farming households (approximately 14 300 people) in seven regions of Namibia. Working in close collaboration with its implementing partners; the Ministry of Agriculture, Water and Land Reform (MAWLR), the Namibia National Farmers Union (NNFU), and the Namibia Commercial Farmers Union (NECFU), FAO availed supplementary livestock feed by introducing hydroponic fodder production systems as well as supplying veterinary inputs to restore and sustain the livestock based livelihoods of targeted smallholder farmers.

ACTIVITIES IMPLEMENTED AND THEIR IMPACT(S):

- 3 343 livestock dependent smallholder farming households equating to approximately 14 709 people in 7 targeted regions (Karas, Hardap, Kunene, Ohangwena, Omaheke, Erongo and Omusati Regions) of Namibia assisted to maintain their core breeding herds as a life-saving intervention for the targeted farmers;
- The 3 343 direct beneficiaries received training in hydroponic fodder production and are in a position to continue producing from the structures for themselves. They also received basic training on animal health including the administration of veterinary medicine as well as training on correct feeding of the livestock from extension staff who were firstly trained through the project by local hydroponic experts from NNFU;
- 148 910 small stock (goats and sheep) and 25 580 cattle belonging to the beneficiaries received fresh green barley



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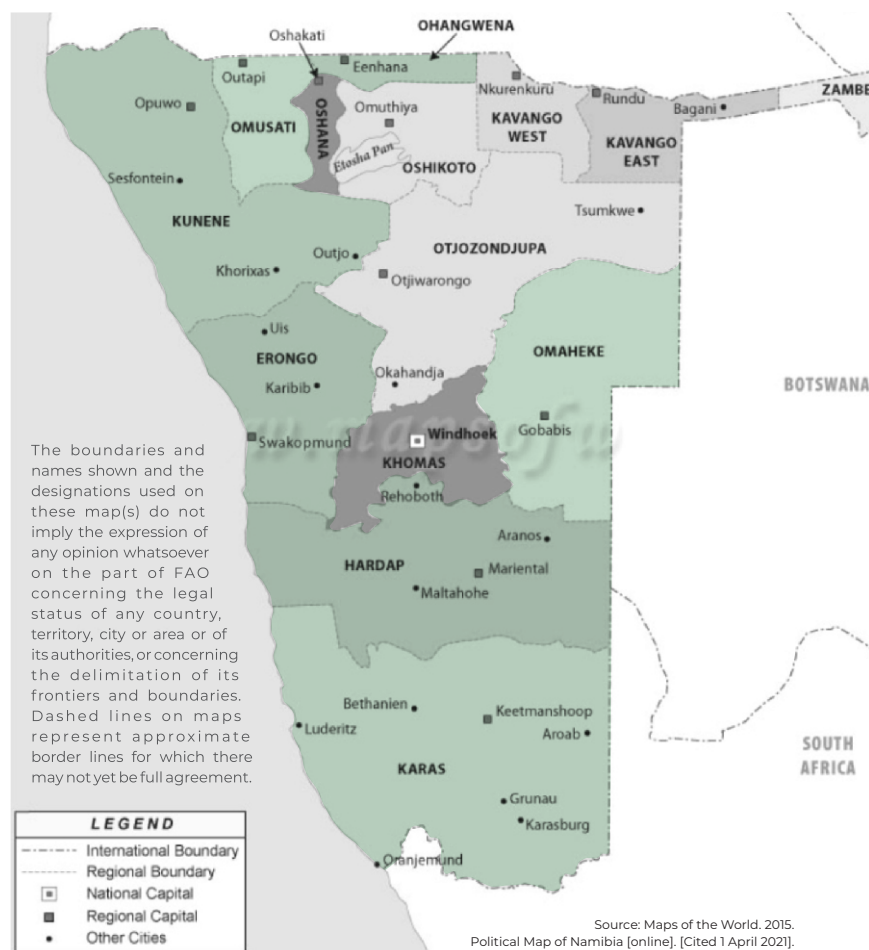
fodder produced hydroponically in 79 greenhouse structures setup at various selected sites in the targeted regions hardest hit by protracted drought conditions;

- All the beneficiaries' livestock were vaccinated against various important diseases and treated for both internal and external parasites, including having received multivitamin metabolic injections to boost their immune systems and overall health status;
- The project made a deliberate effort to reach women-headed households that own livestock and managed to assist a considerably high proportion (40%) of the total assisted households.
- 27 persons living with disabilities also benefited from the project.

GEOGRAPHICAL COVERAGE

This section shows the regions (highlighted in light green) covered by the project in the form of a map as a visual representation.

TARGETED REGIONS



The project initially targeted five regions namely: Ohangwena, Omusati, Hardap, Kunene, and Omaheke. However, that number increased to seven regions after! Kharas and Erongo regions were added, as they were experiencing an equally severe grazing and food security situation. All the aforementioned regions have seen a drastic reduction in grazing capacities and a resultant mass death of livestock, negatively affecting the livelihoods of thousands of rural inhabitants.

TABLE 1: A SUMMARY OF THE CERF FUNDED PROJECT PER TARGETED REGION:

Regions	Number of sites earmarked for fodder production (Including NECFU sites)	Cubic metres (m3)/ under hydroponic fodder production	Number of farmers receiving supplementary feed	Number of beneficiaries of veterinary supplies	Number of livestock treated	Distribution of women headed households	Persons living with disabilities
Ohangwena	8	162	517	517	10 059	179	3
Omusati	9	182	423	423	11 046	172	3
Hardap	13	263	396	396	29 639	225	5
Kunene	14	304	594	594	38 712	124	4
Omaheke	9	182	423	423	23 320	197	5
!Kharas	13	263	537	537	26 181	184	4
Erongo	12	243	453	453	35 532	223	3
Total	79	1 600	3 343	3 343	174 490 (148 910 small stock, goats and sheep, and 25 580 cattle)	1 304	27 (18 women and 9 men)

The information in Table 1 was availed by the Ministry of Agriculture, Water and Land Reform (MAWLR), 2020.

PERSONS INDIRECTLY TARGETED BY THE PROJECT

With continued fodder production for the livestock of the beneficiaries from the erected hydroponic greenhouse structures on a daily basis, an opportunity to train more farmers and schoolchildren in the different areas beyond the beneficiaries themselves presented itself and is being utilised. It is expected that while the procured seeds are available, more than double the number of planned trained people will be trained.

PROJECT PARTNERS:

This project was supported financially by the United Nations Central Emergency Response Fund (CERF) and implemented by the Food and Agriculture Organization of the United Nations (FAO) in close collaboration with the Ministry of Agriculture, Water and Land Reform (MAWLR, through its Directorate of Agricultural Extension and Engineering Services (DAPEES) and Directorate of Veterinary Services (DVS), the Namibia National Farmers Union (NNFU) and the Namibia Emerging Commercial Farmers' Union (NECFU). Additional support was provided by the relevant Regional Councils and Traditional Authorities in the respective targeted regions.

GLOBAL AND NATIONAL DEVELOPMENT GOALS SUPPORTED

→ 17 Sustainable Development Goals (SDGs):

- SDG 1: No Poverty
- SDG 2: Zero Hunger
- SDG 13: Climate actions

→ FAO's fifth Strategic Objective (SO5) – Increase the resilience of livelihoods to threats and crises

→ United Nations Partnership Framework (UNPAF) Pillars namely;

- ECONOMIC PROGRESSION
 - o Outcome 3: By 2023, vulnerable populations in disaster prone areas and biodiversity sensitive areas are resilient to shock and climate change effects (and benefit from NRM)
 - Output 3.2: Improved capacity to prepare, prevent, respond and recover from climate change induced variabilities.
 - 3.2.4: Build capacity to prevent, prepare for, respond to and recover from natural disasters, including those arising from climate variability and change, with a focus on local capacities

→ FAO Namibia Country Programming Framework (CPF) Priority Areas namely;

- Priority Area 2: Improved agricultural production, productivity, food safety and strengthened nutrition sensitive value chains
- Priority Area 3: Strengthened capacity for natural resource management and land governance
- Priority Area 4: Strengthened capacity for disaster risk reduction, resilience building and climate change adaptation and mitigation.



HUMAN INTEREST STORY

Hydroponic fodder production: an innovative solution in times of drought

Namibian farmers are saving their livestock and safeguarding livelihoods by rethinking fodder production.

"Our animals were as thin as straws of grass, but now they are looking very fat and healthy," says 36-year-old Agnes Tengovandu-Tjindo, who lives in Otjozondjou, a small village in Western Namibia. The drought has been so severe in Agnes' area that she worried none of her animals would survive it.

"I lost a great number of my livestock and was left with only a few

cattle and goats that I was also struggling to keep alive," she said, while pointing to a few of her cattle resting under a camelthorn tree not far from her farm.

Over the last couple of years, Namibia has been recovering from one of its worst droughts in recent history. Farmers have been unable to grow crops to feed themselves and their valuable animals. Buying fodder was too expensive, so they needed to look for an alternative.

That's when an FAO-supported project in Agnes' community introduced hydroponics, an innovative way of farming using little water and no soil. It is an easy process whereby barley seeds are first soaked in water until they sprout, and then placed in a simple greenhouse structure where they continue to be provided with nutrients and water to grow. The barley is watered for seven days and the resulting green shoots and root mat are then harvested and fed to livestock. This hydroponic method has many advantages: the fodder only takes a week to grow compared to several weeks with normal methods. It does not require any fuel, and it requires little water, making it ideal in times of drought.

When Agnes first heard about the project, she immediately recognised what it could do for her community and was keen to be involved. Agnes' local farmers' association recommended her for the project, and she became one of over 3 000 farmers to receive training on the hydroponic fodder production process.

Safeguarding livelihoods with innovation

Funded by the United Nations Central Emergency Response Fund, the project, implemented by FAO and several Namibian organisations, has established 79 greenhouse hydroponic fodder production systems across seven regions in the country.

Specialists from FAO and a hydroponics expert from the Namibia National Farmers' Union trained the staff of Namibia's Ministry of Agriculture. They in turn imparted that knowledge to the farmers participating in the project, and farmers then passed on the knowledge to their community.

Agnes went on to become the lead farmer of the greenhouse project in her area. She was in charge of its productivity and training community members, especially women. When done right, Agnes believes that the hydroponic process is fairly easy. "The fodder takes around six to seven days to grow, with one kilogram of fodder requiring about three to four litres of water," she explained.

Around 50 farmers living near each greenhouse all work together as part of the project, under Agnes' guidance. Everyone participates in the production of the fodder, from preparing barley seeds to watering and harvesting the plants, and they agree amongst themselves how to share the products. In this way, all farmers get a feel for the technology, gaining the knowledge and experience to continue it in the future. Agnes says proudly that her community has taken full ownership of the greenhouse, and that it has become an integral part of their survival.

"We have created a system that not only ensures that every household receives fodder from the greenhouse but also makes room for every farmer to get involved in the fodder production process," says Agnes. "Even if the rain returns, we will still keep making use of it and safeguard it because with climate change being an undeniable reality, droughts can strike at any time."

Women leaders

Hydroponic greenhouses have benefitted not just Agnes and her community, but many others in the country. Anna Isaacks is a pensioner from Amalia, a small farming outpost that is particularly prone to drought in southern Namibia. She also put herself forward to be the lead farmer for her local greenhouse, which was then built on her farm to benefit from the borehole on her property that leads to fresh water.

For Anna and the other local farmers, the addition of the greenhouse has been life changing. As Anna herself puts it, "There is now hope where there was none."

"We are now able to feed our livestock and save them from dying," she said.

The project, which began in 2020, has to date benefitted around 3 350 households, 40 percent of which are headed by women. This has had a big impact in a country where agriculture is predominantly led by men.

Boosting resilience

In addition to the hydroponic fodder production systems and training, the project has vaccinated livestock against various diseases and treated them for both internal and external parasites. Multivitamin metabolic injections were also administered to boost the livestock's immune systems and overall health, thereby improving their resilience to the next grazing shortage.

Creating a resilient agricultural sector for rural communities is vital if we hope to end hunger and poverty by 2030, and innovative solutions are the key. Technologies like hydroponics are simple methods that can make a huge difference in boosting communities' resilience and tackling the effects of climate change.

