

# Access and benefit sharing, farmers' rights and plant breeders' rights: reflections on the African Model Law

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*This article discusses the protection of new plant varieties in Africa and the African Model Law through the lens of its key protagonist, Professor Johnson Ekpere. It urges African countries to consult the African Model Law as a guide when designing plant variety protection systems. It is hoped that by offering Professor Ekpere's biography, personal experiences, and first-hand account of the African Model Law, African countries may better understand the Model Law as a significant response to the small-scale-farmer- and farming-community-centred agricultural systems on the continent and embrace its continued relevance.*

**Keywords:** *Professor Ekpere, African Model Law, Africa, TRIPS, CBD, ITPGRFA, UPOV plant variety protection*

## 1 INTRODUCTION

African members of the Convention on Biological Diversity (CBD), the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the International Treaty for Plant Genetic Resources for Food and Agriculture (ITPGRFA) are obliged to introduce access and benefit sharing laws, farmers' rights and plant variety protection systems.<sup>1</sup> Professor Ekpere designed 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) to guide African countries in fulfilling their pending international obligations.<sup>2</sup> The African Model Law is relevant to date because its core principles promote the balance of small-scale farmers, farming communities and commercial breeders' interests.<sup>3</sup>

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1. Convention on Biological Diversity (5 June 1992) 1760 UNTS 143, 31 ILM 818; Agreement on Trade-Related Aspects of Intellectual Property Rights (1994) Annex 1C, 33 ILM 8. International Treaty on Plant Genetic Resources for Food and Agriculture (3 November 2001) Res 3/2003 FAO Conference, 31st Session. Plant varieties include both seeds and other propagating material. This article uses the term 'plant varieties' and 'seeds' interchangeably.

2. Johnson Ekpere, 'African Model Law on the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources' in Kent Nnadozie, Robert Lettington, Carl Bruch, Susan Bass and Sarah King (eds), *African Perspectives on Genetic Resources: A Handbook on Laws, Policies and Institutions* (Environmental Law Institute, 2003) 275.

3. Johnson Ekpere, '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' (OAU/STRC 2000) 1, 13–22 (The OAU's Model Law).

While, as with the Thai Plant Variety Protection Act 1999 and the Indian Protection of Plant Varieties and Farmers Rights Act 2001, the African Model Law was designed as an alternative to the International Convention for the Protection of New Varieties of Plants (UPOV),<sup>4</sup> the African Model Law failed to gain traction in Africa. Instead, African countries are increasingly acceding to the UPOV 1991 Convention.<sup>5</sup>

Scholars such as Professors Carlos Correa and Chidi Oguamanam have extensively discussed the reasons why the UPOV 1991 Convention is unsuited to Africa and the Global South in general.<sup>6</sup> The overarching reason is that the UPOV plant breeder's rights system prioritizes the protection of commercial plant breeders' interests, making it unsuitable for the small-scale-farmer- and farming-community-centred agricultural systems prevalent in Africa. Articles 5, 7, 8 and 9 of the UPOV 1991 Convention provides distinctness, uniformity and stability conditions for protecting new plant varieties, which small-scale farmers and farming communities cannot meet because of their traditional farming practices, such as reusing saved seeds passed down through generations and polyculture farming.<sup>7</sup> In addition, with UPOV's narrow focus on plant breeder's rights, it omits access and benefit sharing as well as farmers' rights

4. International Convention for the Protection of New Varieties of Plants (1991) 815 UNTS 89 <<http://www.upov.int/en/publications/conventions/1991/act1991.htm>> accessed 11 May 2018 (UPOV Convention). UPOV is the French acronym for Union Internationale pour la Protection des Obtentions Vegetales. The UPOV Convention was first adopted in December 1961 and has been amended three times – in 1972, 1978 and 1991. The UPOV Convention establishes the International Union for the Protection of New Varieties of Plants (UPOV), which is an intergovernmental organization with its headquarters in Geneva, Switzerland. For clarity, UPOV or UPOV Convention is used interchangeably in this article to refer to the international treaty or organization.

5. Chidi Oguamanam, 'Breeding Apples for Oranges: Africa's Misplaced Priority over Plant Breeders Rights' (2015) *The Journal of World Intellectual Property* 1, 1 ('Breeding Apples for Oranges'). Susan Isiko Strba, 'Legal and Institutional Considerations for Plant Variety Protection and Food Security in African Development Agendas: Solutions from WIPO?' 12(3) *Journal of Intellectual Property Law & Practice* 191, 198–9.

6. Carlos M Correa, 'Plant Variety Protection in Developing Countries: A Tool for Designing a Sui Generis Plant Variety Protection System: An Alternative to UPOV 1991' (APBEBES 2015) ('Plant Variety Protection in Developing Countries'). Oguamanam, 'Breeding Apples for Oranges', supra (n 5) 13–16. See also: GAIA/GRAIN, 'Ten Reasons Not to Join UPOV: Global Trade and Biodiversity in Conflict' (15 May 1998) <<https://www.grain.org/article/entries/1-ten-reasons-not-to-join-upov#18>> accessed 11 May 2018.

7. Article 7: 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. In particular, the filing of an application for the granting of a breeder's right or for the entering of another variety in an official register of varieties, in any country, shall be deemed to render that other variety a matter of common knowledge from the date of the application, provided that the application leads to the granting of a breeder's right or to the entering of the said other variety in the official register of varieties, as the case may be.

Article 8: The 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 uniform in its relevant characteristics.

Article 9: The 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.

from the CBD and the ITPGRFA, which benefit small-scale farmers and farming communities' agricultural practices in Africa.<sup>8</sup>

However, both Professors Correa and Oguamanam rightly acknowledge that there is very limited empirical evidence on the effects of a UPOV-1991-Convention-styled plant variety protection in Africa.<sup>9</sup> For example, reports such as those of Niels Louwaars et al. and the Crucible Group II that discuss the UPOV 1991 Convention vis-à-vis the small-scale farmer-focused informal seed sector are not substantiated with detailed empirical evidence.<sup>10</sup> Although the UPOV office's 2005 report on the impact of plant variety protection systems in five countries sets out a range of beneficial impacts of UPOV-styled systems, such as an increase in new plant varieties, domestic breeding and foreign investments, the report fails to discuss small-scale farmer-focused informal seed sectors.<sup>11</sup> Yet, there is a prevalence of small-scale farming in Africa. Small-scale farmers who farm on 2 hectares or less represent about 80 per cent of the farms and contribute up to 90 per cent of food production in some African countries.<sup>12</sup> The formal seed sector provides only about 10 per cent of the seed demand for some crops in Africa, as small-scale farmers mainly depend on traditional practices of saving, exchanging, reusing and trading seeds in local markets.<sup>13</sup> Accordingly, the construction of the UPOV 1991 Convention as a plant-breeder-focused system marginalizes small-scale farmers.

Despite its marginalization of small-scale farmers, there are currently 22 African members of UPOV. Five countries and one regional intergovernmental organization: Kenya, Tanzania, Tunisia, Morocco, South Africa, and the African Intellectual Property Organization (OAPI), which comprises 17 Member States.<sup>14</sup> Multiple factors

8. Article 5(2) of the UPOV 1991 Convention prohibits the inclusion of 'any further or different conditions of protection in national plant variety protection systems'.

9. Correa, 'Plant Variety Protection in Developing Countries', supra (n 6); Oguamanam, 'Breeding Apples for Oranges', supra (n 5). See also: Graham Dutfield, 'Turning Plant Varieties into Intellectual Property: The UPOV Convention' in Geoff Tansey and Tasmin Rajotte (eds), *The Future Control of Food: A Guide to International Negotiations and Rules on Intellectual Property, Biodiversity and Food Security* (Earthscan 2008) 41; Bram De Jonge, 'Plant Variety Protection in Sub-Saharan Africa: Balancing Commercial and Smallholder Farmers' Interests' (2014) 7(3) *Journal of Politics and Law* 100, 105.

10. The Crucible II Group, *Seeding Solutions: Volume 1, Policy Options for Genetic Resources: People Plants and Patents Revisited* (International Development Research Centre 2000); NP Louwaars, R Tripp, D Eaton, V Henson-Apollonio, R Hu, M Mendoza, F Muhhuku, S Pal and J Wekundah, 'Impacts of Strengthened Intellectual Property Rights Regime on the Plant Breeding Industry in Developing Countries: A Synthesis of Five Case Studies' (Report Commissioned by the World Bank, February 2005).

11. International Union for the Protection of New Varieties of Plants, 'UPOV Report on the Impact of Plant Variety Protection' (2005). The five countries are Argentina, China, Kenya, Poland and Republic of Korea.

12. Steve Wiggins, 'Can the Smallholder Model Deliver Poverty Reduction and Food Security for a Rapidly Growing Population in Africa?' Paper for the FAO expert meeting on how to feed the world in 2050 (Food and Agriculture Organization of the United Nations 24–26 June 2009) 2.

13. Mywish Maredia, Julie Howard, Duncan Boughton, Anwa Naseem, Maria Wanzala and Kei Kajisa, 'Increasing Seed System Efficiency in Africa: Concepts, Strategies and Issues' (Food Security International Development Working Papers 54578, Michigan State University, Department of Agricultural, Food and Resource Economics, 1999). However, it is important to bear in mind that the formal/informal seed demand differs based on the crop and the country.

14. OAPI members: Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Guinea, Guinea-Bissau, Mali, Mauritania, Niger, Senegal and Togo.

have contributed to the proliferation of the UPOV 1991 Convention in Africa. These include trade and investment agreements as well as extensive lobbying from the UPOV office and seed companies.<sup>15</sup> Morocco, South Africa, Tunisia and Tanzania have trade and investment agreements with the United States (US) and/or Europe that oblige them to introduce the UPOV system. Morocco has bilateral agreements with both the US and European Union (EU) which requires it to introduce the UPOV plant breeder's rights system.<sup>16</sup> The EU has similar trade agreements with South Africa and Tunisia which require them to introduce the highest international intellectual property rights (IPRs) standards.<sup>17</sup> The EU-Tunisia Agreement specifically requires Tunisia to accede to the UPOV 1991 Convention.<sup>18</sup> For its part, Tanzania's accession to the UPOV 1991 Convention in October 2015 was thanks to its membership of the G8's New Alliance for Food Security and Nutrition (NAFSN).<sup>19</sup> One of Tanzania's law reform commitments under the NAFSN was to accede to the UPOV 1991 Convention. Kenya was pressured to join UPOV by its vibrant seed sector,

15. Oguamanam, 'Breeding Apples for Oranges', *supra* (n 5) 4–7.

16. From 2002, the US Congress required trade agreements to include levels of IPRs like those in force in the US. US Trade Act 2002, s 2102. Chapter 15 of the US-Morocco Free Trade Agreement (FTA) sets out provisions on IPRs. Art 15.2(e) provides for Morocco to ratify or accede to the UPOV 1991 Convention <[https://ustr.gov/sites/default/files/uploads/agreements/fta/morocco/asset\\_upload\\_file797\\_3849.pdf](https://ustr.gov/sites/default/files/uploads/agreements/fta/morocco/asset_upload_file797_3849.pdf)> accessed 11 May 2018. Euro-Mediterranean Agreement establishing an association between the European Communities and their Member States, of the one part, and the Kingdom of Morocco, of the other part (19 March 2000) OJEC L70/2, Annex 7, art 1 <[http://trade.ec.europa.eu/doclib/docs/2006/march/tradoc\\_127906.pdf](http://trade.ec.europa.eu/doclib/docs/2006/march/tradoc_127906.pdf)> accessed 11 May 2018.

17. Agreement on Trade, Development and Cooperation between the European Community and its Member States, of the one part, and the Republic of South Africa, of the other part (4 December 1999) OJ L311, art 46; Euro-Mediterranean Agreement establishing an association between the European Communities and their Member States, of the one part, and the Republic of Tunisia, of the other part (30 March 1998) OJEC L97/2, art 39(1).

18. Euro-Mediterranean Agreement establishing an association between the European Communities and their Member States, of the one part, and the Republic of Tunisia, of the other part, 'Council and Commission Decision of the Council and the Commission of 26 January 1998, on the conclusion of a Euro-Mediterranean Agreement establishing an association between the European Communities and their Member States, of the one part, and the Republic of Tunisia, of the other part' (98/238/EC, ECSC, 30 March 1998) OJ L 97/1, Annex 7 <<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31998D0238&from=EN>> accessed 11 May 2018; GRAIN, 'TRIPS-Plus through the Back Door: How Bilateral Treaties Impose Much Stronger Rules for IPRs on Life than the WTO' (27 July 2001) <<https://www.grain.org/article/entries/5-trips-plus-through-the-back-door>> accessed 13 December 2016; GRAIN, 'Tunisia Joins UPOV' (21 August 2003) <<https://www.grain.org/article/entries/2080-tunisia-joins-upov>> accessed 11 May 2018. The EU-Tunisia Agreement is part of the Euro-Mediterranean Association Agreements the EU concluded with seven southern Mediterranean countries between 1998 and 2005. Euro-Mediterranean Partnership, 'Countries and Regions' <[http://ec.europa.eu/trade/policy/countries-and-regions/regions/euro-mediterranean-partnership/index\\_en.htm](http://ec.europa.eu/trade/policy/countries-and-regions/regions/euro-mediterranean-partnership/index_en.htm)> accessed 11 May 2018.

19. G8, 'G8 Cooperation Framework to Support the "New Alliance for Food Security and Nutrition" in Tanzania' 5 <<https://www.usaid.gov/sites/default/files/documents/1868/TanzaniaCooperationFramework.pdf>> accessed 11 May 2018 ('The New Alliance for Food Security and Nutrition in Africa'). The United Republic of Tanzania deposited its instrument of accession on 22 October 2015 and became a UPOV member on 22 November 2015 (UPOV Press Release 102, Geneva, 22 October 2015).

while OAPI, made up of mainly Francophone countries was extensively lobbied by the French government and UPOV office.<sup>20</sup>

In addition to UPOV's current African members, other African countries or organizations that have either initiated the procedure for acceding to the UPOV 1991 Convention or asked for assistance in developing their laws based on the UPOV 1991 Convention include: Algeria, Egypt, Ghana, Libya, Mauritius, Mozambique, Namibia, Nigeria, Sudan, Zambia, Zimbabwe, the African Intellectual Property Organization (ARIPO) and the Southern African Development Community (SADC).<sup>21</sup> Accordingly, out of the 54 African countries, the only countries that currently have no form of contact with the UPOV office are Burundi, Cape Verde, Djibouti, Eritrea and South Sudan. This article, in line with Professor Ekpere's insights, argues that the wholesale adoption of the UPOV 1991 Convention, which solely caters to commercial breeder's interests is unsuited to Africa's small-scale-farming and farming-communities-centred agricultural practices.

Apart from this introduction and the conclusion, the article is divided into three parts. Section 2 traces Professor Ekpere's odyssey leading to his involvement with the African Model Law. Section 3 explores Professor Ekpere's reflections on the design and promotion of the African Model Law. Section 4 illuminates Professor Ekpere's opinions on the future of protection of new plant varieties in Africa.

## 2 ODYSSEY TO THE AFRICAN MODEL LAW

Following the proliferation of the UPOV Plant Breeder's Rights system in Africa, alongside the disregard for the African Model Law, I decided to conduct the following interview with Professor Ekpere to share his experience on designing and promoting the African Model Law as well as his reflections on current developments in this subject. Prior to his appointment as the Executive Secretary of the OAU/STRC, Professor Ekpere worked with reputable academic and research institutions, including: the University of Ibadan, Nigeria; the International Fertilizer Development Centre (IFDC), USA; the National Reference Service for National Agricultural Research (ISNAR), the Netherlands; and the Finnish International Development Agency (FINNIDA), Finland.

**Q:** The 1980s–1990s saw the rise of conflicting debates about IPRs for plant varieties, access and benefit sharing, alongside farmers' rights, following the entry into force of the TRIPS Agreement in 1995, the CBD in 1993, farmers' rights resolutions

20. Dwijen Rangnekar, 'Geneva Rhetoric, National Reality: The Political Economy of Introducing Plant Breeders' Rights in Kenya' (2013) *New Political Economy* 359, 371–5; Carolyn Deere, *The Implementation Game: The TRIPS Agreement and the Global Politics of Intellectual Property Reform in Developing Countries* (Oxford University Press 2009) 279.

21. International Union for the Protection of New Varieties of Plants, 'Overview of UPOV' (Publication No 437, 13 April 2018) <[http://www.upov.int/edocs/pubdocs/en/upov\\_pub\\_437.pdf](http://www.upov.int/edocs/pubdocs/en/upov_pub_437.pdf)> accessed 10 May 2018. ARIPO members: Botswana, The Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Mozambique, Namibia, Rwanda, Sao Tome and Principe, Sierra Leone, Somalia, Sudan, Swaziland, Uganda, United Republic of Tanzania, Zambia and Zimbabwe. SADC members: Angola, Botswana, Democratic Republic of the Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe.

at the FAO [Food and Agriculture Organization of the United Nations] from 1989 and the UPOV Convention in 1991, how did you get involved in these debates?

**JE:** I got into this by association and assimilation: the mandate of my job as Executive Secretary of the OAU/STRC, and maybe to some extent, the nature of the typical teaching and research programme that I was involved with at the University of Ibadan. As a trained extension agronomist, I never thought I would be involved in any issue or debate on the protection of new plant varieties. This is because IPRs was never part of my competence and training as an agronomist. However, I was to some extent coerced into getting involved and directly participating in these debates. But I soon recognized and appreciated the implication of IPRs for national and household food security, sustainable livelihoods and the welfare of the African small-scale farmer. As such, I got involved to get a better understanding and intervene where possible.

To begin with, I was drafted in the early 1990s to prepare a position paper on the Rio Conference. I knew nothing about it. I did not believe in the omnibus conference that was going to be held [The Rio Earth Summit 1992] because I thought the objectives were out of reach. But I was told by my employers – FINNIDA – that it was something that I needed to do and that I should do it as soon as possible. So, I had to use my university research experience to research into what the Rio Conference was about and what I was expected to do with it. I put together the paper. It was a position paper on issues of the environment. To be quite honest, I did not know that it was going to explode into what it became much later.

As Executive Secretary of the OAU/STRC, I had the responsibility for advising the Member States through the Secretary General of the OAU on global events that were going on around science, technology and innovation. So, when the World Summit on Sustainable Development (WSSD) Conference was held in Johannesburg in 2002, I was asked to participate as an observer and produce a position paper as to how Africa should respond to the issues discussed and resolutions adopted.

Then came the World Trade Organization (WTO) Agreements, and of course, the TRIPS Agreement, and its Article 27.3(b), which had implications for science and technology. In my position as Executive Secretary of the STRC, I was asked to put up papers for the council of ministers' deliberations on the implications of these for the African continent. Again, I am not a trade expert and knew very little about these issues. But using the typical science approach and given my research background as a university professor, I did the necessary investigations, undertook a review of available preceding documents that the OAU had put together and delivered a position paper for the council of ministers as to how the continent should react to not only the entire consequence of the TRIPS Agreement, but more specifically to the controversial Article 27.3(b) as it related to the patenting of life forms, and therefore, the appropriation of farmers rights and community traditional knowledge. While these were happening, the CBD meetings were going on in Montreal, Canada and several locations worldwide.

Each time a major conference was convened and matters related to science, technology and innovation were to be addressed, I sought permission and had the authorization and opportunity of participating, because the OAU depended very much on my expertise on most science, technology and innovation issues. So, here was CBD coming with implications for a fast-developing biotechnology industry, alongside questions of IPRs, access to biological/genetic resources and equitable sharing of benefits, etc., amongst others. There were also issues with bio-trade, bio-prospecting, and bio-piracy, which needed to be addressed. At the same time, the marginalization of

indigenous peoples worldwide and the appropriation of their traditional knowledge was being discussed at the United Nations (UN). So much was going on at different levels in different organizations, with conflicting interpretations, understandings and consequences. Some of these consequences relate to issues of the environment, safety, agriculture, food security, as well as several crosscutting imperatives. The way things were going, it was very difficult to keep track and achieve consensus. A lot of the African countries did not quite understand the basic concept out of which most of these issues were being developed. The Global North, which had a monopoly of scientific knowledge at the time, was almost in a position of imposing most of the decisions at the international fora.

Therefore, it became imperative for the OAU to take a position. Where was that position to emanate from other than the STRC, which I was heading at the time? Again, I was given the responsibility to make sure that there was a framework for articulating these issues that were being discussed at different levels to see how Africa could benefit and ensure it was not marginalized. I think these were the significant factors that led to what I then did leading to the production of the African Model Law.<sup>22</sup> But let me state that there were two very specific initiatives in which I was involved and [about which I] gained knowledge and profound insight, which enabled me to more objectively articulate sections of the African Model Law that were not acceptable to many.

The first was the development of the Bonn Guidelines: I had participated in a few of the meetings.<sup>23</sup> I did not quite understand all the issues, but I envisaged the implications. So, I dug in further through research to see how the Bonn Guidelines could be used to have a better appreciation of how Africa should respond to the CBD and all the other trade, investment, science, technology and innovation related activities that were being discussed. The second was the emergence into prominence of the UPOV 1978 Convention and the proposed 1991 Convention.<sup>24</sup> The UPOV Conventions included very little of the provisions in the CBD. In other words, community rights. Ownership of biological/natural resources was not addressed. Farmers' rights were completely jettisoned. The UPOV Conventions spoke directly to plant breeders' rights. Whereas the breeders obtained breeding materials from farmers, who in fact are the custodians of the genetic materials, farmers' rights were ignored. Whatever revision was being contemplated on the UPOV 1991 Convention did not sufficiently articulate two issues: traditional knowledge and farmers' rights.

The Bonn Guidelines and UPOV Conventions triggered an awareness for Africa to act. There was a felt need to address the issues raised in both instruments as well as related issues in an integrated single document that attempted to reveal their

22. The African Model Legislation for the Protection of Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources 2000 (African Model Law).

23. Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising Out of their Utilization (2002) <<https://www.cbd.int/doc/publications/cbd-bonn-gdls-en.pdf>> accessed 11 May 2018.

24. International Convention for the Protection of New Varieties of Plants as of 2 December 1961, as revised at Geneva on 10 November 1972 and on 23 October 1978 <<http://www.upov.int/upovlex/en/conventions/1978/act1978.html>> accessed 11 May 2018. International Convention for the Protection of New Varieties of Plants of 2 December 1961, as revised at Geneva on 10 November 1972, on 23 October 1978 and on 19 March 1991 <<http://www.upov.int/upovlex/en/conventions/1991/content.html>> accessed 11 May 2018.

interrelationships with considerable clarity and implications. The result was a meeting of like minds and the idea to develop an African Model Law.

I would like to pay special tributes to my colleagues who were more knowledgeable and better informed than myself [and] who encouraged me to coordinate the efforts of several others in the development of the African Model Law.

The expertise and support I got from Dr Tewolde Egziabher, Ms Liz Hoskens and Professor Maurice Iwu made it easy for me to conclude that this was a viable and feasible project. I would also like to acknowledge the contribution of the Ministry of Foreign Affairs, Paris, France, for their support in the translation of the final document (2001 edition) of the Model Law. The Organization of the Petroleum Exporting Countries paid for the publication of the first version of the document in 2000. But most importantly, I would like to acknowledge my various bosses at the OAU headquarters in Addis Ababa for their trust, confidence and support. There was substantial international pressure to make sure that the African Model Law was not produced and distributed. I am sure that if I did not have their sustained support, I would not have been able to coordinate and produce the African Model Law. They believed that there was merit and utility to the document, even if it was not immediately self-evident.

### 3 THE AFRICAN MODEL LAW

**Q:** Your seminal contribution to the protection of plant varieties in Africa is the *Organisation of African Unity's (OAU) Model Law for the Protection of Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources, 2000*. You have extensively published articles on the African Model Law, would you like to add any further personal insights about the Model Law?

**JE:** As the title implies the African Model Law is a 'Model'.<sup>25</sup> It is a framework mechanism that attempted to draw attention to all the intricate negotiations that were going on at the World Intellectual Property Organization (WIPO), WTO, CBD, Food and Agriculture Organization of the United Nations [FAO], UN headquarters itself, and at various relevant fora on the issues that concerned our earth, the environment, industry, trade, biological resources and ownership in the context of IPRs. My observation was that each time there was a deadlock that could not be resolved at one forum, there was a tendency to raise the issue at another forum to secure approval and recommend global compliance. I also observed that there was no interface between these discussions. In other words, each organization had its own specific interests and, therefore, discussed issues from its perspective only. It is true that much later in the process there was an effort to integrate, and that integration remains

25. Professor Ekpere's publications on the African Model Law include: Johnson Ekpere, 'The OAU's Model Law', supra (n 3); Johnson Ekpere, 'African Model Law on the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources', supra (n 2); Peter Munyi, Marcelin Tonye Mahop, Pierre du Plessis, Johnson Ekpere and Kabir Bavikatte, *A Gap Analysis Report on the African Model Law on the Protection of the Rights of Local Communities, Farmers, Breeders, and for the Regulation of Access to Biological Resources* (Commissioned by the Department of Human Resources, Science and Technology of the African Union Commission, February 2012).



very difficult till today. A lot of the inter-agency meetings and negotiations on issues of IPRs and biological resources are on-going and yet to be fully resolved.<sup>26</sup>

I felt that in the African context, it was necessary to have an omnibus document. For lack of a better word, we titled it a Model Law. If we called it any other thing, it would not have had the legal implications that we were trying to stress. The Model Law is a mechanism which tended to see the relationship between these seemingly conflicting, yet related issues and to ensure that each time the issues arose, African negotiators should be able to determine where and how it was likely to affect the African sub-continent. We titled it the '*African Model Law for the Protection of Rights of Local Communities, Farmers and Breeders for the Regulation of Access to Biological Resources*' because it articulated the areas in all the discussions where interests – national interests, international donor interests, pharmaceutical interests, and international industrial interests – were all posited. These were also the key words that defined the discussions that were going on at the WIPO, the WTO, the CBD, the FAO, the International Plant Genetic Resources Institute (IPGRI), as well as other related institutions. The document was crafted with these in focus.

If you read the objectives of the African Model Law, you will understand why we did what we did. We wanted to accommodate the relevant issues that were being discussed at the international level in a single thought process, so that we do not address one issue to the exclusion of others. In Part II of the Model Law, we set out the definitions and scope – in other words, what needed to be included. But the basic component of the Model Law (Part III) was 'access and benefit sharing' (ABS), which is a major component of the CBD – stipulating how access to biological resources is sought and granted by the appropriate owner. Part III was designed in anticipation of the Nagoya Protocol and other instruments that may emerge on the issues as envisaged in the original CBD document. It did not cover everything, but we wanted to emphasize it so that persons reading the Model Law would have foresight for what may happen later. Community Rights (Part IV) was emphasized in compliance with the CBD because this was very well documented in the CBD. Farmers' Rights (Part V) was included in the Model Law because we wanted to be consistent and compliant with Article 27.3(b) of the TRIPS Agreement. Plant Breeders Rights (Part VI) was included 'deliberately' (for future negotiation) in compliance with or as a contravening position with UPOV – (UPOV 1991 Convention), the details of which should be carefully negotiated by Africa. Part VII, addressed the institutional arrangement for implementation. This was the most difficult part because those who did not want this document to see the light of day were insistent that the institutional arrangement for its implementation were too cumbersome and that it cannot be implemented. I do not blame them because I had the same feeling when I was told to develop a document for CBD (as mentioned earlier). I had asked myself how I was going to put all the conflicting ideas into one document. Part VIII, crafted the Enabling Provisions and called attention to issues that needed to be addressed if Africa was to be part of the on-going global discourse.

26. For example, the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, is undertaking negotiations to reach an agreement on texts of an international legal instrument that covers the protection of traditional knowledge, traditional cultural expressions and genetic resources. See: World Intellectual Property Organization, 'Intergovernmental Committee' <<http://www.wipo.int/tk/en/igc/>> accessed 11 May 2018.

The Africa Model Law was not very popular at its inception; it was not understood by a lot of people, including Africans. This was understandable because new ideas about sustained practices elicit criticism, misconception and resistance. However, I feel fulfilled today when I read of people discussing the African Model Law. I believed that developing the African Model Law was an essential activity. Not because I thought so in the first instant, but because I started interacting with colleagues who felt that something needed to be done. That some type of documentation for posterity needs to be undertaken. And that every scientific discovery at first started like a fantasy, and that our discussions – even though they sounded like a fantasy – could become a reality, and therefore, we decided to put our minds to it and see whether we could make sense out of it. That kind of encouragement from colleagues, most of whom were more informed on these issues than myself, encouraged me to use the scientific process to start thinking about how to convert what looked like a fantasy into reality. And it happened. It was not easy, it took us almost five years to prepare the final document. Each time we had a review meeting, we rephrased some paragraphs, either due to additional information or to ensure better understanding and clarity. But we were constantly thinking, and it was that thought-process that I think helped in pushing it and making it see the light of the day.

**Q:** One of the questions that arise from the African Model Law is how to implement the Farmers' Rights provisions set out in Part V. The African Model Law recognizes farmers' rights but it does not provide comprehensive guidelines for their implementation, why is this so?

**JE:** When we completed the first draft of the African Model Law in 1999/2000, we had various reviewers, and we presented the document at side events of the CBD and other organizations. Many people felt the Model Law was useless – not worthy of discussion, as they felt nothing concrete would result from it. When we were putting together the 2001 final version, we knew at that point in time, we could not specify a comprehensive guideline for implementation. It would be too much like preventing Member States of the OAU from having an opportunity to discuss what they considered should be the rights of their individual farmers and farming communities to biological resources (not genetic resources), which constituted an essential component of their community welfare, household food safety and livelihood. Research on traditional knowledge associated with biological resources was just beginning and issues of ownership were not even being contemplated in some States. The concept of benefit sharing was being negotiated at the CBD.

The OAU/STRC had published many surveys on Traditional Medicine Plants as well as an African Pharmacopoeia. Each time we went out for these surveys, it was the community members that took us into the bush. It was the traditional medicine practitioners who provided information on what each plant, insect or animal part was used for. Yet, they did not claim traditional knowledge ownership rights, neither was any ascribed to them by law. Hence it was difficult to aggregate available information formulated into a comprehensive guideline for the implementation of farmers' rights as conceptualized in the African Model Law.

It is gratifying to note that these issues are now being addressed and elaborated at national and sub-regional levels as countries ratify and implement the Nagoya and other protocols of the CBD. The discussion on traditional knowledge and IPRs is in focus at the international and AU levels.

That notwithstanding, there is a need for continuous research and studies on traditional knowledge associated with biological resources, issues of ownership and the

economic value of biological resources as a basis for benefit sharing, biodiversity inventories and conservation, and appropriate IPRs regimes to backstop Africa's common position and negotiation capacity at the international level.

**Q:** What hindered the domestication of the African Model Law in Africa?

**JE:** The first [factor] is international objection. What we were talking about was against the grain. It was not traditional IPRs. Neither was it anything that looked like what should be. So, when it was mentioned at some fora, some people would say – that OAU Model Law? It is not implementable. And when you ask them why, they give you a thousand and one reasons why not. Yet, it had never been implemented. So how do you speculate that a concept is not workable when you have not worked it? My argument has always been, if you think this document is not implementable, why not try to implement it first. It is only in recent times, that people are beginning to look at various sections of the document to try to tease out components that they can integrate into their national legislation. It was never our intention that the entire Model Law be implemented wholesale. Rather, as earlier mentioned, it was a framework mechanism for dealing with various components of the discussions that were going on worldwide. So, the aspect that deals with access and benefit sharing is now being used in the implementation of the Nagoya Protocol. The aspect that deals with patenting and Article 27.3(b) of TRIPS is being adapted in some countries in crafting biosafety legislation for the regulation and management of the practice of biotechnology.

There was substantial international resistance to the content of the Model Law. While some felt it will deprive Africa of the benefit of international trade, others felt the continent will lose out from the benefit of modern science, technology and innovation. In fact, it was not expected that this type of document would emanate from an African organization. But more importantly, perhaps, most African governments had a very poor understanding of what was embedded in the document. I do not need to tell you the difficulty of even getting it published.

We had a lot of competition with the UPOV 1978 and 1991 Conventions when the Francophone African countries were being cajoled into accepting wholesale the UPOV 1991 Convention. I travelled the entire West Africa and some parts of the Portuguese Southern Africa to explain why the UPOV 1991 Convention should not be adopted wholesale. There are parts of it that can be adopted, but the UPOV 1991 Convention as one document to which a country must subscribe for all your plant varieties was inimical to the agricultural development programmes of the continent. But I failed. The adoption of the 'Bangui Agreement' (1977), which included plant variety protection and traditional cultural expression and the creation of the OAPI, put paid to that effort.<sup>27</sup> The ARIPO (Harare, Zimbabwe) came alive and started work on farmers' rights, breeders' rights and traditional knowledge, but it was a little late. That effort later resulted in the development of the 'Arusha Protocol for the Protection of New Varieties of Plants' (2015).<sup>28</sup> At the time that we wanted ARIPO's support to

27. Bangui Agreement Relating to the Creation of an African Intellectual Property Organisation, Constituting a Revision of the Agreement Relating to the Creation of an African and Malagasy Office of Industrial Property (Bangui, Central African Republic, 2 March 1977), revised on 24 February 1999, entered into force on 28 February 2002.

28. The Arusha Protocol for the Protection of New Varieties of Plants was adopted by the Diplomatic Conference held in Arusha, the United Republic of Tanzania on 6 July 2015 <<http://www.aripo.org/news-events-publications/news/item/69-aripo-protocol-for-the-protection-of-new-varieties-of-plants-adopted>> accessed 11 May 2018.

get the African Model Law done we did not get it. There was a very ineffective promotion of the idea.

The OAU finally adopted the African Model Law as its document, but given the modus operandi and structure of the organization, resolutions passed at their various organs were not binding. They are recommendations for implementation at the national level. Most Member States lacked the political will, technical understanding and professional expertise to implement the African Model Law. I am not aware that there is currently a section at the OAU, or anywhere, with an effective promotional or public awareness programme on the African Model Law.

However, the African Model Law represents a living and valuable addition to knowledge on IPRs, the conservation on the protection of the rights of local communities, farmers, breeders and the regulation of access to biological resources. It is my hope that the concepts and processes enunciated in the Model Law will continue to enrich research and encourage further elaboration of the basic tenets of IPRs.

**Q:** What did you enjoy most (and least) about the process of designing the African Model Law?

**JE:** What I enjoyed most was the learning process itself. I could never have imagined that with my background and training in agriculture, I was going to be working on IPRs, a subject matter for legal professionals. My involvement started with a review and analysis of the relevant WTO, WIPO and FAO documents on IPRs. The process though challenging was a source of joy and satisfaction as it enabled me to better understand the relationship between research and development in the context of ownership of knowledge as property that could be protected to the benefit of the creator and end user.

The pain and doubt to continually assure myself that I was out to discover and produce something useful was particularly excruciating. I had to vicariously assess and sustain my doggedness to ensure progress. The overwhelming negative review that the process elicited was perhaps the least enjoyable part of the process. The team was however resilient and focused, and in the end intellect, good judgement and hard work prevailed.

#### 4 THE FUTURE OF PLANT VARIETY PROTECTION IN AFRICA

**Q:** What are the implications of the proliferation of the UPOV 1991 Convention in Africa?

**JE:** I do not understand why the African countries and regional organizations are acceding to the UPOV 1991 Convention. I appreciate OAPI's position because of its collaborative relationship with France and the Francophone group. So, a joint recognition and membership of UPOV by the Francophone African countries, I concede. But, I have a little bit of a concern that OAPI as an institution should very glibly – and I use that word with a lot of caution – adopt one IPRs regime against other options that they themselves as a research and well-organized institution should have developed. OAPI has not created any IPRs structure. They have just imbibed UPOV as prescribed. ARIPO, on the other hand, has tried to develop its own IPRs system. The African Union [AU, formerly the Organisation of African Unity (OAU)] initiated action to establish an Africa-wide IPRs mechanism to regulate IPRs including plant variety protection, but I am not aware of the current level of progress with that.

The future of plant variety protection in Africa is bright. African scientists and agronomists may not currently be practising at their best in ensuring plant variety protection. There are annual meetings of plant breeders, agricultural biotechnologists and microbiologists, but they do not add up to a critical mass to influence decisions and industry participation in the business of ownership and protection of plant varieties.

The understanding of IPRs as it relates to plant varieties is still very low. Plant breeders seeking protection for their works are constrained by lack of, or weak institutional procedures for ascribing ownership and sharing benefits. In some institutions, the concept of IPRs as an instrument of wealth creation is either exaggerated or not well understood.

However, the continent now recognizes and understands more than ever before, that science, technology and innovation are the epicentre of its drive for agricultural development, food security and sustainable livelihoods. Consequently, as African agricultural research and development communities acquire significant knowledge as well as professional and technical competence to develop new plant varieties, the need for IPRs will be obvious and hopefully the best option – consistent with regional/national interest – sought.

**Q:** How relevant is plant variety protection to food security in Africa?

**JE:** The African Model Law tries to provide an answer to that question in Parts I and II that deal with the objectives and scope. The seed/planting material is the most important input of any agricultural development project. A good seed is the first real component to a developed agricultural system. So, if an agricultural system does not have a mechanism for improving its planting materials, that system will continue to deflate. Therefore, the development and protection of new plant varieties become extremely important to the agricultural programme of all countries because the improved plant variety is basic to food security. If you do not have an evolving and improving plant variety programme, your agriculture cannot improve. And if you depend on other countries for planting materials, then what you think you are benefiting goes into paying for those plant variety materials that you import from those countries. Therefore, Member States, and Regional and Sub-Regional Agricultural Agencies should invest in science, technology and innovation research and plant variety protection to achieve a world-class competitive agricultural production system that ensures food security.

**Q:** What advice do you have for researchers and advocates interested in promoting African-Model-Law-styled plant variety protection systems in Africa?

**JE:** As mentioned earlier, the African Model Law has not made appreciable progress in adoption, adaptation and further research. First, it is not well known. It is not promoted enough, and it does not provide an implicit research challenge. For young and upcoming researchers and advocates of the African Model Law, and of course the '*sui generis*' option under Article 27.3(b) of TRIPS, the Model Law opens a new chapter in research. Some people think that research can only be undertaken on concrete physical areas of study. Research begins with a challenge (problem) that elicit ideas and concepts from which investigative solutions could emerge. It is elucidated through a thought process and investigative ability/procedure to articulate something new on what needs to be known.

The African Model Law opens a new chapter into research on the concept and practice of IPRs for young researchers. What are the options for protecting new plant varieties under TRIPS? What is the relevance of the '*sui generis*' option in non-industrialized

developing/emerging economies? Do not forget that the patent system was developed for the industrial world, where inventions were specifically described in terms of novelty, the non-obviousness/inventive step and industrial application. When you are dealing with plant varieties, traditional knowledge, access and benefit sharing, as well as other issues enunciated in the CBD, it becomes a real problem trying to articulate definitive procedures like what was done for the industrialized countries at the time that the patent system was enunciated.

The African Model Law is predicated on the CBD. The CBD is an effort to protect (conserve) biological resources (of the developing economies) while at the same time protecting the environment (our planet). The protection mechanism that is envisaged to evolve in these developing economies should, of necessity, be different from the IPRs systems that were developed for the industrial economies. This is the challenge for the young researcher who is interested in undertaking further research based on the African Model Law. How do you develop, defend and implement substantially equivalent mechanisms, processes and procedures that can be used to protect biological resources, using similar but not the same criteria implicit in the global patent system?

Research on promoting the implementation of the African Model Law would expose areas of modification to the existing format that ensures acceptance at the international level and compliance at national levels. There are not many organizations in the developed world that feel comfortable with the approach of the Model Law to the protection of biological resources under CBD. So, they fall back on the use of the qualifier word 'genetic' resources. A gene is a definable entity, a biological resource is perceived as nebulous. How do you define this biological resource (spatially dispersed) that appears not so precise and specific, so that it is substantially equivalent to a gene which is precise and can be defined? Is the principle of substantial equivalence applicable in all cases? These are some of the issues that should inform research topics. The young researcher will need to think out of the box.

Interested advocates of the African Model Law should devise concepts, methodologies and approaches for effective protection of biological resources. I have always considered the African Model Law as work in progress. Promoting its better understanding, adaptation, implementation, continuous investigation and further research is part of that process. There should be a way to integrate this new type of IPRs, the protection of biological resources as enunciated in the various articles of the CBD, into a protection regime that is acceptable, like the patent system, but unique because we are not thinking of a mechanical contraption, an abstract concept/idea, but a biological resource named 'new plant variety'. It will not be easy, but it can be done.

## 5 CONCLUSION

From the late 1990s to the early 2000s, the AU established its position on plant variety protection. The AU's position on plant variety protection, embodied in the carefully designed African Model Law, responded to its members' obligations under the CBD, TRIPS and, subsequently, the ITPGRFA and the Nagoya Protocol. Professor Ekpere creatively conceived the African Model Law as a holistic, innovative *sui generis* plant variety protection system that merges IPRs with other important political, social and economic issues, including food sovereignty, state sovereignty, food security, farmers/farming community rights, as well as access and benefit sharing. However, the African Model Law failed to receive acceptance from the African continent, which it was designed for. With overlapping pressures from trade and investment

agreements, alongside the UPOV office and private seed companies' lobbies, there is a proliferation of the UPOV system in Africa, rather than the Model Law.

Lessons from Global South WTO members such as India and Thailand, which have designed *sui generis* plant variety protection systems that balance the interests of small-scale farmers, farming communities and plant breeders, reveal that the active national civil society organizations (CSOs) in collaboration with international CSOs were at the forefront of promoting and maintaining these systems.<sup>29</sup> Although, plant variety protection was generally alien in Africa prior to TRIPS, in the post-TRIPS era, the introduction of plant variety protection systems and UPOV membership in Africa is increasingly receiving attention from concerned actors.<sup>30</sup> However, the outcome of the public actions and debates largely depend on factors such as the vibrancy of CSOs and the government's response. For example, ARIPO and Ghana's UPOV membership have been stalled to date due to vocal interventions from CSOs. The Alliance for Food Sovereignty in Africa (AFSA), alongside other CSOs, publicly criticized earlier drafts of the ARIPO's Arusha Protocol that were modelled on the UPOV 1991 Convention.<sup>31</sup> Food Sovereignty Ghana is at the forefront of the resistance

29. See generally, on India: Dwijen Rangnekar, 'Tripping in Front of UPOV: Plant Variety Protection in India' (October–December 1998) 48(4) *Social Action* 432; Anitha Ramanna and Melinda Smale, 'Rights and Access to Plant Genetic Resources under India's New Law' (2004) 22(4) *Development Policy Review* 423; Anitha Ramanna, *Farmers' Rights in India: A Case Study* (The Fridtjof Nansen Institute, May 2006). On Thailand: BIOTHAI and GRAIN, 'Signposts to *Sui Generis* Rights' (Resource Materials from the International Seminar on *Sui Generis* Rights Co-organized by BIOTHAI and GRAIN, Bangkok, 1–6 December 1997, February 1998) <<https://www.grain.org/article/entries/2-signposts-to-sui-generis-rights>> accessed 12 May 2018; Jakkrit Kuanpoth, 'Pushing against Globalization: The Response from Civil Society Groups in Thailand' in John Gillespie and Randall Peerenboom (eds), *Regulation in Asia: Pushing Back on Globalization* (Routledge 2009); Gabrielle Gagne and Chutima Ratanasatien, 'Commentary on Thailand's Plant Varieties Protection Act' in Michael Halewood (ed), *Farmers' Crop Varieties and Farmers' Rights: Challenges in Taxonomy and Law* (Earthscan 2016).

30. Prior to TRIPS, only three African countries had plant variety protection systems: Kenya, South Africa and Zimbabwe. Kenya's Seeds and Plant Varieties Act of 16 May 1972 entered into force on 1 January 1975. It was amended and revised in 1998, 2002 and 2012. Kenya became a UPOV member on 13 May 1999 and it is party to the UPOV 1991 Convention. South Africa's Plant Breeders' Rights Act of 15 March 1976 entered into force on 1 November 1977. It was revised and amended in 1980, 1981, 1983, 1986 and 1996. South Africa became a member of UPOV on 6 November 1977 and it is currently party to the UPOV 1978 Convention. Zimbabwe's Plant Breeders' Rights Act, modelled on the UPOV 1961 Convention, was enacted in 1973 and entered into force in 1974. Zimbabwe is not a member of UPOV, but it has initiated the procedure for acceding to the UPOV Convention.

31. The Alliance for Food Sovereignty in Africa (AFSA) is a Pan-African platform comprising of CSOs and farmer organizations involved in the food sovereignty movement in Africa. See for example, AFSA, 'AFSA appeals to ARIPO Members for the Postponement of Diplomatic Conference and National Consultations' (3 November 2014) <<http://www.apbrebes.org/files/seeds/AFSA%20POSTPONEMENT.pdf>> accessed 12 May 2018 ('AFSA appeals to ARIPO Members'); AFSA and other CSOs, 'ARIPO's Draft Protocol for the Protection of New Varieties of Plants (Draft Protocol) Undermines Farmers' Rights, Lacks Credibility & Legitimacy' (Open letter to members of UPOV) (14 April 2014) <<https://viacampesina.org/en/index.php/main-issues-mainmenu-27/biodiversity-and-genetic-resources-mainmenu-37/1591-aripo-s-draft-protocol-for-the-protection-of-new-varieties-of-plants-draft-protocol-undermines-farmers-rights-lacks-credibility-legitimacy>> accessed 12 May 2018; AFSA, 'AFSA Submission for Urgent Intervention in Respect to Draft ARIPO Plant Variety Protection Protocol (PVP) and

against Ghana's UPOV-styled Plant Breeder's Rights Bill.<sup>32</sup> In contrast, Nigeria's recent contact with the UPOV office to seek assistance in developing its laws based on the UPOV Convention has not stimulated any public debates.

Furthermore, in relation to small-scale farming and plant variety protection, it is important to point out that there are growing global debates about the benefits of small-scale and family-farming-based agricultural systems.<sup>33</sup> The FAO's Second International Symposium on Agroecology held from 3 to 5 April 2018 emphasized the importance of small-scale and family farming, as well as sustainable agricultural innovations using traditional ecological knowledge.<sup>34</sup> Similarly, there are burgeoning agricultural research initiatives learning from the traditional ecological knowledge prevalent in the Global South. For example, Dr Julia Wright is pioneering a new research on quantum agriculture.<sup>35</sup> Quantum agriculture investigates the non-material invisible dimension of agriculture, including prayers, chants, rituals and planting according to the lunar calendar, which is prevalent in the Global South.<sup>36</sup> There is also increasing interest in family allotment gardening in the Global North.<sup>37</sup>

As the Global North is looking to Africa and the Global South for inspiration to develop sustainable agricultural systems, it is important for Africa and the Global South to preserve its farming practices and traditional ecological knowledge base.

Subsequent Regulations' (July 2014) <<http://acbio.org.za/wp-content/uploads/2015/02/AFSA-Susbmission-ARIPO-PVP-Protocol.pdf>> accessed 12 May 2018; AFSA, 'Appeal to ARIPO and African Union Member States and UNECA for an Effective ARIPO Protocol Supportive of Farmers' Rights and the Right to Food' (Harare, Zimbabwe, 29 October 2014) <<http://www.ip-watch.org/weblog/wp-content/uploads/2014/11/AFSA-statement.pdf>> accessed 12 May 2018; AFSA, 'AFSA's Comments on ARIPO's Responses to Civil Society: Draft Legal Framework for Plant Variety Protection' (2014) <<http://acbio.org.za/wp-content/uploads/2015/02/AFSA-letter-ARIPO-March2014-.pdf>> accessed 12 May 2018.

32. Food Sovereignty Ghana <<http://foodsovereigntyghana.org/>> accessed 12 May 2018. APBEBES, 'Massive Protests in Ghana over UPOV Style Plant Breeders' Bill' (11 February 2014) <<http://www.apbebes.org/news/massive-protests-ghana-over-upov-style-plant-breeders-bill>> accessed 12 May 2018.

33. Peter Rosset, 'The Multiple Functions and Benefits of Small Farm Agriculture in the Context of Global Trade Negotiation' (Policy Brief No 4, September 1999) <[https://www.iatp.org/files/Multiple\\_Functions\\_and\\_Benefits\\_of\\_Small\\_Farm\\_.htm](https://www.iatp.org/files/Multiple_Functions_and_Benefits_of_Small_Farm_.htm)> accessed 12 May 2018; Miguel Alteri and Parviz Koohafkan, *Enduring Farms: Climate Change, Smallholders and Traditional Farming Communities* (Environmental & Development Series 6, Third World Network, 2008); Philip Woodhouse, 'Beyond Agriculture? Some Questions about Farm Size, Productivity and Sustainability' (July 2010) 10(3) *Journal of Agrarian Change* 437–53.

34. Food and Agriculture Organization of the United Nations, 'Second International Symposium on Agroecology' <<http://www.fao.org/about/meetings/second-international-agroecology-symposium/en/>> accessed 12 May 2018.

35. Dr Wright is a Senior Research Fellow – Agroecological Futures at the University of Coventry Centre for Agroecology, Water and Resilience.

36. Julia Wright, Henk Kieft and Saskia von Diest, 'Quantum-Based Agriculture: The Final Frontier?' Proceedings of the Scientific Track 'Innovative Research for Organic Agriculture 3.0' 19th Organic World Congress (New Delhi, India, 9–11 November 2017) <[http://orgprints.org/32350/1/360a\\_OW17%20science%20track%20proceedings%20in%20TR\\_54\\_Vol1\\_box.pdf](http://orgprints.org/32350/1/360a_OW17%20science%20track%20proceedings%20in%20TR_54_Vol1_box.pdf)> accessed 12 May 2018.

37. M Ferres and TG Townsend, 'The Social, Health and Wellbeing Benefits of Allotments: Five Societies in Newcastle' (Global Urban Research Unit Working Paper, No 47, 2012); Claire Nettle and David Crouch, 'Allotments and Community Gardens: History, Culture and Landscape in Britain, North America and Australia' in Joshua Zeunert and Tim Waterman (eds), *Routledge Handbook of Landscape and Food* (Routledge 2018).



The African Model Law acknowledged the value of small-scale farmers, farming communities and traditional ecological knowledge as well as their contributions to sustainable agriculture. As such, Professor Ekpere explains that it was drafted to cater to competing diverse interests. The protection of three categories of varieties: community varieties, farmers' varieties and new breeders' varieties, alongside access and benefit sharing principles and farmers' rights provisions demonstrate this balance.

Finally, as the much-anticipated mandated review of Article 27.3(b) of TRIPS scheduled for 1999 has failed to take place to date, WTO members still have the flexibility to introduce plant variety protection systems suited to their national interests.<sup>38</sup> Notably, no African country has been invited to the WTO Dispute Settlement Body for failing to introduce a plant variety protection system.<sup>39</sup> This article, in celebration of Professor Ekpere's vision, calls for a revival of the African Model Law in Africa. As Professor Ekpere articulated, there are still grey areas that require clarification in the Model Law, but since it is a 'Model', there is ample room for detailed revisions when designing a plant variety protection system styled after it.

38. For discussions on the mandated TRIPS review, see generally: Jayashree Watal, *Intellectual Property Rights in the WTO and Developing Countries* (Oxford University Press 2001) 180–82; International Centre for Trade and Sustainable Development, *UNCTAD-ICTSD Project on IPRs and Sustainable Development: Resource Book on TRIPS and Development* (Cambridge University Press 2005) 395–7; WTO, 'TRIPS: Reviews, Article 27.3(b) and Related Issues: Background and the Current Situation' <[https://www.wto.org/english/tratop\\_e/trips\\_e/art27\\_3b\\_background\\_e.htm](https://www.wto.org/english/tratop_e/trips_e/art27_3b_background_e.htm)> accessed 12 May 2018.

39. Articles 65–6 of TRIPS gave developing countries up to 1 January 2000 to fulfil their obligations under TRIPS, including the obligation to protect plant varieties, while least developed countries have up to 2021. See also: WTO Council for Trade-Related Aspects of Intellectual Property Rights, 'Extension of the Transition Period under Article 66.1 for Least Developed Country Members: Decision of the Council for TRIPS of 29 November 2005' (IP/C/40, 30 November 2005); WTO Council for Trade-Related Aspects of Intellectual Property Rights, 'Extension of the Transition Period under Article 66.1 for Least Developed Country Members: Decision of the Council for TRIPS of 11 June 2013' (IP/C/64, 12 June 2013).