



Food and Agriculture  
Organization of the  
United Nations



**The International Treaty**  
ON PLANT GENETIC RESOURCES  
FOR FOOD AND AGRICULTURE

**Views, Experiences and Best Practices as an example of possible options for  
the national implementation of Article 9 of the International Treaty**

*Note by the Secretary*

*At its [second meeting](#) of the Ad hoc Technical Expert Group on Farmers' Rights (AHTEG), the Expert Group agreed on a revised version of the [template](#) for collecting information on examples of national measures, best practices and lessons learned from the realization of Farmers' Rights*

*This document presents information on best practices and measures of implementing Article 9 of the International Treaty jointly submitted by Malawi, Zimbabwe, and the African Centre for Biodiversity (ACB) on 4 March 2021.*

*The submission is presented in the form and language in which it was received.*



## Template for submission of

### Measures, Best Practices and Lessons Learned from the Realization of Farmers' Rights as set out in Article 9 of the International Treaty

#### Basic information

- Title of measure/practice

Support of small-scale farmer seed systems and promoting farmers' rights and sustainability of seed in emergency situations

- Date of submission

04 March 2021

- Name(s) of country/countries in which the measure/practice is taking place

Zimbabwe, Mozambique and Malawi

- Responsible institution/organization (name, address, website (if applicable), e-mail address, telephone number(s) and contact person)

National Gene banks of Zimbabwe, Malawi and Mozambique, FAO- ITPGRFA, Bioversity International and in coordination with relevant FAO sub-regional and country offices

- Type of institution/organization (categories)

Government institutions, International organisations

- Collaborating/supporting institutions/organizations/actors, if applicable (name, address, website (if applicable), e-mail address, telephone number(s))

FAO/ITPGRFA, National Genebanks of Zimbabwe, Mozambique and Malawi, FAO sub-regional offices

Mr. Onismus Chipfunde – Curator of the National Gene bank of Zimbabwe - [ochipfunde@gmail.com](mailto:ochipfunde@gmail.com)

Dr. Lawrent Pungulani – Curator of the National Gene bank of Malawi - [lawrentp@yahoo.co.uk](mailto:lawrentp@yahoo.co.uk)

Ms. Modester Kachapila – National Gene bank of Malawi [mauldyka83@gmail.com](mailto:mauldyka83@gmail.com)

Mr. Paulino Munisse – National Gene bank of Mozambique - [pmunisse@gmail.com](mailto:pmunisse@gmail.com)

Ms. Elly Barret – FAO – FAO ITPGRFA - [Elly.Barrett@fao.org](mailto:Elly.Barrett@fao.org)

Ms. Carla Dovale – FAO – National Gene bank of Mozambique - [cdovale080@gmail.com](mailto:cdovale080@gmail.com)



## Description of the examples

### Mandatory information:<sup>1</sup>

- Short summary to be put in the inventory (max. 200 words)

The aim of the project is to increase the immediate and long-term food and nutrition security in cyclone affected communities of Zimbabwe, Malawi and Mozambique through improved national and regional planning and coordination, and assessing the loss of plant genetic resources so that a baseline can be established and strategy developed for restoring germplasm, rebuilding and strengthening local seed systems. The project also aims to increase knowledge and skills in restoration of local community-based small holder farmer seed systems and build capacity of national partners for policy engagement at national and regional level.

- Brief history (including starting year), as appropriate

The FAO-ITPGRFA Secretariat is working with several African governments through the relevant national gene banks and small-scale farmers to rebuild seed systems, supported by the government of Germany, through a project titled “Foundations for rebuilding seed systems post Cyclone Idai: Zimbabwe, Mozambique and Malawi”. This project came about as a recovery and restoration initiative targeted at restoring small scale farmer seed systems after the devastating impact of the tropical Cyclone Idai that affected the three countries directly in March 2019. The impact of the cyclone resulted in many small-scale farmers losing crops that were ready for harvest, local seed reserves, grain and seed storage facilities and arable lands. The project started in September 2019, and the first phase will end in May 2021. Importantly, the project is also supporting the development of appropriate emergency response strategies and plans, at the national level, that integrate the protection, strengthening and rebuilding of local seed systems into National Disaster Action Plans. This will ensure that governments and communities are better prepared in the event of future natural especially climate related disasters, which occur regularly in the region.

- Core components of the measure/practice (max 200 words)
  - 1) Seeds of local and lost varieties are identified, regenerated and returned to communities for future use and safeguarding.
  - 2) The project is supporting national gene banks to undertake studies to document and analyse what has been lost in cyclone-affected communities by way of seed reserves and seed diversity as well as identify what types of crops (including lost varieties) small-scale farmers would like to continue to grow, eat and sell.
  - 3) The project is also facilitating the upscaling of sourcing of suitable germplasm from global sources for introduction to affected communities. This includes using novel climate analogue tools for analysing climate data and farmer preferences of target communities to explore possible matching

---

<sup>1</sup> This mandatory information is required in order for the measure/practice to be included in the Inventory.



**Food and Agriculture  
Organization of the  
United Nations**



**The International Treaty**  
**ON PLANT GENETIC RESOURCES  
FOR FOOD AND AGRICULTURE**

of germplasm from international, regional and national collections that could be mobilised relatively quickly and tested in cyclone-affected communities.

- 4) Promoting and building capacity towards implementation of the ITPGRFA among participating countries.

- Description of the context and the history of the measure/practice is taking place (political, legal and economic framework conditions for the measure/practice) (max 200 words)

Smallholder farmers in the three countries continue to rely on farmer seed systems for the supply of 80 percent of their seed, food, nutritional and income needs. The local seeds which are also referred to as farmers varieties, have become adapted over centuries to local growing conditions and play a significant role in meeting food, nutrition, cultural and livelihood needs. Additionally, local seeds provide farmers with crops that meet household and market preferences, while helping to preserve agricultural biodiversity. With Cyclones Idai and Kenneth impacting Southern Africa in March and April of 2019, heavy rains, floods and landslides affected over 3.8 million people and destroyed nearly 800 000 ha of standing crops in Malawi, Mozambique and Zimbabwe. Farmers lost local seed reserves and crops that were ready for harvest. In emergency situations (such as cyclones, floods, pandemics and armed conflict) local seed reserves, which are key for ensuring food security and nutrition, are often completely wiped out. While interventions in the aftermath of a disaster mainly focus on immediate lifesaving interventions, restoring local food production after disasters and in emergencies should also be prioritized, including safeguarding crucial local seed reserves. Thus, the aim of the project is to protect and restore agricultural livelihoods for small-scale farmers and reduce their reliance on food and seed aid and other humanitarian assistance.

- To which provision(s) of Article 9 of the International Treaty does this measure relate

Art. 9.1     X

Art. 9.2a   X

Art. 9.2b  

Art. 9.2c   X

Art. 9.3     X

**Other information, if applicable**

- Please indicate which category of the Inventory is most relevant for the proposed measure, and which other categories are also relevant (if any):



No.	Category	Most relevant <sup>2</sup>	Also relevant <sup>3</sup>
1	Recognition of local and indigenous communities', farmers' contributions to conservation and sustainable use of PGRFA, such as awards and recognition of custodian/guardian farmers		X
2	Financial contributions to support farmers conservation and sustainable use of PGRFA such as contributions to benefit-sharing funds		
3	Approaches to encourage income-generating activities to support farmers' conservation and sustainable use of PGRFA		X
4	Catalogues, registries and other forms of documentation of PGRFA and protection of traditional knowledge	X	
5	In-situ/on-farm conservation and management of PGRFA, such as social and cultural measures, community biodiversity management and conservation sites	X	
6	Facilitation of farmers' access to a diversity of PGRFA through community seed banks <sup>4</sup> , seed networks and other measures improving farmers' choices of a wider diversity of PGRFA.	X	
7	Participatory approaches to research on PGRFA, including characterization and evaluation, participatory plant breeding and variety selection	X	
8	Farmers' participation in decision-making at local, national and sub-regional, regional and international levels		X
9	Training, capacity development and public awareness creation	X	
10	Legal measures for the implementation of Farmers' Rights, such as legislative measures related to PGRFA.		X
11	Other measures / practices	X	

- In case you selected 'other measures', would you like to suggest a description of this measure, e.g. as a possible new category? \_\_\_\_\_ Recognition and support of farmer managed seed systems through farmers conservation and seed recovery during crises/emergencies
- Objective(s)
  1. To better coordinate and plan activities for the restoration and reconstruction of local seed systems in Zimbabwe, Malawi and Mozambique through the development of plans and regional strategic frameworks and establishment of regional and national coordination platforms and committees.

<sup>2</sup> Please select only one category that is most relevant, under which the measure will be listed.

<sup>3</sup> Please select one or several categories that may also be relevant (if applicable).

<sup>4</sup> Including seed houses.



Food and Agriculture  
Organization of the  
United Nations



The International Treaty  
ON PLANT GENETIC RESOURCES  
FOR FOOD AND AGRICULTURE

2. To establish the ex-ante and post-ante trends and status of local seed systems in cyclone Idai affected communities in Zimbabwe, Malawi and Mozambique.
3. To provide short-term measures to seed insecurity in Cyclone Idai affected communities through the provision of suitable genetic resources.
4. To strengthen the capacity of Zimbabwe, Malawi and Mozambique to implement the International Plant Treaty through the provision of targeted capacity development and policy guidance activities and products.
5. To raise awareness of the impact of extreme weather events on PGRFA biodiversity and local seed systems through the development of targeted communication products and activities.

- Target group(s) and numbers of involved and affected farmers<sup>5</sup>

In Malawi the project worked with 197 households and In Zimbabwe the project is being implemented 6 wards of Chimanimani District with a total 36 households directly and 300 small scale farmers indirectly involved in the participatory seed multiplication and evaluation.

- Location(s) and geographical outreach

This study was carried out in Cyclone Idai affected districts in Malawi, Zimbabwe and Mozambique. In Malawi the assessment was done in 4 districts and 9 Extension Planning Areas (EPAs) respectively. The districts were Chikwawa and Nsanje in the Southern part of Malawi which were heavily devastated by the Cyclone and Zomba and Phalombe districts in the Eastern part. In Zimbabwe the project was carried out in 6 wards in Chimanimani District in the Eastern Highlands that borders Mozambique.

- Resources used for implementation of the measure/practice

USD 385 404

- How has the measure/practice affected the conservation and sustainable use of plant genetic resources for food and agriculture?

This project provides an opportunity for the restoration of farmer managed seed systems, which were disrupted by the tropical cyclones in the three countries. The project is centred on reinforcing the critical role played by national gene banks and partners towards the conservation and sustainable use of plant genetic resources. Farmer managed seed systems represent a significant pillar that anchors PGRFA conservation and sustainable use through preservation of local diverse populations of crop species that meet variable dietary and livelihood needs. The project also demonstrates the urgent need to incorporate PGRFA in national early warning and disaster response action plans to minimise food and nutrition insecurity following disasters. The findings from the assessment of the impact of disasters on PGRFA provides strong justification for the review of the national disaster response policy to include PGRFA. The strong participatory component strengthens the collaboration between small scale farmers, public sector researchers and gene banks in identifying, documenting, conserving and promoting the utilisation of plant genetic resources for food and agriculture. Smallholder farmers have been conserving and using sustainably PGRFA including farmer and traditional seed for millennia. However, the lack of supportive policies that strengthen farmer seed systems makes smallholder farmers particularly extremely vulnerable when it comes

---

<sup>5</sup> Any classification, e.g. of the types of farmer addressed, may be country-specific.



**Food and Agriculture  
Organization of the  
United Nations**



**The International Treaty**  
**ON PLANT GENETIC RESOURCES  
FOR FOOD AND AGRICULTURE**

to the shocks such as climate (drought, floods, famine), pests, and so forth. Thus, local communities who are custodians of seed and a huge reservoir of traditional knowledge are able to contribute to the evolution and conservation of these resources. Through this collaboration, policy makers, various public sector actors and practitioners are becoming increasingly alive to the urgent need to put in place policies that support farmers' seed systems including community seed production, participatory crop improvement among initiatives. The project is implementing short-term PGRFA recovery measures, designed towards supporting restoration and reconstruction efforts, which include the multiplication of preferred germplasm on-farm, repatriation of germplasm that was lost due to the cyclones and reviving social networks that provide access and availability of PGRFA in affected areas. Furthermore, this would in turn reinforce the need for continued support towards building up ex situ collections in gene banks and subsequent multiplication and regeneration of conserved germplasm, which is made available to small scale farmers in case of future shocks and disasters. The process of rescue collection and participatory seed exchanges adopted after a shock or disaster have improved ex situ and on-farm conservation and enhanced access of locally adapted crop seeds and varieties not readily available in the market. This has also helped to restore lost diversity, revive and strengthen the local seed system and safeguard biodiversity of native crops to adapt to more extreme, changeable and uncertain climatic conditions facing the region

- Please describe the achievements of the measure/ practice so far (including quantification) (max 200 words)

**Identification of crops that were affected by the disaster and suitable crops for restoration** -Crops affected were cereals, legumes and root and tuber crops including vegetables, fruits that are readily and easily accessible and hard to come by e.g., wild fruits, trees were washed away and also indigenous vegetables.

**Implementation of short-term recovery measures to rescue seeds and endangered native crop varieties as a means to quickly revive and strengthen the local seed system** – Involved communities in seed multiplication through building local seed systems including restoration of materials in the gene banks for affected communities. National gene banks supplied seed and small-scale farmers multiply on farm and share in the communities for own use. This recognises and promotes an alternative to the formal seed multiplication system which locks out small holder farmers and their seed systems and, in some instances, criminalises them. These measures can be used to formulate a strategy useful in building national capacity and resilience to cope with future disasters and laying a foundation for community seed banks to be established under local community control.

**Link with national and regional level policy instruments**-Results from an impact assessment project can contribute towards the realisation of farmers' rights in seed laws and policies which ensures that small scale farmers play a critical role in in local seed multiplication and benefit from appropriate extension support. Results can also contribute to the development of a regional disaster response strategy and Climate Change adaptation plans.

- Other national level instruments that are linked to the measure/practice  
National

In Zimbabwe the project has contributed to the revision of the national strategy plan for PGRFA by including a component on disaster response which was not previously covered.



**Food and Agriculture  
Organization of the  
United Nations**



**The International Treaty**  
**ON PLANT GENETIC RESOURCES  
FOR FOOD AND AGRICULTURE**

The project is also linked to National PGRFA policies and laws for Malawi and Mozambique and discussions in these countries.

- Are you aware of any other international agreements or programs that are relevant for this
  - Convention on Biological Diversity (CBD) and Global Biodiversity Framework under discussion
  - UNDROP- United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas
  - UNDRIP- United Nations Declaration on the Rights of Indigenous Peoples
  - Nagoya Protocol on access and benefit sharing
- Other issues you wish to address, that have not yet been covered, to describe the measure/practice

#### **Lessons learned**

- Describe lessons learned which may be relevant for others who wish to do the same or similar measures/practices (max 250 words).
  - PGRFA does not have strong recognition in biodiversity policies and laws and is often forgotten in disaster response planning and implementation at various levels. It is key to conduct a good stakeholder mapping exercise to identify strategic key partners in order to influence policy change and inclusion of PGRFA and linkages with national disaster preparedness and response strategies.
  - Farmers' rights are not captured in any PGRFA policies and hence, small scale farmers need much more state support to work out with other similarly impacted farmers in terms of farmer to farmer exchanges in regard to the realisation and implementation of farmers' rights.
  - Decline in genetic diversity has been happening within small scale farming communities prior to the tropical cyclones and the major driver for the decline has been industrial agriculture. Socioeconomic factors such as lack of support for research and development for crop improvement and support locally controlled mechanisms (such as community seedbanks) for conservation of germplasm diversity at local (community) level have left small farmers vulnerable due to lack easily accessible source of seed for immediate recovery.
  - Partnerships with national gene banks are very critical in the resuscitation of disrupted seed systems especially but not limited to the restoration of lost local seed following disasters. However, the limited quantities of germplasm stored in collections render the gene banks unable to meet demand or benefit a significant number small scale farmers in need.
  - In the context of the climate crisis as the "new normal" especially in southern Africa, there is an urgency to entrench these sorts of state support systems as an integral part of the realisation of farmers' rights and should be embodied in laws and policies to implement Farmers' Rights.





Food and Agriculture  
Organization of the  
United Nations



**The International Treaty**  
ON PLANT GENETIC RESOURCES  
FOR FOOD AND AGRICULTURE

- What challenges encountered along the way (if applicable) (max 200 words)
  - During the period that the project was implemented, the world faced a global pandemic induced by the Coronavirus/Covid 19. In efforts to control the spread of infections, many countries went into partial and or complete lockdowns that restricted movement. For the project this presented a challenge in reaching areas that were devastated by Cyclone Idai. For areas where trials for multiplication were on going, germplasm was lost due to little or no maintenance. Some crops were also affected by knock on pest infestations.

The project was implemented rather late after the cyclones had already made landfall, therefore there were already several changes that might have affected results of the impact assessment and in turn compromised recommendations and measures implemented. Many interventions had also been made towards recovery in the form of emergency seed aid among other forms of assistance from donors.

- What would you consider conditions for success, if others should seek to carry out such a measure or organize such an activity? (max 100 words)
  - A multi- stakeholder public sector approach is highly recommended to leverage existing efforts on the ground from other public sector stakeholders, avoid duplication of activities, and maximise use of limited resources. In this regard, there is a need to constitute an implementation team that is multidisciplinary, comprising several skills and expertise from local farming communities, especially women and holders of traditional knowledge, public sector experts such as social scientists, farmer and public sector plant breeders, public sector seed specialists, open source data and analysts and so forth. A fully representative team that deals with the interface between shocks and disasters and farmer managed seeds systems is indispensable for the African continent.

#### **Further information**

- [Link\(s\) to further information about the measure/practice](#)

<http://www.fao.org/plant-treaty/news/news-detail/en/c/1305962/>

**Disclaimer: The information provided above does not include any experiences in Mozambique as they were unable to contribute to the joint submission.**