

FARMERS' RIGHTS IN LAW: CONTROL OVER GENETIC RESOURCES

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The General Agreement on Trade and Tariffs (GATT), the predecessor to the World Trade Organisation (WTO), was started to restore world trade after the end of the Second World War in 1945. Several GATT rounds starting from 1948, dealt with the quotas and duties of tradable commodities between nations. The 1986 GATT Round, popularly known as the Uruguay Round, brought in new elements into the trade discussion, specially relating to agriculture. One of the most controversial agreements of the Uruguay Round is that relating to the granting of Intellectual Property Rights on biological materials embodied in the TRIPS chapter. TRIPS refers to Trade Related Intellectual Property Rights and specifically requires member nations to grant patents on biological resources like microorganisms, non/biological and microbiological processes as well as an effective IPR protection for plant varieties.

These developments were prompted by the biotechnology industry in developed countries, primarily the US. Whereas the industrial nations had a slew of biotechnologies, the raw material needed by the industry, the biological resources, were not located in their territories but in the countries of the south. The Intellectual property regime was the instrument devised to gain guaranteed access to the resources of the south without which the technologies could not produce the products. By compelling all members to accept an IPR regime over biological resources, the legally skilled Americans were hopeful of getting access to genetic resources through patents and other forms of IPR.

TRIPS provide a choice for protecting plant varieties. Members may choose from patents, a *sui generis* system or a combination of the two. Most developing countries including India have decided not to have patents for plant varieties and have chosen the *sui generis* option instead. The *sui generis* system (translating roughly into *self generating*) means any system a country decides on, provided it grants effective Plant Breeders Rights. TRIPS does not specify what kind of Breeders Rights and it does not say what else a member state can put in its law, apart from Breeders Rights. In short, TRIPS is a flexible system, which leaves a lot to the discretion of members. As a response to the TRIPS agreement, India has started enacting a series of domestic laws to implement the commitments it has made. The Plant variety Protection and Farmers, Rights Act, 2001, is the Indian *sui generis* legislation.

The Indian legislation is the first in the world to grant formal rights to farmers in a way that their control over genetic resources and their self-reliance in agriculture is not jeopardized. What is significant about this legislation is that it charts its own course, deviating from the norms set by UPOV. The Union for the Protection of New Plant Varieties (UPOV) is at present the only platform for regulating Plant Breeders Rights. It is a developed country platform, which is modulated to protect the interests of agriculture in industrial countries. It does not even have the notion of Farmers Rights. The innovative Indian legislation has opened up interesting possibilities for developing a developing country platform for regulating Breeders and Farmers Rights so that both, not just one, are acknowledged and protected. The salient features of the new law are as follows.

How these rights over resources were obtained

The government of the day was greatly inclined to accept patents and a large scale propaganda exercise was launched describing the patenting of seeds as the great good fortune of farmers and the harbinger of prosperity for rural India. It was an aggressive and

sustained campaign on the part of the NGO community that forced the government to change its stand and opt for the TRIPs sui generis system instead. Gene Campaign has been in the forefront of this campaign from the start, even having initiated it.

Once the sui generis path was decided, came the question of what kind of legislation we would give ourselves which would accord Plant Breeders Rights in India for the first time. Gene Campaign's position right from the start has been that if the status quo has to be changed and we have to grant Plant Breeders Rights, our legislation will have to grant a strong Farmers Rights at the same time. To recalcitrant and unwilling governments, we pointed out over and over again, that there was nothing in TRIPs or Article 27.3(b) that came in the way of granting Farmers Rights. And that even if there were to be any restriction on the granting of Farmers Rights, it would be impossible for India to accept such a restraint.

Gene Campaign's demand has been for a Farmers Right that would allow the farming community to retain the same control over seed and seed production and use that they have always had. As against the widely articulated demand that Farmers Rights should constitute the right to save seed from the harvest to sow the next crop (plant back rights), Gene Campaign's position has been different. We have maintained that plant back rights were no rights, only exemptions. Such exemptions, sometimes referred to as Farmers' Privilege, were allowed by Breeders in the early years of UPOV and were limited to plant back rights in varying degrees. In some UPOV member countries, France for example, limited exemptions were granted to farmers, in others like Greece, these were more generous. Exemptions for farmers were retained till the 1978 version of UPOV. They have been considerably diluted since. After the last amendment in 1991, exemptions for farmers are no longer a matter of course. They have been made optional and are subject to the consent of the Breeder (read seed company).

Gene Campaign has insisted that Indian law has to grant well defined rights, not just provide beggarly exemptions, to its farmers. These rights have to be recognised because of the past and present contributions made by the farming community to the conservation of agro-biodiversity and their role as dynamic breeders of new varieties, which anchor the food security of the world. Our demands for a farmers right were comprehensive and included several other features which would protect the farmers. We wanted payment for the use of farmer varieties and their informed consent. We also wanted compensation for the farmer if poor quality spurious seeds led to crop failure. To make certain fancy new companies do not displace the farmer as a seed producer, the key element was to ensure that the farmer retained the right to sell seed to other farmers, even if a Breeders Right protected the variety. This right of the farmer to sell seed was crucial to maintaining his control over it. It was also central to the nation's self reliance in agriculture. This clause, the right to sell seed, was the most fiercely resisted and was till the end, the major bone of contention.

The Indian law now recognizes the farmer not just as a cultivator but also as a conservor of the agricultural gene pool and a breeder who has bred several successful varieties. The Bill makes provisions for such farmers varieties to be registered, with the help of NGOs so that they are protected against being scavenged by formal sector breeders. The rights of rural communities are acknowledged as well.

Farmers Rights

The final version of the much fought over clause on what constitutes a Farmers Right now reads like this.....

The 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.

Explanation :- for the purpose of clause (iii) branded seed means any seed put in a package or any other container and labeled in a manner indicating that such seed is of a variety protected under this Act."

This formulation allows the farmer to sell seed in the way he has always done, with the restriction that this seed can not be branded with the Breeder's registered name. In this way , both Farmers and Breeders rights are protected. The Breeder is rewarded for his innovation by having control of the commercial market place but without being able to threaten the farmers' ability to independently engage in his livelihood, and supporting the livelihood of other farmers.

Importance of Farmer's Right to Sell Seed

The pivotal importance of the farmer having the right to sell (not save, not exchange, but sell) seed has to be seen in the context of seed production in India. In India, the farming community is the largest seed producer, providing about 85% of the country's annual requirement of over 60 lakh tons. If the farmer were to be denied the right to sell, it would result in a substantial loss of income for him. But far more importantly, such a step would displace the farming community as the country's major seed provider. Their only replacement if this happens, will be the large Life Science corporations since budget cuts have seriously weakened the capacity and output of the other player, the public research institutions.

It is important to understand the political economy of seed production and seed sale in India and in the world, to understand why it was absolutely crucial for the farmer to retain the right to sell. In India, the farming community is the largest producer of seed, supplying the bulk of India's seed requirement. The Agro-Chemical giants turned Life -Science Corporations have emerged as the largest seed producers in the industrialised nations. In Europe and the US, as also in Canada, Australia, New Zealand , Japan and to a lesser extent, Korea and some Latin American countries, seed production is now in the hands of the large corporations. Control over the seed sector was established by the simple expediency of buying up all the smaller seed companies. In India, such a strategy can not work because there are simply no seed companies of any significance or size that can be bought and that would transfer their market share to the MNC that bought it.

In India, a strategy to control seed production would have to rest on knocking the farmers out of the market by some other means. Since they are not organised in a company that can be purchased, this can only be done, by legally taking away their right to sell seed. If the farmer can be stopped by law from selling seed (and by implication, producing seed) , the market automatically becomes available to the next alternative, the MNC. This is precisely why the Farmers Right clause in the Indian PVP legislation has been the subject of such a tussle between the seed industry and pro-farmer groups like Gene Campaign.

Weak Farmers Rights will allow seed corporations to dominate the seed market. Strong Farmers Rights keeps the farming community alive and well as viable competitors and an effective deterrent to a take over of the seed market by the corporate sector. Control over seed production is central to self-reliance in food. The need for this self-reliance can not be

over-emphasised. Food security is in the forefront of national security. A nation that does not produce its own seed and its own food can not be a secure nation.

Other kinds of Farmers' Rights

Apart from the right to sell (unbranded) seed of protected varieties as before, the rights of farmers and local communities are protected in other ways too. There are provisions for acknowledging the role of rural communities as contributors of landraces and farmer varieties in the breeding of new plant varieties. Breeders wanting to use farmers varieties for creating Essentially Derived Varieties (EDVs) can not do so without the express permission of the farmers involved in the conservation of such varieties.

Essentially Derived Varieties (EDV) are those varieties that are more or less (essentially) the same as the parent variety except for limited, specific changes. Varieties are considered essentially derived when they are developed in such a way that they retain virtually the whole genetic structure of the earlier variety. Most genetically modified (GM) varieties are EDVs. For example Bt cotton is a cotton variety, identical to its parent except for the single difference of containing a bacterial gene from the *Bacillus thuringensis*. So also Bt corn.

Any person, governmental or non- governmental agency is entitled to register a community's claim and have it duly recorded at a notified centre. This intervention enables the registration of farmer varieties as sources of germplasm, even if the people themselves can not do this themselves due to illiteracy or lack of awareness. If the claim on behalf of the community is found to be genuine, a procedure is initiated for benefit sharing so that a share of profits made from the new variety goes on behalf of communities, into a National Gene Fund.

Disclosure

Other details supportive of the rights of farmers are the explicit and detailed disclosure requirements in the passport data, which has to be submitted at the time of applying for a Breeders certificate. Passport data refers to the data about the parentage of the new variety. In this case it includes details like name and location of any farmers varieties used. If any concealment is detected in the passport data, the Breeders certificate stands to be cancelled.

GURT (terminator) forbidden

There is a clause prohibiting breeders from using sterile seed technologies. Breeders will have to submit an affidavit that their variety does not contain a Gene Use Restricting Technology (GURT) or terminator technology.

Exemption from fees

Further protecting farmers from the new set of provisions being put in place, the Act stipulates that if farmers wish to examine documents and papers or receive copies of rules and decisions made by the various authorities, they will be exempt from paying any fees. Such fees would be payable by all other people wanting to examine documents and receive copies of decisions from the National Authority, the Registrar, the Tribunal and various other committees.

Protection against innocent infringement

The law has also attempted to address a concern voiced by several quarters, that when the new system of Plant Breeders Rights is imposed for the first time, there may be cases of unknowing infringement of Breeders Rights. Section 43 specifies that the farmer can not be prosecuted for infringement of rights specified in the Act if he can prove in court that he was unaware of the existence of such a right.

So if the farmer uses the registered name of the breeder informally, while selling seed, he is protected if it can be shown that he did not know that there was a new law in place which places some restrictions on his traditional rights, including the right to sell seeds.

Benefit Sharing

The use of farmer varieties to breed new varieties will have to be paid for. Revenue generated in this way is to flow into a National Gene Fund .Despite its good intentions of protecting the interests of the farming community, the new law is likely to create problems in implementation because the description of the National Gene Fund is confused and poorly, drafted The Gene Fund should be the recipient of all revenues payable to the farming communities under various heads. This money should be collectively, rather than individually, accessed by farming communities. Exceptions can be made where individuals are clearly identified as breeders of specific varieties. The use of the money should not be restricted to conservation or for maintaining ex situ collections. That would mean that the revenue generated from the use of farmer varieties would partly be used to maintain the National Gene Bank in Delhi. This would be blatantly unfair. The money earned by the farming community should be theirs to spend as they wish and not frittered away to meet the expenses incurred by committees or to maintain national facilities which are the nation's responsibility. The method proposed for fixing and realising benefit sharing should be made more simple and straight forward . At present it is a messy, convoluted exercise.

Protection against bad seed

In providing a liability clause in the section on Farmers Rights, the farmer in principle is protected against the supply of spurious and/ or bad quality seed. However, the clause is weakly framed, leaving too much to the discretion of the Authority .Companies selling poor quality seeds with tall claims have been the cause of several crop failures leading to irrecoverable losses for the farmer, sometimes with the tragic consequence of farmers committing suicide. The Act states that if the seed supplied does not perform as has been promised by the breeder/ company , the farmers shall have the right to claim compensation. The compensation should be specified and should be large enough to be a deterrent. If it is proven that the breeder has made false claims and the farmer has suffered a crop failure, then compensation should be awarded amounting to at least twice the projected harvest value of the crop. In addition, a jail term should be provided if the breeder repeats the offence of selling bad quality seeds.

The Indian law grants apart from rights to the farmer, also rights to plant breeders and to scientists and researchers to use genetic materials for breeding new varieties. It contains clauses to protect the public interest and has provisions for compulsory licenses.

After a Plant Variety legislation, what next?

The next step is to decide through which international platform India will interact with other nations. At present the only international platform is the UPOV, a corporate controlled platform regulating Plant Breeders Rights for the industrial nations. The Life Science Corporations control UPOV which on last count had 52 members. The only three Asian countries that are members are Japan, China and South Korea

The International Union for the Protection of New Varieties of Plants (UPOV) is an inter-governmental organization with headquarters in Geneva. The Convention was signed in 1961. It was revised in 1972, and 1978. The Convention was further revised in 1991 to strengthen the protection offered to the breeder and dilute the exemptions granted to the farmer for planting back seed. The conditions of UPOV 1991 do not allow the farmer to save seed unless individual governments with the consent of the breeder allow limited exceptions. UPOV

1991 also introduces patents by allowing dual protection. This means UPOV members can patent plant varieties.

Why India should not join UPOV

Gene Campaign opposes India joining UPOV because UPOV does not address our needs and because its working is totally alien to the conditions of agriculture prevailing in the countries of the south. We believe that developing countries must create their own platform which will grant apart from Breeders Rights, also Farmers Rights and be geared to work towards food and nutritional security in our countries. There is no concept of Farmers Rights in the UPOV system, rights are granted only to the breeder which in today's context are the seed companies.

- In the UPOV system, rights are granted only to the breeder, there are no rights for the farmer.
- The UPOV system embodies the philosophy of the industrialized nations where it was developed and where the primary goal is to protect the interests of powerful seed companies who are the breeders.
- In India the position is very different. Our major seed producers are farmers and farmers cooperatives. Logically, our law will have to concentrate on protecting the interests of the farmer in his role as producer as well as consumer of seed.
- UPOV is a system headed towards outright patents. It permits dual protection of varieties, Plant Breeders Right (PBR) and patents can protect the same variety. Starting with its first amendment in 1978 when limited restrictions were placed on protected seed, the 1991 amendment brought in very strong protection for the plant breeder. In this version, breeders are not exempt from royalty payments for breeding work and the exemption for farmers to save seed has become provisional.
- UPOV laws are formulated by countries which are industrial, not agricultural economies. In these countries the farming community is by and large rich and constitutes from 1 to 5% of the population. These countries do not have the large numbers of small and marginal farmers like we do.
- UPOV laws are framed in countries with a completely different agriculture profile to ours. These are countries where subsidy to agriculture is of a very high order unlike India. Because they produce a massive food surplus, farmers in industrialised countries get paid for leaving their fields fallow. The UPOV system does not have to protect the farming community of Europe in the way that our laws will have to protect ours.
- In the industrialised nations agriculture is a purely commercial activity. For the majority of Indian farmers however, it is a livelihood. These farmers are the very people who have nurtured and conserved genetic resources. The same genetic resources that breeders want to corner under Breeders Rights.
- Almost all agricultural research and plant breeding in India is financed with the taxpayers money. It is conducted in public institutions like agricultural universities and institutions of the Indian Council of Agricultural Research (ICAR). This research belongs to the public. The laws of UPOV on the other hand are formulated by societies where seed research is conducted more in the private domain than in public institutions; where big money is put into breeding using recombinant DNA technology which is expensive. Because they invest in expensive breeding methods and need to secure returns on their investments, seed companies in Europe seek market control through strong IPRS. These conditions do not apply in India.
- The UPOV system is far too expensive. The costs of testing, approval and acquiring an UPOV authorised Breeders Right certificate could be in thousands, even lakhs. Such rates will effectively preclude the participation of all but the largest seed companies. There

certainly will be no space in such a system for small companies, farmers co-operatives or farmer/breeders.

Farmers play a significant role as breeders of new varieties. They often release very successful varieties by crossing and selection from their fields. These varieties are released for use as such. In addition, in almost all cases, these varieties are taken up by agriculture universities as breeding material for producing other varieties. Such farmer/breeders would not be able to participate in an expensive system like UPOV.

Their material along with their labour and innovation would be misappropriated by those with the money to translate such valuable germplasm into money-spinning varieties registered in UPOV. Poor farmers unable to pay the costs of getting an UPOV certificate, would tend to sell their varieties for small sums to larger seed companies. This will be the ultimate irony, creating an institution that will snatch away from the farmer his material and his opportunities.

CoFaB, a developing country alternative to UPOV

Gene Campaign along with Centre for Environment and Agriculture Development, has drafted an alternative treaty to UPOV to provide a forum for developing countries to implement their Farmers and Breeders Rights. This treaty is called the **Convention of Farmers and Breeders, CoFaB** for short. CoFaB has an agenda that is appropriate for developing countries. It reflects their strengths and their vulnerabilities and it seeks to secure their interests in agriculture and fulfil the food and nutritional security goals of their people.

Unlike the provisions of the UPOV, the CoFaB treaty seeks to fulfil the following goals :

- * Provide reliable, good quality seeds to the small and large farmer
- * Maintain genetic diversity in the field
- * Provide for breeders of new varieties to have protection for their varieties in the market, without prejudice to public interest.
- * Acknowledge the enormous contribution of farmers to the identification, maintenance and refinement of germplasm
- * Acknowledge the role of farmers as creators of land races and traditional varieties which form the foundation of agriculture and modern plant breeding,
- * Emphasise that the countries of the tropics are germplasm owning countries and the primary source of agricultural varieties
- * Develop a system wherein farmers and breeders have recognition and rights accruing from their respective contribution to the creation of new varieties

The salient features of CoFaB are as follows

1. **Farmers rights:** Each contracting state will recognise the rights of farmers by arranging for the collection of a Farmers Rights fee from the breeders of new varieties. The Farmers Rights fee will be levied for the privilege of using land races or traditional varieties either directly or through the use of other varieties that have used land races and traditional varieties, in their breeding program.

Farmers Rights will be granted to farming communities and where applicable, to individual farmers. Revenue collected from Farmers Rights fees will flow into a National Gene Fund (NGF) the use of which will be decided by a multi-stakeholder body set up for the purpose. .

The Rights granted to the farming community under Farmers Rights entitles them to charge a fee from breeders every time a land race or traditional variety is used for the purpose of breeding or improving a new variety.

Rights granted to the farmer and farming community under Farmers Rights are granted for an unlimited period.

2. **Breeders rights:** Each member state will recognise the right of the breeder of a new variety by the grant of a special title called the Plant Breeders Right.

The Plant Breeders Right granted to the breeder of a new plant variety is that prior authorisation shall be required for the production, for purposes of commercial and branded marketing of the reproductive or vegetative propagating material, as such, of the new variety, and for the offering for sale or marketing of such material. Vegetative propagating material shall be deemed to include whole plants.

The breeder's right shall extend to ornamental plants or parts of these normally marketed for purposes other than propagation when they are used commercially as propagating material in the production of ornamental plants or cut flowers.

Authorisation by the breeder shall not be required either for the utilisation of the new variety as an initial source of variation for the purpose of creating other new varieties or for the marketing of such varieties. Such authorisation shall be required, however, when the repeated use of the new variety is necessary for the commercial production of another variety. At the time of application for a Plant Breeders Rights, the breeder of the new variety must declare the name and source of all varieties used in the breeding of the new variety. Where a land race or farmer variety has been used, this must be specially mentioned.

In order to promote a more sustainable kind of agriculture and without any prejudice to the quality and reliability of the new variety, CoFaB enjoins breeders of new varieties to try to base the new variety on a broader rather than a narrower genetic base, in order to maintain greater genetic variability in the field. Further, a variety for which rights are claimed must have been entered in field trials for at least two cropping seasons and evaluated by an independent institutional arrangement. The breeder at the time of getting rights will have to provide the genealogy of the variety along with DNA finger printing and other molecular, morphological and physiological characteristics. The right conferred on the breeder of a new plant variety shall be granted for a limited period, depending on the variety.

In the event of a variety becoming susceptible to pest attack, the normal period of protection may be curtailed to prevent the spread of disease. In order to monitor this, periodic evaluations will be undertaken. The breeder or his successor shall forfeit his right when he is no longer in a position to provide the competent authority with reproductive or propagating material capable of producing the new variety with its morphological and physiological characteristics as defined when the right was granted. The breeder will also forfeit his right if the "Productivity Potential" as claimed in the application is no longer valid.

To give primacy to the goals of food security, it has been provided in CoFaB that the right of the breeder will be forfeited if he is not able to meet the demand of farmers, leading to scarcity of planting material, increased market price and monopolies. If the breeder fails to disclose information about the new variety or does not provide the competent authority with the reproductive or propagating material, his right will be declared null and void.

The UNDP Human Development Report (HDR) 1999 has commended the Convention of Farmers and Breeders (CoFaB) as an alternative to UPOV. Describing CoFaB as a "strong and coordinated international proposal which offers developing countries an alternative to

following European legislation by focusing legislation on needs to protect farmers' rights to save and reuse seed and to fulfil the food and nutritional security goals of their people."Gene Campaign's purpose in drafting an alternative to UPOV was to provide the basis for a discussion on what kind of non- UPOV platform developing countries should have. Once there is a comprehensive analysis and critique and consensus emerges among developing countries, it will not take long to come up with a minimum operational framework with which to start.

Post script

After spending about eight years developing a chapter on Farmers' Rights in the national legislation which consciously deviated from the UPOV model, the Indian cabinet has recently given approval to the Agriculture Ministry's proposal to join UPOV. This development has caused consternation among national and international experts who find it difficult to understand why a country would behave in this retrogressive way. The opinion of all experts, including those associated with UPOV, is unanimous, that India's legally granted farmers' rights will have to go if they wish to join UPOV. Gene Campaign has filed a writ petition in the Delhi High Court asking for the government to be restrained from taking any steps that will jeopardize the recently granted rights to farmers. The matter is sub judice.