Patent and Plant Variety Protection under the TRIPS Agreement: Implications and Scope for Regional Cooperation

The Case of Nepal

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Agriculture in Nepal

Agriculture is the main source of economy

- 66% of are engaged in agriculture for their livelihoods
- 35% of national GDP is contributed by agriculture

Agriculture production is largely subsistence-oriented

- Majority of farmers are small holders – less than 0.5 ha
- Agricultural production is largely for household consumption
- Poor integration to market – limited cultivation of cash crops

Low productivity and food sufficiency

- Low crop productivity – low and poor quality inputs
- More than 45 districts experiencing food deficiency
### National Seed Systems

**National seed systems consists of:**
- Formal seed system contributing to about 10% seeds
- Informal seed systems contributing to about 90% seeds

**Formal seed system**
- Variety development and maintenance – mainly NARC + few NGO but no private sector involvement
- Seed types and production guided by seed policy, law and regulations already in place
- Institutional arrangement well established but low capacity

**Informal or Farmers’ seed systems**
- Variety maintained, enhance/developed by farmers
- Seed production based on farmers’ practice and not regulated
- Farmers produce, save, exchange and sell seeds locally
WTO and TRIPS Obligations of Nepal

Seed production and marketing as a trade

Nepal became member of WTO in 2004

WTO obligation to fulfill TRIPS requirement to protect plant varieties as stated in Article 27.3(b)

“Members shall provide for the protection of plant varieties either by patent or by an effective *sui generis* system or by any combination thereof”

No specific laws for protection of plant varieties

Plant variety protection not well defined and provisions in existing laws (Seed Act and Regulation) inadequate

Draft PVP&FR Bill finalized but approval pending
### Rationale for Plant Variety Protection

- **New plant varieties are products of intellectual work**
- **Protect breeders’ rights for their intellectual contribution in developing new plant varieties**
- **Protect farmers’ rights for breeding, selecting and maintaining plant varieties**
- **Create incentives for investment in variety development, and seed production and distribution**
- **Plant varieties protection directly linked with seed**
  - IPR protection is realised through seed production and distribution – linked with seed laws and regulation
IPR Provisions in the existing Seed Policy and Law

Seed Act 1988 (first amendment 2008)

- Definition of breeder: “a person, organisation or body which brings into use any variety of the crops by breeding or selection for the first time”
- Provision for granting ownership right to breeder
- Scope and procedures for claiming ownership right not defined
- Provision for registration of new plant variety
- Marketing of non-registered and non-notified seeds restricted
- Require letter of permission for marketing of seeds
- Punishment levels defined for ignoring legal provisions but not related to infringement of ownership rights
- Provision of granting ownership rights to traditionally used local varieties as prescribed but details not specified
Review of existing provisions (contd.)

Seeds Regulation 1997 (amendment 2013)

- Process of approval, release and registration process for new varieties defined
- DUS criteria for registration, ‘new’ criteria not required/defined
- Provision for granting ownership right to breeder
- Scope of ownership right not defined
- *Ipso facto* termination of ownership right after 2 crop years from the date of de-notification
- Provision for registration of local varieties but no mechanism for granting ownership rights as provisioned in the Seed Act

National Seed Policy 1999

- Distribution of new varieties after the approval, release and registration of such varieties
- Establishing ownership right on plant variety – “Variety Rights”
Purpose of PVP&FR Bill (stated in the preamble)
- Establish breeders’ and farmers’ right on plant varieties
- Encourage research, investment and technology transfer
- Promote agricultural development, food security and agro-biodiversity conservation

Key features of PVP&FR Bill
- Scope: all plant varieties
- IPR protection: thru registration and ownership rights
- Type of rights: breeders’ and farmers’ right
- Type of varieties: both new and farmers’ varieties
- Origin of varieties: both developed in Nepal and WTO members countries
- New and DUS for new varieties and DUS for farmers’ varieties
Breeders’ rights

- Require breeder’s authorization for
  - production and reproduction,
  - conditioning for the purpose of propagation,
  - marketing and distribution
  - import/export

- Above rights also applies in case of EDVs, where the breeder also has right over the parent materials
- Right to transfer/sale such rights for a specified period

Breeders’ exceptions

- Breeders’ right on new varieties not applicable for:
  - private and non-commercial uses
  - study, academic and research purposes
  - breeding and development of new varieties
Farmers’ rights

- Farmers’ rights over new plant varieties:
  - use, re-use, exchange, save and sale in non-branded form
  - grant PIC and decide and participate in ABS, including rights to claim for compensation if violated
  - claim compensation for losses due to bad quality seed or wrong information about the new variety
  - demand access to seeds if limited by ill-intention or with intention to create monopoly

- Farmers’ right over farmers’ varieties:
  - rights to IPR on farmers’ new plant varieties
  - grant PIC and participate in ABS in such varieties
  - rights to information for each use of such varieties
Implication of IPR for Regional Seed Cooperation

- Low investment and cooperation in plant breeding
  - Fewer new plant varieties
  - Narrow genetic base and increased climate vulnerability

- Low exchange/trading of IPR protected varieties
  - Limited access to seed diversity and low seed security
  - Limited choice to seeds and increased climate vulnerability
  - High seed price impacting on small holder farmers

- Focus on high value self-protected seeds
  - Increased production and supply of hybrids, GMOs seeds
  - Increased focus on high values seeds, such as vegetables and cash crops – decreased food security
Implication of IPR for Regional Seed Cooperation

- Impact on effectiveness of SAARC Seed Bank
  - Limited flow/supply of seeds through SAARC Seed Bank

- Implication on Farmers’ Seed Systems & Farmers’ Rights
  - IPR-based policies and laws likely to undermine Farmers’ Seed System thru restriction on production and distribution
  - Restriction on save, produce, use, exchange and sell of IPR plant varieties – a right which farmers have for generation
  - Non-recognition of other Farmers’ Rights as defined by Article 9 of ITGRFA
Scope of IPR for Regional Seed Cooperation

- **High genetic diversity**
  - Nepal in reach in agricultural biodiversity and local knowledge
  - Good scope for exchange and breeding climate-resilient vars

- **High agro-climatic diversity**
  - Nepal’s agro-climatic diversity ideal for collaborative research
  - Good scope for production of diversity of seeds

- **Regional cooperation for efficient plant breeding**
  - Good breeding capacity in the region, especially India
  - Good opportunity for shuttle breeding in Nepal
Scope of IPR for Regional Seed Cooperation

- SAARC Seed Bank for increased access and seed security
  - SAARC Seed Bank – institutional basis for seed exchange
  - IPR would help facilitate and regulate seed flow thru seed bank

- Regional cooperation for implementation of Farmers’ Rights
  - As members of ITPGRFA, SAARC countries have obligation for implementing Farmers’ Rights
  - Experience of Indian PVP&FR law could be used to formulate Sui generis IPR law in other SAARC counties (model PVP law)
  - Joint action for the implementation of Farmers’ Rights
  - Cooperation for strengthening of Farmers’ Organizations in the region, including creating SAARC Farmers’ Forum
THANK YOU