

Country Report on the implementation of
the International Treaty on Plant Genetic
Resources for Food and Agriculture
(ITPGRFA)

NORWAY

05/12/2016

Article 4: General Obligations

1. Are there any laws, regulations procedures or policies in place in your country that implement the Treaty?

Please select only one option

- Yes
 No

1A. If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:

> The Nature Diversity Act (<https://lovdata.no/dokument/NL/lov/2009-06-19-100>) protects biological, geological and landscape diversity and ecological processes through conservation and sustainable use, and in such a way that the environment provides a basis for human activity, culture, health and well-being, now and in the future, including a basis for Sami culture. In § 61 it provides statutory authority to consider further regulations for specifying the implementation of the ITPGRFA if this at a later stage is considered appropriate.

The white paper "Nature for life - Norwegian action plan for nature diversity", which was adopted by Parlemtent in 2016, covers all biodiversity, including the Government's policy on plant genetic resources for food and agriculture.

2. Are there any other laws, regulations, procedures or policies in place in your country that apply to plant genetic resources?

Please select only one option

- Yes
 No

2A. If your answer is 'yes', please provide details of such laws, regulations, procedures or policies:

> There are several specific regulations and policies related to the implementation of the ITPGRFA. Examples:

- Regulation on propagating material (<https://lovdata.no/dokument/SF/forskrift/1999-09-13-1052?q=s%C3%A5varehttps://lovdata.no/dokument/SF/forskrift/1999-09-13-1052?q=s%C3%A5vareSåvare>)
- Guidelines for support to plant breeding and multiplication in order to ensure that Norwegian agriculture has access to climate adapted and diverse varieties free of diseases.
- Guidelines for support to activities related to the management of genetic resources for food and agriculture.
- Both the patent act and the plant breeders' rights act have requirements for disclosure of origin.
- Establishment of Norwegian Genetic Resources Centre to coordinate national and international activities for the implementation of GRFA policies.

3. Is there any law, regulation, procedure or policy in place in your country that needs to be adjusted / harmonized to ensure conformity with the obligations as provided in the Treaty?

Please select only one option

- Yes
 No

3A. If your answer is 'yes', please provide details of such adjustments and any plans to make those adjustments:

>

Article 5: Conservation, Exploration, Collection, Characterisation, Evaluation and Documentation of Plant Genetic Resources for Food and Agriculture

4. Has an integrated approach to the exploration, conservation and sustainable use of plant genetic resources for food and agriculture (PGRFA) been promoted in your country?

Please select only one option

Yes

No

5. Have PGRFA been surveyed and inventoried in your country?

Please select only one option

Yes

No

5A. If your answer is 'yes', please provide details of your findings, specifying species, sub-species and /or varieties, including those that are of potential use.

> The main ex situ collection of Norway is managed in partnership with the other Nordic countries. In addition, a broad range of species and crops of usable/cultivated plants have been partly surveyed in Norway, often on a sub-regional basis. Parts of this material is collected in 23 clonal archives, and is mainly applied for research, innovation and demonstration purposes. The work is guided by the overall strategy plan for GRFA of the Norwegian Centre for Genetic Resources and the action plan on PGRFA that is periodically reviewed. There is a challenge to ensure sufficient funding of larger, national surveys as well as securing long term funding of accessions.

5B. If your answer is 'no', please indicate:

Any difficulties encountered in surveying or inventorying PGRFA;

Any action plans to survey and inventory PGRFA;

The most important PGRFA that should be surveyed and inventoried

>

6. Has any threat to PGRFA in your country been identified?

Please select only one option

yes

No

6A. If your answer is 'yes', please indicate:

The species, subspecies and/or varieties subject to such threats;

The sources (causes) of these threats;

Any steps taken to minimise or eliminate these threats;

Any difficulties encountered in implementing such steps;

> • Mandate varieties of vegetative propagated crops are in process of being designated. Securing these crops is the major priority of the national program. Information and identification of unique accessions is not complete, which constitutes a challenge for securing these accessions.

• Another recent challenge is emerging diseases threatening the clonal archives, such as "Apple proliferation" and "Pear decline". The national program has started to document PGRFA in in situ condition, but the conservation and sustainable use of these are not yet fully integrated into the general conservation strategy.

7. Has the collection of PGRFA and relevant associated information on those plant genetic resources that are under threat or are of potential use been promoted in your country?

Please select only one option

Yes

No

7A. If your answer is 'yes', please provide details of the measures taken:

> • Material from clonal collections as well as from joined Nordic seed collections at NordGen has been promoted through various development projects.

• "Plant Heritage"-award has been awarded individuals and institutions annually since 2006 in order to stimulate awareness raising, engagement and activities for conservation and use of GRFA.

• The Centre for Genetic Resources has established a trade mark (PLANTEARVEN®) that can be used for re-

introduction to the Norwegian market to produce and sell traditional varieties of cultivated crops.

- The Centre for Genetic Resources conducts active outreach activities such as public seminars as well as encouraging the active participation of farmers, hobby gardeners and other stakeholders to use PGRFA.

8. Have farmers and local communities' efforts to manage and conserve PGRFA on-farm been promoted or supported in your country?

Please select only one option

- Yes
 No

8A. If your answer is 'yes', please provide details of the measures taken:

- > • No formal "On Farm" conservation system has been established. At the same time, one of the most important forage crops are partly based on old cultivars. Recent development projects are also investigating the possibility of establishing "new" landraces in production in Norway (http://www.bioforsk.no/ikbViewer/page/tjenester/prosjekt?p_document_id=9258)

- Annually, farmers can apply for funding support to on-farm management of PGRFA. In some districts, the extension services are supporting farmers in on-farm activities such as the establishment of community seed bank.

- Farmers are also included in the development of agricultural policies in general through the different farmers' unions as well as being represented in bodies relevant to PGRFA.

- The Centre for Genetic Resources has assisted in the official registration of conservation varieties.

9. Has in situ conservation of wild crop relatives and wild plants for food production been promoted in your country?

Please select only one option

- Yes
 No

9A. If your answer is 'yes', please indicate whether any measures have been taken to:

- Promote in situ conservation in protected areas
 Support the efforts of indigenous and local communities

9B. If such measures have been taken, please provide details of the measures taken:

- > A project on developing a national strategy for In Situ conservation of selected shortlist of species in protected areas has been developed and is in process of being finalized. The first In Situ conservation reserve is in process of being established

(http://www.skogoglandskap.no/nyheter/2015/genressurser_bevarer_i_farder_nasjonpark%20).

10. Are there any ex situ collections of PGRFA in your country?

Please select only one option

- Yes
 No

10 A. If your answer is 'yes', please provide information on the holder and content of such collections:

- > • Ex situ collection of Norwegian seed crops is held at NordGen as a jointly Nordic collection (<http://www.nordgen.org/>)

- Ex Situ collections of vegetatively propagated crops are held at 23 clonal archives in Norway (http://www.skogoglandskap.no/temaer/bevaringssted_tema)

- Sagaplant is involved in cryopreservation of strawberries and potatoes.

11. Has the development of an efficient and sustainable system of ex situ conservation of PGRFA been promoted in your country?

Please select only one option

- Yes
 No

11A. If your answer is 'yes', please indicate the measures taken to promote ex situ conservation, in particular any measures to promote the development and transfer of technologies for this purpose:

- > • Norway has established the Svalbard Global Seed Vault as a facility for all gene banks of the world to have a safety duplication of their ex situ collections under black box conditions

(<https://www.regjeringen.no/en/topics/food-fisheries-and-agriculture/landbruk/svalbard-global-seed-vault/id462220/>).

- In addition to the joint Nordic collections in NordGen, Norway has established ex situ collections for a range of vegetative propagated material. These collections are still under development in collaboration with other stakeholders and partly publicly funded.

12. Has the maintenance of the viability, degree of variation, and the genetic integrity of ex situ collections of PGRFA been monitoring in your country?

Please select only one option

- Yes
 No

12A. If your answer is 'yes', please provide details of the main conclusions of these monitoring activities
> This is work in progress. In selected crops, studies of diversity and uniqueness of accessions have been initiated.

13. Has your country cooperated with other Contracting Parties, through bilateral or regional channels, in the conservation, exploration, collection, characterization, evaluation or documentation of PGRFA?

Please select only one option

- Yes
 No

13A. If your answer is 'yes', please indicate the other Contracting Parties with whom the cooperation was undertaken (where additional to cooperation through the Governing Body or Treaty mechanisms) and, where possible, details of any relevant projects:

- > • Norway has, since 1979 and through the regional cooperation within the Nordic Genetic Resource Centre (previously the Nordic Gene Bank), collaborated with the other four Nordic countries on all aspects of PGRFA conservation and management. Similar activities, though not quite as extensive, have also been pursued over the last 20+ years with Estonia, Latvia and Lithuania.
- Norway has also, through NordGen and within the framework of ECPGR, collaborated proactively with other member countries of this organisation primarily on aspects of documentation.
- From the point of view of sustainable use of PGRFA, Norway, as part of NordGen, since 2011 actively collaborates with the Nordic commercial plant breeding industry on pre-breeding in barley, apple and perennial ryegrass through a Public-Private Partnership (PPP). (<http://www.nordgen.org/index.php/en/Plants/Innehaall/Partnership-on-pre-breeding/Public-Private-Partnership-on-pre-breeding>)
- Svalbard Global Seed Vault is established.

Article 6: Sustainable Use of Plant Genetic Resources for Food and Agriculture

14. Are there any policy and legal measures in place in your country that promote the sustainable use of PGRFA

Please select only one option

- Yes
 No

14A. If your answer is 'yes', please indicate whether such policy and legal measures include:

- Pursuing fair agricultural policies that promote the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biological diversity and other natural resources;
- Strengthening research that enhances and conserves biological diversity by maximizing intra- and inter-specific variation for the benefit of farmers;
- Promoting plant breeding efforts, with the participation of farmers, that strengthen the capacity to develop varieties particularly adapted to social, economic and ecological conditions, including in marginal areas;
- Broadening the genetic base of crops and increasing the range of genetic diversity available to farmers
- Promoting the expanded use of local and locally adapted crops, varieties and underutilised species
- Supporting the wider use of diversity of varieties and species in on-farm management, conservation and sustainable use of crops and creating strong links to plant breeding and agricultural development
- Reviewing and adjusting breeding strategies and regulations concerning variety release and seed distribution

14B. If such policy and legal measures are in place, please provide details of the measures taken and any difficulties encountered in implementing them:

> Plant breeding: Norway supports domestic plant breeding particularly through Graminor, which is mainly owned by the farmers' cooperative, the Ministry of Agriculture and Food, in addition to some more share holders.

The Nordic Public Private Partnership (PPP) for Pre-breeding: was funded jointly by the Nordic countries and participating breeding companies and institutions in 2011. The purpose of the PPP was to support the development of Nordic plant breeding satisfying the long-term needs of the agricultural and horticultural industries, specifically regarding adaptation to climate change; targets for environmental policies; and demands from consumers, markets, etc. The project included three crops: apple, barley and ryegrass, and the main activities of the project are to broaden and enhance the breeding populations of these crops through the use of a wider range of plant genetic material from gene banks and other sources.

http://www.nordgen.org/ngdoc/nordgen/Eucarpia/oral_presentations/Odd_Arne_Rognli.pdf

Organic plant breeding: There are two Norwegian partners to the European project "Coordinating Organic Plant Breeding Activities for Diversity" (COBRA). COBRA aims to support and develop organic plant breeding and seed production with a focus on increasing the use and potential of plant material with High genetic Diversity (Hi-D) in cereals (wheat and barley) and grain legumes (pea and faba bean) through coordinating, linking and expanding existing breeding and research. In addition to a research institution (Bioforsk Økologisk), the other Norwegian partner, Oikos - Organic Norway, is the national movement of organic producers and consumers in Norway, thus ensuring the participation of farmers in the research process. Release of farmers' varieties http://www.skogoglandskap.no/filearchive/bruksgenbanken_for_korn1.pdf In 2010, Norway adjusted its seed regulation to be more accommodative to the approval and use of traditional varieties. E.g. the general DUS-criteria are applied in a less restrictive way and the registration fees for such varieties are reduced. While the fee for value testing and registration of ordinary varieties are 12.790 NOK, the fees for registration of conservation varieties are currently 695 NOK. Some remaining challenges are linked to definition of "region of origin", the quantity limitation for marketing traditional varieties and the possibilities for further develop so-called conservation varieties for cereals and forages. As of August 2014, 9 conservation varieties are approved: 3 potatoes, 1 rye, 1 barley and 4 wheat varieties.

The Norwegian Genetic Resource Centre has also set up a seed bank for old potato varieties, which provides access to seed potatoes of more than 60 varieties. These varieties are not accessible to farmers from NordGen due to plant health restrictions.

The Centre is also securing the availability of traditional cereal varieties for farmers and other users through the set-up of a 'cereal users gene bank' which can provide seed material of about 40 varieties in portions more adapted to the farmers needs than small gene bank portions. The users gene bank is managed in cooperation with the Norwegian extension service and a network of farmers.

Access of all farmers to PGRFA in the Multilateral System

The Nordic Genetic Resource Centre (NordGen) is the gene bank maintaining germplasm of Nordic origin as well as material relevant for the Nordic region. NordGen is under common Nordic control and management. The seed material stored at NordGen is available upon request for plant breeders, plant researchers, museums and other bona fide users. Germplasm is available in small quantities for research, breeding, conservation or similar purposes.

Community seed bank/user gene bank: Norway has established a national community seed bank with traditional varieties with easy access to farmers.

http://www.skogoglandskap.no/filearchive/bruksgenbanken_for_korn1.pdf

Article 7: National Commitments and international Cooperation

15. Has the conservation, exploration, collection, characterization, evaluation, documentation and sustainable use of PGRFA been integrated into your country's agriculture and rural development programmes and policies?

Please select only one option

- Yes
 No

15A. If your answer is 'yes', please provide details of the integration of such activities into the agriculture and rural development programmes and policies:

> White paper on agricultural policy in general integrates genetic resources: "Landbruks- og matpolitikken: Velkommen til bords" Meld. St. 9 (2011-2012)

<https://www.regjeringen.no/contentassets/adb6bd7b2dd84c299aa9bd540569e836/no/pdfs/stm201120120009000dddpdfs.pdf>

Norwegian Centre for Genetic Resources has a strategy plan for the conservation and sustainable use of genetic resources for food and agriculture and specific action plan for PGRFA:

http://www.skogoglandskap.no/filearchive/rapport_19_13_strategiplan_for_norsk_genressurssenter.pdf

Action plan for conservation of biodiversity in meadows:

[http://www.miljodirektoratet.no/old/dirnat/attachment/95/DN_handlingsplan_2009-6_nett%20\(2\).pdf](http://www.miljodirektoratet.no/old/dirnat/attachment/95/DN_handlingsplan_2009-6_nett%20(2).pdf)

Action plan for endangered nature types:

<http://www.miljodirektoratet.no/no/Tema/Arter-og-naturtyper/Trua-arter-og-naturtyper/Handlingsplaner-for-trua-naturtyper/>

16. Has your country cooperated with other Contracting Parties, through bilateral or regional channels, in the conservation and sustainable use of PGRFA?

Please select only one option

- yes
 No

16A. If your answer is 'yes', please indicate whether the aim of such cooperation is to:

Strengthen the capability of developing countries and countries with economies in transition with respect to conservation and sustainable use of PGRFA

Enhance international activities to promote conservation, evaluation, documentation, genetic enhancement, plant breeding, seed multiplication, and sharing, providing access to and exchanging PGRFA and appropriate information and technology, in conformity with the Multilateral System of Access and Benefit-Sharing under the Treaty

16B. If, in addition to cooperation through the Governing Body or other Treaty mechanisms, your country has cooperated with other Contracting Parties directly or through FAO and other relevant international organizations, please indicate such other Contracting Parties and, where possible, details of any relevant projects:

> Yes (see reply under 13)

Furthermore, Norway has project collaboration with the Czech Republic on natural fruit species and with Bulgaria on Farmers' Rights.

There is also some Norwegian support through civil society organisations, particularly through the Development Fund and their programme on genetic resources in developing countries.

Article 8: Technical Assistance

17. Has your country promoted the provision of technical assistance to developing countries and countries with economies in transition, with the objective of facilitating the implementation of the Treaty?

Please select only one option

Yes

No

17A. If your answer is 'yes', please provide details of the measures taken

> Yes (see reply under 13 and 16). In addition, Norway has supported the multidonor capacity building initiative coordinated by German GIZ since 2005, which is mainly focusing on the Nagoya protocol, but also includes some capacity building on the Treaty.

18. Has your country received technical assistance with the objective of facilitating the implementation of the Treaty?

Please select only one option

Yes

No

18 A. If your answer is 'yes', please provide details of such technical assistance:

>

Article 9: Farmers' Rights

19. Subject to national law, as appropriate, have any measures been taken to protect and promote farmers' rights in your country?

Please select only one option

- Yes
 No

19 A. If your answer is 'yes', please indicate whether such measures were related to:

- Recognition of the enormous contribution that local and indigenous communities and farmers of all regions of the world have made and will continue to make for the conservation and development of plant genetic resources;
 The protection of traditional knowledge relevant to PGRFA
 The right to equitably participate in sharing benefit arising from the utilisation of PGRFA
 The right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of PGRFA
 Any rights that farmers have to save, use, exchange, and sell farm-saved seed/propagating material

19B. If such measures were taken, please provide details of the measures taken and any difficulties encountered in implementing them:

> Based on the submission of Norway in 2014 on Farmers' Rights:

1. Engagement of farmers' organisations and relevant stakeholders

In general, farmers and their organisations have multitude of channels for participation in and influence on policy processes in Norway. There are annual agricultural negotiations between the Government and the farmers' unions, resulting in an Agricultural Act. In the field of genetic resources, for example, Felleskjøpet, a farmer cooperative, is one of the owners of the only breeding company in Norway, Graminor AS, and is also the main distributor of seeds. There are also projects developing new varieties of forages with high level of farmers' participation. Farmers are also represented on the advisory board on plant genetic resources at the Norwegian Genetic Resource Centre. The Centre maintains close working relationships with both the major farmers' cooperatives and farmers' unions as well as with the smaller number of farmers who are more actively involved with issues directly related to seed diversity and cultivation of traditional varieties. During the last few years, farmers cultivating traditional varieties have become more organized, including loose networks and the establishment of cooperatives. Therefore, they have become more visible and it has become easier for the authorities to involve them in various processes.

2. National action plan

Genetic resources are included in the government's general Environment Strategy, 2008-15. The strategy sets out as the government's goal to maintain food security and sustainable agriculture through the use and protection of genetic resources in agriculture. Applying this strategy, the government aims to increase diversity of species and varieties that are cultivated, and promote the conservation and sustainable use of crop wild relatives and other varieties of utility plants, while embedding respect for genetic resources in the management of cultural landscapes and management plans for protected areas.

Norwegian policy on genetic resources is mainly implemented by the Norwegian Genetic Resource Centre with funding from the Ministry of Agriculture and Food. The Centre approved an overall strategy plan in 2013, and has a four year action plan for plant genetic resources, which also includes measures to implement Farmers' Rights.

Three examples of ongoing activities:

1. In order to recognise farmers' contribution to the conservation and development of plant genetic diversity, an annual Plant Heritage Award has been introduced. E.g. in 2006, one of the recipients of the award was Erling Olsen, a farmer and formerly a breeder at a Norwegian research facility. He was given the award for his conservation of more than 170 older varieties of potato. When he passed away earlier this year nearly all his valuable varieties had been conserved in the new potato gene bank, through close collaboration with the donor himself. The award serves as a way to provide farmers and the public in general with information on genetic resources and biodiversity, and it can also supply farmers with valuable in-put on how to utilize such resources. It has also heightened the focus on conservation and sustainable use of older varieties of plants, and increased the demand for propagating material of such varieties. This ensures that the varieties are actually used, which is the best guarantee against genetic erosion.

2. Through the Norwegian Agriculture Agency some financial support is provided to farmers that are engaged in seed diversity. And in 2011, the Centre funded the establishment of a seed bank for old potato varieties, which provides access to seed potatoes of more than 60 varieties.

3. Documentation of traditional knowledge connected to cultural plants used in home gardens.

In addition, the Centre published in 2013 a plan on how to further strengthen the implementation of Farmers' Rights in Norway. This paper identifies possible goals and activities related to all aspects of Farmers' Rights that are addressed in Article 9: save, use, exchange and sell farm-saved seeds; protection of traditional knowledge; benefit sharing; and participation in decision-making. The main recommendations from the report are linked to revision of seed regulation and increased use of economic support schemes in order to increase the diversity of varieties in active use.

4. Reviewing national measures affecting the realisation of Farmers' Rights

The Ministry of Agriculture and Food funded the study "Plant genetic diversity in agriculture and farmers' rights in Norway" (2012) that reviewed policy, legal and financial measures affecting the realisation of Farmers' Rights in Norway. Based on this, the Norwegian Genetic Resource Centre published a paper in 2013 on goals and possible activities, which are currently being acted upon by the Centre.

In 2010, Norway adjusted its seed regulation to be more accommodative to the approval and use of traditional varieties. E.g. the general DUS-criteria are applied in a less restrictive way and the registration fees for such varieties are reduced. While the fee for value testing and registration of ordinary varieties are 12.790 NOK, the fees for registration of conservation varieties are currently 695 NOK. Some remaining challenges are linked to the definition of "region of origin", the quantity limitation for marketing traditional varieties and the possibilities to further develop so-called conservation varieties for cereals and forages. As of August 2014, 9 conservation varieties are approved: 3 potatoes, 1 rye, 1 barley and 4 wheat varieties.

5. Promote access to genetic resources under the MLS by local and indigenous communities and farmers
The Nordic Genetic Resource Centre (NordGen) is a gene bank maintaining germplasm of Nordic origin as well as material relevant for the Nordic region. NordGen is under common Nordic control and management. NordGen is the main source of old plant varieties for farmers in Norway, in addition to the Norwegian Genetic Resource Centre. NordGen stores more than 30,000 unique specimens of seed materials in its gene bank. The seed material stored at NordGen is available upon request for plant breeders, plant researchers, museums and other bona fide users. Germplasm is available in small quantities for research, breeding, conservation or similar purposes.

NordGen serves the scientific community, but does also honour reasonable requests from individuals when resources permit and the requester has a serious interest in seed saving and maintaining old or rare varieties. Individuals who are primarily looking for seeds in general for gardening instead of specific plant genetic resources, are kindly asked to use other sources, such as commercial seed suppliers.

No charge is made for materials and it is easy to file an application. Recipients must sign an agreement on the transfer of material in line with the multilateral system under the Plant Treaty. There is a simplified agreement to be signed for farmers and hobby gardeners.

6. Regional workshop

In March 2014, Norway organised an informal consultation among representatives from a few European countries on the possible interrelationship between the ITPGRFA and the different acts of the UPOV Convention, including issues related to Farmers' Rights. The group considered UPOV and the ITPGRFA to be complementary systems that do not exclude each other. To the contrary, the group felt it would be fruitful for both instruments to identify issues of mutual supportiveness and complementarities. Furthermore, the benefit of increased awareness of the different instruments was stressed. In order to identify how the international instruments could be implemented in support to each other, one starting point could be to point out some relevant challenges for parties of each agreement and then identify how the implementation of the other could contribute to meet those challenges.

7. Global Consultations Norway has been part of organising global consultations on Farmers' Rights in 2007 in Zambia, in 2010 in Ethiopia and in 2016 in Indonesia.

8. Financial and technical support for the implementation of Farmers' Rights in developing countries
Norway provides an annual contribution to the Benefit Sharing Fund equal to 0,1% of national seed sales. In 2013, Norway gave an additional contribution of 40 million NOK to the Benefit Sharing Fund.

Norway also assists in the implementation of the Plant Treaty and benefit-sharing through voluntary organizations. The main Norwegian organization in this regard is the Development Fund, which supports projects through local partners in Asia, Africa and Central America. In 2014, the Development Fund spends about 18 million Norwegian kroner on various projects addressing biodiversity in agriculture. These projects focus on farmers' rights to use and maintain genetic resources and biodiversity in agriculture. They combine practical field work with advocacy at the local, national and international level. It is important that farmers, research institutions and relevant authorities work together, with participatory plant breeding, local seed banks and field schools for farmers among the key instruments. Farmers' participation in political processes is underlined and the Development Fund helps farmers in partner organizations to participate in international negotiations by providing some of the funding.

Further information

- Andersen, Regine (2012): Plant genetic diversity in agriculture and farmers' rights in Norway, Fridtjof Nansen Institute <http://www.farmersrights.org/pdf/FNI-17%20RA.pdf>

- Asdal, Åsmund (2013): Farmers' Rights and contribution to the conservation and development of plant genetic resources in Norway. Input to Norwegian policy on genetic resources (In Norwegian), Skog og landskap,

http://www.skogoglandskap.no/filearchive/rapport_04_13_bonders_rettigheter_og_bidrag_til_bevaring_og_utvikling_av_platogenetiske_ressurser.pdf

- Norwegian Genetic Resources Centre (2013): Strategy plan for the Genetic Resource Centre (In Norwegian), Skog og Landskap,

http://www.skogoglandskap.no/filearchive/rapport_19_13_strategiplan_for_norsk_genressurssenter.pdf

- Norway's submission on Farmers' Rights to the 3rd session of the Governing Body of the ITPGRFA: http://www.planttreaty.org/sites/default/files/gb5i08e_FRs_compilation.pdf

- Norway's submission on Farmers' Rights to the 5th session of the Governing Body of the ITPGRFA: <http://www.farmersrights.org/pdf/Norway-informationpaperGB3.pdf>

Article 11: Coverage of the Multilateral System

20. Has your country included in the Multilateral System of Access and Benefit-Sharing (MLS) all PGRFA listed in Annex 1 to the Treaty that are under the management and control of your Government and in the public domain?

Please select only one option

- All
 Partially
 None

20A. If your answer is 'all', please provide details of any difficulties encountered in including Annex 1 PGRFA in the MLS:

> No technical difficulties for the main collection in NordGen. For smaller national collections, there is still work left to systemize the conservation work linked to vegetative propagative material. The work on crop wild relatives in situ is also in progress. The material is available, but Norway is working on improving the facilitated access through the MLS. Lack of suitable database solution has delayed this process, a number of pilot projects on data solutions have been funded and are in progress.

20B. If your answer is 'partially', please provide details of:

The extent to which Annex 1 PGRFA have been included in the MLS

The crops that have been included in the MLS; and

The difficulties encountered in including Annex 1 PGRFA in the MLS:

>

20C. If your answer is 'none', please provide details of the difficulties encountered in including Annex 1 PGRFA in the MLS:

>

21. Has your country taken measures to encourage natural and legal persons within your jurisdiction who hold Annex 1 PGRFA to include those resources in the MLS?

Please select only one option

- Yes
 No

21A. If your answer is 'yes', please provide details of:

The natural or legal persons within your jurisdiction that included Annex 1 PGRFA in the MLS;

The crops that have been included in the MLS by these persons; and

Any difficulties these persons encountered in including Annex 1 PGRFA in the MLS:

> There are no major collections held by legal persons outside public collections. The private breeding company, Graminor, is encouraged to include their varieties in the MLS when the plant variety protection has expired. NordGen has also encouraged companies to include their material in NordGen in agreement that NordGen only will provide access to that material after the expiry of PVP.

21B. If your answer is 'no', please provide details, in particular details of any difficulties encountered in encouraging these persons to include Annex 1 PGRFA in the MLS:

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Article 12: Facilitated access to plant genetic resources for food and agriculture within the Multilateral System

22. Has your country taken measures to provide facilitated access to Annex 1 PGRFA, in accordance with the conditions set out in Article 12.4 of the Treaty?

Please select only one option

- Yes
 No

22A. If your answer is 'yes', please provide details of such measures:

> All GR stored at NordGen – Annex 1 and non-Annex 1 – are being distributed under the conditions of the SMTA, as a result of the so-called 'Kalmar Declaration' of 2004.

A challenge for the collections held by Norway is the lack of suitable data system to expose the germplasm. This is work in progress.

22B. If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex 1 PGRFA:

>

23. Has facilitated access been provided in your country to Annex 1 PGRFA pursuant to the standard material transfer agreement (SMTA)?

Please select only one option

- Yes
 No

23A. If your answer is 'yes', please provide the number of SMTAs entered into:

> NordGen: 1291 SMTAs in the period from 2009 until today (August 2016)

23B. If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex 1 PGRFA pursuant to the SMTA:

>

24. Has the SMTA been used voluntarily in your country to provide access to non-Annex 1 PGRFA?

Please select only one option

- Yes
 No

24A. If your answer is 'yes', please indicate the number of such SMTAs entered into:

> The Norwegian use of MTA's correspond with the Nordic approach:

All PGR regardless of Annex 1 and for research, breeding and training for food and agriculture is handled with sMTA. All PGR for any other professional use is handled with Nordic/(Norwegian) MTA mirroring the sMTA and encouraging to contribute voluntarily to the Treaty on equal terms as the sMTA. All use for private hobby purpose is handled with Hobby MTA or equivalent information.

<http://www.nordgen.org/ngdoc/plants/AccessandAcquisitionGuidelines.pdf>

25. Does the legal system of your country provide an opportunity for parties to material transfer agreements (MTAs) to seek recourse in case of contractual disputes arising under such agreements?

Please select only one option

- Yes
 No

25A. If your answer is 'yes', please provide details of the relevant laws, regulations or procedures:

> The ITPGRFA and the MLS are not directly regulated in Norwegian law, but parties to the contract are bound by Norwegian contract law. Act relating to mediation and procedure in civil disputes [The Dispute Act] is available here: <http://app.uio.no/ub/ujur/oversatte-lover/data/lov-20050617-090-eng.pdf>

26. Does the legal system of your country provide for the enforcement of arbitral decisions related to disputes arising under the SMTA?

Please select only one option

- Yes
 No

26A. If your answer is 'yes', please provide details of the relevant laws, regulations or procedures:

> Another important form of alternative dispute resolution is arbitration. The Arbitration Act (Norwegian version only): <https://lovdata.no/dokument/NL/lov/2004-05-14-25>

27. Have there been any emergency disaster situations in respect of which your country has provided facilitated access to Annex 1 PGRFA for the purpose of contributing to the re-establishment of agricultural systems?

Please select only one option

Yes

No

27A. If your answer is 'yes', please provide details of such emergency disaster situations and the Annex 1 PGRFA to which access was provided:

>

Article 13: Benefit-sharing in the Multilateral System

28. Has your country made any information available regarding Annex I PGRFA?

- Yes
 No

28A. If your answer is 'yes', please provide details of any information made available regarding Annex 1 PGRFA (e.g. catalogues and inventories, information on technologies, results of scientific and socio-economic research, including characterisation, evaluation and utilisation):

> Norway has provided data to its PGR through the information system of NordGen (<http://sesto.nordgen.org>).

29. Has your country provided or facilitated access to technologies for the conservation, characterisation, evaluation and use of Annex I PGRFA?

If access to technologies was provided, please provide details of the access provided.

Please select only one option

- Yes
>
 No

29A. If your answer is 'yes', please indicate whether your country:

- Has established or participated in crop-based thematic groups on utilisation of PGRFA
 Is aware of any partnerships in your country in research and development and in commercial joint ventures relating to the material received through the MLS, human resource development and effective access to research facilities.

29B. If access to technologies was provided, please provide details of the access provided:

> Yes (NordGen, PPP- project- joint Nordic project including Nordic universities and plant breeding companies). Through the long-term collaboration between NordGen and the Baltic countries (funded by the Nordic Council of Ministers), Norway has contributed to the establishment of gene bank facilities in these countries.

30. Has your country provided for and/or benefitted from capacity building measures in respect of Annex 1 PGRFA?

Please select only one option

- Yes
 No

30A. If your answer is 'yes', please indicate whether such measures were related to:

- Establishing and/or strengthening programmes for scientific and technical education and training in conservation and sustainable use of PGRFA;
 Developing and strengthening facilities for conservation and sustainable use of PGRFA;
 Carrying out scientific research and developing capacity for such research.

30B. If your country provided for and/or benefitted from such measures, please provide details:

>

Article 14: Global Plan of Action

31. Has your country promoted the implementation of the Global Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture?

Please note that this question differs from question 15 as it only concerns Annex I PGRFA and is more specific.

Please select only one option

Yes

No

31A. If your answer is 'yes', please indicate whether the implementation of the plan was promoted through:

National actions

International cooperation

31B. If the implementation of the plan was promoted, please provide details:

> National actions comprise the national programme for PGR run by the Norwegian Centre for Genetic Resources, which work is organised by the multiyear rolling action plan based on the GPA.

http://www.skogoglandskap.no/temaer/handlingsplan_planter/subject_view

International actions comprise collaboration within the context of ECPGR, NordGen and various work plans of Nordic Council of Ministers.

Norway has also supported FAO's CGRFA and its work on the Global Plan of Action.

Article 15: Ex Situ Collections of Plant Genetic Resources for Food and Agriculture held by the International Agricultural Research Centres of the Consultative Group on International Agricultural Research and other International Institutions

32. Has facilitated access to Annex I PGRFA been provided in your country to the International Agricultural Research Centres of the Consultative Group on International Agricultural Research (IARCs) or other international institutions that have signed agreements with the Governing Body of the Treaty?

Please select only one option

- Yes
 No

32A. If your answer is 'yes', please indicate:

To which IARCs or other international institutions facilitated access was provided;
The number of SMTAs entered into with each IARC or other international institution:
> No information.

32B. If your answer is 'no', please provide details of any difficulties encountered in providing facilitated access to Annex 1 PGRFA to IARCs and other international institutions that have signed agreements with the Governing Body of the Treaty

>

33. Has access to non-Annex I PGRFA been provided in your country to IARCs or other international institutions that have signed agreements with the Governing Body of the Treaty?

Please select only one option

- Yes
 No

33A. If your answer is 'yes', please indicate:

To which IARCs or other international institutions access was provided;
The number of MTAs entered into with each IARC or other international institution:
> No information.

33B. If your answer is 'no', please provide details of any difficulties encountered in providing access to non-Annex 1 PGRFA to IARCs and other international institutions that have signed agreements with the Governing Body of the Treaty:

>

Article 16: International Plant Genetic Resources Networks

34. Has your country undertaken any activities to encourage government, private, non- governmental, research, breeding and other institutions to participate in the international plant genetic resources networks?

Please select only one option

Yes

No

34A. If your answer is 'yes', please provide details of such activities:

> The joint Nordic regional gene bank, NordGen, has since long been involved in international activities as part of their mandate. Norway has encouraged such participation also to the stakeholders participating in the advisory board of the Norwegian Centre for genetic resources.

Article 18: Financial Resources

35. Has your country provided and/or received financial resources for the implementation of the Treaty through bilateral, regional or multilateral channels?

Please select only one option

Yes

No

35A. If your answer is 'yes', where possible, please provide details of such channels and the amount of the financial resources involved:

> Since 2009, Norway has given an annual contribution to the Benefit Sharing Fund equal to 0,1% of seed distribution in Norway. The annual contribution in 2016 constituted about 90.000 USD. In addition, Norway donated another 40 mill NOK to the BSF in 2013.

Norway is also a major donor to the Global Crop Diversity Trust, which is part of the financial strategy of the Treaty. In 2013, Norway donated 100 Mill NOK to the endowment fund of the Trust. Furthermore, Norway is the solve donor of the Trust's ten year project on collecting, exploring and making available Crop Wild Relatives. Norway is also a long-term donor to the CGIAR.

Furthermore, Norway supports NGOs such as the Development Fund, which works closely with farmers' organisaiton and civil society in developing countries that are involved in national implemenation of the ITPGRFA.

The Svalbard Global Seed Vault, which was opened in 2008, provides a back up storage for all ex situ collections world wide. Norway owns the vault and is responsible for its annual management costs.

36. Has your country provided financial resources for national activities for the conservation and sustainable use of PGRFA?

Please select only one option

Yes

No

36A. If your answer is 'yes', please provide details of such national activities and the amount of the financial resources involved:

> Resources for conservation and use of PGR has been channeled throught the Norwegian Centre for Genetic resource since its establishment in 2006, and from 2016 through the Directorate of agriculture.

About this reporting format

37. Have you encountered any difficulties in completing this reporting format?

Please select only one option

Yes

>

No

37A. If your answer is 'yes', please provide details on such difficulties:

> Norwegian seed propagated germplasm is conserved at NordGen as joint Nordic PGR, and reported directly to the Treaty secretariate as such. According to the principles on which the Nordic PGR collaboration is established (Kalmar Declaration), all information on use is regarded Nordic and reported as Nordic. Thus, please be aware of the complementarity of Norwegian and Nordic reporting.

37B. If you have suggestions for improvement of this reporting format, please share them:

> Not all information types are of relevance for Norway. A suggestion could be to allow answering "Not applicable"

Some questions are quite similar, as you will see from the answers provided.

General remarks on the implementation of the ITPGRFA

38. You may use this box to share any advice you may have arising from your country's experience with implementation of the Treaty:

> It could be useful to have more guidelines adopted by the Governing Body in order to assist the implementation of several of the provisions.

39. You may use this box to share any additional information that may be useful to provide a broader perspective of difficulties in implementation of the Treaty:

>

40. You may use this box to share any additional information that may be useful to provide a broader perspective of measures that could help to promote compliance:

>