RETHINKING PLANT VARIETY PROTECTION IN AFRICA: IS THE UPOV-STYLE REGIME ADEQUATE FOR ENSURING FARMERS' RIGHTS AND FOOD SECURITY?

Aishatu Eleojo Adaji*

ABSTRACT

African countries are establishing plant variety protection regimes to incentivise investments in plant breeding and the development of crop varieties for the purpose of improving the productivity of basic food crops for smallholder farmers in the continent. However, the regimes, which are mostly modelled on the 1991 Act of the International Convention for the Protection of New Varieties of Plants (UPOV Convention) 1961, undermine the traditionally unrestricted farming practices of using, saving, selling and exchanging farm seeds and other propagating materials that constitute farmers' rights. Therefore, this paper assesses the suitability of adopting UPOV-style regimes in protecting crop varieties in Africa. Particularly, it critically analyses the potential impact of the UPOV-style regimes on farmers' rights and reflects on the broader implications for food security in Africa. It found that the system of plant variety protection obtainable under the UPOV-style regime challenges farmers' rights and ability to control food production and conserve and sustainably use plant genetic diversity in agriculture for diversified farming. This poses a threat to food security in Africa. It is, therefore, imperative to provide safeguards against the erosion of farmers' rights and for the protection of traditional knowledge and agricultural practices in Africa.

Keywords: Farmers' Rights, Food Security, PVP, Nigeria, UPOV, TRIPS.

* Department of Public and International Law, Faculty of Law, Osun State University, Osogbo, Nigeria

INTRODUCTION

Under Article 27.3(b) of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement 1994 (as amended), member countries of the World Trade Organisation are obligated to provide intellectual property (IP) protection for plant varieties/plant breeders rights (PBRs) either under the existing patent system or by 'an effective *sui generis* system'. It is also open to them to utilise both the patent and *sui generis* systems.[1] By this provision, it appears that each and every member country has the liberty to establish any form of legal protection that best suits their purpose. For African countries, such flexibility allows them to adopt a protection mechanism tailored to the peculiarities of their agricultural and socio-economic conditions. However, critics argue that developing countries, including African countries, are being subjected to continuous political and economic pressures, more particularly through various agreements on free trade and economic partnership, to adopt and implement plant variety protection (PVP) systems modelled on the 1991 Act of the International Convention for the Protection of New Varieties of Plants (UPOV Convention) 1961.[2] Thus, there are suggestions that the TRIPS Agreement 1994 (as amended) eventually serves as the conduit through which the UPOV standards are being imposed on African countries and other developing countries which had previously not considered plant varieties a subject of intellectual property rights (IPRs).[3] This has resulted in member countries of the African Intellectual Property Organization (OAPI) (comprising 17 African States)

[1] TRIPS Agreement 1994, art 27.3(b)

[2] T Adebola, 'Examining Plant Variety Protection in Nigeria: Realities, Obligations and Prospects' (2019) 22 Journal of World Intellectual Property 36, 42 – 44 <http://doi.org/10.1111/jwip.12113>; C Oguamanam, 'Breeding Apples for Oranges: Africa's Misplaced Priority Over Plant Breeders' Rights' (2015) 18(15) Journal of World Intellectual Property 165 - 195 <https://doi.org/10.1111/jwip.12039>.

[3] Oguamanam, 'Breeding…' (n2) 168 – 169; JH Reichman, 'Universal Minimum Standards of Intellectual Property Protection under the TRIPs Component of the WTO Agreement' in Correa CM and Yusuf AA (Eds), *Intellectual Property and International Trade: The TRIPS Agreement* (2nd Edition, Kluwer Law International, The Netherlands 2008) 37; Nigeria's Patents and Designs Act 1970, s 1(4)(a) and Tanzania's Patents Act 1987, s 7 explicitly exclude plant varieties from patentable subject matters.

and the African Regional Intellectual Property Organisation (ARIPO) (comprising 22 African States), as well as other African States such as Nigeria and Tunisia, committing to the standards obtainable under the 1991 Act of the UPOV Convention. Before this, Kenya, South Africa, and Zimbabwe were the only African States that had IP systems for plant varieties in place.[4]

It is believed that PVP based on the UPOV PVP system will boost the development of new crop varieties and seeds for Africa's smallholder farmers while incentivising investments in plant breeding and crop variety development.[5] Yet, the exclusivity of breeders' rights over new crop varieties under the UPOV PVP system, among others, raises concerns regarding the traditional farming practices common among smallholder farmers in Africa, such as the saving and replanting of seeds. Considering this, the main question of this paper is whether the UPOV-style regime is compatible with the realities of Africa's farming system. What are the possible implications of the UPOV-style regime for farmers' rights and food security in Africa? Furthermore, given the continent's reliance on smallholder farmers, how can African countries forge a PVP system that balances breeders' rights and local farming practices, ensuring food security? The paper presents six sections to address these questions. After this introduction, the linkage between farmers' rights and food security is examined. Next, the paper analyses two critical multilateral regimes on PVP – (i) the UPOV Convention and (ii) the African Model Law – to put in perspective possible approaches to implementing the obligation of Article 27.3(b) of TRIPS in Africa. The two sections after provide analyses of the current legal framework of the PVP in Africa and the possible implications for farmers' rights and Africa's food security.

---

[4] T Adebola, 'Africa and Intellectual Property Rights for Plant Varieties'. *Oxford Bibliographies Online in International Law* (2020) <10.1093/OBO/9780199796953-0210>.

[5] E Sackey, 'Developing an Effective Plant Variety Protection System for the Promotion of Agricultural Productivity in Africa' (31 March 2023) <https://www.aripo.org/success-stories/developing-an-effective-plant-variety-protection-system-for-the-promotion-of-agricultural-productivity-in-africa-7458> accessed 05 April 2025.

This paper challenges the suitability of a UPOV-style PVP system for farmers' rights and Africa's food security. The UPOV standards fail to adequately balance breeders' IPRs with farmers' traditional practices, potentially hindering Africa's food security efforts. The main thesis of this paper is that the protection of breeders' rights must not come at the expense of farmers' rights; both sets of rights should be recognised and promoted in a balanced and complementary manner, given their possible impacts on food security and socio-economic justice. Therefore, the paper concluded by proposing solutions to the problems identified within the existing PVP legal frameworks in Africa.

FARMERS' RIGHTS AND ITS LINKAGE WITH FOOD SECURITY

The notion of farmers' rights recognises the ongoing contributions of farmers worldwide, especially those in regions with high biodiversity, to the conservation, improvement and availability of plant genetic resources essential for food and agriculture (PGRFA).[6] It emerged in the 1980s in reaction to the application of IPRs to PGRFA. However, the International Treaty on Plant Genetic Resources for Food and Agriculture of 2001 (2001 Treaty) is the first binding instrument to explicitly recognise the concept of farmers' rights.[7] Although it lacks a clear definition of farmers' rights, its Preamble and Article 9 specifically encourage the protection of the traditional rights of farmers to save seeds and other propagating materials and to sell, replant, exchange or share them. Building on the 2001 Treaty, the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP) 2018 recognises these rights over farm-saved seeds and propagating materials, among other things, as a human

[6] Preambles to the International Treaty on Plant Genetic Resources for Food and Agriculture 2001 and the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas 2018.

[7] Food and Agriculture Organization of the United Nations (FAO), 'Farmers' Rights' (2017) 8 <https://openknowledge.fao.org/server/api/core/bitstreams/c6767e7b-331d-421f-b936-f1922a3bc54d/content> accessed 27 February 2025; L Winter, 'Cultivating Farmers' Rights: Reconciling Food Security, Indigenous Agriculture, and TRIPS' (2021) 43 Vanderbilt Law Review 233, 236 <https://scholarship.law.vanderbilt.edu/vjtl/vol43/iss1/6> accessed 27 February 2025.

right.[8] Thus, it obligates States 'to promptly take legislative, administrative and other appropriate steps to achieve progressively the full realisation of the rights'.[9]

To ensure the realisation of farmers' rights nationally, the 2001 Treaty urges national governments to take actions to, among other things, protect traditional knowledge relating to PGRFA, ensure farmers have a fair share in the benefits derived from utilising the PGRFA, and ensure that, nationally, farmers participate in the decision-making concerning issues in conserving and utilising the PGRFA.[10] The UNDROP 2018 contains more elaborate provisions in these regards, although it lacks legal force. Significantly, it obliges States to ensure that their seed policies, PVP and IP laws, and others respect and consider the rights, needs and realities of local farmers.[11] In this vein, it is observed that certain African States are pursuing legislative, policy, administrative, or other initiatives to reinforce their domestic seed systems and uphold farmers' rights; however, this progress is occurring at a slow rate.[12]

Nigeria's National Agricultural Seed Council Act 2019 (Seed Act) provides the legal basis for recognising farmers' rights in Nigeria, with the government undertaking to safeguard these rights.[13] Prior to this enactment, sections one and six of the Nigerian National Biotechnology Policy 2001 had given a lead for the protection of farmers' rights in Nigeria by, among others, stating that Nigeria shall develop 'regulations that ensure biosafety, biodiversity conservation, protection of intellectual property, breeders and

[8] United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas 2018, art 19.1(d).
[9] United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas 2018, art 2.
[10] International Treaty on Plant Genetic Resources for Food and Agriculture 2001, art 9(2).
[11] United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas 2018, art 19.8.
[12] The Office of the High Commissioner for Human Rights, 'Implementation of the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas – Online Submissions. <https://www.ohchr.org/en/calls-for-input/2024/implementation-united-nations-declaration-rights-peasants-and-other-people> accessed 05 April 2025.
[13] National Agricultural Seed Council Act 2019, s 40.

farmers rights as well as bioethics' (emphasis added). In the same vein, Zimbabwe's National Strategy and Action Plan (NSAP) on Plant Genetic Resources for Food and Agriculture (PGRFA) (2022 – 2032) also recognises the importance of creating supportive policies and legislative frameworks that offer clear mechanisms or regulatory frameworks to effectively protect farmers' rights as enshrined in the 2001 Treaty and other legal instruments.

Implementing measures protecting farmers' rights is crucial to incentivise local farmers to continue conserving and developing PGRFA.[14] Specifically, as custodians and developers of PGRFA, recognising and protecting farmers' rights are essential for them to continue maintaining their vital roles towards achieving present and future food security and nutrition.[15] This is especially true for African countries, where most people are smallholder farmers relying mainly on traditional agricultural practices for the continuing development of plant genetic diversity.[16] These farmers are instrumental in increasing the range of PGRFA that is of global importance through the 'careful selection of their best seeds and propagating material, and exchange with other farmers'.[17]

In light of the foregoing, preserving the traditional rights of local farmers is crucial for food security for various reasons, including the fact that the diversity between and within crops enables their adaption to evolving environmental conditions, including those associated with climate change, such as drought.[18] It is a way to mitigate the likelihood of crop failure resulting from adverse environmental conditions or pests and disease problems.[19] Also, the availability of and access to adequate food at all times

[14] FAO, 'Farmers' Rights' (n7) 35.
[15] Ibid; United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas 2018, para 7 of the preamble.
[16] FAO, 'Farmers' Rights' (n7) 33 – 35.
[17] FAO, 'Overview of the Historical Developments and Discussion on Farmers' Rights' (2018) 1. <https://www.fao.org/fileadmin/user_upload/faoweb/plant-treaty/AHTEG-FR-1/Overview_of_Historical_Developments_and_Discussions.pdf> accessed 27 February 2025.
[18] FAO, 'Farmers' Rights' (n7) 5.
[19] FAO, 'Overview…' (n17) 1.

is a prerequisite for food security, and it is maintained that these are best guaranteed by the farmers' autonomy over their food production and food choices.[20] However, as shown in the later part of this paper, the aforementioned international and national instruments and measures may not yield any substantial positive effect on farmers' rights and food security owing to inherent limitations under the prevailing UPOV Convention-based PVP laws in Africa.

THE *SUI GENERIS* OPTION OF TRIPS: ANALYSIS OF THE UPOV CONVENTION AND THE AFRICAN MODEL LAW

As noted, TRIPS allows members to establish their own system to protect PBRs. In this respect, there are two main multilateral regimes providing frameworks serving as templates, at least in the African context: the UPOV Convention 1961 and 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 or OAU/AU Model Law) 2000.[21]

The Upov Convention 1961

The UPOV Convention was established in 1961 by a small group of European countries, providing an international standard for protecting crop varieties and breeding under a distinct IP system.[22] This Convention, which was largely shaped by the economic interests of their plant breeding

[20] Winter, 'Cultivating Farmers' Rights …' (n7) 237; AE Adaji, BS Barau, IA Sarumi, 'The Right to Adequate Food and Protection of Agricultural Innovations in Nigeria: A Critical Analysis' (2024) 1(1) Journal of Public and Human Rights Law, 1, 7.

[21] The OAU/AU African Model Legislation for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources (the African Model Law), 2000 <https://www.wipo.int/edocs/lexdocs/laws/en/oau/oau001en.pdf> accessed 27 February 2025.

[22] UPOV, 'Overview' (2011) <http://www.upov.int/about/en/overview.html> accessed on 30 March 2025; Association for Plant Breeding for the Benefit of Society (APBREBES) 'UPOV Convention: Some Basics about the UPOV Convention' <http://www.apbrebes.org/content/upov-convention> accessed 27 February 2025.

industry, brought the International Union for the Protection of New Varieties of Plants (UPOV) into being.[23] Some believe that its aim was to increase the market demands for seeds of newly created varieties that will likely be saved and replanted by farmers, players in the industry having succeeded in creating a dichotomy between breeding and farming.[24] Dutfield makes this point by arguing that the 1961 Convention is 'an international regime designed specifically to protect plant varieties whose seeds could otherwise be easily saved, replanted and sold' by farmers.[25] After coming into force in 1968, the 1961 Convention was amended at three different periods (in 1972, 1978 and 1991) to keep pace with the technological advancements in plant breeding while incorporating the lessons learned by member States in implementing the Convention.[26] Yet, in broadening the scope of PBRs, the revisions increasingly impede traditional farming practices, such as the sharing and using saved seeds among farmers, with significant implications for Africa's food security and that of other developing countries.

The amendments resulted in three versions of the UPOV Convention. The first version of the initial revision is the 1961/1972 Act of the UPOV Convention, with the second amendment establishing the 1978 Act of the UPOV Convention.[27] The third and latest version remains the 1991 Act of the UPOV Convention.[28] It suffices to note that with the exception of accessions already initiated, all the pre-1991 versions have been closed for

[23] APBREBES, 'UPOV Convention…' (n22).

[24] ibid; See also Oguamanam, 'Breeding…' (n2) 172 (arguing that 'UPOV is essentially a multilateral system that formally established the dichotomisation of breeding from farming').

[25] G Dutfield, 'Turning Plant Varieties into Intellectual Property: The UPOV Convention', in Tansey G.C and Rajotte T (eds), *The Future Control of Food: A Guide to International Negotiations and Rules on Intellectual Property, Biodiversity and Food Security* (Earthscan, London 2008) 27–47.

[26] The International Union for the Protection of New Varieties of Plant (UPOV), 'UPOV Lex' <https://upovlex.upov.int/en/convention> accessed 27 February 2025; Oguamanam, 'Breeding…' (n2) 172.

[27] UPOV, 'UPOV Lex' (n26).

[28] Ibid.

further accessions since the 1991 Act took effect in 1998.[29] All three versions offer protection to plant breeders for their crop varieties in the form known as 'breeder's rights', provided they satisfy the criteria in the Convention.[30] But by contrast, the 1991 Act is prominent for establishing the strongest international legal standard for PBRs protection.[31]

To further strengthen the protection of PBRs, the 1991 Act extended the scope of varieties to be protected to all plants, regardless of their genera and species.[32] Previous versions only set a minimum threshold for the number of plants qualified for protection within given timeframes.[33] While the 1978 Act had expanded the minimum threshold for which members must offer protection beyond what was obtainable under the 1961/1972 Act, it allowed member States who had encountered special economic or ecological difficulties to request that the numbers of plants be reduced or the timeframes within which they are expected to comply extended or both.[34] On the criteria to be fulfilled for protection, it is observed that the 1991 Act sets out a 'stricter or more precise scientific standard'.[35] It emphasises the technical criteria that must be met to enjoy protection over any crop variety, using the term 'uniformity' in place of 'homogeneity'. However, novelty, distinctness, and stability correspond to the stipulations under the 1978 Act.[36] Nevertheless, it is worth noting that both the homogeneity and uniformity requirements form the basis upon which the UPOV standards have been criticised for discouraging variability in plants by rewarding

[29] Ibid.

[30] 1961/1972 Act of the UPOV Convention, art 2, 5 and 6; 1978 Act of the UPOV Convention, art 2, 5 and 6; 1991 Act of the UPOV Convention, art 5-9 and 14.

[31] B De Jonge, and P Munyi, 'A Differentiated Approach to Plant Variety Protection in Africa' (2016) 19(1-2) Journal of World Intellectual Property 28 <https://doi.org/10.1111/jwip.12053>.

[32] 1991 Act of the UPOV Convention, art 3.

[33] 1961/1972 Act of the UPOV Convention, art 4(3) and 1978 Act of the UPOV Convention, art 4(3).b.

[34] 1978 Act of the UPOV Convention, art 4(4) and 4(5).

[35] Oguamanam, 'Breeding…' (n2) 172; 1991 Act of the UPOV Convention, art 5 (conditions of protection).

[36] 1991 Act of the UPOV Convention, art 5 – 9; 1978 Act of the UPOV Convention, art 6.

developers of seeds possessing uniform genetic characteristics.[37] It is also believed that the standards cannot accommodate the diverse and heterogeneous plant varieties developed by local farmers through informal breeding methods.[38]

The 1991 Act further elevates PBRs by expanding the exclusive rights to harvested materials, varieties essentially derived from protected varieties, and exporting, importing, and conditioning activities relating to protected varieties, among others. This is unlike the 1978 Act, which operates a more or less open-source system with less stringent requirements concerning 'the utilisation of the variety as an initial source of variation for the purpose of creating other varieties or for the marketing of such varieties'.[39] In the same vein, Oguamanam points out that as regards the 1978 Act, members 'are at liberty to extend to farmers the opportunity to use or exchange farm-saved seeds of breeders' protected variety on specified terms', both in practice and in principle.[40] Conversely, the 1991 Act 'merely recognises this practice, referred to as farmers' privilege, but leaves States the discretion to either recognise or bar farmers' privilege in their national laws'.[41] However, the explicit recognition of farmers' privilege is subjected to stringent and ambiguous conditions under Article 15(2) of the 1991 Act to ensure 'the

[37] LR Helfer, *Intellectual Property Rights in Plant Varieties: International Legal Regimes and Policy Options for National Governments* (FAO, Rome, Italy 2008)16-17, 23.
[38] Ibid.
[39] Compare art 5(3) of the of the 1978 Act of the UPOV Convention and art 14(5) of the of the 1991 Act of the UPOV Convention.
[40] Oguamanam, 'Breeding…' (n2) 173.
[41] ibid; See also 1991 Act of the UPOV Convention, art 15(2) (optional exception), with respect to which the Diplomatic Conference for the Revision of UPOV had recommended that the provisions as laid down in Article 15(2) of the 1991 Act of the UPOV Convention, 'should not be read so as to be intended to open the possibility of extending the practice commonly called "farmer's privilege" to sectors of agricultural or horticultural production in which such a privilege is not a common practice on the territory of the Contracting Party concerned'. - 'Explanatory Notes on Exceptions to the Breeder's Right Under the 1991 Act of the UPOV Convention'. (UPOV/EXN/EXC/1) (Adopted by the Council of UPOV at its 43rd Ordinary Session on 22 October 2009) 8 <https://www.upov.int/edocs/expndocs/en/upov_exn_exc.pdf> accessed 30 January 2025.

legitimate interests of the breeder'. This approach under the 1991 Act jeopardises the continuation of traditional farming practices in African countries and many countries in the Global South, where local farmers have saved, replanted, and informally exchanged seeds throughout history.

In strengthening the extent of PVP, the 1991 Act also increased the term of protection, requiring that trees and vines be protected for at least 25 years while all other crops are protected for at least 20 years.[42] This puts the PVP system on par with the patent system.[43] It must also be noted that, unlike the previous versions, which categorically stated that patent and breeders' rights could not be concurrently claimed 'for one and the same botanical genus or species', the 1991 Act is silent in this regard. This indicates that member countries can accord plant breeders patents and PVP over the same protectable crop variety. It aligns closely with the TRIPS provisions on PVP, allowing States to protect crop varieties under both a patent and a *sui generis* system.[44]

Above all, the crucial question in the African context is whether the UPOV standard under the 1991 Act is suitable for promoting food security and improved nutrition in the continent, given the largely 'smallholder farmer-centred agrarian system'[45] obtainable. The potential impact in this regard will be explored in the later part of this paper.

The African Model Law Option

The African Model Law was initially approved by the Council of Ministers of the then Organisation of African Union (OAU), now the African Union (AU), at its 68th Ordinary Session in 1998 and later endorsed by the Heads

[42] 1991 Act of the UPOV Convention, art 19(2); Both the 1961/1972 Act of the UPOV Convention (art 8) and the 1978 Act of the UPOV Convention (art 8) provide for a minimum of 15 years and 18years for vines and trees.

[43] M Montenegro de Wit, 'Beating the Bounds: How Does "Open Source" Become a Seed Commons?' (2019) 46(1) The Journal of Peasant Studie*s* 44, 53.

[44] TRIPS Agreement 1994 (as amended), art 27.3(b).

[45] Oguamanam, 'Breeding…' (n2) 177.

of States in 2000.[46] It offers a model for the development of national legislation that not only fulfils the numerous international commitments on IP protection, biodiversity, trade and other related areas but also reflects the realities and interests of African Countries.[47] It considers all living things and biological processes as non-patentable subject matter.[48] However, it advances a *sui generis* framework for recognising and protecting PBRs through which African countries can meet TRIPS obligations while ensuring that others, including the commitments under the Convention on Biological Diversity (CBD) 1992, are also met.[49]

Importantly, the model law considers the rights of local farmers and their indigenous communities as it attempts to counter the threats posed by the globalised IP standards, particularly embodied in TRIPS, to the culture of communal ownership and rich biological resources in Africa.[50] Thus, while the plant breeder is legally entitled to exclusively produce and sell the crop variety and its propagating materials, these rights are subject to other copious provisions on the rights of local farmers and their indigenous communities.[51] For instance, farmers can develop their own varieties using protected plant varieties.[52] Also, they are permitted to use, save, reproduce

[46] JA Ekpere, *The Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources: An Explanatory Booklet* (Scientific, Technical and Research Commission of the Organisation of African Unity, Lagos, Nigeria 2000) 5; B De Jonge, 'Plant Variety Protection in Sub-Saharan Africa: Balancing Commercial and Smallholder Farmers' Interests' (2014) 7(3) Journal of Politics and Law 100, 103.

[47] T Kongolo, *African Contributions in Shaping the Worldwide Intellectual Property System* (Routledge, London, United Kingdom 2016) 118; Ekpere, *The Protection…* (n46) 1.

[48] African Model Law 2000, preamble and art 9.

[49] African Model Law 2000, preamble and part I (objectives); Ekpere, *The Protection…* (n46) 8.

[50] African Model Law 2000, part IV (community rights) and part V (farmers' rights); See also L Fagbohun, 'The Dialectics of Biosphere Protection and the OAU Model Law: A Note' (2002) 4(2) Lagos State University Law Journal 220.

[51] African Model Law 2000, art 30; See also African Model Law 2000, arts 24-27 (on farmers' rights) and art 31 (exemptions to plant breeders' rights).

[52] African Model Law 2000, art 26(1)(e); See also African Model Law 2000, art 31(1)(d).

and process seeds from protected crops.[53] In addition, breeders' rights may be restricted to safeguard public interests, such as health and food security.[54] In general, it is intended that in the African context, community rights would take precedence over all other rights driven by private interests, including PBRs.[55]

Arguably, going by the language of Article 29 of the Model Law, the criteria to be met to enjoy exclusive rights over plant varieties are far less technical than the 1991 Act, although the duration of protection for annual crops and trees corresponds.[56] The model law further sets out provisions regulating other aspects of the PVP system. These include infringements of PBRs, application filing before a competent authority of a member state, registration of PBRs, maintenance of a register on PBRs and provisional protection, among others.[57]

Operationalising the underlying principles and contents of the Model Law nationally is certainly a challenge given that member countries of the African Union have been/are being induced to adopt a PBR system modelled on the UPOV standards of the 1991 Act.[58]

THE LEGISLATIVE AND POLICY TRENDS ON PLANT VARIETY PROTECTION IN AFRICA

The legislative trends among African countries already depict increasing adoption of PBRs systems in tune with the standards of the 1991 Act of the UPOV Convention.[59] This trend is spearheaded by the African Regional

[53] African Model Law 2000, art 26(1)(f); See also African Model Law 2000, art 31(2).
[54] African Model Law 2000, art 31(3); See also African Model Law 2000, art 33.
[55] African Model Law 2000, preamble.
[56] African Model Law 2000, art 34.
[57] African Model Law 2000, part 6.
[58] Adebola, 'Examining Plant Variety Protection…' (n2) 42;
[59] K Peschard, C Golay, L Araya, 'The Right to Seeds in Africa: the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas and the Right to Seeds in Africa' (Geneva Academy Briefing, No 22) <https://geneva-academy.ch/joomlatools-files/docman-files/Briefing%2022_web.pdf> accessed 20 February 2025; UPOV, 'Overview of UPOV' (Publication No. 437, 02 February 2024).

Intellectual Property Organisation (ARIPO), the African Intellectual Property Organisation (OAPI), and other regional blocs, such as the Southern African Development Community (SADC).[60] It is exemplified by the ARIPO's Arusha Protocol for the Protection of New Varieties of Plants (the Arusha Protocol), which was adopted in 2015 and entered into force in 2024,[61] Annex X of the OAPI Bangui Agreement 2015,[62] and the SADC's Protocol for the Protection of New Varieties of Plants 2017.[63] OAPI, which operates a centralised PBRs system covering the territory of its 17 member States, became a UPOV member in 2014. ARIPO, despite its earlier resistance to OAPI's adoption of a PVP regime aligned with the 1991 UPOV Act, has been in the process of becoming a UPOV member for some time.[64] In the same vein, the SADC contacted UPOV for assistance in its effort to develop a PVP system based on the 1991 Act.[65]

Separately, individual African States like Egypt, Ghana, Nigeria, and Tunisia are UPOV members after fulfilling their obligations under Article 34 of the 1991 Act by enacting conforming legislation.[66] Similarly, Algeria, Malawi, Mozambique, Namibia, Zambia, Zimbabwe, and Rwanda have

<https://www.upov.int/edocs/pubdocs/en/upov_pub_437.pdf> accessed 30 January 2025; UPOV, 'Status in Relation to the International Union for the Protection of New Varieties of Plants (UPOV) as of February 27, 2025' <https://www.upov.int/members/en/pdf/status.pdf> accessed 20 March 2025.

[60] Ibid.

[61] The Arusha Protocol for the Protection of New Varieties of Plants Within the Framework of the African Regional Intellectual Property Organisation (ARIPO) 2015 <https://www.aripo.org/wp-content/uploads/2018/12/Arusha-Protocol_20181.pdf> accessed 20 March 2025.

[62] Annex X of the OAPI Bangui Agreement 2015 <http://www.oapi.int/Ressources/accord_bangui/2020/anglais.pdf> accessed 20 March 2025.

[63] African Centre for Biodiversity, 'The SADC PVP Protocol: Blueprint for uptake of UPOV 1991 in Africa' (Discussion Document, September 2018) <https://acbio.org.za/wp-content/uploads/2022/04/The-SADC-PVP-Protocol-Blueprint-for-uptake-of-UPOV-1991-in-Africa-REPORT.pdf> accessed 20 March 2025.

[64] HM Haugen, 'Inappropriate Processes and Unbalanced Outcomes: Plant Variety Protection in Africa Goes Beyond UPOV 1991 Requirements' (2015) 18(5) The Journal of World Intellectual Property, 196-216; UPOV, 'Status…' (n59).

[65] UPOV, 'Status…' (n59).

[66] Ibid.

also initiated the process of joining UPOV and establishing UPOV Convention-based PVP systems.[67] Among the African States, only Kenya and South Africa had the option of remaining parties to the 1978 Act, having, respectively, acceded to and ratified the UPOV Convention earlier. While South Africa has maintained its position in this regard, thereby preserving the flexibilities necessary to protect farmers' rights, Kenya opted to amend its Seeds and Plant Varieties Act 1972 in 2012 in order to align it with the 1991 Act.[68] Even then, it is worth noting that, as a member State of the SADC, it is unclear whether South Africa can continue to maintain its current position in light of the adoption of the SADC Protocol for Plant Variety Protection, which is in tandem with the 1991 Act. By these, over 40 African States have adopted or are in the process of adopting a PVP regime based on the 1991 Act.[69]

Like the 1991 Act, the Arusha Protocol 2015 and others seek to establish a PVP regime for all plants, regardless of the genera and species.[70] Similarly, a crop variety must be new, distinct, uniform and stable (NDUS) in order to be considered for protection.[71] While these various instruments on the grant of PVP/PBRs enable the African States to comply with TRIPS, adopting the standards under the UPOV 1991 Act significantly limits the discretionary choices available to them. For instance, TRIPS is silent on the term of protection for PBRs. Thus, member States had the liberty of adopting a shorter duration of protection as opposed to the 20- and 25-year terms of Article 19 of the 1991 Act.

---

[67] ibid; Sackey, 'Developing…' (n5).

[68] K Peschard, C Golay, L Araya, 'The Right to Seeds in Africa: The UN Declaration on the Rights of Peasants and Other People Working in Rural Areas and the Right to Seeds in Africa' (Academy Briefing No.22, 2023) 20; E Kimani and S Maina 'Kenya: Interaction Between UPOV and ITPGRFA' (2016) 3 <https://www.upov.int/edocs/mdocs/upov/en/upov_itpgrfa_sym_ge_16/upov_itpgrfa_sym_ge_16_ppt_11.pdf> accessed 30 March 2025.

[69] UPOV, 'Status…' (n59).

[70] The Arusha Protocol, art 3; Annex X of the OAPI Bangui Agreement 2015, art 3; Nigerian PVP Act 2021, ss 2, 12 and 13.

[71] The Arusha Protocol, art 6 - 10; Annex X of the OAPI Bangui Agreement 2015, art 4 - 8; Nigerian PVP Act 2021, s 13 -16.

It is worth bearing in mind that the PVP instruments result from the concerted efforts of multinational companies like Monsanto and other private sector actors in the seed industry, and as such, it is not surprising that they may not reflect the realities of Africa and the Global South. As pointed out above with regard to the UPOV Convention and, more particularly, as Adebola noted regarding the Nigerian case, private players in the seed industry 'tend to lobby for the introduction or reform of national plant variety protection systems to suit their business interests'.[72] In addition, instruments, such as the Arusha Protocol 2015 and Nigeria's Plant Variety Protection Act 2022, are often drafted after due consultations with the UPOV and other interested bodies, including the WIPO and the United States Patent and Trademark Office (USPTO).[73] The final draft must be approved as being compliant with the 1991 Act of the UPOV Convention by the UPOV Council.

With regard to the foregoing, it is important to state that the assertions by Dutfield that UPOV often deploys significant resources to conduct workshops as well as technical assistance missions in countries to encourage and advance the membership of the Union still hold valid, at least in the case of Nigeria.[74] It has been observed that the records of UPOV show a high participation of Nigerians in the various international presentations, workshops, etc., that it organises from time to time.[75] Specifically, it can be

[72] Adebola, 'Examining Plant Variety Protection…' (n2) 36 - 58.

[73] The UPOV, 'Examination of the Conformity of the Draft ARIPO Protocol for the Protection of New Varieties of Plants with the 1991 Act of the UPOV Convention' (C(Extr.)/31/2) (Adopted at the Council Thirty-First Extraordinary Session Geneva, 11 April 2014); See also, Jonge and Munyi, 'A Differentiated Approach …' (n31) 29; S Isiko Štrba, 'Legal and Institutional Considerations for Plant Variety Protection and Food Security in African Development Agendas: Solutions from WIPO?' (2017) 12(3) Journal of Intellectual Property Law & Practice, 191, 196.

[74] G Dutfield, 'Food, Biological Diversity and Intellectual Property: The Role of the International Union for the Protection of New Varieties of Plants (UPOV)' (Quaker United Nations Office Global Economic Issue Publications: Intellectual Property Issue Paper No.9, 2011) 10. <http://quno.org/sites/default/files/resources/UPOV%2BQUNO_English.pdf> accessed on 06 February 2025.

[75] Adebola, 'Examining Plant Variety Protection…' (n2) 43.

argued that the technical assistance and workshops have had (and may continue to have) a significant influence on the activities regarding PVP in the country. It is no wonder that contributors such as Rangnekar believe that the engagements of countries with UPOV 'generate a socialisation of policymakers, bureaucrats and legislators'.[76] The implication is that the flexibilities and policy space under TRIPS are no longer explored in the bid to conform to the standards of the 1991 Act.

Significantly, ARIPO, OAPI and various African States, such as Nigeria and Kenya, appear convinced that a system of plant variety protection modelled on the 1991 Act of the UPOV Convention would promote access to a broad range of improved varieties of plants among African farmers and would ensure sustainable agricultural production, and attainment of economic development and food security in Africa.[77] There is no gainsaying that these instruments are a clear departure from the previous common position of African countries that formed the core content of the African Model Law discussed above. The current PVP frameworks are establishing a *sui generis* system which, in safeguarding the broad rights of plant breeders, ensures private interests take precedence over all other interests, particularly as regards local farmers and communities. Under this system of plant variety protection, farmers have no 'rights' as envisaged under the African Model Law. Rather, they have some very restricted and inflexible 'privilege' which allows them, 'subject to the safeguarding of the legitimate interests of the holder of the breeder's right, uses for propagating purposes, on the farmer's own holdings, the product of the harvest which the farmer has obtained by planting on the farmer's own holdings, the protected variety or a variety'.[78] This privilege, as so-called, comes at a cost as farmers are expected to pay

[76] D Rangnekar, 'Geneva Rhetoric, National Reality: The Political Economy of Introducing Plant Breeders' Rights in Kenya' (2014) 19(13) New Political Economy 359, 374 <https://doi.org/10.1080/13563467.2013796445>.

[77] Sackey, 'Developing…' (n5); ARIPO, 'ARUSHA Protocol for the Protection of New Varieties of Plants' <https://www.aripo.org/ip-services/plant-variety-protection>.

[78] See the Arusha Protocol 2015, art 22(2), which is similar with 1991 Act of the UPOV Convention, art 15(2).

some remuneration to the breeder of the protected variety and may also be limited to a list of agricultural crops and vegetables as may be specified.[79]

All the foregoing brings to the fore the question of whether the UPOV-style legal standard is suitable for Africa's local seed systems. What are the implications for farmers' rights and Africa's food security? The following section addresses this question.

IMPLICATIONS OF THE UPOV-STYLE REGIME FOR FARMERS' RIGHTS AND FOOD SECURITY IN AFRICA

IP regimes are generally predicated on the assumption that exclusive rights provide the necessary incentives for intellectual creativity and inventiveness. In turn, creativity or inventiveness promotes technological advancements, economic growth, and people's overall well-being through increased rates of innovation, foreign direct investments, and technology transfer.[80]

A central claim of proponents for PVP is that R&D on plant varieties involve huge investment costs and risks, yet results can be easily copied.[81] Like patents, granting PVP is considered an important incentive for local

[79] See the Arusha Protocol 2015, art 22(2-3); See also Regulations for Implementing the Arusha Protocol 2015, rule 5(2).

[80] TRIPS Agreement 1994 (as amended), art 7, particularly describing the objectives of intellectual property rights and protection to include 'promotion of technological innovation' and 'transfer and dissemination of technology', among others; See also AO Oyewunmi, *Nigerian Law of Intellectual Property* (University of Lagos Press and Bookshop Ltd., Lagos, Nigeria 2015) 6 – 11, 22 – 24, 142 – 144.

[81] N Supasiripongchai, 'The Legal Protection of Breeder's Rights for New Plant Varieties in Thailand: The Need for Law Reform Considering the International Convention on for the Protection of New Varieties of Plants 1991' (2020) 23 Journal of World Intellectual Property 202, 217 <https://doi.org/10/1111/jwip.12149>; CR Nhemachena, FG Liebenberg and J Kirsten, 'The Evolving Landscape of Plant Breeders' Rights Regarding Wheat in South Africa' *South Africa Journal of Science* (2016) 112(3 – 4) 1 <http://dx.doi.org/10.17159/sajs.2016/20150164>; NASC, 'Pass the Plant Variety Protection (PVP) Law'. (A Documentary on the Importance of Plant Variety Protection (PVP) 2020) <https://youtu.be/5xDC-MDxJsM> accessed 01 January 2025.

and foreign firms or individuals to assume risks and engage in R&D.[82] It is argued that the protection provides certainty regarding ownership rights over ensuing new crop varieties and, importantly, it allows breeders to benefit from their intellectual outputs – new crop varieties.[83] By stimulating R&D, PVP could lead to the creation of new and improved varieties. It is argued that PVP ensures private sector participation in developing seeds or new plant varieties that produce more yields, have improved plant characteristics (such as disease or drought resistance) and nutritional qualities or decrease production costs, thereby improving food security.[84] In other words, PVP could ensure food security by creating an environment that promotes innovation.

Supporters of PVP further contend that the IPR accelerate seed availability. It is maintained that the assurance of exclusive rights motivates breeders to swiftly bring their new plant varieties to market, providing faster global access to agricultural advancements.[85] Concerning Nigeria, it was opined that, prior to the enactment of the PVP Act 2021, private companies showed hesitation in entering their improved and new seeds into the Nigerian Market.[86] With regards to Kenya and member countries of OAPI, it is believed that the establishment of the 1991 UPOV-style regime is enabling smallholder farmers to 'access viable seeds for greater economic returns'.[87] Other related arguments supporting PBRs regimes include the potential to promote foreign direct investments and technology transfer from the

[82] ARIPO, 'ARUSHA Protocol for the Protection of New Varieties of Plants' <https://www.aripo.org/ip-services/plant-variety-protection>; Section 4.8 of the National Seed Road Map for Nigeria, 2020.

[83] Ibid; NASC (n81).

[84] ARIPO, 'ARUSHA Protocol for the Protection of New Varieties of Plants'.; Section 2.6 of the National Seed Road Map for Nigeria, 2020; P Cullet, *Food Security and Intellectual Property Rights in Developing Countries* (Réseau Interdisciplinaire Biosécurité - Biosafety Interdisciplinary Network (RIBios), Geneva 2004) 12.

[85] IP Progress, 'Protect Innovators' <https://ipprogress.world/protect-innovators> accessed 20 January 2025.

[86] Section 2.6 of the National Seed Road Map for Nigeria 2020.

[87] Sackey, 'Developing…' (n5).

developed North, including the United States, to Africa.[88] Significantly, proponents of PBRs strongly believe that developing countries must at least adopt the minimum standards set by the UPOV 1991 Act to create incentives for and benefit from private sector/foreign direct investments and technology transfer.[89] In a similar vein, adopting the UPOV-style regime is expected to open up opportunities for local seed companies in Africa to increase their exports.[90]

However, the 1991 UPOV-style regime raises questions about recognising and protecting farmers' rights in Africa and promoting food security. This is because it projects the breeders' proprietary interests at the expense of local farmers' and indigenous communities' traditional farming practices.[91] The exclusivity of breeders' rights in seeds or propagating materials significantly constrains the well-established farming practices of saving, replanting, and freely exchanging seeds/propagating materials among farmers and local and Indigenous communities, making them illegal.[92] This impedes access to seeds and other propagating materials and limits their ability to conserve, make available, improve and diversify crop varieties for food and agriculture, thereby undermining their roles as custodians and innovators. The loss of traditional farmers' rights and control over food production also engenders dependency on foreign agro-technologies that are not necessarily suitable for the local climes or changing environmental

[88] ibid; See also Article 7 of the TRIPS Agreement, 1994 (as amended); NASC (n81); Supasiripongchai, 'The Legal Protection… (n81) 204 – 205.

[89] Sackey, 'Developing…' (n5); Supasiripongchai, 'The Legal Protection…' (n81) 204 – 205.

[90] Sackey, 'Developing…' (n5); Section 4.8 of the National Seed Road Map for Nigeria, 2020; It is reported that while countries like Kenya and the Netherlands generate between 1.8 to 2.6 Billion United States Dollars from exports, Nigeria generates nothing due to the absence of a legal regime for plant variety protection. – NASC (n86).

[91] CB Ncube, 'Food Security and Plant Variety Protection: Seeding Hope for the African Continental Free Trade Area?' (2025) 56 IIC, 64–90. <https://doi.org/10.1007/s40319-024-01556-3>; C Oguamanam, 'Plant Breeders' Rights, Farmers' Rights and Food Security: Africa's Failure of Resolve and India's Wobbly Leadership' (2018) 14 Indian Journal of Law and Technology 240 <http://ijlt.in/wp-content/uploads/2015/09/04_chidi_oguamanam.pdf> accessed 30 January 2025.

[92] ibid; See also, Adebola, 'Examining Plant Variety Protection…' (n2) 44.

conditions. These issues negatively impact the availability of food crops and worsen the problem of hunger, challenging efforts to tackle food insecurity in Africa.[93]

Specifically, it is also argued that the UPOV standards, including the NDUS criteria, as discussed earlier in this paper, are incapable of accommodating varieties developed by the traditional smallholder farming communities and their 'collaborative, communal and incremental and cumulative nature of agricultural innovation' in general.[94] In this regard, it is further argued that the failure to protect local farmers' varieties predisposes the UPOV-styled system of protection 'to the perpetuation of biopiracy'.[95] This is because plant breeders can freely use and appropriate the unprotected farmers' varieties and the associated traditional knowledge.[96] Significantly, this observation also matches those expressed in the relevant literature on patents regarding the misappropriation or theft of plant genetic resources and connected knowledge of developing countries by multinational biotechnology companies.[97] Rather than being compensated for their efforts in conserving and developing diverse PGRFA, local farmers and their indigenous community are subjected to the high monopolistic pricing of

[93] CB Ncube, 'Food Security…' (n91) 81.

[94] Oguamanam, 'Breeding…' (n2); See also Adebola, 'Examining Plant Variety Protection…' (n2) 37.

[95] Oguamanam, 'Breeding…' (n2) 179.

[96] CM Correa, S Shashikant and F Meienberg, 'Plant Variety Protection in Developing Countries - A Tool for Designing a *Sui Generis* Plant Variety Protection System: An Alternative to UPOV 1991'. (Working Paper, Association for Plant Breeding for the Benefit of the Society (APBREBES), 2015) 28 (similarly noting that the UPOV system 'tends to favour commercial breeders to the detriment of farmers, who are not protected against the misappropriation of their varieties nor compensated when such varieties are used by breeders as breeding material').

[97] I Mgbeoji, 'Patents and Traditional Knowledge of the Uses of Plants: Is a Communal Patent Regime Part of the Solution to the Scourge of Bio Piracy?' (2001) Indiana Journal of Global Legal Studies 163 – 186; PA Ageh and N Lall, 'Biopiracy of Plant Resources and Sustainable Traditional Knowledge System in Africa' (2019) 8 Global Journal of Comparative Law 162 – 181; A Bhukta and KS Jana, 'Biopiracy: Challenges Before India' in Dewani ND and Gurtu A (Eds), *Intellectual Property Rights and the Protection of Traditional Knowledge* (IGI Global 2020) 140 – 157.

seed companies, who are aided by the exclusivity obtainable under the existing PVP regimes.[98]

In addition to being excluded from any gains arising from their genetic resources, local farmers and communities face the danger of their indigenous knowledge system being disrupted by the 1991 UPOV-style regime if their traditional varieties are misappropriated or wrongly claimed or protected as new, potentially preventing them from further developing and utilising their own biocultural heritage.[99] The lack of compensation and protection for traditional knowledge and farmers' varieties could also disincentivise farmers from continuing to conserve and develop plant genetic resources.[100] This would lead to loss of biodiversity and impede food security as the established traditional agricultural knowledge system and practices among farmers and indigenous local communities that have been used for centuries to feed most of the population or develop and conserve genetic diversity are misappropriated and displaced.

Following the provisions of the 1991 Act under Article 15(2), jurisdictions adopting the UPOV-style system of PVP seemingly seek to provide for certain exceptions with regard to small-scale farmers.[101] However, as pointed out in this paper, the provisions are restrictive and ambiguous, undermining the traditional rights of local farmers. Furthermore, contrary to the assertions of advocates of plant variety rights, it has been suggested that there is no conclusive evidence that PVP would lead to increased innovation or access to a range of new varieties of plant material for local farmers in developing countries.[102] Also, seed innovation is believed to thrive independently of PVP or any IPR. Underscoring this fact, the preamble and Article 9(1) of the 2001 International Treaty affirm the

[98] Adaji, Barau, Sarumi, 'The Right to Adequate Food…' (n20) 7.
[99] See 1991 Act of the UPOV Convention, art 14.
[100] Winter, 'Cultivating Farmers' Rights …' (n7) 139.
[101] See for instance, the Arusha Protocol for the Protection of New Varieties of Plants 2015, art 22(2-3) and Regulations for Implementing the Arusha Protocol for the Protection of New Varieties of Plants 2015, rule 5(2); Nigerian PVP Act, 2021, s 30(2-3).
[102] Correa, Shashikant, Meienberg, 'Plant Variety Protection…' (n96) 28.

contributions of local farmers and indigenous communities as innovators and custodians of plant genetic diversity without any form of IP protection.[103]

Given the above, it is no wonder that Adebola concludes that the existing legal standards on PVP, as embodied in the UPOV 1991 Act, are better suited to the seed sector of industrialised countries like the United States and countries of the European Union and not the predominantly smallholder local farming communities in Nigeria.[104] In fact, a general consensus among critics, including scholars and Civil Society Organisations (CSOs), is that the UPOV-style regime is unsuitable for Africa.[105] Thus, the legislative developments incorporating the UPOV system of PVP currently sweeping across African countries have been heavily criticised. The Alliance for Food Sovereignty in Africa particularly posits as follows:

> *UPOV 1991 emanates from industrialised countries in response to the advent of large-scale commercial farming and commercial plant breeding. It is focused solely on promoting and protecting industrial seed breeders that develop genetically uniform seeds/plant varieties suited to mechanised large-scale agriculture. The UPOV 1991 framework is wholly unsuitable for African agriculture and does not*

[103] Ibid.

[104] Adebola, 'Examining Plant Variety Protection…' (n2) 37.

[105] Oguamanam, 'Plant Breeders' Rights…' (n91) 240 (arguing that the UPOV Convention is an instrument designed to protect the interest of plant breeders at the expense of farmers); Oguamanam, 'Breeding…' (n2) 165–195; Isiko Štrba, 'Legal and Institutional Considerations …' (n73) 191–205; Haugen, 'Inappropriate Processes…' (n64) 196–216; African Biodiversity Network (ABN) et. al, 'Civil Society Concerned with ARIPO's Draft Regional Policy and Legal Framework for Plant Variety Protection' (Letter to the African Regional Intellectual Property Organisation (ARIPO), 6 November 2012) <http://acbio.org.za/wp-content/uploads/2015/02/CSOconcernsonARIPO-PVPframework1.pdf> accessed 30 January 2025; The Alliance for Food Sovereignty in Africa, 'AFSA Submission for Urgent Intervention in Respect to Draft ARIPO Plant Variety Protection Protocol (PVP) and Subsequent Regulations' (2014) <http://acbio.org.za/wp-content/uploads/2015/02/AFSA-Susbmission-ARIPO-PVP-Protocol.pdf> accessed 30 January 2025.

> *remotely reflect or respond to the agricultural systems and conditions prevailing in Africa.*[106]

The belief is that a *sui generis* system that accommodates traditional farming practices and incorporates the notion of farmers' rights would be best for the socio-economic realities in Africa and other developing countries.[107] To put how the 1991 UPOV-style regime implicates food security into proper perspective, it is of utmost importance to grasp the centrality of local farmers in the food and agricultural system in developing countries and the world generally.

First, at least one-third of the global population is in developing and least-developing countries, with about 70 to 80 per cent engaging in some form of small and informal farming practices.[108] Secondly, these smallholder farmers contribute at least 80 per cent of the food eaten in developing countries, indicating their vital role in addressing food insecurity.[109] Underscoring this fact, local farmers are particularly called the 'foot soldiers of food security and food sovereignty' in developing countries.[110] Significantly, the age-old practice of saving and exchanging farm seeds amongst the farmers is crucial to their 'ability to thrive and to double as

---

[106] The Alliance for Food Sovereignty in Africa, 'AFSA Submission…' (n105) 5.

[107] ibid 42; See also CB Ncube, 'Food Security…' (n91) 82 – 83; Correa, Shashikant, Meienberg, 'Plant Variety Protection…' (n96) 47 – 69 for a more elaborate discussion on a *sui generis* plant variety protection system that could serve as an alternative to the UPOV-style legislation for developing countries.

[108] United Nations Department of Economic and Social Affairs - Population Division. 'World Population Prospects 2019: Highlights' (ST/ESA/SER.A/423, United Nations Publications, New York 2019) 1 <https://population.un.org/wpp/Publications/Files/WPP2019_Highlights.pdf> accessed 30 January 2025; See also, Oguamanam, 'Plant Breeders' Rights…' (n91) 267.

[109] Isiko Štrba, 'Legal and Institutional Considerations …' (n73); Similarly, with specific regard to Nigeria, it is suggested that about 80 per cent of farmers in the country are smallholders, yet, except for wheat, they are the main producers of 98 per cent of the crops being consumed. – RN Mgbenka and EN Mbah, 'A Review of Smallholder Farming in Nigeria: Need for Transformation' (2016) 3(2) International Journal of Agricultural Extension and Rural Development Studies 43, 43 – 44 and 52.

[110] Oguamanam, 'Plant Breeders' Rights…' (n91) 267.

breeders'.[111] In doing so, they create 'culturally sensitive food' and are able to 'exercise control over food choices at cultural and communal levels in ways that enhance the food security of the most vulnerable and most food insecure'.[112]

Importantly, the ability of farmers and their indigenous communities to develop, conserve and sustain biological diversity through their traditional knowledge and skills provides the foundation upon which today's formal plant breeding and hi-tech agricultural research and innovation systems thrive.[113] Accordingly, Oguamanam challenges the notion among proprietary holders and other stakeholders in agricultural biotechnology that farmers and their indigenous communities are free riders and should be regulated by all means, including through intellectual property regimes.[114]

CONCLUSION AND RECOMMENDATIONS

The UPOV-style regime in Africa contradicts farmers' rights and threatens the promotion of food security on the continent. Failure to address the drawbacks of the UPOV system of PVP could leave the majority of the population of Africa and other developing countries hungry, malnourished and in extreme poverty in the near future. Therefore, it is imperative that the various PVP regimes based on the 1991 Act of the UPOV Convention be amended in line with the African Model Law 2001, International Treaty 2001, and the UNDROP 2018 to provide a number of safeguards that would advance farmers' rights and protect indigenous communities. This is even more so as the Protocol to the Agreement Establishing the African Continental Free Trade Area on Intellectual Property Rights (AfCFTA IP Protocol) 2023 calls on the African States to 'provide protection for new plant varieties through a sui generis system that includes farmers' rights, plant breeders' rights, and rules on access and benefit sharing, as

[111] Ibid.
[112] Ibid 266 – 267.
[113] Ibid 247.
[114] Ibid.

appropriate'.[115] In this vein, it encourages them to leverage relevant African and international instruments to achieve their development priorities and interests.[116]

The PVP regimes in Africa must, among other things, incorporate specific provisions protecting the practice of farmers selecting, saving, and exchanging seeds from their harvests and, in addition, recognise their contributions to the conservation of genetic resources. Given the low literacy level among local farmers and communities, it is particularly important that they are protected from unintended or accidental infringement of breeders' rights. It is further recommended that the PVP regimes incorporate provisions protecting traditional knowledge against misappropriation while ensuring benefit sharing. Importantly, the approach whereby PVP may be granted over any plant, regardless of the genera or species, should be jettisoned, and the African governments should reserve the right to restrict the scope of plant variety right protection. Particularly, they can, from time to time, specify, through a public notice in their Official Gazettes, the genera or species eligible for protection or varieties that are excluded.

[115] Article 8(1) of the AfCFTA IP Protocol.
[116] Article 8(3) of the AfCFTA IP Protocol.