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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 Norway on 30 September 2021.

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



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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:

Putting farmers and Indigenous Peoples' access to crop diversity at centre in seed policy and practice

Date of submission: September 2021

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

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

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Type of institution/organization (categories): government, farmers' organisation, civil society, research

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

Norwegian Ministry of Foreign Affairs, Norwegian Ministry of Agriculture and Food, Norad, Norwegian Farmers' Union, Development Fund Norway, Caritas Norway; and staff at the research institutions Fridtjof Nansen Institute and the Norwegian University of Life Sciences.

Description of the examples

Mandatory information:¹

- **Short summary to be put in the inventory:**

The measure is a game changing solution presented to the UN Food System Summit 2021 calling for a fundamental re-think of how seed system development is supported globally.

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



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Our proposal is to ensure and promote – through legislation, seed policies and action – that farmers have access to a diversity of well adapted varieties of crops that meet agroecological, nutritional and cultural needs and preferences. Farmers’ seed systems are key to provide farmers with access to both local varieties developed over millennia of farmer selection and varieties developed with modern plant breeding. We call for a bottom-up demand-driven approach to *seed security* to complement the currently dominant top-down supply-side approach, thereby supporting farmers’ agency and recognizing farmers’ seed systems contribution to global food security.

- **Brief history (including starting year), as appropriate:** The game-changing solution was developed and presented during the preparatory process towards the UN Food System Summit in September 2021. The solution is based on the experiences during the last decades of the partners behind the proposal in the ministries, the farmers' union and its global network, research as well as civil society and their partners in the Global South.
- **Core components of the measure/practice:**

The game-changing solution is to ensure and promote – through seed policies, legislation and action – that farmers and Indigenous Peoples have access to a diversity of well adapted varieties of crops that meet agroecological and nutritional needs and preferences and that they can continue to conserve, develop and exchange this diversity for the benefit of food security and livelihoods.

In the shaded circles and squares in figure 2 we list examples of approaches to support activities and functions in the seed systems farmers use. This list spans from activities such as collaborative plant breeding and cooperative seed production to establishment of enabling laws and policies. The appropriateness of the different approaches depends on the local agroecological, socio-economic and cultural context of the seed system.

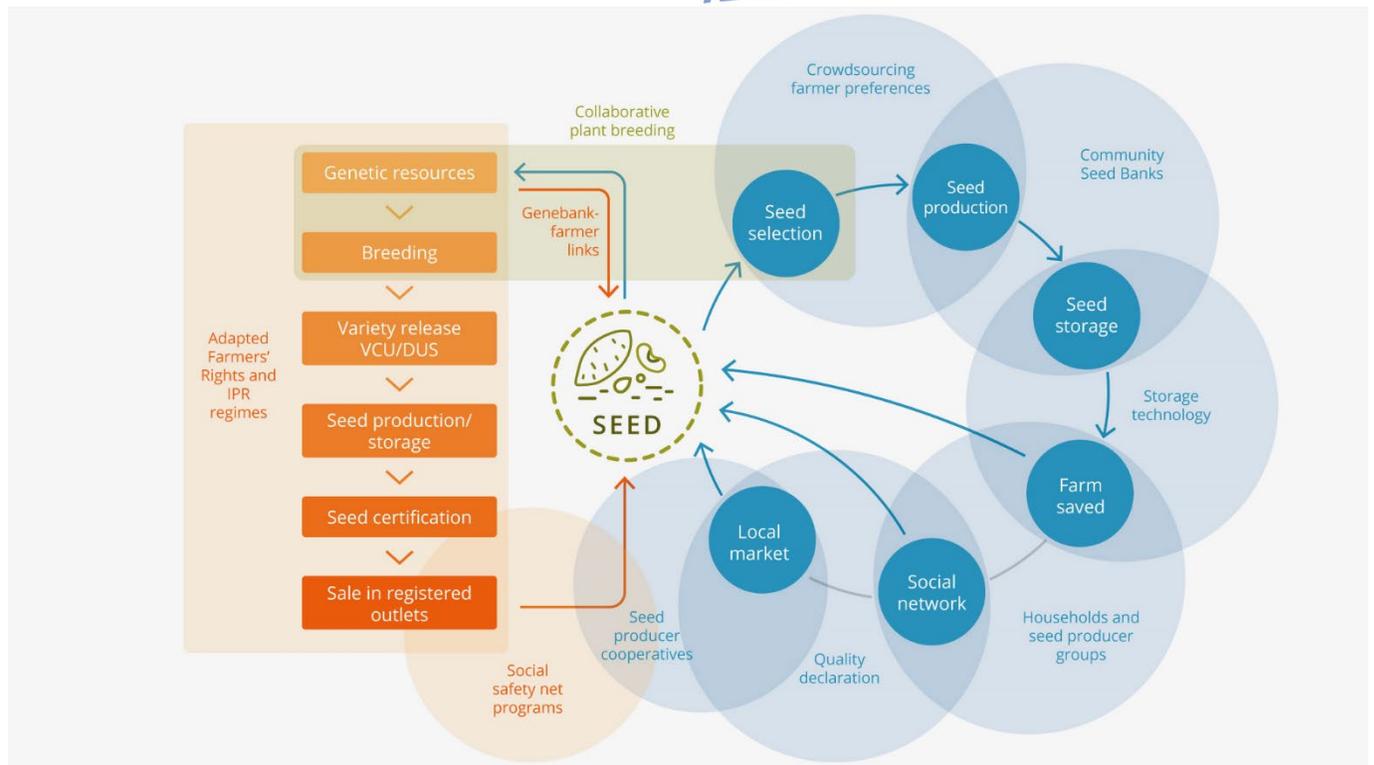


Figure 2. Approaches to support farmers' seed systems and linkages between formal and farmers seed systems.

The approaches can be divided into three main categories: Seed policy; seed legislation and seed system activities.

Seed policy

The FAO defines seed policy as “a statement of principles that guides government action and explains the roles of relevant stakeholders in the coordination, structure, functioning and development of the seed system comprising both formal and informal sectors. The seed policy normally serves as the overall framework for regulatory instruments, such as the seed law and related legislation”² Thus, the FAO’s Voluntary guide for national seed policy formulation explicitly says countries should recognize and formulate policies for both formal and informal seed systems. Unfortunately, we see that many national seed policies ignore informal or farmers’ seed systems. We also see that national seed policies often focus on measures to support the “supply side” of formal seed systems, with less attention to the “demand side”. The seed system models that commonly are promoted can be characterized as commercial formal seed system.

Actions within seed policy formulation includes:

- Promoting FAO’s Voluntary guide for national seed policy formulation among member countries

² FAO, Voluntary guide for national seed policy formulation. <http://www.fao.org/publications/card/en/c/272c15fb-0949-479d-aba9-72d918891fc5/>



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- Support formulation of seed system policies that puts farmers' needs and preferences first in policy formulation
- Support participatory seed policy formulation processes in the member countries
- Support the public sector's capacity to regulate seed system development according to farmers need, including policy support for integrated approaches such as decentralized and locally adapted seed quality testing and certification
- Bolster public-sector support for diverse seed systems

Seed legislation

Also seed legislation should be formulated with farmers' needs and preferences at center stage. As outlined above, current IPR and seed regulations often ignores farmers' seed systems – and are sometimes in conflict with the customary practices in farmers' seed systems.

Actions within seed legislation includes:

- Support the partner countries in reviewing, and if necessary, adjusting legislation on:
 - Variety release and seed distribution, to ensure that farmers are free to save, use, exchange and sell farm-saved seed.
 - Intellectual property rights, to ensure that small-holder farmers can save, use, exchange and sell farm-saved seed.
 - Other legislation as relevant
- Support the partner countries reviewing, and if necessary, adjusting policies on:
 - Seed, to ensure that farmers' access to a diversity of seed is at a centre stage, and that they promote local seed systems in general and community-based agrobiodiversity management in particular
 - Agriculture, to ensure they promote local seed systems and community-based agrobiodiversity management
- Support development cooperation agencies wishing to engage in supporting the partner countries and their interested local communities in changing the game of seed systems in developing their interventions.

Seed system activities

Community-based agrobiodiversity management is a common denominator for approaches aimed at promoting the conservation, sustainable use and improvement of local crop diversity at the community level. Within this complex, a rapidly increasing number of different forms of community seed banks and participatory plant breeding programmes with cooperative seed production schemes have emerged, many of which have turned out to be promising platforms and pathways to maximizing the benefits of local crop diversity for food security, poverty alleviation and livelihoods. Actions within community-based agrobiodiversity management include:

- Identifying models of community-based agrobiodiversity management that have been successful in terms of seed and food security
- Identifying local communities in these partner countries that are interested in establishing community-based agrobiodiversity management, and elaborate relevant models with them – for them to decide
- Implementing these models together with the local communities, develop capacities for them to run the initiatives on their own and scaling up and out successful models



- In the context of this implementation, and as decided by the local communities:
 - invite plant breeders/scientists to assist in identifying promising local varieties for improvement and develop these through participatory plant breeding;
 - assist the development of cooperative seed production and creating market access;
 - improve rural livelihoods through community-based capacity building and related micro-finance programmes.

- **Description of the context and the history of the measure/practice is taking place (political, legal and economic framework conditions for the measure/practice):** see above

- **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 x

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 ³	Also relevant ⁴
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		x

³ Please select only one category that is most relevant, under which the measure will be listed.

⁴ Please select one or several categories that may also be relevant (if applicable).



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 ⁵ , 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): Meet the needs of farmers and Indigenous Peoples, and halt the loss of agrobiodiversity by moving farmers' seed security center stage in all seed policy and action.

- **Target group(s) and numbers of involved and affected farmers⁶:** governments, donor agencies, farmers' unions, agricultural research institutes
- **Location(s) and geographical outreach:** global
- **Resources used for implementation of the measure/practice:** government and donor agencies
- **How has the measure/practice affected the conservation and sustainable use of plant genetic resources for food and agriculture?** Many promising examples around the world.

⁵ Including seed houses.

⁶ Any classification, e.g. of the types of farmer addressed, may be country-specific.



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- **Please describe the achievements of the measure/ practice so far (including quantification) (max 200 words)**
- **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?**
- **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 proposal builds on comprehensive research related to the importance, state and governance of crop genetic resources, among others:

- Research documents that small-scale farmer in many developing countries are increasingly exposed to crop failure, hunger and poverty due to effects of climate change (FAO 2016a, IPCC 2018, Leichenko and Silva 2014) and that diversity of plant genetic resources for food and agriculture is a crucial factor for their ability to adapt their food production to the effects of climate change, like rising temperatures, droughts, floods, pests and diseases (IPBES 2019, FAO 2015, Winge 2014, IPCC 2014, Fujisaka et al 2010, United Nations 2009, Andersen 2008, Esquinas-Alcázar 2005).
- Research also shows that women form an integral part of agriculture in developing world – as farmers, custodians and users of seed and traditional knowledge (Pionetti & Ruiz 2010) and that women and men have access to different spaces and environments and fulfil different tasks that give them distinctive information and practical knowledge about local agricultural biodiversity (Momsen et al 2013).
- Research on the Seed Systems farmers use have documented and highlighted that farmers in most countries in the Global South source most of their seeds outside the formal seed system and hence argue that these seed systems should receive more attention and support (Almekinders et al. 1994; Badstue et al. 2006; Bellon & Brush 1994; Coomes et al. 2015; Louwaars & de Boef 2012; McGuire & Sperling 2016; Mulesa et al. 2021; Richards 1985; Thiele 1999; van Etten et al. 2019).
- Research on Seed Security in post disaster contexts have documented that seed is an essential resource in relief and rehabilitation which requires evidence-based support building on the strengths of exiting seed systems (FAO 2016, Sperling et al. 1993; Sperling et al. 2008; Sperling et al. 2020)
- An increasing body of research documents that a number of community seed banks and participatory plant breeding programmes have emerged as promising platforms to maximize the benefits of local crop diversity for food security, poverty alleviation and livelihoods (Andersen 2019a and 2019b, Westengen and Winge 2019, Maharajan et al 2018, Andersen et al 2018, Vernooij et al 2017, Vernooij et al 2015, Andersen and Winge 2013, Ashby 2009, Almekinders and Hardon 2006, Jones et al. 2004, Morris and Bellon 2004, Sperling et al. 2001).
- A number of other approaches integrating formal and farmer seed system development have proven merit across policy, legislation and action at different scales such as integrated seed system development (Louwaars et al. 2013; Mulesa et al. 2021), citizen science for variety selection (Steinke & van Etten 2017; van Etten et al. 2019), seed producer cooperatives and community based seed



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production of Quality Declared Seed (FAO 1993; Sisay et al. 2017), genebank-farmer seed system linkages (ISSD 2021; Westengen et al. 2018)

- However, research also shows that farmers' customary rights to save, use, exchange and sell farm-saved seed are being challenged throughout the world, thus decreasing the legal space for farmers to manage their crop genetic resources for seed and food security and continue contributing to crop genetic diversity (Lawson & Adhikari, eds. 2018, Kell et al, 2017, Andersen 2016, Andersen 2013, Santilli 2012, United Nations 2009, Andersen 2008, Brush 2004). Also, the agricultural policies are generally set up to support the formal seed system, thereby neglecting and marginalizing farmers' seed systems instead of promoting and enhancing them as set out in the International Treaty on Plant Genetic Resources for Food and Agriculture (Plant Treaty) (e.g. Andersen 2017 and 2016, Andersen and Winge, 2013)

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

The currently dominant approach for seed system development is unable to meet the needs of the majority of the farmers and Indigenous Peoples' across the world. In most developing countries farmers' seed systems supply the bulk of the seeds used by smallholders. At the same time, agrobiodiversity is threatened by unsustainable production systems. The dominant approach is undermining farmers' and Indigenous Peoples' traditional production systems that have been devised based on observation and intergenerational knowledge on how to generate food in balance with the local ecosystem. Restrictions on traditional practices are contributing to loss of agrobiodiversity, and represent a major threaten to global seed security.

- **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:** [Seed security at the UN Food Systems Summit - regjeringen.no](https://www.regjeringen.no/en/dep/MD/press/2017/seed-security-at-the-un-food-systems-summit-2017)



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