



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 the updated information on best practices and measures of implementing Article 9 of the International Treaty submitted by Malawi on 1 August 2019.

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



analysis of the draft Seed Bill and mobilized like-minded stakeholders including farmers to have a dialogue meeting with the seed Bill drafting team.

At this meeting, the discussions were conducted in Chichewa, a local language which enabled farmers to participate in the discussions. The farmers were able to raise different seed related issues affecting them. They also questioned some of the provisions in the draft Seed Bill, for instance prohibiting the exchange of seed amongst farmers and limited involvement of farmers in decision making, to which the policy makers responded and committed to change in the bill. It was agreed at the meeting that the Bill was not promoting framers’ rights and that the Bill should specify that it is just for formal seed system. DARS also committed to develop a separate farmers’ rights policy framework and tasked the Civil Society present to engage them on this.

When the Bill was revised it was observed that most of the issues raised by the farmers were addressed in the Bill. For instance the provision prohibiting farmer seed exchange was removed and it also included the representation of farmers in one of the committees to be established.

- **Core components of the measure/practice (max 200 words)**

As a lead organization in policy and advocacy issues in Malawi CEPA takes an active role in advocating for seed related policies and other legal frameworks pertaining to agrobiodiversity including Farmers Right’s. Core components of the promotion work on Farmer Participation in Decision making included; (i) Mobilization of like-minded stakeholders and farmers to have a dialogue with the drafting team for the Malawi Seed Bill and analyse the Draft Seed Bill. (ii) Ensuring that there is facilitated participation of the farmers involved through use of local language in the dialogue process so that the farmers better understand the discussions and equally contribute towards the process.

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

- Art. 9.1
- Art. 9.2a
- Art. 9.2b
- Art. 9.2c
- Art. 9.3

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 ²	Also relevant ³
-----	----------	----------------------------	----------------------------

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

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



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		
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		
4	Catalogues, registries and other forms of documentation of PGRFA and protection of traditional knowledge		
5	In-situ/on-farm conservation and management of PGRFA, such as social and cultural measures, community biodiversity management and conservation sites		
6	Facilitation of farmers' access to a diversity of PGRFA through community seed banks ⁴ , seed networks and other measures improving farmers' choices of a wider diversity of PGRFA.		
7	Participatory approaches to research on PGRFA, including characterization and evaluation, participatory plant breeding and variety selection		
8	Farmers' participation in decision-making at local, national and sub-regional, regional and international levels	✓	
9	Training, capacity development and public awareness creation		
10	Legal measures for the implementation of Farmers' Rights, such as legislative measures related to PGRFA.	✓	
11	Other measures / practices		

- In case you selected 'other measures', would you like to suggest a description of this measure, e.g. as a possible new category? _____
- Objective(s)
Recognition and promotion of farmers' rights in policies and legal frameworks.
- Target group(s) and numbers of involved and affected farmers⁵
14 farmers (2 male and 12 females) participated in the Seed Bill dialogue meeting
- Location(s) and geographical outreach
Malawi: farmers came from different districts
- Resources used for implementation of the measure/practice

⁴ Including seed houses.

⁵ 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

Financial support from the Development Fund of Norway and African Centre for Biodiversity.

- How has the measure/practice affected the conservation and sustainable use of plant genetic resources for food and agriculture? Please describe the achievements of the measure/ practice so far (including quantification) (max 200 words)

By removing seed exchange prohibition provision, farmers will continue to use, save, share and exchange seed which will contribute to conservation and sustainable use of PGRFA.

The policy makers present at the dialogue meeting also allowed farmers to sell their local seed as long as it is well labelled as such which was not allowed before.

- Other national level instruments that are linked to the measure/practice
- Are you aware of any other international agreements or programs that are relevant for this measure/practice?

ITPGRFA promotes farmers rights which includes a right to sell and exchange seed as well as a right to participate in decision making

- 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).

Involving the farmers to actively participate in policy dialogue increased the chances of influencing decision making which is very difficult when it is just civil society alone with the presence of the affected beneficiaries of decisions and policy documents

- What challenges encountered along the way (if applicable) (max 200 words)

Unwillingness of government to promote farmers' rights and recognize it as one way of achieving food security and climate change adaptation and resilience especially for resource poor farmers.

- 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)

Involvement of farmers in advocacy and ensure that the discussions are carried in a medium where farmers are comfortable in

Further information

- Link(s) to further information about the measure/practice

www.cepa.org.mw



Food and Agriculture
Organization of the
United Nations



The International Treaty
ON PLANT GENETIC RESOURCES
FOR FOOD AND AGRICULTURE

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
Strengthening Local Farmers Seed Systems through Community Seed Banks in Malawi □
- Date of submission
31st July 2019
- Name(s) of country/countries in which the measure/practice is taking place
Malawi
- Responsible institution/organization (name, address, website (if applicable), e-mail address, telephone number(s) and contact person)

Biodiversity Conservation Initiative (BCI)

Sun Bird Mzuzu Hotel, First Floor Room # 1.

P.O. Box 20402 Luwingu, Mzuzu, Malawi.

www.bcimalawi.org. info@bcimalawi.org.

+265 212 271 754.

Contact Person: Dr Godwin Mkamanga Cell: +265 999 956 501

E-mail: godwinmkamanga@gmail.com

- Type of institution/organization (categories) **Non-Governmental Organization**
- Collaborating/supporting institutions/organizations/actors, if applicable (name, address, website (if applicable), e-mail address, telephone number(s)) **The Development Fund of Norway**

Description of the examples

Mandatory information:¹

Biodiversity Conservation Initiative entered into partnership with the Development Fund of Norway (DF) in 2013 to implement a Community Based Agrobiodiversity Management project (2013 – 2016). The project was extended from 2017 – 2020. DF provides the funding while BCI directly implement the project targeting 2500 smallholder farmers. The major objective is to Increase adaptive capacity to climate change among smallholder farmers in Malawi through strengthening local seed systems with community seed banking as a major focus. Core components of the work include; multiplication of locally adapted seed varieties such as finger millet, groundnuts, beans, green gram, sesame, sorghum, pearl millet and Bambara nut; maize varieties participatory variety selection; community seed banking on loan basis for enhanced

¹ 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

farmer access of the materials and loan schemes for sustainability and Capacity building programs on quality seed production, crop production practices and Seed policies including Farmers rights. Notable achievements of the work include the sustainable management of 4 Community seed Banks in Rumphi district.

- Brief history (including starting year), as appropriate

Biodiversity Conservation Initiative entered into partnership with the Development Fund of Norway (DF) in 2013 to implement a Community Based Agrobiodiversity Management project (2013 – 2016). The project was extended from 2017 – 2020. DF provides the funding while BCI directly implement the project targeting 2500 smallholder farmers

- Core components of the measure/practice (max 200 words)

BCI is promoting multiplication of locally adapted farmers' seed varieties of finger millet, groundnuts, beans, green gram, sesame, sorghum, pearl millet and Bambara nut. BCI also selected four locally adapted farmer varieties of maize through participatory variety selection. The selected materials were multiplied in farmers' fields. The multiplied materials were stored in Community Seed Banks for local community smallholder farmers to access the materials on loan basis agreement with the management committees of the Community Seed Banks. In order for the farmers to access quality seed, BCI trained the members of the CSBs in on-farm quality seed production, CSB practices and management, participatory variety selection, sustainable agronomy and local seed policies and Farmer' Rights. Farmers also share planting materials and raise awareness on Farmers' Rights through conducting field days and seed and food fairs in the communities. BCI is currently working with four (4) Community Seed Banks in Rumphi district in Malawi.

- 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)

Over 80 % of farmers in Malawi are smallholder farmers who depend on small scale farming for their livelihoods. Over 70 % of the smallholder farmers use farm saved seed. The government of Malawi introduced farm input subsidy program but target less farmers and is dominated by maize leaving out other important crops (grain legumes, sorghum, millet, vegetables) to farmers' dietary needs. The sustainability of the farm input subsidy program is also highly questionable. To address the challenge of seed shortages, BCI partnered with the Development Fund of Norway to strengthen local seed systems as a way of increasing availability of diverse and good quality seed among smallholder farmers with the view of increasing food and nutrition security and reduce susceptibility of smallholder farmers to climate change effects. The community seed banking practice was adopted owing to its successful implementation in other countries such as Zimbabwe and Nepal.

BCI is working with smallholder farmers to strengthen their local seed systems with backing of the ITPGRFA to which Malawi is a signatory.

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

Art. 9.1

Art. 9.2a



Art. 9.2b

Art. 9.2c

Art. 9.3

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 ²	Also relevant ³
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		
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		
4	Catalogues, registries and other forms of documentation of PGRFA and protection of traditional knowledge		
5	In-situ/on-farm conservation and management of PGRFA, such as social and cultural measures, community biodiversity management and conservation sites		<input checked="" type="checkbox"/>
6	Facilitation of farmers' access to a diversity of PGRFA through community seed banks ⁴ , seed networks and other measures improving farmers' choices of a wider diversity of PGRFA.	<input checked="" type="checkbox"/>	
7	Participatory approaches to research on PGRFA, including characterization and evaluation, participatory plant breeding and variety selection		
8	Farmers' participation in decision-making at local, national and sub-regional, regional and international levels		
9	Training, capacity development and public awareness creation		<input checked="" type="checkbox"/>
10	Legal measures for the implementation of Farmers' Rights, such as legislative measures related to PGRFA.		

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

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

⁴ Including seed houses.



11	Other measures / practices		
----	----------------------------	--	--

- In case you selected ‘other measures’, would you like to suggest a description of this measure, e.g. as a possible new category? _____
- Objective(s)

Increase adaptive capacity to climate change among smallholder farmers in Malawi

- Target group(s) and numbers of involved and affected farmers⁵

The intervention is targeting 2500 smallholder farmers.

- Location(s) and geographical outreach

The project is located in Rumphu district in Malawi. The impact Extension Planning Areas (EPAs) are Katowo, Bolero and Mhuju.

- Resources used for implementation of the measure/practice .How has the measure/practice affected the conservation and sustainable use of plant genetic resources for food and agriculture?
- Please describe the achievements of the measure/ practice so far (including quantification) (max 200 words)

The project is using four CSBs that were constructed by the Development Fund of Norway and relies on farmers’ fields to collect and multiply locally adapted seed. Project staff from BCI are directly involved in providing technical backstopping to the farmers. The project has increased access to good quality seed among smallholder farmers. Availability of Bambara nut seed has been increased. The project managed to bulk six tons of Bambara nut seed and this has resulted to increased production of bambara nut since seed is readily available. Through mass selection, four locally adapted farmer varieties were selected and improved. A local maize variety that matures in sixty days was also selected and improved through mass selection. Through increased production of locally adapted bean varieties (Nyauzembe, Jandalala, Sugar beans and Mzaza) and groundnuts (Chalimbana, Buyaya and Chailosi), the project has increased farmers’ incomes through selling of these materials from surplus production. In 2013/2014 season the project focused on building capacity of farmers to collect and multiply good quality seed. In that year a total of one ton of seed was produced that was further multiply in the 2014/2015 season producing five ton of seed. The growing season of 2015/2016 was the breakthrough season from which a total of thirty-eight tons of seed was produced. The project has benefited a total of 5000 smallholder farmers through access of seed and sharing knowledge. From 2017- 2018 farmers have continued maintaining the locally adapted varieties on-farm with two tons as the working sample as they continue to loan out seed to farmers on a 50% loan agreement. The materials that were not shared were sold to agro-dealers and estate owners to create space in the CSBs. These interventions have contributed to increase on-farm conservation of locally adapted farmer varieties.

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

⁵ 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**

- Are you aware of any other international agreements or programs that are relevant for this measure/practice?

These include the International Treaty on Plant Genetic Resources for Food and Agriculture, Convention on Biological Diversity, Cartagena Protocol on Biosafety to CBD and the Nagoya Protocol on Access and Benefit Sharing.

- Other issues you wish to address, that have not yet been covered, to describe the measure/practice

At each CSB, farmers manage a diversity of locally adapted crop varieties in a diversity block. Farmers collect and evaluate the collected materials in diversity blocks. The diversity block act as a school for farmers to share knowledge and best practices and learn new skills such seed selection on-farm while the crop is still in the field. The diversity block is also used as a research field to study introduced crop materials'. Prior to multiplication of seed, a four-cell analysis was conducted to collect information on the status of seeds of locally adapted materials and select materials for collection, conservation and multiplication and re-introduction. The samples of rare crop materials were replicated at the Malawi National Gene Bank for conservation.

Lessons learned

- Describe lessons learned which may be relevant for others who wish to do the same or similar measures/practices (max 250 words).

To effectively conserve crop genetic resources on-farm, capacity building of farmers is important in key areas of seed multiplication, collection and storage. Good storage facilities are very important to ensure that the quality of the stored materials is maintained since quality can deteriorate as a result of poor storage. Motivating farmers with economic gains is also important because farmers use their resources such as time and land need to have income at the end through selling of their materials in agriculture fairs.

- What challenges encountered along the way (if applicable) (max 200 words)

Limited storage space to bulk materials produced by farmers and store seeds belonging to individual farmers within the catchment communities wishing to store their seeds for the next planting season. Limited availability of land to observe recommended isolation distances for open pollinated crop varieties during mass selection. Government policies that neglect local farmer's seed systems and limited support from government institutions. Low crop prices and long distances to markets to sale surplus produce.

- 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)

Further information

- Link(s) to further information about the measure/practice



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



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

<https://www.gfar.net/documents/capacity-building-material-realization-farmers-rights-malawi>

<http://www.aprebes.org/news/capacity-building-material-farmers-rights-malawi>



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



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

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
PARTICIPATORY PLANT VARIETY SELECTION
- Date of submission
31ST July 2019
- Name(s) of country/countries in which the measure/practice is taking place
MALAWI
- Responsible institution/organization (name, address, website (if applicable), e-mail address, telephone number(s) and contact person)

Malawi Plant Genetic Resources Centre

Chitedze Agricultural Research Station

Off Lilongwe _ Mchinji road

P.O. Box 158, Lilongwe, Malawi

Website: www.dars.mw

Contact person: Dr Lawrent Pungulani

Tel. +265 (1) 707 222, Cell. +265 (0) 991 142 300 or (0) 885 313 594

Email: lawrentp@yahoo.co.uk or Lawrent.pungulani@dars.mw

Skype ID: Lawrent.pungulani

- Type of institution/organization (categories) : **Government Institution**

Description of the examples

Mandatory information:¹

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

The Malawi Plant Genetic Resources Centre started working on the Participatory Variety Selection of 56 Bambara nut accessions in the year 2001/02. The work involved three research stations in the Department of Agricultural Research Services namely: Chitedze in Lilongwe district, Chitala in Salima district and Mbawa in Mzimba district. Agricultural Extension Planning Areas (EPAS) and Farmers from villages surrounding the research stations were also involved in the Bambara nut PVS. The major objective of the work was to identify high yielding and farmer preferred accessions since Production of Bambara nuts in Malawi is characterized by low yields. Core components of the work included; (i) Farmer involvement which contributed to program success and ensured farmer commitment in activity implementation, (ii) integration of local technical knowledge and scientific knowledge in the research process, (iii) Development of readily acceptable varieties by farmers which is one of the fundamental research gaps in Malawi. The major outcome of the PVS was the official release by the Department of Agricultural Research Services through MPGRC of three Farmer preferred Bambara nut varieties

¹ 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

namely; *Kayera*, *Kadziunde* and *Makata*. Key lessons learnt included that integration of farmer preferences at an early stage in varietal development enhances adoption rates.

- Brief history (including starting year), as appropriate

Malawi Plant Genetic Resources Centre (MPGRC) has been working with farmer communities in Malawi in the conservation and sustainable utilization of plant genetic resources since the centre's inception in 1992. During the year 2001/2002, 56 Bambara (*Vigna subterranea* (L.) Verdc) accessions that were collected in the country and maintained in the national genebank collection were preliminary characterized with the aim of identifying high yielding and farmer preferred accessions. From the 56 accessions eight gave yields between 400 - 1500 kg/ha and were selected for multi-location trials. The eight accessions were then systematically evaluated at Chitedze (33.6°E, 13.9°S and Alt. 1146 m) in Lilongwe district, Chitala (34.3°E, 13.7°S and Alt. 606 m) in Salima district and Mbawa (33.4°E, 12.1°S and Alt. 1253 m) in Mzimba district during 2002/2003 and 2003/2004 seasons. In all sites, farmers scored the accessions at vegetative, harvesting and post harvesting stages. Criteria for scoring were developed by farmers with assistance from researchers.

- Core components of the measure/practice (max 200 words)

The development of varieties that are readily accepted by farmers remains a fundamental research gap, which requires immediate attention by most national programs including Malawi. In Malawi production of Bambara nut is characterized by use of landraces due to lack of improved varieties. Therefore, the integration of farmers' preference in varieties at an early stage of development enhances adoption rates. This integration is achieved through various ways including Participatory Variety Selection (PVS). In the PVS, farmers establish their criteria for selection with assistance or guidance from researchers. In participatory approaches programs are likely to be successful if farmers or stakeholders are involved. Farmers and others (local leaders and chiefs) who participate actively in such programs are likely to be more committed which facilitates acceptance and implementation of policies and technologies that best promotes their rights. Participation of farmers may also enhance the use of local technical knowledge and contribution to decision making process. In this case, science can make most contribution to research and development for small-scale farmers when it takes account of and utilizes farmers' indigenous knowledge based system.

- 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)

Bambara nut (*Vigna subterranea* (L.) Verdc) is the third most important grain legume in Africa after groundnuts and cowpeas. It makes a complete food as it contains sufficient quantities of protein, carbohydrate and fat and its gross energy exceeds that of other common pulses. In terms of production, Bambara nut has relative advantages over other grain legumes as it performs well under drought conditions, poor soils, and extreme heat as well as fixes nitrogen in the soil, thereby making it a suitable crop for the low-input production systems. Despite its relative advantages over other grain legumes, Bambara nut is still regarded as one of the neglected and underutilized crops in Africa due to limited research efforts. This status has led



to non-existence of improved and readily accepted varieties by farmers. Lack of improved varieties contributes to low yields low as 400 kg/ha compared with potential yields of 4000 kg/ha.

Malawi as a country has a rich plant genetic diversity of 555 species reported as food crops and wild edible plants, due to its diverse range of agro-ecological systems. Despite the existence of wide plant genetic diversity which includes Bambara nut, these valuable resources have not been fully exploited in terms of variety selection and development for enhanced socio-economic prospects of Malawian farming communities. Despite the availability of other legal instruments such as National Agricultural Policy and Environmental Management Act, there is no specific policy to support agrobiodiversity conservation, sustainable utilization and farmer’s rights for access and benefit sharing in Malawi.

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

- Art. 9.1
- Art. 9.2a
- Art. 9.2b
- Art. 9.2c
- Art. 9.3

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 ²	Also relevant ³
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		
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		
4	Catalogues, registries and other forms of documentation of PGRFA and protection of traditional knowledge		

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

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



5	In-situ/on-farm conservation and management of PGRFA, such as social and cultural measures, community biodiversity management and conservation sites		
6	Facilitation of farmers' access to a diversity of PGRFA through community seed banks ⁴ , seed networks and other measures improving farmers' choices of a wider diversity of PGRFA.		
7	Participatory approaches to research on PGRFA, including characterization and evaluation, participatory plant breeding and variety selection	✓	
8	Farmers' participation in decision-making at local, national and sub-regional, regional and international levels		
9	Training, capacity development and public awareness creation		
10	Legal measures for the implementation of Farmers' Rights, such as legislative measures related to PGRFA.		
11	Other measures / practices		

- In case you selected 'other measures', would you like to suggest a description of this measure, e.g. as a possible new category? _____

- Objective(s)

Identifying high yielding, adaptable and farmers' preferred genotypes/ varieties for production in Malawi.

Also, to allow farmers have co-responsibility in the selection of preferred varieties for production in Malawi.

- Target group(s) and numbers of involved and affected farmers⁵

20 farmers per site were involved for participatory variety selection.

- Location(s) and geographical outreach

Malawi with participation of farmers around Chitedze in Lilongwe district, Chitala in Salima district and Mbawa in Mzimba district.

- Resources used for implementation of the measure/practice

Funding of this work that was provided by the SADC Plant Genetic Resources Centre, the SADC Biodiversity Support Project and Malawi Government.

⁴ Including seed houses.

⁵ 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

- How has the measure/practice affected the conservation and sustainable use of plant genetic resources for food and agriculture? Please describe the achievements of the measure/ practice so far (including quantification) (max 200 words)

Through participatory farmer engagement, in addition to the yield, farmers' were able to come up with own criteria based on their preferred attributes which included; plant vigour, ability to fully bury its pods in the ground (mounding), maturity period, seed colour, and grain size, taste of boiled dry grain and taste of fresh pods were used to identify farmers' preferred genotypes.

The Combination of yield and farmers' preference identified three genotypes (181RD, 181CR and 2768) as potential varieties for production in Malawi.

Apart from the yield and agronomic traits, during the evaluation process farmers were also able to link the identified genotypes/varieties to particular utilization. As such Accessions 181RD and 2768 were specifically selected for relish unlike 181CR, which has been selected for use as snack.

For enhanced decision making and empowerment, farmers' had the responsibility of the variety naming whereby Accessions 181 RD was named '*Kadziunde*' meaning a variety that needs no mounding, 2768 named '*Kayera*' meaning a white / cream variety and 181 CR named '*Makata*' meaning a snack.

Production of Bambara nut in Malawi over the years had been poor and characterized with low yields, therefore by selecting potentially higher yielding varieties with farmer preferred attributes, Bambara nut production has significantly improved in Malawi. Bambara nut yields have also been improved from as low as 400kgs/ ha to a range of 485 to 1322Kg/ha.

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

National Agricultural Policy

- Are you aware of any other international agreements or programs that are relevant for this measure/practice?

ITPGRFA which promotes the conservation and sustainable conservation of PGRFA as well as Farmers Rights.

Nagoya protocol which promotes issues of 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).



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



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

Participatory approach to improvement of farmers' plant genetic resources management offers the potential to reach a large number of farmers and make local crop genetic diversity an integral component of agricultural development of farmers in less-favoured environments.

Participatory approaches require recognizing the central role that rural women play in agricultural production. Therefore, gender mainstreaming is a must in participatory variety selection.

- What challenges encountered along the way (if applicable) (max 200 words)
Inadequate awareness of researchers/ plant breeders on the significance of Participatory Variety Selection or Participatory Plant Breeding in crop improvement programs and technology adoption.
- 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)

The involvement of farmers in conservation and research work to ensure that identified /developed varieties have traits that are preferred by farmers for enhanced adoption of technologies as well as conservation and sustainable use of PGRFA.

Further information

- Link(s) to further information about the measure/practice

American Journal of Plant Sciences, 2012, 3, 1802-1808
<http://dx.doi.org/10.4236/ajps.2012.312A221> Published Online December 2012
(<http://www.SciRP.org/journal/ajps>)