

## 10. PLANT BREEDERS' RIGHTS ACT 2016: AN OVERVIEW OF PAKISTAN'S PLANT VARIETY PROTECTION LEGISLATION

Muhammad Zaheer Abbas\*

### ABSTRACT

As a member of the World Trade Organization and bound by the TRIPS Agreement, Pakistan is required to provide protection of new plant varieties. Article 27.3(b) of the TRIPS Agreement requires members to protect breeders' rights either by patents or by an effective *sui generis* system or with a combination of both. As a developing country, Pakistan was allowed to defer TRIPS compliance until 2000. In 2000, Pakistan updated its patent laws in order to meet its obligations under TRIPS but excluded plant varieties from the patentable subject matter. A plant variety protection (PVP) legislation in Pakistan remained overdue since 2000. The Pakistan government made several attempts to update its legal and institutional regime in order to be TRIPS compliant, but its efforts failed to achieve the desired result. Adoption of a PVP legislation remained a challenge for the government as Pakistan is an agricultural country where the informal seed sector meets 80% of the annual seed requirements. Pakistan finally adopted the Plant Breeders' Rights Act (PBRA) in December 2016. This paper provides an overview of the PBRA 2016 and discusses the salient features of this PVP legislation in the light of the standards set by the Union for Protection of New Varieties of Plants (UPOV) Convention.

**Keywords:** *Pakistan, TRIPS, UPOV, plant variety, plant breeders, biodiversity, food security, agriculture, farmers' rights, seed quality*

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\* The author is a Lecturer in Law at International Islamic University Islamabad, Pakistan and a PhD Law student at Queensland University of Technology (QUT), Brisbane, Australia. The author is in his last year of candidature at QUT Faculty of Law.

## 1. THE PLANT BREEDERS' RIGHTS ACT 2016: SALIENT FEATURES

Pakistan adopted the Plant Breeders' Rights Act (PBRA) in December 2016 in order to comply with its obligations as a WTO member. This section provides an overview of the PBRA 2016 and discusses its salient features.

A plant variety has been defined in the PBRA 2016 as:

A plant grouping within a single botanical taxon of the lowest known rank, which grouping, irrespective of whether the conditions for the grant of a new plant variety are fully met, may be (a) defined by the expression of the characteristics resulting from a given genotype or combination of genotypes; (b) distinguished from any other plant grouping by the expression of at least one of the said characteristics; and (c) considered as a unit with regard to its suitability of the plant grouping for being propagated unchanged.<sup>1</sup>

The definition of a plant variety provided in the PBRA 2016 is in complete harmony with the UPOV 1991. A plant variety has been defined under the UPOV 1991 as:

A plant grouping within a single botanical taxon of the lowest known rank, which grouping, irrespective of whether the conditions for the grant of a breeder's right are fully met, can be (a) defined by the expression of the characteristics resulting from a given genotype or combination of genotypes; (b) distinguished from any other plant grouping by the expression of at least one of the said characteristics; and (c) considered as a unit

<sup>1</sup> Plant Breeders' Rights Act 2016, No. 2(xxii) of 2016, The Gazette of Pakistan, 8 December 2016.

with regard to its suitability for being propagated unchanged.<sup>2</sup>

The criteria for protection of a new plant variety have been provided under the PBRA 2016. The Act requires a new plant variety to meet 'the criteria of novelty, distinctness, uniformity, stability and designated by an acceptable denomination.'<sup>3</sup> The criterion for protection of a new plant variety provided under the PBRA 2016 is fully consistent with the UPOV 1991. UPOV 1991 provides protection to a plant variety that is '(i) new, (ii) distinct, (iii) uniform, and (iv) stable.'<sup>4</sup> An applicant filing an application for protection for a new plant variety in Pakistan is required to submit 'a statement containing a brief description of the variety bringing out its characteristics of novelty, distinctness, uniformity and stability.'<sup>5</sup>

The new variety is 'novel' under the Act if it has not been sold or marketed by or with the agreement of the applicant for more than one year in Pakistan, for more than six years in the case of trees or vines, and for more than four years in the case of all other plants in a foreign country before filing of the application for the certificate of plant breeders rights under the Act.<sup>6</sup> The new variety is 'distinct' under the Act if it clearly differs by one or more identifiable morphological, physiological or other characteristics from any other variety whose existence is

a matter of common knowledge on the date of filing of the application for a certificate under PBRA 2016.<sup>7</sup>

For the purposes of the Act, the new variety is 'uniform' if, subject to the variation that may be expected from the particular features of its propagation, it is sufficiently uniform in its essential characteristics.<sup>8</sup> Under the Act, the new variety is '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 cycle.<sup>9</sup> The Federal Seed Certification and Registration Department carries out a technical examination for distinctness, uniformity and stability of a plant variety of an application filed for protection of a new plant variety in Pakistan.<sup>10</sup>

The Act requires the Registrar to publish accepted applications for protection in the Plant Breeders' Rights Journal in a prescribed manner.<sup>11</sup> The Act allows any person to give written notice of opposition to the grant of rights, along with documentary evidence, to the Registrar within four months from the date of advertisement.<sup>12</sup> The opponent may invoke any of the following grounds: (a) the opponent is entitled to rights for the new variety; (b) the variety does not meet criteria for protection under the Act; (c) the grant of certificate is not in public interest; and (d) the variety may have adverse effects on the environment, human, animal or

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<sup>2</sup> 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. (4)(Article 1(vi).

<sup>3</sup> Plant Breeders' Rights Act, No. 12.1 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>4</sup> 1991 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, (6) Article 5(1).

<sup>5</sup> Plant Breeders' Rights Act, No. 15(i) of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>6</sup> Plant Breeders' Rights Act, No. 12.2 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>7</sup> *ibid.*

<sup>8</sup> Plant Breeders' Rights Act, No. 12.2 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>9</sup> *ibid.*

<sup>10</sup> Plant Breeders' Rights Act, No. 2(viii) of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>11</sup> Plant Breeders' Rights Act, No. 18 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>12</sup> Plant Breeders' Rights Act, No. 19.1 of 2016, The Gazette of Pakistan, 8 December 2016.

plant health.<sup>13</sup> The Act requires the Registrar to provide an opportunity for both the applicant and the opponent to be heard.<sup>14</sup>

The Act has also provided the option of post-grant opposition proceedings. The Act stipulates that:

[a]t any time within twelve months after the grant of a certificate, any person interested who did not oppose the grant of the certificate may make an application to the Registrar for an order revoking the certificate on any one or more of the grounds upon which the grant of certificate could have been opposed.<sup>15</sup>

In instances where action for infringement or proceedings for the revocation of a certificate is pending in any court, post-grant opposition proceedings can be initiated only with the prior permission of the court.<sup>16</sup>

If the application is successful, the certificate of plant breeders' rights will be issued to the applicant on payment of the prescribed fee.<sup>17</sup> The certificate will be recorded in the Register and made publicly available.<sup>18</sup> Under the Act, the owner of plant breeders' rights 'shall be the breeder or discoverer of the variety' who 'may be a natural or legal person.'<sup>19</sup>

The Act grants the following exclusive rights to the owner of a protected variety:

(a) offering for sale or selling or marketing of the reproductive or vegetative propagating material of the protected variety in Pakistan;

(b) importing the reproductive or vegetative propagating material of the protected variety into Pakistan or exporting it from Pakistan;

(c) conditioning or multiplying the reproductive or vegetative propagating material of the protected variety; (d) carrying out of any of the acts identified in clauses (a), (b), and (c) in relation to an essentially derived variety provided the provided variety is not itself an essentially derived variety;

(d) carrying out any of the acts identified in clauses (a), (b), and (c) in relation to an essentially derived variety provided the protected variety is not itself an essentially derived variety;

(e) instigating or promoting any of the acts identified in clauses (a), (b), (c) and (d);

(f) authorizing any person to produce, sell, market or otherwise deal with a protected variety; and

(g) stocking for any of the purposes mentioned in clauses (a) to (d).<sup>20</sup>

The rights granted to the owner of a protected variety are consistent with UPOV 1991 which stipulates that:

The following acts in respect of the propagating material of the protected variety shall require the authorization of the breeder: (i) production or reproduction (multiplication), (ii) conditioning for the purpose of propagation, (iii) offering for sale, (iv) selling or other marketing, (v) exporting,

<sup>13</sup> *ibid.*

<sup>14</sup> Plant Breeders' Rights Act, No. 19.4 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>15</sup> Plant Breeders' Rights Act, No. 27 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>16</sup> *ibid.*

<sup>17</sup> Plant Breeders' Rights Act, No. 21 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>18</sup> *ibid.*

<sup>19</sup> Plant Breeders' Rights Act, No. 13.1 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>20</sup> Plant Breeders' Rights Act 2016, The Gazette of Pakistan, 8 December 2016. NO. F. 9(31)/2016-Legis, 1253, s. 22.

(vi) importing, (vii) stocking for any of the purposes mentioned in (i) to (vi), above.<sup>21</sup>

The PBRA 2016 provides disclosure of origin as well as access-benefit sharing requirements. The Act requires applications for protection to contain 'a complete identification data of the parental lines from which the variety has been derived along with the geographical location in or outside Pakistan from where the genetic material has been taken.'<sup>22</sup> The Act requires the application to 'be accompanied by written consent of the authority representing the public sector, private sector or the local community in cases where the plant variety is developed from traditional varieties,'<sup>23</sup> alongside 'documents relating to the compliance of any law regulating access to genetic and biological resources.'<sup>24</sup>

The Act entitles the owner of the initial variety to claim benefit sharing in plant varieties that are derived from the initial variety. The Act requires the Registrar to invite claims of benefit sharing from 'any person or group of persons or firm or governmental or non-governmental organization'<sup>25</sup> provided that claims are submitted by any '(a) person or group of persons, if such person or every person constituting such group is a citizen of Pakistan; or (b) firm or governmental or non-governmental organization, if such firm or organization is formed or established in or outside Pakistan.'<sup>26</sup> The Act requires the Registrar to take into consideration the following factors while disposing of the claims of benefit sharing:

(a) the extent and nature of the use of genetic material of the claimant in the development of the

variety relating to which the benefit sharing has been claimed; and (b) the commercial utility and demand in the market of the variety relating to which the benefit sharing has been claimed.<sup>27</sup>

Certain exceptions to infringement of exclusive rights have been provided under the Act in an attempt to balance competing interests. These exceptions include:

(a) any act done privately on a non-commercial basis;

(b) any act done for scientific research or plant breeding as an initial source of variety for the purpose of creating other varieties ...;

(c) any act done for the purpose of breeding other plant varieties ...; and

(d) a farmer to be entitled to save, use, sow, re-sow, exchange, share or sell his farm produce provided that the farmer shall not be entitled to sell seed of a variety protected under this Act on a commercial basis without complying with the requirements of Seed Act, 1976.<sup>28</sup>

Farmers have been provided certain rights under the Act in the form of exceptions. The use of these exceptions is further constrained by the requirements of the Seed Act 1976 and the Seed (Amendment) Act 2015. Pakistan's seed law and regulation have a close relationship with Pakistan's PVP legislation.

<sup>21</sup> International Convention For The Protection Of New Varieties Of Plants of 2 December 1961 as Revised at Geneva on 10 November 1972, on October 23, 1978, and on 19 March 1991.(10) Article 14.

<sup>22</sup> Plant Breeders' Rights Act, No. 15(f) of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>23</sup> Plant Breeders' Rights Act, No. 15(g) of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>24</sup> Plant Breeders' Rights Act, No. 15(h) of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>25</sup> Plant Breeders' Rights Act, No.32 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>26</sup> *ibid.*

<sup>27</sup> Plant Breeders' Rights Act, No. 32(5) of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>28</sup> Plant Breeders' Rights Act No. 25 of 2016, The Gazette of Pakistan, 8 December 2016.

Pakistan enacted the Seed (Amendment) Act in July 2015. Sharing and selling of unbranded and unregistered seeds is prohibited under the Act. The Act prescribed fines (up to Rs.200,000) and imprisonment (up to three months) in case of non-compliance.<sup>29</sup> Under the Act, the farmers are left with the only choice to purchase registered varieties of seeds from licensed seed companies or their agents. The Seed (Amendment) Act clearly protects the private interests of foreign companies. The Act has redefined the 'basic seed' to include private sector organizations in its definition. Under the Act, the 'basic seed' means 'progeny of the pre-basic seed produced by any public sector or private sector organization and certified by the Federal Seed Certification and Registration Department.'<sup>30</sup> One of the main purposes of the Act is to deter the sale of fake and substandard seeds, but it can potentially create a commercial monopoly of profit-driven seed companies and make farmers pay higher prices for protected seed varieties.

The PBRA 2016 provides certain safeguards against potential abuse of exclusive rights. The Act authorizes the Registrar to grant a compulsory license, after providing the owner of the certificate and the interested person an opportunity of being heard.<sup>31</sup> A compulsory license may be granted only after the expiry of three years from the date of grant of a certificate.<sup>32</sup> The Act provides the following possible grounds for the grant of a compulsory license:

- (a) the public interest, in particular, the nutrition or health so requires;

- (b) the Registrar has determined that the manner of exploitation, by the owner of the certificate or his licensee, is anti-competitive;

- (c) reasonable requirements of the public for seeds or other propagating material of the variety have not been satisfied or that the seed or other propagating material of the variety is not available to the public at a reasonable price;

- (d) the owner of the certificate refuses to grant a license to a third party on reasonable commercial terms and conditions; or the right under the certificate has not been exploited in a manner which contributes to the promotion, transfer and dissemination of technology.<sup>33</sup>

The duration of compulsory license shall be determined by the Registrar, but it shall not exceed five years from the date of grant.<sup>34</sup> The Registrar may revoke the compulsory license if the licensee has violated any of the terms and conditions of the license or if the Registrar is satisfied that to continue the compulsory license further is not justified.<sup>35</sup>

To what extent Pakistan makes effective use of this safeguard is yet to be seen. Likelihood of the actual use of the compulsory licensing safeguard by Pakistan is less. It is important to note that Pakistan has also provided the compulsory licensing safeguard in its patent laws but there is not a single instance when Pakistan considered invoking the compulsory licensing provisions in its patent laws.<sup>36</sup>

<sup>29</sup> Seed (Amendment) Act, No. 12 of 2015, The Gazette of Pakistan.

<sup>30</sup> Seed (Amendment) Act, No. 2(4) of 2015, The Gazette of Pakistan.

<sup>31</sup> Plant Breeders' Rights Act, No. 33 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>32</sup> *ibid.*

<sup>33</sup> *ibid.*

<sup>34</sup> Plant Breeders' Rights Act, No. 34 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>35</sup> Plant Breeders' Rights Act No. 35 of 2016, The Gazette of Pakistan, 8 December 2016.

<sup>36</sup> Patents (Amendment) Ordinance No. 17 of 2016, The Gazette of Pakistan.

## 2. CONCLUSION

Though Pakistan is not a member of the UPOV, an effort has been made to make Pakistan's PVP legislation compliant with the standards set by the UPOV Convention. The PBRA 2016 is fully TRIPS-compliant as it is based on the stricter 1991 version of the UPOV Convention. So far, no issues have been raised at any level regarding TRIPS-compliance of the PBRA 2016.

The PBRA 2016 is aimed at promoting healthy competition for improved seed quality in Pakistan. The Act will empower and strengthen private seed companies in Pakistan by disallowing the traditional practice of saving and sharing seeds in the informal seed sector. Exclusive rights granted to plant breeders will result in higher prices of seeds in the regulated market. Access to affordable seeds may be a challenge for resource-constrained small farmers in Pakistan. The farmers have been provided certain rights under the Act in the form of exceptions. The use of these exceptions is further constrained by the requirements of the Seed Act 1976 and the Seed (Amendment) Act 2015.

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