18 Commentary on the Nepalese Seeds Act and the Seeds Regulation

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Background

In Nepal, the Plant Variety Protection and Farmers’ Rights Bill (PVP&FR Bill) has been drafted and is undergoing review and finalization for approval from the government.¹ The PVP&FR Bill will ultimately regulate the registration of plant varieties and grant intellectual property rights protection for these varieties. Plant varieties that are protected in this way will be new plant varieties – both new farmers’ varieties as well as varieties developed by formal breeders. The registration of, and ownership over, traditionally grown, local farmers’ plant varieties and landraces falls within the remit of the Access to and Benefit Sharing from the Use of Genetic Resources Bill (ABS Bill), which has also been drafted and is awaiting for approval from the government.² Until these bills are implemented, the registration and granting of ownership or intellectual property rights to plant varieties in Nepal is currently partly regulated by the Seeds Act 1988 (first amendment, 2012) and the Seeds Regulation 2013 (after first amendment of Seeds Regulation 1997).³ The National Seed Policy was formulated and brought into force in 1999, which provided further policy guidelines to promote the production and marketing of quality plant seeds in the country.

Seeds Act, 1988 (first amendment, 2012)

Legal provisions

The Seeds Act was enacted in Nepal in 1988 and amended in 2012. The main objective of the Seeds Act was to promote and regulate the increased production and distribution of high-quality plant seeds and to ensure the interest of seed entrepreneurs and farming communities (the consumers of such seeds). There are very limited provisions included in the Seeds Act that are relevant to the protection of intellectual property rights on new plant varieties. The two elements that are key to ensuring the protection of intellectual property rights, namely seeds and breeders, are explicitly defined in the Seeds Act. According to these definitions:

- ‘seed’ means matured ovules having embryonic plant, food materials and protective covers or seeds that are reproduced sexually or by vegetative
means and that can be used to produce crop by sowing or planting (subsection 2.1.1);
• ‘crops’ comprise fruits, food grains, vegetables, cash crops and forage crops (subsection 2.1.2);
• ‘breeder’ means a person, organization or body that brings into use any variety of the crops by producing or selecting it for the first time (subsection 2.1.8).

Thus, the seeds include all planting materials that are used for crop production and the reproduction of seeds. The definition of breeder focuses mainly on the act of developing a new plant variety and recognizes, without any conditions, a person, organization or authority developing such variety as a breeder. By this definition, a farmer developing a new plant variety also qualifies as a breeder.

The Seeds Act also made provision in section 3 for the constitution of the National Seed Board (NSB), with authority and responsibility to formulate and implement seed-related policies and to give necessary advice on seed-related matters to the government. Of the various functions and rights of the NSB, the following two are relevant to intellectual property rights on plant varieties:

• approve, release and register the seeds of new varieties as prescribed (subsection 5.5);
• grant the right of ownership to the breeder as prescribed after testing the seeds of new varieties for distinctness, uniformity and stability (subsection 5.6).

The marketing of the seeds is an important function that is directly related to the intellectual property rights. There are a number of provisions in the Seeds Act that regulate the marketing of seed, including the following:

• If deemed necessary to regulate and control the quality of the seed of any kind or variety used for agricultural production, the government of Nepal may, in consultation with the NSB, prescribe seeds by publishing a notice in the Nepal Gazette (such seeds are called notified seeds), and, while so prescribing, it may also prescribe the kind or variety of the seeds appropriate for different regions (section 11).
• Any person or organization that is willing to engage in the marketing of seed shall have to obtain a permission letter in the format specified by submitting an application to the concerned authority and by paying the specified fee (subsection 11.a.1).
• Except for the purpose of agricultural research, no person shall market seeds that are not notified by the Seeds Act (subsection 11.b.1).
• The kind or variety of seed determined by the breeder as being appropriate for a specific area shall not be sold or caused to be sold in the areas other than prescribed (subsection 13.2).
• Provisions have been made for the punishment of persons or organizations not abiding by the Seeds Act (section 19). The first amendment of the Seed Act has also made a provision for granting ownership rights on the local
plant varieties with the addition of a new section 18.a. It states, “There shall be ownership right on the seeds of traditionally used plant varieties in Nepal as prescribed (page 6)”. However, the definition and scope of such a right is not described.

Issues and suggestions

The provisions in the Seeds Act for the protection of plant varieties are not adequate for effective intellectual property rights protection. Although the NSB is authorized to register and grant ownership rights on new plant varieties and a new provision is made establishing ownership rights over the traditionally used local plant varieties, no specific legal provisions have been made for such rights in the Seeds Act. As a result, to date, none of the registrees (breeders) have applied for ownership rights. While it is not explicitly mentioned, these functions appear to have been left to be handled by the Seeds Regulation. The provisions that regulate the marketing of plant seeds are not linked strictly with the ownership rights of the seed breeder. The NSB can authorize more than one person or organization to market a single variety.

The eligibility conditions included in section 11 and subsections 11.a.1 and 11.b.1 of the amended Seeds Act for the marketing of seeds favour a formal seed sector that involves organized seed entrepreneurs and the marketing of new plant varieties. These provisions completely ignore any informal seed systems, where farmers meet most of their seed needs through farmer-to-farmer exchange and by buying and selling such seeds. These eligibility conditions, if implemented strictly, will not only disrupt and dismantle the informal seed systems but also pose a big threat to the conservation of agricultural biodiversity and undermine farmers’ customary rights over seeds which they have been cultivating and managing for generations. However, due to a lack of adequate institutional capacity and limited human and financial resources, adequate law enforcement and monitoring is currently not taking place. The size of the commercial seed market for cereal crops is also small, and therefore the pressure and incentives for strict law enforcement are low.

The Seeds Act also restricts marketing of notified seeds in geographical areas that are not prescribed for such seeds. The author is of the opinion that this restriction is an unnecessary and potentially harmful aspect of the Seeds Act. Such a restriction will only limit access to, and the supply of, seeds in resource-poor countries such as Nepal, where market infrastructures are inadequate and marketing networks are poorly developed. As long as there is information about the suitability of the seed for a particular geographical area on the seed packet and the seed users are not misinformed, the marketing of seeds should not be restricted to any particular geographical location. For example, seed entrepreneurs in Nepalganj should be allowed to sell seed prescribed for Jumla. Such restrictions are also detrimental for local innovation and the promotion of agricultural biodiversity. Local Initiatives for Biodiversity, Research and Development’s (LI-BIRD’s) experience with participatory variety selection demonstrates that some of the new plant varieties released and prescribed for the Terai
(the southern plains of Nepal) also performed well and were preferred by the hill farmers. Farmers also experiment with new seeds. They often try out new seeds in their own production environments and management conditions – a process of adaptation and domestication which has made an enormous contribution to the promotion and conservation of agricultural biodiversity.

The scope of the Seeds Act, in terms of the kinds of plants and plant varieties to be included, is not explicitly defined. While the statement of the preamble appears to define the act as covering the seeds of different ‘crop,’ the definition of the term crop opens up the scope to all kinds of crops – that is, all cultivated plants, both food crops and nonfood crops. For example, ‘cash crop’ may include nonfood crops such as medicinal plants, ornamental plants, timber plantations and so on.

Similarly, the institutional base of the NSB is also not explicitly mentioned. However, in practice, it operates under the MoAC, possibly because the secretary of the MoAC is the ex-officio chairperson of the NSB. In order to effectively regulate seed production and marketing in the country, the scope of the Seeds Act should be enlarged to include seeds of all kinds of plants and plant varieties, and the NSB should be made an autonomous body directly reporting to the executive head of the government. Such changes would avoid the need for interministerial coordination, which is always difficult to manage.

Seeds Regulation, 2013 (after first amendment of Seeds Regulation 1997)

Legal provisions

The Seeds Regulation was formulated in 1997 and amended in 2013, within the provisions of the Seeds Act 1988 (first amendment, 2012), to define rules and to regulate the production and marketing of quality seeds in the country. Based on the provisions of Rule 4 of the Seeds Regulation, the NSB has constituted a Variety Approval, Release and Registration Sub-Committee (VARRSC). This subcommittee has been authorized to regulate the functions of approval, release and registration of the new plant varieties (Rule 5).

The process of approval, release and registration of new plant varieties is detailed in Rule 11 of the Seeds Regulation. The breeder has to submit an application for approval, release and registration of the new plant variety to the VARRSC in the prescribed format. The new variety has to meet three criteria: it has to be (1) distinct, (2) uniform and (3) stable – these are known as the DUS criteria. The requirement of the new criterion is not explicitly mentioned, but it is implicit in the fact that the provision for approval, release and registration is only for new plant varieties. These criteria, however, are not defined in the Seeds Regulation. The provision for the registration of local plant varieties has also been made in Rule 12.2 of the amended Seed Regulations 2013.

The Seeds Regulation has also made clear provision for the right of ownership to new plant varieties outlined in Rule 13. The breeder willing to acquire such rights has to submit an application to the NSB in the prescribed format.
The right of ownership so obtained is conditional – that is, it remains valid as long as the variety remains in the list of notified seeds. The right of ownership of the variety of de-notified seeds (those that have been removed from the list of notified seeds) is deemed to have been terminated ipso facto after two crop years from the publication of de-notification in the Nepal Gazette. The scope of the right of ownership granted to the breeder is not defined in the Seeds Regulation, and there is no mention about the implications of such rights to the production and marketing of the seeds of right-protected plant varieties. The person or organization willing to market the seeds of registered plant varieties, domestically or internationally, does not have to receive permission from the holder of the right of ownership to such plant varieties. The Seeds Regulation has the capacity to grant authority to more than one applicant. However, this provision has not yet been exercised (personal communication, Madan Thapa, Seed Quality Control Centre, 11 April 2012). Similarly, there is no mention about the period of time for which the plant is protected under the right of ownership on new plant varieties. Likewise, there are no rules included in the amended Seeds Regulation 2013 to establish ownership rights on the traditionally used local plant varieties as provisioned in the amended Seed Act 2012.

**Issues and suggestions**

The first step towards the realization of intellectual property rights protection on new plant varieties is registration and obtaining a right of ownership on such varieties. Since the DUS criteria required for approval, release and registration are not defined in the Seeds Regulation, these criteria could be subject to interpretation and a possible source of conflict. The ‘new’ criterion, which is the fundamental requirement for claiming any intellectual property rights protection, should also be explicitly included as a necessary criterion along with the DUS requirements.

Solely granting the right of ownership is not adequate to effectively implement intellectual property rights protection, unless the scope of such ownership is specifically defined. The Seeds Regulation as well as the Seeds Act do not explicitly mention the types of rights the owner of the plant varieties can exercise in relation to the production and marketing of their seeds. One reason for this could be that variety development and registration was initially entirely the responsibility/business of the Nepal Agricultural Research Council, and it was a nonprofit public sector organization. The ownership issue, therefore, may not have received proper attention and thought. There may simply have not been adequate demand to justify developing the appropriate legal provisions. Such a hypothesis is reflected in the fact that more than 574 new plant varieties have been released and registered in Nepal until 28 July 2014, but not a single application for ownership rights has been filed.4

It can be argued that the granting of ownership rights should not be subject to a second application and approval procedure, but rather should automatically come into effect after the successful registration of the plant variety. The
ipso facto termination of the right of ownership on plant varieties after the
de-notification of seeds of such varieties is not logical. Although it is not men-
tioned, the de-notification may be temporary, and de-notified seeds in one
region or country may qualify for notification in another region or country.
The right of ownership, therefore, should be made independent of the de-
notification of the seeds. Similarly, the Seed Regulation should define the
meaning and scope of ownership rights on the local varieties used traditionally
in Nepal as provisioned in the amended Seed Act.

The analysis presented in this chapter is for new plant varieties (those with
intellectual property rights implications) that are protected by the right of own-
ership for a specified period of time. Although the protection period is not
specified in the current Seeds Regulation, I am arguing that de-notification
that is done for reasons other than the completion of the protection period –
for example, the degeneration of the genetic quality, a lack of supply in the
market, and so on – should not automatically terminate the right of ownership.

National Seed Policy, 1999

Provisions relevant to intellectual property rights protection

The National Seed Policy came into force in Nepal in 1999. The main objec-
tive of the National Seed Policy is to provide a policy framework and guidelines
to ensure the production and distribution of quality seeds and to conserve and
protect rights over seeds of local crop varieties that have distinctive genetic traits.

The National Seed Policy has explicitly mentioned that the variety develop-
ment, which has so far been carried out by the government sector, will also be
done through private organizations and NGOs as well as the private sector (sub-
section 3.1.1). These organizations will, however, only be given permission to
engage in the variety development program after they pre-inform the authority
about their infrastructure facilities and the rationale behind developing such
variety (subsection 3.1.2). To implement this policy guideline, the NSB made a
decision on the requirement for various infrastructure facilities and conditions
in a meeting held on 5 September 2003, and these requirements were put on
public notice on 20 November 2003. According to this decision, private and
nongovernment organizations must have the following infrastructure facilities:

• own or lease land for purposes of research;
• employ a plant breeder with a minimum level of education of a master of
  science degree;
• employ a seed technologist with a master of science degree;
• employ other staff, each with a bachelor of science degree (one for each crop);
• employ a multidisciplinary team of other individuals as required;
• have a seed store to store the required capacity;
• maintain other equipment that is necessary for plant breeding and seed
  production.
These organizations must fulfil the following minimum conditions:

- they must submit a plan for variety development to the NSB;
- they must implement the directives/suggestions that are passed down to them from the concerned authorities as necessary.

The National Seed Policy has also made policy provisions for the new varieties that have been developed from agricultural research, which first need to be approved, released and registered with the NSB before being marketed and/or distributed to the farmers (subsection 3.1.3). This policy dictates that the seeds of new varieties are restricted for distribution until they are formally approved, released and registered. The National Seed Policy has also declared that the responsibility of maintaining the quality and production in a required amount of nucleus and breeder seed lie with the breeder.

The seed certification system is a standard certification system adopted by NSB of Nepal. The Quality Standards Determination and Management Subcommittee of the NSB has set minimum standards for certified seed production, such as isolation, purity, germination percentage, moisture content and so on, and these criteria are published in the Seed Production Guidelines. The seed inspector appointed by the Seed Quality Control Centre of the NSB checks compliance with the standards before certifying the seeds and provides a certification tag once the seed has met these standards. The Seed Certification Agency is responsible for ensuring that there is compliance with this quality standard. On the other hand, the truthful label system is a softer and more cost-effective system of producing quality seed. This is a kind of self-certification system where seed producers themselves declare the minimum standards of their seed as set out by the Quality Standard Declaration Sub-Committee of the NSB. Seed inspection is not required for this category of seeds. The seed producers themselves are fully responsible for the quality of the seeds specified.

The National Seed Policy has also introduced the Quality Declared Seed system, which falls somewhere between the seed certification system and the truthful label seed system in terms of quality assurance and quality checks. The seed producers agree to produce quality declared seed as specified by the Quality Standards Determination and Management Sub-Committee of the NSB. The appointed seed inspector may do random testing of, at least, 10 percent of the seed at any stage from production to packaging and retail. The seed producer is responsible for the quality of the seed. To enable NGOs and private-sector seed entrepreneurs to comply with the minimum quality standards, the truthful label seed system does not involve the high cost and bureaucracy of seed inspection and testing for specified minimum standards. As a result, it is much easier and more economical for farmers and farming groups in the decentralized seed production system to meet the high demand for new seed in the domestic market. The quality declared seed system guarantees higher quality compared to the truthful label seed system and is suitable for commercially branded seed production by private companies and NGOs, but it is still less expensive and more straightforward during the certification process.
Issues and suggestions

According to the definition of a ‘breeder’ in the Seeds Act, any person or organization is able to develop and maintain new plant varieties. In this spirit, the Seeds Act also recognizes farmers as breeders and, therefore, considers them to be eligible to develop new plant varieties. However, it is almost impossible for ordinary farmers and farmers’ groups to fulfil the conditions imposed for the production of breeder seeds. Farmers and/or farmers’ groups, therefore, will not be able to register new plant varieties since it requires them to submit their breeder seeds to the variety registration authority. The conditionality attached with the production of breeder seeds directly conflicts with the definition of a breeder, and disqualifies farmers and individual breeders from developing new plant varieties.

These conditions further create an artificial barrier for NGOs and small seed entrepreneurs in engaging in the development and maintenance of new plant varieties since they can hardly afford to maintain the specified infrastructures. Such endeavours are also bound to be costly, making variety development a nonviable enterprise. These conditions, therefore, should be removed immediately.

The seeds of new plant varieties are required to be distributed to the farmers for on-farm testing before these varieties are approved, released and registered for further cultivation. However, the policy provision, as stated under subsection 3.1.3, restricts such distribution. Changes to this policy provision should be made to allow distribution of seeds of varieties that are under development and require on-farm adaptation testing as part of the variety development process.

The policy provision that dictates that the responsibility for production and maintenance of the nucleus and breeder seeds lies with the breeder is a supportive provision for the realization of the intellectual property rights protection for new plant varieties. Similarly, the policy emphasis on the conservation of agricultural biodiversity and the protection of rights over local crop varieties needs to be clearly set out in the appropriate provisions of the Seeds Act and the Seeds Regulation. At the moment, both of these legal instruments are silent on both of these matters.

Notes

1 Plant Variety Protection and Farmers’ Rights Bill, Ministry of Agricultural Development, Nepal.
2 Access to and Benefit Sharing from the Use of Genetic Resources Bill, Ministry of Forest and Soil Conservation, Nepal.