



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 Oxfam Novib on 31 July 2019.

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:
Sowing Diversity=Harvesting Security (SD=HS) Program (1/2) – Field Work
- Date of submission
15/07/2019
- Name(s) of country/countries in which the measure/practice is taking place
2014-2018: Laos, Myanmar, Peru, Vietnam and Zimbabwe
2019-2022: China, Guatemala, Laos, Nepal, Peru, Uganda, Zambia and Zimbabwe
- Responsible institution/organization (name, address, website (if applicable), e-mail address, telephone number(s) and contact person)
Oxfam Novib, Mauritskade 9, 2514 HD the Hague, the Netherlands, +31 70 3421777, email sdhsprogram@oxfamnovib.nl, website www.sdhsprogram.org
- Type of institution/organization (categories)
NGO
- Collaborating/supporting institutions/organizations/actors, if applicable (name, address, website (if applicable), e-mail address, telephone number(s))

Phase 1 (2013-2018)

- **Coordinator:** Oxfam Novib
- **Laos:** National Agriculture and Forestry Research Institute (NAFRI); Ministry of Agriculture and Forestry (MAF); Lao Farmers Network (LFN); Southeast Asia Regional Initiatives for Community Empowerment (SEARICE)
- **Myanmar:** Metta Development Foundation; Southeast Asia Regional Initiatives for Community Empowerment (SEARICE)
- **Peru:** ANDES
- **Vietnam:** Mekong Delta Development Research Institute (MDI); Center for Initiatives on Community Empowerment and Rural Development (ICERD); Southeast Asia Regional Initiatives for Community Empowerment (SEARICE)
- **Zimbabwe:** Community Technology Development Trust (CTDT); Champion Seeds Co-op
- **International partners:** ETC Group; GRAIN; South Centre; Third World Network (TWN)

Phase 2 (2019-2022)

- **Coordinator:** Oxfam Novib
- **China** (Linking and Learning partner): Centre for Chinese Agricultural Policy - Chinese Academy of Sciences; Farmers' Seed Network in China (FSN); Oxfam in Hongkong
- **Guatemala:** Asociación de Organizaciones de los Cuchumatanes (ASOCUCH); Oxfam in Guatemala



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- **Laos:** National Agriculture and Forestry Research Institute (NAFRI); Ministry of Agriculture and Forestry (MAF), Lao Farmers Network (LFN); Oxfam in Laos
- **Nepal:** Local Initiatives for Biodiversity Research and Development (Li-Bird); Oxfam in Nepal
- **Peru:** ANDES; Oxfam in Peru
- **Uganda:** Eastern and Southern Small-Scale Farmers Forum (ESAFF Uganda); Participatory Ecological Land Use Management (PELUM Uganda); Oxfam in Uganda
- **Zambia:** Community Technology Development Trust (CTDT); Zambia Alliance for Agroecology and Biodiversity (ZAAB); Oxfam in Zambia
- **Zimbabwe:** Community Technology Development Trust (CTDT); Champion Seeds Co-op; Oxfam in Zimbabwe

Description of the examples

Mandatory information:¹

- Short summary to be put in the inventory (max. 200 words) including:
 - Implementing entity and partners
 - Start year
 - Objective(s)
 - Summary of core components
 - Key outcomes
 - Lessons learned (if applicable)

The Sowing Diversity=Harvesting Security (SD=HS) program is a joint effort of the civil society organization Oxfam, acting as coordinator, and its partners, including NGOs, farmers organisations, public institutions and government agencies, in the field of plant genetic resources. The overall objective is to contribute to the realization of Farmers' Rights and Sustainable Development Goal 2 by enhancing small-scale farmers' and indigenous people's capacities to access, develop and use PGRFA to improve food and nutrition security under conditions of climate change. Towards this end, SD=HS builds on expansion and institutionalization of the Farmer Field School (FFS) approach to strengthen the role and capacity of farmers in the management, research and conservation of plant genetic resources. Emphasis is also put on building partnerships with national breeding and research institutions, genebanks and extension services. Further activities include support to farmer-managed seed enterprises and enhancing nutritional knowledge and utilization of minor crops and under-utilized plant species. Between 2014 and 2018, SD=HS established over 1,050 self-sustaining FFS in five countries and reached approximately 150,000 households in Asia, Africa and Latin America. Amongst the lessons learned are the identification of 5 key conditions for scaling-up the FFS approach in any country. The second phase of the program started in 2019.

- Brief history (including starting year), as appropriate
The first phase of SD=HS started in 2014. The program is made possible because of multiple donors, including Sida, IFAD, Dutch MoFA, NPL, and private donors from the Netherlands.
- Core components of the measure/practice (max 200 words)

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



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1. SD=HS strengthens the role and capacity of farmers in the management, research and conservation of plant genetic resources through expansion and institutionalization of the **Farmer Field School** (FFS) approach. The FFS methodology seeks in particular to transform power relations at different levels and strengthen the voice of women and youth in decisions regarding the sustainable use (and hence conservation) of crop and variety diversity, with strong emphasis on building partnerships with national breeding and research institutions, (inter)national gene banks and extension services.
 2. SD=HS strengthens smallholders' capacities to produce and market diverse, good quality seeds and supports the establishment of **farmer seed enterprises**.
 3. SD=HS taps into communities' knowledge and strengthens their capacities to widen the diet and **improve nutrition** through better use of minor crops and other plants that have been ignored in (inter)national food policy and research, or have been stigmatized as poor peoples' food. SD=HS contributes by improving the management and nutritional value of NUS, as well as their storage, processing and preparation.
 4. SD=HS promotes **enabling policy environment** for farmers' seed systems and the implementation of Farmers' Rights. Examples can be found in our second submission on SD=HS Policy Work.
- 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)
Achieving the Right to Food is possible only if farmers, rural families and indigenous communities are put at the heart of food policies. SD=HS is about building farmer-centred food systems in which sustained crop diversity, food and nutrition security and climate adaptation are interconnected and addressed simultaneously. For centuries, small-holder farmers – especially women – have managed and created the crop diversity that forms the basis of global agriculture today. They have relied on traditional knowledge to innovate their crops and practices within highly diverse agro-ecological systems adapted to local circumstances. These farmers' seed systems are largely ignored by governments and the formal sector, resulting in a lack of investments in small-holder food and seed production and the denial of their rights. Food insecurity, inequality, crop diversity loss and climate change continue to threaten the lives and future of millions of rural men, women and the next generations. SD=HS implements Farmers' Rights by assisting these rural communities to reclaim their leading roles in PGRFA management, and by connecting 'traditional' and 'modern' knowledge and stakeholders in order to create resilient seed and food systems.
 - 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		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 ⁴ , 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		

- 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)
Indigenous peoples and small-holder farmers enjoy their Farmers' Rights and have the capacity to access, develop and use PGRFA to improve their food and nutrition security under conditions of climate change.
- Target group(s) and numbers of involved and affected farmers⁵

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.

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



The SD=HS program focusses on indigenous peoples and small-holder farmers, in particular women and youth. During phase 1 (2014-2018), SD=HS worked with approximately 150,000 households in Asia, Africa and Latin America. In phase 2 (2019 – 2022) SD=HS aims to directly reach 200,000 households within indigenous and farming communities in 8 countries, benefiting approximately 1 million men, women and youth. At least 50% of these beneficiaries will be women and girls.

- Location(s) and geographical outreach
Phase 1 (2014-2018): Laos, Myanmar, Peru, Vietnam and Zimbabwe
Phase 2 (2019-2022): China (Linking & Learning partner), Guatemala, Laos, Nepal, Peru, Uganda, Zambia and Zimbabwe
- Resources used for implementation of the measure/practice
Phase 1 (2014-2018) operated on a core budget of € 11.3 million.
Phase 2 (2019 – 2022) operates on a core budget of € 12.3 million.
- How has the measure/practice affected the conservation and sustainable use of plant genetic resources for food and agriculture?

SD=HS Phase 1 achieved the following increases in both crop diversity and varietal diversity in the program countries:

- Increased crop diversity: Laos: 38% more crops (from 8 to 11); Zimbabwe: 75% increase (from 4 to 7), with emphasis on drought-tolerant crops; In Vietnam, the focus was more on improving the varieties available of ‘alternative’ market crops sesame, mungbean and waxy corn (see varietal diversity below); in Peru, farmers focused on being able to maintain a large diversity of landraces of particularly potato, maize and broad beans in the face of changing climate.
- Increased varietal diversity of major crops: Laos: lowland rice (23% increase, from 44 to 54 varieties), waxy corn (300%, from 2 to 8, and 167%, from 3 to 8, in Oudomxay and Xayabouly, respectively); Peru: a total of 225 ‘new’ traditional varieties of potato were adopted, of which 13 through participatory varietal selection (PVS); Vietnam: rice (100%, from 4 to 8 varieties), waxy corn (150%, from 2 to 5); Zimbabwe: an increase of 110% for six major crops together (from a total of 9 to 19 varieties).

Recent drastic changes in weather patterns showed that there is a limit to local adaptation because of lack of seed of appropriate local varieties. The FFS have been indispensable in facilitating access to novel crops and varieties with new resistances and traits for farmers to select from. The increase in crop diversity coincide with a decrease of the ‘period of scarcity’, with for example a one-third reduction in the length of the hunger season (from four to 2.5 months per year) in Zimbabwe.

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

Between 2014 and 2018, the SD=HS program⁶:

- Established 1,050 Farmer Field Schools where farmers work together to select, adapt and/or develop new plant varieties that better fit their needs and preferences;
- Trained 35,000 farmers and facilitators, with more than 50% being women;
- Helped farmers to improve 400 varieties of staple crops;
- Operationalized 7 Community Seed Banks;
- With support of SD=HS, 400 seed clubs in the Mekong Delta and the farmers’ cooperative Champion Seeds have established a significant foothold for farmers’ seeds

⁶ For more information on the program’s achievements in Phase 1, see: <https://www.sdhsprogram.org/publications/final-report-2013-2018/>



markets in Vietnam and Zimbabwe respectively. In Zimbabwe, the program trained 899 farmers as seed enterprise association members;

- The programme has demonstrated that the use of neglected and underutilized species (NUS) can reduce hunger, and developed an FFS curriculum for the management of NUS for a more biodiverse diet and as a strategy for the hunger period.⁷
- SD=HS has promoted innovations including modules on Disaster Risk Reduction⁸, illustrated field manuals⁹, and the Digital Diversity Wheel, a diagnostic tool in the form of a smartphone application¹⁰.
- Other national level instruments that are linked to the measure/practice SD=HS has addressed national and regional policy and legislation in the area of seed laws and intellectual property rights, see SD=HS submission 2/2 on Policy Work for more information.
- Are you aware of any other international agreements or programs that are relevant for this measure/practice?
- 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).
The following are examples of some of the program's key lessons from Phase 1 (2014-2018):
 - For the first time, FFS on the management of crop diversity have been scaled-up with e.g. the number of FFS expanding from 20 to 300 within a single agricultural season in Zimbabwe. Five key conditions for scaling-up are: 1) well-established curricula for trainers and farmers; 2) engendered tools catering to the needs and role of women farmers that enable farmers to diagnose problems, find solutions and take decisions; 3) direct involvement of government extension services and (inter)national breeding institutes; 4) availability of new germplasm; and 5) an enabling policy environment.¹¹
 - The program explored the diverse options to create farmer seed enterprises according to local and national needs and conditions, from informal and local to formalised and national.¹²

⁷ For more information on the use of neglected and underutilized species in the hunger period, see: <https://www.sdhsprogram.org/publications/our-seeds-lessons-from-the-drought-briefing-note/> and <https://www.sdhsprogram.org/publications/evidences-on-the-use-of-neglected-and-underutilized-species-nus-to-cope-with-food-scarcity-and-climate-change-in-the-peruvian-andes-briefing-note/>

⁸ The full Facilitator's Field Guide, including the module on Disaster Risk Reduction, can be found here: <https://www.sdhsprogram.org/tool/manual-for-the-training-of-trainers-for-farmer-field-schools-on-participatory-plant-breeding-under-revision/>

⁹ For examples, see: <https://www.sdhsprogram.org/tool/diagnostic-stage-illustrated-module-for-ffs-facilitators/> and <https://www.sdhsprogram.org/tool/plot-design-for-pvs-illustrated-module-for-ffs-facilitators/>

¹⁰ For more information on the status of the Digital Diversity Wheel application, see: <https://www.sdhsprogram.org/tool/digital-diversity-wheel-roll-out-and-scale-up-strategy/>

¹¹ For more information on our scaling up strategy, see: <https://www.sdhsprogram.org/video/how-do-we-scale-up-our-work/>

¹² Key lessons on the establishment of the farmer seed enterprise Champion Seeds in Zimbabwe can be found here: <https://www.sdhsprogram.org/publications/the-case-of-champion-seeds/>. SD=HS also supported multiple 'Seed Clubs' in Vietnam. This work is reported in a separate submission by SEARICE.



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- Neglected and underutilized species (NUS) play an important role in diversifying the diets of indigenous peoples and smallholder farmers, in particular as part of their coping strategies during the hunger season as well as with the effects of climate change.¹³
- The need to create an enabling environment for farmers' seed systems, which remain largely neglected in (inter)national policies and legislation, and to base policy work in the lessons of field operations and the needs of small-scale farming communities, linking national to regional and global initiatives.¹⁴
- What challenges encountered along the way (if applicable) (max 200 words)
All activities undertaken should aim at long-term sustainability, and farmer field schools as well as farmer seed enterprises should be able to outlive programme interventions by offering an improved livelihood to the communities undertaking these activities. Programme interventions should be based on a thorough baseline assessment and planning exercise undertaken by community members. Timely supply of (foundation) seed of appropriate varieties or lines is essential and creating such access can resolve a major shortcoming of rural communities, i.e. the availability of locally adjusted, good quality seed at the right time and in the right volumes.
- 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)
Creating community ownership by recognizing that farmers will educate each other and acting in a supportive role only; ensuring that all activities contribute to improved community livelihoods; recognising and challenging traditional gender roles; assessing the current and near-future impact of climate change; linking field-based activities with policy initiatives; creating an enabling institutional environment that help to protect and support farmers seeds systems e.g. by reform of existing seed laws; creating proper alliances with public sector institutions; connecting the local to the global and vice-versa.

Further information

- Link(s) to further information about the measure/practice
www.sdhsprogram.org

¹³ For more information see: <https://www.sdhsprogram.org/publications/neglected-and-underutilized-species-for-improved-diets-briefing-note/>

¹⁴ See SD=HS Submission 2/2 on the program's Policy Work.