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A Dysfunctional Plant Variety Protection System:

Ten Years of UPOV Implementation in Francophone Africa

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Foreword

Internationally a debate is raging about the 1991 Act of the International Convention for the Protection of New Varieties of Plants (UPOV 1991), its impact on and relevance for the basic needs of farming families and biodiversity conservation. It raises questions such as: Is there a need for a plant variety protection (PVP) system in the poorest nations, where markets are limited? And is there an appropriate plant variety protection system for countries where most of the seed is produced and distributed by smallholder farmers who also play a vital role in ensuring the basic food supply? In the region covered by the African Intellectual Property Organization (OAPI), this debate has been ongoing for about two decades.

In 1999, under the influence of Geneva-based institutions, developed countries and their seed industry, OAPI introduced Annex X on plant variety protection – modelled on UPOV 1991 – into the regional Bangui Agreement. The adoption of Annex X followed promises of agricultural transformation through emergence of a competitive commercial seed sector, foreign investment in breeding, the availability of new foreign plant varieties, significant royalty incomes for national research institutes and overall greater benefit for all levels of society.

From the very beginning, however, the relevance of Annex X for a region dependent on the farmer-managed seed system (also known as the peasant seed system or informal seed sector) for its seeds was seriously contested. Further, the process of developing Annex X had been neither evidence-based nor inclusive. Importantly, the process ignored the needs and interests of the main agricultural actors in the region, the local farming communities.

More than 10 years after Annex X entered into force on 1 January 2006, this Working Paper studies how Annex X has been operationalized, the impact and relevance of UPOV 1991 for the region and, in particular, whether the promises of UPOV 1991 were ever realized for the 17 countries in the OAPI region. Twelve of these countries are categorized by the United Nations as least developed countries.

To obtain answers to these questions, the authors (Mohamed Coulibaly and Robert Ali Brac de la Perrière), among others, studied the history of OAPI and development of Annex X and conducted more than 20 interviews with civil servants, breeders and farmers in Mali, Senegal, Benin, Cameroon and Niger as well as the national OAPI liaison offices and the OAPI secretariat.

The results of the investigation are staggering. It points to a dysfunctional PVP system that does not fit the socio-economic and agricultural conditions prevailing in the region. While benefits have hardly been realized, states are burdened with the costs of implementation. This shows, once again, that the top-down approach of exporting legal frameworks intended for developed countries to developing countries which have different circumstances, is a flawed colonial strategy, with significant costs and missed opportunities for people of the OAPI region.

1

Introduction

The Organisation Africaine de la Propriété Intellectuelle (African Intellectual Property Organization), known by its acronym OAPI, is an intellectual property organization for 17 countries mainly from French-speaking West and Central Africa. Created by the Bangui Agreement of 2 March 1977, it is based in Yaoundé, Cameroon.

Its members are Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Comoros, Congo, Cote d'Ivoire, Equatorial Guinea (Spanish-speaking), Gabon, Guinea, Guinea-Bissau (Portuguese-speaking), Mali, Mauritania, Niger, Senegal and Togo. Importantly, 12 of these 17 countries are categorized by the United Nations as least developed countries (LDCs),¹ i.e., countries at the lowest level of socioeconomic development and hence the most vulnerable segment of the international community.

The conceptual and substantive design of the Bangui Agreement originates from the 1962 Libreville Agreement that preceded it and the considerable influence France exercised over its former colonies (as will be elaborated in Chapter 2). The Agreement set up OAPI as a supra-national organization on intellectual property (IP) matters. OAPI operates as the intellectual property office for its members. Procedures for filing applications for, granting and administering intellectual property rights are harmonized and centrally handled by the OAPI secretariat.

In the Agreement's original version of 1977, its scope was limited to select categories of intellectual property such as patents, trademarks, industrial designs, and literary and artistic property. The advent of the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), followed by significant pressures exerted by Geneva-based international institutions (UPOV, WIPO, WTO) and donors, led to a revision of the Agreement in 1999, which resulted in a controversial expanded Agreement that included plant variety protection in its Annex X. On 14 December 2015, the Bangui Agreement was further revised; however, this revision has yet to come into force.

The Agreement consists of a main part – which sets out the institutional structure of OAPI and the general rights and obligations of its members – and 10 annexes, each addressing a specific aspect of intellectual property: patents (Annex I); utility models (Annex II); brands of goods or services (Annex III); in-

dustrial designs (Annex IV); trade names (Annex V); geographical indications (Annex VI); literary and artistic property (Annex VII); protection against unfair competition (Annex VIII); layout-designs (topographies) of integrated circuits (Annex IX); and plant variety protection (Annex X).

The 1999 revision of the Agreement met with significant opposition from multiple segments of the international community (e.g., civil society, experts, academics, farmers, even relevant ministries) from different sectors, namely health, agriculture and the environment. The main concerns were that the revision process had been captured by advocates of strengthened IP protection and enforcement, and did not employ an evidence-based participatory approach, hence the failure of the revised Agreement to fully exploit the policy space provided by the TRIPS Agreement to put in place intellectual property standards that reflect the level of socio-economic development and technological challenges in the region.

For example, the revised Agreement applies the newly adopted intellectual property standards to LDCs despite Article 66 of the TRIPS Agreement explicitly granting LDCs a renewable exemption from implementing the TRIPS Agreement “in view of their special needs and requirements”, “their economic, financial and administrative constraints, and their need for flexibility to create a viable technological base”.² This exemption was initially granted until 1 January 2005. Thereafter the WTO has renewed this exemption, which will now continue until 1 July 2021 and possibly beyond with further renewal.

The inclusion of Annex X on PVP sparked international outrage not least because of the absence of a rigorous and inclusive decision-making process that involved the farming community. The Annex marked for the first time the creation of exclusive rights in relation to plant breeding, a dramatic shift in the model of creation and diffusion of plant varieties in the region.

For centuries plant varieties have been developed through the free exchange of seeds and the sharing of knowledge among farmers. This model continues to prevail in the OAPI region and in most other developing countries. However, in the developed countries especially in the US and the EU, with the growth of the seed trade and the emergence of private commercial breeders, a new model of production and diffusion, based on intellectual property, emerged at the end of the 19th century.

In 1911, the *Congres Pomologique de France* suggested the need for special protection for plant varieties, a view that became prevalent among European commercial breeders. In 1956, the *Semmering Congress of the International Association of Plant Breeders for the Protection of Plant Varieties (ASSINSEL)* stressed the need for an international conference to adopt an international system for the protection of new plant varieties. In response, the French led European countries to negotiate an international instrument on plant variety protection, resulting in 1961 in the *International Convention for the Protection of New Varieties of Plants (UPOV)*, which set out binding minimum standards of PVP. The UPOV Convention has since been revised in 1972, 1978 and 1991, each revision expanding and strengthening the rights conferred to breeders while limiting the freedom to operate in particular rights of farmers to freely save, use and exchange seed/propagating material.

Historically the membership of UPOV has been small. The initial version was negotiated and adopted by six countries from Western Europe while the 1991 Act was negotiated by only 20 member countries, out of which only one (South Africa) was a developing country. *Correa et al.* point out that “[t]he low participation of developing countries in setting the UPOV regime is in sharp contrast to the negotiations leading to the adoption of the *Convention on Biological Diversity (CBD)* and the *International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)*, in which developing countries played a key role”.³ Most countries are also members of these instruments (see Box 1).

By the end of 1999, UPOV 1991 had attracted only 11 members, none of which were developing countries. As the TRIPS Agreement became operational, UPOV and its advocates (e.g., France, the WTO, the World Intellectual Property Organization (WIPO), the multinational seed industry) set about to capture OAPI and its members to join UPOV 1991. Their significant financial resources and leverage over the region prevailed as Annex X modelled on UPOV 1991 was adopted in 1999 as part of the revised Bangui Agreement.

Its adoption however was controversial, as mentioned above. Concerns were raised over the appropriateness of the protection model in Annex X for the agricultural systems and practices prevailing in the region.

In the OAPI region, agriculture remains the dominant productive activity in most countries. More than 80% of the seed used comes from the “informal” seed system (often referred to as “peasant seed system” or “farmer-managed seed system”).⁴ In this system, farmers maintain seed of their local varieties for their own consumption and production, and they multiply and exchange seed on an in-kind or cash basis. Local markets are also an important source of seeds for these farmers.

In this agricultural context, the suitability and relevance of UPOV was questioned. As noted above, UPOV was conceived for the modalities of seed production prevailing in developed countries, where seed/propagating materials are primarily sourced through the commercial seed sector. In addition, developing countries were conspicuously absent in the process of creating UPOV, meaning the characteristics of the seed supply systems of these countries were ignored.

Adoption of the UPOV-style Annex X bewildered the international community as the TRIPS Agreement provided ample flexibility for countries to develop a “*sui generis*” plant variety protection system that reflected the agricultural system as well as the needs and interests of farmers in the region. In addition, as noted above, the LDCs in the region (i.e., 12 OAPI members) had been afforded special treatment under the TRIPS Agreement in the form of a renewable transition period that exempted LDCs from implementation of the TRIPS provisions.

Article 27.3(b) of the TRIPS Agreement does place a general obligation on WTO members (except for LDCs that are exempt) to provide a system for plant variety protection.⁵ However, countries have considerable latitude and space to design and implement this system. They can determine the modality and level of protection. The only condition of the protection is that it should be “effective *sui generis*” protection. The UPOV Convention is not mentioned, hence WTO members may opt for non-UPOV *sui generis* systems. “*Sui generis*” means “unique”, “of its own kind”, a concept which indicates that WTO members have broad policy space to define the parameters of protection.

Developing countries, in debates on the review of Article 27.3(b), also stressed that the WTO Agreement does not specify criteria by which to judge whether a *sui generis* system is effective and therefore this should be left to members to decide.⁶ The African Group of countries in the WTO in particular called for clarity on Article 27.3(b), stating that any *sui generis* law for plant variety protection can provide for: the protection of innovations of indigenous and local farming communities in developing countries; the continuation of traditional farming practices including the right to save and exchange seeds, and sell farmers’ harvest; and the prevention of anti-competitive rights or practices which threaten the food sovereignty of developing countries.⁷

In addition, during the time of the revision of the Bangui Agreement, the Organization of African Unity (OAU) (now known as the African Union) initiated continent-wide discussions on the impact of the TRIPS Agreement on African resources, communities, systems and practices and the social, economic and cultural implications of TRIPS implementation. These discussions, which included a wide range of perspectives across the continent, such as from farmers, scientists, lawyers, civil society and relevant ministries, eventually led to the adoption of the African Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders and for the Regulation of Access to Biological Resources (African Model Law) in 2001.

This Model Law was an attempt to establish a legal framework that balances the complex and often contradictory relationship between the TRIPS Agreement, which focuses on furthering private monopoly rights, and the CBD and ITPGRFA which recognize state sovereignty over biological resources, and stress on advancing sustainable biodiversity and farmers’ and community rights. The Model Law also sought to safeguard the biological resources and diversity, interests of communities and indigenous peoples and the farming systems and practices in Africa.

The Model Law comprehensively elaborated on access to biological resources in light of CBD principles of prior written, free

and informed consent of the state and/or the concerned local communities, recognizing also the collective rights of the local and indigenous communities. It sought to balance protection of plant breeders' rights with farmers' rights, including recognition

of farmers' varieties, the right to freely use, save, exchange and sell farm-saved seed/propagating material, right to participate in decision-making and right to obtain equitable sharing of benefits arising from the use of plant genetic resources.

Box 1

THE CBD AND THE ITPGRFA

Convention on Biological Diversity

OAPI member states are contracting parties to the CBD.

The CBD, which was adopted in 1992, came into force on 29 December 1993. It currently has 196 parties.⁸ It aims at ensuring the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources (Article 1). Importantly, the CBD operationalized the concept of sovereign rights over biological resources (Preamble and Article 3). It introduced the requirement of prior informed consent (Article 15.5) and the fair and equitable sharing of benefits arising from the "commercial and other utilization" of genetic resources, based on terms mutually agreed between the recipient and the country supplying the resources (Articles 15.4 and 15.7). In 2010, the CBD's Conference of Parties adopted the Nagoya Protocol on Access and Benefit Sharing (ABS) which further elaborates on access and benefit-sharing implementation at the national level. The Nagoya Protocol has 110 parties.⁹

The extension of intellectual property to living subject matter in the TRIPS Agreement raised significant concerns among developing countries over the possibility of incompatibility between the TRIPS Agreement and the CBD. Consequently, developing countries have, among others, focused their efforts on establishing a mandatory obligation to disclose the origin of biological resources and associated traditional knowledge claimed in patent¹⁰ and plant variety protection¹¹ applications. Intellectual property applications are an important checkpoint to monitor and enhance transparency with regard to utilization of genetic resources and compliance with ABS rules.

International Treaty on Plant Genetic Resources for Food and Agriculture

OAPI member states are contracting parties to the ITPGRFA.

This Treaty, adopted in 2001, is the result of the revision of the voluntary 1983 Food and Agriculture Organization (FAO) International Undertaking on Plant Genetic Resources for Food and Agriculture following the adoption of the CBD.¹² Its objectives are the conservation and sustainable use of plant genetic resources for

food and agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the CBD, for sustainable agriculture and food security.

Article 6 of the ITPGRFA requires contracting parties, *inter alia*, to "develop and maintain appropriate policy and legal measures that promote the sustainable use" of PGRFA, including promoting the development and maintenance of "diverse farming systems"; promoting plant breeding efforts with the participation of farmers, particularly in developing countries, to strengthen the capacity to develop varieties particularly adapted to social, economic and ecological conditions, broadening the genetic base of crops, promoting the expanded use of local and locally adapted crops, varieties and underutilized species, as well as maximizing intra- and inter-specific variation for the benefit of farmers, especially those who generate and use their own varieties.

In addition, the ITPGRFA is the first international legally binding treaty to recognize Farmers' Rights, given "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" (Article 9.1).

While the implementation of Farmers' Rights is left to national laws and regulations, in the Preamble and Article 9, the Treaty indicates some of the fundamental elements of such rights:

- the protection of traditional knowledge relevant to PGRFA;
- the right to equitably participate in sharing benefits arising from the utilization of PGRFA;
- the right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of PGRFA; and
- the right to save, use, exchange and sell farm-saved seed and other propagating material.

These rights are not exhaustive and national laws can recognize more rights, including those under other international instruments and customary international law that are applicable to farmers and the objectives of the Treaty.

In contrast, the UPOV system is a rather inflexible legal framework, offering breeders' rights only to varieties that are novel, distinct, uniform and stable (NDUS); generally these are commercial varieties. There is no recognition of or protection offered to other, diverse farming systems, their varieties or Farmers' Rights under the ITPGRFA, including their right to freely save, use, exchange and sell farm-saved seed and other propagating material. In fact, UPOV is known for advising its potential members to reject provisions implementing Farmers' Rights in their PVP legislation. The access and benefit sharing (ABS) principles of the CBD and disclosure of origin (see Box 1), crucial for the operationalization of ABS to prevent misappropriation of genetic resources, are considered to be inconsistent by UPOV.

This paper analyzes the impact of the UPOV-style Annex X of the revised Bangui Agreement in the more than 10 years since its entry into force on 1 January 2006.

Chapter 2 discusses the origins of the Bangui Agreement and OAPI, and looks at the role played by international institutions, developed countries and their seed industry in the revi-

sion of the Bangui Agreement and formulation of Annex X. This chapter also elaborates on the parallel processes underway in Africa, led by the OAU, and in the WTO, led by the African Group, emphasizing on non-UPOV *sui generis* systems that are more reflective of the farming systems prevailing in the OAPI region.

Chapter 3 examines the legal and institutional structure of OAPI as well as the implications of the provisions contained in Annex X. Chapter 4 analyzes the functioning of the OAPI PVP system following operationalization of Annex X. It provides information on the origins and subject matter of PVP applications filed and approved. It assesses availability of information about PVP in the OAPI region and explores whether and how the technical examination of NDUS is conducted.

Chapter 5 scrutinizes the impact of Annex X in the OAPI region in particular on availability of new varieties, breeding activities, development of the seed industry, local farmer varieties, public institutions, farmers' seeds systems and Farmers' Rights. Chapter 6 discusses the next steps for OAPI member states.



Niamey Peasants Seed Fair Final Declaration, April 2019 ©BEDE

2

Historical Context of the Bangui Agreement

This chapter traces the historical origins of the Bangui Agreement which established the institution of OAPI. It reveals the influential role of international institutions (UPOV, WIPO, WTO), developed countries (in particular France) and their seed industry in the revision of the Agreement and formulation of Annex X on PVP.

During the period of revision, the OAU was already formulating a common African position on plant genetic resources, prompted by widespread concerns over the impact of the TRIPS Agreement on the African region. Inspired by the OAU outcomes, the African Group of countries also took a firm position in the WTO that asserted the freedom to adopt non-UPOV *sui generis* PVP regimes that would, inter alia, support the system of saving, exchanging and selling seeds among farmers, balance breeders' rights with the needs of farmers and local communities, promote implementation of the CBD and the ITPGRFA, and protect traditional knowledge as well as inventions of local communities. This chapter elaborates on these initiatives that, through inclusive and consultative processes, were about safeguarding the agricultural systems and practices prevailing in the region. Despite these developments and in the absence of a rigorous inclusive and participatory process, OAPI adopted the one-size-fits-all PVP regime of UPOV 1991, developed to protect the interests of commercial breeders in developed countries.

2.1 – POLITICAL CONTEXT OF THE ESTABLISHMENT OF OAPI

The prevailing view of scholars studying francophone Africa, according to Deere, is that despite decolonization, francophone Africa remains “economically, politically and intellectually” dependent on foreign donors especially France, compromising decision-making autonomy in domestic policy-making.¹³ Decades of French influence in the region have led to francophone officials generally being amenable or deferring to French advice and expertise, Deere argues.¹⁴

Throughout the colonial era until 1962, patent rights in the francophone region were governed by French law and the French Institut national de la propriété industrielle (INPI),

which operated as the intellectual property office for these colonial territories. French priority was to protect the intellectual assets of its nationals within the colonial territories. Hence a patent deposited in France also came into effect in these territories. This historical context set the foundation for the region's reliance on external actors in the area of IP.

Post independence, France's significant influence in the region continued especially in the IP domain as it remained eager to ensure protection of investments of its companies and nationals in the former colonies. For instance, France persuaded 11 francophone African states to join the Berne Convention (the international convention regarding copyright protection for literary and artistic works) between 1962 and 1964.¹⁵ France also supported a regional approach to IP protection.¹⁶

On 13 September 1962 in Libreville (Gabon), 12 heads of state and government signed an agreement which established a regional framework for industrial property protection and created the African and Malagasy Industrial Property Office (OAMPI) based in Yaoundé, Cameroon.

OAMPI became the central authority for managing the protection of industrial property in francophone Africa based on the principles of regional cooperation through: (a) the adoption of a uniform system of industrial rights protection based on uniform legislation; (b) the creation of a common authority to serve as the office for protection of industrial property for its member states; and (c) the application of common and centralized procedures such that a single title issued by OAMPI would be valid in all member states.¹⁷ (These principles remain applicable today in the context of OAPI.) Given the active involvement of INPI and United International Bureaux for the Protection of Intellectual Property (BIRPI, WIPO's predecessor) in the formation of OAMPI, it is unsurprising that the Libreville Agreement mirrored the French legislation.

Following the subsequent withdrawal of Malagasy, the Libreville Agreement was revised and a new convention was signed in Bangui on 2 March 1977 giving birth to OAPI, also headquartered in Cameroon. At this time, the membership of OAPI had expanded to 15 countries.¹⁸ Even after its adoption, French influence over the legal provisions of the Bangui Agreement continued.

2.2 – REVISING THE BANGUI AGREEMENT TO BE TRIPS-COMPLIANT

In its original version of 1977, the Bangui Agreement did not include certain categories of industrial property rights, such as PVP. Even in Europe, PVP was relatively novel then.

In the context of the revision of the Paris Convention for the Protection of Industrial Property, the European industrial countries held in Paris an international conference which led to the adoption, on 2 December 1961, of an International Convention for the Protection of New Varieties of Plants establishing the Union pour la Protection des Obtentions Végétales (UPOV). This Convention set binding minimum standards for PVP and was revised in 1972, 1978 and 1991. While the first two revisions did not substantially alter the system of protection, the 1991 revision brought about significant changes. It expanded and strengthened the rights conferred to breeders, inter alia by limiting breeders' exemption and the rights of farmers to freely save, use and exchange farm-saved seed/propagating material.

While the 1977 version of the Bangui Agreement may not have been influenced by UPOV, this was not the case some 20 years later when the Agreement underwent its first revision in February 1999. The revision included a new annex to the Agreement on PVP modelled on UPOV 1991, and this annex came into force on 1 January 2006.

The main reason for the revision was to make the Bangui Agreement compliant with the requirements of the TRIPS Agreement, which had come into force on 1 January 1995, and to further broaden the scope of the Bangui Agreement, swayed primarily by the influence of UPOV, WIPO, the WTO and France in the region, as shown in the next section.

As mentioned above, Article 27.3(b) of the TRIPS Agreement requires WTO members to establish an “effective *sui generis* system” for the protection of plant varieties. However, this requirement was not applicable to LDCs as they enjoyed a transition period until 2005. In 2005 the transition period was extended to 1 July 2013 when it was extended again to 1 July 2021.¹⁹ During the transition period LDCs are exempted from implementing the provisions of the TRIPS Agreement, except for Articles 3, 4 and 5.²⁰ The rationale for this flexibility is to accord LDCs policy space in view of their special needs, especially their economic, financial and administrative constraints.²¹

Since the majority of OAPI member states are LDCs, OAPI did not have to hastily adopt a PVP system and apply it to LDCs. As shown in the next section, international institutions and donors providing technical and financial assistance deliberately ignored this fact, and even the need for credible due process, as they doggedly sought to further their influence and protect their interests in the region.

2.3 – INFLUENCE OF UPOV 1991 PROPONENTS IN THE REVISION OF THE BANGUI AGREEMENT

As the TRIPS Agreement entered into force in 1995, Geneva-based international institutions mobilized to accelerate its

implementation nationally and regionally. Despite the outstanding issue of review of Article 27.3(b), UPOV, with the support of WIPO, the WTO and France, embarked on an assertive campaign in the OAPI region to urgently put in place a UPOV-based PVP system. The OAPI secretariat was a willing ally given its close relationship with and dependence on France and international institutions for financial support and technical assistance.

On 8 August 1996, officials from UPOV (including its Vice Secretary General) and WIPO discussed proposals for amending the Bangui Agreement to include the creation of a PVP system in the OAPI region.²² On 10 December, the Vice Secretary General of UPOV had another discussion with WIPO officials to discuss the possible revision of the Bangui Agreement.²³

In 1997, the UPOV secretariat was involved in discussions with the French Ministry of Agriculture as well as Francois Burgaud, who was in charge of international relations within the French National Interprofessional Seed and Seedlings Grouping (GNIS – see Box 2), about providing technical assistance on PVP to francophone African countries, including providing a financial contribution for the organization of a regional seminar in Burkina Faso.²⁴

In April 1997, the Director General of WIPO sent to OAPI draft texts for the revision of the Bangui Agreement, which included a draft annex relating to plant variety protection drawn up by the UPOV secretariat.²⁶ In September 1997, the Director General of OAPI Anthioumane N'Diaye and Faolu Bangoura, IP Director of OAPI, met with UPOV officials to discuss possible extension of the Bangui Agreement so as to include plant variety protection and the participation of representatives from OAPI in the Burkina Faso seminar.²⁷ UPOV also participated in a WIPO Academy session for French-speaking countries to lecture on UPOV and PVP.

The abovementioned seminar – a regional seminar on the nature of and rationale for the protection of plant varieties un-

Box 2

FRANCE AND GNIS

France is a major exporter of seeds. In 2016, it was the country with the second highest amount of seed exports, estimated at a value of US\$1,708 million.²⁵

Groupement national interprofessionnel des semences et plants (GNIS), created in 1941 and modified in 1962, is the interprofessional organization of the seeds and seedlings sector for France, recognized in June 2014 by decree of the Ministry of Agriculture. It is also responsible for seed control and certification in France. It is funded by fees mandated by the French government. A key objective of GNIS is the protection of the interests of the French seed sector in general and multinational seed companies more specifically in the international arena.

der the UPOV Convention – was organized by UPOV in Ouagadougou, Burkina Faso, on 17–19 December 1997 in cooperation with the Government of Burkina Faso and OAPI with the financial support of the French Ministry of Agriculture and Fisheries.²⁸ This seminar was attended by participants from OAPI member states: Benin, Burkina Faso, Cameroon, Chad, Cote d'Ivoire, Gabon, Guinea, Mali, Mauritania, Niger, Senegal and Togo. The annual report by the Secretary General of UPOV commended OAPI's hard work on revising the Bangui Agreement, adding that "it is proposed to add to that Agreement an annex concerning the protection of new plant varieties".²⁹

In 1998, the UPOV Secretary General reached out to the General Coordinator, Conference of the Ministers for Agriculture of Western and Central Africa, to offer UPOV's assistance in relation to plant variety protection.³⁰ UPOV further engaged the Head of the Seed and Plant Breeding Office in the French Ministry of Agriculture and Fisheries on the organization and financing of "roving seminars" in OAPI member states.³¹

According to the OAPI secretariat, the draft text of the revised Bangui Agreement was discussed at several expert meetings in Conakry (November 1997), Abidjan (February 1998), Ouagadougou (July 1998) and Nouakchott (November 1998), which were also attended by donors and international agencies especially UPOV.³² The final text was approved by national IP officials at another meeting in Nouakchott (Mauritania) at the end of December 1998.

Ten days before the Diplomatic Conference in Bangui that would consider the revised Bangui Agreement, a joint UPOV-WIPO-WTO workshop was held for developing-country delegates in Geneva to convey the message that UPOV 1991 would be the best option for implementing the PVP system required by Article 27.3(b).

From 22 to 25 February 1999, the revised Bangui Agreement was opened for signature at the Diplomatic Conference in Bangui and signed on 24 February by the plenipotentiaries of 15 member states. As mentioned earlier, this Agreement included an annex on PVP modelled on UPOV 1991.

The influence of UPOV, WIPO, the WTO and other proponents of UPOV 1991 was not limited to the regional process of revising the Bangui Agreement. As it engaged in meetings on revising the Bangui Agreement, UPOV also systematically approached key officials from countries in the region, such as Burkina Faso, Cote d'Ivoire and Gabon, presenting them with draft laws for establishing national PVP systems aligned with UPOV 1991.

The WTO secretariat and developed countries, through the WTO Trade Policy Review process, also repeatedly reinforced on OAPI member states the need to swiftly comply with the TRIPS Agreement and strengthen IP protection and enforcement, failing to recognize LDCs' transition period and other TRIPS flexibilities or the broader implications for development and public policy.³³

RATIFICATION OF UPOV 1991

Civil society including organizations from francophone Africa protested against the revised Bangui Agreement and appealed to the OAPI member states to defer its enactment and to consider

the Model Law of the OAU. They argued that the Agreement had been revised "without any consultation with or participation of farmers, even though they will be seriously affected by the new law", and that UPOV and WIPO "pressurized OAPI to change its basic law".³⁴ They championed the African Model Law which was "much more attuned to the realities of the continent than what UPOV and WIPO have impressed upon francophone Africa".³⁵ They argued that "it provides a basis for each African country to develop its national legislation in consideration not only of CBD and WTO, but also the interests of its people, especially the farmers and traditional healers", and that the "Heads of State of all the OAU member countries have formally endorsed this model legislation as the recommended basis for national laws".³⁶

The OAU secretariat joined civil society and some local scholars to actively promote a non-UPOV 1991 *sui generis* approach to plant variety protection, reaching out to trade, agriculture and environment ministries in the OAPI governments. The OAU and civil society engagement in the OAPI region was complemented by efforts in Geneva to advance a common African Group position at the WTO on Article 27.3(b) in line with the Model Law.

However, eventually "the combined efforts of civil society and officials from the OAU Secretariat were overwhelmed by the superior financial and organizational resources of UPOV, INPI, and WIPO, all of which favoured the UPOV 1991 approach and exercised considerable leverage over OAPI Secretariat and national IP offices through the provision of technical and institutional support".³⁷

UPOV, INPI and WIPO continued their active lobbying in the region, this time to convince OAPI member states to ratify the revised Bangui Agreement and for OAPI as an organization to ratify UPOV 1991.³⁸ By the end of 1999, UPOV 1991 had attracted only 11 members, none of which were developing countries. With the number of OAPI countries at the time, UPOV stood to gain 15 new members in a single swoop.

In July 1999, the UPOV secretariat transmitted an aide-memoire to OAPI governments regarding the ratification of the revised Bangui Agreement and accession to the UPOV Convention.³⁹ According to the civil society group GRAIN,⁴⁰ the aide-memoire highlighted the purported advantages of introducing plant variety protection in Africa, i.e., food security (by the increase in quantity, quality and diversity of foodstuffs); sustainable agriculture (for example, by a more efficient use of available resources and inputs or by the use of pest- and disease-resistant varieties); and protection of the environment and of biodiversity (for example, by reducing pressure on natural ecosystems through better productivity of cultivated lands, increase in species and varietal diversity and increased interest in conservation and use of genetic resources for food and agriculture).

GRAIN countered that the "pot of gold being promised by UPOV to some of Africa's poorest countries deserves scrutiny".⁴¹ In its rebuttal of UPOV's arguments, GRAIN concluded they were "unfounded and misleading".⁴²

In September 1999, during the sessions of the WIPO Assemblies, UPOV discussed with many delegates of OAPI member

states the steps to be taken for the ratification of the revised Bangui Agreement and the accession to the UPOV Convention.⁴³ The then Vice Secretary General of UPOV also participated in a Conference of Ministers of Agriculture of West and Central Africa in November 1999 which ended with a recommendation that the OAPI member states ratify the revised Bangui Agreement and urged the other countries in the region to enact legislation conforming with UPOV 1991.⁴⁴ UPOV also wrote to several countries in the region, including Cote d'Ivoire, regarding the procedure for accession to UPOV.

UPOV and WIPO also launched an attack on the OAU Model Law (see discussion in Section 2.4).

On 20 December 1999, Anthioumane N'Diaye, the then Director General of OAPI, requested the advice of the UPOV Council on the conformity of the revised Bangui Agreement with UPOV 1991.⁴⁵ At this point, the revised Bangui Agreement, including the annexes, had not even entered into force.⁴⁶ Of all the OAPI members, only Cameroon had deposited its instrument of ratification.⁴⁷

On 7 April 2000, the UPOV Council decided that the Agreement was in conformity with the UPOV Convention and that, "once the Bangui Agreement was in force, the member States of the African Intellectual Property Organization (OAPI) and OAPI itself might deposit instruments of accession to the Convention".⁴⁸

The revised Bangui Agreement came into force on 28 February 2002. When OAPI's Administrative Council met in mid-2002, it took the decision to delay the entry into force of Annex X on PVP due to institutional, technical and financial constraints following from the lack of experience and expertise on the subject matter. Annex X became operational on 1 January 2006 and in 2014 OAPI as an intergovernmental organization acceded to UPOV. Nevertheless many of the above constraints remain, as shown in Chapters 4 and 5, calling into question the relevance and suitability of Annex X for the region.

REVISION LACKING DUE PROCESS

It is apparent the PVP annex in the Bangui Agreement is the direct result of the influence of foreign donors and international institutions in the francophone region rather than the outcome of a transparent, inclusive, participatory and evidence-based process. There is no evidence of any substantive empirical assessments being undertaken by the OAPI secretariat, member states or by international partners of the potential impact and the appropriateness of the PVP system for the countries in the region.

Neither is there any evidence of any public consultations held by the OAPI secretariat or national governments with relevant local stakeholders, although the subject matter of the revision would directly impact the lives of people in those countries.⁴⁹ No formal interstate negotiation during the revision process was reported either.⁵⁰

The focus of officials in national IP offices was, unsurprisingly, mainly on compliance with the TRIPS Agreement from the perspective of strengthening IP protection, as the majority of these officials were products of training by INPI, WIPO and European and US universities.⁵¹ Hence IP in OAPI member

states is approached as a narrow technical matter rather than a broader policy issue with implications for national development and public interests. Weak understanding and capacity on IP and more specifically on PVP allowed the OAPI secretariat and foreign interests to dominate and drive the process.

International non-governmental organizations (NGOs) only became aware of the revision process as the Bangui Diplomatic Conference was to be held. Rural Advancement Foundation International (RAFI) based in Canada and the Spain-based GRAIN urgently issued press statements and letters to the Ministers of Agriculture and Ministers responsible for patent offices of OAPI member states expressing concerns about the adoption of the UPOV 1991 model and calling for a delay in the signing of the revised Bangui Agreement. They queried, "Why the rush?", arguing that it was "premature" for OAPI member states to adopt UPOV 1991. "Not only is it out-of-step with other developments in Africa," they added, "it would lock governments into legislation that no other developing country has adopted, and which is far more restrictive than is necessary to meet their international obligations".⁵² They also pointed out that LDCs had the benefit of the transition period and did not have to implement the TRIPS Agreement until 2005.⁵³

The adoption and implementation of the revised Bangui Agreement was opposed not only because it was establishing a UPOV-style PVP system in the absence of a rigorous evidence-based and consultative process. International and local civil society organizations and experts were also concerned about the impact of other annexes of the Agreement on other public policy areas, such as access to affordable medicines, the environment and traditional knowledge, for the annexes failed to incorporate adequate TRIPS flexibilities and instead contained "TRIPS-plus" measures⁵⁴ which could adversely affect development and the public interest.⁵⁵ Revision of the other annexes was also influenced by IP advocates: WIPO, the WTO and bilateral donors. Multinational companies and industry associations, including in the seed sector, insisted that strengthened IP protection was essential to introduce their products and for their investment in the region. See Box 3.

Box 3

CREATION OF A SEED TRADE ORGANIZATION: AFSTA

Soon after the adoption of the revised Bangui Agreement, the International Seed Federation (ISF)⁵⁶ established an African Seed Trade Association (AFSTA). It was formalized in 2000 with an international headquarters in Nairobi, Kenya, and an office for West Africa in Dakar, Senegal. Currently, the Association has about 100 members including national seed associations and seed companies in and outside Africa. The interests of multinational seed companies are widely represented through their subsidiaries and other members of AFSTA. AFSTA advocated adoption of the UPOV 1991 model in Africa rather than the OAU Model Law. It argued that UPOV was “established to promote cost recovery through the protection of new varieties from illegal use”⁵⁷ and that it “has been widely adopted by both African and international communities in order to enhance and/or promote investment in crop technology development”.⁵⁸ However, it is worth noting that by the end of 2000, only 15 countries had ratified UPOV 1991. Kenya and South Africa were the only African UPOV members, and parties to the 1978 Convention.

2.4 – DIVERGING FROM AFRICA'S COMMON POSITION ON PLANT GENETIC RESOURCES

While proponents of UPOV 1991 were exercising their influence on the French-speaking region, a parallel process was underway on the continent led by the OAU. The OAU was founded in 1963 and replaced by the African Union in 2002. It had 53 member states at the time of the revision of the Bangui Agreement.

In April 1997, the OAU Scientific, Technical and Research Commission (STRC), headed by Nigerian professor Johnson Ekpere, organized in Nairobi a Workshop on Medicinal Plants and Herbal Medicine in Africa: Policy Issues on Ownership, Access and Conservation. This workshop was motivated by concerns that the requirements of the TRIPS Agreement would extend private monopoly rights over community biological diversity and appropriate the rights and resources of local communities and indigenous peoples, with major implications for food security, agriculture, rural development as well as health and the environment. There was recognition that Africa “is economically the least developed continent, and yet is one of the best endowed in biological resources” and that these “will continue to be the basis of its wealth and security into the future”. Thus, what was required was “that Africa define its path of economic development fully respecting its cultural norms and ecological imperatives”.⁵⁹

The workshop recommended the elaboration of model legislation on the protection of indigenous knowledge concerning plants, and the need to study the implications of the TRIPS Agreement on Africa's bio-resource heritage and the expected implementation of intellectual property standards as the TRIPS Agreement came into force for developing countries.

The workshop was followed up with intense collaboration over three years among African experts from different segments of society – scientists, lawyers, NGOs, ministries and farmers' organizations, including the Director General of the Ethiopian Environmental Protection Authority, Tewolde Egziabher. This collaboration resulted in an African common position and consequently adoption, during the July 2001 OAU summit in Lusaka, Zambia, of an African Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders and for the Regulation of Access to Biological Resources.⁶⁰

A draft model law had been sponsored by the Government of Ethiopia and considered by the OAU at its summit in Ouagadougou, Burkina Faso, in June 1998. At the Summit of Heads of States, the draft was adopted but member states called to initiate consultative meetings at the regional, national and sub-national levels to further clarify the text. The summit was significant as it highlighted growing concern for the protection of indigenous knowledge and biodiversity on the continent and these issues were seriously being considered by a diverse cross-section of society in Africa: farmer groups, civil society, and trade, environment and agriculture ministries. This model law was subsequently discussed at multiple meetings and clarified and expanded to include plant breeders' rights and Farmers' Rights in anticipation of the adoption of the ITPGRFA and in recognition of the fact that its member states would, as required by the TRIPS Agreement, need a *sui generis* law for protecting plant varieties.

In June 1999 at an African Regional Workshop on Understanding Biodiversity-Related Instruments, held in Lusaka and organized by the OAU, the 60 African government officials who participated in the meeting advised African countries to “develop *sui generis*... legislation” for plants such as those included in the OAU model law that would be compatible with the TRIPS Agreement, to protect farmers' rights, and to “exercise their *ordre public* options under TRIPS to prevent privatization of plants and biodiversity”.⁶¹ In June 2000, a meeting was held in Algiers, Algeria, with the purpose of developing and updating the French version of the model legislation.

The OAU initiatives also provided the conceptual and empirical evidence for the formulation of the African Group common position in the WTO with regard to the review process of Article 27.3(b) of the TRIPS Agreement.

In August 1999, the African Group submitted a proposal to the General Council of the WTO calling for a clarification that implementation of Article 27.3(b) in respect of plant varieties should allow developing countries to “[m]eet their international obligations, for example under the Convention on Biological Diversity, and the FAO International Undertaking for Plant Genetic Resources”; “[s]atisfy their need to protect the knowledge and innovations in farming, agriculture and health and medical care of indigenous people and local communities” (adding that

“resolution of this issue affects the food security, social and economic welfare, and public health of people in developing countries”); and to “protect human, animal and plant life and to avoid serious prejudice to the environment.”⁶²

The African Group also proposed that a footnote be inserted after the sentence on plant variety protection in Article 27.3(b), stating that any *sui generis* law for plant variety protection can provide for:

- i the protection of the innovations of indigenous and local farming communities in developing countries, consistent with the Convention on Biological Diversity and the International Undertaking on Plant Genetic Resources;
- ii the continuation of the traditional farming practices including the right to save, exchange and save seeds, and sell their harvest;
- iii preventing anti-competitive rights or practices which will threaten food sovereignty of people in developing countries, as is permitted by Article 31 of the TRIPS Agreement.

The African Group proposal also called for the postponement of the implementation deadline for Article 27.3(b), arguing that the review of Article 27.3(b), if undertaken in 1999, would preempt the outcome of deliberations in other, related fora such as the CBD, FAO, International Undertaking on Plant Genetic Resources, and the development of an OAU model law on community rights and control of access to biological resources added that “[t]hese are important fora dealing with Article 27.3(b) issues (from a developmental perspective) which the [WTO] TRIPS Council cannot afford to ignore.”⁶³

In September 2000, African Trade Ministers adopted a resolution in Cairo stressing the need to raise awareness about the model law and invited UPOV and WIPO, with other organizations, to collaborate “in the furtherance of this initiative.”⁶⁴

Instead of providing positive suggestions and expertise on how to “further” the African initiative, UPOV, WIPO, AFSTA (see Box 3) and OAPI sought to completely undermine it during a conference at the OAU headquarters in Addis Ababa in May 2001.⁶⁵ Arguing that many provisions of the model law were either “too vague” or “ineffective”, UPOV reworked more than 30 articles of the model law to align it with the standards of their own Convention.⁶⁶ UPOV’s critique of the OAU model law outraged African governments and civil society alike.

“If WIPO’s contribution to the ‘furtherance’ of the OAU process was misdirected and counterproductive, UPOV’s input consisted of an iron-fisted bash on the whole initiative,” GRAIN remarked, asking: “[W]ho is UPOV to come in and challenge a Model Law that has been carefully developed to serve Africa by balancing the rights of all the different actors with biodiversity across the continent and turn it into a law to serve the interests of foreign biotech and plant breeding corporations?”⁶⁷ GRAIN noted that “TRIPS does not oblige countries to adopt legislation that conforms with UPOV”, adding that “[t]he reality is that Africa has a choice – and UPOV’s ten-page attack on the OAU Model Law boils down to destroying that choice.”⁶⁸

Frustrated by the WIPO and UPOV submissions, the conference chair Egziabher reminded each of the agencies that they

had not been invited “to change the essence of the Model Law”. He called for support and recognition of “the OAU’s right to lead Africa, especially on emerging critical issues”.⁶⁹

THE OAU MODEL LAW

The core principles behind the African Model Law are: food sovereignty and security, in particular maintaining the customary rights of farmers to save, use, exchange and sell seed and other plant material as these are the foundation of agricultural practices and enable farmers to keep control of their livelihood systems; commitment to the CBD principles, especially recognizing that states have sovereignty over their biological resources, protection of indigenous peoples’ knowledge, innovations, technologies and practices and those of other local communities within the framework of national legislation, and access to genetic resources being subject to prior informed consent and fair and equitable benefit sharing; and finally, the need to ensure effective participation of local communities in decision-making on all issues that affect their biological wealth, knowledge and technologies.

Based on these core principles, the Model Law covers four areas:

- Access to biological resources: access to biological resources depends on prior written, free and informed consent of the state and/or the concerned local community;
- Community rights: recognition of the rights of local and indigenous communities and that these rights are collective, are not subject to limitation and have a supremacy over rights based on particular interests;
- Farmers’ Rights: this includes recognition of farmers’ varieties, the right to freely use, save, exchange and sell farm-saved seed/propagating material, the right to participate in decision-making and the right to obtain equitable sharing of benefits arising from the use of plant genetic resources etc.;
- Plant breeders’ rights: to protect breeders’ rights in harmony with Farmers’ Rights.

The principles of the Model Law also informed the African Group’s position at the WTO. In November 1999, the African Group submitted its initial August 1999 proposal to the WTO Council for TRIPS in the context of the review of Article 27.3(b) of the TRIPS Agreement.⁷⁰ Several years later, in 2004, the African Group submitted another communication to the WTO Council for TRIPS stressing that “[t]he requirement to protect plant varieties should not in any manner undermine, but should support, the right of Members to protect important public policy goals relating to food security, nutrition, the elimination of rural poverty, and the integrity of local communities. In this regard, there is no basis for requiring Members to adopt inappropriate regimes for protecting plant varieties.”⁷¹ The communication sought confirmation that, inter alia:

- “Members have the right and the freedom to determine and adopt appropriate regimes in satisfying the requirement to protect plant varieties by effective *sui generis* systems ... The ‘African Model Legislation on the Protection of the Rights of

Local Communities, Farmers and Breeders and the Regulation of Access to Biological Resources' is one example of a sui generis system, which has been developed to provide appropriate and effective protection for the rights and knowledge of farmers, as well as indigenous peoples and local communities, in a manner that suits the circumstances of Africa and possibly other developing Members."⁷²

- "Regardless of what sui generis system that is adopted for protecting plant varieties, non commercial use of plant varieties, and the system of seed saving and exchange as well as selling among farmers, are rights and exceptions that should be ensured as matters of important public policy to, among other things, ensure food security and preserve the integrity of rural or local communities. While the legitimate rights of commercial plant breeders should be protected, these should be balanced against the needs of farmers and local communities, particularly in developing Members. Any sui generis system should enable Members to retain their right to adopt and develop measures that encourage and promote the traditions of their farming communities and indigenous peoples in innovating and developing new plant varieties and enhancing biological diversity."
- "Both the TRIPS Agreement and the Convention on Biological Diversity as well as the International Treaty on Plant Ge-

netic Resources should be implemented in a mutually supportive and consistent manner. In this regard, Members retain the right to require, within their domestic laws, the disclosure of sources of any biological material that constitutes some input in the inventions claimed, and proof of benefit sharing."⁷³

- "Traditional knowledge and inventions of local communities should be protected under appropriate regimes, on the understanding that the TRIPS Agreement provides only minimum standards and does not prevent Members from adopting additional areas of protection. In this regard, it is important to develop mechanisms for ensuring equity in relation to the use of genetic resources and traditional knowledge through appropriate international arrangements and mechanisms to supplement domestic laws and measures."⁷⁴

Other developing countries, such as India, Thailand, Malaysia, Brazil and Venezuela, also expressed similar concerns.⁷⁵

Yet, despite the existence of a common African position on fulfilling the requirements of the TRIPS Agreement on PVP in a balanced and equitable manner consistent with the agricultural needs of the region and obligations under the CBD and ITPGR-FA, OAPI adopted the UPOV 1991 model as the basis of Annex X of the Bangui Agreement.

3

The PVP System Under Annex X of the 1999 Revised Bangui Agreement

The Bangui Agreement, as stated above, consists of a main text which defines the legal and institutional structure of OAPI and 10 annexes, each addressing the legal parameters of a specific category of intellectual property: patents (Annex I); utility models (Annex II); brands of goods or services (Annex III); industrial designs (Annex IV); trade names (Annex V); geographical indications (Annex VI); literary and artistic property (Annex VII); protection against unfair competition (Annex VIII); layout-designs (topographies) of integrated circuits (Annex IX); and plant variety protection (Annex X). The main text and its annexes are applicable in their entirety to every state that ratifies or accedes to the said Agreement.⁷⁶

This chapter elaborates on the institutional and legal setup of OAPI as defined in the main text as well as the key provisions governing PVP as contained in Annex X. Various provisions in the main text as well as Annex X also refer to Implementing Regulations.⁷⁷ The available Regulations,⁷⁸ however, inadequately address the requirements of the Bangui Agreement.⁷⁹ Further, the Regulations refer to Administrative Instructions which are to be published and yet these Instructions do not seem to be accessible.

3.1 – LEGAL AND INSTITUTIONAL STRUCTURE OF OAPI

LEGAL SETUP

At the outset, it is important to reiterate that the Bangui Agreement set up OAPI as a supra-national organization. Intellectual property rules established, including in connection with PVP, are directly applicable to the 17 OAPI member states. While the Agreement does not rule out the possibility of having national legislation, the Agreement is a unitary system where the regional instrument also serves as national legislation for all member states, with the OAPI secretariat being the central authority for administration of intellectual property in the region. Intellectual property grants by the OAPI secretariat are considered to be “independent national rights”, with national effect in all OAPI member states.⁸⁰

Article 17 of the Agreement states that in the case of discrepancies between the provisions of the Agreement or its an-

nexes and those of the international conventions to which the member states are party, the latter shall prevail.

Specifically with regard to new plant varieties, Article 14 of the Agreement mandates OAPI to undertake the examination and provide for the registration, maintenance and publication of new plant varieties. The same article further states: “In each of the member States, registered and published new plant varieties shall produce their effects in accordance with the provisions of this Agreement and its Annex X.”⁸¹

In addition, Article 18 of the Agreement states that “[f]inal legal decisions relating to the validity of titles and rendered in one member State under the provisions of Annexes I to X of this Agreement shall be binding on all other member States, with the exception of decisions based on public policy and morality”.

INSTITUTIONAL SETUP

The main organs of OAPI are the Administrative Council, the High Commission of Appeal and the Office of the Director General.

The Administrative Council is the highest decision-making body of OAPI, usually meeting once a year. It is composed of representatives of the member states on the basis of one representative per state. The Council appoints the Director General and determines the general policy of the Organization, including approving the budget.

The High Commission of Appeal is a quasi-judicial body composed of three members selected by the drawing of lots from a list of representatives designated by the member states, with each state designating one representative.⁸² The High Commission is responsible for ruling on appeals following: (a) rejection of applications for titles of industrial property protection; (b) rejection of requests for the maintenance or extension of terms of protection; (c) rejection of requests for reinstatement; and (d) decisions on oppositions.⁸³

The Office of the Director General is responsible for the executive work of the Organization, taking care of the day-to-day management, implementing instructions of the Administrative Council and carrying out the tasks deriving from the provisions of the Agreement and its annexes, and reporting to the Administrative Council.⁸⁴ The Director General is appointed for a five-year term, which may be renewed once.⁸⁵

At the national level, national liaison offices (NLO) ensure a connection between national applicants for intellectual property protection and OAPI, transmitting applications for registration. The national liaison structure usually falls within the Ministry of Industry of each member state.⁸⁶

The financial resources of OAPI are derived from proceeds from fees provided for in the regulations of the Organization and in the laws of member states, proceeds from remuneration for services rendered, and any other receipts, donations and bequests approved by the Administrative Council.⁸⁷

3.2 – KEY PROVISIONS OF ANNEX X OF THE BANGUI AGREEMENT

SCOPE AND DURATION OF PROTECTION

Annex X of the Bangui Agreement extends to “[a]ll botanical taxa”, “except for wild species, that is species that have been neither planted nor improved by man”.⁸⁸ This means that any variety that fulfils the required criteria may be granted PVP.

The extension of PVP to all genera and species in the OAPI region makes little sense, not least because of the lack of experience and capacity in the region with regard to implementation of PVP. It does not make sense to develop procedures and extend protection to crops with no or limited commercial value to the country. Even the UPOV secretariat has stated: “In an effective system of PVP the development of new varieties of plants will be encouraged where there is commercial viability, but in cases where there is no existing, or potential, commercial market for varieties, the presence of a PVP system should not be expected to encourage the development of new varieties.”⁸⁹ Ad-

ditionally, given the vulnerability of countries in the region, and their dependence on agriculture, it would seem important to preserve the possibility of restricting PVP to a limited number of genera and species.

Even UPOV 1978 recognized the importance of flexibility relating to the scope of botanical genera and species to be protected. It did not obligate contracting parties to extend protection to all genera and species, and allowed contracting parties to limit the application of the Convention within a genus or species to varieties with a particular manner of reproduction or multiplication, or a certain end-use.⁹⁰ Contracting parties of UPOV 1978 are only bound to initially apply the Convention to at least five genera or species, and progressively extend it within eight years to at least 24 genera or species in all. These numbers may be reduced taking account of “special economic or ecological conditions prevailing in that State”.⁹¹ UPOV 1978 also built in the possibility of the UPOV Council extending the term for introducing PVP “in order to take account of special difficulties encountered by that State in the fulfilment” of its obligations.

These flexibilities were eliminated by UPOV 1991. Although the 1991 Act does stipulate transitional periods for prior and future member states (5 and 10 years, respectively), there is an obligation to grant protection to “all genera and species”.⁹²

Annex X of the Bangui Agreement fails to incorporate any flexibility for its members, even the limited transition period contained in UPOV 1991 in relation to scope of protection. As a result, the Annex fails to consider the fact that OAPI member countries may need policy space to address their specific needs and interests.

As discussed in Chapter 1, the TRIPS Agreement does not place any requirement or restriction with regard to the coverage

Box 4

CRITERIA FOR PROTECTION OF NEW PLANT VARIETY UNDER ANNEX X

Novelty (Article 5): The variety shall be deemed to be new if, on the date of filing of the application or on the priority date, the propagating or harvested material of the variety has not been sold or otherwise disposed of to others, by or with the consent of the breeder, for the purposes of exploitation of the variety, earlier than one year on the territories of the member states of the Organization, or earlier than four years (six years in the case of trees or of vines) on the territories of non-member states. Based on UPOV’s documents, Article 5(2) further defines situations where novelty is not considered to be lost.

This criterion is waived for the protection of known varieties, as a transitional arrangement (see Box 5).

Distinctness (Article 6): A variety shall be deemed to be distinct if it is clearly distinguishable from any other variety whose existence is a matter of common knowledge at the time of the filing of the application. Common knowledge of a variety may be established by

various factors such as the use of the variety already in progress, entry of the variety in a register maintained by a recognized professional association or the inclusion of the variety in a reference collection.

Uniformity (Article 7): A variety shall be deemed to be uniform if, subject to the variation that may be expected from the particular features of its propagation, it is sufficiently homogenous in its relevant characteristics.

Stability (Article 8): A variety shall be deemed to be stable if its relevant characteristics remain unchanged after repeated propagation or, in the case of a particular cycle of propagation, at the end of each such cycle. Stability implies that the new variety maintains its specific characteristics in accordance with its initial description after several successive reproductions or multiplications.

of protection for plant varieties. It is common practice for PVP laws to limit protection to a specified list of genera and species as well as to refuse protection where the particular variety may be harmful to the farming system, environment and food security.⁹³

With regard to the duration of protection, Article 33(1) of Annex X states that a plant variety certificate (PVC) shall expire 25 years after its date of issue. The duration of protection is more extensive than in both the UPOV Conventions.⁹⁴ To maintain the PVC, an annual fee has to be paid (Article 33(2)).

Today it is recognized that while plant breeding is time-consuming, the application of marker-assisted selection (MAS) and other new technologies has reduced the time it takes to bring new crop varieties to market.⁹⁵ Arguably, a long term of protection is simply not justified. This is all the more so in the case of OAPI, as the majority of its membership are LDCs, its commercial market insignificant and hence the value of PVP questionable.

CRITERIA FOR OBTAINING PLANT BREEDERS' RIGHTS

For a new variety to qualify for protection under Annex X, the variety must be new, distinct, uniform and stable (NDUS) and given a denomination in accordance with Article 23.⁹⁶ As already noted above, Annex X is modelled after UPOV 1991, hence the criteria for obtaining protection defined in Articles 4 to 8 of Annex X are similar to the terms in Articles 5 to 9 of the UPOV 1991 (see Box 4).

Article 5(2) of UPOV 1991 explicitly states that the “grant of the breeder’s right shall not be subject to any further or different conditions”, provided that the variety is designated by a denomination and the applicant complies with the formalities required by the law of the contracting party.

As mentioned in Chapter 1, the UPOV Convention was developed taking into account the agricultural systems of developed countries, especially the European nations. As Annex X is based on the Convention, it fails to outline conditions suitable for the agricultural system prevailing in the OAPI region, which is dependent on “farmer-managed seed systems” and farmers’ varieties. The application of the novelty requirement would generally exclude from protection farmers’ varieties.⁹⁷ The requirements of uniformity and stability exclude from protection varieties such as landraces or farmers’ varieties that are more heterogeneous and variable, which are crucial for food security especially in risk-prone areas.⁹⁸ These criteria also raise concern about the erosion of the genetic base and diversity.

The TRIPS Agreement does not specify the criteria to be applied to grant PVP. Several countries (e.g., India, Thailand, Malaysia) have used this policy space to implement PVP systems that recognize the importance of promoting and protecting heterogeneous and farmers’ varieties, while applying NDUS standards to commercially bred varieties.

PROCEDURE FOR THE GRANT OF A PLANT VARIETY CERTIFICATE

Filing of PVP Application

In addition to the substantive requirements described above, Annex X also sets out procedures to be fulfilled in order to obtain the grant of PVP.

Box 5

PROTECTION OF KNOWN VARIETIES

As a transitional arrangement under Annex X, the novelty criterion is waived for “protection of known varieties” (Article 52, Annex X). This article is supposed to be a temporary arrangement which allows a PVC to be issued for a variety that is no longer new on the date of entry into force of the Annex (i.e., 1 January 2006). However, to qualify for protection, several conditions have to be met: (a) the application shall be filed within the year of the abovementioned date; and (b) the variety must (i) have been entered in the national catalogue of varieties passed for marketing of an OAPI member state or of a member of UPOV or in a variety register kept by a professional association; (ii) have been the subject of a PVC in a contracting party, or of a PVC application in a contracting party, on condition that such application leads to the issue of a certificate; or (iii) be the subject of documents confirming, to the satisfaction of the Organization, the date on which the variety ceased to be new within the meaning of Article 5 of Annex X.

Article 52(2) requires the duration of protection to be reduced by the number of years that have elapsed between the time at which the variety was first offered for sale or distributed and that at which the application was filed. Further, where a PVC is issued under this article, the owner may not prohibit exploitation by any third party who was exploiting the variety in good faith prior to the filing of the application.

An application for PVP may be filed with the ministry responsible for industrial property of each member country of OAPI or directly with the Organization itself at its headquarters in Yaoundé.⁹⁹ In the first case, the person in charge of the file at the ministry draws up a record, of which a copy is given to the applicant, recording the filing and date and time on which the documents were submitted. The ministry is required to transmit the application to OAPI within five working days of the filing date. In the second case, the competent official of OAPI also draws up a record containing the abovementioned indications.

The application must be accompanied by proof of payment of the required fees¹⁰⁰ (see Table 1) and shall contain:¹⁰¹

- the name and other prescribed information relating to the applicant, the breeder and, where appropriate, the representative if any;
- identification of the botanical taxon (Latin name and common name);
- the denomination proposed for the variety or a provisional designation; and
- a succinct technical description of the variety.

Table 1 – FEES APPLICABLE TO PLANT VARIETY PROTECTION IN THE OAPI REGION¹⁰²

Applicable Taxes	Tax Amount (FCFA–XOF/XAF) ¹⁰³ (1 € = 656 XOF/XAF)	Tax Amount (€)
Taxes for the obtainment of plant variety certificate		
Application fee	590,000	900
Fee for publication of the application and the proposed denomination	50,000	76
Denomination proposal fee when it is not included in the application	100,000	153
• Change of denomination tax	120,000	183
• Priority claim fee (by priority)	110,000	168
• Substantial error rectification fee, per error	40,000	61
• Denomination objection fee	150,000	229
• Plant variety certificate publication fee	75,000	114
• Fee for filing a claim (before the High Commission of Appeal)	960,000	1,463
• Tax for official copy of variety description (per official copy)	100,000	152
• Information tax	70,000	107
Tax relating to technical examination		
• When examined in field, per cycle of experimentation	625,000	953
• In case of simplified examination	PM ¹⁰⁴	
a) Tax for using technical examination results from a non-OAPI service (buying a DUS test result)	PM	
• When the examination is not carried out in the OAPI region: single tax plus the amount of taxes invoiced by the foreign service	PM	
b) Tax for the maintaining of the variety (per production cycle)	PM	
Annual taxes to keep the certificate valid		
First annuity	250,000	381
Second annuity	250,000	381
Third annuity	250,000	381
Fourth annuity	250,000	381
Fifth annuity	250,000	381
Sixth to twentieth or twenty-fifth annuities	300,000	457
Additional fee for late payment	70,000	107
Fee for the issue of annual payment invoice	110,000	168
Tax for rights restoration		
a) In the case of a priority claim		991
• Fault attributable to the proxy	650,000	
• Fault attributable to an applicant or to any other circumstance	375,000	572
b) In the case of forfeiture due to non-payment of an annuity within the prescribed period:		
• Fault attributable to the proxy	650,000	991
• Fault attributable to the applicant or to any other circumstance	375,000	572
Taxes concerning the Special Register of New Plant Varieties		
Registration or cancellation fee in the Special Register of New Plant Varieties	265,000	404
Fee for issuance of a copy of the registration statement or cancellation or negative registration certificate	100,000	152
Extension taxes (when the PVP right is requested to be extended to a new OAPI member and vice versa)		
• From a new state to OAPI	250,000	381
• From OAPI to a new state	125,000	191
• Fee for extension delay	50,000	76
Other taxes		
Change of agent tax	90,000	137

A key concern is the lack of mechanisms and safeguards in the PVP application process against misappropriation of genetic resources. The CBD and Nagoya Protocol (see Box 1) have well established that access to genetic resources is subject to prior informed consent and fair and equitable sharing of benefits arising from the utilization of genetic resources. The ITPGRFA also recognizes as a Farmers' Right, equitable benefit sharing arising from the utilization of plant genetic resources. In multiple fora, developing countries, in particular African nations, have recognized intellectual property applications as an important checkpoint to monitor and enhance transparency with regard to utilization of genetic resources to address misappropriation of such resources. And yet, in Annex X there is no requirement on the PVP applicant to disclose information on the source of the plant variety for which protection is sought as well as to provide evidence of prior informed consent and fair and equitable benefit sharing.

An example of a disclosure obligation in the context of PVP legislation is Article 18(1) of the Indian Protection of Plant Varieties and Farmers' Rights Act 2001, which stipulates that an application for registration must:

"... (e) contain a complete passport data of the parental lines from which the variety has been derived along with the geographical location in India from where the genetic material has been taken and all such information relating to the contribution, if any, of any farmer, village community, institution or organization in breeding, evolving or developing the variety;...

"(h) contain a declaration that the genetic material or parental material acquired for breeding, evolving or developing the variety has been lawfully acquired..."

Similar provisions are also found in other PVP legislations.¹⁰⁵ Such provisions are however opposed by UPOV.¹⁰⁶ Given UPOV's influence in the development of Annex X, the exclusion of mechanisms and safeguards protecting the interests of farmers in the OAPI region is unsurprising.

Publication of Application and Objections to the Issue of PVC

Article 16 of Annex X requires OAPI to publish a notice of filing of the application containing at a minimum:

- the name and other prescribed information relating to the applicant, the breeder and, where appropriate, the representative if any;
- identification of the botanical taxon (Latin name and common name);
- the denomination proposed for the variety or a provisional designation.

Upon publication, any person may file with OAPI written and reasoned objections to the grant of PVP, subject to payment of a fee (see Table 1),¹⁰⁷ on the grounds that the variety is not new, distinct, uniform or stable or that the applicant is not entitled to protection. The applicant has a right to respond to the notice of objection. If there is a request, the OAPI secretariat may hold a hearing with the objector and/or applicant. The secretariat decides on the objection and its decision may be appealed to the High Commission of Appeal within 30 days from notification of the decision to the parties concerned.

It is troubling that only limited information about an application is made public, making objections unfeasible. Unlike in other countries, the objector does not have access to the relevant documents, including the results of the technical examination and the variety description.¹⁰⁸

Worse still, Article 20 of Annex X states that applications "shall be kept secret" by the OAPI secretariat and any "administration and institution involved in the procedures", adding that "[n]o information relating to the applications may be published without the consent of the breeder, except in special cases determined by the Organization" (i.e., the OAPI secretariat).

This is not a requirement of UPOV 1991, and is heavily biased in favour of applicants and against public interest. It conveniently allows withholding of important information with regard to breeding and development of a variety (see also the discussion in Chapter 4, Section 4.1).

In the patent system, applicants are entitled to 20 years of patent protection from the filing date. In return, patent applications must be published and disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by a skilled person, including the best way of working the invention. This is to ensure that others have the technological information necessary to develop the invention especially after the expiry of patent protection. Similar principles should apply to PVP.

The confidentiality clause effectively enables the applicant to maintain control over information contained in the application, presumably even after expiry of the protection, preventing transfer of technology and knowledge to local entities. It also facilitates misappropriation of genetic resources. Since PVP applicants are entitled to extensive rights, their applications should be publicly available, with breeders required to make full disclosure including complete passport data and disclosure of origin of the genetic material used to develop the new varieties. There is no reasonable justification for the confidentiality provision, which also hinders filing of objections to the applications.

Examination of the Application

Examination of the application is done in two steps. The first consists of verifying whether the application meets the formal requirements. The second is a technical examination of the variety, on the basis of growing trials and other tests to examine *inter alia* if the variety is distinct, uniform and stable. The cost of the technical examination is borne by the applicant.¹⁰⁹

Article 18 of Annex X states the technical examination is to be conducted by an authorized institution approved by the Organization.¹¹⁰ It is further clarified by OAPI Secretariat, that the technical examination may be conducted by an institution in OAPI member states or OAPI may simply purchase the examination results from UPOV members or entrust the examination of the variety to a non-member state of OAPI.¹¹¹ Foreign test results however raise the issue of relevance given the different breeding and cultivation environments.

OAPI claims that the identification of the authorized institution takes place on the basis of criteria adopted by OAPI, including that the institution has the relevant facilities and competence, and the final selection is made after OAPI has audited the identified institutions.¹¹² As at September 2017, OAPI had desig-

nated two public research institutes for purposes of technical examination, the Institute of Agricultural Research for Development (IRAD) of Cameroon and the Senegalese Institute for Agricultural Research (ISRA). However, as explained in the next chapter, these institutes have yet to conduct any technical examination.

Where the OAPI secretariat determines, as a result of the technical examination of the variety, that the variety satisfies the substantive conditions, and is new, distinct, uniform and stable, and that a denomination can be allocated, it issues a PVC to the applicant.¹¹³ Thereafter the Organization is to publish a notice of issue of PVC, register the PVC and make copies of the variety description available to the public, on payment of the prescribed fee.¹¹⁴

3.3 – RIGHTS CONFERRED BY A PLANT VARIETY CERTIFICATE

SCOPE OF BREEDERS' RIGHTS

A PVC confers on its owner the exclusive right to exploit the variety to which it relates and the right to prohibit any person from exploiting the variety. Exploitation is defined as acts carried out in relation to propagating material of a protected variety: (a) production or reproduction; (b) conditioning for the purpose of propagation; (c) offering for sale; (d) sale or other marketing; (e) export; (f) import; or (g) stocking for any of the purposes mentioned in (a) to (f) above.¹¹⁵

This extensive scope of rights is based on the requirements of UPOV 1991 and such rights extend to harvested material obtained through unauthorized use of the propagating material of the protected variety, unless the breeder has had reasonable opportunity to exercise his right in relation to the said propagating material.¹¹⁶ UPOV 1991 also offers the option of further extending the rights to products made directly from harvested material of a protected variety (e.g., soya flour, sunflower oil) through unauthorized use of such harvested material, except where the breeder has had reasonable opportunity to exercise his right in relation to the said harvested material.¹¹⁷ Accordingly, Article 29(2) and (3) of Annex X also applies breeders' rights to the harvested material and products from such material.

In addition, following UPOV 1991, Article 29(4) further applies breeders' rights to: (a) varieties which are essentially derived from the protected variety, where the protected variety is not itself an essentially derived variety; (b) varieties which are not clearly distinguishable in accordance with Article 6 from the protected variety; and (c) varieties whose production requires the repeated use of the protected variety.

The provision on essentially derived varieties (EDVs) – a concept introduced by UPOV 1991 – has become one of the UPOV Convention's most problematic provisions for interpretation and application by administrative authorities and judges.¹¹⁸ The determination of when a variety is an EDV is complex; there are divergent approaches and uncertainties remain in determining EDVs.

Annex X based on UPOV 1991 explains that EDVs “may be obtained for example by the selection of a natural or induced

mutant, or of a somaclonal variant, the selection of a variant individual from plants of the initial variety, backcrossing, or transformation by genetic engineering”.¹¹⁹

A variety that is deemed to be an EDV cannot be commercialized without the authorization of the right holder of the initial variety (from which the EDV was derived). This means that the application of the EDV rules may reduce competition between breeders, as they risk the possibility of being prevented from commercializing a new variety if it is found to be an EDV.¹²⁰

EDVs may be highly problematic in developing countries not only because of the practical difficulties in establishing when a variety qualifies as an EDV. EDVs introduce limitations that threaten the informal seed sector. Farmers are no longer able to freely use protected varieties for further breeding because in certain circumstances (e.g., breeding through selection, mutants), authorization of the right holder will be needed to exploit the newly bred variety. This may adversely impact the ability of farmers to adapt protected varieties to local conditions, thus enhancing farmers' vulnerability and threatening food security.¹²¹

The EDV rules also introduce a double standard since they apply only to protected varieties used as an initial source of derivation, while in cases where a farmer's variety is used to develop a new variety which is essentially derived, the breeder can obtain an independent title and is not subject to any limitation on commercialization of his new variety.¹²²

3.4 – EXCEPTIONS TO BREEDERS' RIGHTS

Certain acts are excluded from the scope of breeders' rights. Article 30 of Annex X lists five categories of such acts that do not require the breeder's consent:

- a) acts done privately for non-commercial purposes;
- b) acts done for experimental or research purposes;
- c) acts done for the purpose of breeding other varieties, and except where the provisions of Article 29(4) apply, acts mentioned in Article 29(1) to (3) that are performed in relation to such other varieties (also referred to as “breeder's exemption”);
- d) use by a farmer on his own holding, for propagating purposes, of harvested material he has obtained by cultivating, on his own holding, a protected variety or a variety essentially derived from the protected variety or a variety covered by Article 29(4)(a) or (b); this exception (also referred to as “farmer's privilege”) shall not apply to fruit, forestry or ornamental plants;
- e) acts carried out by any third party in good faith prior to the filing of the application for a plant variety certificate.

These exceptions are drawn from Article 15 of UPOV 1991 and hence UPOV's interpretation of its provisions is especially relevant, in the absence of any other explanation or interpretation offered by Annex X.

With regard to acts done privately for non-commercial purposes, Annex X does not specify which acts are covered by the exception. In its explanatory notes,¹²³ UPOV indicates that “acts

which are *both* of a private nature and for non-commercial purposes are covered by the exception. Thus, non-private acts, even where for non-commercial purposes, may be outside the scope of the exception” (emphasis in original).¹²⁴ The explanatory notes further state that the exception “could allow, for example, 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”. UPOV adds: “Equally, for example, 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.”

Exchange of seeds among farmers as well as sale of seeds in local farmer markets for propagating purposes would not be permissible in the context of UPOV 1991 as UPOV’s explanatory notes explicitly mention “exclusive use in his own garden (i.e. no material of the variety being provided to others)”. UPOV has found provisions in national legislation in Malaysia,¹²⁵ the Philippines¹²⁶ and Myanmar¹²⁷ that allow farmer exchanges and sale to be inconsistent with UPOV 1991.¹²⁸

Generally the breeder’s exemption is an important exception, as it allows improvement of plant varieties by third parties without the authorization of the right holder of the original variety. However, since Annex X borrows the UPOV 1991 exemption, it is limited. UPOV 1978 would have offered a significantly better breeder’s exemption as it allows the use of the protected variety as an initial source of variation for the purpose of creating other varieties and marketing of such varieties. The authorization of the right holder is required only in cases where repeated use of the protected variety is “necessary” for the commercial production of the newly bred variety.

In contrast, the breeder’s exemption under UPOV 1991, incorporated in Article 30(c) of Annex X, requires the authorization of the right holder of the protected variety for purposes of commercialization in the following cases: the newly bred variety is an EDV, or its production requires the repeated use of the protected variety, or the newly bred variety is not clearly distinguishable from the protected variety. In short, other countries that are using the broader exemption of UPOV 1978 would enjoy greater benefits than the member states in the OAPI region.

The farmer’s privilege exception allows farmers to save and reuse on their own holding the product of the harvest obtained by planting the protected variety on their own holding. Under UPOV 1991, this exception is optional and may be applied “within reasonable limits and subject to the safeguarding of the legitimate interests of the breeder”, meaning that the practice of reusing seed/propagating material of a protected variety on one’s own holding may be subject to payment of remuneration to the breeders. The abovementioned qualification has not been incorporated into Article 30 of Annex X and neither is there mention of payment of remuneration in Annex X. This presumably means that farmers may save seeds of a protected variety for reuse on their own holding without paying any remuneration to the right holder. This is a valid approach practised in other countries.¹²⁹

However, the scope of the exception is limited as the exception is not applicable to “fruit, forestry or ornamental plants” such as bananas, mangoes, shea etc. It is noteworthy that this limitation is not a requirement of UPOV 1991 but rather derived from UPOV’s guidance, which is not binding on UPOV members.¹³⁰ The limitation also reduces the benefit farmers may gain from the exception, in contrast to other countries that may not apply such a limitation.

The acts of freely saving, using, exchanging and selling farm-saved seed/propagating material are essential components of Farmers’ Rights. The importance of these rights in the OAPI region cannot be overstated given that seed/propagating material are mainly sourced through the informal seed sector, through farmer exchanges and local markets. The provisions on exception in Annex X however do not recognize the right of farmers to freely exchange and sell farm-saved seed/propagating material. Even the exception on saving and reusing farm-saved seed on the farmer’s own holding as well as the breeder’s exemption are subject to several restrictions.

3.5 – RESTRICTIONS ON THE EXERCISE OF THE BREEDER’S RIGHT, NULLIFICATION AND INVALIDATION

Article 36 of Annex X allows an OAPI government to authorize exploitation of the protected variety by the state or by a third party designated by the government, without the consent of the PVC holder. This provision is commonly known as a compulsory licence. Article 36 allows such licences, subject to payment of equitable remuneration, where:

- the public interest, particularly the food supplies of the member state concerned or public health, so demands; or
- a judicial or administrative body has ruled that the manner in which the owner of the PVC or his licensee exploits the variety is anti-competitive and the government is convinced that the use of the variety will remedy the practice.

Article 36(2) adds that the government may require the PVC holder to make available to the relevant state service or designated third party, against payment of suitable remuneration, the quantity of propagating material required for reasonable use to be made of the authorization to exploit. The consequences for the PVC holder of failing to make available the propagating material are unclear.

Article 36(1)(c) places conditions on the government authorizing the use of the protected variety, i.e.:

- the owner of the PVC has been put on formal notice to remedy the situation and has not taken the necessary steps within the prescribed time limit;
- the relevant state service or the designated third party is in a position to exploit the variety in a competent and efficient manner;
- three years have elapsed between the date of issue of the PVC and the date of the decision.

Additionally, sub-paragraph (6) of Article 13 of Annex X limits the exploitation of the variety to “serve exclusively to supply the domestic market of the member State”. These conditions are not required by the TRIPS Agreement nor UPOV 1991, and merely hinder effective use of the safeguard provided by Article 36.

Finally, before the decision on a compulsory licence is taken, all parties are required to be heard, and the decision may be appealed to the competent administrative court, according to Article 36(7) of Annex X. There is no provision clarifying that an appeal would have no suspensive effects. This opens up an avenue for the PVC holder to challenge the grant of compulsory licence and prevent its execution.

INVALIDATION AND NULLIFICATION

A PVC may be invalidated on filing of a request by any person with the OAPI Director General. However, Article 40 of Annex X suggests that invalidation proceedings are to be handled by the court, which is to invalidate the PVC if it is established that the variety does not meet the NDUS criteria or the PVC has been granted to a person not entitled to it. An invalidated PVC shall be deemed to be invalid as of its date of issue.

OAPI may also forfeit the PVC pursuant to Article 41 if it is established that the holder has not maintained the protected variety or its components during the validity of the certificate; has failed to provide OAPI or any designated authority the information, documents or material deemed necessary for verifying the maintenance of the variety; or has failed to propose a relevant denomination. Forfeiture shall take effect on the date of its registration and OAPI shall publish a notice thereof.

3.6 – INFRINGEMENT

Annex X has extensive provisions dealing with infringement and other unlawful acts that, among others, stipulate injunctions, civil damages, criminal sanctions and seizures. According to Article 43, violating the exclusive rights of the PVC holder “constitutes an infringement”. Article 43(2)(a) gives the court authority, at the request of the owner of the PVC or the licensee, to grant an injunction “for cessation of the infringement or prevention of an imminent infringement or the committing of an act of unfair competition referred to in Annex VIII”,¹³¹ in addition to damages and any other remedy provided for in domestic legislation. The court also has the authority to award the same remedies as in the case of an act of unfair competition referred to in Annex VIII (Article 43(2)(b)).

Further, any person who “knowingly” commits infringement (i.e., violates the exclusive rights of the PVC holder) or an act of unfair competition within the meaning of Annex VIII shall be guilty of an offence and is liable to a fine of between 1,000,000 and 3,000,000 CFA francs or to a prison term of between one month and six months or both without prejudice to civil damages.

Article 44 of Annex X allows PVC holders to obtain “an order from the presiding judge of the civil court within the jurisdiction of which the action is to be taken” for the seizure of the

allegedly infringing objects by bailiffs or public or judicial officers, including customs officers. Such an order can be given “on a simple request and on presentation of the plant variety certificate and proof that it has not been invalidated or forfeited” (Article 44(2)). The petitioner may have to provide a security deposit (especially in the case of requests from a foreigner) (Article 44(3) and (4)) and has to institute civil or criminal proceedings within 10 working days, failing which the seizure will become null and void (Article 45 of Annex X).

The court may order the infringement-related items to be confiscated and, where appropriate, destroyed or handed to the PVC holder where such action is necessary “to act as a deterrent to infringers”, or “to safeguard third-party interests” (Article 46(1)). The court may also order that the devices or means specially intended for the perpetration of the infringement be confiscated and that the sentence be made public (Article 46(2)), and that the infringing items and the devices or means that have been confiscated may be sold by public auction for the benefit of the state (Article 46(3)).

Article 51 of Annex X states that any person who knowingly uses a variety denomination in violation of Article 23(4) or who in violation of Article 23(5) fails to use a variety denomination shall be liable to a fine of between 400,000 and 1,000,000 CFA francs.

A major concern with the infringement provisions contained in Annex X is the application of criminal sanctions. Infringement of the conferred rights should only give rise to civil remedies. Criminal sanctions are not required under the TRIPS Agreement except in cases of wilful trademark counterfeiting or copyright piracy on a commercial scale.¹³² Such sanctions are also not justified because the rights conferred are private rights and the losses generated by an eventual infringement can be compensated through monetary payments.¹³³ In most countries (including the developed countries), no criminal sanctions are provided for in the area of PVP as well as in other areas of intellectual property, such as patents.¹³⁴

The TRIPS Agreement also does not require border measures including seizures by customs officials in cases of PVP infringement. Further, the infringement provisions lack appropriate safeguards. For instance, while a permanent injunction would normally be granted when infringement has been found, it should not be issued in cases of innocent infringement or where the refusal of a permanent injunction would be justified in the public interest.¹³⁵ The former is especially important to protect innocent farmers who unknowingly become involved in PVP infringements.¹³⁶ In the case of compulsory licensing of a registered new plant variety for government use pursuant to Article 36 of Annex X, remedies should be limited to remuneration in the case of government use.

4

Functioning of the OAPI PVP system

This chapter analyzes the functioning of the OAPI PVP system. The entry into force of Annex X on 1 January 2006 marked the beginning of the operationalization of the system, with acceptance of applications and the issuance of protection certificates. As explained in Chapter 3, to obtain protection, PVP applications need to comply with the formal requirements and undergo technical examination to assess whether the variety meets NDUS standards. Going beyond this theoretical explanation, this chapter examines the overall status of plant variety protection in the OAPI region, the practice of technical examinations at OAPI and the role of national authorities in the system.

For this concrete analysis of the OAPI PVP system, four main points will be examined: (i) access to information; (ii) the status of PVP applications and grants since Annex X became operational; (iii) the novelty of the protected varieties; and (iv) the conduct of DUS tests.

4.1 – ACCESS TO INFORMATION

In order to establish the inventory of all PVP applications and grants at OAPI, it is first important to assess the availability and accessibility of information around its system. In this regard, we sought access to the list of protected varieties. The reality is that this list is available but very difficult to access. This is due, in the first place, to the fact that OAPI started publishing the official PVP bulletin on its website only very recently in 2017. Only the latest issue, the sixth in the series and which was published in December 2017, is available online.¹³⁷ Unlike with the patents bulletin, which is published regularly and accessible on OAPI's website, a request to the OAPI Information Service is necessary to obtain previous issues of the PVP bulletin.¹³⁸ This centralization of information at OAPI headquarters in Yaoundé places the citizens of OAPI's member countries in a very difficult situation with regard to regular access to information on the PVP system of their countries.

The OAPI secretariat has an obligation to publish information on varieties submitted for protection before and *after* considering the PVP application. According to Article 16 of Annex X, as mentioned in Chapter 3, before examining the PVP application, OAPI shall publish a notice on the receipt of the applica-

tion, which is to include at least the following information: (i) name and other required information relating to the applicant, the breeder and the representative; (ii) identification of the botanical taxon (Latin name and common name); and (iii) the denomination proposed for the variety or a provisional designation. This information is to be published in the PVP bulletin as a measure of transparency as well as to enable implementation of Article 17, which allows any person to oppose the application on the basis that the variety does not comply with the NDUS criteria or the applicant is not entitled to PVP.

As for information to be provided after examining the PVP application, Annex X requires OAPI to publish a notice of either rejection of the application (Article 21) or grant of a PVC (Article 22(2)(a)). In the event of grant of a PVC, OAPI is required to make available copies of the variety description to the public against payment of a prescribed fee, which, as shown above in Table 1, is a prohibitive 100,000 CFA francs or €152.

OAPI claims to comply with these requirements by producing regular bulletins on new plant varieties, but has to date, even after more than 10 years of implementation of the PVP regime, failed to systematically make the bulletins available to the public via its website.

Article 16 of the main text of the Bangui Agreement states that OAPI shall maintain for all member states a Special Register of New Plant Varieties; any person may consult the register and obtain extracts therefrom on the terms specified in the Implementing Regulations. However, information about this register and how to access it is not readily available.

Transparency is at the heart of any functioning intellectual property system. OAPI's failure to fully implement the basic transparency provisions of the the Bangui Agreement (which, as shown in Chapter 3, are inadequate in the first place) suggests a system that is failing to serve OAPI members expectations on the the region's development interests.

4.2 – STATUS OF PVP APPLICATIONS AND GRANTS SINCE THE ENTRY INTO FORCE OF ANNEX X

Two editions of the official PVP bulletin (No. 05, 1 September 2015 (received from the OAPI secretariat) and No. 06, 15 Decem-

ber 2017 (accessed online)) do not provide a complete description of PVP applications and grants in the OAPI region. However, we obtained information from the OAPI secretariat on all PVP applications filed at OAPI from 2006, when Annex X entered into force, to 31 December 2016.

Based on this information, during the period in question, OAPI received 122 applications from seven member states (Mali (54), Cameroon (24), Senegal (11) Burkina Faso (7), Togo (7), Cote d'Ivoire (4) Benin (1)) and two foreign countries (France (14), Germany (1)).

From the 122 applications, OAPI issued 117 PVCs. Of these, 51 are currently in force (see Annex 1), while 66 have lapsed (see Annex 2) due to non-payment of annual maintenance fees (i.e., 250,000 CFA francs or €381 for each variety) as required by Article 33.2 of Annex X (see Chapter 3).

From Table 2, it is apparent that some 80% of PVP certificates in force are held by public institutions. This shows that the OAPI PVP system modelled on UPOV 1991, even after over 10 years of implementation, has yet to attract any significant private and foreign investment in plant breeding in OAPI countries. In addition, no royalties or licence fees were generated by public institutions by obtaining PVP, further invalidating any argument that the UPOV model would enable public institutions to recoup their investments. These issues are further discussed in Chapter 5.

Lapsed PVP certificates represent more than 50% of the total number of PVCs granted and were mainly held by public research institutes. 50 of these lapsed certificates, i.e. 80% of the lapsed certificates, were held by the Institute of Rural Economy (IER), the public agricultural research institute of Mali, all of whose varieties (re)fell in the public domain for its failure to pay annual maintenance fees.

4.3 – HOW NOVEL ARE THE PROTECTED VARIETIES?

The list of OAPI protected varieties reveals that many of the varieties are not new varieties made available by the system. Also evident, as will be explained below, is the inefficiency of the system from a technical, legal and administrative point of view.

Many of the varieties protected by the public research institutes of OAPI member countries were already available in these countries for several years and, in some cases, even before the introduction of the OAPI PVP system. As Annex X entered into force, the OAPI secretariat appealed to member countries to protect existing varieties under transitional arrangements provided for in Article 52 of Annex X.¹³⁹

As explained in Chapter 3, Article 52 concerns “protection of known varieties”. It waives the requirement of novelty but to qualify for protection, several conditions must be met. One condition is that the application must be filed within the year following the entry into force of Annex X, which means that all applications for the protection of known varieties would need to have been filed by 2007, given that Annex X entered into force on 1 January 2006. However, this condition was not met by known varieties of Cameroon, Mali and Senegal where the public institutions concerned filed applications only in 2009 and 2010 and yet were granted protection. Obviously OAPI has failed to comply with its own requirements under Annex X concerning the grant of PVP for known varieties. There is also no evidence that other conditions and requirements of Article 52 have been met.

All of the 17 varieties protected by IRAD of Cameroon had been in the public domain for many years, sometimes decades (see Annex 1).¹⁴⁰ Certain varieties from this country are also

Table 2 – SUMMARY OF THE PVP CERTIFICATES IN FORCE

Source: See Annex 1

TOTAL NUMBER OF PVP CERTIFICATES IN FORCE: 51 PVCS ON 51 VARIETIES OF 17 CROPS

Public vs. private right holders		Foreign vs. domestic right holders	
Public	Private	Foreign	Domestic
9 PVC holders: ISRA, CIRAD, IRAD, SODECOTON, INERA, ITRA, CNRA, INRAB, MESRS	3 PVC holders: Tropicasem SA, Technisem and Monsanto	Only one foreign entity obtained PVP certificates on its own: Technisem (France)	9 PVC holders: ISRA, Tropicasem SA, IRAD, SODECOTON, INERA, ITRA, CNRA, INRAB, MESRS
39 PVP certificates, representing 76% of total certificates in force, are held by public entities.	10 PVP certificates, i.e. 20% of certificates in force, are held by private entities.	4 certificates, representing 8% of certificates in force	30 certificates, representing 59% of certificates in force
2 certificates are jointly held by public and private entities: INERA (public), AICB (parastatal) and Monsanto (private). These represent 4% of certificates in force.		17 certificates are jointly held by foreign and domestic entities (33% of certificates in force).	

included in the Economic and Monetary Community of Central African States' (CEMAC) common catalogue of species and varieties of food crops.¹⁴¹ This catalogue gives details about the year of creation of these varieties and the year of their introduction in countries other than the country of origin. For example, three protected corn varieties from Cameroon were developed in 1985 (CMS 85-01), in 1987 (CMS 87-04) and in 1992 (CHC 201). CMS 85-01 and CMS 87-04 were introduced in Cameroon and Chad between 1986 and 1989, in the Central African Republic in 1988 and in Congo in 1988 (CMS 87-04) and 2007 (CMS 85-01). Protected varieties of cassava were developed in the 1980s and have been available since 1986. The two protected varieties of sweet potato were developed in 1970 and 1986 respectively.

The known varieties from Mali that were granted protection include millet varieties Toroniou C₁ (registered in the Malian catalogue in 1994) and Indiana 05 (registered in 2002); cowpea variety Dounanfana (registered in 1998); sorghum variety Seguifa (registered in 1993); and corn varieties Zanguereni (registered in 1987) and Sotubaka (registered in 1995).¹⁴² These varieties are, however, no longer protected as the Malian public institute IER had ceased payment of maintenance fees to keep the certificates valid.

Through our field visits and research, we were able to identify 24 known varieties among the 51 varieties currently under protection, representing 47% of the total. This figure could have been even higher had we been able to identify the date of availability for the 27 remaining varieties.

Varieties developed by the French private seed company Technisem and its subsidiary Tropicasem SA are all registered in the national seed catalogue of Senegal. However, this catalogue does not contain the date of creation for any of Tropicasem/Technisem's varieties, unlike those of the Senegalese public institute ISRA. Our requests to the director of Tropicasem in Dakar for the dates of creation of the varieties were unsuccessful. However, as shown in the next chapter, the novelty of several of the protected varieties held by them is questionable.

4.4 – DUS TESTING IN THE OAPI SYSTEM

Two centres of excellence have been identified and selected in OAPI member countries for the conduct of DUS testing as part of the review of PVC applications: IRAD in Cameroon and ISRA in Senegal. Both are expected to conduct DUS tests for OAPI, but as at September 2017, no tests had been performed in/by these centres.

During our field visit to Cameroon in March/April 2017, the OAPI focal point at IRAD conveyed that everything was still at the theoretical stage, stating “the staff are being trained and the equipment purchased ... There are technical sheets for each variety and an official protocol available on the UPOV website that should be followed when the tests become operational ... but we haven't done anything so far...”¹⁴³ In the case of ISRA, its website states it began to “experiment with DUS testing for groundnut” in October 2017.¹⁴⁴

In Mali, DUS tests are required to register varieties in the national seed catalogue. As 53 registered varieties from Mali

were protected under the OAPI system, we hypothesized that OAPI would have relied on national test results to grant protection. We found, however, that DUS tests were never carried out for the varieties' registration in Mali.¹⁴⁵ When asked about this, a secretariat staff member dealing with PVP issues at OAPI was not able to indicate where the DUS tests were conducted for these varieties.¹⁴⁶

Similarly in Niger¹⁴⁷ and OAPI countries with PVC holders (Burkina Faso, Cote d'Ivoire and Togo), national systems of DUS testing, usually linked with the registration of varieties in the context of regional variety marketing regulations,¹⁴⁸ have long been non-functional.

The main conclusion that can be derived with regard to the question of technical examination is that OAPI does not perform DUS testing before granting PVP. This is based on three main findings: (i) the lack of clear answers from the OAPI secretariat on how and where DUS testing is conducted;¹⁴⁹ (ii) DUS testing at IRAD and ISRA, centres of excellence selected by OAPI, has yet to be fully operational; and (iii) non-functional DUS testing in OAPI countries with PVC holders.

During our field visit, the OAPI secretariat informed us that for two PVP applications under examination in April 2017, OAPI was considering the possibility of buying DUS test results from a foreign jurisdiction such as Germany as allowed by Article 18.5 of Annex X. Reliance on foreign DUS test reports raises the issue of the relevance of such examination for OAPI member countries where the variety is intended to be grown, given the variations in environmental conditions.

5

Impact of the UPOV 1991 model in the OAPI region

This chapter examines the impact of the PVP system in the OAPI countries more than 10 years after Annex X came into force. To analyze the impact of such a system, it is important to recall the “benefits” articulated unequivocally by advocates of the UPOV system. According to UPOV, the aim of this system is “to provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society”.¹⁵⁰ Thus, the stated objective is to encourage innovation in the field of plant breeding. Accordingly, an issue examined by this chapter is whether Annex X has indeed stimulated this innovation in the OAPI region and, consequently, significantly increased the availability of new varieties, including foreign new varieties, in the region.

This chapter also discusses whether the prevailing PVP system has increased breeding activities in the region, including foreign investment in breeding, and encouraged the development of a competitive seed industry as often maintained by proponents of the UPOV model.¹⁵¹

A purported advantage of UPOV often highlighted is the elimination of barriers to trade in varieties, thereby extending the scope of national and international markets, on the assumption that “breeders are unlikely to release valuable varieties into a country without adequate protection”.¹⁵² The availability of high-performing varieties selected abroad would offer farmers “more scope to improve their production and also to export their products” and also provide breeders with access to these valuable varieties for use in their breeding programmes.¹⁵³ The PVP system is also said to be a means for technology transfer and an effective use of genetic resources.¹⁵⁴

In addition, it is asserted that a UPOV-style PVP system will produce benefits at all levels of society, including economic, health and environmental benefits.¹⁵⁵ Economic benefits are claimed on the assumption that availability of high-yielding varieties would reduce the price of final products for consumers, while improved varieties would lead to higher-value products that are easier to market. The health benefits would be generated by the availability of varieties with better nutritional content, and the environmental benefits by the development of disease-resistant or stress-tolerant varieties.¹⁵⁶

In order for these benefits to be realized and for us to speak of the impacts of the protection system in general, the varieties

must first be available. Thus, the impact assessment of the OAPI system requires the evaluation of the availability of new varieties. There is also a need to assess the impact of the system on the improvement of breeding activities at national level but also on foreign investment in the seed sector and the development of a seed industry at national level.

5.1 – AVAILABILITY OF NEW VARIETIES, INCLUDING FOREIGN NEW VARIETIES

To assess this aspect, the number of PVP applications and grants would be relevant. As stated in Chapter 4, from the time Annex X became operational (on 1 January 2006) up to 31 December 2016, over an 11-year period, OAPI received 122 applications and issued 117 PVCs. Of these, 51 PVCs are currently in force, and 66 PVCs lapsed for non-payment of annual fees. Based on this, it would appear that OAPI has only processed an average of some 11 applications per year.

Chapter 4 also showed that many of the varieties (e.g., corn, cassava and sweet potato varieties protected by IRAD of Cameroon) have been in use in the OAPI region since the 1980s. At least 47% of the valid PVCs are for “known varieties” and arguably, this percentage may be much higher had it been possible to identify the date of availability for the remaining varieties.

Public institutions hold approximately 76% of the valid PVCs, with another 4% held jointly by public institutions and private entities. 80% of the lapsed PVCs were held by the public agricultural research institute of Mali alone. These public institutes have a mandate to develop varieties for societal benefit, and it would be reasonable to conclude that irrespective of the existence of the OAPI PVP system, the varieties would have been developed in any case.

This is all the more evident given that public and private breeders continue to develop new varieties without seeking PVP protection.¹⁵⁷ For instance in Mali, a participatory breeding project including farmers developed three new varieties of sorghum which are not PVP-protected but simply registered in the national catalogue to enhance farmers’ seed activities and make them available to the public.¹⁵⁸

Chapter 4 also revealed few foreign PVP applications¹⁵⁹ and even fewer PVCs granted to foreign entities. Furthermore, the novelty of several of these varieties is in question. This shows the extremely limited impact of the PVP system on introduction of foreign novel varieties in the OAPI region.

From the foregoing, it appears that in the OAPI region, a UPOV-based PVP system is not a prerequisite for the development or introduction of new varieties. Many of the protected varieties were already available before Annex X became operational and new varieties continue to be developed without PVP.

5.2 – BREEDING ACTIVITIES AND THE DEVELOPMENT OF A SEED INDUSTRY IN OAPI COUNTRIES

In the seven OAPI countries from where PVP applications have originated, the main breeders are public research centres. Of the 122 applications received by OAPI between 2006 and 2016, 103 were from public breeders, which applied either individually or jointly. This represents 84% of the applications filed. Of the 51 PVCs that are currently in force, the public sector holds or is involved in 41 PVCs, i.e., 80%.

The question is therefore whether this public sector breeding activity is attributable to the establishment of a UPOV-type protection system in the OAPI region. The answer to this question is negative. Breeding of varieties in the OAPI region has always been carried out by state bodies as a public service and these activities are publicly funded.¹⁶⁰ Moreover, Chapter 4 has demonstrated that a large number of the protected varieties were “known varieties”, widely disseminated by these public centres. In addition, we noted an increase in the number of varieties created by public institutions in the countries we visited, and for which PVP is not claimed.¹⁶¹ It is therefore clear that the dynamism of breeding activities in the public sector is in no way linked to the establishment of a PVP system in the OAPI region.

As for private sector breeding, we observed no meaningful increase in breeding activities in OAPI countries after the establishment of the PVP system. Private sector plant breeding continues to be largely non-existent in OAPI countries. Interest of foreign companies in investing in plant breeding seems limited as evidenced by the sparse use of the PVP system. Instead, public institutions are the main actors in plant breeding. The few private seed companies that are emerging are mostly engaged in seed distribution and marketing.¹⁶²

In the four countries we visited (Cameroon, Mali, Niger and Senegal), only one domestic private company (Tropicasem of Senegal) has used the OAPI system to protect its varieties, representing only 12% of the PVP certificates in force (6 out of 51). This company is, however, a subsidiary of Technisem, a French seed company.¹⁶³ Tropicasem has also set up a small company in Mali (Mali Semences) to sell its varieties.¹⁶⁴

Many of the protected varieties held by Tropicasem (chili, tomato, okra and onion) are listed in the Senegal national seed catalogue with no date of development provided. The availability of some of the company's varieties prior to PVP is well docu-

mented in West Africa. This is the case with Violet de Damani, which was derived from Violet de Galmi, an onion cultivar from the Galmi region (Niger) (see below), and Gombo Volta, which is an improved African traditional okra variety distributed in Senegal long before the entry into force of Annex X.¹⁶⁵

Plant breeding in the OAPI region is obviously not incentivized by its PVP system. Neither has the PVP system delivered on the establishment of a competitive seed industry in the region. Its contribution to foreign investment in breeding is also questionable. Instead, foreign seed companies may be misappropriating local varieties through the PVP system.

5.3 – MISAPPROPRIATION OF GENETIC RESOURCES

One criticism of the UPOV-based protection system is that there are no mechanisms that prevent misappropriation of genetic resources.¹⁶⁶ When applying for PVP, there is no requirement on the applicant to disclose the origin of the genetic material of the variety for which protection is being sought nor to prove prior informed consent and fair and equitable benefit sharing in access to the genetic material. This situation puts the varieties of farmers and local communities in OAPI countries at great risk of illegal appropriation.

A concrete example is the case of a farmers' variety of onion from Niger known as Violet de Galmi, which has been protected under the denomination of Violet de Damani. Niger is among the majority of OAPI countries where no PVP applications have yet been made. It was however the first country in the OAPI region to be negatively affected by a PVP application filed by a private company on a traditional variety of common knowledge.

The Violet de Galmi variety is native to Galmi, a village located on the edge of the Maggia Valley (500 km from Niamey) in Niger's onion-cultivating Ader region. Among the numerous varieties of onion, this cultivar has been selected by researchers for its yield (productive), taste (spicy), culinary (thick sauce) and long-lasting qualities.

In 2006, Tropicasem claimed ownership of Violet de Galmi. This claim was challenged by the Government of Niger, which had been alerted by its technical services, themselves informed by a national farmers' association which had obtained information in 2009 at a regional seed fair in Senegal.¹⁶⁷ After examining Niger's request, OAPI refused to attribute the PVP to Tropicasem under the denomination of Violet de Galmi. Hence, the seed company renamed its variety Violet de Damani and resubmitted its application to OAPI, which finally granted the PVP in 2015.

However, as the breeding work merely consisted of uniformization and stabilization of a local farmers' variety, the characteristics of Violet de Damani are the same as those of Violet de Galmi. In light of this, Niger has filed a new opposition, which has remained unanswered at the time of writing.¹⁶⁸

The biopiracy case of Violet de Galmi has been widely commented on, notably by the Coalition for the Protection of African Genetic Heritage (COPAGEN) and the national network of agricultural chambers of Niger (Réseau des Chambres d'Agri-

culture du Niger – RECA).¹⁶⁹ The dispute between the Government of Niger and Tropicasem raises fundamental questions about protection of farmers' varieties. OAPI only considered part of the problem related to the denomination of the variety. Farmers' varieties, which are the foundation of seed systems in the OAPI region, are not protected and they would fail to meet the DUS criteria. As in the case of Tropicasem, any commercial or public sector breeder may use any farmers' variety from the region for further selection, making it uniform and stable without changing the key characteristics, and then seek extensive rights over the variety through PVP.

This case highlights the inequities prevailing within the UPOV system, revealing also a conflict with implementation of the CBD and the ITPGRFA.¹⁷⁰ The need for safeguards against misappropriation of local plant genetic resources is now ever more compelling, given the significant advances in new technologies (sequencing etc.) that are accelerating biopiracy of such resources.

5.4 – PUBLIC INSTITUTIONS IN THE OAPI REGION

Public institutions from seven OAPI countries (Benin, Burkina Faso, Cameroon, Cote d'Ivoire, Mali, Senegal and Togo) filed the majority of PVP applications and these institutions are also the main holders of PVCs. At the outset, it is important to reiterate that the source of many of the varieties for which protection was sought is the farmer-managed seed system. A study of seed systems in West Africa, for which officials from the public sector Environment and Agricultural Research Institute (INERA) of Burkina Faso were interviewed, concluded:

“[T]he ‘improved’ varieties promoted today ... are developed on the basis of varieties created by farm communities over the centuries ... the scientific contribution to the creation of these varieties is in some cases minimal. In our discussions with farm communities, some respondents indicated that INERA agents had asked them for seeds of peasant varieties. The same researchers allegedly came back later offering seeds of the same variety as ‘improved’ seeds. In an interview, INERA representatives confirmed that the ‘scientific’ work on the development of a ‘new’ variety sometimes involves merely growing out and purifying genetic lines to obtain the greatest possible uniformity of crops derived from peasant seed. There is nothing scientific about this process per se ... INERA itself stated an objection to the fact that certain varieties ‘created’ by public research and registered in the national catalogue are now being produced by commercial seed companies and sold to peasants at high prices.”¹⁷¹

As public research institutions filed PVP applications presumably with a view to deriving some monetary returns from the PVP system, the costs and benefits of the system to these institutions should be examined.

An important finding from our field visits is that the public institutions have not generated any monetary returns from the licensing of the protected varieties. IRAD of Cameroon confirmed that varieties it has developed are freely used in the Central African region without collection of any royalties. A researcher from IER in Mali reaffirmed the public mission of the institution, stat-

ing that “public research has always been conducted with the needs of farmers and agricultural development in mind”.¹⁷²

In fact, we found significant costs associated with the filing and maintenance of PVP. If the rights obtained through PVP were to be enforced, additional costs associated with enforcement would be incurred, especially against experienced companies with significant resources.

Take the case of IER itself, which had submitted a host of PVP applications on the back of World Bank funding that covered all the application costs.¹⁷³ Subsequently, however, no funds were made available to IER to maintain the protection and the certificates became void, with some 50 varieties falling into the public domain.¹⁷⁴

Cameroon's IRAD held 22 PVCs which were annulled in 2012 for its failure to pay the annual fees. Seventeen of the PVCs were restored in 2015 with payment of the outstanding fees. Aided by the Cameroonian government, IRAD continues to maintain its certificates on these 17 protected varieties at an annual cost of 4,750,000 CFA francs (€7,250).¹⁷⁵

This raises the question of whether the use of the PVP system by public institutions at the expense of public funds is justified. Officials from some of these institutions¹⁷⁶ interviewed for this paper were of the view that the system was not suitable in the context of OAPI countries and that it was not aligned with the agricultural system, socio-economic conditions and cultural practices prevailing in the region.

Furthermore, relying on PVP to generate revenue could skew the focus of the public body towards commercially oriented agriculture at the expense of other crops that may be more important from the perspective of food security, nutrition and the needs of the country's farmers.¹⁷⁷ In short, it could undermine the public mandate of such institutions.

5.5 – FARMERS' SEED SYSTEM AND FARMERS' RIGHTS

In the OAPI region, the farmers' seed system is the main seed-supplying system. Despite its central role, however, issues and concerns pertaining to the farmers' seed system and Farmers' Rights have been sidelined and ignored.

Chapter 2 revealed that the adoption of UPOV 1991 was the “end goal” for OAPI's donors and providers of technical assistance (i.e., UPOV, WIPO and WTO) influencing revision of the Bangui Agreement. Hence, the development of Annex X was not underpinned by a rigorous due process that involved farmers from the region in the decision-making, a right of farmers recognized by the ITPGRFA.

Additionally, while the ITPGRFA recognizes the important role of local and indigenous communities and farmers in the development of plant genetic resources and their right to fair and equitable sharing of the benefits arising from the use of PGRFA, these issues are not addressed by the OAPI PVP system. This system modelled on UPOV 1991 does not recognize or protect varieties that do not meet the DUS standard, and neither are there any mechanisms to ensure fair and equitable benefit sharing and to prevent misappropriation of local varieties.

A relevant question to examine is the extent of use of protected varieties and the interface with farmer seed systems.

As stated in Chapter 4, 76% of the PVCs belong to public institutions and 4% are held jointly by public and private institutions, making the total 80%. Generally the public institutions have no commercial purpose; they were created to provide assistance to farmers including in crop improvement. During our field visit, the public research institute of Cameroon, IRAD, said that “their” varieties were developed for Cameroonian farmers, who were free to use them as they wanted.¹⁷⁸ A similar view prevailed in other public institutions visited, i.e., IER (Mali), the Senegalese intellectual property agency and CIRAD (France), which liaises with OAPI on PVP issues.¹⁷⁹ CIRAD, which has jointly protected some varieties with public institutions from OAPI countries, stressed that PVP is mainly for “defensive protection, i.e., protection against misappropriation by other breeders”.¹⁸⁰ It is also worth reiterating that many of the varieties protected by the public institutions were already in circulation before the grant of PVP.

The remaining 20% of the PVCs are held by private companies. It is difficult to say to what extent these varieties are used, as they constitute a very small part of a long list of varieties that includes many non-protected varieties. During our visit, the director of Tropicasem, the only private company registered/operating in an OAPI country to have protected its varieties under Annex X, claimed it would not prevent farmers from “freely” using their varieties, but qualified the statement by adding, “Our protection is against other private seed developers and traders...”¹⁸¹ The director informed us of legal action instituted against a seed trader in Senegal and Mali for commercializing the company’s varieties. The Senegalese and Malian tribunals ruled in favour of Tropicasem and ordered the defendant to halt exploitation of Tropicasem’s varieties. The Tropicasem director did not provide further details on the cases, as the proceedings in Mali had not fully concluded.¹⁸²

The director’s assertion about non-enforcement against farmers provides little comfort as the OAPI PVP system does not explicitly recognize the right of farmers, even smallholder farmers, to exchange and sell farm-saved seed/propagating material. Farmers’ rights to save seed/propagating material as well as to further breed protected varieties are also limited by the provisions of Annex X as explained in Chapter 3. The restrictions on use of protected varieties, if enforced, could have distortive effects on farmer seed systems and consequently on human rights (see discussion in the next section).

5.6 – ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS

Annex X of the Bangui Agreement was developed on the assumption that the commercial seed sector underpinned by strengthened intellectual property rights will deliver food security, nutrition, and other significant social, economic and environmental benefits. This assumption has been found to be flawed. More than a decade of implementation of Annex X has failed to deliver the claimed benefits.

A study into the seed systems of West Africa¹⁸³ found that smallholder farmers are the main suppliers of seed in West Africa, while average use of commercial seed is about 18%. The use of peasant seeds is explained by the fact that “their characteristics generally respond better to peasants’ needs – seed saving, adaptedness to local conditions, diversity of crops and varieties available, nutritional qualities, and the taste of food produced from peasant varieties”. In addition, “[s]eed selection, saving, use, and exchange are an integral part of the agricultural practices and the life of peasant communities, and rest upon their knowledge. In this system, peasants have control over the seeds they use, which represents an important element of their autonomy.”

A key finding of the study is that “[t]he introduction of commercial seeds and GMOs [genetically modified organisms] fundamentally changes the practices and lives of peasant communities. The access of peasants to seeds happens increasingly through the sale, and the production of seeds is gradually dissociated from the agricultural activities and the daily life of peasant communities. In addition, seeds produced from commercial varieties are reusable for only two to three years, can be less well preserved and require a high use of external inputs (chemical fertilizers, herbicides, pesticides, etc.), thus implying a net increase in production costs and a loss of autonomy for peasants. The use of chemicals and GMOs also cause[s] health and environmental problems. The introduction of commercial seeds is further accompanied by the abandonment of traditional/peasant varieties and, consequently, a decrease in agricultural biodiversity. With regard to food and nutrition, communities are finding that the taste and nutritional value of foods produced from commercial seeds are lower and that they can better preserve foods derived from peasant varieties.” The study concluded that the exclusive promotion of commercial seeds underpinned by intellectual property rights threatens the human right to food. Other studies have also reached similar findings.

An impact assessment of UPOV 1991 at the national level found that restrictions derived from UPOV 1991 on the use, exchange and sale of farm-saved seed/propagating material “negatively impact on the functioning of the informal seed system, [as they] sever the beneficial interlinkages between the formal and informal seed systems. Moreover, selling seeds is an important source of income for many farmers”.¹⁸⁴ “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.”¹⁸⁵

5.7 – CONCLUSION

Chapter 4 established that the main components of the OAPI PVP system are non-functional. Following from that conclusion, this chapter has further revealed that the system has failed to deliver the promised agricultural transformation in the OAPI region. Of the current 17 OAPI member states, only



West african Sorghum and Millet Peasant Varieties ©BEDE

seven have made use of the system, at great cost and at the expense of public funds. The private sector's use of the system in the more than 10 years of operation of Annex X is negligible. The system has also not delivered any significant increase in plant breeding activities nor led to the development of the seed industry across the region. In fact, a major concern is the misappropriation of local and farmer varieties through the PVP system.

These results are the consequence of OAPI adopting a "one size fits all" UPOV 1991 approach to PVP in total disregard of the agricultural, social, economic, cultural and market conditions, systems and practices prevailing in the OAPI member states.

Furthermore, for the system to be able to deliver its purported benefits, there have to be immediate or potential market opportunities for new varieties. Such a market barely exists in the OAPI countries, where most farmers' seed needs are met by farmers' circuits based on traditional seeds and adapted farm-saved seeds, and far less by the formal market.

The OAPI secretariat has itself acknowledged the constraints of the PVP system including the low utilization of the system and non-exploitation of protected plant varieties.¹⁸⁶ However, the secretariat and UPOV proponents are promoting more of the same as a means to remedy the situation, a flawed strategy which history has shown to fail.

6

What next for OAPI members?

Chapters 4 and 5 revealed over 10 years of disappointing outcomes and failed promises from the OAPI PVP system, which raises the question: What should be the next step for the OAPI member states?

The OAPI secretariat advocates “more of the same” dysfunctional system. It attributes shortcomings of the current PVP system to failures at the national level, including ignorance or indifference to intellectual property, limited research and development expenditure, the lack of IP training programmes and respect for IP, and weak or non-existent relationships among breeders, companies, donors etc.¹⁸⁷ To address these constraints, it proposes the following actions at the OAPI secretariat level: undertaking training of its staff and national experts, participation in UPOV meetings, identification and evaluation of DUS examination centres, and adoption of the UPOV electronic application form. At the level of member states, the OAPI secretariat proposes acceding to UPOV, financing research in plant varieties, and funding participation of national experts in UPOV activities. The secretariat expects such moves to bring about respect for breeders' rights and an increase in the number of PVP applications and grants. The secretariat also views the technical and financial assistance of UPOV as a major gain for the region.¹⁸⁸

The OAPI secretariat's response stems from its limited expertise and capacity on the subject, as revealed in the preceding chapters, and its historical and present dependence on the financial and technical assistance of Geneva-based institutions, in particular UPOV, and international donors. Its deep vested interest has made it indifferent to the actual conditions prevailing in OAPI member states. As a result, its diagnosis and proposed solutions are fundamentally flawed.

Following the entry into force of the TRIPS Agreement, as elaborated in Chapter 2, the OAPI secretariat aligned itself with the interests of Geneva-based institutions and international donors. On the back of their promises, it championed the UPOV 1991 system designed to benefit the commercial seed sector of developed countries such as France and the Netherlands, and moved to “copy and paste” it in the OAPI region. It expected significant benefits to materialize, all the while failing to grasp the socio-economic, agricultural and market conditions prevailing in the region. The agricultural system in the OAPI region has been and is characterized by

peasant farming, a limited or non-existent commercial seed sector, and many other socio-economic constraints. Further, the adoption of the UPOV 1991 model occurred in the absence of a thorough, evidence-based and accountable decision-making process, in complete disregard of the interests of local communities and farmers, African initiatives in regional and international fora such as the OAU Model Law process, the mandated review of Article 27.3(b) of the TRIPS Agreement, and alternative options. Given such a context in which the UPOV 1991 model was adopted, especially its incompatibility with the realities prevailing in OAPI member states, one could hardly have failed to foresee the model's failure.

Unfortunately, it appears that lessons have not been learned, and history may be repeating itself.

OAPI, in its capacity as a regional intergovernmental organization, is already party to UPOV 1991. It is set up as a centralized PVP authority for OAPI countries, whereby PVP applications, examination and grants are handled centrally. There is clearly no rationale or benefit for each and every OAPI country to individually apply for UPOV membership. During a meeting of the OAPI Administrative Council, “some countries showed interest in joining and some others were reluctant; then it was decided that no collective decision be taken on that issue and individual countries would decide to join UPOV or not.”¹⁸⁹ And yet, the OAPI secretariat has actively been encouraging member countries to individually accede to UPOV 1991. This position is linked to its unequivocal support of UPOV, including of the latter's endeavour to increase developing-country membership, irrespective of the relevance of the UPOV system to the agricultural context of such countries.¹⁹⁰ As shown in Chapter 1, only a handful of developing countries are parties to UPOV 1991, and most of them joined due to obligations imposed by the US and/or the EU in North-South trade agreements.

OAPI's call for its members to join UPOV 1991 is all the more irrational considering the latter's ineffectiveness at the regional level. Notable as well is OAPI's continued marginalization of the local farming community, especially smallholder farmers, that is the foundation of the agricultural system in the OAPI region.

Following the OAPI secretariat's recommendation, Benin initiated the process of accession to UPOV 1991 in 2017.¹⁹¹ The

draft decree transmitting the Act of accession to the National Assembly for authorization of membership has been seriously contested by domestic civil society and farmers' groups. In February 2017, the Farmers' Seeds Watch Coalition in Benin (Coalition de veille sur les semences paysannes au Bénin – CVSPB) brought together agricultural organizations, farmers' federations and civil society organizations and explicitly called for the rejection of Benin's accession to UPOV 1991. They questioned the rationale for ratification given the ineffectiveness of Annex X of the Bangui Agreement and its irrelevance to Benin for nearly two decades. They also expressed concern that UPOV's regulatory system was hard to understand "even for knowledgeable lawyers". Further, it would increase the cost of seeds, making the protected varieties inaccessible to the vast majority of Beninese farmers, they cautioned, pointing out that in Europe UPOV 1991 had outlawed free exchange of seeds among farmers.¹⁹² They added that the notion of development of local seed companies was a myth, especially in a globalized context where large companies absorbed small ones. The accession process has been delayed and is still not achieved.

Another point raised by farmers in connection with their rejection of the system is the opaqueness of OAPI, its lack of transparency and accountability as well as its persistent exclusion of civil society and the farming community from its decision-making process. Our interviews in preparation of this report with farmer organizations from Benin, Mali, Niger and Senegal found that none of them had been engaged in any OAPI meetings concerning PVP.

Some OAPI member states have also expressed caution about joining UPOV 1991. The national OAPI liaison office in Senegal said: "This is a highly important and sensitive question, we need to take our time and do proper analysis of the situation through a large-scale consultation with all relevant stakeholders before deciding. Senegal already clarified its position during an OAPI meeting, saying it would not join without assessing the pros and the cons of accession."¹⁹³ The liaison office added that the decision would also affect future generations.¹⁹⁴ It also expressed concern that "our countries have not reached a level of development to allow a protection [model] like that of UPOV. We need to think deeply to find a system that accommodates our way of living and our agricultural practices..."¹⁹⁵

Notably, many independent expert reports have actually recommended that developing countries should not join the UPOV system as its model is inflexible and inappropriate for developing countries where farmer-managed seed systems and the practices of freely saving, using, exchanging and selling seeds are prevalent.¹⁹⁶

The importance of farmer-managed seed systems is often misunderstood. It is assumed that these seed systems are the cause of hunger and poverty and contribute a limited volume and dubious quality of seed for agricultural production, and thus are inefficient drivers of agricultural development. They are also commonly considered to be of limited value to agricultural development as they circulate seeds of local varieties through exchanges among farmers over small geographical areas where infrastructure and markets are poorly developed. At a 2017 regional meeting sponsored by UPOV and the US Patent and

Trademark Office (USPTO) which focused on the importance of plant variety protection and the private seed sector, Memassi Dosso, the Director General of OAPI, said that "if we continue with our current farming techniques, we will starve", arguing that "one of the best solutions is to focus on plant varieties" as it "allows farmers to have quality seeds, to meet the needs of markets and produce in quality and quantity, on increasingly smaller surfaces, but thanks to the productivity of quality seeds, everyone will gain".¹⁹⁷

However, the PVP system does not guarantee quality of seeds, which is not among the criteria for obtaining protection. Further evidence shows that the commercial seed system plays a very limited role, supplying a very small proportion of what farmers sow, often less than 20%. This indicates that the farmer seed systems currently serve farmers' needs much better and can be favourable in terms of choice, accessibility, cost and non-economic utility (e.g., social values).¹⁹⁸ Further studies have confirmed that "farmer seed networks are important for building viable and diverse crop populations, and for the spatial as well as social distribution of genetic, morphological and varietal diversity, for staple and for minor crops", and they can "provide quality planting materials that are acceptable to farmers".¹⁹⁹

Farmer seed systems are also essential for food security, with 80-90% of food grains in many developing countries still depending on these systems, especially in recycling older varieties saved during harvest and uncoordinated exchanges of seed among farmers.²⁰⁰ Studies also show that farmer seed networks are vital in ensuring long-term access to diverse crop planting material. The open and dynamic nature of these networks enables them to be responsive to changes in contextual conditions and resilient to environmental and price shocks, and makes them an effective means of moving seed from farmer to farmer as well as from and to other stakeholders.²⁰¹

The primacy of farmer seed systems and their practices especially of saving, using, exchanging and selling seeds in the OAPI region cannot therefore be overlooked. Their contribution to agricultural development needs to be appreciated and supported in policy-making.

6.1 – THE WAY FORWARD

UNUSED POLICY SPACE

As discussed in Chapter 1, although Article 27.3(b) of the TRIPS Agreement requires countries to put in place a system for the protection of new plant varieties, it allows countries ample policy space to design legal regimes appropriate to local conditions and needs. Some countries have successfully followed this route, and designed tailor-made legal regimes for the protection of new plant varieties.

One case in point is India, where smallholder farmers supply around 80% of the seed required. 86% of Indian farmers operate on land holdings of less than 2 hectares, while less than 1% hold more than 10 hectares.²⁰² This national context led India to adopt a unique system by way of its Protection of Plant Varieties and Farmers' Rights Act, 2001 (PPVFR Act) (see Box 6).

Box 6

THE INDIAN PROTECTION OF PLANT VARIETIES AND FARMERS' RIGHTS ACT

The PPVFR Act accords protection to new plant varieties following the criteria of NDUS; it also recognizes farmers as breeders, allowing the registration of farmers' varieties on a separate criterion. More importantly, the Act contains specific provisions balancing breeders' and farmers' rights. It rewards the breeder for the new variety by allowing control of the commercial marketplace without threatening the farmers' ability to independently support their livelihood. Section 39 of the Act safeguards farmers' right to freely use a protected variety, with the limited restriction that the seed cannot be marked with the PVP holder's brand.

Section 39(1)(iv) of the Act reads:

"a farmer shall be deemed to be entitled to save, use, sow, resow, exchange, share or sell his farm produce including seed of a variety protected under this Act in the same manner as he was entitled before the coming into force of this Act:

"Provided that the farmer shall not be entitled to sell branded seed of a variety protected under this Act.

"*Explanation* – For the purposes of clause (iv), 'branded seed' means any seed put in a package or any other container and labelled in a manner indicating that such seed is of a variety protected under this Act."

Other elements in the PPVFR Act safeguarding farmers' rights include:

- Provisions for farmers' contribution to be recognized and rewarded for engaging in conservation and improvement of genetic resources and wild relatives (Section 39(1)(iii))
- The breeder has to disclose the expected performance of the registered variety and farmers are entitled to com-

pensation if the protected variety fails to perform as claimed by the breeder (Section 39(2))

- Any person/persons/governmental organization/NGO may file a claim for compensation for farmers/local community/village's "significant" contribution in the development of a variety registered under the Act (Section 41)
- A farmer cannot be prosecuted for infringement of rights specified in the Act if the farmer can prove in court that the farmer was unaware of the existence of a PVP right (Section 42)
- A farmer/village community is not liable to pay any fees in any proceedings under the Act (Section 44).

The breeder's exemption in the PPVFR Act is also significantly broader than that provided for in Annex X of the Bangui Agreement, which has a limitation linked to EDVs.²⁰³ The Act also features exclusions aimed at protecting the public interest²⁰⁴ and provisions aimed at curbing misappropriation of local plant genetic resources.²⁰⁵ In addition, India has utilized the Gene Fund set up under the Act to establish awards, rewards and recognition for farmers and farming communities involved in the conservation of genetic resources used as donors of genes in varieties registrable under the Act.²⁰⁶

The uniqueness of this Act has not discouraged use of the PVP system. On the contrary, a large number of PVP applications have been filed and granted in India, including to multinational companies. Between 2007 and June 2015, 9,564 PVP applications were filed, with 2,244 applications concerning new plant varieties. Of these, 1,831 titles were granted to the public sector (665), the private sector (376), farmers (574) and the State Agricultural Universities (216).²⁰⁷

The case of India shows the feasibility of alternative approaches better suited to the agricultural context of developing countries. Other countries such as Malaysia and Thailand have also adopted alternative approaches which are operational with the participation of domestic and international companies.²⁰⁸

The OAPI region should draw inspiration from the various *sui generis* PVP systems and the African Model Law and develop its own *sui generis* PVP model suited to its own circumstances. There are a wide range of possible options to consider, such as formulating distinct criteria for different types of varieties (e.g., traditional farmer varieties, new farmer and other heterogeneous varieties and new uniform plant varieties); differentiating the scope of protection for crops important for food security and nutrition and for commercial cash crops, with more limited protection for the former category; and provisions that recognize LDCs' transition period, that safeguard the public interest and

farmers' rights and that safeguard against misappropriation of local plant genetic resources. The possibilities to promote a workable, fair and equitable PVP system are practically boundless under the TRIPS Agreement. In this regard, the report *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991* may be an especially useful resource for identifying the options available.²⁰⁹

In developing a *sui generis* PVP system that is relevant to the circumstances of the OAPI countries, the following objectives should be considered:²¹⁰

- it is adapted to the agricultural, socio-economic and cultural profile of the OAPI countries/region;
- it is consistent with and supportive of policies on conservation and sustainable use of plant biodiversity for food and agriculture;

- it achieves the right balance between breeders' rights and those of farmers and the society at large;
- it recognizes and supports the informal seed sector, particularly the interests and needs of smallholder farmers that are the pillars of the agricultural system in the region;
- it includes measures that ensure the genetic materials of farmers in the OAPI region are not misappropriated;
- it includes measures for the preservation of traditional knowledge associated with genetic resources and the traditional farming practices of saving, using, exchanging and selling seed/propagating material, having in view the importance of ensuring the livelihood of farming communities, the continuous adaptation of seed/propagating material to the evolution of agricultural ecosystems, and food security;
- it respects, protects and fulfils states' obligations regarding the right to food, the rights of indigenous peoples²¹¹ and the rights of peasants and other people working in rural areas;²¹² and
- it is supportive of and does not counter the objectives and the obligations under the CBD, the Nagoya Protocol and the ITP-GRFA.

STEPS TO CONSIDER IN DEVELOPING A *SUI GENERIS* REGIME²¹³

Establishing an effective and equitable PVP regime is ultimately very much dependent on the process for the development of such a regime. This section elaborates on certain process-related steps that may be taken nationally and/or regionally to develop a relevant *sui generis* regime.



Peasants Seed Fair, Niamey, Niger, April 2018 ©BEDE

A process driven by the vested interests of Geneva-based institutions and donors led to Annex X, which has been shown to be largely dysfunctional and irrelevant for the OAPI region. Hence OAPI member governments have the responsibility to implement instead a well-defined, transparent and inclusive process based on a sound assessment of the factual and empirical evidence. Such a process should:

- Conduct a thorough, objective and realistic multidisciplinary assessment of the local situation which takes into account the kind of seed supply system in place, the extent to which farmers freely save, exchange and sell seed/propagating material, the type of domestic seed industry and the existence of public breeding, the current domestic breeding capacity, international obligations applicable (CBD, Nagoya Protocol, ITPGRFA, human rights, etc.), and relevant national objectives and policies (e.g., on nutrition, food security, poverty reduction, agriculture).
- This is imperative as there is no single regime that fits all sizes. Hence developing a *sui generis* regime requires a good knowledge of the local situation regarding seed supply, breeding activities, cultivated crops, market trends, diversity in the fields, the social conditions of small-scale farmers, farmers' organizations, local and indigenous communities, etc.
- Explore legal precedents from other countries, especially those with similar agricultural and socio-economic circumstances, and analyze their impact, considering the contextual differences where they exist and assessing their relevance and suitability to national realities, policies and objectives.
- Ensure that the process of designing the PVP regime is open to and inclusive of the views of all relevant stakeholders, as well as transparent, with relevant stakeholders having all the information necessary for effective engagement on the matter. This engagement should not be a one-off event of consultation but should be ongoing until the concerns of the relevant stakeholders, particularly those that are vulnerable (e.g., farmers and indigenous communities), have been addressed.
- Consider procedures and institutions that will be necessary to protect the interests of smallholder farmers and farming communities, who may not benefit from a system that is complex and costly and, in any case, may need support to claim their rights.
- Consider international obligations applicable (notably the CBD, ITPGRFA and human rights) and measures required to support implementation of these instruments as well as flanking measures needed to mitigate and remedy any potential adverse impacts of the PVP laws on human rights or on farmer-managed systems. This is critical as the abovementioned instruments have been promoted by developing countries including OAPI members. It also ensures a coherent policy in relation to plant genetic resources.
- Develop policy expertise that is able to design a legal system adapted to the local conditions and that is supportive of national policies and strategies. It is especially important to understand the nature (and limitations) of intellectual property. The development of a *sui generis* PVP regime should be seen as a multidisciplinary task involving farmers, commercial

breeders, non-governmental organizations, consumers, academics and all the government agencies competent in the formulation or execution of public policies in areas that could be impacted by the introduction or reform of a PVP regime. An ex ante impact assessment study should be undertaken of the legal options being considered by the government prior to devising the legal regime.

Finally, it is critical to appreciate the fact that the development of a PVP regime is not an end in itself and that the *sui generis* PVP regime needs to be supportive of relevant national policies (on agricultural development, poverty alleviation, rural development, trade, food security, biodiversity, innovation, climate change, etc.).

6.2 RECOMMENDATIONS

FOR OAPI MEMBER STATES:

1. OAPI member states should not apply to become a party to UPOV 1991.
2. OAPI member states should revise Annex X of the Bangui Agreement and develop their own *sui generis* PVP system better suited to the agricultural, socio-economic context and capacities prevailing in the OAPI region (see Section 6.1 above on “The Way Forward”).
3. Alternatively, the main text of the Bangui Agreement should be amended to allow OAPI members to opt out of Annex X of the Agreement and implement alternative *sui generis* PVP systems at the national level (see Section 6.1 above on “The Way Forward”).²¹⁴
4. OAPI member states should initiate a transparent, inclusive and participatory process at the national and regional level that credibly engages relevant stakeholders, especially farmers and local communities, to discuss revision of the Bangui Agreement and/or alternative *sui generis* PVP systems.

FOR OTHER LDCS AND DEVELOPING COUNTRIES:

5. LDCs and developing countries should recognize that UPOV 1991 is ill-suited for the conditions prevailing in their countries, especially where agriculture is dependent on farmer seed systems and markets are marginal or non-existent. UPOV 1991 is clearly not a magical tool that will instantly transform the agricultural system of a country. On the contrary, there are significant costs and missed opportunities attached to the adoption of a system that is incompatible with the country's agricultural profile. Hence LDCs and developing countries should utilize the policy space offered by Article 27.3(b) of the TRIPS Agreement and develop alternative *sui generis* PVP systems appropriate for their own national circumstances.

In addition, the process for developing a PVP law should be transparent and inclusive of the views of all relevant stakeholders, in particular the smallholder farmers and local communities that are the pillars of the agricultural system in the country.

Annex 1

VALID PVP CERTIFICATES IN OAPI COUNTRIES AS AT 31 DECEMBER 2016

Source: OAPI. Excerpt from table obtained during field visit to the OAPI secretariat.

No.	Crop	Variety	Year of Development	Date of Application for PVP Certificate	PVP Certificate holder	Status of PVP Certificate Holder (Public/Private/ Domestic/Foreign)	Country of the Right Holder	
1	Groundnut (7 varieties)	GC 8-35	1990	2009	Jointly held by: – Institute for Agricultural Research of Senegal (ISRA) (<i>public & domestic</i>) – French Agricultural Research Centre for International Development (CIRAD) (<i>public & foreign</i>)		Senegal & France	
		SRV 1-19	1990	2009				
		55-33	1991	2009				
				73-9-11	1991	2009	Institute of Agricultural Research for Development (IRAD) of Cameroon (<i>public & domestic</i>)	Cameroon
				CGS-383	1990	2009		
				CGS-310	1990	2009		
				CGS-1272	1990	2009		
2	Cowpea (2 varieties)	LORI-Niébé	1991	2009	IRAD (<i>public & domestic</i>)		Cameroon	
		CRSP-Niébé	1991	2009				
3	Corn (7 varieties)	COCA SR	1989	2009	IRAD (<i>public & domestic</i>)		Cameroon	
		CHI 001	1989	2009				
		CHI 002	1989	2009				
		THE Charles (CMS 85-01)	1985	2009				
		Benedicte (CMS 87-04)	1987	2009				
		CHC 202	1989	2009				
		CHC 201	1992	2009				
4	Sweet potato (2 varieties)	IRAD 1112	1970	2009	IRAD (<i>public & domestic</i>)		Cameroon	
		TIB 1	1986	2009				
5	Cassava (2 varieties)	8017	1980	2009	Jointly held by: – IRAD (<i>public & domestic</i>) – State Enterprise for Cotton Development (SODECOTON) (<i>public & domestic</i>)		Cameroon	
		8034	1980	2009	Jointly held by: – IRAD (<i>public & domestic</i>) – SODECOTON (<i>public & domestic</i>) – CIRAD (<i>public & foreign</i>)		Cameroon & France	

No.	Crop	Variety	Year of Development	Date of Application for PVP Certificate	PVP Certificate holder	Status of PVP Certificate Holder (Public/Private/ Domestic/Foreign)	Country of the Right Holder
6	Cotton (11 varieties)	IRMA L457	1996	2008	IRAD (public & domestic)		Cameroon
		IRMA L484	1996	2008			
		FK 95 BG2		2008	Jointly held by: – Environment and Agricultural Research Institute (INERA) (public & domestic) – Cotton Interprofessional Association of Burkina Faso (AICB) (parastatal & domestic) – Monsanto (private & foreign)	Burkina Faso & US	
		FK 94 BG2		2008			
		FK 290		2007			
		CNRA-COT-1		2010	National Center for Agricultural Research (CNRA) (public & domestic)	Cote d'Ivoire	
		CNRA-COT-2		2010			
		CNRA-COT-3		2010			
		STAM 279 A		2006	ITRA (public & domestic)	Togo	
IRMA D742		2006					
STAM 279-1		2006	Jointly held by: – ITRA (public & domestic) – National Institute for Agricultural Research of Benin (INRAB) (public & domestic) – CIRAD (public & foreign)	Togo, Benin & France			
7	Cacao (1 variety)	CNRA-CAC-1		2010	CNRA (public & domestic)		Cote d'Ivoire
8	Chilli pepper (2 varieties)	Big Sun		2009	Technisem (private & foreign)		France
		Jaune du Burkina		2006	Tropicasem SA (a private company established under the laws of Senegal by Technisem France)		Senegal
9	Eggplant (1 variety)	N'Galam		2009	Technisem (private & foreign)		France
10	Onion (3 varieties)	Gandiol		2011	Technisem (private & foreign)		France
		Safari		2011			
		Violet Damani		2006	Tropicasem SA (a private company established under the laws of Senegal by Technisem France)		Senegal
11	Okra (1 variety)	Gombo Volta		2006	Tropicasem SA (a private company established under the laws of Senegal by Technisem France)		Senegal
12	Hevea (4 varieties)	IRCA 101		2010	Jointly held by: – Ministry of Scientific Research of Cote d'Ivoire (MESRS) (public & domestic) – CIRAD (public & foreign)		Cote d'Ivoire & France
		IRCA 109		2010			
		IRCA 230		2010			
		IRCA 331		2010			
13	Coffee tree (3 varieties)	H1 11		2010	Jointly held by: – MESRS (public & domestic) – CIRAD (public & foreign)		Cote d'Ivoire & France
		H1 12		2010			
		H1 13		2010			
14	Watermelon (1 variety)	Pasteque Koalack		2006	Tropicasem SA (a private company established under the laws of Senegal by Technisem France)		Senegal
15	Tomato (1 variety)	IRMA D742		2006	Tropicasem SA (a private company established under the laws of Senegal by Technisem France)		Senegal
16	Turnip (1 variety)	Navet Longo		2006	Tropicasem SA (a private company established under the laws of Senegal by Technisem France)		Senegal
17	Sorghum (2 varieties)	CIRAD 406		2010	Jointly held by: – MESRS (public & domestic) – CIRAD (public & foreign)		Cote d'Ivoire & France
		CS 54	1985	2009	IRAD (public & domestic)		Cameroon

Annex 2

LAPSED PVP CERTIFICATES FOR NON-PAYMENT OF ANNUAL FEE

Source: OAPI

No.	Crop	Variety	Date of Application for PVP Certificate	PVP Certificate holder	Status of PVP Certificate Holder (Public/Private/ Domestic/Foreign)	Country of the Right Holder
1	Cotton (11 varieties)	FK 37	2007	INERA (<i>public & domestic</i>)		Burkina Faso & US
		FK 96 BG2	2008	Jointly held by: – INERA (<i>public & domestic</i>) – AICB (<i>parastatal & domestic</i>) – Monsanto (<i>private & foreign</i>)		
		IRMA A 1239	2006	Jointly held by: – ITRA (<i>public & domestic</i>) – CIRAD (<i>public & foreign</i>)		Togo & France
		IRMA D742	2006			
		IRMA A 1239	2006	ITRA (<i>public & domestic</i>)		Togo
		IRMA D742	2006			
		STAM 42	2009	Jointly held by: – ITRA (<i>public & domestic</i>) – CIRAD (<i>public & foreign</i>)		Togo & France
		NTA 88-6	2009	Institute of Rural Economy of Mali (IER) (<i>public & domestic</i>)		Mali
		NTA 90.5	2009			
		NTA 93-15	2009			
		NTA 100L	2009			
2	Rice (16 varieties)	Kayira Malo	2009	IER (<i>public & domestic</i>)	Mali	
		BH2	2009			
		Gambiaka Suruni	2009			
		Dunkafa 21 (DKA 21)	2009			
		Dunkafa 4 (DKA 4)	2009			
		Dunkafa 11 (DKA 11)	2009			
		Dunkafa 14 (DKA 14)	2009			
		Dunkafa 5 (DKA 5)	2009			
		Dunkafa P 25	2009			
		Dunkafa P 21	2009			
		Dunkafa P 22	2009			
		Dunkafa P 17	2009			
		Dunkafa M 4	2009			
		Dunkafa 7 (DKA 7)	2009			
		Dunkafa 1 (DKA 1)	2009			
Dunkafa 15 (DKA 15)	2009					

No.	Crop	Variety	Date of Application for PVP Certificate	PVP Certificate holder	Status of PVP Certificate Holder (Public/Private/ Domestic/Foreign)	Country of the Right Holder		
3	Sorghum (12 varieties)	Niatitiaman	2009	IER (public & domestic)		Mali		
		Jakumbe	2009					
		Jigi Seme	2009					
		Grinkan	2009					
		Seguifa	2009					
		Tiandougou	2009					
		Darralken	2009					
		Zara	2009					
		Sarioso 11	2010				Jointly held by: - INERA (public & domestic) - CIRAD (public & foreign)	Burkina Faso & France
		Sarioso 14	2010					
		Sorvato 1	2006				ITRA (public & domestic)	Togo
Sorvato 2	2007							
4	Corn (7 varieties)	Kogoni B	2009	IER (public & domestic)		Mali		
		Sira Djouba	2009					
		Zanguereni	2009					
		Sotubaka	2009					
		Sama	2009					
		Molobala 2	2009					
		Tiemantie	2009					
5	Cowpea (6 varieties)	Gana Shoba	2009	IER (public & domestic)		Mali		
		Gana Shoni	2009					
		Jemani	2009					
		Dounanfana	2009					
		Yere Wolo	2009					
		Telimani	2009					
6	Millet (7 varieties)	Kaba Mouniou	2009	IER (public & domestic)		Mali		
		Sanio Massa	2009					
		Cinza Sanio Teliman	2009					
		Toroniou C1	2009					
		Ciimzana-Sanio	2009					
		Indiana 05	2009					
		Sanio-Sabatile	2009					
7	Okra (2 varieties)	Sabaubougou	2009	IER (public & domestic)		Mali		
		Gombo Keleya	2009					
8	Onion (2 varieties)	Belami	2009	Technisem (private & foreign)		France		
		Marena	2009	IER (public & domestic)		Mali		
9	Mexican bamboo	Fallopia sachalinense	2008	Copwerenergie (private and foreign)		Germany		
10	Groundnut (2 varieties)	Diakandape	2009	IER (public & domestic)		Mali		
		Kaarta Tiga	2009					

Endnotes

- 1 The UN LDC list is available at <http://unctad.org/en/Pages/ALDC/Least%20Developed%20Countries/UN-list-of-Least-Developed-Countries.aspx>.
- 2 Article 66 of the TRIPS Agreement:
 - "1. In view of the special needs and requirements of least-developed country Members, their economic, financial and administrative constraints, and their need for flexibility to create a viable technological base, such Members shall not be required to apply the provisions of this Agreement, other than Articles 3, 4 and 5, for a period of 10 years from the date of application as defined under paragraph 1 of Article 65. The Council for TRIPS shall, upon duly motivated request by a least-developed country Member, accord extensions of this period.
 - "2. Developed country Members shall provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least-developed country Members in order to enable them to create a sound and viable technological base."
- 3 Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBREBES, p. 11, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant
- 4 Business profits or diverse food systems?: Threats to peasant seeds and implications in West Africa, www.fian.org/fileadmin/media/publications_2018/Reports_and_guidelines/180329_FIAN_FFM_BurkinaFaso_EN_Web.pdf, published by FIAN International for the Global Network for the Right to Food and Nutrition, and the Global Convergence of Land and Water Struggles – West Africa
- 5 Article 27.3(b) of the TRIPS Agreement: "...Members shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement." This is the only provision in the entire TRIPS Agreement that was subjected to an early review, an indication of the controversy surrounding the extension of intellectual property to living matter. The process of review was formally initiated in 1999.
- 6 WTO (2006), "Review of the Provisions of Article 27.3(b) – Summary of Issues Raised and Points Made", Note by the Secretariat, IP/C/W/369/Rev.1, 9 March 2006
- 7 See the submission by Kenya on behalf of the African Group, IP/C/W/163. See also WTO (2006), "Review of the Provisions of Article 27.3(b) – Summary of Issues Raised and Points Made", Note by the Secretariat, IP/C/W/369/Rev.1, 9 March 2006, pp. 15-16.
- 8 www.cbd.int/information/parties.shtml
- 9 www.cbd.int/abs/nagoya-protocol/signatories/default.shtml
- 10 A group of developing countries, supported by the African, Caribbean and Pacific Group of States (ACP Group) and the Least Developed Countries (LDC) Group, made a proposal for a new Article 29bis in the TRIPS Agreement (Communication from Brazil, China, Colombia, Cuba, India, Pakistan, Peru, Thailand and Tanzania, "The Outstanding Implementation Issue on the Relationship between the TRIPS Agreement and the Convention on Biological Diversity", IP/C/W/474, Add.1, Add.2, Add.3, Add.4, Add.5, Add.6, Add.7, Add.8 and Add.9 Revision (also circulated as WT/GC/W/564/Rev.2 and TN/C/W/41/Rev.2), 5 July 2006). After the adoption of the Nagoya Protocol, a new submission was made that reflects some of the elements of the Protocol, such as the concept of an "Internationally Recognized Certificate of Compliance" (TN/C/W/59, "Draft decision to enhance mutual supportiveness between the TRIPS Agreement and the Convention on Biological Diversity").
- 11 Proposals regarding a disclosure obligation in all intellectual property applications, including for PVP, have been submitted by a number of developing countries to the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC). See, e.g., www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_20/wipo_grtkf_ic_20_6.pdf; www.wipo.int/edocs/mdocs/govbody/en/wo_ga_46/wo_ga_46_6.pdf. For the latest update on the negotiations, see [www.wipo-ip-genetic-resources-committee-makes-progress-despite-block-end](http://www.ip-watch.org/2018/07/02/wipo-ip-genetic-resources-committee-makes-progress-despite-block-end)
- 12 Farmers' Rights as well as several other agriculture-related issues were not explicitly addressed in the final CBD text. Resolution 3 ("The Relationship Between the Convention on Biological Diversity and the Promotion of Sustainable Agriculture") of the Nairobi Conference for the Adoption of an Agreed Text of the CBD held on 22 May 1992 recognized the question of Farmers' Rights as one of the "outstanding matters" that needed a solution and called for ways and means to be explored to develop complementarity and cooperation between the CBD and the Global System for the Conservation and Sustainable Use of PGRFA (under FAO). In November 1993, the FAO Conference Resolution 7/93 requested the FAO Director-General to provide an intergovernmental forum for negotiations for the adaptation of the International Undertaking on Plant Genetic Resources for Food and Agriculture, in harmony with the CBD, the consideration of the issue of access on mutually agreed terms to plant genetic resources, including *ex situ* collections not addressed by the CBD, and the issue of the realization of Farmers' Rights. Thus the realization of Farmers' Rights was one of the principal objectives of the renegotiation of the International Undertaking that resulted in the Treaty.
- 13 Carolyn Deere (2009), "TRIPS Implementation in Francophone Africa", available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1405228, p. 245
- 14 *Ibid.*, pp. 245–246
- 15 *Ibid.*, p. 246
- 16 *Ibid.*, p. 250
- 17 *Ibid.*, p. 250
- 18 *Ibid.*, p. 251
- 19 WTO TRIPS Council decisions on extensions of the LDC transition periods are available at www.wto.org/english/tratop_e/trips_e/ldc_e.htm.
- 20 Article 66.1 of the TRIPS Agreement
- 21 *Ibid.*
- 22 UPOV doc. C/31/2
- 23 *Ibid.*
- 24 UPOV doc. C/32/2
- 25 www.worldseed.org/wp-content/uploads/2018/03/Exports_2016_Final.pdf
- 26 UPOV doc. C/32/2

- 27 Ibid.
- 28 Ibid.
- 29 Ibid.
- 30 UPOV doc. C/33/2
- 31 UPOV doc. C/32/3
- 32 UPOV doc. C/32/3, UPOV doc. C/33/2
- 33 Carolyn Deere (2009), "TRIPS Implementation in Francophone Africa", available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1405228
- 34 GRAIN (2002), "OAPI Undermines Farmers' Rights in Francophone Africa", available at www.iatp.org/sites/default/files/OAPI_Undermines_Farmers_Rights_in_Francophone_.htm
- 35 Ibid.
- 36 Ibid.
- 37 Carolyn Deere (2009), "TRIPS Implementation in Francophone Africa", available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1405228, pp. 269-270
- 38 UPOV doc. C/34/2
- 39 Ibid.
- 40 GRAIN (1999), "Plant variety protection to feed Africa? Rhetoric versus reality", www.grain.org/article/entries/13-plant-variety-protection-to-feed-africa-rhetoric-versus-reality
- 41 Ibid.
- 42 Ibid.
- 43 UPOV doc. C/34/2
- 44 Ibid.
- 45 UPOV doc. C/35/2
- 46 According to Article 43 of the revised Bangui Agreement, it will enter into force two months after the deposit of instruments of ratification by at least two-thirds of the signatory states.
- 47 UPOV doc. C(Extr.)/17/6
- 48 Ibid.
- 49 Carolyn Deere (2009), "TRIPS Implementation in Francophone Africa", available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1405228, pp. 260-263
- 50 Carolyn Deere (2009), "TRIPS Implementation in Francophone Africa", available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1405228
- 51 Ibid.
- 52 See www.gene.ch/gentech/1999/Jan-Feb/msg00271.html
- 53 Rural Advancement Foundation International (1999), "UPOV threatens Francophone Africa", available at www.grain.org/article/entries/2098-upov-threatens-francophone-africa
- 54 TRIPS-plus measures are measures which go beyond what is required under the TRIPS Agreement.
- 55 See, for example, p. Boulet et al. (2000), "Drug patents in French-speaking Africa", Joint Mission MSF, WHO, UNAIDS
- 56 ISF represents the national seed trade and/or plant breeder associations (ordinary members) as well as companies active in plant breeding or seed trading (associate members). The vast majority of members are from Europe.
- 57 AFSTA Position Paper on Intellectual Property 2001
- 58 Ibid.
- 59 J.A. Ekperu (2001), *The OAU's Model Law: The Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources – An Explanatory Booklet*
- 60 T.B.G. Egziabher (2002), "The African Model Law for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources in Relation to International Law and Institutions", paper from Ethiopian Forum 2002 Conference, available at <http://chora.virtualave.net/tewolde-rights.htm>
- 61 Carolyn Deere (2009), "TRIPS Implementation in Francophone Africa", available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1405228, p. 271
- 62 Submission of Kenya on behalf of the African Group, WT/GC/W/302
- 63 Ibid.
- 64 GRAIN (2001), "IPR Agents Try to Derail OAU Process: UPOV and WIPO attack Africa's Model Law on community rights", available at www.grain.org/article/entries/89-ipr-agents-
- 65 Ibid.
- 66 Ibid.
- 67 Ibid.
- 68 Ibid.
- 69 Carolyn Deere (2009), "TRIPS Implementation in Francophone Africa", available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1405228, p. 272
- 70 Submission by Kenya on behalf of the African Group, IP/C/W/163
- 71 Submission by the African Group, IP/C/W/404
- 72 Ibid.
- 73 Ibid.
- 74 Ibid.
- 75 See WTO (2006), "Review of the Provisions of Article 27.3(b) – Summary of Issues Raised and Points Made", Note by the Secretariat, IP/C/W/369/Rev.1, 9 March 2006, available at www.wto.org/english/tratop_e/trips_e/ta_docs_e/4_ipcw369rev1_e.pdf
- 76 Article 4 of the Bangui Agreement
- 77 For example, see Articles 35 and 42 of Annex X of the Bangui Agreement.
- 78 <https://wipo.lex.wipo.int/en/treaties/textdetails/12623>
- 79 For example, the Regulations do not address the requirements of Article 16 of the main text and Article 35 of Annex X.
- 80 Article 3 of the Bangui Agreement
- 81 Article 14(2) of the Bangui Agreement
- 82 Article 33(1) of the Bangui Agreement
- 83 Article 33(2) of the Bangui Agreement
- 84 Article 34 of the Bangui Agreement
- 85 Ibid.
- 86 See <http://www.oapi.int/index.php/fr/oapi/organisation/structures-nationales-de-liaison>, accessed 6 April 2018
- 87 Article 36 of the Bangui Agreement
- 88 Article 3, Annex X of the Bangui Agreement
- 89 UPOV Report on the Impact of Plant Variety Protection (2005), available at www.upov.int/export/sites/upov/about/en/pdf/353_upov_report.pdf
- 90 Article 2(2), UPOV 1978
- 91 Article 4(4), UPOV 1978
- 92 Article 3(1)(ii) and 3(2)(ii), UPOV 1991
- 93 Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, pp. 29-30, 54-56, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant
- 94 Under UPOV 1978, the minimum period of protection is 15 years. For vines, forest trees, fruit trees and ornamental trees, it is 18 years (Article 8). UPOV 1991 extended these periods to 20 years and 25 years, respectively (Article 19).
- 95 Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, p. 39, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant
- 96 Article 4, Annex X of the Bangui Agreement
- 97 The situations where there would not be a loss of novelty are defined narrowly by UPOV. They do not, for example, include farmers' exchanges of seeds. See UPOV (2009), "Explanatory Notes on Novelty under the UPOV Convention", UPOV/EXN/NOV, para. 6.
- 98 Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, pp. 32-33, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant
- 99 Article 12, Annex X of the Bangui Agreement
- 100 Article 12(3), Annex X of the Bangui Agreement
- 101 Article 12(2), Annex X of the Bangui Agreement
- 102 See <http://www.oapi.int/index.php/en/ressources/reglements>, accessed 16 April 2018
- 103 The franc CFA (FCFA) is the currency of eight West African countries (XOF) and seven Central African ones (XAF) – all members of OAPI. More information can be found here: www.bceao.int/fr/content/histoire-du-franc-cfa
- 104 PM means "Pas de montant" (no amount, the fee is not determined).
- 105 For example, Section 12(1)(e), (f) and (g) of Malaysia's Protection of New Plant Varieties Act 2004, and Section 19 of Thailand's Plant Variety Protection Act.
- 106 The UPOV Convention has been interpreted as preventing contracting parties from establishing a disclosure obligation as a condition for registration of a plant variety. In applying this approach, UPOV has deemed inconsistent with its regime legislation proposed by some developing countries, such as Malaysia, and required removal of disclosure obligations (with regard to origin, prior informed consent and compliance with access and benefit-sharing legislation) before allowing accession to UPOV. For more information, see Chapter 3 of Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant.

- 107 Article 17, Annex X of the Bangui Agreement
 108 For example, Article 57 of the European Union Directive No. 2100/94 on Community plant variety rights states that objectors shall have access to the documents including the results of the technical examination and the variety description.
- 109 Article 19, Annex X of the Bangui Agreement
 110 Article 18, Annex X of the Bangui Agreement
 111 See www.upov.int/edocs/mdocs/upov/fr/upov_ge_15_fr/upov_ge_15_fr_04.pdf, accessed 19 June 2018
 112 Ibid.
 113 Article 22, Annex X of the Bangui Agreement
 114 Ibid.
 115 Article 29(1), Annex X of the Bangui Agreement
 116 Article 14(2), UPOV 1991
 117 Article 14(3), UPOV 1991
 118 See Chapter 3 of Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant.
- 119 Article 1(e), Annex X of the Bangui Agreement
 120 The International Association of Horticultural Producers (AIPH) holds this view. AIPH has questioned the whole basis of EDVs, arguing that it reduces healthy competition between breeders, as it makes it difficult for new varieties to enter the market and gives existing breeders a market monopoly. It is of the opinion that “distinctiveness” is a sufficient criterion for granting breeders’ rights, adding that EDVs also do not promote “innovation and product renewal which was the basis for progress in [the] ornamental sector”. See APBEBES Report on the UPOV Seminar on Essentially Derived Varieties, Geneva, 22 October 2013, available at www.apbrebes.org/files/seeds/APBEBES%20rep%20EDV%20Sem%2022%20Oct%2013_0.pdf.
- 121 See Chapter 3 of Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant.
- 122 Ibid.
 123 UPOV (2009), “Explanatory Notes on Exceptions to the Breeder’s Right Under the 1991 Act of the UPOV Convention”, UPOV/EXN/EXC/1, October 2009, available at: www.upov.int/edocs/expdocs/en/upov_exn_exc.pdf
 124 Ibid.
 125 In examining the conformity of the Malaysian national PVP legislation with UPOV 1991, the UPOV secretariat expressly stated that the exchange of protected material for propagating purposes would not be covered by the exceptions under Article 15 of UPOV 1991. On that basis, it recommended deletion of Section 31(1)(e) of the Malaysian Protection of New Plant Varieties Act which contained the following exception: “any exchange of reasonable amounts of propagating materials among small farmers”. See UPOV document C(Extr.)/22/2, available at www.upov.int/edocs/mdocs/upov/en/c_extr/22/c_extr_22_2.pdf.
- 126 In the case of the Philippines, UPOV found the farmer’s exception in Section 43(d) of the PVP legislation to be incompatible with UPOV 1991. Section 43(d) states: “The Certificate of Plant Variety Protection shall not extend to: ... d) The traditional right of small farmers to save, use, exchange, share or sell their farm produce of a variety protected under this Act, except when a sale is for the purpose of reproduction under a commercial marketing agreement ... This provision shall also extend to the exchange and sell [sic] of seeds among and between said small farmers: Provided, That the small farmers may exchange or sell seeds for reproduction and replanting in their own land.” UPOV in its comments noted *inter alia* that “The exchange and sale of seeds among and between the said small farmers in their own land, as provided in the third sentence of Section 43(d) of the Law, go beyond the exception of Article 15(2) of 1991 Act”, and called for the Section to be amended. See UPOV document C(Extr.)/24/2, available at www.upov.int/edocs/mdocs/upov/en/c_extr/24/c_extr_24_02.pdf.
- 127 See www.apbrebes.org/news/apbrebes-report-upov-2017-autumn-session
 128 See Chapter 3 of Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant.
- 129 In Germany, small farmers including small-scale commercial farmers do not have to pay remuneration for seed saving for purposes of propagation. In Switzerland, where the average farmer holding is 22 hectares, all farmers (small and large) are exempt from payment of remuneration for seed saving for propagating purposes.
- 130 UPOV’s guidance (UPOV/INF/6/5) on Article 15(2) states that “the optional exception may be considered to relate to selected crops where the product of the harvest is used for propagating purposes, for example small-grained cereals where the harvested grain can equally be used as seed i.e. propagating material. Taken together with the recommendation relating to Article 15(2) of the Diplomatic Conference of 1991..., the wording also indicates that it may be considered inappropriate to introduce the optional exception for agricultural or horticultural sectors, such as fruit, ornamentals and vegetables, where it has not been a common practice for the harvested material to be used as propagating material.” It is to be noted, however, that the Diplomatic Conference refused to include this qualification in the text of the Convention itself.
- 131 According to Annex VIII, an act of unfair competition is an act or practice referred to in Articles 2 to 6 of Annex VIII and any act or practice which, in the course of industrial or commercial activities, is contrary to honest practice. Articles 2 to 6 of Annex VIII cover: confusion with another’s enterprise or activities (Article 2); acts damaging to another’s image or reputation (Article 3); deceiving the public (Article 4); disparaging another’s enterprise or activities (Article 5); and unfair competition concerning confidential information (Article 6). These articles shall apply independently of and in addition to any legislative provisions on intellectual property (Article 1). Any natural or legal person who has suffered damage or is liable to suffer damage due to an act of unfair competition may institute proceedings before the court of a member state and may obtain injunctions, damages and any other remedy provided by civil law (Article 1).
- 132 Article 61, TRIPS Agreement
 133 Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, p. 68, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant
 134 Ibid.
 135 Ibid.
 136 Ibid.
 137 *BOPI No. 06 des Obtentions Végétales*, 15 December 2017, available at www.oapi.int/bopi/OV/BOPI_06OV2017.pdf
 138 During our visit to the OAPI headquarters in March 2017, OAPI had not started publishing the PVP bulletin online. We were able to access only the latest issue at that time (*BOPI No. 05 des Obtentions Végétales*, 1 September 2015), which, as of June 2018, was still not available online. The Director of the Industrial Protection section of OAPI suggested that we officially write to the Information Service to request copies of past issues of the PVP bulletin.
 139 Interview with OAPI legal service (February 2017)
 140 The date of development for each variety was provided during an interview with the OAPI focal point at IRAD.
 141 Available at www.prasac-cemac.org/images/pdf/CEMACCATALOGUE.pdf
 142 Ministry of Agriculture of Mali, *Catalogue Officiel des Espèces et des Variétés*, Edition 2013
 143 Interview with the OAPI focal point at IRAD (April 2017)
 144 See this article on ISRA’s website confirming the existence of such an experiment which was witnessed by participants from an OAPI-UPOV workshop on PVP in Senegal: www.isra.sn/index.php/88-news/latest-news/267-proprete-intellectuelle-l-isra-s-engage-dans-la-protection-des-innovations-varietales
 145 Stakeholders we interviewed confirmed that the varieties were characterized, tested in the natural environment under local farming conditions, and inventoried in the catalogue. This is also officially acknowledged in the foreword of the national catalogue itself. However, DUS testing never took place.

- 146 Interview with a staff member of OAPI at the industrial property department, 1 April 2017
- 147 R.A. Brac de la Perrière (2017), *Etude critique du cadre juridique et des dispositifs juridiques sur les semences au Niger*, Swissaid
- 148 Syngenta Foundation for Sustainable Agriculture (2017), "Regional Variety Release Test Cases: 2016 Findings", p. 4
- 149 Interview with a staff member of OAPI at the industrial property department, 1 April 2017
- 150 UPOV (2005), *Rapport de l'UPOV sur l'impact de la protection des obtentions végétales*, p. 23, available at www.upov.int/export/sites/upov/about/fr/pdf/353_upov_report.pdf
- 151 "Basic Principles of the UPOV Convention and Benefits of UPOV Membership", available at www.eapvp.org/report/docs/myanmar/04-1-%20Basic%20Principles%20of%20the%20UPOV%20Convention%20and%20Benefits%20of%20UPOV%20Membership.%20Ms.%20Huerta.pdf
- 152 Ibid.
- 153 Ibid.
- 154 Ibid.
- 155 Ibid.
- 156 Ibid.
- 157 Kindo Ousseny (2012), "Nouvelles variétés culturales/Hévéa, cacao: les chercheurs sauvent les paysans!", 9 January, available at <http://news.abidjan.net/h/422292.html>. Also see T. Leroy et al. (2014), "Inscription d'une variété de sorgho obtenue par sélection participative au Mali dans des projets multi-acteurs", in *Agronomie, Environnement et Sociétés*. December, pp. 143-152. These sources provide examples of new varieties developed in Mali and Cote d'Ivoire and not proposed for protection at OAPI.
- 158 Ibid.
- 159 Three other international firms recently applied for PVP: Del Monte Int'l (Monaco, France), for the protection of a variety of pineapple (filed in 2013); Florida Foundation Seed Producers, Inc. (USA), on a variety of strawberry (filed in September 2017); and Berryworld Plus Limited (Great Britain) on three varieties of raspberry (filed respectively in January, August and November 2017). These five applications are under examination by OAPI (as of December 2017).
- 160 The only country where a domestic private company is engaged in breeding is Senegal, the company concerned being Tropicasem SA.
- 161 See Ousseny; Leroy et al., supra note 157.
- 162 Dr. Patrice Djamen (2016), *Développer le secteur semencier pour augmenter la productivité agricole en Afrique de l'Ouest et du Centre: Leviers et Principes d'actions*, Fondation FARM and CORAF/WECARD, November, p. 7
- 163 See www.la-croix.com/Economie/Bpifrance/PlusBeauStage-Technisem-cultive-succes-international-2017-10-18-1600885257. Tropicasem's varieties registered in the Senegal seed catalogue are listed as belonging to Tropicasem/Technisem.
- 164 Interview with the Director of Tropicasem (October 2017)
- 165 G.J.H. Grubben (2004), "Légumes", in *Ressources Végétales de l'Afrique Tropicale (PROTA)*, French Edition, Volume 2, p. 29.
- One paragraph on the selection of okra in Africa reads: "The Senegalese seed company Technisem distributes some selected African cultivars such as 'Volta'..."
- 166 See Public Eye, "Qu'est-ce que la biopiraterie?", available at www.publiceye.ch/fr/themes-et-contexte/agriculture-et-biodiversite/biodiversite/biopiraterie
- 167 ASPSP, BEDE (2009), *Journal of the West African Farm Seed Fair*, www.bede-asso.org/wp-content/uploads/2014/10/journalfoire2009.pdf
- 168 Interview with Ousmane Abdou, OAPI focal point at the Niger Ministry of Agriculture, 30 November 2016
- 169 R.A. Brac de la Perrière (2017), *Etude critique du cadre juridique et des dispositifs juridiques sur les semences au Niger*, Swissaid
- 170 Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, Chapter 2, available at www.apbebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant; Sangeeta Shashikant (2017), "UPOV: Symposium Reveals Conflict in Interrelations Between UPOV and ITPGRFA; UPOV To Consider Proposals", www.apbebes.org/news/upov-symposium-reveals-conflict-interrelations-between-upov-and-itpgrfa-upov-consider-proposals
- 171 *Business profits or diverse food systems?: Threats to peasant seeds and implications in West Africa*, www.fian.org/fileadmin/media/publications_2018/Reports_and_guidelines/180329_FIAN_FFM_BurkinaFaso_EN_Web.pdf, published by FIAN International for the Global Network for the Right to Food and Nutrition, and the Global Convergence of Land and Water Struggles – West Africa, pp. 53-54
- 172 Interview with IER staff (May 2017)
- 173 ASPSP-BEDE (2014), "La recherche publique malienne captée par l'OAPI pour la certification des obtentions végétales?", in *Journal de la 4e foire ouest-africaine des semences paysannes*, 11-13 March, p. 4
- 174 Interview with IER staff (May 2017)
- 175 Interview with IRAD staff (the OAPI focal point and the director of legal affairs)
- 176 IRAD and IER
- 177 Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, p. 76, available at www.apbebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant
- 178 Interview with OAPI focal point at IRAD (April 2017)
- 179 Interviews with staff members of IRAD (April 2017), CIRAD (April 2017), IER (March 2017) and ASPIT (Agence sénégalaise pour la Propriété Industrielle et l'Innovation technologique, October 2017)
- 180 Interview with Thierry Leroy, referent Genetic Resources / Intellectual Property GS team "Genomics and selection" UMR AGAP CIRAD - Biological Systems department, Montpellier 31 mai 2017
- 181 Interview with the Director General of Tropicasem in Dakar, Senegal (3 October 2017)
- 182 Interview with the Director General of Tropicasem in Dakar, Senegal (3 October 2017)
- 183 *Business profits or diverse food systems?: Threats to peasant seeds and implications in West Africa*, www.fian.org/fileadmin/media/publications_2018/Reports_and_guidelines/180329_FIAN_FFM_BurkinaFaso_EN_Web.pdf, published by FIAN International for the Global Network for the Right to Food and Nutrition, and the Global Convergence of Land and Water Struggles – West Africa
- 184 Berne Declaration (2014), *Owning Seeds, Accessing Food: A Human Rights Impact Assessment of UPOV 1991 Based on Case Studies in Kenya, Peru and the Philippines*, p. 7, available at www.bernedeclaration.ch/fileadmin/files/documents/Saatgut/2014_07_10_Owning_Seed_-_Accessing_Food_report_def.pdf
- 185 Ibid.
- 186 Presentation by M. Mémassi Dosso of OAPI at AFSTA Conference 2017, available at <http://afsta.org/wp-content/uploads/2017/03/10-b-Memmasi-Situation-des-droits-des-obtenteurs.pdf>
- 187 Ibid.
- 188 Interview with the person in charge of PVP issues at OAPI
- 189 Interview with the technical director of ASPIT in Dakar, 3 October 2017
- 190 UPOV and the US Patent and Trademark Office funded a regional meeting in Senegal on 26-28 September 2017 specifically dedicated to the issue of OAPI countries' membership in UPOV. A report on this meeting is on file with the authors. See some information here: www.scidev.net/afrique-sub-saharienne/agriculture/actualites/proteger-les-innovations-varietales-en-afrique.html
- 191 Communiqué du conseil des ministres ayant entériné la décision de ratification de la convention UPOV 1991. Available at <https://beninwebtv.com/2017/02/conseil-ministres-1er-fevrier-integralite-point-de-presse>
- 192 CVSPB, letter to the Speaker of the National Assembly, 3 April 2017
- 193 Interview with the Senegal national OAPI liaison office, 3 October 2017
- 194 Ibid.
- 195 Ibid.
- 196 For example: "The UPOV Convention, Farmers' Rights and Human Rights – An integrated assessment of potentially conflicting legal frameworks", published by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the German Federal Ministry for Economic Cooperation and Development (June 2015), available at www.giz.de/fachexpertise/downloads/giz2015-en-upov-convention.pdf; UNDP (2008), "Towards a Balanced Sui Generis Plant Variety Regime", available at www.undp.org/content/undp/en/home/librarypage/poverty-reduction/toward-a-balanced-sui-generis-plant-variety-regime.html; and "Seed policies and the right to food: enhancing agrobiodiversity and encouraging innovation", UN General Assembly Document A/64/170, available at www.srfood.org/images/stories/pdf/offici

- alreports/20091021_report-ga64_seed-policies-and-the-right-to-food_en.pdf
- 197 www.scidev.net/afrique-sub-saharienne/agriculture/actualites/protoger-les-innovations-varietales-en-afrique.html
- 198 O.T. Coomes et al. (2015), "Farmer seed networks make a limited contribution to agriculture? Four common misconceptions", *Food Policy* 56, pp. 41-50, available at www.sciencedirect.com/science/article/pii/S030691921500086X?via%3Dihub
- 199 Ibid.
- 200 www.fao.org/fileadmin/templates/nr/sustainability_pathways/docs/Factsheet_SMALLHOLDERS.pdf
- 201 O.T. Coomes et al. (2015), "Farmer seed networks make a limited contribution to agriculture? Four common misconceptions", *Food Policy* 56, pp. 41-50, available at www.sciencedirect.com/science/article/pii/S030691921500086X?via%3Dihub
- 202 <https://timesofindia.indiatimes.com/india/slide-in-farm-size-but-women-land-owners-rise-agri-census/articleshow/66035943.cms>
- 203 Section 30 of the PPVFR Act allows use of the protected variety as an initial source of variation for the purpose of creating other varieties, with the breeder's authorization needed only where the repeated use of the protected variety is necessary for commercial production of another new variety.
- 204 Section 29 of the PPVFR Act excludes registration of varieties in cases where prevention of commercial exploitation of such variety is necessary to protect public order or public morality or human, animal and plant life and health or to avoid serious prejudice to the environment. It further adds that "...no variety of any genera or species which involves any technology which is injurious to the life or health of human beings, animals or plants shall be registered under this Act".
- 205 The PVP applicant has to provide information on the genetic material from which the variety is derived, including information relating to the contribution of any farmer or local community in breeding, evolving or developing the variety, and prove that the genetic material utilized for development of the variety has been lawfully acquired (Section 18). The local community has the right to claim benefit sharing if it has contributed to the development of the variety for which the applicant is seeking protection (Section 41).
- 206 For example, in 2017, five farming communities were awarded with a citation, a memento and cash prize of Rs. 10 lakh (US\$14,132); 10 farmers were given Plant Genome Saviour Farmers' Rewards with a citation, a memento and cash of Rs. 1.5 lakh (US\$2,119); and 20 farmers were awarded Plant Genome Saviour Farmer Recognitions that included a citation, a memento and cash of Rs. 1 lakh (US\$1,412).
- 207 Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, Chapter 5, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant
- 208 For example, Malaysia, which began operationalizing its *sui generis* PVP system in 2008, received 207 PVP applications between 2008 and 2015. International companies filed the majority of these applications (50%). Domestic private companies (20%), government research agencies (14%), universities (11%) and individuals (5%) accounted for the remaining applications filed (source: Malaysian Country Report, Plant Variety Protection Forum 2015).
- 209 Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant
- 210 The list of objectives is drawn from Carlos M. Correa et al. (2015), *Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991*, APBEBES, p. 48, available at www.apbrebes.org/news/new-publication-plant-variety-protection-developing-countries-tool-designing-sui-generis-plant
- 211 United Nations Declaration on the Rights of Indigenous Peoples, www.un.org/esa/soc-dev/unpfii/documents/DRIPS_en.pdf
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- 214 Article 47 of the Bangui Agreement states that the Agreement "may be revised from time to time, notably with a view to introducing amendments intended to improve the services rendered by the Organization [OAPI], on the initiative of and according to the procedure laid down by the Administrative Council".



PUBLISHERS



APBREBES The Association for Plant Breeding for the Benefit of Society (APBREBES) is a network of civil society organizations from developing and industrialized countries. The purpose of APBREBES is to promote plant breeding for the benefit of society, fully implementing Farmers' Rights to plant genetic resources and promoting biodiversity.

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BEDE is a non-profit international solidarity organization that has been promoting agricultural biodiversity and food sovereignty since 1994 in Europe and North and West Africa. Its main objectives are:

- Facilitate the construction of peasant initiatives;
 - Document and promote farmer innovations, develop collaborative research methods;
 - Inform, raise awareness and network to defend the collective rights of communities over peasant seeds.
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THIRD WORLD NETWORK is a research and advocacy organization dedicated to promoting sustainable development and the interests of developing countries, with its international secretariat in Malaysia.

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More than 10 years ago the new plant variety protections system – modelled on UPOV 1991 – entered into force in West Africa. This Working Paper studies how the system has been operationalized, the impact and relevance of UPOV 1991 for the region and, in particular, whether the promises of UPOV 1991 were ever realized for the 17 countries in the OAPI region.

The results of the investigation are staggering. It points to a dysfunctional PVP system that does not fit the socio-economic and agricultural conditions prevailing in the region. While benefits have hardly been realized, states are burdened with the costs of implementation. This shows, once again, that the top-down approach of exporting legal frameworks intended for developed countries to developing countries which have different circumstances, is a flawed colonial strategy, with significant costs and missed opportunities for people in West Africa.

