Food and Agriculture Organization of the United Nations

International Treaty on Plant Genetic Resources for Food and Agriculture

FOUNDATIONS FOR REBUILDING SEED SYSTEMS **POST CYCLONE IDAI**

Achievements and insights from project implementation

Malawi, Mozambique and Zimbabwe

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A group of women farmers takes extension service and genebank staff on a 'transit walk' in their community, to show the crop, tree and bush varieties that they grow for food and nutrition intake and to sustain livelihoods. The farmers describe the purpose of each variety and explain how many farmers in the community grow these crops and on what sizes of land. This type of information provides insights into the status of crop diversity, which crops are needed and preferred, and which crops were lost or are at risk of getting lost in the community.

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Food and Agriculture Organization
of the United Nations
Rome, 2023

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ABBREVIATIONS AND ACRONYMS

CIAT	International Centre for Tropical Agriculture (now the Alliance of Bioversity and CIAT)
FAO	Food and Agriculture Organization of the United Nations
IIAM	Agricultural Research Institute of Mozambique
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
MPGRC	Malawi Plant Genetic Resources
NGO	non-governmental organization
NSAP	National Strategies and Action Plans
PGRFA	plant genetic resources for food and agriculture
SADC	Southern African Development Community
SPGRC	SADC Plant Genetic Resources Centre

MESSAGE FROM THE SECRETARY

Local seed systems are under threat from both human-induced crises and natural disasters. They hold the key to our food security and agricultural production and contain a treasure trove of traits we can harness to develop more resilient crops.

This project is the first of its kind for the Food and Agriculture Organization (FAO) and the International Treaty on Plant Genetic Resources for Food and Agriculture. It has demonstrated an innovative model for addressing the loss of diversity and availability of local seeds in the event of natural disasters. The activities and accomplishments of the project provide the international community with practical examples and tested approaches of how to secure seed systems and adapt to the rising challenges of climate change and other environmental threats. They demonstrate a comprehensive approach to addressing such issues at community, gene bank and policy levels, and show how the mechanisms of the International Treaty can be leveraged to secure and rebuild local seed systems in the aftermath of disasters.

As a regional initiative, cooperation in Southern Africa has been strengthened between key stakeholders responsible for managing and conserving plant genetic resources for food and agriculture (PGRFA), such as gene banks and farmers. The project has fostered new collaboration and relationships which will last well beyond the project timeframe, providing a pathway for continued partnerships in the field of plant genetic resources.

I am impressed by the results achieved under this project that are highlighted in this report, including being able to welcome Mozambique as a new Contracting Party to the International Treaty.

I wish to extend my deep gratitude to the Government of Germany and the Kingdom of Norway for their generous support and continued interest in this project without which it would not have been possible to implement these activities.

I also wish to thank my colleagues in the Secretariat who oversaw the implementation of the project, as well as FAO's Office of Emergency and Resilience for the support they have provided. It is the first time that the International Treaty has partnered with FAO's emergency response team which has led to partnering on other emergency seed projects, including in Ukraine.

Finally, I wish to thank the farmers and partners involved – the national gene banks of Malawi, Mozambique and Zimbabwe. After Cyclones Idai and Kenneth, the gene banks shared their concerns about possible losses to local seed systems and the impact on farming communities and crop diversity. With the dedication and hard work of the gene banks and farmers, impressive results have been achieved through this project of restoring and protecting agricultural biodiversity of significance globally and for communities in Southern Africa.

Kent Nnadozie,
Secretary of the International Treaty on Plant Genetic Resources for Food and Agriculture

INTRODUCTION

When Cyclones Idai and Kenneth made landfall in Southern Africa in March and April 2019 respectively, the consequences were devastating for farmers, who lost local seed reserves including crop wild relatives and crops ready for harvest. The cyclones and related floods affected more than 3.8 million people in Southern Africa and destroyed nearly 800 000 hectares of standing crops in Malawi, Mozambique and Zimbabwe.

Heavy rains, floods and landslides destroyed crop fields, granaries and forests, all of which were important reserves of local seeds. The severe loss of these seed reserves has meant that affected communities have had less food to eat, farm, exchange and sell, impacting people's food and nutrition security and livelihoods – with long-term effects.

National responses were initiated in the three countries with a focus on food, health and shelter. As part of the emergency relief effort, FAO provided seeds, agricultural kits and emergency electronic cash vouchers to be exchanged with agrodealers for seeds and tools.

However, there was no initiative to assess the impact of the cyclones on local seed systems or to restore lost local seeds to affected communities. To address this gap, the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and FAO partnered with the national gene banks of Malawi, Mozambique and Zimbabwe on a project with support from the Government of Germany and the Kingdom of Norway.

The project, Foundations for rebuilding seed systems post Cyclone Idai: Malawi, Mozambique and Zimbabwe, aimed to improve food and nutrition security and livelihoods in the longer term.

In the project, national gene banks and farmers collaborated to rescue, regenerate and return seed to affected communities in Malawi, Mozambique and Zimbabwe, and to strengthen national and regional planning for the protection of local seed systems in the future.

Among the main achievements of the project are the inclusion of seed system protection and restoration in national and regional strategies, the rescue of crop varieties that were at risk of becoming lost, and the multiplication and distribution of varieties that respond to farmers' needs and preferences, as well as to current and future climate conditions. At the same time, the project has strengthened the capacities of multiple stakeholders in Malawi, Mozambique and Zimbabwe to benefit from and contribute to the mechanisms of the International Treaty. Significantly, this led to Mozambique becoming a Contracting Party of the Treaty in December 2020. Furthermore, the participating countries enhanced their National Strategies on Plant Genetic Resources for Food and Agriculture to better manage PGRFA in emergency situations.

The project has been implemented over a three-year period from September 2019 to December 2022. This report summarizes the achievements and insights of the project from September 2019 until September 2022.

IMPACT AT A GLANCE

AFFECTED COMMUNITIES have less food to eat, farm, exchange and sell

Heavy rains, floods, and landslides **DESTROYED LOCAL SEED RESERVES** such as crop fields, granaries and forests

BEFORE DISASTER
SMALLHOLDER FARMER SEED SYSTEMS

DISASTER IMPACT
CYCLONES IDAI AND KENNETH

IMMEDIATE RESPONSE
FAO EMERGENCY RESPONSE

SHORT-TERM ACTIVITIES
ASSESSMENT OF NEEDS AND LOSSES

80% OF SEEDS used by smallholder farmers are sourced locally

Local seeds are adapted to **ENVIRONMENTAL STRESSES**

Local seeds are **AFFORDABLE** and **EASY** to come by

Partners

The project was implemented with a range of partners at international, regional and national level.

The International Treaty jointly implemented the project with the national gene banks of Malawi, Mozambique and Zimbabwe,[1] in close collaboration with farmers, extension services and non-governmental organizations (NGOs).

FAO's emergency team, country and subregional offices and the Southern African Plant Genetic Resource Centre (SPGRC) also provided support to the project. The Alliance of Bioversity International and the International Centre for Tropical Agriculture (CIAT) supported the post-cyclone situational assessments that were carried out in the three countries by national partners, and the identification of crop varieties for (re)introduction in the affected sites. The Alliance also provided training, including on resilient seed systems and identifying and retrieving suitable germplasm.

The total project costs were approximately USD 850 000. The Government of Germany provided USD 792 950 and the Kingdom of Norway also provided financial support.

1) The Malawi Plant Genetic Resources Centre, the Agricultural Research Institute of Mozambique, and the Genetic Resources and Biotechnology Institute in Zimbabwe.

NEEDS OF FARMING COMMUNITIES to continue to grow, eat and sell crops identified

LOSSES in seed reserves and seed diversity determined

Goal

To increase the immediate and long-term food and nutrition security in cyclone affected communities of Malawi, Mozambique and Zimbabwe through improving national and regional planning and coordination, assessing the loss of plant genetic resources, restoring germplasm, and rebuilding and strengthening local seed systems.

MID-TERM ACTIVITIES

RESTORING SEED SYSTEMS

LONG-TERM PLANNING

DISASTER-PROOFING LOCAL SEED SYSTEMS IN PLANNING

MALAWI, MOZAMBIQUE AND ZIMBABWE GENEBANKS collaborated on improved emergency response strategies for local seed systems

Local **CROP SPECIES CONSERVED** at local and national level as back-up

SUITABLE SEEDS IDENTIFIED in national and regional genebanks

Farmer preferences and climate data **MATCHED** with global gene pool

Seeds **REGENERATED AND RETURNED** to communities for future use and safeguarding

Approach

An innovative approach was used that brought together communities, researchers and policymakers to address the immediate needs of farmers and develop practices and policies to create lasting change.

Activities centered around five areas:

1. Strategic planning and coordination.
2. Establishing trends and status of local seed systems in cyclone affected communities.
3. Rescuing, restoring and conserving crop varieties.
4. Capacity development for ITPGRFA implementation.
5. Awareness-raising on the impact of extreme weather events on local seed systems.

The approach was informed by a 2017 study[2] on rebuilding local seed systems in earthquake affected areas of Nepal. Building on this, the scope of the project was expanded to include aspects of regional and international coordination, policy development, capacity building and awareness raising.

2) https://www.researchgate.net/publication/322364186_Process_of_Rebuilding_Local_Seed_System_after_2015_Nepal_Earthquake_Rescue_Collection_Conservation_and_Repatriation

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STRATEGIC PLANNING AND COORDINATION

Rebuilding local seed systems is crucial for food and nutrition security, but is often overlooked in national emergency response and preparedness plans. The national gene banks of Malawi, Mozambique and Zimbabwe addressed this gap by integrating emergency response measures for PGRFA into national strategies, so that governments and communities are better prepared for future emergencies.

The National Focal Point from Malawi shares experiences on the post-Cyclone Idai response in Malawi, Mozambique and Zimbabwe during the Ninth Session of the International Treaty's Governing Body in India.

SUMMARY OF ACTIVITIES

- **Mapping** of existing relevant national and regional strategies, plans and mechanisms to identify needs, gaps and entry points.
- **Coordination at national and regional level** to share lessons and harmonize approaches for strategy development.
- Joint **development of emergency response measures** for inclusion in national and regional PGRFA strategies and plans.
- **Integration** of such measures into strategies and plans.
- **Validation, endorsement and implementation** of strategies and plans.


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A coordinated approach to PGRFA strategy development

The project supported a number of regional coordination meetings held in-person and virtually to identify needs and gaps, share lessons and harmonize approaches to national and regional PGRFA strategy development, and the integration of emergency response measures. The meetings took place at the beginning, mid-way point and towards the end of the project to ensure continued information sharing, learning and coordination. The meetings were attended by participants from key national agricultural institutions in Malawi, Mozambique and Zimbabwe, as well as from SPGRC, FAO and the International Treaty Secretariat.
Such coordination has been crucial in identifying common issues to address through the development of national and regional PGRFA strategies, including the need to:

- develop national PGRFA strategies that incorporate emergency response measures;
- expand the scope of national PGRFA strategies to include wild species relevant to agriculture and food;
- develop a regional PGRFA strategy;
- ensure national PGRFA strategies are suitable for informal seed sectors as well as formal seed sectors;
- align national seed policies and harmonize them at regional level;
- develop regulatory standards to guide national and regional movement and trade of farmers' varieties;
- promote the importance of the ITPGRFA and local PGRFA and how they contribute to food and agriculture.

Development and endorsement of PGRFA strategies

In **Zimbabwe**, the project contributed to better national coordination of disaster response related to plant genetic resources, by strengthening the position of the gene bank in the broader network of PGRFA actors in the country. An important project achievement has been the inclusion of PGRFA-related disaster response measures in the National Strategy and Action Plan for PGRFA covering the period 2022 to 2032. This strategy was finalized, endorsed by the Minister of Agriculture and formally published during the project period. Around 1 000 copies were printed and circulated to relevant stakeholders.

The team in **Mozambique** began their strategy work with research on existing emergency response strategies in the Southern Africa region and identified suitable strategies to adapt and improve

on. A working group was established to facilitate the process of developing a new PGRFA strategy. A draft strategy was presented at the *Harmonization of Strategies* regional workshop in August 2022 in Maputo, which incorporated feedback provided at earlier regional meetings. The team is currently undertaking consultations with key stakeholder groups in the country as part of a national validation process of the draft strategy before its finalisation and endorsement.

In **Malawi,** the project has brought together key actors to synergize disaster response strategies, including the Department of Disaster Preparedness for the integration of PGRFA issues in national disaster response. A strategy on PGRFA – that includes emergency response measures has been developed and validated by policy-makers. It has been submitted to the Ministry of Agriculture for endorsement. The strategy will then be published and implemented.

A draft regional PGRFA strategy has been developed by SPGRC and is currently under review. Members of SPGRC were supported to attend the strategy coordination meetings. SPGRC welcomed the collaborative approach used under the project for national strategy development and commented that the model could be replicated in other SPGRC regional processes.

Continued collaboration

A plan of action was agreed to continue collaboration beyond the project period on the following key issues related to the implementation of the PGRFA Strategies:

- **Exploring formal recognition of farmers' varieties** and enhancing the **relationship between the formal and informal local seed systems** in the use of local seed varieties.
- Using the experience of the project to **mainstream PGRFA into other national, regional and international emergency response plans and to develop standard seed assessment tools.**
- **Improving inter-institutional coordination** between key PGRFA actors, such as between research institutions and gene banks to share knowledge, information and resources.
- Enabling the implementation of national PGRFA strategies through **revising legal frameworks, and undertaking joint resource mobilization and communication initiatives.**
- **Transitioning the project's regional coordination platform to SPGRC** and expanding it to include other countries in the region.
- Planning a **biennial PGRFA global knowledge conference** in the region.

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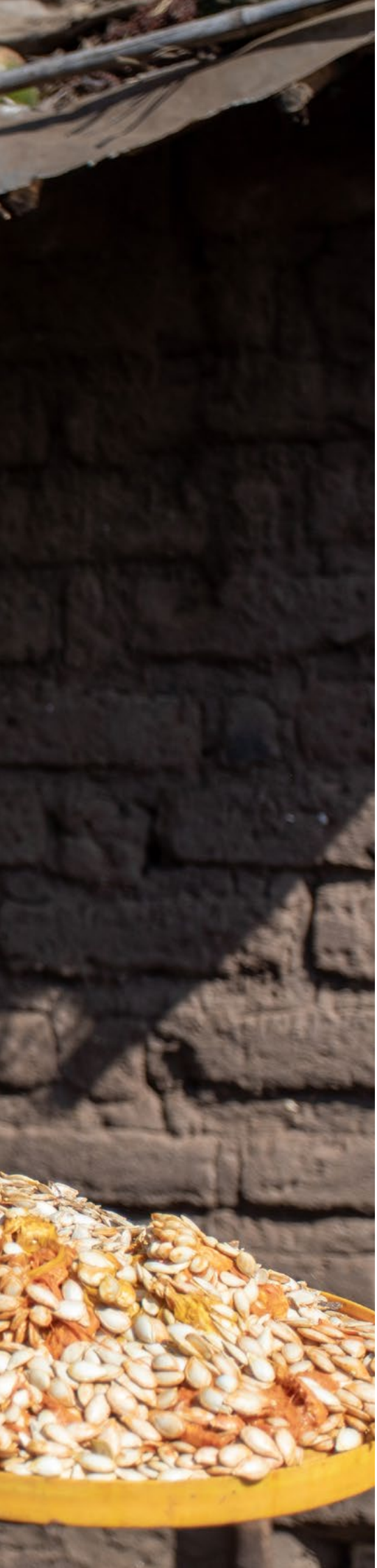

ESTABLISHING TRENDS AND STATUS OF LOCAL SEED SYSTEMS IN CYCLONE IDAI AFFECTED COMMUNITIES

To undertake seed system restoration work, it is necessary to understand what has been lost in disaster-affected communities in the way of seed reserves and seed diversity, and what types of crops small-scale farmers would like to continue to grow, eat and sell. The project conducted surveys, focus group discussions, and climate and situational analyses to determine this information, so that the right types of seed could be searched for in national, regional and international gene bank collections, to regenerate and return to communities.

Survey results

In all three countries, farmers lost crops and seeds and the weather extremes severely damaged local food production systems, crop fields, granaries and forests. Farmers lost varieties of cereals, legumes, roots and tubers, which subsequently affected the local seed systems in the areas studied. After the cyclones, farmers faced significant challenges in accessing seeds locally for planting. Instead, farmers relied on external support for seeds of improved varieties of various crops.

The analysis of local seed systems before and after the cyclones revealed that access to a diverse range of locally available seeds was crucial for communities to be able to recover. This indicates that better planning and an enabling policy environment can support the resilience of seed systems by coordinating the restoration of crop varieties post-disaster.

In **Malawi**, the cyclones affected 15 districts and a total of 975 600 people. The Malawi Plant Genetic Resources Centre conducted a survey in 4 of the 15 most affected districts (randomly selected) to assess the impact of the cyclones in greater depth. Three of the four districts – Chikwawa, Nsanje and Phalombe – were particularly badly hit, while the fourth, Zomba, was less affected. Crops which faced major drawbacks in terms of seed availability included pigeon pea, sorghum, cowpea, millet, and root and tubers, such as yam and cocoyam. Based on the analysis, it was decided to prioritize cowpea and sorghum for the restoration efforts.

Of the three project countries, **Mozambique** was most heavily affected by the cyclones and significant losses of varieties were reported. It was noted that in the immediate aftermath of the cyclones the presence of native fruits, such as Maroro and Matamba, played an important role in combating food. The project identified sites in the Sussundega, Gondola and Macate districts for activity implementation. Due to the significant losses incurred in these areas, communities requested the urgent reintroduction of crops and emphasized good taste and pest-resistance as key preferences. From the crop varieties that were identified as important for food security, it was decided to focus on cowpea and sorghum. The survey results also indicated a lack of technical knowledge for the multiplication of local seeds at community level, which was addressed in the project by providing a technical seed management training.

In **Zimbabwe**, the cyclones caused excessive damage in Chimanimani District in the eastern part of the country where floods and landslides occurred, resulting in crops being wiped out which were near ready to harvest. Assessments were conducted in six wards (Chakohwa, Nyanyadzi, Chikukwa, Biriiri, Ngorima A and Ngorima B) and revealed a significant impact on local seed systems. While the overall diversity of major field crops was not heavily affected, seed quantities dropped significantly and local seed supply for most local and indigenous crops was severely impacted. Based on the situational analysis and consultation with national partners, cowpea, groundnut, sorghum and sweet potato were shortlisted as priorities. For each of the four crops, one target site was selected.

Data from before the cyclones indicated that some varieties have disappeared altogether, although this trend is likely to have commenced before the disaster. These include varieties of maize, sorghum, sugar bean, pearl millet, yam and banana. A significant number of these varieties were restored during the project implementation period. Efforts to provide varieties extended beyond those that had been lost, resulting in a substantial increase of on-farm diversity. However, some varieties could not be retrieved, either due to the limited coverage of the previous collections, or because some of the gene bank materials had poor viability and insufficient seed quantities. The varieties of vegetatively propagated crops could not be retrieved since the gene banks lack the conservation programs required for these. In all cases, the project identified the need to link with other germplasm sources to address such limitations and restore the varieties to communities.

SUMMARY OF ACTIVITIES

- **Baseline assessment** of the extent of the loss of plant genetic resources, the PGRFA needs and preferences expressed by communities, pre-cyclone PGRFA status, climate data and situational analysis at project sites in the three countries.
- **Identification of project priority areas and crop varieties** that needed to be rescued, conserved, duplicated and redistributed to communities.
- **Strengthening capacities of project implementation staff to leverage data in the search for suitable crop varieties.** This included triangulating crop preferences and needs with geographic figures and current and future climate data, to search for suitable germplasm in gene bank collections connected to the International Treaty's Multilateral System of Access and Benefit-sharing (Multilateral System), so to strengthen crop diversity in the target areas.

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RESCUING, RESTORING AND CONSERVING CROP VARIETIES

Following the analysis undertaken with farmer communities to take stock of what was lost and what was needed, a rescue mission was undertaken and adopted a dual approach. On the one hand, gene bank and extension service staff worked with farmers to collect accessions of crop varieties that were at risk of becoming lost, before duplicating these for conservation in the national gene banks, and later in international gene banks. At the same time, these and other varieties were multiplied at research stations and in farmers' fields for distribution to the affected farming communities.

Note: the restrictions on movement imposed due to COVID-19 caused some delays in the implementation of field project activities and was one of the reasons for extending the project to December 2022 – taking into account the agricultural season and the crop harvest season.

Collection, multiplication and dissemination

In **Zimbabwe**, varieties of bambara groundnut (80), cowpea (159), common bean (31), sorghum (200) and finger millet (30) were collected and conserved at national level.

The multiplication of seeds in Zimbabwe was led by thirty households in the first season, selected by the extension officers from the targeted six wards of Chimanimani District with each household sharing the harvested seeds with a further ten households. This resulted in up to 300 households benefiting from access to diverse seeds. In the second season, a total of 56 lead farmers were involved and the expectation is that the resulting seeds will benefit more than 500 households. After the project has ended, the farmers involved will have significant quantities of seed for production in the coming seasons. For the multiplication process, farmers were guided by gene bank staff and local extension services in setting up trial plots, preparing land, and learning more about planting practices and sharing germplasm.

The team in **Mozambique** collected 140 seed accessions of different crops among four local maize varieties (Raposta, Maguenda, Cangeri and Chinhamuana) and two sorghum varieties (Djenatchena and Guenguere), which were at risk of becoming lost due the cyclones. An additional seven rare maize landrace accessions were collected during the project cycle.

Two seed multiplication fields were established at Estacão Agrária do Chokwe containing local varieties rescued in the districts of Gondola, Sussundenga and Macate. The first multiplication field was established in September 2021, covering 22 maize accessions. However, due to a storm that hit the area, it was necessary to establish a second multiplication field. The purpose of this work is to obtain enough seed for further on-farm multiplication in the province of Manica. To this end, 6 accessions of maize have already been sown in farmers' fields in the district of Gondola in which are performing well.

In **Malawi**, a total of 201 accessions of various crops have been rescued and conserved in the country's national gene bank. Of the 201 accessions collected, 98 have been duplicated to the regional gene bank for Southern Africa, based in Zambia.

The project managed the multiplication of 65 accessions of varieties of cowpea (20) finger millet (18), sorghum (15) and pigeon pea (12) and distributed these to farmers as part of an initiative to restore the lost germplasm in the affected areas. The crops were selected based on survey results, for their potential in contributing to improved community livelihoods, in terms of both food security and income generation.

Retrieving suitable materials from the international gene bank network

Project partners received training from the Alliance of Bioversity International and CIAT in identifying and accessing suitable materials in gene bank collections connected to the International Treaty's Multilateral System. At the time of preparing this report, the process is underway to retrieve suitable material from the international genebank network.

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SUMMARY OF ACTIVITIES

- **Collection missions** to rescue crop varieties at risk of becoming lost and safely **conserving these in the national gene banks.**
- **Identification of potentially suitable germplasm** based on farmers' needs and preferences and climate data.
- **Multiplication and distribution of crop varieties** for use in areas affected by the cyclone.

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CAPACITY DEVELOPMENT FOR INTERNATIONAL TREATY IMPLEMENTATION

The project both uses and reinforces the international conservation and exchange system supported by the International Treaty by finding local varieties, lost varieties and other suitable seed within the system, and regenerating and returning it to communities for future use and safeguarding. Implemented through the International Treaty, the project has mobilized technical support to build capacity in these areas. This has reinforced the International Treaty systems, benefiting partner countries, and other Contracting Parties of the Treaty more broadly.


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Resilient seed systems training

A regional workshop on resilient seed systems was held in Malawi in June , where project staff and stakeholders received training on a portfolio of tools that can be used to develop resilient seed systems that help farmers adapt to climate change. The methodology used combines participatory tools with climate and crop modeling tools, whose application can be used to design strategies to access and use crops and crop varieties more effectively. Researchers, genebank managers and farmers are now better able to gain access to potentially useful plant genetic resources through the multilateral system of the International Treaty, and once obtained, know how to evaluate these new plant genetic resources in farmers' fields.

GB8 and GB9 participation

The project supported three representatives - one from each of the three project countries - to attend the Eighth and Ninth Sessions of the Governing Body of the International Plant Treaty in Italy and India respectively. This enabled their participation in a key international PGRFA policy platform and assisted Mozambique, **as a new Contracting Party**, in becoming familiar with the proceedings of the Governing Body and the key issues being negotiated.

Mozambique's ratification of the International Treaty

Participation in the project accelerated the process of Mozambique becoming a Contracting Party of the International Treaty and learning more about its processes and mechanisms. With the support of the project, Mozambique concluded the Treaty ratification process in December 2020.

Webinar series

A session on Farmers' Rights was organized as a platform to exchange good practices and lessons learned on the implementation of Farmers' Rights and the conservation and sustainable use of PGRFA. The webinar included an introduction to concepts related to Farmers' Rights and discussion on the inventory of national measures. The webinar included presentations of examples of national implementation in Ethiopia and Zimbabwe.

A session on **implementation and reporting** covered International Treaty compliance procedures and practical advice, a presentation on the value of data and the relevance of national reports for other reporting processes. The National Focal Points from Namibia and Zambia presented their experiences and recommendations on national reporting and provided practical advice

Mr Lawrent Pugliani, project coordinator for Malawi shares the experiences of the Cyclone Idai project at a side event of the Ninth Session of the ITPGRFA Governing Body Session in India.

SUMMARY OF ACTIVITIES

- **Identification of target country needs** in order to improve national implementation of the International Treaty, during the project inception workshop and first regional coordination meetings.
- **Delivering capacity-building workshops** on topics of Farmers' Rights, Treaty implementation and national reporting, development of national strategies, and sustainable use and resilient seed systems.
- **Developing tailored and translated publications**, including manuals and other products such as a podcast, infographics and an animated video.
- Support to enable **Mozambique's ratification of the International Treaty.**

on their approach to obtaining sufficient information, involving stakeholders in the process.

Podcast on Farmers' Rights

The inception workshop highlighted the need for communication materials that can be easily distributed to other stakeholders, in order to increase awareness on Farmers' Rights, and offer practical examples of how these can be implemented. The resulting podcast features a conversation between a presenter and two PGRFA specialists, providing an introduction to Farmers' Rights and discussing their practical implications in the context of the post-Cyclone Idai project. The podcast has been shared on FAO and International Treaty channels and by project partners in Malawi, Mozambique and Zimbabwe. Further podcasts are under development.

A manual on the Online Reporting System on Compliance

Responding to requests for accessible materials to explain the International Treaty's implementing and reporting processes, the project worked on a tailored version of the *User manual for the ITPGRFA Online Reporting System on Compliance.*

The manual offers step-by-step guidance on how to submit reports digitally. It has been revised to include advice on the preparatory steps to be taken before entering responses in the Online Reporting System, and provides recommendations throughout the process. The manual has been translated into Portuguese.

SUMMARY OF ACTIVITIES

- **Development of a communication and advocacy strategy** to raise awareness for assessing and addressing biodiversity loss of PGRFA in disaster contexts and the inclusion of relevant strategies to assess and restore these vital resources in national emergency response plans.
- **Awareness-raising events during the Eighth and Ninth sessions of the Governing Body** of the International Treaty to share project plans, showcase the regional approach used in this intervention, and profile the support of Germany and Norway.
- **Production and dissemination of communication products and events at local, national and regional level**, including television broadcasts, web articles, field days and national and regional workshops.
- **Production and dissemination of communication products at global level**, including web articles, a podcast, infographics, posters, an animated video and a webpage.

COMMUNICATION AND VISIBILITY

There is a lack of awareness of the impact of extreme weather events on PGRFA and on local seed systems. At the same time, it is often overlooked that strengthening the resilience of these systems can be pivotal to recovery from disaster. The project has been active at national, regional and global levels to develop targeted communication products and activities to increase awareness and to suggest potential steps that actors can take to integrate PGRFA in emergency response strategies.

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PODCASTS

POSTERS

INFOGRAPHICS

→ **Source:** https://bit.ly/Treaty-Talks-Ep1

→ **Source:** FAO. 2021. Rescuing, restoring and protecting seed systems in emergencies [infographic]. Cited 1 December 2022. https://www.fao.org/3/cb7949en/cb7949en.pdf

Visibility at local, national and regional levels

At national level, several channels have been used to raise awareness of the importance of including PGRFA in disaster response strategies. Among these were workshops, participation in district-level and national events, and television programs. In Zimbabwe, use was made of platforms such as the Pillar 8 Committee on Resilient Sustainable Agriculture, and the National Biodiversity Forum coordinated by the Ministry of Environment, where issues of ecosystem restoration and biodiversity conservation are discussed.

In all three countries, seed fairs, field days and training have proved effective approaches for raising awareness at community level and seeking the engagement of local and traditional leadership.

The project published an extensive article in the newsletter of the SADC Plant Genetic Resources Centre, reaching a key group of stakeholders working with plant genetic resources in the region. The article covered the impact of the cyclones in Zimbabwe and presented the step-by-step approach of the project.

Visibility on global platforms

The project was featured on global platforms and by news outlets, including through an article in the newsletter of Welthungerhilfe. The

RAISING AWARENESS ON THE ROLE OF SEEDS IN EMERGENCIES

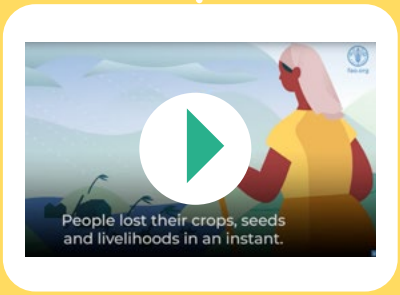
Documentaries broadcast on national television

In **Zimbabwe**, documentaries were broadcast on national television to showcase efforts by smallholder farmers, with support from various NGOs, to raise the profile of PGRFA and address food and nutrition security. The episodes showcased: (1) the importance of community seed banks; (2) various agroecological practices to adapt to changing climate conditions; and (3) the restoration of local germplasm after Cyclone Idai in the Chimanimani district.

NEWS ITEMS

Source: https://www.welthungerhilfe.de/welternaehrung/rubriken/klima-ressourcen/lokales-saatgut-ueber-naturkatastrophen-retten/

VIDEO ANIMATION AND WEBPAGE



Source: videostill from 'Seed systems in emergencies', https://youtu.be/RxO28TQmfII

project also developed several products to promote and disseminate project insights in the PGRFA community.

The **podcast on Farmers**' Rights has served as a capacity development tool for both International Treaty implementation and raising visibility of the project. A series of **infographics and posters** has highlighted key lessons learned and good practices that are applicable to other actors and contexts. The infographics have been shared in national networks, engaging and informing a wider group of stakeholders, and on international platforms, disseminating the project's achievements and insights.

For presentations and social media, the project created a short **animated video** on the role of seed systems in emergencies. The video was launched during the Ninth session of the Governing Body of the International Treaty, held in New Delhi, India in September 2022, where seed systems and seed collections under threat of natural disaster and conflict was a topic of interest. The video also provides an introduction to the dedicated seed systems in emergencies webpage on the website of the International Treaty. The webpage has been designed in the light of this project, and brings together a range of resources that support policy-makers and other stakeholders in integrating plant genetic resources in emergency response planning.

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Contact
International Treaty on Plant Genetic
Resources for Food and Agriculture

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