

Intellectual Property Rights: World Trade Organization and Trade Related Intellectual Property Rights

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Introduction

The agricultural development strategies followed in India since late 1960's has helped the country to achieve commendable growth in production of different food and commercial horticultural crops, livestock, poultry, and fisheries products. In Indian economy, the agriculture and its allied sectors continue to play a major role and their share accounts to nearly 28 per cent of the Gross Domestic Product, 20 per cent of the total annual export earnings and about 65 per cent of total employment. However, the realized growth rate in these sectors is far below the true potential growth rate. During the past five years, the average annual growth rate of Indian agriculture is about 3.5 per cent and the average productivity of Indian agriculture is still around 1.6 t/ha, which is lower than other developing countries such as China, Brazil etc. The country's share in the world agricultural export accounts to only 0.5 per cent.

Since the liberalization of Indian economy during 1991, the following changes have taken place in the agricultural sector viz., i) removal of restrictions on domestic movement of agricultural commodities, ii) partial rationalization of exports, iii) progressive reduction in food and fertilizer subsidies and iv) membership of World Trade Organization (WTO). It is claimed that all these policy reforms will improve resource allocation in agriculture, induce private investment and result in higher growth of production, exports and income. However Vyas (1994), Hanumantha Rao (1995) and Johl (1995) have looked into the complexity of these policy reforms and contributed to the discussion in an informed manner.

In view of economic liberalization and being a member of the World Trade Organization, certain macro and micro level changes are expected to take place in the primary sector of Indian economy. Since GATT aims to boost agricultural trade through substantial reduction in protectionism, prices of agricultural commodities in member countries are expected to move closer to international prices. Hence to compete in international markets, product price and cost of production of agricultural commodities produced in the country should not be higher than those in exporting countries. To meet these challenges, Indian agriculture has to maintain an higher level of technical and economic efficiency through higher productivity.

India, being a member of World Trade Organization, is bound to follow certain rules and regulations with regard to international trade as laid down by the agreement of WTO. This agreement was reached based on the comprehensive Uruguay round of multilateral trade negotiations held under the aegis of General Agreement of Tariff and Trade (GATT). For the first time in the history of GATT, all the agreements or provisions made were equally applicable to both developed and developing countries. The only concession given to the developing countries was in terms of transitional periods. The major differences between GATT and WTO are given in Appendix I.

This article highlights the effect of WTO Agreement on Indian agriculture with reference to Intellectual Property Rights (IPR) and Trade Related Intellectual Property Rights (TRIPS).

IPR and TRIPS in WTO Agreement

Intellectual Property Rights (IPR) as proposed in WTO agreement refers to the legal ownership by a person or a business of a discovery or an invention attached to a particular product or process, which prohibits others from unauthorized copying or imitation. There are seven types of IPR viz., Copyrights, Trademarks, Patents, Geographical indications, industrial designs, Integrated Circuits and Trade Secrets.

The issue of IPR was brought for the first time into the Uruguay round discussions on GATT and because it had a bearing on the trade related aspects, the agreement is known as Trade Related Intellectual Property Rights (TRIPS). The TRIPS agreement laid down norms and standards for all the seven types of Intellectual property.

India, through her laws and jurisprudence, is already in compliance to a substantial level with the TRIPS standards on copyright and related rights, trademarks, geographical indications, industrial design, trade secrets and with some of the provisions on patents. However new legislation is required in the area of layout designs for integrated circuits (Watal, 1997).

IPR and Plant Breeding

IPR has become a serious matter of concern for Indian agriculture and a wide range of apprehensions and misconceptions like farmers would have to buy seeds every year from multinational companies, the future threats to the Public

system and threats to her genetic wealth are being
ely by the researchers, planners and policy makers.
r information on these subjects is the major reason
prehensions.

International Union for the Protection of New
Plants known as UPOV was formulated during
the purpose to ensure Plant Breeder's Rights (PBR)
New Plant Varieties, which are sufficiently
us, non commercialized, stable and distinct from
nmonly known varieties. Under UPOV 1978, a
variety produced by a breeder could only be
and marketed by him. But it had allowed two
exemptions viz., the Breeder's exemption which
her plant breeders to use the protected variety for
urposes and the Farmer's Rights which allowed the
use their own seeds for the next cropping season.

However under UPOV 1991, the breeder's
right was almost taken away, paving way for royalty
to the PBR holder from the breeders if their new
is resemblance to the protected variety. Besides,
cannot use farm-saved seeds from protected varieties
paying compensation.

This is neither acceptable to Indian farmers nor to
breeders since unlike in countries like USA, where
run into hundreds of hectares producing hundreds of
of seed materials, India has more than 100 million
with less than two hectares of land relying directly on
mer for procuring seed material. Hence there is a need
to protect the rights and interests of the small farmers to use
their own seeds. Hence the plant variety legislation
is being modified to suit the interests of farmers, plant
breeders and the Indian seed industry.

In this connection, the dialogue on "Methodologies
for recognising and rewarding informal innovation in the
creation and utilization of plant genetic resources" held in
Delhi from 28-31 January 1994 had incorporated the
following features viz., i) retain breeder's exemption so as to
maintain dynamic breeding programme, ii) strengthen farmers'
rights in order to ensure that resource poor farmers have
access to new varieties, iii) provide a mechanism for giving
national content to the concept of Farmer's Rights and iv)
suggests the creation of a Community Gene Fund to which the
rights due to farmer-conserves can be credited and which
can be used for strengthening the *in situ* and *ex situ* conservation
of tribal and rural families (Swaminathan, 1995)

The document of the final act of WTO had indicated
that the members should provide for the protection of plant
genetic resources either by *sui generis* system or through patents or a
combination of both.

provides a framework of PBR through which protection is
given to Plant Breeders, researchers and farmers with regard
to use and exchange of seeds and plant genetic material. In
this connection the proposed draft by Government of India on
the Protection of Plant Varieties (PVP) ensures that the
farmers can raise their own seeds and retain them even to
exchange with other farmers as per the existing tradition and
the researchers shall be able to produce new varieties from the
protected varieties.

A patent is a statutory privilege granted by the
Government to inventors and to other persons deriving their
rights from the inventor for a specified period, to exclude
others from manufacturing, using or selling a patented product
or process. The criteria for an invention to be patented include
i) novelty, ii) non-obviousness, iii) utility on a commercial
scale, iv) the scope of protection granted must be in proportion
to the invention and v) it must relate to a technology where
patents are permitted. At the time for which the privilege is
granted, the patented invention is available to the general
public. Indian Patents Act (IPA) 1970 had included only the
process patent and not the product patent and had excluded the
management practices of agriculture and allied activities from
patentability. But as per Uruguay agreement, in addition to
process patents, India is bound to introduce product patents.

One of the most important tasks ahead of Indian
Scientists is to produce and patent more number of product and
process technologies at the earliest possible time frame. The
problem is more tedious in case of agricultural research since the
Scientists are bound to patent the most important and unique
varieties of different crops. At present India produces about 4000
patents a year which is very low as compared to countries like
USA where the number of patents exceeds 1.1 lakh per year.
The cost of patenting a technology is very high for an
individual, however this could be solved through increased
participation of private entrepreneurs. The timely efforts
taken by the Indian Government have made us to assert our
rights on our bio-resources like withdrawal of US patent on
turmeric and earlier upholding of the claim made by our
environmentalists against a patent on neem oil given to a
European multinational.

During 1997, Rice Tec, an agro based company in
USA has patented novel rice lines viz., Texamati, Jasmati and
Kasmati which produce grains having characteristics similar
or superior to those of good quality basmati rice grains
produced in the Indian subcontinent. India has challenged this
in the WTO's Dispute Settlement Panel (DSP), but the case
only goes to prove that basmati is not an unique product.

As per Geographical Appellation Bill of TRIPS,
geographical indications pertain to "indications which identify a

goods as originating in the territory of a member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the commodity is essentially belonging to its geographical origin". Had such legislation existed in India, conferring an unique status to the climatic and soil conditions and cultivation practices of basmati, India's case in WTO would have probably emerged stronger. Hence there is an urgent need to amend the existing Patent laws in India. The differences between existing laws of India and WTO are given in Appendix II.

Protection of Bio-Diversity

India is one of the largest repositories of bio-diversity. In the self provisioning economies of the third World, producers are simultaneously consumers and conservers. In fact, it is recognised that 'the total genetic change achieved by farmers over the millennia was far greater than that achieved by the hundred or two years of more systematic science-based efforts' (Vandana Shiva, 1995). Hence there is an urgent need to make inventories of the bio-diversity to have a complete picture of our valuable resources and to formulate new laws to deal with all aspects of bio-resources and policy governing their use.

Convention on Biological Diversity (CBD) was a treaty signed during December 1993 by the member countries under WTO and India ratified the same during February 1994. This convention has three broad objectives viz., i) the conservation of bio-diversity, ii) sustainable use of its components and iii) fair and equitable sharing of profits that come from the utilization of genetic resources (Rana, 1998).

These new laws should be formulated based on the conditions of the CBD and these are i) to establish ownership rights over biological resources found in the sovereign territory of India, ii) to formulate the guidelines and structures for prior informed consent according to which the user parties will have to seek the permission of some kind of National Authority authorized to grant or refuse access to genetic resources and iii) the conditions for material and information transfer agreements will have to be laid down so that the use of biological resources is just equitable and sustainable (Suman Sahai, 1998)

Future Strategies

By the turn of the Century, Indian agriculture has to face multi-fold problems, the most important being the food security. By 2025, the country has an uphill task of feeding 1.4 million people which requires about 300 million tonnes of food grains. In this era of globalization, competitive edge based on technology is considered as the only way to achieve this target. Moreover economic growth is accelerated through technological development and confidence in a well-enforced

intellectual property protection is a great stimuli for innovation. A well defined IPR regime is a basic source of technological information that research organizations have at their disposal. This will also boost the level of foreign investment in the country since many multinationals especially in biotechnology sectors would like to be assured of a strong IPR regime in place before deciding on investment (Ilyas, 1999).

Being a member of WTO, India has to comply with its regulations related to IPR. If the country fails to properly handle the IPR related issues, it will be at the cost of the country's future prosperity. For this the Indian Government, planners, policy makers and the bureaucrats should make a clear cut strategic plan and implement the same at the earliest possible time.

The first thing is to remove the apprehensions and misconceptions about IPR among the public. The patent system in the country should be strengthened especially in the field of agriculture. The country has vast human resources, technical man power, adequate infrastructural facilities, aspiring private entrepreneurs etc.. These components should work together for developing and introducing product patents and marketing them globally.

India had already initiated pipeline protection for patents in its gradual march on the course of WTO to form a proper patent regime by 2004 AD. But it needs careful examination that the proposed safeguards are in line with the TRIPS.

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Appendix I. Differences Between GATT and WTO

S.NO.	GATT	WTO
1.	Was essentially concerned to issues arising out of international trade of goods at the international level	It has annexed vast spaces of national decision making to its domain. Entire spectrum of Intellectual Property protection has been lifted out of national domain and are subjected to the most rigorous and demanding international discipline
2.	It did not seek to intrude into the sphere of autonomous decision making of its member countries	The trade in services has been defined in an open ended manner to bring all possible activity under GATT
3.	It specifically listed a number of exceptions and recognized the departures from the rules of the border paradigm under certain circumstances	The National Public Distribution System will henceforth have to reckon with the parameters laid out in the agreement
4	Recognized the autonomy of members to have and enforce laws and regulations relating to the protection of patents, trade marks and copy rights, conservation of natural resources, restrictions on export of domestic materials and the laws and regulations essential for the acquisition or distribution of products in short supply	The National Investment regime will similarly be subjected to the international discipline evolved in the agreement of Trade Related Investment Measures (TRIM)
5	Provided for its members the fundamental right of non discriminatory treatment at the hands of other members of the system in regard to international trade in goods	The fundamental right of non- discriminatory treatment was destroyed. New obligations can be added and can be enforced on all members, if there is a prescribed majority endorsing such a decision. The continued enjoyment of Most Favoured Nation (MFN) will be subject to that members' acceptance of the new discipline.

Appendix II. Patent Laws in India visa-vis WTO

INDIAN LAWS	WTO RULES
Provides only process patents in food, pharmaceuticals and chemical sectors	Requires both product and process patents
The burden of proof on "process" patents lies on the complainant	It is on the defendant
Duration of the patent is seven years for food and pharmaceutical sectors and 14 years for all the other sectors	It is uniformly for 20 years for all patents
Provides automatic compulsory licensing in case of food, pharmaceutical and chemical sectors without the patent holder being heard	Permits compulsory licensing on the merits of each case but the patent holder will have to be heard
No system for protection of plant varieties	Requires effective "Sui generis" system of PVP
Does not allow patenting of life forms	Requires micro-organisms to be patented