GATT/ WTO AND THE TRIPS AGREEMENT

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It is possible to illustrate with two very basic examples how the Uruguay GATT round has been impervious to the needs of developing countries while securing the interests of the industrialised nations. A fundamental quid pro quo between the developing and developing nations should have been the granting of labour mobility in lieu of capital mobility. The countries of the North holding surplus capital in sated economies have been pressing for the freedom to invest their money in growing economies like India, China, the Asian Tigers and Egypt.

India and its neighbours should have pressed for the right to send their labour to industrialised countries to seek jobs in their fields, factories and service institutions. Developing countries may be cash strapped but they have a wealth of skilled and unskilled manpower. India has the third largest scientific manpower in the world for which it should have sought employment avenues and dollar repatriations for the country by insisting on labour mobility. But that did not happen. Whereas we have granted practically unfettered capital investment rights to foreign companies, they have refused to allow our manpower into their countries

Similarly, GATT/ WTO have ensured that industrial countries get access to the markets of developing countries for their products and their services. Countries of the South Asian region have seen the entrance of consumer goods, fast food and foreign finance companies. Consumers in these parts will have the choice of putting their money into their own or foreign pockets when they buy either local or foreign goods or services. On the other hand, GATT/ WTO has not, ensured that developing countries get technology from the industrialised countries in exchange for giving market access.

However the area where developing countries have been hit hardest is in the harmonised regime of Intellectual Property Right demanded in the chapter on Trade Related Intellectual Property Rights (TRIPS). If one traces the history of the international patent system, it can be seen very clearly that there is a definite correlation between the economic, technical and industrial development of a country, with the patent protection granted by that country. In the early phases of industrial development many of the industrialised countries had no patent system at all, or very weak patent systems. As they became more industrialised and developed their technology base, they began to strengthen their patent systems.

With respect to IPRs for plants, in Europe we see the system progressing from Plant Breeders' Rights under UPOV which were at first flexible, with implied or outright exceptions for farmers and plant breeders, becoming stricter by curtailing the farmers' and breeders' exemptions and finally introducing the highly monopolistic form of protection by patents.

Under the older UPOV Convention which was constituted in 1961 and revised in 1978, the breeder had a monopoly over his variety via the seed trade, but the system allowed two important exemptions, for farmers and for other breeders. In 1991, the UPOV treaty was revised once more and the breeders' exemption was practically done away with. The farmer, after the 1991 amendment, cannot use farm saved seed without some kind of payment.

In the chemical and pharmaceutical sector, a highly industrialised nation like Italy accepted product patents only in 1984 and Spain as late as1992! Before that, they had patent laws similar

to ours even though they were far more technologically advanced then than we are today. Japan, the economic powerhouse of the world, allowed the introduction of a patent system itself only about 20 years ago.

TRIPs introduces a dangerous possibility in the chemical and pharmaceutical sector concerning the duration of patents. A new compound would, for example, first obtain a product patent for 20 years. After that it would be possible to file for a process patent for manufacturing that product for another 20 years. Theoretically, it would be possible to extend this protection still further, by obtaining in turn, process patents for all the three or four methods of manufacture so that a successful product could be monopolised for as long as 40 to 50 years. It need not be mentioned that this would completely break the back of indigenous efforts in chemicals, agro-chemicals and pharmaceuticals. With the globalisation of IPR regimes, seed producers in developing countries would be required to compete with multinational companies under conditions and rules that have been developed in the industrialised countries to protect their corporate interests.

The entry of the MNCs armed with patent rights into this nascent South Asian scenario has other repercussions. Because of money again a substantial outflow of our scientists from universities can be expected in the direction of the MNCs which can pay much higher salaries. These scientists will carry away not only the technical skills they acquired with the taxpayers' money, but they will also seriously erode the competitive potential of institutions by removing the skills and technology located there. Today our institutions can be strengthened and built up for competition if we improve the system and upgrade the infrastructure because the skills are already there.

TRIPS clearly will have negative consequences for us. The level of intellectual property demanded from us and the sectors in which it is demanded, drugs and agriculture, will have altogether undesirable effects on food self sufficiency and health care. This is primarily because the nature of protection demanded is not in step with the stage of our technological development and the structure of our public and private institutions. It is crucial that we limit the damage to the extent possible and adopt a more aggressive posture in intenational negotiations like the WTO.

Trade Related Intellectual Property Rights

The agreement on Trade Related Intellectual Property Rights (TRIPS) was introduced into the Uruguay GATT Round in 1986. It was the result of intense negotiations and a compromise between different sets of interests. One of the dominant players in setting up TRIPS was the American biotechnology industry. TRIPS provides minimum national standards for levels of protection to the creators of intellectual property in various fields. It covers the following fields:

- copyright and related rights;
- trademarks;
- geographical indications;
- industrial designs;
- patents and plant variety protection or PVP;
- layout-designs (topographics) of integrated circuits;
- protection of undisclosed information; and,
- control of anti-competitive practices in contractual licences

For the developing countries, patents of microorganisms and PVP are the most important areas for agriculture. The clause on geographical indications is at present limited to wines and spirits but theoretically it offers the opportunity to protect specialty products like Basmati rice and Darjeeling tea For this developing countries will have to lobby to have the scope of the clause is expanded.

By placing IPRs in the WTO and making them subject to its binding disputes procedure, proponents of a strong IPRs regime have made it possible for non-compliant WTO Members to face trade sanctions in any area if they fail to live up to its rules. This is arguably the main reason why IPRs were put into WTO instead of the existing body promoting IPRs, the World Intellectual Property Organisation (WIPO). The TRIPS Agreement also includes for the first time in any area of international law "rules on domestic enforcement procedures and remedies". Article 27.3.b of TRIPs pertaining to IPRs on life forms was due for a review in 1999 but this did not materialise since the Seattle meeting got derailed .The whole TRIPS Agreement is due to be reviewed after January 2000 and this process has started with preliminary meetings of the TRIPS Council.

IPRS ON BIOLOGICAL MATERIALS

The key element of the TRIPS Agreement for agriculture and food security is the requirement for WTO Members to make patents available for any inventions, whether products of processes, in all fields of technology without discrimination. One reason. for greater interest in patents is the rapid development of biotechnology, especially in the OECD countries, and its application in agriculture. Apart from Article 27.3(b) , two other Articles permit exceptions to the basic rule on patentability:

1. When members want to prevent the commercial exploitation of the invention to protect *ordre public* or morality; this explicitly includes inventions dangerous to human, animal or plant life or health or seriously prejudicial to the environment (Art 27.2).

2. Diagnostic, therapeutic and surgical methods for the treatment of humans or animals (Art 27.3(a)).

Members may also provide limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties (Art 30).

Patents must also be available and patent rights enjoyable without discrimination as to the place of invention and whether products are imported or locally produced the so-called 'national principle' (Art 27.1). According to Article 28.1(a) of the TRIPS Agreement, patents relating to products confer the right to prevent third parties from "making, using, offering for sale or importing for those purposes the product" without the patentee's consent.

Implementation requirements

WTO members must ensure their laws meet the minimum standards laid down in the TRIPS Agreement but they can introduce tougher laws if they wish. They do not, however, all have to comply at the same time (Art 65):

- Developed countries had to implement TRIPS within one year of entry into force of the Agreement on 1 January 1995
- Developing countries had an extra four years-i.e. by 1 January 2000.
- Economies in transition (from centrally-planned to market economies) also had an extra four years-i.e. to 1 January 2000.
- Least developed countries have a 10 year transition period but they may apply for extensions to the (Art 66.1)

Newly acceding members of the WTO do not benefit from the transitional arrangements but must comply with the TRIPS obligations immediately they join the organisation.

Four options are consistent with the obligations in Article 27.3(b):

1. To allow patents on everything.
2. To exclude plants, animals and essentially biological processes from patenting but not to exclude plant varieties from patentability.
3. *To exclude plants, animals and essentially biological processes from patenting and to introduce a special sui generis right for the protection of plant varieties.*
4. To exclude plants, animals and essentially biological processes from patenting but not plant varieties and to provide, in addition, for a *sui generis* right ('combination thereof').

Most developing countries including India have chosen option 3.

The sui generis system (option 3)

A sui generis (of its own kind) system of protection is a special system adapted to a particular subject matter, as opposed to protection provided by one of the main systems of intellectual property protection, e.g. the patent or copyright system. It means countries can make their own rules to protect new plant varieties with some form of IPR provided that such protection is effective. The Agreement does not define the elements of an effective system.

One possible *sui generis* system likely to be recognized as effective is the UPOV system of Plant Breeders' Rights (PBRs). This was initially developed in Europe and has now been adopted by the industrialised countries. The UPOV system has undergone several changes after its formulation in 1961. Amendments in 1972, 1978 and finally 1991 which is now ratified, have resulted in almost no concessions for farmers and breeders. The 1991 amendment brings UPOV in line with patents.

ARTICLE 27.3.(b)

Article 27.3(b) of TRIPs is perhaps the most controversial clause of the entire WTO agreement. It requires members to provide for the patenting of microorganisms and genetically engineered organisms ("non-biological and microbiological processes"). It allows them to exclude from patentability, plants and animals "and essentially biological processes for the production of plants and animals", though members must provide either patents or an "effective *sui generis* system" for plant varieties.

WTO members are now in the process of defining their positions regarding the future of these provisions. There are indications that a few members like the US, would like the *sui generis* option to be eliminated altogether, while others, which include most developing countries, are

preparing national legislation to implement it. There are proposals to treat UPOV, the Union for the Protection of New Varieties of Plants, as the only sui generis option for plant varieties. This view is being aggressively presented by the US and the Cairns group of nations.

It also needs to be recognized that there are potential conflicts between the TRIPs patenting regime and the Convention on Biological Diversity, as well as the International Undertaking presently being negotiated at the United Nations Food and Agriculture Organisation (FAO). These conflicts are widely seen as more political than legal in nature and the US government has made early implementation of TRIPs and even "TRIPs-plus" provisions a top priority of its foreign policy. These matters are likely to emerge as matters of dispute under the WTO's dispute settlement system in the coming years.

The implications for small farmers and rural communities in developing countries of adopting UPOV to comply with TRIPs Article 27.3(b) are likely to be considerable. UPOV 1991 conditions will significantly diminish the farming community's capacity to be self sufficient in seed and self-reliant as agricultural producers. UPOV had been established to promote the interests of commercial plant breeders in the North rather than the farming communities, and was part of the industrial agriculture system.

UPOV's uniformity requirement will contribute to genetic erosion and the cost of maintaining UPOV certification is beyond the means of most farmer-breeders. Although peasant farmers have also cultivated plant varieties expressing desirable traits over time, their varieties rarely meet the UPOV requirements of "D-U-S", that is, that they be "distinct" from other varieties, produce genetically "uniform" progeny, and remain genetically "stable" over generations. After the 1991 UPOV amendment, a new quality "novelty"- has been added to the minimal characteristics required of plant varieties, in order to bring them in line with patent requirements.

These conditions for a plant Breeders Right certificate under UPOV go contrary to the goal of enhancing genetic diversity. Furthermore, the kind of protection granted by post 1991 UPOV's Plant Breeders Rights is an exclusive monopoly right. This contrasts sharply with the broader goals of collective remuneration and benefit-sharing expressed in the Convention on Biological Diversity and the FAO Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture.

NO TO UPOV

Most developing countries are contemplating the sui generis route to compliance, instead of patenting. A number of influential bodies, including the WTO itself, are pushing for a narrowing of the *sui generis* option to one legislative model provided by the Union for the Protection of Plant Varieties or UPOV. This is unfair and uncalled for. UPOV is not mentioned in the TRIPS Agreement when other relevant IPR treaties are. Independent legal and economic experts have reiterated that UPOV should not be accepted as an effective sui generis system for TRIPS and that there is ample scope for manoeuvre, flexibility and national discretion in interpreting the sui generis option.

The UPOV system promotes commercially bred varieties geared for industrial agricultural systems in which farmers have to pay royalties on such seed and the seed sector becomes an investment opportunity for chemical and biotech concerns. These breed plants to grow

successfully with their proprietary chemical inputs or with their patented genes it the expense of more sustainable biodiverse systems.

Since PBRs are only given for a variety that is genetically uniform they automatically limit both what kind of seeds can be marketed and who can market them and so UPOV automatically discourages genetically diverse and locally adapted seeds from the market and from the field, say its critics.

Even in industrial nations there are grave problems associated with intellectual property protection of plant varieties, particularly the UPOV Convention. Developing countries must not fall into the UPOV trap. They must work to provide themselves an alternative to UPOV since UPOV does not serve their interests for the following reasons:

i. There are no Farmers Rights in the UPOV system, only Breeders Rights.
ii. UPOV conditions are for industrial, not agricultural economies where only 2 to 5% of the population practices agriculture and there are no small and marginal farmers.
iii. UPOV laws are for countries where subsidy to agriculture is very high and farmers get paid for leaving their fields fallow.
iv. In Europe agriculture is a purely commercial activity. For the majority of farmers in Asia however, it is a livelihood.
v. In UPOV countries agricultural research is conducted by seed companies with private capital, so they maximise profits by market monopolies. In India and other developing nations, agricultural research is done in public institutions with the taxpayers money and it belongs to the people.
vi. The UPOV system is very expensive. The cost of a Breeders Right certificate could range from a few thousand to a few hundred thousand rupees. This will exclude small companies, farmers co-operatives and farmer-breeders from participating.
vii. If developing countries join UPOV, they shall be forced to accept the patenting of Plant Varieties which is not in their interest. After the 1991 amendment, both patents and Breeders Rights are used in UPOV.

CoFaB AS DEVELOPING COUNTRY ALTERNATIVE TO UPOV

The South Asian countries must reject the pressure of the developed world to strengthen IPR requirements. For a start, the region must refuse to accept UPOV as the only sui generis option and place its own alternative for other developing countries. The Indian government has taken this view.

In order to take this process a step further, Gene Campaign and the Centre for Environment and Development have drafted an alternative treaty to UPOV to provide a forum for developing countries to implement both 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. It seeks to secure their interests in agriculture and fulfil the food and nutritional security goals of their people.

This treaty between developing countries 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 he 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 TRIPS - CBD LINKAGE

The Convention on Biological Diversity (CBD) and the WTO/ TRIPs are essentially two treaties in conflict with one another. Here again, developing countries must push to give primacy to CBD in all matters relating to bioresources. Some countries including India have taken the position in the TRIPS Council that CBD and TRIPS provisions must be linked.

The CBD which is a pro-developing country or pro- community treaty, supports above all, the protection of biodiversity and the rights of those local communities that have nurtured that biodiversity over generations. It also supports the viewpoint and interests of developing countries. The WTO/ TRIPs on the other hand represent the interest of the corporate sector, the most visible face of which is the "Life Sciences "industry. Rather than the conservation of biodiversity, TRIPs seeks to facilitate corporate control over biodiversity which in the era of biotechnology is one of the most sought after raw materials in the world.

In the Convention on Biological Diversity two provisions are notable form the TRIPs point of view, namely ; (i) acknowledgement that biodiversity resources are the sovereign property of the country of origin, and (ii) acknowledgement of the need to equitably share benefits with indigenous communities for their contribution to conservation and their knowledge of sustainable uses of biodiversity. These provisions run completely contrary to TRIPs and point towards the most significant defect in the prevailing regime of Intellectual Property Rights (IPR).

In the use and transfer of biological material, the CBD makes it mandatory to disclose the source and method of obtaining the foundation material. All biodiversity resources are to be obtained only on the basis of prior informed consent (PIC) of the country of origin and after

executing a Material Transfer Agreement (MTA). All this would involve confrontation with the procedures mentioned under the GATT / WTO regime. Also, the CBD's advocacy for preferential location of research and development activities and the transfer of technology on concessional terms to the countries of origin will come into conflict with the implementation of TRIPs.

TRIPS does not allow for the full exercise of national sovereignty over biodiversity (because it obliges countries to enact intellectual property rights on plant varieties). TRIPS does not allow countries to seek a share of benefits obtained from patented biodiversity (there is no provision requiring patentees to disclose the country of origin of any biological materials, therefore no claims can effectively be made from the countries of origin). TRIPS does not require patentees to fulfil access obligations towards genetic resources (it therefore condones and facilitates biopiracy).

TRIPS overrules (and legally compromises the development of) CBD Art 8(j) because patent claims can be worded to embrace and expand on indigenous knowledge without recognition of or compensation for it. Turmeric, Neem, and Basmati as also Phyllanthus amara and the diabetes formula based on Karela, Jamun & Gurmar, are well known cases of this but there are many others. Also, UPOV type of plant variety protection (PVP) certificates are being granted on traditional plant varieties from developing countries. Australia granted a patent on a chickpea variety which comes from India.

These are conflicts at the level of substantive provisions, not mere operating principles. And it is clearly TRIPS which undermines the implementation of CBD. It is important to remember that TRIPS was negotiated as a discrete treaty. It was drawn up by a small group of GATT negotiators and became part of a take-it-or leave-it package toward the end of the Uruguay Round. Therefore, governments were not able to say yes or no to TRIPS specifically in consideration of their obligations to CBD.

PRIMACY OF CBD OVER TRIPS

There is a large body of opinion held by academia, politicians, and civil society groups all over the world, that IPRs should not be regulated under the World Trade Organisation at all. Refining the jurisdiction of TRIPS would be part of a more fundamental reassessment of whether trade policy instruments governing, market access should determine national intellectual property regimes. In recent times, several platforms have demanded granting primacy to CBD over TRIPS. More and more nations should support this move and place this as a demand at the TRIPs review. The official Indian position has asked for a CBD- TRIPS linkage.

Demanding primacy for the CBD is justified and supported by Article 22 of the CBD which says - *The provisions of this Convention shall not affect the rights and obligations of any Contracting Party deriving from any existing international agreement, except where the exercise of those rights and obligations would cause a serious damage or threat to biological diversity*. It is clear that the implementation of TRIPs is detrimental to the health of biological diversity and therefore its implementation must be made subservient to the conditions of the CBD.

THE WAY OUT FOR DEVELOPING COUNTRIES

The way TRIPS stands at the moment, the only way to fully ensure a fair deal for communities and people in developing countries is to remove biodiversity from TRIPS altogether. Since achieving this ambitious goal may take more time than the mandated review period allows, one way might be to secure a five-year suspension of the implementation of Article 27.3(b) so that developing countries, which are facing enormous difficulties with TRIPS, may sort out their strategies more appropriately. In any case, developing countries must at least ensure that there is no strengthening of the TRIPS Agreement, as some developed countries are pushing for. Trying to keep TRIPs as flexible as possible for the time being and working for its ultimate rejection, must go hand in hand.

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