10. PLANT VARIETY PROTECTION IN UGANDA: A LEGAL ANALYSIS OF EMERGING TRENDS

Anthony C.K. Kakooza*

ABSTRACT

This article looks at the most recent intellectual property protection legislation in Uganda, the Plant Variety Protection Act passed in 2014. The article particularly addresses the protective mechanisms stipulated for in the legislation. It goes on to highlight the imbalance that exists in the legislation between the interests of plant breeders who are the ultimate beneficiaries of Plant Variety protection and the rights of indigenous farmers, who are the unsuspecting losers. This is based on restrictions that the legislation places on access to Food Security that has hitherto not been a problem for such communities. In this analysis, the article looks at the government's justification for the enactment of the legislation and critiques this justification using the provisions in the Act. The central argument presented is that Agro-Based communities, such as those in Uganda, would be hard-pressed to satisfy the interests of pro-protection communities like plant breeders. The latter are in the minority as opposed to local farming communities that are major feeders to the nation's economy. Comparisons are thus made with similar – both existing and old -legislations in India and Tanzania respectively, with a view to draw out best practices. This then forms the basis for the argument that Plant Variety protection, though possible and warranted, needs to enable continued easy access by farming communities to food, which may be hindered by such protection.

Key words: *Benefit sharing, Food, Plant variety, Farmers' rights, Plant Breeders.*

1. INTRODUCTION

Uganda, as a founding member of the World Trade Organization (WTO) in 1994, is obligated to implement legislations that are modeled along the principles of the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement. Article 27 (3)(b) states that:

> "Members may also exclude from patentability:
>
> (b) plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement."

The aforementioned provision gives lee-way to Member organizations to '*provide for the protection of plant varieties either by patents or by an effective sui generis system*' or a combination of both. The government of Uganda opted to give separate protection to patents and plant varieties. According to section 13 (a) of the Industrial Property Act, 2014 (IPA),[1] plant varieties are not patentable, which is provided for in the law on protection of plant varieties. As such, Uganda has a sui generis system for protecting plant varieties in the form of the Plant Variety Protection Act, 2014(hereinafter 'PVPA'). It states in its preamble that it is –

> "An Act to provide for the promotion of development of new plant varieties and their protection as a means of enhancing breeders' innovations and rewards through granting of plant breeders rights and for other related matters."

Although the PVPA was assented to by the President of Uganda on 21 June 2014, it is not yet operational. Section 48 (1) of the Act stipulates that regulations shall be put in place to bring into full effect the provisions of the law. This, as of June 2017, has not been done. Nonetheless, for all intents and purposes, this is the current law on Plant Variety protection in Uganda.

Interestingly, the PVPA is not the first piece of legislation on plant breeding in the country. In 1994, the Ugandan government enacted the Agricultural Seeds and Plant Act (Cap. 28, Vol. 3) (hereinafter '1994 Act'). There is no definite indication in the 1994 Act to conclude that it was enacted to fulfill the objectives of Article 27 of the TRIPS Agreement. It would therefore be safe to assume that this earlier legislation had no agenda directed towards the protection of intellectual property. The Preamble of that Act provides that it is –

* **Dr. Anthony Conrad K. Kakooza** is currently the Dean of the Faculty of Law at Uganda Christian University, Mukono (2014 – to date). Dr. Kakooza holds a Doctor of the Science of Law (J.S.D) degree in Intellectual Property and Cyber Law from the University of Illinois College of Law in Urbana-Champaign (U.S.A). He also holds a Master of Laws (LL.M) degree in International Economic Law, specializing in International Intellectual Property Law, from the University of Warwick in Coventry, U.K as well as a Bachelor of Laws (LL.B) degree from Makerere University, Uganda. He is an enrolled advocate in Uganda. Dr. Kakooza has been lecturing in Intellectual Property and Cyber law at the Uganda Christian University as well as Nkumba University since 2006. The law in this paper is stated as it stood on 3 June 2017.

[1] Industrial Property Act No. 3 of 2014, Laws of Uganda.

> "An Act to provide for the promotion, regulation and control of plant breeding and variety release, multiplication, conditioning, marketing, importing and quality assurance of seeds and other planting materials and for other matters connected therewith."

However, a quick perusal of the 1994 Act shows that it has some essential stipulations that are similar, in principle, to the provisions in the PVPA. For instance, section 3 of the 1994 Act enumerates the functions of the National Seed Industry Authority. This includes advising the government on the national seed policy. This is similar to section 5 of the PVPA which enumerates the functions of the Plant Variety Protection Committee, one of which is advising the Minister of Agriculture on policies relating to plant varieties. Section 5 of the 1994 Act also lists the functions of the Variety Release Committee, which includes the approval of new seed varieties. Similarly, Section 5 of the PVPA requires for the Committee's approval for plant varieties to be registered.

Although there are obvious differences between plants and seeds, the two are intertwined and go hand in hand in in the regulation of Plant Varieties. It is therefore important to note that no reference whatsoever is made to the 1994 Act by the PVPA, to create a harmonious relationship between the two legislations. It can be opined, however, that the PVPA places more emphasis on the exploitation and protection of the Plant Breeder's Intellectual property.

Legislation for plant variety protection was birthed by the Uganda Law Reform Commission. This is the government body that carries the mandate for improving, developing, modernizing and reforming laws in Uganda.[2] A report prepared by the Law Reform Commission presented[3] two basic principles as justifications for the protection of plant varieties. These were:

(a) 'That it is beneficial to society to encourage the disclosure of new development, and
(b) That it is beneficial to society to ensure honest dealing.'

This article therefore focuses on looking at the extent to which the stipulations in the new Act meet the aforementioned justifications, in particular, what is beneficial to society. The article looks at how effective the Act is in meeting the private rights of plant breeders *viz a viz* the public rights of farmers or local community breeders. In this respect, it addresses two core areas: The first is the general perspective of attention given to farmers' rights in the Act, and the second is the attention given to sharing benefits from plant varieties between the holders and farming communities.

In its analysis, the article reflects on the Ugandan Act's position as compared to International treaties, particularly the International Union for the Protection of New Varieties of Plants (UPOV) and the International Treaty on Plant Genetic Resources for Food and Agriculture (popularly known as the International Seed Treaty). Uganda is a signatory to the International Seed Treaty but not a member of UPOV. However, it is important to note, that although the UPOV was tailor-made for European interests in 1961, since it touches on farmers' rights generally, its implications have a global reach.[4]

By choosing to focus more on the interests of plant breeders at the expense of indigenous farming communities, the Ugandan legislation has been hit by a lot of criticism including an on-going Constitutional Petition. Further, local farmer's associations were not consulted before the enactment of the law. According to the report of the Parliamentary Committee on Agriculture, Animal Industry and Fisheries on the Plant Variety Protection Bill 2010, the stakeholders consulted included the following: the Ministry of Agriculture, Animal Industries and Fisheries, National Agriculture Research Organization (NARO), African Forum for Agricultural Services (AFAAS), Uganda Forum for Agricultural Advisory Services (UFAAS), Science foundation for Livelihoods and Development (SCIFODE) and the Plant Variety Protection Bill Stakeholders' Working Group.[5] This therefore contravenes the right to participation under article 38 of the Ugandan Constitution.

The article also carries out a comparative analysis with the *Protection of Plant Variety and Farmers Rights Act, 2001* of India and the *Protection of New Plant Varieties (Plant Breeders' Rights) Act, 2002* of Tanzania (which was replaced by the *Plant Breeders' Rights Act, 2012*). By doing so, it highlights the inadequacy in the provisions under the Ugandan Act, specifically in terms of practicality and efficiency.

It is an uncontested fact that humankind cannot live without food. As such, obstacles and limitations emanating from legislations on the food industry have

[2] Uganda Law Reform Commission Act Cap. 25 sec. 10, Laws of Uganda.

[3] Uganda Law Reform Commission, *A Study and reform on Plant Variety Protection Law* (ULRC Publication No. 18 of 2004).

[4] International Convention for the Protection of New Varieties of Plants<www.upov.int/upovlex/en/upov_convention.html> (accessed 2 April 2016).

[5] Parliament of Uganda, *Report of the Committee on Agriculture, Animal Industry and Fisheries on the Plant Variety Protection Bill 2010,* Office of the Clerk to Parliament, Parliament Buildings, Kampala-Uganda, December 2013.

both direct and indirect impacts on everyone. This article tries to provoke the question, who actually benefits from plant variety protection?

2. PROTECTION OF PLANT VARIETIES UNDER THE ACT

The Plant Variety Protection Act (PVPA) entered into force in June 2014. Generally, The PVPA gives due recognition to the public rights of local community breeders, particularly those associated with traditional breeding methods. It does not specifically affect traditional community-based practices, however, it extends its applicability to plant varieties, their derivatives, breeding and export.[6]

Under Section 33(1)(b) of the PVPA, an application for Plant Breeding rights is granted where the plant variety is new[7], distinct[8], uniform[9] and stable[10] distinct,[11] uniform[12] and stable.[13] This is in harmony with Article 5(1) of UPOV.

A. FARMERS' RIGHTS AS COMMUNITY BREEDERS VERSUS PRIVATE RIGHTS OF PLANT BREEDERS

Indigenous farmers in the traditional Ugandan setting, which consists of communal farming and ownership of land, are reliant on cheap and convenient farming habits. These include saving and communal sharing of seeds for replanting. It is on this premise that one of the clashes with the interests of plant breeders is likely to occur. In the case of *Vernon Hugh Bowman v. Monsanto Co. 569 U.S. 133 SCt. 1761*, the Supreme Court of the United States opined that patent exhaustion does not permit farmers to reproduce a patented seed through planting and harvesting without the patent holder's permission. With this interpretation of the law, indigenous farmers in Uganda, the majority of whom are illiterate or semi-literate, would not be in a position to appreciate the legal restrictions imposed on them. They would be trapped on the wrong side of the law. Litigation involving indigenous farmers surrounding their alleged infringement of plant breeder's rights can deprive them of access to food. This ultimately means that there is no benefit to all members of society as was envisaged by the Uganda Law Reform Commission in drafting the Act.

It is therefore important to understand the essential differences between farmers' rights[14] and plant breeders' rights as summarised below:

Table 1: Differences between farmers and plant breeders' rights[15]

	Plant breeders' rights	**Farmers' rights**
Type of rights	They are a form of IP rights that are exclusive in nature	They are collective rights
Ownership of rights	Rights awarded to individuals	Vested in communities to be held in trust for present and future generations
Extent of the rights	Rights limited to a particular plant variety	A bundle of rights that extend to plant genetic resources for subsistence and commercial agriculture
Scope of the rights	Rights recognize a single inventive step as long as the variety is "new" and clearly distinguishable from any other variety whose existence is a matter of common knowledge	Rights recognize the cumulative intellectual contributions of many preceding generations of farmers
Duration	Limited	Unlimited

The Act currently has no express provision for farmers' rights although it creates exceptions to the rights of plant breeders.[16]

To a limited extent, the Act reflects a harmonious relationship with Article 15 of the UPOV which provides for '*Exceptions to the Breeder's Right'*. From a perusal of the Uganda Law Reform Commission's Study report on the reform of Plant Variety Protection law,[17] it is highly unlikely that the provisions in Article 15 of the UPOV were the basis for Section 15 of the PVPA. The provisions in Article 15 stipulate compulsory and optional exceptions. For the former, these are private

[6] PVPA 2014, s 1.
[7] PVPA 2014, s 23.
[8] PVPA 2014, s 24.
[9] PVPA 2014, s 25.
[10] PVPA 2014, s26.
[11] PVPA 2014, s 24.
[12] PVPA 2014, s 25.
[13] PVPA 2014, s26.

[14] Farmers' rights have been interpreted as the rights arising from the past, present and future contributions of farmers in conserving, improving and making available plant genetic resources, particularly those in the centres of origin/diversity. See: Food and Agriculture (FAO) conference resolution 4/89: <ftp://ftp.fao.org/ag/agp/planttreaty/gb2/gb2i6e.pdf> accessed 4 January 2016.
[15] Ronald Naluwairo, 'From Concept to Action: The Protection and Promotion of Farmers' Rights in East Africa' [2006] 15 ACODE Policy Research Series 8.
[16] PVPA 2014, s 15
[17] ULRC (n 3).

and non-commercial acts, for experimental purposes, and acts done for breeding other varieties. The optional exceptions to the breeder's rights are restricted to permitting farmers to use the plant variety for fulfilling purposes on their own holdings.

In line with the same framework, Section 15 of the PVPA provides for exceptions to the rights of breeders. The exceptions in Section 15 emphasize on the use being non-commercial. The provision authorizes a 'person' (which can be interpreted to include a 'farmer') to propagate, grow and use parts of the variety for non-commercial purposes. However, it would not allow commercial applications like selling plants, seeds or propagating materials of plants as food. It would therefore only allow farmers to engage in the exchange of seeds, plants or propagating materials of plants for consumption, research and education.

It is therefore clear that Section 15 of the PVPA is friendlier to farmers as compared to Article 15 of UPOV – which is more restrictive. Section 15 of the Act, by having different provisions on non-commercial use, enables local farming communities to continue their community farming initiatives, which is in line with the premise for drafting the PVPA. One could therefore argue that farmers' rights are catered to under Section 15 of the PVPA but this is not adequate, as is explained herein below.

The deficiencies in the Act, which also plague UPOV, is clearly noticeable in Section 18 of the PVPA which employs exactly the same wording as Article 16 of UPOV. These provisions stipulate the exhaustion of breeder's rights. The basic understanding is that once a person has properly utilized the breeder's plant variety, the breeder's rights are exhausted and he cannot exercise any authority as to how, for instance, a farmer may want to re-use or market a seed derived from the earlier plant variety. However, this conflicts with the emphasis on non-commercial use under Section 15. A combined reading of Section 15 and 18 thus allows the conclusion that the Ugandan Act takes away what it gives. The most affected category of persons due to this conflict in the law is the indigenous farming community.

The farming communities not only enjoy the sharing of seeds as a social activity, but also rely on combining their farm produce as a means of commercial productivity and economic survival. This article, therefore, contends that farmers' rights should be given exceptional consideration given that Uganda is an agriculture centric economy. There has to be a clear balance between the private rights of plant breeders and the public rights of farmers as community breeders, specifically the inconsistency in section 15 of the PVPA occasioned by section 18 emulating UPOV.

The Ugandan indigenous people, the majority of whom are based in rural areas, rely on agricultural production mainly for subsistence. It is therefore argued that the Act would have done well to provide exclusive rights to indigenous farmers in this respect. These exclusive rights, as a proviso to Section 15 of the PVPA, would bring in clarity as to how the farming community in Uganda can exploit plant varieties without being perceived as infringing the rights of plant breeders. UPOV too, unfortunately, does not give adequate recognition to farmers' rights. It provides a recommendation relating to Article 15(2) by cautioning that the exceptions '*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.'*

On the contrary, farmer's privilege within agricultural production is one of the most common practices in Uganda and matters involving plant breeders are likely to attract a lot of attention. Given that Uganda's economic output is heavily reliant on agricultural production, the farmer's privilege exception should apply.

Farmer's privilege in this respect emphasizes the need to give significance to the interests of farmers through legal recognition of their right to practice their farming activities without any constraints being imposed as a result of protections for plant breeders. Such activities, in the Ugandan context, include the sharing of seedlings as well as small scale commercial exploitation of their produce – for the purpose of economic survival rather than commercial gain.

The apparent disproportionality highlighted in the various provisions of the PVPA and UPOV, shows that the legal framework is more inclined towards protecting the rights of plant breeders and how their products are utilized. The local farmer – a key beneficiary of such products – cannot enjoy the products sufficiently in line with the centuries old communal practices that he has been accustomed to. As a result, the plant breeder gets to derive more economic gain from the protection of his plant varieties while the local farmer does not get to enjoy the same personal or economic benefit. What must be continually emphasized is that there are more indigenous farmers in Uganda than there are plant breeders. This disproportionality is highlighted again from the perspective of benefit sharing in the next part of this article.

In support of the argument for farmers' rights, in the case of *Association Kokopelli versus Graines Baumaux*

SAS,[18] Advocate General Kokott analyzed the idea of proportionality between the interests of the plant breeder and the farming community. In this context, he stated that:

> '[108]. According to Article 52 of the Charter of Fundamental Rights, any limitation on the exercise of the rights and freedoms recognized by that charter must be provided for by law and respect the essence of those rights and freedoms. Subject to the principle of proportionality, limitations may be made only if they are necessary and genuinely meet the objectives of general interest recognized by the European Union or the need to protect the rights and freedoms of others [Sic].
>
> [109.] Consequently, justification for interference with the freedom to conduct a business must satisfy the requirements of the principle of proportionality. As it has already been established that the sales prohibition is disproportionate, in principle, it also infringes the fundamental right to pursue an economic activity.'(Sic)

The Honorable Advocate General's opinion in the aforementioned case can be placed in the Ugandan context in this form: Although it can be argued that the limitation of farmer's rights to use the plant varieties for non-commercial purposes are provided for in Section 15 of the PVPA, these limitations have to be proportional to the interests of the plant breeder and should genuinely meet the stated objectives of the law. Furthermore, the justification of the Act in interfering with the farmers' freedom to engage in commerce related to the plant varieties, must satisfy the principle of proportionality. The claim thus made in this study is that Ugandan farmers, who are the core of the nation's economy, are considerably disadvantaged by the provision's restriction on their freedom of commerce. Essentially, there is no proportionality between the protection of interests of the plant breeders and the indigenous farmer's right to pursue economic activities.

Uganda would do well to borrow a thing or two from other common law jurisdictions which have made exceptional provisions for indigenous farmers. Ujwal Nandekar,[19] in his study of the Indian legislation on the protection of plant varieties, outlines specific rights of farmers, for which exclusive provisions have been devoted:[20]

1. The Right to Sell Seeds: He opines that this right is crucial for the maintenance of the livelihood of the farming community and the nation's self-reliance on agriculture. This right is provided for under Section 15 (b) of the PVPA but does not make exclusive provisions for farmers.

2. Grant of Exclusive Permission: The provision for the grant of exclusive permission by farmers for breeders who would like to use farmers' varieties for creating Essentially Derived Varieties (EDVs). This is not provided for in the Ugandan Act.

3. Exemptions from the payment of inspection fees: Exempting farmers from having to pay fees, given that most farmers are from low-income household, would act as an incentive for more farmers to try out new plant varieties in agricultural production. Allowing them to access documents, rules and decisions related to the use of plant varieties, will lower barriers for them to adopt these technologies and their legitimate use. This would ultimately boost agricultural production in the economy.

4. Revocation of rules allowing non-disclosure of plant variety parentage: Farmers are entitled to know the parentage of a particular plant variety. Although the Ugandan Act provides for revocation of this protection under Section 41, barring 'public interest',[21] there are no provisions for revocation based due to non-disclosure.

5. Express prohibitions on Terminator Technology: Under *The Protection of Plant Variety and Farmers Rights Act, 2001* of India, plant breeders have to submit a sworn affidavit that their variety does not contain Gene Use Restricting Technology (GURT) or terminator technology. Such technologies act as bars to further research or experimental trials on plant varieties, especially by farmers.[22]

6. Protection for innocent infringement: The Indian law has an express provision for the protection of farmers from prosecution for

[18] See: <www.bailii.org/eu/cases/EUECJ/2012/C5911_O.html> accessed 5 April 2016.

[19] Ujwal Nandekar, The Protection of Plant Variety and Farmers Rights Act, 2001, <http://ssrn.com/abstract=2208399> (accessed 3 April 2015).

[20] Ibid 6.

[21] PVPA 2014 s 41(c).

[22] Nandekar (n 10) 6.

innocent infringement. This is based on the assumption that farmers may unknowingly infringe breeders' rights.[23] The Ugandan law, on the other hand, provides for infringement of rights under Section 20 but has no exception for innocent infringement.

7. Compensation to farmers: The Indian law has an express provision for the compensation of a farmer or farmer's organization where a plant variety fails to perform as expected. The compensation is paid by the breeder, on the directions of the authority.[24] The importance of such a provision is that it incentivizes breeders to carry out diligent research into a plant variety before having it registered.

Although the Ugandan legislation does not explicitly impose such an obligation, it does have general stipulations about the rights of farmers and farming communities. Section 17 of the Act provides for restrictions on plant breeders' rights by the Minister. This includes instances where the requirements of the farming community for propagating materials of a particular variety are not met.[25] It also allows awarding compensation to the 'holder of the right'.[26] However, the provision is not specific as to the rights of farmers in the same manner as the provisions in the Indian legislation. Section 34(g) of the PVPA stipulates that –

> 'When the office grants plant breeders' rights in respect of a plant variety, the Registrar shall enter in the register –
>
> > (g) description of the communities or localities in the country entitled to farmers' rights where applicable . . .'[Sic]

Section 34 also appears ambiguous in terms of its practicality. How should communities entitled to farmers' rights be defined? On the basis of what criteria should they be selected? The absence of satisfactory answers to these questions renders the provision inadequate.

It therefore goes to show that given the large indigenous farming community in Uganda, the activities of these communities are bound to be affected one way or another by the PVPA. As such, there is a need for an explicit recognition of the rights of these communities to carry out their activities. This will offer significant guidance on how their interests can be protected – similar to the position in India.

B. BENEFIT SHARING

This section of the article investigates the extent to which the legislation achieves general societal benefit, the justification for its enactment.

Plant breeders' rights are personal property like any other intellectual property.[27] Section 43 goes on to provide for how royalty from plant varieties can be calculated. This follows the principle of exclusivity which is an important premise of intellectual property. Fundamentally opposed to this, indigenous farming communities thrive on benefit sharing and community engagement. The inclusion of benefit sharing in the PVPA would be justified because of the numerous instances where research and development into plant varieties has been undertaken with the assistance of local farming communities. Currently, provisions for this collaborative process are left to the institution of private contracts. However, the practical elements of such benefit sharing transactions are difficult to define and as such, provisions for the same would be better placed in the Act.

The Indian legislation, for instance, provides for benefit sharing whereby the commercial breeder has to share the benefits that accrue from registration of the plant variety with the farmers or local communities that have contributed towards the development of the variety. The Ugandan Act does comes close to recognizing benefit sharing in Section 17(3) which provides that –

> '… the relevant Government authority shall have the right to convert the exclusive plant breeders' rights granted under this Act to non-exclusive plant breeders' rights.'

It can therefore be argued that where it is shown that the plant breeder engaged local farming communities in developing the plant variety, the rights accruing therefrom will not be exclusively granted to one person. As such, participatory rights of local farming communities should not be overlooked in the context of plant variety development. In the absence of an express provision on benefit sharing, multiple rounds of litigation are likely to ensue, along with objections to the grant of rights from those aggrieved by the perceived lack of any benefit sharing. Section 32 (1)(a) of the PVPA, for instance, provides that any person who considers that their commercial or public interests would be affected by the grant of plant breeders' rights in respect of a plant variety to a particular applicant, can lodge, with the Office of the Registrar, a written objection to the grant of those rights.

[23] Ibid, 7.
[24] Ibid.
[25] PVPA 2014 s 17(1)(d).
[26] PVPA 2014 s 17 (2)(c).
[27] PVPA 2014 s 37.

The case of *Association Kokopelli versus Graines Baumaux SAS*[28] mentioned above, supports this argument. This is a case decided by the European Court of Justice, in which Advocate General Kokott spoke of the importance of benefit sharing between plant breeders and local farming communities. He cited the International Treaty on Plant Genetic Resources for Food and Agriculture (PGRFA). Article 9 of the Treaty addresses the rights of farmers and in particular, Article 9.2, establishes specific measures for recognizing them:

> 'The Contracting Parties agree that the responsibility for realizing farmers' rights, as they relate to plant genetic resources for food and agriculture, rests with national governments. In accordance with their needs and priorities, each Contracting Party should, as appropriate, and subject to its national legislation, take measures to protect and promote farmers' rights, including:
>
> (a) protection of traditional knowledge relevant to plant genetic resources for food and agriculture;
>
> (b) the right to equitably participate in sharing benefits arising from the utilisation of plant genetic resources for food and agriculture; and
>
> (c) the right to participate in making decisions, at national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture.'
>
> (Emphasis added)

The PGRFA was adopted by the Food and Agriculture Organization in 2001 and entered into force in 2004. It was established to facilitate the conservation and exchange of crop and forage plant genetic materials and sharing of the derived benefits.[29] It is in harmony with the Convention on Biological Diversity, whose objectives, inter alia, are equitable sharing of benefits arising from the utilization of genetic resources.[30]

It follows from the above provision, that recognition of farmers' rights is not only integral in legislations for Plant Varieties and therefore must be expressly provided for under the Ugandan Act, but there should also be an express provision for benefit sharing as highlighted in Article 9.2(b) above.

Just next to Uganda, Tanzania's previous legislation – 'The Protection of New Plant Varieties (Plant Breeders' Rights) Act, 2002 – did exactly what this paper is advocating for.[31] Section 57 of the Tanzanian legislation stipulated as follows:

> (1) 'The Minister shall ensure that the implementation of this Act shall not affect the fulfillment of the Government obligations pertaining to the protection of farmers' rights to equitably share and access to traditional cultivars and germplasm; national and international commitments towards sustainable use of biological diversity taking into account the human health.
>
> (2) The Minister shall, after consultation with the Minister responsible for finance, direct that, a certain percent of the fee paid to the Registrar under this Act, be set aside for the benefits of traditional farmers and the preservation of traditional cultivars of agricultural products.'

Local farmers have always been regarded as the 'largest and most prolific group of seed breeders in Africa'.[32] It is therefore quite unfortunate that Tanzania opted to do away with an arguably good law when it replaced its 2002 legislation on Plant Varieties with the Plant Breeders' Rights Act No. 1 of 2012. In the 2012 legislation, section 57 of the 2002 legislation was removed. As such, the new legislation in Tanzania is more in line with the current situation in Uganda as highlighted in this article.

The 2002 Tanzanian legislation on Plant Varieties stood out on two fronts: firstly, it clearly gave special recognition to indigenous farmers in the context of protection of plant varieties; secondly, it also assured that the law grants indigenous farmers benefit sharing. In 2010, the Tanzanian government embarked on the process of gaining membership of UPOV and as a part of this process adopted legislation on plant varieties that was aligned with UPOV 1991.[33] It is on this basis that the focus shifted from striking a balance between the interests of plant breeders and small-scale farmers, to focusing more on the interests of plant breeders. The 2012 Act is now criticized for curtailing the free

[28] *Association* (n 8).

[29] Charles Lawson, Patents and Plant Breeder's Rights over Plant Genetic Resources for Food and Agriculture <*www.austlii.edu.au/au/journals/FedLawRw/2004/5.html*> accessed 12 April 2016.

[30] Article 1 of the Convention of Biological Diversity 1992.

[31] See: <www.wipo.int/edocs/lexdocs/laws/en/tz/tz007en.pdf> accessed 20 May 2016.

[32] African Centre for Biodiversity, *Changing Seed and Plant Variety Protection Laws in Tanzania – Implications for Farmer-managed Seed systems and Smallholder Farmers,* 18, April 2016 <http://acbio.org.za/wp-content/uploads/2016/05/Tanzania-Seed-Law-2016.pdf > accessed 3 June 2017.

[33] Ibid, 17.

preservation and exchange of seeds among small-scale farmers in Tanzania.[34]

Nonetheless, the provisions in Tanzania's 2002 Plant Variety legislation are still worth emulating if countries like Uganda are to focus on distributing the benefits from plant variety protection proportionately between the breeders and the local farmers. A number of recommendations are offered on how to put this into effect.

3. RECOMMENDATIONS

The Ugandan law focuses on the protection of the few - plant breeders – and marginalizes the majority – indigenous farmers. It is the latter that form the bread-basket of the economy and by marginalizing them, there is a negative impact on the country's food security. As such, in addition to the arguments advanced throughout this article, a number of other recommendations which place obligations upon the government, can be explored:[35]

a) The government should ensure that its legislation on plant variety protection has measures that provide a balance between the interests of plant breeders and indigenous farmers. This can be achieved through greater engagement with plant breeders and small-scale farmers with a view towards establishing and capitalizing on the mutual interests of all stakeholders. Hopefully, in doing so, traditional farming practices like saving seeds, will not face the risk of interference by legislations focusing solely on plant breeders' interests.

b) Government measures should also be put in place to facilitate and encourage the participation of farmers in the conservation and improvement of plant genetic resources for food and agriculture.

c) There should also be national systems in place to promote and protect traditional systems of food and agriculture that would otherwise be threatened by new forms of plant variety protection. In any event, such systems should strive for a harmonious existence of both practices supported by legislation to guarantee their sustainability.

[34] Ibid.

[35] Also see: Herman Tuhairwe, *Agriculture as the backbone of Uganda's economy: Towards balanced legislative protection of Plant Breeders' and Farmers' rights*; a dissertation submitted at the Faculty of Law, Uganda Christian University in partial fulfilment of the requirements of the award of the degree of Master of Laws in International Business law, April 2016.

4. CONCLUSION

On the 6th of July 2015, Uganda witnessed the signing of the Arusha Protocol for the Protection of New Varieties of Plants in Arusha, Tanzania.[36] This was under the auspices of the African Regional Intellectual Property Organization (ARIPO) of which Uganda is a member. This Protocol is modeled along the principles of UPOV 1991 and thus does not give due recognition to the interests of indigenous farming communities, particularly the traditional rights of farmers to save, exchange or sell farm-saved seeds. It is thus also in conflict with Article 9 of PGRFA which advocates the promotion of farmers' rights at the national and international level.

The Ugandan government's efforts in coming up with legislation on plant breeding as well as pushing for its regional interests through ARIPO are highly commendable. This is particularly directed at ensuring the development of the intellectual property legal framework of the country. However, the government has failed to take cognizance of the fact that the local indigenous farming community have a right to share in the benefits that arise from it. Legislation of this nature should thus be to the benefit of the country by empowering the economy in the process of developing intellectual property. Agricultural production is currently the leading source of economic empowerment in Uganda. It accordingly needs to be encouraged and accounted for as we make improvements to our intellectual property regime.

As such, addressing these and other shortfalls in the Plant Variety Protection Act of 2014 would be one way of supporting our agricultural sector.

BIBLIOGRAPHY

Lawson C, *Patents and Plant Breeder's Rights over Plant Genetic Resources for Food and Agriculture*. See: <http://www.austlii.edu.au/au/journals/FedLawRw/2004/5.html> accessed 12 April 2016.

Naluwairo R, '*From Concept to Action; The Protection and Promotion of Farmers' Rights in East Africa'* ACODE Policy Research Series, No. 15, 2006, 8.

Nandekar U, *The Protection of Plant Variety and Farmers Rights Act, 2001* (un-published).

Tabaro E, *Intellectual Property and the protection of Food Security in Uganda* (un-published).

[36] See: <www.aripo.org/news-events-publications/news/item/69-aripo-protocol-for-the-protection-of-new-varieties-of-plants-adopted> accessed 21 May 2016.

Tuhairwe H, *Agriculture as the backbone of Uganda's economy: Towards balanced legislative protection of Plant Breeders' and Farmers' rights*; a dissertation submitted at the Faculty of Law, Uganda Christian University in partial fulfilment of the requirements of the award of the degree of Master of Laws in International Business law, April 2016 (un-published).

Parliament of Uganda, Report of the Committee on Agriculture, Animal Industry and Fisheries on the Plant Variety Protection Bill 2010, Office of the Clerk to Parliament, Parliament Buildings, Kampala-Uganda, December 2013.

Uganda Law Reform Commission, *A Study and reform on Plant Variety Protection Law* (ULRC Publication No. 18 of 2004).