Most of the national policies, regulations and laws governing seed and planting material, their movement across national borders, internal and external trade and associated intellectual property rights (IPRs) are bound to international conventions and agreements on phytosanitary aspects and IPRs related to seed. Some of such international conventions and agreements include the International Plant Protection Convention (IPPC) administered by the Food and Agriculture Organization of the United Nations (FAO), and the Agreement on Sanitary and Phytosanitary (SPS) Measures and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), administered by the World Trade Organization (WTO). As a party to these, India has promulgated several orders, regulations and laws—the Plants, Fruits, Seeds (Regulation of Import into India) Order 1989; the Plant Quarantine (Regulation of Import into India) Order 2003 of India; and the Protection of Plant Varieties and Farmers’ Rights (PPVFR) Act 2001. The Indian seed law, on the other hand, stands independent of any legally or morally binding international undertaking. The Indian seed policy and related laws and regulations are essentially stand-alone domestic devices for setting and enforcing national seed standards to ensure the supply of quality seeds to farmers, promote investment in seed research, and regulate the import and export of seed—all converging to enhance farm income and national agricultural production. In this context, this policy brief is an analysis of the complementarities and contradictions between the legislation governing seed trade and seed-related IPRs in India.
Quality seed: The genesis

Quality seed is the most basic and important input for gainful agricultural production. The most vital attribute of seed quality is viability: the innate ability of a seed to germinate under favourable conditions. Seed vigour is another attribute closely associated with seed viability and important for ensuring the establishment of a vigorous and uniform field crop. These two seed traits significantly influence crop performance. A seed normally developed on healthy plants, and harvested, processed and stored well shall have good viability and vigour. The performance of a seed in terms of economic yield also depends on its genetic architecture. The main difference between traditional and new seeds lies in this aspect.

Other additional factors affecting seed quality are genetic impurity and seed health. Genetic impurity is assessed from a benchmark chosen for defining a variety or cultivar (cultivated variety), which is perceived by farmers and scientists differently. According to the taxonomic definition, a variety/cultivar is a plant grouping within a species that is produced by selective breeding with little or no role of natural selection and persists only under cultivation and selection. Every variety/cultivar has an identity on the basis of a given unique name and certain characteristics that are usually distinct from other similar plant grouping, and these characteristics remain stable during repeated propagation.

The seed of a variety becomes genetically impure when the distinctive characteristics defining the variety are either diluted or lost due to genetic contamination. Such contamination may be the result of either out-pollination of the seed with other cultivars or very rare spontaneous mutations or physical mixing of the seed with those of other cultivars of the same crop. While genetic contamination cannot be totally excluded under the normal process of seed production, its regulation is essential for preserving variety identity and seed quality. Seed standards followed in different countries specify a different but narrow range of genetic and physical impurity to crop varieties depending on their reproductive behaviour, such as self- or cross-pollination or vegetative propagation. The traditional standards on seed mixture followed by farmers are more lax and vary with farmers, regions and farming systems.

Seed health refers to freedom from infection by pests or diseases, which may seriously compromise seed viability and vigour. Unhealthy seeds give poor yields and spread the disease to other varieties during their movement. This is more serious in vegetative propagated crops. Moreover, some vegetative planting material is often used with planting medium like soil in which the potential threat of spreading soil-borne pathogens such as nematodes, fungi or bacteria is very high. Therefore, seed health is even more important than genetic purity.

Why the Seed Law?

In order to safeguard the interests of farmers and protect overall national agriculture, it is essential for a country to put in place laws and regulations which define, monitor and control the minimal standards and other quality measures on seeds (or other planting materials). A seed law is necessary to ensure that spurious and poor quality seeds are not sold in the market and that true-to-type seeds are made available for plantation. Such a law may, in addition, provide legal protection and space to seed developers to create an exclusive market through the registration of their seeds and ensure the right to export and import registered seeds. It can also establish a link between seed registration right and IPRs such as plant breeders’ right, trademark or trade secret with a view to promoting the seed industry that would better serve farmers.

Taking the farmer seed system on board

In India, about 70 percent of the country’s seed system is managed by farmers’ traditional practices which involve saving seed from own harvest, and using seed for re-sowing, sharing, exchanging, bartering and selling. Such practices are the mainstay of the conservation and enrichment of plant genetic resources (PGRs). Therefore, the protection of traditional rights of farmers is an issue that should be given primacy while drafting seed laws.

Lately, new seeds offering higher yields and better profits to farmers have become an important technology component of modern agriculture. India, the second largest agricultural country in the world with relatively low crop yields and high yield gaps, offers a huge market for new seeds of many crops. Since the start of the Green Revolution, the new seed system has been growing rapidly with an increasing role of the private sector.

With the public research institutions’ share of 26 percent and the private sector’s share of 4 percent, the Indian seed industry is the eighth largest in the world. The estimated value of seed turnover in India is US$1.06 billion per year, and is growing at the rate of 12–13 percent per annum1. The hybrid seed market of India, accounting for about 3.7 percent of the global market, has an annual turnover of US$106 million and is growing at the rate of 10 percent against the global growth rate of 5 percent.

Currently, there are more than 400 seed companies in India. The private seed industry thus has a huge interest in the
Indian seed legislation and its implementation. Farmers are unorganized and have the least clout to influence any legislative process. Therefore, any responsible legislative and enforcement process should not ignore the interests of farmers. On the other side, the rapid expansion of new seeds is replacing the traditional seeds of targeted and non-targeted crops. Hence, seed laws should provide for the creation of a “conservation cess” on every commercialized new seed to generate resources for the conservation of traditional seeds.

**Seed Act 1966**

During the 1960s, India witnessed the arrival of high-yielding varieties in food grain crops. The first impetus to commercial seed trade was the release of the first hybrid varieties of sorghum (CSH 1), pearl millet (HB 1) and maize (Ganga 1), and the varieties of high yielding rice (TN 1, ADT 27, IR 8, etc.) as well as vegetables (notably Pusa Sawani of bhindi). This led to the realization, for the first time in the country, of the need for a seed law, which culminated in the legislation of the Seed Act 1966. The Act became operational along with the enactment of the Seed Rules in 1968. The Seed Act and Rules were amended in 1972, 1973, 1974 and 1981. The Seeds (Control) Order 1983, issued under the Essential Commodities Act 1955, established a regulatory framework for controlling the distribution and supply of seeds in the market.

In 1988, a New Policy on Seed Development was developed with the objective of making available to Indian farmers the best planting material from anywhere in the world and to encourage the export of seeds. Another National Seed Policy was announced in 2001.

**Salient features**

The Seed Act 1966 established the Central Seed Committee (CSC) as the national apex body to oversee the setting of seed standards, release, and certification and implementation of other provisions of the Act. It is assisted by two subordinate bodies—the Central Seed Certification Board and the Central Variety Release Committee at the central level, and the State Seed Certification Agency and the State Variety Release Committee at the state level.

The Act allows the commercialization of two classes of seeds. Class 1 (called notified variety or NV) constitutes seeds that are notified on approval from either the Central or State Variety Release Committee on the basis of the recommendations made based on agronomic data from multilocation trials conducted by public research organizations. Class 2 (called “truthfully labeled” variety or TLV) constitutes seeds that are neither evaluated under the said multilocation trials nor notified but which truthfully conform to the standards labeled on the seed.

Thus, the farmers’ traditional seed system is left outside the Act. The multilocation trials on NVs are conducted for at least three years by the Indian Council of Agricultural Research and State Agricultural Universities. The validity period for the commercialization of NVs is 15 years with the option of revalidation, while no such period is specified for TLVs. The prescribed label includes the information on net weight of seeds in the container; the date of testing (percent germination, percent physical impurity, and genetic purity); chemicals used for seed treatment (if treated); caution on toxicity of chemicals; the name and address of the person accountable for quality; and the name of the kind/variety. Similarly, the Seed Rules prescribes the minimum standards of seed quality for breeder seeds, foundation seeds and certified seeds of each crop species. The certification of notified and other commercialized seeds is carried out either by the state or the central seed-testing laboratories.

Seed marketing is linked neither to plant breeders’ rights nor to any established ownership on variety. As the Act does not prescribe the declaration of pedigree, particularly in the case of TLVs, secrecy on pedigree is used to create a commercial monopoly on seeds. In the seed chain involving producers, processors and stockists/traders, a licence for the transaction is required only for the stockist/trader. A stockist/trader is always required to display the stock position and price of each seed in stock. The law is monitored and enforced by Seed Inspectors, who are controlled by the state.

However, the enforcement of the law is weak and the prescribed penalty is soft. Although the Act covers horticultural crops, it excludes horticultural nurseries, vegetative propagating materials except potato, tissue-cultured banana and sugarcane.

**Seed Bill 2004**

With a view to repealing and replacing the Seed Act 1966, the Seed Bill 2004 was introduced. Among others, one of the notable exemptions provided in the Bill with regard to farmers’ seed was:

"Nothing in this Act shall restrict the right of the farmer to save, use, exchange, share or sell his farm seeds and planting material, except that he shall not sell such seed or planting material under a brand name or which does not conform to the minimum prescribed limit of germination, physical purity, genetic purity" (Italics added).

However, the provisions of the Bill were so anti-farmer that farmers and civil society actors in India dubbed the Bill a legislative piece drafted at the behest of the seed industry to serve its end and
snatch away the traditional rights of farmers. Consequently, the Government of India referred the Bill to the Parliamentary Standing Committee on Agriculture (PSCA), which prepared its report in 2006. An amended Seed Bill introduced in 2008 has not been enacted thus far. Therefore, the Seed Act 1966 and its amendments are still in force.

Salient features
Seed Bill 2004 seeks to retain the CSC as the national apex body, but with an enlarged and more centralized authority. Members to be nominated to the CSC are to include, specifically, representatives of farmers and the seed industry, and seed experts. The CSC would be assisted by two subordinate bodies– the Seed Registration Committee and the Seed Certification Committee at the central level, and the State Seed Committee (SSC) at the state level.

As provisioned in the Bill, the SSC should advise the CSC on matters related to the registration of varieties, seed producers, processors and traders from that region. Some of the important additions in the Seed Bill 2004 are:

- Compulsory registration of every variety for conducting trade of its seed.
- Registration of seeds to encompass horticultural nurseries with traceability of planting material and data on mother trees, details of grafting material under use, and transparency on production, stocks and sale prices.
- Duration of registration of a variety is 15 years for annuals and 18 years for perennials with the option of an extension for an equal term.
- Separate compulsory registration for seed producers, seed processing units and those holding seed stocks or dealing in seed trade.
- Transgenic variety allowed provisional registration for two years based on information furnished on multilocation trials.
- Seeds with genetic use restriction technology or other like technologies prohibited for registration.
- Additional mandatory labelling requirements include expected agronomic performance of seeds, which is determined on the basis of multilocation trials conducted by accredited public and private institutions.
- Seed certification by the State Seed Certification Agency made voluntary, while accredited individuals or seed-producing organizations allowed self-certification in accordance with prescribed conditions.
- Seed certification regulated and governed by the Central and State Seed Testing Laboratories.
- In the case any registered seed with mandatory disclosure of the expected performance fails to provide the expected performance under specified conditions, the farmer entitled to claim compensation from the producer, distributor or vendor under the Consumer Protection Act 1986.
- Monitoring of the Act at the state level carried out by Seed Inspectors as provisioned in the Seed Act 1966, but with enlarged powers for search, confiscation and prosecution.
- Offences attracting penalty include misbranding, commercial activity without registration, marketing substandard seeds, misleading with false information, and obstructing the officials from discharging their duty.
- Penalty, depending on the offence, varies from a fine of INR 5,000² to INR 50,000 to imprisonment for up to six months.
- An Appellate Authority to be constituted for expeditious decision on disputes.
- The export of seeds required in adequate quantity to achieve food security, and the import of unregistered varieties, to be regulated accordingly and on satisfaction of specified conditions, including quarantine regulations in force.

Significant omissions in the Seed Bill are:

- A variety not registered under the PPVFR Act can be registered under the Seed Bill.
- The Bill does not require either a disclosure of the pedigree of a registered variety or any evidence to establish the ownership of the applicant over it.
- The Bill does not have provisions to regulate seed prices.

Major criticisms
- The Bill undermines the farmer- or primary conserver-friendly provisions of the PPVFR Act 2001 and the Biological Diversity Act 2002.
- The application of the minimum limit of germination, physical purity and genetic purity, prescribed for commercial seeds, on the farmer seed system cripples farmers’ seed rights provided in the PPVFR Act.
- The Bill also implicates farmers as producers of seeds and thus makes them subject to the regulations provided for commercial producers, processors and stockers of seeds.
- The absence of the provision to disclose the pedigree of a registered variety or any evidence to establish the ownership of the applicant over it, could lead seed companies to commercialize any variety from the public domain, including farmers’ variety, or use such varieties in the pedigree of their new variety with no liability for benefit sharing as provided in the Convention on Biological Diversity (CBD). This deficiency, together with the freedom to export registered seeds as a commodity, facilitates unchecked and legitimate transfer of PGRs. The Bill is also silent on which essential attributes of a variety are considered for its registration.
• The absence of a provision to regulate seed prices leaves the door wide open for the seed industry to levy arbitrary and opportunistic prices on seeds.
• Farmers’ varieties are not explicitly excluded from the clause on compulsory registration of varieties to be put on sale, and therefore, snatches away farmers’ traditional right to sell their seeds.
• The clause for provisional registration of transgenic varieties opens a back door for the field release and market entry of genetically engineered food crops without biosafety clearance from the national biosafety regulatory system. Such a provision would sabotage the national biosafety system and invite irreversible biohazards to human health, plant and animal life, as well as the environment.
• Allowing multilocation testing of varieties for agronomic performance by private and transnational seed companies runs the risks of prejudicial test results.
• The accreditation of private seed companies, which are the principal seed traders, for either self-certification or accreditation of private individuals for such services is bound to compromise seed quality standards and bring in a serious conflict of interest, to the detriment of farmers and their livelihoods.
• The provision to certify the agronomic performance data of imported seeds, the evaluation of which is conducted outside India under different weather, soil, crop management, and other conditions, will be unrealistic. Hence, it will be inappropriate to grant registration without conducting agronomic trials in India.
• The provision to extend the registration period for an equal term helps to consolidate the monopolistic control of seeds by the seed industry. This will also reduce the urgency to come up with novel and better varieties. Extended duration is also in conflict with the period of registration provided by the PPVFR Act.
• Compensation to farmers would be provided in the case of the failure of a seed to perform according to its “expected performance under given conditions” as mentioned by the seed producer on the label of the seed package. Such a vague term can lead to wasteful litigation in compensation claim and thus make this important clause infructuous. Settlement of such claims through the Consumer Protection Act 1986 is also cumbersome and time consuming. Moreover, Consumer Courts are not designed to settle seed-related disputes.
• While it is important that Seed Inspectors have adequate authority for effectively discharging their role, the Bill seeks to invest sweeping powers in these junior-level officers without a proper procedure or authorization from higher authorities. Such dispensation of authority, including to break-open any container or the door of any premise, enter and search any place in which they have reason to believe that an offence under this Act has been or is being committed, opens every possibility of the officers taking prejudiced decision or that they might even misuse their power under pressure, or harass farmers.
• The penalty prescribed for offences continues to be soft. There is a need to make the penalty punitive and deterrent and at least on a par with those provided in the PPVFR Act.

**PPVFR Act 2001**

India instituted the PPVFR Act with the primary goals of fulfilling India’s commitment to provide IPRs on plant varieties to comply with TRIPS and protecting farmers’ rights to seeds; and promoting accelerated agricultural development by stimulating investment in research and development (R&D) by the private seed industry to ensure the availability of high quality seed and planting materials to farmers.

The Act provides for the establishment of a Plant Varieties Protection Appellate Tribunal to deal with matters of jurisprudence related to this Act, and a National Gene Fund to support conservation and sustainable use of agricultural biodiversity with a focus on hot spots (for example, primary centres of origin) involving a grass-roots democratic institution—the Panchayat.

The PPVFR Act and the Seed Bill are closely linked. For example, although an entity registering a seed under the PPVFR Act enjoys the right to exclude others from producing, processing, marketing and exporting or importing that seed, the exercise of this exclusive marketing right is subject to registration of the seed under the Seed Bill, which independently assesses agronomic performance of the seed and oversees its quality from production to marketing. The contradictions between the Act and the Bill have serious implications in view of the fact that the Bill enjoys temporal precedence over the Act.

**Comparative analysis of the Act and the Bill**

**Registration of seed**

Registration is a common terminology used either to establish exclusive legal right on a variety conferred under the PPVFR Act or the right to carry out activities from production to marketing of a variety under the Seed Bill. Registration under the PPVFR Act is
Eligibility criteria for registration
The PPVFR Act has clearly set out the morphological and legal criteria, which qualify an extant or new variety for registration. Extant variety includes farmers’ variety. Such clarity on eligibility criteria, except prescribed standards on genetic and physical purity, seed health and a priori determined agronomic performance, is not provided in the Seed Bill. The legal eligibility criteria on ownership, and practices followed for accessing parental material used for breeding the variety, are left totally outside the scope of the Seed Bill.

Truthful disclosure
One of the essential requirements for the registration of varieties under the PPVFR Act is the truthful disclosure of the pedigree of the variety, the geographical origin of parental material used, as well as an affidavit on the lawful acquisition of the parental material. This information is linked to the benefit sharing provision of the Act. In the case of the Seed Bill, there is no obligation whatsoever for disclosing either the pedigree of the variety under registration or the geographic origin of its parental material or the process of accessing these materials.

Benefit sharing
The PPVFR Act provides for the sharing of the economic gains accrued to the user who registers the variety with the conservers or providers of the PGR. While the primary objective of the Seed Bill is to facilitate the commercialization of varieties, it has no provision for benefit sharing and identifying persons or institutions eligible for the same. Thus, the Bill short circuits the benefit sharing provision of the PPVFR Act.

Institutional system for the testing of varieties
The eligibility test for the registration of a variety under the PPVFR Act is the test for distinctness, uniformity and stability (DUS), and in some cases, biochemical test, of a seed. These tests, under this Act, are to be carried out only by accredited government institutions. Regarding the Seed Bill, the important test data required are: agronomic performance assessed from multi-location testing (MLT), and certification of seed quality. The Bill seeks to have these tests conducted by accredited public and private organizations, including private individuals. The ability of the Central and State governments to hold these private institutions and individuals (some of them also associated with seed trade) accountable for the important data they provide based on their tests is questionable.

Registration and exclusive commercialization right
While registration under the PPVFR Act offers the right to exclude others from commercializing the registered variety, there is no clarity in the Seed Bill as to whether the registration it allows offers such an exclusive right. Therefore, technically, one variety could be registered by more than one party, provided that they have the knowledge of its seed production. But there is a hidden agenda to make the registration exclusive by keeping the variety identity and origin a secret. The private seed industry dealing largely with hybrids may strongly favour this privilege, which, in practice, offers it a monopoly on seeds that could be stronger than what might be possible with patent right.

Deposition of voucher seed samples
Registration under the PPVFR Act requires the voucher seed samples of the candidate variety and its parental stock to be deposited with the National Gene Bank maintained by the PPVFR Authority. In the case of the Seed Bill, there is no requirement of deposition of any seed sample with the CSC.

Regulation of seed price
In countries like India, there are instances where seed companies have misused their monopoly on seed to levy arbitrary and high prices. By including the provision of compulsory licensing, the PPVFR Act seeks to regulate unreasonably high seed prices, including unfair methods like creating artificial seed shortages. The Seed Bill, on the other hand, has no provision to regulate seed prices, despite the enhanced authority conferred to the CSC.

Validity period
The duration of plant breeders’ rights (PBRs) under the PPVFR Act is 15 years for annuals and 18 years for trees and vines, while the initial grant is for six and nine years, respectively. The Act does not allow for the extension of the duration of protection. Rather, the granted period may get prematurely lapsed if the breeder fails to make the annually payable registration maintenance fee to the PPVFR Authority.

In the case of the Seed Bill, although the duration of protection is identical to the PPVFR Act, the Bill has provisions for the extension of this period for another equal term. Such long periods of marketing right along with the secrecy of pedigree, and the absence of deposition of voucher seed samples and regulation on seed pricing and compulsory licensing, offer a monopoly, which, in practice, is much stronger than a plant patent. The negative impact of such a provision on farmers and on investment...
in R&D for developing new seeds would mock at the lofty goals of this Bill.

Farmers' right to seed
Recognizing farmers as cultivators, conservers and breeders, the PPVFR Act provides a number of farmers' rights: the right to seed; the right to fair and equitable benefit sharing when PGRs conserved by farmers is used to breed new commercial variety; the right to register farmers' varieties; the right to recognition and reward from the National Gene Fund for their contribution in the conservation and improvement of and making available PGRs; unrestricted access to registered seed at reasonable prices; the right to claim compensation for underperformance of a registered seed; judicial protection against an innocent infringement of the Act; and exemption from all fees related to the administration of the Act and judicial proceedings.

Farmers' right to seed, according to the Act, is the right to save, use, sow, re-sow, exchange, share or sell farm-produced seed. It is also the right to sell seeds even of registered varieties, but only in non-branded form. The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) recognizes the right to save, exchange, reuse and sell farm-saved seed and the right to fair and equitable benefit sharing as fundamental to the realization of farmers' rights. While the rights of farmers to exchange, barter, share or sell seeds under the PPVFR Act are unhindered (except in making sale under a brand), the Seed Bill renders these seed transactions conditional. It introduces a rider that seeds or planting materials sold by farmers have to conform to the minimum prescribed limits of germination, physical purity and genetic purity. As the traditional seed system of farmers is practised outside the formal commercial seed system and without any legal encumbrances, the introduction of the above rider may lead to the choking of the traditional seed system or rendering the transactions therein a punishable offence. The creation of such an obstacle in the traditional seed system may divert the demand for seeds from the traditional to the formal system and thus benefit seed trade.

Compensation to farmers
The PPVFR Act stipulates that a registered seed has to be sold with a disclosure about ‘its expected performance under specified conditions’. If a farmer fails to realize the assured performance under such given conditions, s/he is entitled to receive compensation from the breeder of the said registered variety, as determined by the PPVFR Authority. A similar compensation provision in the Seed Bill is, however, complex—both in the process and determination of claim and payment. The Bill states that the farmer may claim compensation from the producer, distributor or vendor, which may confuse the farmer regarding with whom to make the claim. The determination of compensation under the Consumer Protection Act 1986 may also make the process prolonged, tedious and expensive for the farmer because of the inherent limitations of the Consumer Courts in India. Such courts are located in urban areas and have no expertise in seed- and agriculture-related matters. Therefore, the compensation provision of the Bill is virtually inapplicable to most of the farmers living in far-flung rural areas.

Opposition to registration
The opportunity for public opposition to an application for the registration of a variety makes the registration process transparent. Under the PPVFR Act, which includes such a provision, an application that is illegitimate or not in public interest, could be opposed and cancelled.

But the Seed Bill neither contains such provision, nor any binding requirement to disclose the origin and pedigree of a variety.

Payment for registration
A normal process of registration under the PPVFR Act requires the payment of fees at different stages of the process. Further, the payment of fees is also stipulated during processes related to opposition, benefit claim, correction in registration, licensing to agents, etc. Farmers are exempted from all these payments, including official payments related to judicial proceedings. The Seed Bill lacks such a farmer-friendly provision regarding fees for the registration of farmers' varieties.

Registration of GM crop variety
An application for the registration of a genetically modified (GM) crop variety, according to the Rules of the PPVFR Act, will be acceptable only if such an application is accompanied by a bio-safety clearance certificate from the competent authority. However, the Seed Bill allows the provisional registration of GM crop varieties for a period not exceeding two years even without the bio-safety clearance certificate from the competent authority.

Penalty
A seed law is essentially for the purpose of protecting farmers against the fraudulent sale of spurious seeds. Notwithstanding the provisions, however well meaning, a soft penalty may not deter the offences, as the latter may offer far higher economic gains. But the Seed Bill is notable for a very soft penalty in comparison to the PPVFR Act. For instance, all offences under the PPVFR Act are punishable with imprisonment from three months to three years and fines from INR 50,000 to INR 500,000. In contrast, as provisioned in the Seed Bill, the punishment for most of the offences, including selling spurious seeds to farmers, is a fine of a mere INR 5,000 to INR 25,000, with no prison term. Comparing this penalty with the price of tomato seeds at INR 25,000 to INR 75,000 per kg or the price of hybrid rice seeds at INR 25,000 per quintal, one can infer that the low penalty will not be able to prevent the sale of spurious seeds and deter fly-by-night seed traders. This is a major concern for farmers. Due to such sale, they might face several socio-economic problems.
Lessons for Other South Asian Countries

While seed laws or seed regulations exist in the South Asian countries to ensure the production and marketing of quality seeds, the plant variety protection law has not come into implementation in the majority of the countries of the region. For example, Pakistan has promulgated the Plant Breeder’s Rights Ordinance 2000 and Sri Lanka the Protection of New Plant Varieties (Breeder’s Rights) Act 2001. Similarly, as part of the obligations of the least-developed members of the WTO, Bangladesh and Nepal have drafted the Plant Varieties Act 1998, and the Plant Variety Protection and Farmers’ Rights Act 2005, respectively.

Given the nature and significance of agriculture in the majority of South Asian countries, it is important for them to protect farmers’ rights and devise mechanisms that enable farmers, among others, to save, exchange, reuse and sell seeds, and to obtain ownership over their varieties. The position that most South Asian countries have taken at the WTO, as well as the interaction with some civil society organizations and concerned government agencies in Bangladesh, Nepal, Pakistan and Sri Lanka suggest that they are committed to protect farmers’ rights.

In this regard, India’s case of the conflict between the Seed Bill 2004 and the PPVFR Act 2001 offers important lessons for these countries. In particular, it is important for the other countries of the region to consider the following issues so that they not only implement effective and farmer-friendly plant variety protection laws, but also avoid the (possible) conflict between the seed and plant variety protection laws.

The countries should expand their investment in R&D and institutionalize the consultation process with relevant stakeholders, including farmers and their organizations, for the real assessment and understanding of the nature and dynamics of local agriculture systems and patterns, including the formal and informal seed market situation. This will enable them to identify their national interests in agriculture as well as the management of agricultural biodiversity. And the identification of national interests, in turn, will enable them to review, develop and implement legal measures and institutional strategies needed to balance the rights of breeders and farmers.

For example, in the case of India, the realization that despite the growing presence of the private sector in seed business, the informal seed system continues to hold significance in agriculture led the stakeholders and the government to devise a plant variety protection law that balances the interests of breeders and farmers.

In this connection, the countries in the region should take note of the fact that the contradicting provisions in the PPVFR Act and Seed Bill of India arose because the PPVFR Act has extensive provisions on farmers’ rights due to the internalization of the ethics and relevant principles of the CBD and the ITPGRFA, apart from the sui generis requirement of the TRIPS Agreement. In addition, the PPVFR Act was finalized after seven years of prolonged and intensive discussions among all stakeholders at the national level, and whetting of the inputs by a joint Parliamentary Committee. It is also commendable that many provisions of the Act attracting public interest were repeatedly brought under the stakeholder lens and revised.

On the other hand, the Seed Bill is essentially an official draft brought to the Parliament without exposing it to a wider stakeholder debate. Consequently, there was a strong and wide public opposition, which forced the government to refer the Seed Bill to the PSCA. The Committee, through a consultative process, offered valuable recommendations in 2006 for undoing most of the deficiencies of the Bill. If such recommendations of the Committee are addressed, there is a strong possibility that stakeholders, including farmers and their organizations, would accept the new seed bill.

Hence, the other countries in the region should ensure that they institutionalize the policy- and law-making process by adequate consultation with and participation of stakeholders. Most importantly, they should also recognize and respect the right of farmers to participate in decision-making processes that could have implications for their livelihood.

Notes
1 http://www.contractedwork.com/rt.cfm?projectid=33305
2 US$1=INR 48.655, as of 8 September 2009