

Patent and Sui Generis Plant Varieties Protection under the TRIPS Agreement: Options for Bangladesh in the South Asian Landscape

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PVP under the TRIPS and other treaties

- ▶ TRIPS Article 27.3.b enjoins the parties to protect plant varieties (PVP) either by patents or by an effective sui generis system or combination thereof.
- ▶ As parties to other treaties including BITs, countries oblige to protect PVP.

PVP under the TRIPS (contd.)

- ▶ Protecting plant varieties by patents i.e. granting the inventors exclusive rights over the PGRs invented is not desirable for the agriculture based South Asian economy
- ▶ It mostly asserts rights over PGRs
- ▶ Many view this would reward MNCs at the cost of farmers' traditional rights and ultimately bring disastrous result for the food security.

PVP under the TRIPS (contd.)

- ▶ An effective sui generis PVP system like International Convention for the Protection of New Varieties of Plants (UPOV) offers some rights to the plant breeders (PBRs) while retaining some leeway by way of farmers' exemption.
- ▶ However, the PBRs model legislation requires uniformity (essential characteristics including quality after each of the propagation are uniform), distinctiveness (different at least by one element from the existing variety) and stability (essential characteristics remain unchanged even after repeated propagation) for a new plant variety to get registered under this regime.

PVP under the TRIPS (contd.)

- ▶ Article 27.3.b of the TRIPS Agreement categorically provides that WTO Members may exclude from patentability whole plants, plant varieties (provided an alternative system of protection is provided), parts of plants and essentially biological processes for their reproduction.
- ▶ An alternative system for the protection of plant varieties must be either by patents or by an effective *sui generis* system or by any combination thereof.

PVP under the TRIPS (contd.)

- ▶ The term “*sui generis*” for PVP left enormous scope for interpretation and like all WTO members Bangladesh has freedom to design its own PVP framework as per its own needs and particularities.
- ▶ Bangladesh can, for example, grant exceptions to the exclusive rights of breeders with respect to the propagating materials of new varieties in order to enable farmers to save, reuse, exchange and sell seeds.
- ▶ A *sui generis* PVP framework can also recognize farmers as breeders additional and protect traditional agrarian practices.

PVP in the CBD and the ITPGRFA

- ▶ The Convention on Biological Diversity (CBD) protects farmers traditional PGRs and traditional knowledge by the provisions of prior informed consent (PIC) and access to benefit sharing (ABS).
- ▶ The Cartagena Protocol to the Convention also protects bio-diversity and farmers rights prohibiting terminator technology in PGRs and Genetically Modified Organisms (GMOs).
- ▶ The Plant Genetic Resources for Food and Agriculture (ITPGRFA) on the other hand formally recognizes farmers rights viz. right to seed, access to benefit sharing, right to participation and right to compensation in case of misappropriation of traditional PGRs.

PVP or PBRs in Bangladesh under the current patent regime

- ▶ A plant variety fulfilling the conditions of novelty, inventive step and utility is patentable under the Patent and Designs Act 1911.
- ▶ Since the term “invention” has been defined widely to include any manner of new manufacture or any improvement, GMOs or seeds with terminator technology would also qualify as patentable.
- ▶ So, the present regime for the protection of plant varieties by way of patents is already in line with the TRIPS patent regime.

PVP or PBRs in Bangladesh (contd.)

- ▶ However, under the patent regime farmers would have no right whatsoever.
- ▶ Patent over plant varieties would give the plant breeders exclusive rights in terms of use, re-use, sale, exchange etc. for a period of 16 years renewable for a further period of ten years.
- ▶ This regime is not beneficial to the farmers and the agriculture of the country because of its exclusive deference to the breeders leaving no room for the traditional farming practices and rights.

PVP or PBRs in Bangladesh (contd.)

- ▶ However, the only flexibilities available from the public good or food security perspective are compulsory licensing, Bolar-exceptions and government use.
- ▶ The current regime does not even have the provision of parallel imports.
- ▶ Further, the government may revoke any patent if it considers “mischievous to the State or generally prejudicial to the public.” - sec. 25
- ▶ The terms like, “prejudicial” or “mischievous” seems to be wide and could be interpreted to ignore a protected variety for public interest like bio-safety, human health or food security.

PBRs under the sui generis Regime

- ▶ Since Bangladesh is in the TRIPS transition period until 2021, it is endeavoring to set a regime to strike a balance between PBRs and farmers' rights using the TRIPS flexibilities.
- ▶ Bangladesh is also a signatory of the CBD and its Cartagena Protocol on Bio-safety, and the ITPGRFA.

The Tentative Regime

- ▶ *PVP in Bangladesh under the Draft Patent Act 2013*
- ▶ As a part of the regime-setting agenda to reap the benefits of TRIPS flexibilities Bangladesh has drafted a Patent Act taking into consideration farmers traditional rights, bio-safety, public-health and food-security.
- ▶ Under section 4 of the draft Act an invention is disqualified of being protected if it is based on traditional knowledge or it a mere collocation of traditionally used natural ingredients.
- ▶ The Act also disqualifies an invention the commercial exploitation of which is required to prevent for the sake of public order or morality.

The Tentative Regime (contd.)

- ▶ Section 6 of the Act has provided for disclosure requirement in cases where the traditional genetic resources or knowledge has been used for an invention. Misappropriated genetic resources are liable to be forfeited into the public domain.
- ▶ Section 14 of the Act empowers the Government to issue compulsory license on the ground of public interest viz. national security, nutrition, health or national economy.
- ▶ Section 31 and 32 of the Act respectively provides for the provision of parallel imports and Bolar exception.

The Tentative Regime (contd.)

- ▶ The sui generis regime for the protection of plant varieties and related issues like farmers' rights, bio-safety, and prior informed consent or equitable benefit sharing for access to genetic resources is also contained in:
 - (a) The Plant Varieties and Farmers' Rights Protection Act 2014 (Draft)
 - (b) The Bangladesh Biological Diversity Act 2012 (Draft)

The Tentative Regime (contd.)

► *Salient Features of the PVP and Farmers' Rights Act 2014 (Draft)*

- has provided for the provision of Prior Informed Consent and Access to Benefit sharing in case of using the farmers' traditional varieties or traditional knowledge of breeding in line with the CBD and ITPGRFA
- has recognized share-croppers as farmers
- has recognized the traditional farming practices i.e. saving, sowing, re-sowing, exchanging and selling of farm-saved seeds on a non-commercial basis
- has prohibited protection of a variety with terminator technology or V-GURT in line with the ITPGRFA and CBD

The Tentative Regime (contd.)

- protects traditional knowledge of the farmers in line with art. 9 of ITPGRFA
- guarantees right to participation by the farmers in the decision making as to the sustainable use of PGRs in line with art. 9 of the ITPGRFA
- ▶ Ironically the Act has not recognized farmers as breeders.
- ▶ The Act has prescribed the DUS (distinctiveness, uniformity and stability) criteria for the registration of new plant variety in line with the UPOV

The Tentative Regime (contd.)

- ▶ ***Salient features of the draft Bangladesh Biodiversity Act 2012***
- ▶ The draft Biodiversity Act 2012 has been framed in line with the CBD and ITPGRFA incorporating
 - prior informed consent of the community,
 - access to equitable benefit sharing in case of use of traditional genetic resources and
 - Guarantees of rights in traditional practices relating to genetic resources.
- ▶ The Act has also made provision for in-situ and ex-situ conservation of bio-genetic resources.

Bangladeshi PVP legislation in the South Asian PVP landscape

► *Recognition of Farmers' as Breeders*

- The Indian Act has recognized farmers' as breeders' u/s 2 (c) of the 2001 Act.
- But the 2014 draft of Bangladesh PVP and Farmers' Rights Act has not included farmers' as breeders.
- This is a clear denial of the farmers' perennial contribution to the preservation and developing PGRs. Nepalese Draft Act also recognizes farmers as breeders.

► *Share-croppers as Farmers*

- The Indian Act has not recognized sharecroppers as farmers but the 2015 draft of Bangladeshi Act has done so.

South Asian PVP landscape (contd.)

► *Farmers' Variety to get Registration*

- Indian Act has defined “farmers’ variety” as a variety which— (i) has been traditionally cultivated and evolved by the farmers in their fields; or (ii) is a wild relative or land race of a variety about which the farmers possess the common knowledge.
- The PVP Act of Bangladesh has not provided any such definition.
- The Indian Act has allowed farmers variety to be registered u/s 14 read with s.18 and 39.
- Farmers like commercial breeders can apply for IPR over their varieties.
- The criterion for registration of varieties is also similar to breeders (distinctness, uniformity, stability) but novelty is not a requirement.
- The ability to gain IPR type rights over farmers’ varieties is a unique aspect of the Indian Act.

South Asian PVP landscape (contd.)

► *Farmers' Right to Seed*

- The farmer's right to save, exchange and sell seed has been one of the major demands of the farmers' right movement.
- Section 39 of the Indian Act categorically provides that, "a farmer shall be deemed to be entitled to save, use, sow, re-sow, exchange, share or sell his farm produce including seed of a variety protected under this Act in the same manner as he was entitled before the coming into force of this Act."
- However, the Act clearly prohibits farmers to use the brand while commercializing or selling a protected variety.
- By these, the Indian Act stands as the most liberal legislation to date in this sphere, allowing farmers all the customary rights they previously enjoyed.

South Asian PVP landscape (contd.)

- Section 19 of the Bangladeshi PVP Act provides for the similar provision.
- Section 31 of the Pakistani PVP Act of 2000 has also ensured farmers' right to sell farm saved seeds without commercial jargons i.e. labeling and packaging using a registered name of a PVP.
- The Sri Lankan draft 'Seed and Planting Material Act of 2013' seems to be devoid of any option to exchange or sell protected varieties.
- The Biodiversity Act of Bhutan, 2003 allows the farmers' to propagate and exchange protected plant varieties on a non-commercial basis.

South Asian PVP landscape (contd.)

▶ *Compulsory Licensing*

- Like the Indian PVP Act, the Bangladeshi Daft Act has also provided for a provision of compulsory licensing of a variety on the ground of unreasonable price or unavailability.

▶ *Farmers' Right to Reward and Recognition*

- The Indian Act provides for establishing a National Gene Fund.
- Through the National Gene Fund, farmers that have played a role in conservation of varietal development of plants can be recognized and rewarded.
- Sections 20-21 of Bangladesh Act provide for similar provision.

South Asian PVP landscape (contd.)

▶ *Equitable Right to Benefit Sharing*

- Section 19 of the Bangladesh Draft Act provides for the provision of benefit sharing to use PGRs developed by farmers.
- Section 26 of the Indian Act devises such system.
- The Draft Nepalese Act also provides for such provision.
- The Sri Lankan PBRs Act, which is already criticized as draconian seems to drop it.

▶ *Right to protect Traditional Knowledge*

- The Bangladesh Draft Act also provides the right to protect traditional knowledge as to traditional farming practices in respect of food and agriculture.

South Asian PVP landscape (contd.)

- ▶ ***Provision of prior informed consent and Right to take action against Misappropriation***
 - Section 19 of the Bangladesh Act requires disclosure requirement on the part of the breeders and prescribes cancellation and punishment in default.
 - Section 40 of the Indian Act enjoins such disclosure requirement by the breeders.
- ▶ ***Farmers Right to Participation***
 - Section 19 of the Bangladesh Draft Act also guarantees the farmers right to participate in decision-making as to the sustainable use of PGRs

Hurdles to Achieve Farmers' Rights

- ▶ ***Farmers as Breeders have not been Streamlined***
 - Another barrier to achieving Farmers' Rights is the *lack of adequate policy measures to promote effective utilization of germplasm.*
 - The policy towards Farmers' Rights in Bangladesh focuses more on asserting and assigning ownership rights, than on measures to utilize traditional knowledge and genetic resources for the development of farmers.
 - The traditional knowledge of the farmers could be used by the Public Authorities to develop new varieties.
 - Moreover, there is no provision in the law to train farmers as to how to use existing PGRs to develop new varieties.
 - The main focus of such initiative would be to develop capacity of farmers' as breeders.

Hurdles to Achieve Farmers' Right (contd.)

- ▶ *The Challenge to realize Access to Benefit Sharing*
 - Given the patron-client situation in the Bangladeshi farming community, it is very unlikely that the bona fide cultivators of land with poor bargaining power e.g. the share-croppers would get any advantage of the provisions relating to ABS.
 - Practicable provisions should be made to ensure ABS.

Way forward

- ▶ In the context of Agriculture-prone Bangladesh, while devising a sui generis regime for the protection of plant varieties Bangladesh would try to maximum exploitation of art. 27.3.b for the sake of food security and farmers' rights.
- ▶ The PVP regime of Bangladesh while strengthening PBRs should also make provision recognizing farmers as breeders, farmers' right to preserve the traditional farming practices, farmers' contribution to innovation by selecting and maintaining of seeds, and farmers' right to ABS.