

# Infopack

EDITORIAL

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## Pushing Indian Farmers into a Seed-Trap

- Piyush Pant

There is an Indian adage- 'Don't treat the symptoms , treat the disease'. But powers that be, in India, have always been given to treat the symptoms and not the disease. Prime Minister Manmohan Singh is no exception to that. So while visiting the Vidharba region in Maharashtra to take cognizance of the sordid tale of a series of suicides by farmers of the region, the prime minister ended up with simply declaring the setting-up of a committee to look into debt relief. Later he also announced a financial rehabilitation package of Rs. 5000 crores for the farmers. But neither the committee nor the package will bring any, short or long term, change in ground realities in the region.

In fact, Indian rulers are habitual of practicing ad hocism, they don't look beyond the fleeting moment. No doubt, the increasingly mounting debts and recurrent failure of crops rendering the farmers incapacitated to pay back the debts are major causes of farmers' suicides but the biggest cause behind ever- increasing number of suicides, perhaps, is the entrapment of the farmers by multinational seed corporations. These corporations lure them away to greener pastures with the dreams that never materialize, while they themselves rake in the mullah by selling their seeds, fertilizer and pesticides to these hapless farmers. The crisis in Vidharba is mostly among farmers who have sown Mosanto's genetically modified Bt.Cotton seeds. So the need is to rescue our farmers from the trap of these multinationals. But look , what our government is doing. It is, instead, pushing them further into MNC's trap. If you don't believe, then have a look at the National Seeds Bill 2004. A careful study of the Bill will convince you that the Indian government is gearing up to make the operations of these seed MNC's much easier and smoother, thus, further allowing them to tighten their noose on the farmers.

Though the stated objective of the proposed act is to regulate the seed market and to ensure the seeds of "quality" but the proposed amendments in the existing laws in the Bill and new provisions incorporated are aimed at harmonizing it with other seed laws around the world and ensure that the Indian seed market is open to big corporates. It is being said that the Seeds Bill 2004 has one and only one objective of stopping farmers from seed saving, seed exchange and seed reproduction. The repeated reference to 'barter' in the Bill will certainly prevent farmers from exchanging the seeds, thus killing an essential practice which results in the maintainance of high quality seed supply at the community level. Thus, the Seed Bill 2004 clearly demonstrates who is the winner and who is the loser? No doubt, millions of marginal Indian farmers will lose and a handful of MNC's and their Indian cohorts will gain!

In this issue of **Infopack** we have summarized the National Seeds Bill 2004 as well as most of the existing laws governing the seeds in India.

Popular Information Centre

## Seeds Act 1966

It is the Central Government Act. This Act is known as Act No. 54 of 1966

## Bird's Eye View

This Act was enacted on 29th December, 1966.

It is an Act to provide for regulating the quality of certain seeds for sale, and for matters connected therewith. The Seeds Bill 2004 is proposed to replace this 1966 Act. In 1972 certain amendments were carried out in it which were notified on September 9, 1972. Subsequently it was known as The Seeds ( Amendment ) Act, 1972. But first let's talk about the 1966 Act. It extends to the whole of India. The Act says that it shall come on force on such date as the Central Government may, by notification in the Official Gazette, appoint, and different dates may be appointed for different provisions of this Act, and for different States or for different areas thereof.

Next, definitions of various terms contained in the Act are given. For instance, 'Agriculture' includes horticulture, 'Committee' means the Central Seed Committee constituted under sub-section ( 1 ) of section 3; 'Seed' means any of the following classes of seeds used for sowing or planting-

1. seeds of food crops including edible oil seeds and seeds of fruits and vegetables;
2. cotton seeds;
3. seeds of cattle fodder;

and includes seedlings, and tubers, bulbs, rhizomes, roots, cuttings, all types of grafts and other vegetatively propagated material, of food crops or cattle fodder; 'Prescribed' means prescribed by rules made under this Act etc.

Now the Act talks about central seed committee and says that the Central Government shall, as soon as may be after the commencement of this Act, constitute a committee called the Central Seed Committee to advise the Central Government and State governments on matters arising out of the administration of this Act and to carry out the other functions assigned to it by or under this Act. It further says that the Committee may, subject to the previous approval of the Central Government, make by-laws fixing the quorum and regulating its own procedure and conduct of all the business to be transacted by it. The central government, after consulting with the Central Seed Committee, may notify a seed in order to regulate the quality of seed.

The document, next, talks about the central seed laboratory and state seed laboratory and says that-

1. The Central government may, by notification in the official Gazette, establish a Central Seed Laboratory or declare any seed laboratory as the Central Seed Laboratory to carry out the functions entrusted to the Central Seed Laboratory by or under this Act.
2. The State Government may, by notification in the official Gazette, establish one or more State Seed Laboratories or declare any seed laboratory as a State Seed Laboratory where analysis of seeds of any notified kind or variety shall be carried out by Seed Analysts under this Act in the prescribed manner.

Regarding notification of kinds or varieties of seeds , the document says that if the central government, after consultation with the committee, is of opinion that it is necessary or expedient to regulate the quality of seed of any kind or variety to be sold for purposes of agriculture, it may, by notification in the official Gazette, declare such kind or variety to be a notified kind or variety for the purposes of this Act and different kinds or varieties may be notified for different States or for different areas thereof.

As far as power to specify minimum limits of germination and purity etc. is concerned, it says that the central government may, after consultation with the committee and by notification in the official Gazette, specify-

- a. the minimum limits of germination and purity with respect to any seed of any notified kind or variety;
- b. the mark or label to indicate that such seed conforms to the minimum limits of germination and purity specified under clause (a) and the particulars which such mark or label may contain.

Regarding regulation of sale of seeds of notified kinds or varieties, it is written that no person shall, himself or by any other person on his behalf, carry on the business of selling, keeping for sale, offering to sell, bartering or otherwise supplying any seed of any notified kind or variety, unless-

- a. such seed is identifiable as to its kind or variety;
- b. such seed conforms to the minimum limits of germination and purity specified under clause (a) of section 6;
- c. the container of such seed bears in the prescribed manner, the mark or label containing the correct particulars thereof, specified under clause (b) of section 6; and
- d. he complies with such other requirements as may be prescribed.

Under this Act only varieties notified by the government need to be registered and there is no provision for the registration of transgenic varieties of seeds.

The Act next talks about certification agency, grant of certificate by certification agency and revocation of certificate. About revocation it says that if the certification agency is satisfied, either on a reference made to it in this behalf or otherwise, that -

- a. the certificate granted by it under section 9 has been obtained by misrepresentation as to an essential fact; or
- b. the holder of the certificate has, without reasonable cause, failed to comply with the conditions subject to which the certificate has been granted or has contravened any of the provisions of this Act or the rules made thereunder;
- c. then, without prejudice to any other penalty to which the holder of the certificate may be liable under this Act, the certification agency may, after giving the holder of the certificate an opportunity of showing cause, revoke the certificate.

But at the same time, under the head Appeal, it says that -

1. Any person aggrieved by a decision of a certification agency under section 9 or section 10, may within thirty days from the date on which decision is communicated to him and on payment of such fees as may be prescribed, prefer an appeal to such authority as may be specified by the state government in this behalf:

Provided that the appellate authority may entertain an appeal after the expiry of the said period of thirty days if it is satisfied that appellate was prevented by sufficient cause from filing appeal in time.

2. On receipt of an appeal under sub-section (1), the appellate authority shall, after giving appellant an opportunity of being heard, dispose of the appeal as expeditiously as possible.
3. Every order of the appellate authority under this section shall be final.

Next the document talks about the appointment of seed analysts, powers of seed inspectors and the procedure to be followed by the seed inspectors. While talking about the restrictions on export and import of seeds of notified kinds or varieties, it says that -

No person shall, for the purpose of sowing and planting by any person (including himself), export or import or cause to be exported or imported any seed of any notified kind or variety, unless-

- a. it conforms to the minimum limits of germination and purity specified for that seed under clause (a) of section 6; and
- b. its container bears, in the prescribed manner, the mark or label with the correct particulars thereof specified for that seed under clause (b) of section 6.

Mentioning the recognition of seed certification agencies of foreign countries, it says that the central government may, on the recommendation of the committee and by notification in the official Gazette, recognise any seed certification agency established in any foreign country, for the purposes of this Act.

Under the head penalty, it is written that if any person-

- a. contravenes any provision of this Act or any rule made thereunder; or
- b. prevents a seed inspector from taking sample under this Act; or
- c. prevents a seed inspector from exercising any other power conferred on him by or under this Act;

he shall, on conviction, be punishable-

- i. for the first offence with fine which may extend to five hundred rupees, and
- ii. in the event of such person having been previously convicted of an offence under this section, with imprisonment for a term which may extend to six months or with fine which may extend to one thousand rupees, or with both.

It further says that when any person has been convicted under this Act for the contravention of any of the provision of this Act or the rules made thereunder, the seed in respect of which the contravention has been committed may be forfeited to the Government.

The Act also contains provisions to deal with the offences committed by the companies. It further says that the central government may give such directions to any state government as may appear to the central government to be necessary for carrying into execution in the state any of the provisions of this Act or of any rule made thereunder.

The Act also provides for the exemptions. It says that-

Nothing in this Act shall apply to any seed of any notified kind or variety grown by a person or sold or delivered by him on his own premises direct to another person for being used by that person for the purpose of sowing or planting.

The Act also provides for the power of central government to make rules by saying that the central government may, by notification in the Official Gazette, make rules to carry out the purpose of this Act. It also provides that every rule made under this Act shall be laid as soon as may be after it is made, before each house of Parliament while it is in session for a total period of thirty days which may be comprised in one session or two successive sessions, and if before the expiry of the session in which it is

so laid or the session immediately following , both the Houses agree in making any modification in the rule or both Houses agree that the rule should not be made , that the rule shall, thereafter have effect only in such modified form or be of no effect, as the case may be; so however , that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

This Act was further amended in 1972 and was called Seeds (Amendment) Act, 1972. In it the section 2 of 1966 Act was amended and in clause(11), after sub-clause(iii) the sub-clause '(IV) jute seeds' was inserted. Further , new sections 8A to 8E wre inserted after section 8 of the 1966 Act. These new sections were related to the establishment of a central seed certification board, its constituent members, other committees, procedure for board and appointment of secretary and other officials of the board.

In section 9 of the 1966 Act amendment was done as the following-

- (i) in sub-section (3), for the words, brackets, letter and figure"minimum limits of germination and purity specified for that seed under clause (a) of section 6", the words "prescribed standards" shall be substituted;
- (ii) to sub-section (3), the following provison shall be added , namely:-  
" Provided that such standards shall not be lower than the minimum limits of germination and purity specified for that seed under clause (a) of section 6."

An amendment was made in section 25 also. It reads like this-

- (a) in sub-section 2,after clause (f), the following clause shall be inserted, namely:-  
"(ff) the standards to which seeds should conform,";
- (b) in sub-section (3), for the words " in two successive sessions, and if, before the expiry of the session in which it is so laid or the session immediately following", the words in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid" shall be substituted.

## The Seeds Bill, 2004

Department of Agriculture  
and Cooperation,  
Ministry of Agriculture,  
Government of India

## Bird's Eye View

The Seeds Bill, 2004, was introduced in the Rajya Sabha on December 9, 2004. It had been referred to the Standing Committee on Agriculture and it was supposed to be enacted by Parliament in the Fifty-fifth Year of the Republic of India. But this Bill is still lying with the Standing Committee for consideration.

The objective of the Seeds Bill, 2004, is to regulate the quality of seeds for sale, import and export through registration and certification. The proposed Act would replace the Seeds Act, 1966.

This 25-page document is divided into ten chapters.

In **chapter I**, the document says that this Bill may be called the Seeds Act, 2004, and be extended to the whole of India. The Act shall be applied to every dealer, and every producer of seed meant for sale. In this chapter, the document also gives definitions of some important words that are used in the Act. For example, the Act defines:

- ◆ "agriculture" includes horticulture, forestry and cultivation of plantation, medicinal and aromatic plants;
- ◆ "Certification Agency" means an agency established under section 26 or accredited under section 27 or recognized under section 30;
- ◆ "dealer" means a person who carries on the business of buying and selling, exporting, or importing seed, and includes an agent of dealer;
- ◆ "farmer" means any person who cultivates crops either by cultivating the land himself or through any other person but does not include any individual, company, trader or dealer who engages in the procurement and sale of seeds on a commercial basis;
- ◆ "kind" means 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;
- ◆ "seed" means any type of living embryo or propagule capable of regeneration and giving rise to a plant of agriculture which is true to such type;
- ◆ "extant variety" means a variety available in India which is -
  1. notified under section 5 of the Seeds Act, 1966; or
  2. farmers' variety as defined in PVO Act; or
  3. a variety about which there is common knowledge; or
  4. any other variety which is in public domain.

In **chapter II**, the document tells about the constitution and functions of the Central Seed Committee, Registration and about other Sub-Committees.

The document says that the Central Government shall, by notification, constitute for the purpose of this Act, a Committee to be called the Central Seed Committee, consisting of a Chairperson, seven ex-officio members, and thirteen members nominated by the Central Government.

The document says that the Committee shall be responsible for and shall have all the powers for the effective implementation of this Act and shall advise the Central Government and the State Governments on matter relating to seed programming and planning, seed development and production, export and import of seeds, standards for registration and



certification and seed testing, seed registration and its enforcement.

The document also says that the Committee has the power to specify the mark or label to indicate that the seeds for sale conform to the minimum limits of germination, genetic and physical purity, and seed health prescribed under this Act. The document further says that the Committee shall constitute a Sub-Committee to be called the registration Sub-Committee to assist him in the discharge of the functions of the Committee.

Here, the document also says that every state Government shall establish a state seed Committee to advise the State Government on Registration of seed producing and seed processing units, seed dealers and horticulture nurseries, and seek information from persons engaged in the production, supply, distribution, trade or commerce in seeds of any kind or variety regarding stocks, prices, sales and other information in the manner prescribed under this Act.

In **chapter III**, the document points out that all varieties of seeds for sale have to be registered in a register called National Register of Seeds, which shall be maintained by Registration Sub-Committee. The registration is valid for 15 years for annual/biennial crops and 18 years for long duration perennial crops. All registered seeds need to meet minimum standards with respect to the proportion of seeds that must germinate, levels of genetic and physical purity, and the permitted proportion of diseased seeds.

The document says that no seed of any kind or variety shall, for the purpose of sowing or planting by any person, be sold unless such seed is registered with the Registration Sub-Committee. The Sub-Committee may register or refuse any kind or variety of seed on the basis of information furnished by the producer on the results of the performance of that seed. The document further says that notwithstanding anything contained in this Act, no seed of any transgenic variety shall be registered unless the applicant has obtained clearance under the provisions of the Environment (Protection) Act, 1986. A kind or variety of seed containing any technology, which is harmful or potentially harmful, shall not be registered.

The document here further says that the Registration Sub-Committee may cancel any registration granted on the following reasons:

1. that the holder of the certificate has violated any of the terms and conditions of the registration;
2. that the registration has been obtained by misrepresentation or concealment of essential data;
3. that the variety is not performing as per the information provided by the producer or has become obsolete or has outlived its utility.

The document says that prevention of commercial exploitation of such variety of seeds is necessary to protect human beings, animal and plant life and health to avoid serious prejudice to the environment. The Committee may accredit some agencies like Centers of Indian Council of Agricultural Research, State Agricultural Universities and such other organizations to conduct trials to evaluate the performance of seed.

**If a registered seed sold to the farmer fails to perform to expected standards, the farmer can claim compensation from the producer or dealer under the Consumer Protection Act, 1986.**

The document further says that every person who desires to carry on the

business of selling, keeping for sale, offering to sell, bartering, import and export or otherwise supply any seed must obtain a registration certificate as a dealer in seeds from the State government. No person is allowed to conduct a business even in horticulture nursery unless such nursery is registered with the State Government. The holder of a registration of a horticulture nursery must keep a complete record of the origin or source of every planting material and performance record of mother trees in the nursery.

In **chapter IV** the document tells about the regulation of sale of Seed Certification Agencies. It says that no person shall himself or by any person on his behalf, carry out any deal in sale seed of any registered kind or variety unless:

1. such seed is identifiable as to its kind or variety;
2. such seed conforms to the minimum limit of germination, genetic, physical purity, seed health specified under the clause of this Act;
3. the container of such seed bears in the prescribed manner, the mark or the label bearing the correct particulars, and in case of transgenic varieties bears a declaration to this effect as specified in clause of this Act.

The document further says that any person selling, keeping seeds, offering to sell, bartering or otherwise supplying any seed may, if he desires to have such seed certified by the State Seed Certification Agency, apply to that agency for the grant of a certificate for the purpose. The State Seed Certification Agency may, after satisfying itself that the seed conforms to the prescribed standards, grant a certificate. The said Act also permits self certification of seeds by accredited agencies.

It also says that the Central Government may, on the recommendation of the Committee and by notification, recognize any seed certification agency established in any foreign country.

In **chapter V**, the document mentions about the functions of seed analysis and seed testing laboratories. It says that the Central Government may establish a Central Seed Testing Laboratory as well as one or more State Seed Testing Laboratories in order to conduct analysis of seed of any kind or variety. The Seed Testing Laboratories shall have as many Seed Analysts as the Central Government may think necessary.

The State Government may appoint such persons as it thinks fit, to be seed Inspectors. The Seed Inspector may take any samples of any seed from any person selling such seed and may send the sample for analysis to the Seed Analysts of the area within which such sample has been taken.

The document further says that the seed Inspector may have the power to enter and search, as he considers necessary, any place in which he has reasons to believe that an offence as per the said Act has been or is being committed and order the person in possession of such seed a notice to dispose of any stock of such seed for a specific period not exceeding thirty days, unless the alleged offence is such that the defect may be removed by the possessor of the seed, seize the stock of such seed. He may examine any register, document or any other material object found in any place and seize the same if he has the reason to believe that may furnish evidence of the commission of an offence punishable under the



said Act. The seed Inspector also has power to break-open any container in which any seed of any kind or variety may be contained or to break-open the door of any premises in the presence of two persons where any such seed may be kept for sale.

In **chapter VII**, the document tells about export and import of seeds. The document says that all import and export of seeds shall be subject to the provisions of Fruits, Plants and Seeds (Regulation of Import into India) Order, 1989, or any corresponding Order made under Section 3 of the Destructive Insects and Pests Act, 1914. It shall be subject to registration as may be granted on the basis of information furnished by the importer.

The document further says that the Central Government may permit to import unregistered variety of seeds for research purpose. The Central Government may, on the advice of the Committee, restrict the export of seeds if it is deemed that such export may adversely affect the food security of the country or if it is felt that the reasonable requirements of the public will not be met.

In **chapter VIII** the document points out the offences and punishment. Here the document says that a person, on conviction, be punished on the basis of the few grounds. Some of them are:

1. contravenes any provisions of the said Act;
2. imports, sells, stocks or exhibits for sale or barter, and or otherwise supplies any seed without a certificate of registration, and deemed to be misbranded;
3. obstructs the Committee Registration Sub-Committee or Seed Certification Agency or Seed Inspector or Seed Analyst or any other authority appointed or duly empowered under this Act in exercising their power or discharging of their duties under this Act or the rules made there under, he shall, on conviction, be punishable with fine which shall not be less than five thousand rupees but which may extend to twenty five thousand rupees;
4. if any person sells any seed which does not conforms to the standards of physical purity, germination or health or does not maintain any records required to be maintained under this Act or the rules made there under he shall, on conviction, be punishable with fine which shall not be less than five thousand rupees but which may extend to twenty five thousand rupees;
5. if any person furnishes any false information relating to the standards of genetic purity, misbrands any seeds or supplies any spurious seed or spurious transgenic variety, sells any non-registered seeds he shall, on conviction, be punishable with imprisonment for a term which may extend to six months or with fine which may extend to fifty thousand rupees or both.

The Act further says that the seed of the convicted person shall be forfeited to the Central Government.

The Act also says that if it is proved that the offence has been committed by a Company or with the consent or connivance of any director, manager, secretary or other officer then he/the Company shall be liable to be proceeded against and punished accordingly.

In **chapter IX**, the document mentions about the power of the Central Government. It says that the Central Government may give necessary

directions to any State Government for carrying out into execution any of the provisions of the said Act or any rule made there under. The decision of the Central Government whether a question is one of policy or not shall be final.

**The document further says that the said Act does not restrict the farmers' right to use or sell his farm seeds and planting material, provided he does not sell them under a brand name. But all seeds and planting material sold by farmers will have to conform to the minimum standards applicable to registered seeds.**

Finally, in **chapter X** the document says that no suit, prosecution or other legal proceeding shall lie against the Government or any person for anything which is done in good faith or intended to be done under this Act.

The document also says that the Committee may, with the approval of the Central Government, make regulations not inconsistent with the provisions of this Act and the rules made there under, to provide for all matters for which provision is necessary or expedient for the purpose of giving effect to the provision of this Act.

The document finally says that every rule and regulation made under this Act shall be laid before each House of Parliament for consent, or modification of the rules and regulations.

It also says that on the commencement of this Act, the Seeds Act 1966 shall stand repealed, provided such repeal shall not affect any right, privilege, obligation or liability acquired, accrued or incurred under the law so repealed.

## Comparison between Seeds Act, 1966, Seeds Bill, 2004 and Protection of Plant Varieties and Farmers' Rights Act (PPVFR Act) 2001

By

M R Madhvan and Kaushiki Sanyal and Dr. Suman Sahai

### Bird's Eye View

The Seeds Bill, 2004 should be seen in the context of the Seeds Act, 1966 which it replaces, and the PPVFR Act, 2001. The main objective of the Seeds Bill is to ensure availability of quality seeds to farmers. The proposed Bill seeks to update the existing Act in order to address changes in technology and the structure of the seeds sector. The PPVFR Act sets up a framework to protect the intellectual property rights of breeders, while safeguarding the rights of farmers. Below are listed the main changes in the Seeds Bill 2004 from the Seeds Act, 1966 and from PPVFR Act, 2001.

**Table 1: Comparison of Seeds Act, 1966 and Seeds Bill, 2004**

	<b>Seeds Bill, 2004</b>	<b>Seeds Act, 1966</b>
<b>Definitions</b>	"Agriculture" includes horticulture, forestry, cultivation of plantation, medicinal and aromatic plants.  Definitions of "Seed" and "Variety" have been changed to make them more specific and technical.  Defines terms such as "Dealer", "Essentially Derived Variety", "Extant Variety", "Farmer", "Horticulture Nursery", "Misbranded", "Spurious Seed", and "Transgenic Variety".	"Agriculture" includes horticulture.      Does not define these terms
<b>Registration</b>	All seeds for sale must be registered.	Only varieties notified by the government need to be registered.
<b>Seed Committee</b>	Constitutes Central and State Seed Committees. A Registration Sub-Committee would register seeds of all varieties.	Constitutes Central Seed Committee. The central government, after consulting with the CSC, may notify a seed in order to regulate the quality of seed.
<b>Transgenic Varieties</b>	Special provisions for registration of transgenic varieties of seeds.	No provision for transgenic varieties of seeds.
<b>Compensation to Farmers</b>	Provides for compensation to farmers under the Consumer Protection Act, 1986 in the event of under performance of seeds.	No specific provision for compensation mentioned in the Act.
<b>Export and Import</b>	All seed imports are regulated by the Plant Quarantine (Regulation of Import into India) Order, 2003 or any corresponding order of the Destructive Insects and Pests Act, 1914; shall conform to minimum limits of germination etc. Exports can be restricted if it adversely affects the food security of the country.	A person is restricted from exporting or importing notified variety of seed unless it conforms to minimum limits of germination etc.
<b>Penalties</b>	Any person who contravenes any provisions of the Act or imports, sells or stocks seeds deemed to be misbranded or not registered, can be punishable by a fine of Rs 5,000 to Rs 25,000. The penalty for giving false information is a prison term up to six months and/or a fine up to Rs 50,000.	Any person who contravenes any provisions of the Act, prevents a Seed Inspector from taking samples etc. shall be punished for the first offence with a fine which may extend to Rs 500. If the offence is repeated he may be imprisoned for a maximum term of six months and/or fined up to Rs 1,000.

There are several contradictions and overlaps between the PPVFR Act and the Seeds Bill, 2004. They are listed below. Unless these are reconciled and there is clarity on which of these two legislations will supercede the other in cases of conflict, there would be scope for litigation.

**Table 2: Comparison of Seeds Bill, 2004 and PPVFR Act, 2001**

	<b>Seeds Bill, 2004</b>	<b>PPVFR Act, 2001</b>
<b>Definitions</b>	"Farmer" means any person who cultivates crops either by cultivating the land himself or through any other person but does not include any individual, company, trader or dealer who engages in the procurement and sale of seeds on a commercial basis.	"Farmer" means any person who cultivates crops by cultivating the land himself or cultivates crops by directly supervising the cultivation or land through any other person; or conserves and preserves, severally or jointly, with any other person any wild species or traditional varieties or adds value to such wild species or traditional varieties through selection and identification of their useful properties.
<b>Registration</b>	Requires mandatory registration of the varieties/seeds which the PPVFR does not. Establishes a Registration Sub-Committee, which would maintain a National Register of Seeds.  No specifications regarding parentage of variety.  Registration is for 15 years for annual/biennial crops and 18 years for long duration perennials. On expiry, registration can be renewed for a similar period.	Under it the breeder applies for registration for a Plant Breeder's Right. Establishes a Plant Varieties Registry, which would maintain a National Register of Plant Varieties.  Specifies details under which a variety may be registered such as a complete passport data of the parental lines from which a variety has been derived.  Registration is for 15 years for annual/biennial crops and 18 years for long duration perennials. Registration cannot be renewed.
<b>Farmers' Rights</b>	A farmer can save, use, exchange, share or sell his farm seeds and planting material. He cannot sell seeds under a brand name. Seeds sold have to conform to the minimum limit of germination, physical purity, genetic purity prescribed by the Act.	A farmer is entitled to save, use, sow, resow, exchange, share or sell his farm produce including seed of a variety protected under the Act in the same manner before this Act came into force. He cannot sell branded seed of a variety protected under the Act.
<b>Compensation</b>	The seed producer, distributor or vendor will have to disclose the expected performance of a particular variety of seed under certain given conditions. If the seed fails to perform to expected standards, the farmer can claim compensation from the dealer, distributor or vendor under the Consumer Protection Act, 1986.	If a breeder of a propagating material of a variety registered under the Act sells his product to a farmer, he has to disclose the expected performance under given conditions. If the propagating material fails to perform, the farmer can claim compensation in the prescribed manner before the Protection of Plant Varieties and Farmers' Rights Authority.
<b>Penalties</b>	Any person who contravenes any provisions of the Act, prevents a Seed Inspector from taking samples etc. shall be punished for the first offence with a fine up to Rs 500. If the offence is repeated he may be imprisoned up to six months and/or fined up to Rs 1,000.	Penalty for applying false denomination to a variety is imprisonment up to two years and/or a fine between Rs 50,000 and Rs five lakh. Penalty for falsely representing a variety as registered is imprisonment up to three years and/or a fine between Rs one lakh and Rs five lakh or both. Penalty for subsequent offence is imprisonment up to three years and/or a fine between Rs two lakh and Rs 20 lakh.

◆ **Protection of farmers' rights**

Exemption for farmers: This Bill exempts a farmer from compulsory registration of seed varieties in order to use, exchange, share or sell his farm

seeds or planting material. However, it stipulates that he cannot sell any seed under a brand name. Also, any seed sold by a farmer has to conform to the minimum limits of germination, and physical and genetic purity as applicable to commercially sold seeds. This last proviso (minimum standards of germination and purity) could be difficult to implement. It is estimated that seeds saved and exchanged by farmers constitute above 80% of the seeds planted, and there would be a need to establish the physical infrastructure required to test these. Such testing would also lead to an increase in the cost of seeds.

In contrast, The PPVFR Act, 2001, only restricts the farmer from selling branded seed. There is no other requirement for a farmer to sell seeds. The exemption clause given in the PPVFR Act is easier to implement.

*Compensation:* The farmer has to approach the Consumer Courts to claim compensation if the seeds do not perform to expected levels. There is a contradiction between this provision and the PPVFR Act which permits farmers to claim compensation through the Authority set up under that Act. Given the number of factors (such as climate, fertilizer, water) that affect the performance of a crop, it may be difficult to prove that underperformance of a crop was on account of poor quality of seed. Indeed, there have been recent cases where the issue has not been fully resolved. Furthermore, it is not clear whether the compensation would include the value of the crop or only the cost of the seed.

#### ◆ **Registration and certification**

*Exclusivity:* Only those varieties of seeds that are registered may be sold. The Bill does not clarify whether a seed producer may sell seed which is registered by a different producer. The absence of a non-exclusivity requirement could lead to a monopoly on existing and common varieties by the first mover on any registration. Issues regarding intellectual property rights may be addressed through the provisions of the PPVFR Act.

*Disclosure of Parentage:* The Bill leaves it to regulations to specify the information that an applicant has to furnish, such as data about the source and geographical origin, in order to register a seed variety. It might lead to a situation where seeds could be registered without disclosing the parentage or origin of the seed. Although the PPVFR Act, 2001, makes it mandatory for the applicant to issue specific details about the parental lines of a variety, it is not clear which legislation would take precedence in case of conflict. In such a case, an applicant might be able to register a variety of seed which has traditionally been used by a farmer (i.e., farmers' variety). The Bill also does not have the provision of benefit-sharing (as mentioned in the Convention on Biological Diversity and the PPVFR Act), in which case any applicant can register and use a farmer's variety of seed without compensating the farmer.

*Traceability and Quality Assurance:* The Bill does not provide for a mechanism to trace back a packet of seed to the dealer, processor and producer. Also, there is no specification of quality assurance systems. This would make it difficult to trace back a defective lot, and rectify any deficiencies in the supply chain.

*Transgenic Varieties:* The Bill forbids the use of any technology that may be harmful or potentially harmful, and includes 'genetic use restriction technology' and 'terminator technology' in the definition of 'technology'. It is not clear whether both these technologies are explicitly banned in this Bill. A farmer planting seeds containing terminator technology cannot use the seed from his crop for the next generation, and has to purchase new seed every season. The PPVFR Act, 2001 does not permit registration of any variety containing terminator technology.

*Self Certification and Testing before Registration:* Seed producers would be permitted to self-certify the performance of their seeds under certain conditions. The seed companies need to provide the results of multi-locational trials before

registration. This opens up the possibility of false declaration by seed companies. To prevent this, there could be a case for allowing only government agencies to conduct these trials and grant certification.

#### ◆ **Horticulture Nurseries**

Every horticultural nursery has to be registered with the state government and has to maintain records of layout plan, source of every planting material etc. The argument is that performance of horticultural planting material (such as mango) is known only after a number of years, and these trees are harvested for a number of years. The investment and risk for the farmer is significantly higher than in the case of one-season grain, and this justifies stricter norms. That said, nurseries in the unorganized sector may find it difficult to adhere to these conditions.

#### ◆ **Role of Seed Inspectors**

The Seed Inspector has the power to enter and search as well as break open container or break open doors, without a warrant. This is different from the provisions under the Code of Criminal Procedure, 1973 under which a warrant signed by the district magistrate, sub-divisional magistrate or first class magistrate is necessary for search and seizure.

#### ◆ **Penalties**

The penalty for selling substandard seeds is between Rs 5,000 and Rs 25,000. This may not prove to be a deterrent for a large seed company but which may be significant for a farmer or a small dealer.

Comparing the two, **Dr. Suman Sahay**, director of the Gene Campaign points out -

Key differences between the Seed Bill and the PPVFR relate to declaring the origins (parentage) of the variety, the conditions for multi location testing and who will conduct these tests, level of transparency maintained on grant of registration, price control and the treatment of farmer varieties. While the PPVFR requires the declaration of the origine of the variety with pedigree details, the seed bill does not.

With respect to testing the new variety , the PPVFR lays down that the national authority will conduct the tests for distinctiveness, novelty and utility of the variety whereas the seeds bill does not specify who will conduct the tests for establishing the usefulness of the new variety. This lacuna can be misused unless it is clarified.

The PPVFR allows legitimate opposition to the grant of a registration for a new variety before registration is granted. People have an opportunity to raise objections if they have the reason to think that variety is not what is claimed . But in the case of the Seeds Bill , the registered varieties will be made known only through periodic publications. The public has no opportunity to object to a new variety for any reason. This lack of transparency could mean that varieties of dubious performances could get registered without giving people a chance to oppose such grants.

The PPVFR accords recognition to the contributions of the farming community in many ways which is not the case in the Seed Bill. The PPVFR recognizes farmer as the conserver, cultivator and breeder of new varieties. The law, therefore protects the farmer in all these roles. The farmer varieties are hence eligible for protection under the Act and such varieties can be registered without paying a fee. In the Seeds Bill , although farmer varieties are eligible for registration, this can only be done after the payment of the necessary fees. This will place a burden on small farmers who have good material to register but may not be able to afford the cost of registering their varieties.

**In the PPVFR the regulation of seed supply and seed price is to be managed through a process of compulsory licensing. This safeguards the interests of the farming community since it places the responsibility of ensuring an adequate seed supply at reasonable price, on the**



**government. Whereas the Seeds Bill fails to provide any such protection to the farmer. Here there is no mechanism to regulate seed supply or seed price. This could result into a high cost of seeds fixed arbitrarily by the seed companies, leaving the government with no means to control the price. It could also mean that seed providers are under no obligation to ensure a reasonable seed supply to farmers. This will defeat the very rationale that had kept the seed production in the public sector so far.**

Further, the Seed Bill is silent on the origin and ownership aspect of a registered variety for trade. This will facilitate unrestricted commercialization of varieties in the public domain, including farmer varieties, by private parties. On top of it, there are no opportunities for benefit sharing post-commercialisation, as is the case in the PPVFR.

The Seeds Bill attempts to bypass the PPVFR in other ways also. It seeks to nullify the need for seeking a Plant Breeders Right (PBR) in order to obtain the rights to market the new variety. This allows the evasion of the public interest liabilities that are linked to the PBR.

Further, the grant of registration to a seed variety without concurrent registration for PBR, allows the seed owner to evade the onus of compulsory license provisions which protect the cultivators from high seed price and inadequate seed supply.

Social activist **Vandana Shiva** points out that the Seeds Bill 2004 has one and only one objective of stopping farmers from seed saving, seed exchange and seed reproduction since the Bill clearly states that it is aimed at replacing farmers' saved seeds with seeds from private seed industries.

According to her the repeated reference to 'barter' in the Seeds Act will prevent the farmer's exchange, a necessary aspect of maintaining high quality seed supply at the community level.

Further the compulsory registration of seed combined with the power of seed inspectors to enter and search premises (which now means farmers' huts' and fields), power to break open any container and any door is tantamount to creating a 'Seed Police' to terrorise farmers who are conserving biodiversity and practising a sovereign self-reliant agriculture. The fine for seed exchange and barter of unregistered seeds (thousands of farmers varieties has a fine of upto Rs. 25,000). While criminalizing farmers who consume biodiversity and traditional varieties, the Seeds Act fails to do one thing it should have done, which is to regulate and hold liable private seed industry for seed failure and genetic contamination from GMO's. For example, the failure of maize seeds in Bihar cost more than 1000 crores to Bihar farmers and the constant failure of Bt. Cotton annually is costing more than a billion dollars to Indian farmers.

She says that in the new Seeds Act farmers can only claim compensation under the Consumer Protection Act. This option is in any way available to the farmers presently and the brutal power of the Central Authority, which acts to prevent farmers from growing own seeds, provides no safety and remedy to our farmers from untested and hazardous seeds MNC's are selling to our farmers.

Vandana Shiva further points out that the Seeds Act has also undermined the role of the State governments. The Central Seed Committee in 1966 Act has representatives nominated by the governments of each state. Now only 5 states will be represented in the Central Seed Committee and even these will be nominated not by the State governments but by the Centre. The 2004 Seeds bill has nothing positive to offer to the farmers of India but offer a promise of monopoly to private seed industries, which has already pushed thousands of our farmers to suicide through dependency and debt caused by unreliable, high dependency and non-renewable seeds.

## **The Protection of Plant Varieties And Farmers' Rights Act, 2001**

Ministry of Law, Justice and Company Affairs.

(Legislative Department)

New Delhi, October 30, 2001.

### **Bird's Eye View**

This Act of Parliament received the assent of the President on October 30, 2001, and was published for general information.

The objective of this Act is to provide an effective system for protection of plant varieties, the rights of farmers and plant breeders and also to encourage the development of new varieties of plants. Each protection will facilitate the growth of seed industry in the country, which will ensure the availability of high quality seeds and planting materials to the farmers. The 50-page document is divided into eleven chapters. Following are the points that the chapters deal with:

Chapter I: Preliminary including short title, extent, commencement and definitions of some important words.

Chapter II: Protection of Plant Varieties and Farmers' Rights Authority and Registry.

Chapter III: Registration of Plant Varieties and Essentially Derived Variety.

Chapter IV: Duration and Effect of Registration and Benefit Sharing.

Chapter V: Surrender and Revocation of Certification and Re-certification and Correction of Register.

Chapter VI: Farmers' Rights.

Chapter VII: Compulsory License.

Chapter VIII: Plant Varieties Protection Appellant Tribunal.

Chapter IX: Finance, Accounts and Audit.

Chapter X: Infringement, Offences, Penalties and Procedure.

Chapter XI: Miscellaneous.

In the Preliminary under **chapter I**, the document says that this Bill may be called the Protection of Plant Varieties and Farmers' Rights Act, 2001. It shall extend to the whole of India. And it shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint; and different dates may be appointed for different provisions of this Act.

The document also gives definition of some of the important words contained in this Act. Some of them are:

- ◆ "Benefit sharing"-in relation to a variety, means such proportion of the benefit accruing to a breeder of such variety or accruing from an agent or a licensee of such variety, as the case may be, for which a claimant shall be entitled as determined by the Authority under section 26;
- ◆ "Breeder" means a person or group of persons or a farmer or a group of farmers or any institution which has bred, evolved or developed any variety;
- ◆ "Essentially derived variety"-in respect of a variety ( the initial variety), shall be said to be essentially derived from such initial when it
  1. is predominantly derived from such initial variety or from a variety that itself is predominantly derived from such initial variety, while retaining the expression of the essential characteristics that results from the genotype or combination of genotype of such initial variety;
  2. is clearly distinguishable from such initial variety; and
  3. conforms (except for the differences which result from the act of derivation) to such initial variety in the expression of the essential characteristics that result from genotype or combination of genotype of such initial variety;

- ◆ "Extant Variety" means a variety available in India which is
  1. notified under section 5 of the Seeds Act, 1966, or
  2. farmer's variety, or
  3. a variety about which there is common knowledge, or
  4. any other variety which is in public domain.
- ◆ "Farmers' Variety" means a variety which has been traditionally cultivated and evolved by the farmers in their fields; or is a wild relative or land race or a variety about which the farmers possess the common knowledge.

In **chapter II**, the document points out that the Central Government shall establish an Authority to be known as the Protection of Plant Varieties and Farmers' Rights Authority for the purpose of this Act. The Authority shall consist of a Chairperson and fifteen members appointed by the Central Government, and with the approval of the Central Government shall establish branch offices at other places in India.

The Chairperson shall appoint a Standing Committee consisting of five members, one member shall be a representative from a farmers' organization to advise the Authority on all issues including farmers' rights.

The document further says that it shall be the duty of the Authority to promote encouragement for the development of new varieties of plants and to protect the rights of the farmers and breeders.

The Authority shall take some measures that may provide for:

1. the registration of extent varieties subject to such terms and conditions in the manner as may be prescribed;
2. developing characterization and documentation for varieties registered under this Act;
3. documentation, indexing and cataloguing of farmers' varieties;
4. compulsory cataloguing facilities for all varieties of plants;
5. ensuring that seeds of the varieties registered under this Act are available to the farmers and providing for compulsory licensing of such varieties if the breeder of such varieties or any other person entitled to produce such varieties under this Act not arrange for production and sale of the seed in the manner as may be prescribed;
6. collecting statistics with regard to plant varieties, including the contribution of any person at any time in the evolution or development of any plant variety, in India or in any other country, for compilation or publication;
7. ensuring the maintenance of the Register.

The document also says that in all proceedings under this Act, the Authority or the Registrar, as the case may be, shall have all the powers of a Civil Court. The document further says that for the purpose of this Act, the Central Government shall establish a Registry which shall be known as the Plant Varieties Registry consisting of a Registrar-General of Plant Varieties and a number of Registrars appointed by the Authority. For the purpose of this Act, a Register called the National Register of Plant Varieties shall be kept at the head office of the Registry maintaining the names of all the registered plant varieties with the names and addresses of their respective breeders and their rights. Each branch office of the Registry shall have a copy of the Register and such other documents as the Central Government may, by notification in the Official gazette, direct.

In **chapter III**, under the Sub-title 'Application for Registration', the

document points out that any person may make an application to the Registrar for registration of any variety-

- ◆ of such genera and species as specified under sub-section (2) of section 29; or
- ◆ which is extant variety; or
- ◆ which is a farmers' variety.

A new variety or an extant variety shall be registered under this Act if it conforms to the criteria of novelty, distinctiveness, uniformity and stability. A new variety shall be deemed to be novel, if at the date of filing of the application for registration for protection, the harvested material of such variety has not been sold or otherwise disposed of by or with consent of its breeder or his successor for the purpose of exploitation of such variety in India, earlier than one year, or outside India, in the case of trees or vines earlier than six years, or in any other case, earlier than four years.

The Act further says that the new variety shall not be registered under this Act if the denomination given to such variety:

- ◆ is not capable of identifying such variety; or
- ◆ is liable to mislead or to cause confusion concerning the characteristics, value identity to such variety of the identity of breeder of such variety; or
- ◆ is not different from every denomination which designates a variety of the same botanical species or of a closely related species registered under this Act; or
- ◆ is likely to hurt the religious sentiments respectively of any class or section of the citizens of India; or
- ◆ is prohibited for use as a name or emblem for any of the purposes mentioned in Section 3 of the Emblems and Names (Prevention of Improper Use) Act, 1950; or
- ◆ is comprised of solely or partly of geographical name.

The Act says that every applicant, either joint or individual, shall assign a single and distinct denomination to a variety with respect to which he is seeking registration under this Act in accordance with the regulations. The Authority shall having regard to the provisions of any international convention or treaty to which India has become a party, make regulations governing the assignment of denomination to a variety. Notwithstanding anything contained in the Trade Marks Act, 1999, a denomination assigned to a variety shall not be registered as a Trade Mark under this Act.

The document here says that if the Registrar finds that the application does not comply with the requirements of this Act or any rules or regulations made there under, he may, either require the applicant to amend the application to his satisfaction, or reject the application provided the applicant has been given a reasonable opportunity to defend his case.

Where the application for registration has been accepted, the Registrar shall, immediately after its acceptance, put such application to be advertised in the prescribed manner calling objections from the persons interested in this matter.

The document further says that the opposition to the registration may be made within three months from the date of advertisement on payment of the prescribed fees, on any of following grounds, namely:

- ◆ that person opposing the application is entitled to the breeder's right as against the applicant; or
- ◆ that the variety is not registrable under this Act; or

- ◆ that the grant of certificate or registration may not be in public interest; or
- ◆ that the variety may have adverse effect on the environment.

**Chapter IV** contains many clauses related to registration under this Act. Some of the important clauses are mentioned below:

- ◆ Where registration of a variety (other than an essentially derived variety), is not completed within twelve months from the date of application by reason of default on the part of the applicant, the Registrar, after giving notice to the applicant, treat the application abandoned unless it is completed within the time specified in the notice.
- ◆ The Registrar shall have the power to issue such directions to protect the interests of a breeder against any abusive act committed by any third party during the period between filing of application for registration and decision taken by the Authority on such application.
- ◆ On receipt of copy of the certificate of registration under sub-section (8) of section 23 or sub-section (2) of section 24, the Authority shall publish such contents of the certificate and invite claims of benefit sharing to the variety registered under such certificate in the manner as may be prescribed.
- ◆ While disposing of the claim, the Authority shall indicate in its order the amount of the benefit sharing, if any, for which the claimant shall be entitled and shall take into consideration the following matters, namely:
  1. the extent and nature of the use of genetic materials of the claimant in the development of the variety relating to which the benefit sharing has been claimed;
  2. the commercial utility and demand in the market of the variety relating to which the benefit sharing has been claimed;
- ◆ The breeder shall be required to deposit such quantity of seeds or propagating material including parental line seeds of registered variety in the National Gene Bank as may be specified in the regulations for reproduction purpose at the breeder's expense within such time as may be specified in the regulation;
- ◆ A breeder may authorize any person to produce, sell, market or otherwise deal with the variety registered under this Act, subject to such limitations and conditions as may be specified in the regulations;
- ◆ Notwithstanding anything contained in this Act, no registration of a variety shall be made under this Act in cases where prevention of commercial exploitation of such variety is necessary to protect public order or public morality or human, animal and plant life and health or to avoid serious prejudice to the environment.

The Central Government shall, by notification in the Official Gazette, specify the genera or species for the purposes of registration of varieties other than extant varieties and farmers' varieties under this Act.

Notwithstanding anything contained in sub-sections (1) and (2) of section 15, no variety of any genera or species which involves any technology which is injurious to the life or health of human beings, animals or plants shall be registered under this Act.

In this chapter the document further talks about the researcher's rights and some special provisions relating to application for registration from citizens of convention countries. At the end it says that where any country declared by the central Government in this behalf by notification in the Official Gazette does not accord to citizens of India the same rights in

respect to the registration and protection of a variety, as it accords to its own nationals, no national of such country shall be entitled, either solely or jointly, to apply for the registration of a variety or be entitled to get a variety registered under this Act.

In **chapter V**, the Act mentions the grounds for Surrender and Revocation of certificate and Re-certification and Correction of the Register.

The Act here says that a breeder of a variety registered under this Act may, at any time giving notice in the prescribed manner to the Registrar offer to surrender his certificate of registration and the Registrar shall notify every registered agent or licensee relating to such certificate. And such agent or licensee may give notice to the Registrar or his opposition to the surrender and where such notice is given, the Registrar shall intimate the contents of such notice to the breeder of such variety. If the Registrar is satisfied after hearing the applicant and all the opponents, that the certificate may properly be surrendered, he may accept the offer and by order revoke the certificate of registration.

The document further says that subject to the provisions contained in the Act, the protection granted to a breeder in respect to a variety may, on the application in the prescribed manner of any person interested, be revoked by the Authority on any of the following grounds, namely:

- ◆ that the certificate has been based on incorrect information furnished by the applicant;
- ◆ that the certificate has been granted to a person who is not eligible for protection under this Act;
- ◆ that the breeder did not provide the Registrar with such information, documents or material as required for registration under this Act;
- ◆ that the breeder has failed to provide an alternative denomination of the variety in case where the earlier denomination of such variety provided to the Registrar is not permissible for registration under this Act;
- ◆ that the breeder did not provide the necessary seeds or propagating material to the person to whom compulsory license has been issued;
- ◆ that the breeder has not complied with the provisions or rules or regulations and directions of the Authority under this Act;
- ◆ that the grant of the certificate is not in the public interest.

The document also says that no such protection shall be revoked without giving any opportunity to the breeder to file objection and of being heard in this matter.

The document further says that the Registrar has power to cancel or change registration and to rectify the Register on an application made in the prescribed manner to the Registrar by any aggrieved person.

In **chapter VI**, the document gives a list of some of the important provisions relating to farmers' rights. These are mainly:

- ◆ a farmer who has bred or developed a new variety shall be entitled for registration and other protection in like manner as a breeder of a variety under this Act;
- ◆ the farmers' variety shall be entitled for registration if the application contains declaration as specified in clause (h) of sub-section (1) of section 18;
- ◆ a farmer who is engaged in the conservation of genetic resources of land races and wild relatives of economic plants and their improvement through selection and preservation shall be entitled for registration



and reward from the Gene Fund provided the material so selected and preserved has been used as donors of genes in varieties registrable under this Act;

- ◆ a farmer shall be deemed to be entitled to save, use, sow, re-sow, exchange, share or sell his farm produce including seed of variety protected under this Act in the same manner as he was entitled before 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;

Provided that the farmer shall not be entitled to sell branded seed of a variety protected under this Act.

Here the document further says that the farmer or the group of farmers or any organization of farmers may claim compensation before the Authority where any propagating material of a variety fails to provide such performance under such given conditions as disclosed to them by the breeder while selling his seeds, the Authority, after giving notice to the breeder of the variety and after giving him an opportunity to file opposition and after hearing the parties, may direct the breeder to pay such compensation as it deems fit, to the farmers.

This chapter also talks about the rights of communities and protection of innocent, authorization of farmers variety and about Gene Fund. It also says that a farmer or group of farmers or village community shall not be liable to pay any fees in any proceeding being taken up before the Authority or Registrar or Tribunal or the High Court under this Act.

In **chapter VII**, the Act says that the Authority has the power to make order for compulsory license under certain circumstances.

The Act says that at any time, after expiry of three years from the date of issue of a certificate of registration of a variety, any person interested may apply to the Authority alleging that reasonable requirements of the public for seed or other propagating material of the variety have not been satisfied or the variety is not available to the public at a reasonable price and pray for the grant of a compulsory license to undertake production, distribution and sale of the seeds or other propagating material of that variety.

The Authority shall, while determining the terms and conditions of a compulsory license under this chapter, endeavour to secure reasonable compensation to the breeder of the variety relating to the compulsory license having regard to the nature of the variety, expenditure incurred by such breeder in breeding the variety or for developing it, and other relevant factors;

and that the compulsory licensee of such variety possesses the adequate means to provide to the farmers, the seeds or other propagating material of such variety, timely and at a reasonable market price.

The document also points out that the Authority has the power to revoke and modify the compulsory license as may be case, it deems necessary.

In **chapter VIII**, the document states that the Central Government may establish a Tribunal consisting of a Chairman, Judicial and Technical members appointed by the Central Government, to be known as Plant Varieties Protection Appellate Tribunal to exercise the jurisdiction, powers and authority conferred on it by or under this Act. The Tribunal shall enjoy the same power as the Authority and the Registrar do.

The document further says that an Appeal shall be preferred to the Tribunal by a petition in writing within the prescribed period from order or decision

of the Authority or the registrar, relating to registration of a variety, or to claim for benefit sharing, or revocation and modification of compulsory license, or payment of compensation, made under this Act, or the rules made there under.

In **chapter IX**, the document tells about Finance, Accounts and Audit. It says that the Central government may make to the Authority grants and loans for being utilized for the purpose of this Act through a fund to be called the Protection of Plant Varieties Authority Accounts. The accounts of the Authority shall be audited by the Comptroller and Audit-General of India on the expenses borne by the Authority.

**Chapter X** refers to Infringement, Offences, Penalties and procedure. Here the document says that subject to the provision of this Act, a right established under this Act is infringed by a person, who not being the breeder of a variety registered under this Act or a registered agent or registered licensee of that variety, sells, exports, imports or produce such variety without the permission of its breeder or the registered licensee or the registered agent, as the case may be.

Regarding penalty, the document points out that any person who applies any false denomination to a variety, or indicates the false name of a country or place or false name and address of a breeder of a variety shall unless he proves that he acted without intend to defraud, be punishable with imprisonment for a term of not less than three months extending to two years, or with a fine of fifty thousand rupees, extending to five lakh rupees, or both.

In this chapter the document gives a list of many more provisions under this Act.

In last chapter called 'miscellaneous' the document talks about the protection of security of India, implied warranty on sale of registered variety, power of the Authority and many other provisions required under this Act.

The document further says that not withstanding anything contained in this Act, the Authority or the registrar shall not disclose any information relating to the registration of a variety under this Act, which it deems prejudicial to the interest of the security of India. The document also says that the Central Government has the power to make rules and regulations to carry out the provisions of this Act.

At the end of this chapter, the document points out that every rule and regulation and every scheme made under this Act shall be laid, as soon as may be after it is made, before each House of Parliament, while it is session, and both the House agree in making any modification in the rules or regulations or schemes or both House agree that the rule or regulation or scheme should not be made, the rule or regulation or scheme shall thereafter have effect on in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule or regulation or scheme.

## **PFS ORDER, 1989**

### **The Plants, Fruits and Seeds (Regulation of Import into India) Order, 1989**

Ministry of Agriculture

(Department of Agriculture & Cooperation),

Government of India New Delhi, the 27th October, 1989

## **Bird's Eye View**

The document starts with a notification which says that in exercise of the powers conferred by sub-section (1) of section 3 of the Destructive Insects and Pests Act, 1914 (2 of 1914), and in suppression of Plants, Fruits and Seeds (Regulation of import into India) Order 1984, except as respects things done or omitted to be done before such suppression, the Central Government hereby makes the following order for the purpose of prohibiting and regulating the import into India of agricultural articles mentioned herein.

Chapter I of the document mentions the title of the order and gives definitions of various words used in the order.

Chapter II of the document talks about the general conditions for import. It says that all consignments of plants, fruits and seeds (hereinafter referred to as 'consignments') shall be imported into India subject to the following conditions-

1. No consignment shall be imported into India without a valid permit issued under clause (3);
2. (i) All applications for a permit to import consignments by land, air or sea shall be sent (in triplicate) at least one month in advance to the Competent Authority, and the application for the import of seeds, fruits and plants for consumption shall be made in form 'A' and that for the import of seeds and plants for sowing or planting shall be made in form 'B';  
(ii) A fee of Rs.50 shall be payable along with the application for the import of seeds, fruits and plants for consumption and Rs. 100 for the application for the import of seeds and plants for sowing or planting and the fee shall be payable in the form of Demand Draft payable to the competent authority having jurisdiction
3. (i) The Competent Authority shall issue permit in Form "C" for import of seeds and plants for sowing or planting, if he is satisfied that the applicant meets all the necessary conditions

Few more conditions are given in the document.

It further says that conditions specified in chapter II, the articles herein after mentioned shall be imported subject to special conditions prescribed for them in schedule II, namely :-

- i. All species of Allium;
- ii. Cacao and all species of Steruliaceae and Bombacaceae;
- iii. All species of Citrus;
- iv. Coconut, seeds and all species of Cocos;
- v. Coffee plants and seeds, and all species of coffee;
- vi. Cotton seeds and all species of Gossypium;
- vii. Seeds of forest trees;
- viii. Groundnut seeds, and all species of Araches;
- ix. Bucrene and all species of Medicago;
- x. Potato and all species of Solanum;
- xi. Rubber and all species of Hevea;
- xii. Sugarcane and all species of Saccharum;
- xiii. Tobacco and all species of Nicotiana;
- xiv. Berseem and all species of Trifolium;
- xv. Sunflower and all species of Helianthus;
- xvi. Wheat and all species of Triticum;
- xvii. Paddy and all species of Oryzae;
- xviii. Cuttings, saplings and bud-woods of flowers or ornamental plants;
- xix. Seeds and the plant material of fruits;

The document further says that every consignment of the articles herein before mentioned shall be accompanied with the official phytosanitary certificate issued by the authorized officer of the country of origin of consignment, containing additional declarations that they are free from pests specified against them in column 4 of schedule II.

## **The Changing Nature of Seed From Public Resource to Private Property**

By

Dr. Vandana Shiva and Tom Crompton

### **Bird's Eye View**

This 25-page document is one of the chapters' contained in a thicker document titled "Seeds of Suicide": The ecological and Human Costs of Globalization of Agriculture.

The objective of this document is to give an account of the impact of the new trade policies of the so-called 'liberalization' of the seed sector.

The chapter says that these new policies are leading to emergence of private seed companies by replacing public sector seed companies and removal of farmers' varieties. Farmers' suicide is the extreme result of these new policies of free market. Farmers are gradually falling prey to the marketing strategies of seed companies.

This document is divided into five parts. These are:

- ◆ Diverse Seeds for Diversity
- ◆ The decline of the Public Sector
- ◆ The Privatization of the Seed Sector
- ◆ Big Companies Getting Bigger
- ◆ Legislating for Privatization

In the sub-title called Diverse Seeds for Diversity it says that the farming community of the world has been a scientific plant breeder. Farmers have traditionally conserved and developed seeds of agricultural crops over centuries. These seeds have been freely exchanged with other communities again across the world and have led to the development of the new varieties, which usually suit their ecological, nutritional, medicinal, fodder, fuel and other needs. These have sometimes been called landraces to distance them from the contribution that the farmers have made towards their evolution through selection.

Farmers' varieties like any other seed varieties are an embodiment of intellectual contribution. These farmers' varieties are perennial and sustainable.

The document here points out that today with the entry of multinational companies in seed production and supply as well as in new technologies for producing seed, the seed varieties have been given a variety of names. The document says that today there are three kinds of producers of seed:

1. Farmer Seeds: the farmer has traditionally been the producer of perennial varieties, which could reproduce themselves eternally.
2. Public Sector Seeds: Public sector research institutions have bred short-term varieties for "high yield". These seeds could for sometimes, be saved and used by the farmers, but their yield reduces after few years.
3. Private sector Seeds: Private companies and Transnational Corporations produce non-renewable and therefore non-sustainable seeds through hybrids and tissue culture, where the farmer has to return to the company for fresh seed, each time he has to sow. It is also called the Biological Patenting Seeds, which effectively prevents the farmers from multiplying, saving and selling the seeds.

The document further says that the shift from farmers' varieties of seeds to the high yielding and hybrid varieties leads the farming system once controlled by peasants to one controlled by agri-chemical and seed corporations, and international agricultural research centres. And this shift

also made the seeds a costly input to be purchased by the farmers.

In this section the document also talks about the decline of the public sector and emergence of private sector.

The document says that in order to promote production and distribution of high quality seed in agriculture, The National Seed Corporation Ltd (NSC) was established in 1963, followed by the passage of The Central Seeds Act 1966, which laid the legal foundation for present day seed industry.

The document says that while the Green Revolution of the 1960s and 1970s was orchestrated by the public sector, the so-called Second Green Revolution based upon new hybrid and genetic technologies will be driven by the private sector.

The document further says that under Structural Adjustment Programmes (SAPs), investment in the public sector, and the competitiveness of the sector, has fallen. Its role has now diminished to:

1. Make provision of open pollinated seed. The majority of seed distributed by the State Seed Corporation (SSC) is open pollinated, the market of which is on the decline as pressure to use hybrid seed increases. Sales of Open Pollinated Varieties (OPVs) cannot compete directly with the private sector sales of hybrid seeds.
2. Sale of hybrid seed in crops for which there is little private sector interest.
3. Erosion of public sector market share, but the market is increasingly dominated by transnational companies or national companies with tie-ups with foreign companies.
4. Production of parental lines. The role of public sector research institutions is viewed as the production of parental lines to be given to private companies for further development.
5. Sale of private sector seed. Seed from private sector companies, particularly maize and sunflower seeds from trans-nationals, comprises an important proportion of total seed distribution through some State Seed Corporations. This attracts Central and State Government subsidies, amounting to direct though unacknowledged, governmental support for the private sector.

It further says that the National Seed Corporation became the distribution arm of the public sector, responsible for production and marketing of varieties bred at ICAR funded institutes and agricultural universities. But its role has been superseded by the State Seed Corporations as they are increasingly supplying private sector hybrids. Attempts were made by the World Bank to persuade the Director of NSC to cut back vegetable seed production.

The document further says that Indian seed industry is undergoing a rapid change due to economic liberalization of past decade including the New Seed Policy of 1988. The structural Adjustment Programmes of the 1990 and the coming into force of the WTO, agreement on Trade Related Intellectual Property Rights (TRIPs), the New seed Policy lifted restrictions on private sector to import foreign germplasm, enabling the larger seed producers to access seeds from international sources. The public sector has been focusing on the development and production of open pollinated varieties, which are less commercially exploitable than the hybrid seeds, which are being developed and distributed by the private sector seed

companies. This is a polarization, which is set to continue, particularly as pressure is on farmers to use high yielding hybrid seeds instead of the open pollinated seed currently used by the farmers.

The document says that the private sector is predominantly concerned with conversion of farmers currently relying upon open pollinated varieties to use of hybrids. It also says that there have been several recent and discrete legislative changes, which have promoted the growth of the private sector.

The document points out that multinational companies are beginning to move into crops, which have been dominated hitherto by domestic companies. For example, Cargill, is pushed to sell sorghum hybrids. These multinational companies put emphasis on sale of seeds at high price, justifying it on the basis of higher yield, consumer confidence, and after-sale back-ups. Those poor farmers who can not afford hybrid seeds, or higher input levels, and are vulnerable to increase in the price of fertilizers and pesticides are seen to present a secure market for small domestic companies. Small companies also recognize that open pollinated varieties have a longer marketable life expectancy, whereas hybrid varieties, derived from western germplasm are more susceptible to pests and disease, and have a commercial longevity of around just five years.

The document says that one alternative role for smaller companies are the contractual production of seed for larger foreign companies. But some small companies find it difficult to produce sufficient seeds to meet the supply. For example, Bhavani Seeds Company has difficulty to find local grower, as a result they have had to contract their seed production to farmers in the interior.

The document further says that the representatives of smaller seed companies realize that they are squeezed between a reliance upon a diminishing market among poorer farmers for open- pollinated varieties, and direct competition with multinational companies, who are well aware of the effects of their increasing share upon smaller domestic companies.

A small seed company like the Bhavani Seed is embittered, that the price paid for hybrid seed produced under contract for multinational companies are significantly higher than they themselves can afford to pay.

The document says that wide spread disparities in the pricing of the hybrid seed may be attributable to the differing advertising policies and promotion strategies of specific companies. In practice, it is difficult to control other factors, which may lead farmers to prefer one brand to another.

The document under the sub-title "Legislating for privatization" says that under the trade Intellectual property Rights (TRIPs), arrangement of the World Trade organization (WTO), signatories are required to legally confer exclusive property rights to seed production. If these are conferred through legislation in consistence with the International Union for the Protection of new Varieties of plants, 1991, farmers will be divested of their rights to exchange seed, even to save seed for their own use. It amounts to legislation for further privatization of the seed industry and a decline in public sector seed development and production, which will be in the hands of few companies who collude to manipulate prices, and limit supply of seed.

Towards the end the document gives several reasons for expecting that



the seed industry will coalesce under the contract of few large companies with foreign interest. The reasons are:

- ◆ Hybrid seed is produced principally by large companies, and its use is set to increase following the decline of the public sector. Public sector efforts to increase farmers' acceptance of hybrid seed, and decreased use of farmer-saved seed; and private sector promotion and advertising strategies.
- ◆ Smaller companies will experience increased difficulty to compete because the market is fickle.
- ◆ There will be an increased use of transgenic crops, which are produced only by those companies who are able to meet the high development costs. Small companies will thus be excluded from such a market sector, which is likely to grow.

Under the subtitles "**Seeds of Distress and Seeds of Suicide**" and "**IPRs: Legal Control of the Seed**", the document talks about the agricultural crisis caused by the multinationals and various Acts made by the Government in the seed sector, leading to farmers untimely deaths. The document says that the testimony of farmers from Andhra Pradesh, Punjab, Karnataka, Orissa, Bihar, West Bengal and Garhwal reflected the dimensions of the nation-wide seed and agricultural crisis. The evidence showed growth of corporate monopoly in the seed sector and farmers' increasing dependency on these monopolies, which leads them to choose death as the only possible way out.

The document further says that Prof. K. Gopal Iyer of Dept. of Sociology at the Punjab University (Chandigarh), in a comparative study of such suicides, highlights the factors that contribute to such deaths. These factors are:

- ◆ cumulative crop loss;
- ◆ cumulative debt;
- ◆ supply and use of spurious seeds and pesticides;
- ◆ seeds not tested enough before distribution;
- ◆ increase in the number of dependents in a family;
- ◆ private money-lenders which charge a high rate of interest.

The document also points out that corporate monopolies now take control over agriculture and all agricultural decisions. And the farmers today are becoming just one factor in a giant food production, manufacturing and delivery system called agribusiness, a trade in commodities, controlled by the corporations like Monsanto and Cargill, nationally and internationally. In this agribusiness there is no place for small and marginal but independent farmer.

The document further says that these multinationals are making profits through supply of spurious and 'truthful' seeds. It says that the seed sector, which is a cornerstone of agriculture, becomes the best place for them to start earning profits. The leading cause of farmers' suicide is debt linked to crop failure due to extensive spread of monocultures and "truthful hybrids seeds". It says that there is no regulation to prevent marketing 'truthful' seeds as it takes long time to be certified, which the farmers cannot wait for. For example, in Warangal in Andhra Pradesh, commercial crops have been grown since 1980s but because of major losses incurred

in agriculture the farmers are desperate now and turn to anyone for inputs, promising them high yields.

The document says that the farmers are basically dependent on the dealers of seed who also supply them the pesticides and fertilizers, which often turn out to be spurious. These dealers also advise the farmers about the use of pesticides, handle the credit facilities and give loan at a very high interest, thus pushing the farmers into deep debt. The document also says that the multinational corporations like Monsanto and Cargill that are in both seed and the chemical business are directly marketing their products deep into the villages.

The document further points out that it is quite evident that there is a nexus between the government and the industry as when the farmers approach the government agencies for help. In most of the cases, instead of taking any action against the dealers of spurious and truthful seeds, the government officials turn the farmers away by blaming the climate rather than the seeds.

The document says that seed is one agricultural input that has traditionally been in the hands of the farmers who save, exchange and sell seeds to one another. Till a few years ago, over 70% of the seed supply in India was farmer- to- farmer based.

The document further says that if agriculture has to be controlled, the seed itself has to be controlled both structurally and legally. But the inherent right of the farmers to save and exchange seeds is under threat. The new Patent laws, Plant Varieties laws and Biodiversity Act introduced in India have serious impacts for the Indian farmers already burdened with high cost seed supply controlled by the corporate. The proposed Plant Variety Protection Act fails to protect the rights of the small and marginal farmers. The Patents (Second) Amendment Act 1999 provides for patenting life and promotes bio-piracy of our indigenous knowledge and resources. The Plant Variety Protection Act is being amended to allow corporate Intellectual property Rights (IPRs) on farmers' varieties.

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