

Striking a Balance: Navigating Dilemmas in Plant Breeders' Rights and Farmers' Rights

Abishkar Subedi,
Wageningen Centre for Development Innovation, Wageningen University and Research,
The Netherlands

To reference this paper, please use:

Subedi, A. 2024. Striking a balance: navigating dilemmas in plant breeders' rights and farmers' rights. Background paper for SeedNL podcast series on plant breeders' rights and farmers' rights. Wageningen Centre for Development Innovation, Wageningen University and Research, SeedNL. The Netherlands.

1| PURPOSE

Plant Breeders' Rights (PBR) and Farmers' Rights (FR) are frequently debated regulatory provisions that have an impact on plant genetic resources, plant breeding, and the seed sector, particularly within the context of food security and economic development in the Global South. Stakeholders' perspectives and priorities on these two regulatory provisions are divided at the national and international levels. PBR is advocated for incentivizing plant breeding and the commercialization of the seed sector for the benefit of breeders and societies. On the other hand, stakeholder groups advocate ensuring Farmers' Rights for the benefit of smallholder farmers in the Global South, whose 80% of seed sources are met through farmers' seed systems, and the recent development in the PBR legislation severely hinders the functioning of farmer seed systems in case PBR-protected varieties are produced in that system.

SeedNL is a partnership that facilitates collaboration between Dutch organizations and international partners to drive changes contributing to Sustainable Development Goal 2 (zero hunger) by 2030. SeedNL's mission is to strengthen the seed sector in developing countries, provide equitable access to quality seeds for all farmers, and enhance productivity and farmer income.

SeedNL partners often encounter situations where they must address regulatory challenges arising from debates surrounding Plant Breeders' Rights (PBR) and Farmers' Rights (FR). To address these issues, a podcast series has been developed to facilitate dialogues with experts from various stakeholder groups. This paper serves as a background resource for the podcast series, drawing its content from a review of

various publications including policy briefs, peer-reviewed journal articles, book chapters, website contents, and international policy documents. It is important to note that this background paper does not offer recommendations or solutions regarding PBR and FR. Instead, it sets the stage for expert conversations during the podcast sessions.

2] OUTLINE OF PAPER

The first part (section 3) deals with the Intellectual Property Rights (IPR) system in plant varieties, encompassing three main types of IPR currently in operation: Plant patents, Plant Breeders' Rights, and other sui generis options. Since the focus of this paper is on Plant Breeders' Rights, plant patents are not covered. In the second part (section 4), the paper delves into the concept of Farmers' Rights, outlining its objectives, its origin within an international treaty, the benefits it brings, and the countries where Farmers' Rights legislation is in operation. The final part (section 5) provides a summary of different stakeholder perspectives and their concerns related to PBR and FR, including a differentiated approach to strike the balance in the plant variety protection system in Africa.

3] INTELLECTUAL PROPERTY RIGHTS (IPR) IN PLANT VARIETIES

Intellectual Property Rights (IPR) in the context of plant varieties grant exclusive rights to inventors for a limited period of time, allowing for the commercialization of new plant varieties within specific geographic territories. There are three types of IPR systems for plant varieties currently in operation on a global scale, each originating from different global conventions or agreements:

- Plant patents, established under the Paris Convention of 1883.
- Plant Breeders' Rights (PBR) governed by the Plant Variety Protection (PVP) system, based on the UPOV convention. The UPOV convention underwent revisions in 1972, 1978, and 1991. New members or inter-governmental organizations must develop PVP laws that are compatible with the UPOV 1991 convention to become UPOV members.
- IPR protection system for plants, based on WTO-TRIPS Agreement of 1995.

3.1 Plant Breeders Rights (PBR) system based on the UPOV convention.

Plant Breeders' Rights (PBR) is a form of Intellectual Property Rights (IPR) granted to plant breeders for new plant varieties, providing them with an exclusive right to commercialize their registered varieties. PBR is granted under the Plant Variety Protection (PVP) Law or other relevant seed law at national and or union level (such as in European Union). PBR provides breeders exclusive control over the production, sale, and distribution of the protected new plant variety for a certain period of time, usually around 20-25 years within a geographic territory. By granting this exclusive right to the breeder, breeding is encouraged and this will lead to availability of more improved varieties which will benefit society (breeders, seed producers, farmers, growers, consumers).

3.1.1 Historical origin of PBR system and UPOV

A first *sui generis* PBR system was developed in the Netherlands in 1941, Germany in 1953 and followed by few other European countries developed their own national PBR systems. These national PBR systems were harmonized following the establishment of International Convention for the Protection for New Varieties of Plants which was adopted on December 2, 1961 in Paris, France. The plant variety protection (PVP) system where PBR was granted to the breeders is coordinated by the International Union for the Protection of New Varieties of Plants (UPOV). UPOV convention was revised in 1972, 1978 and 1991 responding to the development of agriculture and professionalization of the sector in the UPOV member states¹.

3.1.2 UPOV membership

To date, a total of 78 states/countries or organizations/Union are members of UPOV Convention². Majority of UPOV member countries are from Europe and South America while there are few countries represented from Africa and Asia. These countries include viz. China, Egypt, Ghana, Tunisia, Japan, Jordan, Kenya, Morocco, Oman, Singapore, South Africa, and Vietnam. The African Regional Intellectual Property Organizations (OAPI) is also member of UPOV. OAPI which is mainly French speaking countries, is an inter-governmental organization that facilitates cooperation among its 17 member countries of West Africa in intellectual property matters, with the objective of pooling financial and human resources.

However in recent years the interest over the PVP system following the UPOV 1991 convention is expanding worldwide (see Annex 1). There are 19 additional countries from the global south which have initiated acceding the UPOV 1991 membership (for example, India, Myanmar, Nigeria, Philippines, and Zimbabwe, etc). The Inter-governmental African Regional Intellectual Property Organization (ARIPO), English speaking countries in Africa, has initiated to accede the UPOV 1991 membership as well. ARIPO as of 2022 comprised 22 Member states in Africa (mainly the countries in eastern and southern Africa).

In addition to the above there are over 26 additional countries from the global south that are in contact with the UPOV office for assistance in the development of PVP laws based on the UPOV 1991 convention. These countries include Indonesia, Iraq, Malawi, Mozambique, Sudan, Zambia, etc. A similar status exists with the Southern African Development Community (SADC) which is the regional economic community of 15 member countries from the Southern Africa region. This shows that the PVP system as per the UPOV 1991 convention is becoming a global regulatory instrument for granting the new variety protection through Breeders Rights.

¹ Van Wijk, A.J.P. and Louwaars, N. (2014). Framework for the introduction of plant breeder's Rights: Guidance for practical implementation, Naktuinbouw, The Netherlands

² List of UPOV members. https://www.upov.int/edocs/pubdocs/en/upov_pub_423.pdf

3.1.3 Major regulatory provision in PVP system of UPOV 1991

Plant variety protection through Plant Breeders Rights is the main regulatory provision of UPOV 1991. The rights include breeder authorization on production or reproduction (multiplication), conditioning for the purpose of propagation, offering for sale, selling or other marketing, exporting, importing and stocking for any of the purposes mentioned. This means the owner of protected varieties has exclusive control over the new seed varieties or propagating materials.

Granting PBR under UPOV 1991 require that the following criteria should be met by the new variety:

- **Distinctness:** A new variety must be distinct from any other variety whose existence is a matter of common knowledge.
- **Uniformity:** Uniformity means that the plants within a new variety are sufficiently similar in their relevant characteristics. This ensures that the variety maintains its distinctive characteristics across different individuals within the variety.
- **Stability:** Stability indicates that the essential characteristics of a new variety remain unchanged after successive propagation or, in simpler terms, the variety retains its distinct features over time and through generations.
- **Novelty:** Novelty refers to the newness of a plant variety. This means a variety must not have been commercialized or made available to the public prior to a certain date, known as the novelty date.

3.1.4 Major exception on Plant Breeders Rights in UPOV 1991 convention

Although Plant Breeders' Rights (PBR) under UPOV 1991 grant exclusive control over the seed or propagating material of new varieties to their respective developers, they also include some significant exceptions to PBR. These exceptions can be categorized into two types:

a) Compulsory exception: This exception refers to a situation where a UPOV member country is allowed to use a protected plant variety without the authorization of the breeder or rights holder under specific circumstances – for instance for further breeding, which is a major difference with the patent system.

b) Optional exception: This exception includes farm saved seed. Optional exceptions are not like the compulsory ones which UPOV members must provide. Here UPOV member countries can choose to include certain exceptions in their plant variety protection laws, allowing for limited use of protected varieties without the consent of the breeder or rights holder. These optional exceptions are designed to balance the interests of breeders and the public, taking into consideration factors such as research, education, and small-scale farmers' needs.

3.1.4.1 Compulsory exceptions of PBR

This includes a) Acts done privately and for non-commercial purposes b) Acts done for experimental purposes (research exemption) and c) Acts done for the purpose of breeding other varieties (Breeders exemption).

a) Acts done privately and non-commercial purposes: This exemption refers to the allowance for farmers and gardeners to reuse protected plant varieties for their own private and non-commercial purposes without infringing on the plant breeder's rights. UPOV explanatory notes provide the following explanation: 'A farmer saving his own seed of a variety on his own holding might be considered to be engaged in a private act, but could be considered not to be covered by the exception if the said saving of seed is for commercial purposes. The propagation of a variety by an amateur gardener for exclusive use in his own garden (i.e. no material of the variety being provided to others), since this may constitute an act which was both private and for non-commercial purposes. Equally, for example, the propagation of a variety by a farmer exclusively for the production of a food crop to be consumed entirely by that farmer and the dependents of the farmer living on that holding, may be considered to fall within the meaning of acts done privately and for non-commercial purposes. Therefore, activities, including for example "subsistence farming", where these constitute acts done privately and for non-commercial purposes, may be considered to be excluded from the scope of the breeder's right, and farmers who conduct these kinds of activities freely benefit from the availability of protected new varieties.

b) Acts done for experimental purposes (research exemption): The research exemption permits scientists, researchers, and breeders to use protected plant varieties for the purpose of conducting experiments, studies, and research activities aimed at developing new varieties. This exemption is important for advancing agricultural innovation and the development of new plant varieties.

c) Acts done for the purpose of breeding other varieties (Breeders exemption): This exemption provides no restrictions on the use of protected varieties for the purpose of breeding new plant varieties and commercializing them. This is a fundamental aspect of plant breeding, as it allows breeders to cross and hybridize protected varieties to develop improved or novel plant varieties.

3.3.4.2 Optional exceptions for farm saved seed

It extends certain rights to farmers, permitting them to save and use seeds from protected varieties for planting on their own holdings. Each Contracting Party may, within reasonable limits and subject to the safeguarding of the legitimate interests of the breeder, restrict the breeder's right in relation to any variety in order to permit farmers to use for propagating purposes, on their own holdings, the product of the harvest which they have obtained by planting, on their own holdings, the protected variety.

For those crops where the optional exception is introduced in relation to the introduction of reasonable limits and the safeguarding of the legitimate interests of the breeder within plant breeders' rights legislation, UPOV 1991 convention provides the factors below, or a combination of such factors, amongst others, might be considered are a) type of variety – it is possible to specify only certain types of varieties for which the optional exception it would be applicable. For example, authorities might decide not to extend the optional exception to certain types of varieties, e.g. hybrid varieties or synthetic varieties. This allows authorities to take into account whether there has been a common practice of farmers saving harvested material for further propagation and whether it would be appropriate to introduce the optional exception for such types of varieties b) size of holding / crop area / crop value: Examples of factors which might be used to establish reasonable limits and to safeguard the legitimate interests of the breeder are the size of the farmer's holding, the area of crop concerned grown by the farmer, or the value of the harvested crop. Thus, "small farmers" with small holdings (or small areas of crop) might be permitted to use farm-saved seed to a different extent and with a different level of remuneration to breeders than "large farmers". However, the size of holding (or crop area) determining a small farm may differ when considering reasonable limits and safeguarding the legitimate interests of the breeder for each member of the Union.

3.2 IPR system for plant varieties based on the WTO-TRIPS, 1995 Agreement.

Most countries in the Global South are members of the World Trade Organisation (WTO), and are obliged to establish minimum standards for intellectual property (IP) protection through the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs, 1995). Concerning plant varieties, the TRIPs Agreement mandates members to provide protection for these varieties either through 'patents,' an effective '*sui generis*' (its own type) system, or a combination of both (Article 27.3b) by a certain agreed-upon date. African countries do not grant patent protection to plant varieties, and only a few countries have implemented operational *sui generis* systems for plant variety protection. For instance, countries like India, the Philippines, and Malaysia have developed their *sui generis* PVP laws to fulfill the WTO-TRIPS requirements. Conversely, organizations such as WIPO and trading partners like the EU recommend the UPOV 1991 model as a ready-made *sui generis* system to meet WTO-TRIPS obligations.

The WTO has extended the deadline until 1 July 2034 for least developed countries (LDCs) to comply with intellectual property protection under the WTO's TRIPS agreement.

4. FARMERS' RIGHTS

4.1 Farmers' Rights and IT-PGRFA

Farmers' Rights were officially recognized in the Article 9 of the International Treaty on Plant Genetic Resources for Food and Agriculture (IT-PGRFA) which came into force in 2004. The Article 9 of the International Treaty provides the following explanation and regulatory provisions:

“The Contracting Parties recognized the enormous contribution that the local and indigenous communities and farmers of all regions of the world, particularly those in the centres of origin and crop diversity, have made and will continue to make for the conservation and development of plant genetic resources which constitute the basis of food and agriculture production throughout the world.

The Contracting Parties agree that the responsibility for realizing Farmers' Rights, as they relate to plant genetic resources for food and agriculture, rests with national governments. In accordance with their needs and priorities, each Contracting Party should, as appropriate, and subject to its national legislation, take measures to protect and promote Farmers' Rights, including:

- i) protection of traditional knowledge relevant to plant genetic resources for food and agriculture;
- ii) the right to equitably participate in sharing benefits arising from the utilization of plant genetic resources for food and agriculture; and
- iii) the right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture.

Nothing in this Article shall be interpreted to limit any rights that farmers have to save, use, exchange and sell farm-saved seed/propagating material, subject to national law and as appropriate”.

It is important to note that the IT-PGRFA was developed in harmony with another international convention, namely the Convention on Biological Diversity (CBD 1992), and therefore shares similar objectives: the conservation and sustainable use of genetic resources, access to biological resources, and fair and equitable benefit sharing from the utilization of genetic resources. The key difference is that CBD 1992 grants 'national sovereign rights' to member countries over their biological resources, whereas the IT-PGRFA primarily deals with genetic resources for food and agriculture, facilitating a multilateral system of a global gene pool. As a result, Farmers' Rights extend beyond 'seed' or 'plant breeding' related regulatory aspects and encompass broader legal provisions on genetic resource conservation, access to genetic resources, and benefit sharing, all of which support the core objectives of the IT-PGRFA.

4.2 IT-PGRFA Membership (contracting party)

As of January 1, 2023, the International Treaty has 150 Contracting Parties (countries) and one member organization (EU). As treaty members, it is the obligation of the national government of contracting parties to protect Farmers' Rights in their national legislation.

4.3 Countries with Farmers Rights legislation

The first and most referred Farmers' Rights national legislation is from India. India has developed its own *sui generis* system to provide plant variety protection and Farmers' Rights in one law viz. The Protection of Plant Varieties and Farmers' Rights Act (PVPFR Act, 2001). One of the key aspects of Indian legislation is that it provides farmers

Box 1: Farmers varieties registration in India

The registration of farmers' varieties in India, in accordance with the PVPFR Act of 2001, was initiated in 2009 with the first registration granted to a total of three rice varieties. The PVPFR Authority's website provides a compendium of a total of 511 farmers' varieties registered in India up until 2014.

varieties registration (Box 1).

Despite the concept of Farmers' Rights and its legal provisions coming into force in 2004 through the adoption of the IT-PGRFA, only a few contracting parties have incorporated Farmers' Rights provisions into their national seed or PVP legislation. These countries include Malaysia, Thailand, Ethiopia, Uganda, Nepal, and Zimbabwe.

In 2017, an Ad Hoc Technical Expert Group on Farmers' Rights (AHTEG or Expert Group) was established. The Expert Group produced an inventory of national measures, best practices and lessons learned from the realization of Farmers' Rights, as set out in Article 9 of the International Treaty³. The best practices of realizing the Farmers Rights from inventoried countries include community seed banking, participatory crop improvements (participatory plant breeding, participatory variety selection), farmer-led crop breeding, farmers and community managed seed production schemes, allowing farmers varieties registration by national seed law, allowing farmers to save, reuse and exchange of seed in national PVP Act, farmers participation in national seed or agrobiodiversity policy decision making, measure to in situ on-farm conservation of agrobiodiversity, seed fair, farmers access to gene bank materials, community seed register for traditional knowledge protection, etc.

³ Inventory of national measures, best practices and lessons learned from the realization of Farmers' Rights, as set out in Article 9 of the International Treaty.

<https://www.fao.org/plant-treaty/areas-of-work/farmers-rights/overview-inventory/en/>

5. STAKEHOLDER PERSPECTIVES TO PLANT BREEDERS' RIGHTS AND FARMERS' RIGHTS

There are various perspectives, criticisms, and concerns raised by different stakeholders regarding the impact of PBR and FR. Some of these concerns reflect misconceptions about PBR or FR. Broadly, stakeholders can be grouped into three categories based on their priorities, interests, and positions in relation to PBR and FR.

5.1 Stakeholders promoting PBR

These stakeholder groups promote PBR as one of the key policy and regulatory instruments to provide benefits to breeders and societies, including farmers, gardeners, seed producers, and consumers. Their main advocacy is to incentivize plant breeding and commercialize the seed sector, increase access to new superior varieties for societies, access to foreign varieties and technologies, and increase investment for export markets. Additionally, the development of PVP systems fulfills national government obligations to WTO-TRIPS requirements. These stakeholders advocate for effective legal provisions for plant variety protection in national seed or plant variety laws, as provided by the UPOV 1991 convention.

Members of this stakeholder group are concerned that farmer seed exchange practices of protected varieties hinders the recovery of investments made in developing new varieties. Seed companies worry about maintaining control over the market for their unique plant varieties. Strong PVP systems help prevent unauthorized propagation and sale of their varieties, ensuring they have full control over the distribution and sale of these seeds for a specified period.

However, there is significant criticism of the UPOV 1991-led PBR system, primarily from Civil Society Organizations at international and national levels. These criticisms mostly revolve around the contradiction with Farmers' Rights provisions laid out in IT-PGRFA. In response to this opposition, some members promoting PBR have expressed their views that UPOV and IT-PGRFA have different purposes and aims. The UPOV convention should not be scrutinized for how it supports various elements of Farmers' Rights, as it is not UPOV's task to deliver on such goals and nonetheless, these two instruments do not contravene each other but rather mutually support each other (see stakeholder perspective #1).

Stakeholders perspective #1: UPOV and IT-PGRFA have been set up for different purposes but mutually support each other (comments submitted by the European Seed Association on 21 January 2015 to the Secretariat of International Treaty, below are summary of comments that mainly relate to the aspects of Farmers Rights, full commentary can be found in this source⁴)

⁴ <https://www.fao.org/3/bb929e/bb929e.pdf>

“.....European Seed Association (ESA) believes that the UPOV Convention and the International Treaty have been set up for different purposes and are seeking to achieve different aims. While UPOV aims at encouraging the development of new varieties of plants, for the benefit of society; the aim of the Treaty lies in the conservation and sustainable use of PGRFA and the fair and equitable sharing of benefits arising out of their use (article 1.1).

Further on, the joint exercise should also acknowledge that while the two instruments regulate different matters, their systems do not contravene but mutually support each other. This is evident in the following examples: - The fact that the Multilateral Systems (MLS) of the Treaty provides facilitated access to PGRFA for further breeding and (in its current form) clearly acknowledges the value of the breeders' exemption as a form of benefit-sharing which supports the development of new plant varieties; - On the other end, the open innovation system set up by the UPOV Convention and the exceptions to the breeder's right (private, non-commercial use; breeder's exemption; and the optional agricultural exemption) encourage the conservation and sustainable use of PGRFA.

Further on, the breeder's exemption is undeniably a very important way to share benefits arising from the use of PGRFA. It is also important to note that the UPOV Convention only regulates protected varieties that are by definition only temporarily protected. After the period of protection expires, the variety is "open source" and from a PBR perspective there are no limits on the reproduction and commercialisation of that variety. By definition the UPOV convention also has no impact on traditional varieties or land racers.

With regard to Article 9, the UPOV Convention clearly should not be scrutinized on how it supports the various elements of Farmers' Rights (such as the protection of traditional knowledge or the participation of farmers in decision-making on matters concerning the conservation and sustainable use of PGRFA) for the simple reason that it is not a task for UPOV to deliver on such goals; the joint exercise should nevertheless reflect on areas where there are some clear interrelations.

One of such interrelations is the way the breeder's exemption under the UPOV system makes it possible for farmers to enjoy various forms of benefit sharing (Article 9.2(b)). Further to the fact that in case of commercial varieties high value information exchange is taking place since a lot is made known about the varieties regarding their cultural value and main characteristics (which means less time and effort for the next breeder to identify where the value of a variety lies), the breeder's exemption also ensures the physical availability of the material for further breeding. This equals to valuable technology transfer since with the variety itself the technology used to develop it is also automatically transferred. Article 9.3 of the Treaty and the optional "agricultural" or "farm saved seed" exemption in the 1991 UPOV Convention. Here, it has to be noted that there are different versions of the UPOV Convention being applied in UPOV member countries. And also that in the 1991 UPOV Convention there are several exceptions to the right which are relevant with regard to Article 9.3 of the Treaty and which provide 1 To read more on the benefit-sharing value of the breeder's exemption

please refer to the ESA paper on this topic. for important leeway as to national implementation.

In all countries where the 1978 or the 1991 UPOV Convention applies, national law may, within reasonable limits and subject to the safeguarding of the legitimate interests of the breeder, allow farmers to save and replant on their own farm the seed produced on that same farm without the prior authorization of the right holder. The extent of this exception may vary from country to country also as this exemption is intended for crops where farm saved seed has been used traditionally in a country. Further on, it should not be forgotten that there is also a compulsory exception for private, non-commercial use of protected varieties under the UPOV Convention which allows complete freedom regarding any acts with protected varieties for private, non-commercial purposes.

Therefore, subsistence farmers in developing countries are not prohibited from exchanging seed with or selling seeds to other subsistence farmers. Last, when looking at areas of interrelations between UPOV and the Treaty it has to be mentioned that this exercise cannot be fully accomplished without noting that the implementation of Article 9 is subject to national laws and therefore it is only by looking into the national implementation of both the Treaty and the UPOV Convention in the different countries that one can get a full picture with regard to areas of interrelations.

5.2 Stakeholders promoting Farmers' Rights

These stakeholder groups promote Farmers' Rights to support the functioning of farmer-managed seed systems, which account for 80% of the seed sources for smallholder farmers in the Global South.

There is a wider interpretation of Farmers' Rights within this stakeholder group, which goes beyond the provisions laid out in the IT-PGRFA Article 9 (Farmers Rights). This interpretation covers various aspects, including seed systems, plant breeding, genetic resources conservation, protection of traditional knowledge, participation in national decision-making bodies, support for agro-ecological principles, climate change adaptation, food and seed sovereignty, and human rights perspectives. Many of these issues reflect the current realities of smallholder farmers in the Global South. However, different stakeholders from this group interrelate and interpret their interest point of view with the PBR as defined by the UPOV convention, resulting in increased complexity issues.

There are four key issues in which the stakeholder groups major concerns with UPOV and its PBR systems are reflected:

- One of the most criticized aspects of UPOV 1991 with regard to Farmers' Rights is that it undermines the smallholder farmers rights which include seed saving, use, exchange, and selling farm-saved seed. Through these practices, smallholder farmers contributed to the conservation and maintenance of global crop

diversity. Stakeholders within this group argue that the UPOV 1978 convention provided greater leeway to accommodate these common practices of farmers' seed systems, whereas the UPOV 1991 convention hinders these rights ([see stakeholder perspective #2](#))

- Secondly, they claim that UPOV 1991 is incompatible with the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)⁵.
- Thirdly, the EU pushes for intellectual property rights on seeds, primarily the UPOV 1991 convention, in its trade agreements, resulting in impacts on developing countries⁶. Here, stakeholders argue that it is not a requirement for global South countries to join the UPOV convention, as WTO-TRIPS provides flexibility to develop their own sui generis IPR systems for plant varieties. However, the pressure on countries to provide plant variety protection under the terms of the UPOV Convention is fueled by the widespread advocacy of the Act by the UPOV organization itself, as well as by the European Union and some of its Member States ([see stakeholder perspective #3](#)).
- The fourth concern is about issues related to UPOV's new membership. Here, UPOV members who were already part of the 1978 Act have the option to continue under the same act or shift to the 1991 Act. However, since 1999, any new members wishing to accede to the UPOV must comply with the UPOV 1991 convention. This situation has a significant impact on many countries in the Global South that are preparing to accede to the UPOV since the 1991 version severely hinders Farmers' Rights.

Stakeholder perspective #2: UPOV 1991 undermines the right to save, use, exchange and sell farm-saved seed (Third World Network and The Berne Declaration 2015⁷, similar views can be found in Both ENDS discussion paper October 2018⁸)

UPOV 1978 convention provides for Breeders' Rights, but it is limited to "production for purposes of commercial marketing, the offering for sale and the marketing of the reproductive or vegetative propagating material, as such, of the variety." It is generally accepted that farmers using the protected varieties have the freedom to save and exchange farm-saved seed/propagating material. However, the sale of the protected variety's propagating material requires the authorization of the right holder.

⁵ UPOV 91 and trade agreements: Compromising farmers' right to save and sell seeds, Both ENDS discussion paper, October 2018

⁶ The EU's push for intellectual property rights on seeds and its impact on developing countries, Policy Brief, APBREBES & Both ENDS, December 2021.

⁷ Shashikant, S., Meienberg, F. (2015). International contradictions on Farmers' Rights: The interrelations between the international treaty, its Article 9 on Farmers' Rights, and relevant instruments of UPOV and WIPO. Published by Third World Network and The Berne Declaration

⁸ UPOV 91 and trade agreements: Compromising farmers' right to save and sell seeds, Both ENDS discussion paper, October 2018

In contrast, the UPOV 1997, UPOV 1991 convention hinders the implementation of farmers' rights to freely use, save, exchange and sell seeds/propagating material, which is fundamental to the realization and promotion of farmers' rights. When using a protected variety, farmers may save seeds for replanting on their own holdings, but this Article 15(2) exception is restricted to seeds of certain crops grown on their own farm, and even in this case remuneration to breeders may be required to safeguard the legitimate interests of the breeders. Farmers are prohibited from selling and exchanging farm-saved seeds/propagating material. The effects of restrictions on farmers' rights to freely use, save, exchange and sell seeds/propagating material of protected varieties can be quite devastating.

A human rights impact assessment of UPOV (referred to hereafter as "HRIA of UPOV") that examined the potential impact of UPOV in the Philippines, Peru and Kenya concludes that UPOV 1991 restrictions on the use, exchange and sale of farm-saved PVP seeds will make it harder for resource-poor farmers to access improved seeds. This could negatively impact the functioning of the informal seed system, as the beneficial inter-linkages between the formal and informal seed systems will be cut off. Moreover, selling seeds is an important source of income for many farmers. From a human rights perspective, restrictions on the use, exchange and sale of protected seeds could adversely affect the right to food, as seeds might become either more costly or harder to access. They could also affect the right to food, as well as other human rights, by reducing the amount of household income which is available for food, healthcare or education.

Stakeholder perspective #3: The EU's push for intellectual property rights on seeds and its impact on developing countries (APBREBES & Both ENDS 2021⁹)

There is increasing pressure on countries to provide plant variety protection under the terms of the UPOV Convention, fueled by widespread advocacy of the Act by the UPOV organisation itself, but also by the European Union and some of its Member States, as well as by other UPOV Member states from industrialized countries. The EU does this by offering soft training tools and consultancy services, but also by taking a strong negotiating position in regional or bilateral trade and association agreement talks. At the time of writing, 10 free trade agreements (FTAs) and 3 association agreements signed by the EU and its trading partners required protection of plant variety rights under the terms of the 1991 UPOV Act, while 15 association agreements formally require accession to the 1991 Act. None of the Economic Partnership Agreements signed by the EU have clauses on IPRs, except for the one signed with CARIFORUM countries.

Given the adverse consequences of UPOV-91 outlined above, the stakeholder group is calling on the EU to change its current approach to include plant variety protection obligations in their trade agreements and to stop requiring developing countries to adopt the 1991 Act of the UPOV convention through trade agreements or any other

⁹ The EU's push for intellectual property rights on seeds and its impact on developing countries, Policy Brief, APBREBES & Both ENDS, December 2021

related activities. To promote truly sustainable agriculture, agrobiodiversity and food security, governments need sufficient flexibility when drafting their national or regional seed and plant breeders' rights laws to design a legal system that both protects breeders' innovation and enshrines farmers' rights, adapted to their local conditions and needs.

c) Stakeholders promoting differentiated approach in plant variety protection system

Between the above two divided stakeholder groups, a third stakeholder group promotes a differentiated approach to address conflicting issues and create space for both Breeders' Rights and leeway to Farmers Rights in national plant variety protection law^{10,11}.

This group of stakeholders argue that striking balance could be found by establishing a differentiated system that incorporates varied levels of protection, both for different crops (viz non-food crops and food crops) and with respect to different categories of farmers (viz. commercial farmers and smallholders/subsistence farmers). For example, for commercial farming systems (so commercial farmers) and especially for non-food crops, a country could set the highest protection levels of the UPOV 1991 Act and not allow any use of farm-saved seed without royalty payments. For locally important food crops, commercial farmers could be allowed to use farm-saved seed on their own holding, and smallholder farmers could be allowed to use and exchange farm-saved seed among themselves (see stakeholder perspective #4).

Stakeholder perspective #4: A differentiated approach to strike the balance in plant variety protection system in Africa (De Jonge, et al. 2015¹²)

For countries where food and nutrition security continue to be at stake, it is important that plant variety protection does not create additional impediments to the accessibility of improved varieties for smallholder farmers. The civil society organizations do have a point as the known interpretation of the UPOV 1991 rules is that exchange and sales of farm-saved seed of protected varieties requires approval by the breeder. The challenge for African countries is therefore to strike a balance between protecting the legitimate interests of breeders in commercial farming systems and meeting the needs of smallholder farmers who depend on informal sources for their seed security and survival.

¹⁰ De Jonge, B. and Munyi, P. (2015). A Differentiated Approach to Plant Variety Protection in Africa <http://dx.doi.org/10.2139/ssrn.2619763>

¹¹ De Jonge, B., Louwaars, N. P., & Kinderlerer, J. (2015). A solution to the controversy on plant variety protection in Africa. *Nature Biotechnology*, 33 (5), 487-488.

¹² De Jonge, B., Louwaars, N. P., & Kinderlerer, J. (2015). A solution to the controversy on plant variety protection in Africa. *Nature Biotechnology*, 33 (5), 487-488.

'Striking this balance could be done by establishing a differentiated system that incorporates varied levels of protection, both for different crops and with respect to different categories of farmers. For example, for commercial farming systems and especially for non-food crops, a country could set the highest protection levels of the UPOV 1991 Act and not allow any use of farm-saved seed without royalty payments. For locally important food crops, commercial farmers could be allowed to use farm-saved seed on their own holding, and smallholder farmers could be allowed to use and exchange farm-saved seed among themselves'.

Notably, the UPOV 1991 convention can accommodate this approach through its farmers' privilege (UPOV Article 15.2) and the private and non-commercial use exemption (UPOV Article 15.1.i). The farmers' privilege is an optional exemption allowing farmers to utilize farm-saved seed of a protected variety on their own land.

The compulsory exemption for "acts done privately and for noncommercial purposes" could offer smallholders exemptions, but UPOV's narrow interpretation restricts seed exchange among them. However, a recent UPOV FAQ hints at a broader interpretation, suggesting the Council's willingness to broaden the private and noncommercial use exemption. While FAQs are not legally binding, this illustrates progress. Countries can individually decide the scope of this exemption.

African countries aspiring to UPOV membership could resolve the controversy by broadening the private and noncommercial use exemption in their national rules. For instance, they could view seed exchange among smallholders as vital to 'subsistence farming,' excluding surplus harvest sales from breeder rights. Such an interpretation would align with commercial interests and resolve disputes, safeguarding smallholders' practices while maintaining breeders' protection.

The incentive role of plant breeders' rights can boost agriculture and food security. A broader private and noncommercial use exemption would benefit current UPOV members, potentially expanding membership and improving enforcement. This aligns with UPOV's mission and accommodates provisions focused on smallholders. African countries and regional bodies should define implementation rules to support both commercial and subsistence farming, fostering a thriving agricultural landscape. In addition, the proposed definition would enable UPOV to accommodate the International Treaty on Plant Genetic Resources for Food and Agriculture (IT-PGRFA) provisions on Farmers' Rights that are focused on smallholder farmers.

Plant variety protection is a proven method for supporting commercial seed systems in many countries. By granting an exclusive right to the commercialization of new varieties, it provides an incentive to invest in plant breeding and organize seed markets, two important tools permitting farmers to access a wide range of new varieties. UPOV is, however, strongly opposed by a wide range of civil society organizations. They are of the opinion that the proposed legal framework is unsuitable for African countries, as they

fear that the UPOV 1991 system “outlaws centuries-old practices of farmers freely using, exchanging and selling seeds/propagating material”. The same practices are also considered an important farmers’ right in the International Treaty on Plant Genetic Resources for Food and Agriculture (IT-PGRFA).

The UPOV 1991 system will protect only new varieties that are granted a plant breeder’s right, which means that all varieties currently in use by farmers in the region will remain free of restrictions on the use, exchange and trade of farm-saved seed. The real question is whether new and improved varieties, once they are protected by plant variety rights, will still be accessible to the smallholder farmers who may need them the most. Improved varieties that are bred in the formal sector reach smallholders mainly through the same informal channels of seed saving, exchange and local trade, which assures their availability and affordability.

ANNEX 1. Why the adoption of the UPOV convention is rising in the Global South

Fulfilling the WTO-TRIPS Requirements

Many countries in Africa and Asia are WTO members, making it obligatory for them to fulfill the TRIPS agreement. TRIPS mandates WTO member countries to establish an intellectual property rights (IPR) protection system for plants (such as patents, an effective sui generis system, or a combination thereof) in their national legislation within a specified deadline. The deadline for least developed countries has been extended until July 1, 2034. Given that many African countries oppose patents on plants, the development of sui generis IPR legislation, other than patents, emerges as the most preferred option for policy makers.

However, one of the significant challenges in developing WTO-TRIPS guided IPR sui generis legislation at the national level is the lack of detailed technical guidance and active support. National IPR legislation development is a complex process that policy makers must navigate. In contrast, the UPOV convention provides comprehensive technical guidance and offers an almost ready-made national PVP legislation format on its website. Policy makers can utilize this guidance document, adapting specific sections through stakeholder consultation to ensure compatibility with the UPOV 1991 convention. WIPO, a major provider of IP technical assistance, also emphasizes the adoption of the UPOV 1991 legal framework.

Preference for UPOV Convention Guided PVP System in EU Trade Partnerships

Many African and Asian countries maintain robust trade partnerships with the EU. The EU actively encourages its trade partners and other nations to adopt plant variety protection measures through soft training tools, consultancy services, and strategic negotiations in regional or bilateral trade and association agreement discussions. The inclusion of strong UPOV protection wording in free trade and economic partnership agreements raises concerns, as non-compliance could lead to arbitration and sanctions under the agreement's dispute settlement mechanisms and monitoring systems. According to ABBREBAs and Both Ends¹³, the EU has signed 10 free trade agreements (FTAs) and 3 association agreements that require plant variety rights protection under the terms of the 1991 UPOV Act. Additionally, 15 association agreements formally mandate accession to the 1991 Act. Few Economic Partnership Agreements signed by the EU have IPR clauses, except the one with CARIFORUM countries.

Access to Technical Capacity Development

Implementing PVP legislation, particularly conducting Distinctness, Uniformity, and Stability (DUS) examinations for granting Plant Breeders' Rights, demands strong technical expertise at the national level. PVP international training courses are available, coordinated by Naktuinbouw and UPOV, annually in the Netherlands. These courses

¹³ The EU's push for intellectual property rights on seeds and its impact on developing countries, Policy Brief, APBREBES & Both ENDS, December 2021.

offer PVP officials from interested countries practical learning opportunities and capacity-building in DUS examination and other administrative requirements for the PVP system. The UPOV Secretariat provides distance learning training courses multiple times throughout the year to raise awareness of the UPOV convention. Active technical support from the UPOV secretariat office in Geneva is also invaluable for interested countries engaging in national PVP system development. Additional funding instruments, such as the PVP Tool Box projects, are available for short and long-term projects focused on developing PVP legislation or building specific national capacities, such as DUS examination expertise.

Promotion of International Cooperation and Knowledge Exchange

Upon becoming a UPOV convention member, countries gain access to DUS examination reports and the DUS database for plant species/varieties from other member states. This substantially reduces the financial burden and expedites the granting of breeder's rights, especially in countries where the DUS system is still under development. This opportunity alleviates the need for a country to establish its own DUS examination systems for all plant species covered by variety protection. For instance, Switzerland lacks its own DUS examination system entirely and relies on international cooperation from other UPOV member states to grant PBR within its territory. UPOV's technical instruments, such as UPOV Prisma, offer an online one-stop shop for PBR applications in different languages. UPOV Pluto provides a database for preliminary checks on whether a proposed variety name (denomination) is similar to existing variety names. This system of international cooperation and knowledge exchange is functional and provides immediate benefits to UPOV convention members.