POLICY BRIEF

SOUTH ASIA WATCH ON TRADE, ECONOMICS & ENVIRONMENT

No. 4 Year. 2002

Protecting Mountain Farmers' Rights in INDIA

BACKGROUND

The Himalayas is one of the well-defined phyto-geographical regions of the Indian sub-continent. It is thought to have formed some 15 million years ago as a result of collusion of peninsular plate with the Asian continental plate. The Himalayas stretch 2,500 km in length, occupying an area of about 23,600 sq. km in India. Its width ranges from 240 to 340 km and goes above 8,000 m above mean sea level. Geographically Indian Himalayas primarily consist of: North Western Himalayas - comprising of states of Jammu and Kashmir (J&K) and Himachal Pradesh (HP); Central Himalayas - comprising of newly formed state of Uttaranchal; Eastern Himalayas - comprising of states of Sikkim and Arunachal Pradesh (AP); and North Eastern Himalayas - extension of eastern flank encompassing states of Assam, Tripura, Manipur, Nagaland and Mizoram. Because of its vast diversity in soil, slope, altitudes and ecological conditions, it hosts diverse life forms. The agro-biodiversity forms the basis of existence of human life on earth. It broadly covers all forms of life that concern agriculture production systems existing among farming communities. The various components of agro-biodiversity may include crop plants and their wild relatives, weeds, fruit, forestry species, soil microorganisms, domesticated and wild animals, insects-pests etc.

MOUNTAIN AGRO-ECOSYSTEM

In hills crop husbandry is the main occupation of the people providing direct employment to about 71 percent of the main working population. The area under cultivation in HP Himalayas is 0.981 million (m) hectre (ha) which constitutes 17.60 percent of the total geographical area of the State. The comparative figures in the case of J&K Himalayas and UP Himalayas are 0.74 m ha (5.28 percent) and 0.97 m ha (18.97 percent) of the total geographical area respectively. The land holdings are mostly marginal with insignificant percentage of large category (<5.0 and above ha.). The farm production is mostly of subsistence nature (except fruit and vegetables) due to small size of holdings, lack of irrigation facilities and low level of adoption of improved seeds and modern farming technology. Despite the efforts made in various government plans, the food grains exhibited poor growth owing to the reason that development models followed at national level were alien to mountain milieu, and their percolation was hindered by difficult accessibility and poor communication network in the hill area. Thus, the productivity of the food grains in the western Himalayas remained low and stagnant. Even after achieving lucrative returns from the cultivation of off-season vegetables, many farmers have to revert to food grain production on account of irregular supply of pesticides/fungicides, fertilisers, quality seeds and uncertain environment and market. A shift in land use pattern from traditional crops to horticulture crops is accelerating changing the scenario of hill agriculture.

HIMALAYAN BIODIVERSITY

The agricultural prosperity of Himalayan people solely depends on wider base of agro-biodiversity. This biodiversity may be at the crop species level or at varietal (genetic) level. The available bio-resources are utilised in an optimum way to ensure the supply of food in spite of weather odds, epidemics of diseases and insect-pests. It is, therefore, pertinent to maintain wide base of agro-biodiversity (species diversity) in order to ensure the livelihood of the people living in Himalayas.

MOUNTAIN GENETIC EROSION

As a policy issue the Central and State governments of India have been making massive efforts to modernise agriculture by laying much emphasis on the cultivation of improved varieties that are responsive to inputs. These high-yielding varieties have replaced the landraces of wheat, rice, maize and other crops at an alarming rate. The landraces today can be found only in remote, landlocked, inaccessible areas, which have difficult means of communication. This is true in case of HP where depletion of native diversity commensurate with the pace of development. The situation in J&K hills, Uttaranchal, Sikkim, AP and other northeastern states, however, is not so bad. Today, some of the crop species have become rare or completely lost from the cultivation. For example, in Meghalaya, a local cereal *Digitaria cruciata var. esculanta* has become rare. Similarly, in HP, crops like *Vigna mungo, Vigna radiata, Macrotyloma uniflorum, Cicer arietinum, Eleucine coracana, Panicum miliaceum* have become either rare or extinct. In Tripura, landraces of rice have been reduced to 32 from 105 in 1975. The millets and pseudo-cereals in the Himalayas have become the victim of new cash crops like peas, potatoes and fruit crops.

The crop plant species under cultivation across the Himalayas include over 139 crop species. The total crop species in India may be around 166 species, which represent about 84 percent of predominant species under cultivation. The North Eastern Himalayan region is endowed with rich biodiversity of agri-horticultural plants and is home to nearly 167 species that represent 47 percent of the crop species diversity available in the country. In the Eastern & North Eastern Himalayan regions, the varietal or genetic diversity has been narrowed down to a few improved varieties from 60 landraces in rice, 29 landraces in wheat and 13 landraces in maize. The total crop plant diversity in the Central Himalaya is 119, which is about 33 percent of the total crop agro-biodiversity in the country.

The Central Himalaya represents the newly formed state of Uttaranchal where loss of genetic materials has been comparatively slow. But as the communication improves, the replacement of landraces and some traditional crops will increase. These will be replaced by few improved high yielding varieties and major crops will replace some of the famine food crops such as millets and pseudo-cereals. The genetic diversity in crops like rice, maize and wheat has been recorded as 49, 5 and 10 respectively in the region. Though the temperate fruit and nuts diversity is narrow, the expansion of area under these fruits has resulted in replacement of traditional crop species such as grain amaranth, chenopods and buckwheat.

PROTECTION OF PLANT VARIETIES AND FARMERS' RIGHTS ACT

Over 200 million Indian farmers and farm workers have been the backbone of India's agriculture. Despite having achieved national food security, the well being of the farming community continues to be a matter of grave concern for the planners and policy makers in the country. The establishment of an agrarian economy, which ensures food and nutrition to India's billion people, raw materials for its expanding industrial base and surpluses for exports, and a fair and equitable reward system for the farming community for the services they provide to the society, will be the mainstay of reforms in the agriculture sector.

The Plant Variety Protection and Farmers Rights Bill has finally been passed by both houses of the Indian Parliament. A long and arduous struggle waged for the recognition of the rights of farmers in India's *sui generis* legislation has come to an end with the passage of the Bill. India has now put in place a law to grant Plant Breeders' Rights (PBRs) on new varieties of seeds, for the very first time. What started as a Bill heavily loaded in favour of breeders and falling far short of protecting the rights of farmers, has now got a reasonable section on Farmers' Rights.

CORE FARMERS' RIGHTS

The Act recognises the farmer not just as a cultivator but also as a conserver of the agricultural gene pool and a breeder who has bred several successful varieties. The Act makes provisions for such farmers' varieties to be registered, so that they are protected against being scavenged by formal sector breeders. The rights of rural communities are acknowledged as well. The final version of the much fought over clause on what constitutes a Farmers' Right [Section 39 , clause (iv)], 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 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/she has always done, with the restriction that this seed cannot be branded with the breeder's registered name. In this way, both Farmers' and Breeders' rights are protected. The breeder is rewarded for his/her innovation by having control of the commercial market place but without being able to threaten the farmers' ability to independently engage in his/her livelihood, and supporting the livelihood of other farmers. Strong Farmers' Rights keep the farming community alive as well as viable competitors and an effective deterrent to the take over of the seed market by the corporate sector. Control over seed production is central to food security, which is in the forefront of national security.

OTHER KINDS OF FARMERS' RIGHTS

Apart from the right to sell non-branded seed of protected varieties, 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) cannot do so without the express permission of the farmers involved in the conservation of such varieties.

EDVs are those varieties, which are more or less (essentially) the same as the parent variety except for very minor changes. The EDV category refers to those varieties where a single character has been changed in a variety which otherwise remains more or less identical to the parent 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*.

Any one 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 even if the farmers themselves cannot do this 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 use of a farmer variety in a new variety goes into a National Gene Fund.

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.

Benefit sharing

The use of farmer varieties to breed new varieties will have to be paid for. Revenue will flow into a National Gene Fund.

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 poor quality seed leading to crop failures. The Plant Variety Protection Authority will fix the compensation.

Protection against innocent infringement

The legislation has also attempted to address a concern voiced by several quarters, that when a new system of PBRs is imposed for the first time, there will probably be many cases of unknowing infringement of Breeders' Rights. Section 43 specifies that the farmer cannot be prosecuted for infringement of rights specified in the Act if he/she can prove in court that he/she was unaware of the existence of such a right.

Protection of public interest

The new Act includes public interest clauses, like exclusion of certain varieties from protection and the grant of Compulsory Licensing. To secure public interest, certain varieties may not be registered if it is felt that prevention of commercial exploitation of such variety is necessary to "protect order or public morality or human, animal and plant life and health or to avoid serious prejudice to the environment".

Rights of research

The Act has provisions for Researchers' Rights, which allow scientists and breeders to have free access to registered varieties for research. The registered variety can also be used for the purpose of creating other new varieties. The breeder cannot stop other breeders from using his/her variety to breed new crop varieties except when the registered variety needs to be used repeatedly as a parental line. In that case authorisation is required.

UPOV AND FARMERS' RIGHTS

The Act went further than simply fulfilling the countries' commitments under Article 27.3(b) of the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement of the World Trade Organisation (WTO) to provide protection of plant varieties either by patents or through an effective *sui generis* system or by any combination thereof. The legislation contains measures to protect plant varieties developed through public and private sector research, and developed and conserved by farmers and traditional communities.

However, on 31 May 2002, the Cabinet approved the Government's decision to seek accession to the Union Internationale pour la Protection des Obtentions Vegetales (UPOV) or the International Union for the Protection of New Varieties of Plants under the terms of UPOV Convention of 1978. This raises two main questions: how is it possible under international law for India to join the 1978 UPOV Convention and why is India joining the UPOV having just introduced the Plant Variety Protection and Farmers' Rights Act?

Article 37(3) of the UPOV 1991 Convention clearly states that after 31 December 1995, all countries, including developing nations, who wish to join the UPOV must accede to the 1991 Convention. Yet, India has been allowed to join the 1978 Convention. The obvious benefit to the UPOV in bending its own regulations [Article 37(3) UPOV 1991] is that in encouraging India, a large developing country with major public and private plant breeding sectors, to join, other Asian countries will follow suit rather than try and introduce their own *sui generis* legislation. The reluctance of Asian countries to join the UPOV is clearly demonstrated as to date only three Asian countries (Japan, China and the Republic of Korea) are members of the UPOV.

But what are the benefits for India? The Indian Government will argue that in joining UPOV it has provided for the protection of new plant varieties on internationally accepted standards. It would also obviate the need for the country to enter into a large number of bilateral agreements with other countries for mutual recognition of PBRs.

But what does this mean for the farmers? In order to join the UPOV India will need to submit the recently adopted PAct to the UPOV Council. The Council will have to assess whether the law is compliant with the UPOV Convention or requires amendment. The provisions relating to breeders' rights are, by and large, similar to that recognised by the UPOV. What will be interesting is the reaction of the UPOV to other areas of the Act. Most observers, as well as Indian Government officials, expect the UPOV to recommend changes to the law if India wants to push through with joining the Union.

COFAB, A DEVELOPING COUNTRY ALTERNATIVE TO UPOV

The UNDP Human Development Report (1999) describes CoFaB as a strong and coordinated international proposal, which offers developing countries a far better alternative to European legislation, by focusing on the need to protect farmers' interests and food and nutritional security goals. The purpose of Gene Campaign and the Centre for Environment and Development 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. It reflects their strengths and their vulnerabilities and it seeks to secure their interests in agriculture and fulfill the food and nutritional security goals of their people.

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

- Provide reliable, good quality seeds to the small and large farmers;
- 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; and
- Develop a system wherein farmers and breeders have recognition and rights accruing from their respective contribution to the creation of new varieties.

Adapted from: Suman Sahai (2002), *CoFaB: A Developing Country Alternative to UPOV*, a paper presented at a Consultative Meeting on Farmers' Rights, Organised by SAWTEE and International Centre for Integrated Mountain Development (ICIMOD), 17-18 August 2002, Kathmandu, Nepal.

It seems likely that the main area of contention will be the issue of farmers' rights. Under the UPOV 1978, most countries introduced a reasonable broad farmers' privilege. The scope of the "farmers' privilege" varies under different national laws, but generally farmers were allowed to continue their tradition of using a part of one year's harvest as seeds for the next and also to exchange seeds with their farm neighbours. These activities were not considered part of "commercial marketing" under Article 5 (1) 3 of the 1978 Convention. But this form of farmers' privilege falls well short of what is allowed under the farmers' rights provisions in the Act.

The term "legitimate interests of the breeder" has been widely interpreted to mean compensation or remuneration to the breeder for the use of farm-saved seeds. Furthermore, farmers' rights are defined only as the right to save seeds for replanting on their own holding. The effect of this will be to the detriment of the farming community and the government mechanism has to be very careful.

BIODIVERSITY ACT

India's interpretation of the Convention on Biological Diversity (CBD) is reflected in the Biodiversity Act 2001. It provides for the establishment of a National Biological Authority (NBA) with extensive powers to protect biological resources. Foreign agents require NBA's approval in order to access biological resources or inventions derived from them and provisions for equitable benefit sharing are clearly stipulated. NBA's approval must also be obtained before biological resources can be exported and proposals have been made to set up biodiversity funds and management committees at national, state and local levels.

Critics of the Act argue that it does not assert national sovereignty over biodiversity even though in the context of the CBD the sovereignty provision is an important check to foreign patent seekers. Neither does it provide measures to limit the potential environmental and health risks associated with the introduction of genetically modified organisms (GMOs). However, the business community is critical of the strict licensing requirements of the NBA, arguing that restrictions on foreign collaborative ventures will inhibit the growth of the Indian biotechnology industry.

GEOGRAPHICAL INDICATION ACT

The Geographical Indication of Goods (Registration and Protection) Act was adopted in 2000. This Act aims to provide a comprehensive framework to facilitate the registration, conservation and protection of goods with a unique geographical identity. The Act also provides for the establishment of a Geographical Indication Registry and an Appellate Board to take necessary action against infringement.

RECOMMENDATIONS

After enacting the legislation it is now to decide through which international platform India will interact with other nations. After deciding the future course of action and while undertaking the amendments if need be the farmers rights should be protected. One has to keep in mind that the commercialisation of agriculture has failed to protect the rights of local farmers and generally not contributed to meeting the food needs of every human being. Moreover, it has contributed to the erosion of the genetic base necessary for the further development of agro-biodiversity. We contend that the legal framework can only foster the fulfillment of everyone's food needs if agro-biodiversity is recognised as a common heritage of humankind. The following points need special attention by the policy makers while preparing the laws, acts and legal frameworks in the interest of the farming community in general and mountain farmers in particular.

- The method for fixing and realising benefit sharing should be made simpler and easier to implement because the mountain farmers are less educated and have underdeveloped village level institutions.
- At present there is too much left to the discretion of the Plant Variety Authority which will fix the compensation. Due to tough terrain and topography, it will be very difficult for the mountain farmers to approach the authority. This will lead to arbitrary decisions and should be looked into.
- Section dealing with Breeders' Rights needs to be more specific about what would constitute a violation of Breeders' Rights and what would constitute proof in a court of law that the farmer was unaware of the existence of such a right?
- The Act should provide a holistic framework to recognise the variety of stakeholders engaged in agricultural management and seed improvement especially in the mountains having wide niche specific farming systems.
- Keeping in view the largely subsistence farming in the mountain areas there should be well-defined registration criteria to give protection to the farmers from the trap of registration criteria of the UPOV convention.
- The varieties offered for registration should be accessed in terms of their socio-economic and ecological impacts especially in mountain areas. ■

Launched in December 1994 by a consortium of NGOs from South Asia region, South Asia Watch on Trade, Economics and Environment (SAWTEE) is a recognised, registered, non-profit, non-governmental organisation. Its mission is to build capacity of the stakeholders in South Asia by equipping them with knowledge, information and skills to voice their concerns in the context of liberalisation and globalisation. It currently operates through its headquarters in Kathmandu and 11 network members from five South Asian countries, namely Bangladesh, India, Nepal, Pakistan and Sri Lanka.

SAWTEE

Post Box No. 19366, 341, Alok Madhya Marg, Min Bhawan, Kathmandu, Nepal
Tel: 977-1-482217, Fax: 977-1-430608, E-mail: hqsawtee@wlink.com.np
Published with the support from Ford Foundation and ActionAid

 This Policy Brief has been compiled by Prof. Dr. Atul, Head & Cochairman, Department of Agroforestry & Environment, Himachal Pradesh Agricultural University, Palampur, Himachal Pradesh, India. Author is highly thankful to various experts who have put their findings and views on the Internet in the public domain. Their material has been used in the present compilation and the same is duly acknowledged. Special thanks to the ITC, CSK HP Agriculture University, Palampur India for providing the basic facility.