SEEDS BILL 2004: FOR WHOM?

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I Introduction

THE SEEDS Bill, 2004 (bill) was introduced in the Rajya Sabha on 9th December 2004 and has been referred to the Standing Committee on Agriculture. This bill if comes into force will replace the present Seeds Act, 1966. The bill proposes to bring all the players, from the seed producer to the retail seller, under the law to facilitate effective regulation of production, supply and sale of seeds. To this end, it prohibits sale of unregistered seeds.[1] Further, it requires all producers of seeds, seeds processing units, dealers of seeds and horticulture nurseries to register themselves with the state government concerned.[2] The state government has the duty to make arrangement for the above-mentioned registration. It also prescribes certain conditions for the sale of registered seeds such as label requirement, minimum limit of germination and genetic, physical purity and seed health etc.[3]

The bill proposes to create a central seed committee (committee) vested with the responsibility and powers for the implementation of the legislation.[4] This committee is to form a sub-committee known as registration sub-committee,[5] which would be responsible for the registration of seeds as well as maintenance of the national register of seeds. Further, the committee can appoint other sub-committees including that for seed certification.[6] The committee, in consultation with the state governments concerned, is also responsible for the appointment of

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1. Seeds Bill, 2004. S. 13(1).
2. *Id*., s. 21-24.
3. *Id*., s. 25.
4. *Id*., s. 5.
5. *Id*., s. 7 (1)–(2).
6. *Id*., s. 7(3).

the state seed certification agency.[7] Additionally, the committee has the power to accredit organisation, individuals in consultation with the state government and the state seed committee for seed certification.[8] Apart from the registration of seeds, the committee would advise the central government and the state government on the following matters: the seed programming and planning, seed development and production, export and import of seeds, standards for registration, certification and testing, seed registration and its enforcement and such other matters as may be prescribed.[9] The bill obligates every state government to establish a state seed committee to advice the committee on registration of local or regional seeds of any kind or variety and to maintain a register of seed producers, seed processing units, seed dealers and horticulture nurseries.[10] Lastly, the bill also lists various offences and punishments for violation of its provisions.[11]

According to the critics, the bill fails to address the concerns of the largest suppliers of seed namely the Indian farmer for the promotion of private sector, which supplies only 20% of seeds requirement in India.[12] The following paragraphs examine the main issues of concern with respect to the bill.

II Context and Function of the Bill

The decision to repeal the existing Seeds Act is part of the National Seeds Policy 2002. According to the seeds policy "*(T)he Seeds Act will be revised to regulate the sale, import and export of seeds and planting materials of agriculture crops including fodder, green manure and horticulture and supply of quality seeds and planting materials to farmers throughout the country.*"[13] The decision to replace the present Seeds Act with a new legislation is stated under the heading quality assurance and the sub paragraphs spell out the key features of the proposed bill. The bill has taken these features and given them a legal touch with minor changes. However, according to the Annual Report of the Ministry of Agriculture the introduction of new legislation is to address certain deficiencies of the existing Seeds Act. These

7. *Id*., s. 26.
8. *Id*., s. 27.
9. *Id*., s. 5.
10. *Id*., s. 11.
11. *Id*., s. 38-39.
12. Gene Campaign press release *available at* http://www.genecampaign.org/stakeholder2.html.
13. National Seeds Policy Para:3 (1) *available at* www.agricoop.nic.in/seedpolicy.htm.

deficiencies are:[14] non-compulsory registration of seed variety (the Act covers only notified seeds varieties), non-coverage of commercial crops and plantation crops, lack of regulation of transgenic materials and mild penalties for infringement. Nevertheless, the bill states its purpose is "*to provide for regulating the quality of seeds for sale, import and export and to facilitate production and supply of seeds of quality and for matters connected therewith or incidental thereto.*"[15] Thus, the purpose of the bill is to regulate the production, supply and sale of quality seeds including the export and import of the same.

Another reason cited for the new legislation is to liberalise import of seeds and planting materials to be compatible with the World Trade Organisation (WTO) commitments.[16] However, the Agreement on Agriculture (AoA), which regulates the trade in agriculture within WTO, does not contain any such obligation to liberalise import of seeds and planting materials. Moreover, the Agreement on Sanitary and Phyto-Sanitary Measures (SPS) gives freedom for member countries to regulate the import of seeds. Therefore, citing the WTO regime as a reason to liberalise seed import is a misleading statement which is perhaps made to justify the pro-seed industry tilt of the bill.

During enquiries into the cause of farmers' suicide in Andhra Pradesh, Karnataka, Maharashtra and Punjab various public interest groups also suggested changes in the Seeds Act. One of the reasons identified for farmers' suicides was crop failure due to the low quality seeds including spurious seeds supplied by the seed companies and seed sellers. The Seeds Act does not provide any effective mechanism to hold either the seed companies or seed dealers liable for selling low quality or spurious seeds. The need for an effective regulatory mechanism was also felt in view of the growing presence of seed companies including multinational corporations. Another important concern was to equip the present Act to address the safety concerns arising through the introduction of transgenic varieties of seeds. These factors resulted in the demand to amend the Act to ensure an effective regulatory framework for commercial production and supply of seeds. Surprisingly, none of these concerns figure prominently in the proposed legislation. According to the Ministry of Agriculture the new legislation aims to "*(i) overcome deficiencies of the existing legislation (ii) create facilitative climate for growth of seed industry, (iii) enhance seed replacement rates for various crops, (iv) boost the export of seeds and encourage import of useful*

14. *Annual Report*, Ministry of Agriculture *available at* http://agricoop.nic.in/Annual-Rep04-05/Annual-Report.pdf.

15. See the introductory statement of Seeds Bill 2004.

16. Press Information Release (PIB) dated 3/5/05 *available at* http://pib.nic.in/release/release.asp?relid=8963.

germplasm, (v) create a conducive atmosphere for application of frontier sciences in varietal development and enhanced investment in research and development". Some of these aims are highly controversial and debatable, especially the idea of enhancement of seed replacement.[17] These aims clearly reflect the pro-seed industry bias because the legislation aims at a facilitative climate and not regulatory framework for the seed industry.

A parallel legislation, which serves similar function in the health sector, is the Drugs and Cosmetics Act (D&C Act). This Act regulates the production and supply of drugs and cosmetics in India. The D&C Act and the rules made under it together lay down the basic rules for the marketing approval of drugs and cosmetics. This legislation makes it compulsory for every drug and cosmetic producer to obtain marketing approval from the Drugs Controller General of India (DCGI) before the introduction of drugs into the market. For the marketing approval of new drugs one has to conduct all three trials *viz.* phase I, phase II and phase III as well as submit the data relating to toxicity and side effects. However, for the marketing approval of a drug, which is already available in the market, one has to show only the bioequivalence study to prove that the chemical component is same as the one already approved drug/ cosmetic. This approach avoids 'reinvention of the wheel' and expedites the subsequent marketing approvals of drugs/cosmetics. One need not take marketing approval if the drug is as per the formula described in the authoritative traditional texts of *Ayurveda, Siddha, Unani* and Tibetan systems of medicine. The Insecticides Act, 1968 regulates the marketing approval in the case of insecticides and pesticides. The purpose of marketing approval is to ensure quality and safety of drugs, cosmetics and insecticides. Generally, the marketing approval does not and should not attach any exclusive rights (proprietary rights), which are to be granted to various instruments of intellectual property protection. Subsequent producers can get the marketing approval on the same product on the basis of bioequivalence study once they are in public domain.

Similarly, the primary function of any seed legislation should be to regulate the efficacy (quality) and safety of new seeds introduced in the market. The proposed registration of seeds with the Sub-Committee is equal to a marketing approval (license) for the production and supply of new seeds. Therefore, registration should not confer (directly or indirectly) any kind of exclusive rights (proprietary rights) to the producer. The Sub-Committee should examine whether the new seeds seeking marketing approval satisfies the efficacy and safety requirements.

17. See, Vandana Shiva, "Critique of the Seeds Bill" *available at* http:// www.navdanya.org/articles/seed-bill-2004.htm.

The bill proposes to treat all seeds at par for marketing approval irrespective of whether it is a farmers' (traditional) variety or a transgenic variety. New seeds especially those produced through modern genetic engineering techniques require rigorous trials and monitoring prior to their commercial use. Contrary to this, new seeds bred from traditional and farmers' varieties do not require stringent trial and monitoring mechanism for obtaining marketing approvals because they pose minimum safety concerns. Hence, the bill should focus mainly on marketing approval of seeds developed through genetic engineering techniques and the regulation of seed industry.

Central Seed Committee

The seed committee under the Act comprises of a chairperson, seven ex-officio members representing various central government departments, and other members nominated by the central government.[18] The secretary of the department of agriculture would be the chairperson of the committee. Other nominated members include the agriculture secretary of five states, the director (seed certification agency), the managing director (State Seeds Corporation), two representatives of farmers and two representatives of the seed industry.[19] Representation of the seed industry in the committee, which oversees the marketing approval of seeds will cast clouds on the neutrality of the committee's decisions as the representatives from the seed industry, would have a considerable stake in getting the marketing approvals of seeds. Farmers' representation by two members will not act as a counterweight against powerful industry influence. As mentioned earlier, the committee has to advise the central government and the state governments on matters relating to seed programming and planning, seed development and production, export and imports of seeds, standard of registration, certification and seed testing, seed registration and its enforcement and any other matters specified by the central government. Hence, the representation of the industry in the committee is against the spirit of neutrality. Finally, the sub-committee is given the responsibility to register the seeds for marketing approval. It is not clear whether industry representation is barred in the sub-committee. All the powers regarding the registration lies with the sub-committee[20] and the bill does not provide any statutory control over the sub-committee by the committee except the power to make regulations for the procedure of sub-committee.[21]

18. *Supra* note 1, s. 4.
19. *Ibid.*
20. *Id*., s. 7(2).
21. *Id*., s. 8.

Registration

The bill introduces a major change in the seed trade through the compulsory registration of all seeds with the sub-committee. According to section 13 of the bill, *"no person can sell seeds of any kind or variety for the purpose of sowing or planting without registering it with the Sub-Committee"*. The word 'kind' is defined as *"one or more related species or sub-species of crop plants each individually or collectively known by one common name such as cabbage, maize, paddy and wheat."*[22] Variety means *"a plant grouping except microorganism within a single botanical taxon of the lowest known rank, which can be (i) defined by the expression of the characteristics resulting from a given genotype of that plant grouping (ii) distinguished from any other plant grouping by expression of at least one of the said characteristics and (iii) considered as a unit with regard to its suitability for being propagated, which remains unchanged after such propagation and includes propagating material of such variety, extant variety transgenic variety, farmers' variety and essentially derived variety"*.[23] In sum, registration is compulsory for marketing /selling of any kind or variety of seeds including farmers (traditional) varieties. As a consequence, farmers' varieties cannot be sold in the market without registering with the sub-committee.

It is well known that seeds developed through traditional breeding techniques do not cause any major threat to environmental safety compared to the varieties produced through genetic engineering. Therefore, there is no valid reason for the bill to treat these varieties at par with those developed through modern genetic engineering techniques for compulsory registration. If this provision comes into force, it would indirectly impose a ban on the use of many varieties developed earlier; and still used by farmers, as they would have to be withdrawn from the market. Farmers' varieties and other varieties developed through conventional breeding techniques should be exempted from the registration requirement. The requirement in such varieties should be to maintain quality *i.e.* minimum limits of germination and purity.

Further, the bill does not exclude any kind or variety of seeds from the registration requirement and makes the marketing/selling of the same illegal. The only exemption from registration is given in section 13(3), which reads *"the Registration Sub-Committee may grant provisional registration to the varieties of seeds which are available in the market on the date of commencement of this Act"*. Thus varieties of seeds, which are already available in the market, may get provisional registration

22. *Id*., s. 2 (12).
23. *Id*., s. 2 (29).

at the discretion of the sub-committee which will be regularised subsequently on fulfilment of conditions imposed by the sub-committee. This clearly means that all unregistered existing varieties should be registered in the due course to become eligible for marketing. There is no reason for the registration of any variety of seeds, which are already available in the market legally because these varieties have already proved their quality and safety. Hence, instead of interim arrangement of provisional registration these varieties should be exempted from registration altogether. In other words the registration should apply prospectively to only new seeds using modern genetic engineering techniques for breeding. Moreover, there is no legal obligation on the sub-committee to grant provisional registration and the bill leaves this to the discretion of the sub-committee. Many of these seeds are either traditional varieties or developed by public sector institutions and they would be financially and administratively constrained to register such varieties. Thus this retrospective application of law would make marketing of these varieties illegal and their forced withdrawal would provide increased market to private companies. It would also result in decreasing on-farm diversity, as farmers would be obliged to plant seeds of only available registered variety.

The bill defines seed as "*any type of living embryo or propagule capable of regeneration and giving rise to a plant of agriculture, which is true to such type.*"[24] According to the bill, agriculture *includes horticulture, forestry and cultivation of plantation, medicinal and aromatic plants*.[25] As a result, seeds and planting material used for horticulture, forestry, plantation, medicinal plants and aromatic plants have to be registered before its marketing/sales. The definition contains a non-exhaustive list and therefore, the list may get expanded in future through the court interpretation. As per the definition nobody can sell any seed or planting material without the registration.

Another important issue is the cumbersome and expensive procedure for registration. The bill proposes a centralised registration mechanism, which insists even local varieties and regional varieties should be registered at the national level.[26] The procedure formalities for registration would ensure that only a single or few companies would get registration of a particular variety. This would prevent others from marketing those seeds, which are in the public domain. Furthermore, registration is done on the basis of "*information furnished by the producer on the results of multi-locational trials to establish the performance of*

24. *Id*., s. 2 (21). Emphasis added.

25. *Id*., s. 2 (1). Emphasis added.

26. See, S Bala Ravi, "Seeds of Trouble" *available at* http://www.hindu.com/2005/03/08/stories/2005030801761000.htm

that seed for a period prescribed by the rules."[27] Multi-locational trials are expensive and time consuming. The high cost of registration would prevent individual breeders, farmers and even small seed companies from registering their seed varieties. Big seed companies would be interested in registering the new varieties and marketing them instead of these varieties. They would show little interest in registering commercially less potential varieties. In the long run, the prohibition on sale of unregistered seeds cut the supply and minimises the area of cultivation of unregistered seeds. This would make thousands of varieties to go out of circulation and result in the depletion of bio-diversity.

There is need for an independent body under the direct control of the committee to conduct multi-locational trials to ensure trust, transparency and efficiency. Further, there may be many seeds, which would be good for a very restricted area particularly in hilly or stressed ecologies, but may not perform well under the multi-locational trials. Hence, there should be provision for granting the approval for marketing of such seeds in the specified localised areas. The multi-locational testing in such seeds should only be to check the insect-pest and disease susceptibility, in case there is unauthorised movement of the seed away from approved area restricting the trials in localised areas because such seeds would be required only in such areas.

The bill is not clear who is eligible for registration. According to section 13(2), *"the registration Sub-Committee may register or refuse to register any kind or variety of seeds on the basis of information furnished by the producer who develops the variety on the results of multi-locational trials"*. This means that only the breeder who develops the seed variety can apply for registration. Nevertheless, the bill as available on the website of Ministry of Agriculture contains a small change in the provision and it reads as *"information furnished by the producer on the results of multi-locational trials for such period as may be prescribed to establish the performance of that seed"*. According to this modified text any producer of the seed variety, not necessarily the developer of the variety can register seeds for marketing approval. However, it is not clear whether all producers of the same variety are required to register their product to get the marketing approval or it is only the initial producer to register the variety.[28] If the registration is limited only to the initial producer then it is bringing market exclusivity, a right provided under Protection of Plant Varieties Farmers' Rights (PPVFR) Act, through back door and neutralise the effect of PPVFR Act.[29] Nonetheless, section 14(2) states *"the Sub-Committee may, after*

27. *Supra* note 1, s. 13 (2).
28. *Supra* note 12.
29. *Supra* note 26.

such enquiry as it deems fit and after satisfying itself that the kind or variety of seed to which the application relates confirms to the claims made by the importer or by the seller as the case may be, as regards the efficacy of the kind or variety of seeds and its safety to human beings and animals…" Thus, it implies that even importers and sellers can apply for registration. However, it is not clear whether they have to conduct a multi-locational trial or use the data supplied by the producer.

Generally, data is submitted to prove the value for cultivation and use (VCU) of the seed for marketing approval. Under the PPVFR Act one has to prove novelty, distinctiveness, uniformity and stability (NDUS) of seed to qualify for protection.[30] The bill is silent on the criteria of registration. Therefore, it is not clear if one has to prove either VCU or NDUS or both for registration. Even though the bill provides for cancellation and exclusion of registration to protect human beings, animal and plant life and health to avoid serious prejudices to the environment the bill is silent on the requirement of data to prove the safety aspect of the new seed.[31] Further, there is ambiguity regarding the provisions on how much data is to be submitted for the initial registration and subsequent marketing approval/registration of a seed. If the same amount of data is required for the subsequent marketing approval (if required) of the initially registered variety, it would prevent small players from registering their seeds. This would prevent the individual breeders and small seed companies from marketing the seeds, which are in the public domain, *i.e.*, not protected under PPVFR Act. In other words, the bill indirectly creates a parallel mechanism to give exclusive marketing rights even in the absence of intellectual property protection. Ideally, the sub-committee should not seek the same amount of data for the subsequent marketing approval/registration of seeds. As a result, the subsequent marketing approval will be quick and cost effective and will create competition in the market.

Another controversial provision is section 15(2), which gives powers to the sub-committee to give provisional registration for transgenic varieties on the approval of the provisions under the Environment (Protection) Act, 1986. This permission of provisional registration might be an easy instrument for seed companies to introduce experimental transgenic varieties and conduct large-scale field trials at the cost of farmers. After collecting the data this provision provides them an easy escape route to withdraw the variety in case it does not perform as expected. Hence, there should not be any provisional registration for transgenic varieties. Apart from this provision the bill is silent about the regulation of transgenic varieties. Since the multi-locational trials are

30. *Supra* note 1, s. 15(1).
31. *Id*., ss. 16 & 18.

performed in regulated environment, post-marketing surveillance of transgenic seeds are necessary to monitor the safety aspects.

Moreover, the registration procedure lacks transparecy and it is very difficult to raise objections against the claim for registration. None of the provisions allows interested parties to raise objections against the registration of a particular variety as in the case of PPVFR Act. Absence of pre-grant opposition allows the seed companies to escape the public scrutiny to get the registration. Since marketing approval of seeds is a matter that involves serious public concern, the bill should have provided room for opposition from interested parties before the registration. Likewise, relevant data regarding the efficacy and safety of the seeds should be made available to the public.

The bill does not obligate the parties to disclose the source of material, parental lines and passport data of the seed at the time of registration. Information on parent line is critical in the hybrid seed production especially in the case of cross-pollinating crops.[32] In the absence of such information no one else except the person who registers the seed can produce the same hybrid seed. Disclosure of parental lines and passport data is mandatory under the PPVFR Act. There is an element of risk for the seed companies in the registration varieties under the PPVFR Act because it provides strong measures like compulsory license against the abuse of monopoly. In the absence of disclosure requirement the bill provides a safe mechanism for keeping the information as a trade secret and enjoy the market monopoly. Registration under the bill does not result in the disclosure of necessary information for the commercial reproduction of hybrid seeds and avoids competition in all circumstances. In other words, the registration requirement would indirectly give exclusive marketing rights to those seeds, which cannot be reproduced without the information of parental lines. As a result, seed companies can now use the registration under the bill as a mechanism to bypass protection under PPVFR.

Many provisions of the bill on registration of varieties resemble the provisions under the PPVFR Act. The concept of national register of plant varieties has been adopted 'as such' from PVPFR Act and renamed as the 'National Register of Seeds'. If the function of the register is to keep a list of seeds, which has the marketing approval along with its producers, then the national registry of seeds is not the ideal name for the register. Hence, the name of the register should be changed. Further, the definitions of extant variety, essentially derived variety and farmer's variety are borrowed as such from the PPVFR Act. PPVFR Act borrowed the definition of essentially derived variety from UPOV Convention,

32. This is the group of crops where the private seed companies have the larger stake as the seed has to be replaced regularly.

which deals with the breeders' rights. These definitions are applicable in the proprietary right context.

In conclusion, these definitions and terms are quite out of place in this bill, which deals with efficacy and safety concerns of seeds. All these clearly show the intention of the drafters to grant some kind of proprietary rights after the registration. In simple terms, the drafters of the bill mixed the concepts of proprietary rights and marketing approval of seeds. Similarly, the very use of the term registration could have been avoided as it creates confusion with the registration under the PPVFR Act. Moreover, registration envisaged in the bill is functionally a licence to produce and supply quality seeds and does not entitle any intellectual property rights.

Cancellation and refusal of registration

According to section 16 of the bill the sub-committee may cancel the registration on the following grounds: "*(i) that the holder of the certificate has violated any of the terms and conditions of the registration; (ii) that the registration has been obtained by misrepresentation or concealment of essential data or that the variety is not performing in accordance with the information provided by the producer under sub-section (3) of section 14 or has become obsolete or has outlived its utility; (iii) that prevention of commercial exploitation of such variety of seeds is necessary either in the public interest or to protect public order or public morality or to protect human beings, animal and plant life and health to avoid serious prejudice to the environment.*" However, the bill is silent about the meaning of public interest. Likewise, the registration of certain kinds and varieties of seeds are banned if commercial exploitation of such kind or variety is necessary to protect public order or public morality or human, animal or plant life and health or to avoid serious prejudice to the environment. Seeds containing any technology, which is harmful or potentially harmful are also banned from registration. Explanation to this clause shows that the term technology includes genetic use restriction technology and terminator technology. The noted difference between the provisions of cancellation of registration and ban on registration is that the public interest is not a ground for denying registration but a ground for cancelling the registration. As a result, one cannot prevent the registration of variety in the public interest but can only cancel the registration.

Duration of registration

According to section 13(4), registration of a seed is valid for a period of 15 years in the case of annual and biennial crops and 18 years

for long duration perennials. This means that the selling of seeds after the expiry of 15 or 18 years becomes illegal. For getting re-registration, the producers have to conduct trials and submit the data to re-establish the performance of the kind or variety of seeds. It means that additional cost has to be incurred to re-register the seed. If the seed does not have much market share the producer will not re-register the seed by spending money on trials. Seed companies can easily use this provision to push their new products without renewing the registration of old seeds. This would reduce the availability of seeds in the market. Lastly, there is no rationale to either automatically cancel the registration of a seed if it has performed well for 15-18 years in farmer's field or to insist on further registration. Specific period of protection exists in the case of intellectual property rights because the product comes in public domain after the expiry of the protection period. In this context, the product would not be available in the market after the expiry of period of registration. This provision in the long run would result in the erosion of biodiversity. Ideally the registration should be valid until there is any evidence, which questions the efficacy and safety of the registered seed.

Compensation

According to section 20, if the "*registered kind or variety is sold to a farmer, the producer, distributor or vendor, as the case may be, should disclose the expected performance of such kind and variety to the farmer under given conditions*". In case of failure to provide the expected performance the farmer is entitled to claim compensation from the producer, distributor or vendor under the Consumer Protection Act. This remedial measure would remain only in theory and not in practice. It would rather work as an effective safeguard for seed industry. Modern techniques of plant breeding especially GMOs are known for performance failure. Providing compensation only under Consumer Protection Act is very ineffective and impractical due to various factors including the pendency of matters. Under the Consumer Protection Act it would be very difficult for the farmers to prove the failure of a seed. The effective step would be to give powers to the committee to adjudicate claims on compensation. The committee, which is responsible for registration of seeds, is the best agency to adjudicate claims of compensation for non-performance of seeds. Further, under this provision the farmer cannot claim damages occurring due to crop loss and is only entitled to compensation for the value of seeds.

Abusive acts during the pendency of registration

As per the bill the sub-committee will have the power to issue

directions to protect the interests of a producer against any abusive act committed by any third party during the period between the date of filing of application for registration and the date of decision by the committee.[33] This provision is another example of attaching proprietary rights to the producer. The word abusive act is too vague and gives room for interpretation. The main abuse that can be made against the producer during the pendency of registration is marketing the same seeds by a third party or the unauthorised use of data even for registration. Since the bill prohibits selling the product without registration, such action by the third parties is not an abuse against the producer but a violation of the law itself. If the abuse includes using the producer's data for registration, then it is a clear instance of attaching proprietary rights to the seed producer.

Accreditation

The committee is responsible to accredit the Indian Council of Agricultural Research, state agricultural universities and other organisations to conduct trials to evaluate the performance of any kind or variety of seeds.[34] The words 'other organisations' clearly mean that private organisations would also be allowed to carry out trials. There is no clarity on the responsibility of carrying out multi-locational trials. It is not clear from the provisions that whether the sub-committee conducts the trials or the producers through the accredited centres. The mention of private organisations in section 19 shows that the producers will be permitted to carry out the trials at accredited centres. Apart from this, the committee can accredit organisations to carry out certification *"on fulfilment of such criteria as may be prescribed or allow individuals or seed producing organisations to carry out self-certification."*[35] Hence, the committee can accredit private organisations to act as seed certification agencies. Involvement of private certification agencies and self-certification without effective mechanisms to check the quality might defeat the purpose of seed certification agencies, *i.e.*, quality assurance.

Export and import of seeds

The bill permits importation of only registered seeds to India and the import of seeds will be regulated by the provisions of Plants, Fruits and Seeds (Regulation of Import into India) Order, 1989 or any corresponding order made under section 3 of the Destructive Insects

33. *Supra* note 1, s. 13(6).
34. *Id.*, s. 19.
35. *Id.*, s. 27.

and Pests Act, 1914.[36] It means either of them can be used to regulate the imports of seeds. The word '*or*' should be replaced with '*and*'. The central government can permit the importation of unregistered seeds subject to fulfilling certain conditions for research purpose. The bill gives powers to the central government on the advice of the committee to restrict the export of seeds, if the exports adversely affect the food security or it fails to meet the reasonable requirement of the public or any other grounds as may prescribed.[37] Firstly, provisions on export of seeds fail to mention the Bio-Diversity Act, which has put reasonable restrictions on the export of biomaterials. Secondly, the central government cannot *suo motu* act on this and it has to wait for the advice of the committee. Thirdly, the bill does not explain what the reasonable *requirements of the public and such other grounds are* to restrict exportation.

Offences and punishment

The bill prescribes three types of punishments to offences committed. Firstly, a fine of not less than Rs.5000 which may extend up to Rs 25000 is given to any person who contravenes any provisions of the bill or rule or imports, sells, stocks or exhibits for sale or barters and or otherwise supplies any seed of any kind or variety without a certificate of registration.[38] The same punishment is given to a person who imports, sells, stocks or exhibits for sale or barters and or otherwise supplies any seed of any kind or variety deemed to be misbranded or obstructs the committee or sub-committee or seed certification agency or seed inspector or seed analyst or any authority duly empowered under the bill in the exercise of their powers or discharge of their duties under the bill.[39] Secondly, if any person sells any seed which does not conform to the standards of physical purity, germination or health or does not maintain any records required under the bill shall be punishable with minimum fine of Rs.5000 and a maximum of Rs 25000.[40] Thirdly, if any person furnishes any false information regarding the genetic purity, misbrands any seed or supplies any spurious transgenic variety or sells non registered seeds shall be punishable with imprisonment for a period up to six months and fine up to Rs 50000 or both.[41] Punishment prescribed by the bill is too mild especially compared to the PPVFR

36. *Id.*, s. 36.
37. *Id.*, s. 37.
38. *Id.*, s. 38 (1) & (2).
39. *Id.*, s. 38(3).
40. *Id.*, s. 38 (2).
41. *Id.*, s. 38 (3).

Act, which prescribes harsher punishment. Hence it will not deter the industry from indulging in malpractice. Further, most of the offences listed in the bill are directed against sale of misbranded seeds or supply of non-registered variety or spurious variety. The notable omission is that there is no punishment for selling seeds, which lacks efficacy as mentioned in the claim. Lastly, there is no punishment for submitting false data regarding the efficacy of seeds.

Farmers' rights

Convention of Biodiversity (CBD) recognises the role of local communities in the conservation of biodiversity. According to article 8(j) of the CBD, member countries should "*subject to the national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices*". Thus, the above article gives farmers a right to continue with their practices, which contributes to enhancement of biodiversity. Further, it obligates states to promote practices and innovations of local communities including farmers.

This right is again recognised by the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR). According to ITPGR the contracting party is under an obligation to recognise the enormous contribution of the local and indigenous communities and farmers of all regions of the world, particularly those in the centres of origin and crop diversity.[42] It specifically obligates contracting parties to take measurers to protect and promote farmers' rights including: "*protection of traditional knowledge relevant to plant genetic resources for food and agriculture, the right to equitably participate in sharing benefits arising from the utilisation of plant genetic resources for food and agriculture and the right to participate in making decisions at the national level on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture*". Finally, it states that no provision in article 9 of the treaty should be interpreted "*to limit any of the rights of farmers to save, use, exchange and sell farm saved seed /propagating material, subject to national law and as appropriate.*"[43] Thus, the treaty not only recognises the role of farmers

42. Art. 9.
43. Art. 9. 3.

in the conservation but also gives the countries an opportunity to enact legislations that provide rights for farmers to sell and save seeds from their farm.

The PVPFR Act recognises the concept of benefit sharing and farmers' rights. According to section 39 (1) (iv) of PPVFR Act *"a farmer shall be deemed to be entitled to save, use, sow, resow, 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: provided that the farmer shall not be entitled to sell branded seed of a variety protected under this Act. An explanation for the purposes of clause (iv) branded seed means any seed put in a package or any other container and labelled in a manner indicating that such seed is of a variety protected under this Act"*. A farmer is entitled to enjoy the rights in the same manner, as she/he was entitled to before the coming into force of PPVFR Act. Hence, the farmer is entitled to save, use, sow, resow, exchange, share or sell seeds in the same manner before the passing of the PPVFR Act. The only restriction under the PPVFR Act is on the freedom to sell the seeds of protected variety under a brand name.

The bill also recognises the farmers' rights by stating that *"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 limit of germination, physical purity, genetic purity prescribed under clause (a) or clause (b) of Section 6."*[44] The bill, however, restricts the scope of farmers' rights available under PPVFR Act. The bill restricts the scope of farmers' rights by omitting the words *in the same manner, as he was entitled to before the coming into force of this Act* from PPVFR Act. Further, the bill prohibits use of brand name by farmers in all circumstances. Thus, the set of farmers' rights is applicable to the provisions of the bill, if seeds are from her/his farm. Therefore, this provision would not protect the farmer from prosecution if the seeds originate from a different farm, which is not owned or operated by the same farmer. In other words, a farmer can enjoy the right only in the case of a first sale. The farmer cannot buy and later sell the same seed to another farmer. It is also not clear whether farmers' right applies to a farmer who sells the entire production as seeds because then the farmer falls within the scope of producer. The term producer is defined as *"a person, group of persons, firm or organisation who grows or organises the production of seeds."*

44. *Supra* note 1, s. 43.

Brand name is not always attached with the efficacy and safety of seed. It is independent of efficacy and safety. Brand name gets established over a period of time and is part of the marketing strategy. Prohibiting farmers from selling seeds under a brand name excludes a section of the people who supply 80% of seeds in the market, namely, the farmers and the intention of the provision is to legitimise the seed industry as the sole supplier of seeds. The restriction on the farmers to sell seeds under a brand name also violates article 19 (1) (e) of the Constitution, which states that all citizens shall have the right to practise any profession, or to carry out any occupation, trade, or business. Restriction on brand name is a clear violation of this provision. Again, under the Geographical Indication Act seeds can get protection and therefore be branded. It is arguable that selling under brand name by the farmer may fail the purpose of bill, *i.e.*, efficacy and safety of seeds. Practically, this purpose will not be jeopardised if a farmer sells the seed under a brand name. It also ignores the fact that seed production is part and parcel of traditional agricultural system in India. Restrictions like these are intended to view seed production and crop production as separate activities, which is far from reality. By preventing farmers from selling seeds under a brand name the bill strives to strangulate the local innovations and practices, which is critical to the conservation of biodiversity. Hence, the bill should not deal with the regulation of brand name, which should be left, to the Trade and Service Mark Act.

According to the second qualification the seeds sold by the farmer under section 43 should "*conform to the minimum limit of germination, physical purity, genetic purity prescribed under clause (a) or clause (b) of section 6.*"According to section 6 (b) the "*the mark or label to indicate that such seed conforms to the minimum limits of germination, genetic and physical purity, and seed health specified under Clause (a) and other particulars, such as expected performance of the seed in accordance with the information provided by the producer under section 14 which such mark or label may contain.*" Thus, the farmer is under an obligation not only to maintain the minimum limit of germination, physical purity, genetic purity of seed, which is difficult to monitor but also to sell it with a mark and label containing information as mentioned in section 6(b). However, under section 6 there is no obligation on the part of the committee to "*notify the minimum limits of germination, genetic and physical purity and seed health, with respect to any seed of any kind or variety*." Moreover, it is not clear whether farmers are permitted to sell the seeds even in the absence of committee's notification. Thus, the ultimate control of farmers' production and supply of seeds is with the committee. Another important issue is whether section 43 gives a right to the farmer to sell seeds of unregistered kinds or varieties. Section 13 (1), however, gives no such right to anyone. Nevertheless,

section 43 permits the farmer to save, use, exchange, share or sell his farm seeds and planting material. In the absence of any specified reference to the registered kinds and varieties section 43 does cover unregistered kinds or varieties. The committee still can curtail the sale of unregistered variety by not specifying the minimum limits of germination, genetic and physical purity and seed health, with respect to any seed of any kind or variety.

As mentioned earlier, farmers' rights include protection of traditional knowledge relevant to plant genetic resources for food and agriculture. By insisting on compulsory registration of traditional and farmers' variety and by prohibiting sale of unregistered variety, the bill limits the circulation of traditional varieties, thereby infringing farmers' rights. The exemption provided under section 43 does not contribute to the conservation of farmers' varieties. As mentioned earlier, the bill does not contain any provision to disclose the parental line and its geographical origin. The bill also has ignored benefit-sharing norms mentioned under the PPVFR Act and the Bio Diversity Act. In such a case, it legitimises biopiracy by giving marketing approval/registration without checking whether the companies adhere to the norms of access and benefit sharing. The cumulative effect of these measures will result in the marginalisation of farmers' rights and the depletion of biodiversity.

Price control

Even though the bill states that its objective is to facilitate production and supply of seeds of quality, the bill fails to address the concerns of accessibility of seeds to farmers. One of the effects of the implementation of the bill could be the monopolisation of the seed market with a few players in the market. As a result, the price of seeds will be high and will affect the accessibility of seeds. Often it is the high price of seeds that compels farmers to turn to low quality seeds especially spurious seeds. Availability of seeds at affordable price is essential to curb spurious seed market. The bill is silent on the price control mechanism, which is absolutely necessary to ensure access to seeds and to protect the food security of the country.[45]

III Conclusion

The above discussion shows that the bill is fundamentally flawed and not rooted in the realities of Indian farming practices. By banning the sale of unregistered seeds and insisting on compulsory registration of all varieties of seeds including farmers' varieties the bill will

45. *Supra* note 12.

effectively push the farmers' varieties from the formal seed market and limit its circulation. The bill tries to separate the seed production from the farm production and permits only seed industry in the formal seed market. Thus, the bill tries to create favourable atmosphere for the seed industry at the cost of farmers who supply 80% of seeds. The bill if converted into law in its present form would make farmers dependant on seed companies. The prohibition on the sale of unregistered varieties and compulsory registration of all seeds and planting materials would adversely affect the efforts of biodiversity conservation. Non-availability in the formal market and criminalisation of sale of unregistered varieties would prevent wider circulation of these varieties and endanger the conservation of these varieties. The bill needs to be redrafted to remove those provisions, which are hindering the current entitlements of farmers. The bill should exclude farmers' and traditional varieties from registration requirement. Also, the bill should be brought in harmony with the Bio-Diversity Act and PPVFR Act. The main purpose of the bill should have been the accessibility and availability of safe and quality seeds in the place of a mere regulation that facilitates the production, supply and sale of quality seeds by the industry.