Food and Agriculture Organization of the United Nations

The International Treaty ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Report on the implementation of the Programme of Work on Sustainable Use of PGRFA and Supporting Initiatives

Note by the Secretary

This document presents the Report on the implementation of the Programme of Work on Sustainable Use of PGRFA and Supporting Initiatives submitted by International Seed Federation (ISF) on 16 November 2018.

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

International Seed Federation
Seed is Life

Report on the implementation of the Programme of Work on Sustainable Use of PGRFA and Supporting Initiatives

16 NOVEMBER 2018

A REPORT PREPARED BY THE INTERNATIONAL SEED FEDERATION TO HIGHLIGHT THE COMMITMENT OF THE SEED SECTOR TO SUSTAINABLE USE, CONSERVATION, AND ACCESS AND BENEFIT SHARING OF PLANT GENETIC RESOURCES

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The International Seed Federation (ISF) (www.worldseed.org) represents the global seed industry through 56 national seed associations representing 7500 companies and its vision is to build "A world where the best quality seed is accessible to all, supporting sustainable agriculture and food security". Through its mission "to create the best environment for the global movement of seed and promote plant breeding and innovation in seed", ISF "promotes the International Treaty as the preferred tool to administer Plant Genetic Resources for Food and Agriculture (PGRFA)."

ISF recognizes the importance of the conservation of plant genetic resources for food and agriculture (PGRFA) and the role they play in addressing global challenges, such as a growing population, climate change, biodiversity loss, poverty alleviation, and food security for all farmers.

The seed sector therefore takes it responsibility in conservation and use and provides significant voluntary benefit sharing in many different forms. Information on some of the worldwide voluntary benefit-sharing activities of the seed sector regarding conservation, sustainable use, capacity building, and technology transfer have been collected on a seed sector website[1] supported by ISF.

Following the request of the ITPGRFA to help the work of the Ad Hoc Technical Committee on Sustainable Use, we would like to report on our activities in relation to plant genetic resources focusing on three pillars: sustainable use, conservation, and access and benefit sharing.

- **The plant breeders of ISF support sustainable use of PGRFA**

Over 80% of the human diet is provided by plants most of which come from improved varieties by breeders. Breeders also improve varieties to serve other important needs, such as for feed, fiber, fuel, shelter, landscaping and eco-systems services. The development of new varieties meeting these needs is a long and labor-intensive process. It is only after thousands of crossings of different plant genetic resources (including advanced breeding materials and commercial varieties), and selection of specific traits that plant breeders obtain new varieties that will be offered to farmers.

> PGRFA do not disappear when used! Access to PGRFA promotes sustainable use, conservation, benefit-sharing and further expansion of biodiversity.

Unlike fossil fuels, plant genetic resources do not disappear when used. ISF believes that under-use of PGRFA could even lead to their disappearance. Thus we engage to promote the use of genetic resources through plant breeding as a means of sustainable use.

We emphasize that the sustainable use of plant genetic resources through plant breeding requires that access to such genetic resources is ensured. This is also the basic, internationally-accepted

[1] https://www.euroseeds.eu/voluntary-benefit-sharing-activities-european-seed-industry

working principle in plant breeding that free access for further breeding must be ensured. Through this principle, variety creation is enhanced and innovation stimulated. It allows every – public or private – breeder in any country, whether they work for a farm or a company, big or small, to globally increase the plant genetic diversity.

Sustainable use is also a theme that is reflected in a number of seed sector partnerships in developing countries where seed industry actors provide seeds, knowledge, and experience to enable local communities to develop, diversify and use PGRFA in line with the principles of sustainable use.

To give an example, ISF and several seed companies support the work done by Plant Breeders Without Borders, a NGO aiming at "*sharing knowledge and skills of plant breeding through experienced plant breeders, trainees, undergraduate students and people in developing and third world countries with the goal of decreasing poverty and increasing food security*."

In 2017, Plant Breeders Without Borders joined forces with Bogor University in Indonesia to empower 30 farmers and agricultural students to develop their own varieties of Bambara Groundnut and multiple Indonesian indigenous vegetables. The practical training had two main foci: (1) plant crossing for variety development and (2) successful marketing of products in order to make a sustainable living.

© Plant Breeders Without Borders

Another representative example of seed industry support of sustainable use is seen in the work of Fair Planet in Ethiopia. Several seed companies partner with Fair Planet to facilitate access of smallholder farmers to the highest quality vegetable seeds suited to their needs. Training farmers to cultivate and use these seeds to their full potential is also a key objective of the work of Fair Planet.

As of to-date, the program's impact has reached more than 16,000 farmers who have shifted towards using high quality vegetable seeds.

© Fair Planet

Project Impact 2018:

The average tomato yield of the 550 lead farmers trained was over 3.200kg per 1.000m^2, 4 times higher than the national average in Ethiopia.

Many small holder farmers doubled their families' annual income, in only one production season.

Fore more examples see: https://www.euroseeds.eu/voluntary-benefit-sharing-activities-european-seed-industry

- **ISF supports conservation of PGRFA**

Conservation of PGRFA is a pre-requisite of sustainable use. It is the firm belief of ISF and its members that conservation efforts enable and improve sustainable use, especially when conservation efforts improve characterization of PGRFA and promote their access. Commercial breeding both actively conserves plant genetic resources and promotes its diversification. Breeders are also involved in long-term conservation work through their support of international, national and regional gene banks, often within the framework of public-private partnerships. Companies and associations demonstrate full commitment to the sustainable use of PGR for the benefit of the society by sharing their expertise, providing their inputs to responsible authorities in important policy decisions related to PGR, as well as maintaining and multiplying collections on behalf of some gene banks.

Plant breeders were the first to take systematic action to sustainably conserve and promote access to PGRFA. They created the first genebanks in the 1930's.

In one specific illustration amongst a wide variety of examples displayed on the website[1]: a seed potato company based in Europe has partnered with CIP (International Potato Centre) and national partners in Peru to work on a novel model to practically implement conservation and benefit sharing

with custodian farmers. CIP strives to fight poverty, eliminate malnutrition, and secure the world's food supply by developing more resilient and nutritious potatoes through the remarkable traits found in native varieties. In collaboration with private industry, an association was created, and now runs a pilot with 43 custodian farmers. Farmers earn money through this partnership that they can spend on agricultural inputs, education and health care.

The seed sector acknowledges that different forms of conservation are key, and has provided significant donations to organizations that pursue these modes of conservation. To show its support of conservation, ISF and multiple members made equal donations in 2016 to the Benefit Sharing Fund of the Treaty and to the Global Crop Diversity Trust[2].

DONORS	PLEDGED US$	RECEIVED US$
Australia	20,001,786	18,565,004
Bundesverband Deutscher Planzenzuechter	25,735	25,735
CropLife International	43,726	43,726
Czech Republic	40,000	40,000
Dupont/ Pioneer Hi-bred	1,500,000	1,500,000
Egypt	166,657	25,000
Ethiopia	50,000	25,000
Gates Foundation/UN Foundation	8,003,118	8,003,118
Germany	37,687,801	37,296,832
India	560,000	254,000
International Seed Federation	80,785	80,785
Ireland	4,144,250	4,144,250
KWS SAAT AG	35,589	35,589
Norway	31,491,161	31,491,161
New Zealand	1,453,800	1,453,800
Republic of Korea	442,556	442,556
Slovak Republic	20,000	20,000
Spain	2,629,650	2,629,650
Sweden	11,886,620	11,886,620
Switzerland	10,992,704	10,992,704
Syngenta AG	1,000,000	1,000,000
United Kingdom	19,468,582	19,468,582
United States – before Farm Bill	42,825,073	42,825,073
United States – US Farm Bill*	57,012,841	4,349,683
Sub Total	**251,562,433**	**196,598,868**
Concessional Loan **	61,857,826	61,857,826
Sub Total	**61,857,826**	**61,857,826**
Total	**313,420,259**	**258,456,694**

Source: Global Crop Diversity Trust Website

- **ISF is committed to fair access and benefit-sharing of PGRFA**

In a globalized world where the growing population's dietary habits are shifting, the climate is changing, and pests and diseases also are evolving, it is critical to find solutions beyond national and commercial institutional boundaries. ISF members are committed to find quick and innovative

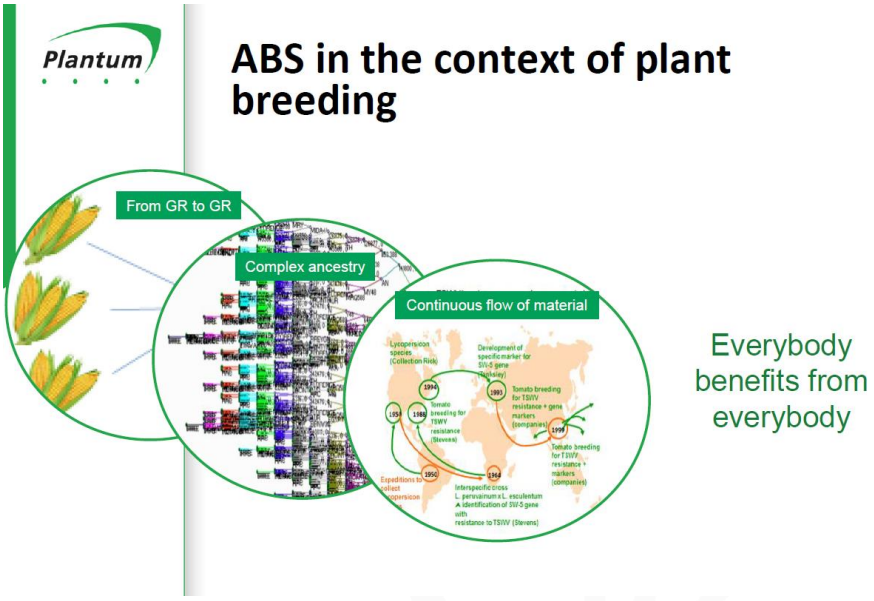
[2] See press release "Seed industry calls for global coalition to strengthen food security" http://www.worldseed.org/wp-content/uploads/2016/04/ISF_PR_20160422.pdf

solutions to new challenges. Nevertheless, ISF would like to emphasize that finding such solutions requires that genetic resources can be fairly and readily accessed and exchanged.

ISF actively engages to raise the awareness of its members to the access and benefit-sharing requirements of the IT PGRFA and of the vastly more complex and unharmonized national implementations of the Nagoya Protocol. An online tool is currently under development to inform breeders on their access and benefit sharing obligations when accessing genetic resources.

Helping countries to ensure the exchange of their germplasm is also important, and ISF is actively engaged in sharing concrete experiences with provider countries when implementing Access and Benefit Sharing legislation. For example, ISF recently participated in two workshops organized by Bioversity International, the IT PGRFA and the Convention on Biological Diversity, in the Philippines (March 2017) and in Lima (September 2018). ISF shared some experiences of breeders who accessed plant genetic resources with the Nagoya Protocol and Plant Treaty National Focal Points of South and East Asia / Latin America and the Caribbean.

Similar initiatives are repeatedly done at regional levels by national and regional seed associations in order to raise awareness on the importance of sharing, conserving and sustainably using genetic resources (via workshops, trainings, newsletters, etc.). For example during the annual Congress of the African Seed Trade Association, the Dutch national seed association, Plantum, presented the main components of legislation regarding genetic resources:



At the global level, the Word Seed Partnership involves the collaboration of 4 international organizations (UPOV, ISF, OECD and ISTA – International Seed Testing Association) in order to improve regulation to genetic resource access for more sustainable agriculture.

The World Seed Partnership provides a focal point for information on the role of internationally-harmonized seed systems that support sustainable agriculture.

To be able to consider the farmers' needs in those activities, the World Seed Partnership has actively engaged with the World Farmers Organizations as an important advisor. The World Seed Partnership organized a side event during the 7th meeting of the Governing Body of the ITPGRFA in Kigali, where a Rwandan farmer expressed the value and need for access to seed varieties.

> "*In Rwanda only 10% of the seed are certified seeds. Public research has difficulty to provide improved varieties and farmers need training and good material to make a living out of their activity*" Joseph Gafaranga, IMBRAPA (Farmer organization in Rwanda)

Building on this evidence that is very often heard in developing countries, ISF has developed a position paper to support seed choices for farmers[3].

Finally, for the duration ISF remains fully engaged in the discussions taking place at the ITPGRFA for the enhancement of the multilateral system (MLS) and the funding of the Benefit Sharing Fund. ISF will continue to engage with the Ad Hoc Working Group to find fair, business-practical ways to sustain PGRFA. In the meantime ISF members and breeders will continue to actively conserve,

[3] A position paper titled "Supporting Seed Choices for Farmers" will be proposed for adoption at the next Annual General Meeting (June 2018) and then become freely available on ISF website.

sustain, and exchange PGRFA around the world in partnership with many organizations and individuals, only a few of which could be highlighted here.

For more information, thank you for contacting the ISF Secretariat at h.guillot@worldseed.org