CHAPTER 7
7. OPPORTUNITIES AND CHALLENGES UNDER TRIPS PROVISIONS IN WTO FOR INDIA

The main object of this work is to find the reasons for developing nations apprehension about the implementation of TRIPS provisions and the benefits that accrue to developed nation at the cost of developing nations.

The Paris Convention, a major International Convention, which came into force in 1960s established certain basic concepts of harmonising national patent laws. The important feature of this harmonisation being the concept of “National Treatment” meaning the accordance of the same protection of foreign applicants as is allowed for the nationals. As the time progressed further, the developed countries particularly the US, viewed that the absence of strong patent protection in many other countries and the free flow of pirated goods, especially in the developing countries, acts like a tariff barrier to trade. In this pretest, in the Uruguay Round of Negotiations, under the former GATT, the subject of IPR was incorporated in the guise of “Trade Relates Aspects of Intellectual Property Rights (TRIPS)” into the WTO Agreement.

Prima facie the developing countries feel that the TRIPS provisions are not advantages to them. The full impact of these provisions will be clearly known only by 2005 when the transition period allowed will be over. It would, therefore, be appropriate to
review the TRIPS provisions so as to understand the provisions clearly and to consider wherever necessary to propose alternate provisions before the Trade Review committee constituted under WTO.

The main arguments put forward by the developed countries for the inclusion of IPR in the negotiations was that the "piracy" of their intellectual property, especially in the pharmaceutical and chemical sectors, is causing them enormous loss of sales in the international market place. The developed countries preferred GATT to World Intellectual Property Organisation (WIPO) to redress their concerns, since WIPO is an UN Agency where countries took their stand on various issues on Block basis and the individual developed countries found it difficult to have their own say in the matter and (2) it was felt that the enforcement mechanism under WIPO was very weak. On the other hand the participation in the GATT was on individual basis rather than on Block basis. Further, economic strength of the individual countries gave scope for the developed countries to control and guide the negotiations under the GATT much more easily than they could have under WIPO.

The main success in the negotiations was achieved in integrating Intellectual Property to international trade by conveniently coining the word "Trade Related Intellectual Property Rights (TRIPS). The developing countries initially agreed for the discussion on IPR confining only to those matters which are related to counterfeit goods in trade. The developing countries resisted the inclusion of IPR as a whole in the Uruguay Round till 1989. But
gradually the developed countries started pushing the proposition that Intellectual Property Rights by their very nature affected international trade in general and that it was a fit subject matter for discussion under the umbrella of GATT.

The negotiations on TRIPS turned out to be asymmetrical and non-transparent. No opportunity was provided to the developing countries for serious bargaining with developed countries and for a trade-off between the losses to be suffered by them on account of accepting a higher level of IPR protection and gains in terms of compensatory provisions in the area of TRIPS or other areas of Uruguay Round Negotiations. The finally arbitrated unilateral text in the form of Dunkel Draft came as a big surprise to developing countries. The TRIPS Agreement basically universalizes the levels of IPR protection now prevalent in the developed countries. Accordingly the resistance of the developing countries collapsed.

The entire negotiations were one-sided with the developed countries demanding and getting whatever they wanted and the developing countries only submitting to the dictates of the developed countries, making one concession after another. Consequently the whole system of national policy of the developing countries got to be changed with implications to their national interest. The developing countries were also handicapped by their inability to negotiate appropriately, perhaps due to the lack of expert and experienced negotiators with insufficient material to substantiate their claim.
The main objectives of the acceptance of the scheme is that "the promotion and enforcement of intellectual property should contribute to the promotion of technological innovation and to the transfer and dissemination of technology to the mutual advantage of producers and users of technical knowledge and in a manner conducive to social and economic welfare and to a balance of rights and obligations" (Article 7)

A detailed and careful study of TRIPS depicts that there are no specific provisions commensurate with the above mentioned declared objectives of facilitating transfer of technology to developing countries. The provisions also do not provide any differential and more favorable treatment for developing countries in any manner except for providing time limits for the implementation. Such time limits also seems to be illusionary and not realistic.

The main concerns amongst the developing countries about the TRIPS provisions of the Agreement are (i) effect of extension of product production, particularly in the field of pharmaceuticals (ii) impact on domestic R & D (iii) consideration of import of patented products as working of patents (iv) Protection of living matters (v) extension of term of patents (vi) The more extended period of limitation (vii) grant of compulsory license (viii) Reversal of burden of proof & (ix) Exception to exclusive rights.

These concerns are examined with reference to the interests of the developing countries :-
a. Extension of protection for new products and increase in price.

There is apprehension that by virtue of grant of product protection to pharmaceuticals, the prices of drugs will shoot up. The above concern may be true to a certain extent. When one talks about the rise in price of a drug in the context of patents, it is based on the presumption that a drug, which is protected by patents, will command higher price than the same drug, which has not been so protected. There is another school, which thinks that such patented drugs are unlikely to cover more than 10 to 15% by value of the total drug market in a developing country at any point of time in the foreseeable future.

It is also a fact that the market in a country which has not had product patent regime particularly in the pharmaceutical sector will be populated with both patented and non patented drugs (including products whose patents have expired) at all points of time. Further, whether a patented drug will command higher price than when it is not patented also depends on several other factors such as the purchasing power of the public, the health insurance system etc.

A patented drug may also demand higher price due to the exclusive exploitation rights conferred on the drug. But the rate of increase will vary from drug to drug. For majority of patented drugs especially those drug that are merely incremental improvements over the existing drugs, alternative non-patented drugs are normally available in the market. The prices of such alternate drugs will act as
check for the higher prices. In the post WTO era majority of drugs which are very common currently will be off patents and will be subject to stiff competition. Such a competition should ensure that the prices of such drugs are not exorbitant. Even where patented new drugs are launched, the history of pricing has been based on the availability of the therapeutic alternatives in the market which will be economical and which can be chosen by the doctors and the patients.

Under the above said circumstances, the rise in prices of drugs, if any cannot be attributed solely to the allowance of product patents for the drugs. The rise in prices is influenced by various other factors such as: the nature of the patented drug, the class of customers who purchase the drug, the availability of alternate drugs in the market etc.

b) Impact on domestic R & D

Another concern expressed amongst the public is that the new IPR regime will have adverse impact on domestic R & D, as well as in the establishment of domestic manufacturing facilities. In the Indian scenario, the basic reason for the Indian industry unable to engage in the development of new molecules, is not that it lacks the intellectual ability or scientific manpower but it is due to the lack of sufficient financial resources and infrastructure required for initiating such an activity. The Indian Patents Act was enacted in 1972 when the Indian S & T infrastructure and the chemical industries were in the developing stage. At that time such provisions were relevant to
encourage development of chemical industries, particularly pharmaceutical industry keeping in view of the health care needed.

The initiatives taken and the successes reported to have achieved in the short period (since the bringing into force of WTO agreement) by the Indian pharma industry such as Dr Reddy's Research Foundation, Ranbaxy etc for the development of new molecules reflects, the above conclusion.

Therefore the TRIPS provisions may perhaps act as a catalyst to kindle and enhance the ability to develop new molecules. Many industrialised countries may also like to take advantage of the resources natural and or otherwise and the enormous market potential available in the developing countries to tie up with domestic enterprises for undertaking joint R & D programs. The creation of confidence amongst the developed countries by the incorporation of provisions for the protection of new products in the patent legislation may encourage establishing such a scenario.

It is pertinent to note that such a scenario has started witnessing in India consequent to India signing the WTO Agreement even though all the provisions of TRIPS have not yet been complied with. Considering these, one may conclude that the domestic R & D may not have adverse effect to the extent it is being apprehended. However the situation may be different based on the particular condition and environment, particularly the S & T environment prevailing in individual developing country.
C) Consideration of importation of patented products as working of patents and grant of compulsory license.

Another concern is to the question whether importation can be considered as working of a patent or not?. This question may not have a uniform answer. For example, if a patented product is required in small quantity and it is not commercially viable to manufacture in such a small quantity in the country concerned, the market will, in any case, be served only by imports.

The subject of "import monopolies" is perhaps the most dangerous aspect in respect of the developing countries. The issue is whether patents allow access to products / processes not otherwise available or whether they simply raise the cost of what is actually available. The main reason for the argument that the cost of patented products will raise is based on the low degree of working the invention in the country of grant or domestic working of the invention.

From an economic point of view, the more relevant consideration on the subject is to consider whether patents assist in technology transfer or simply provide the same products / processes at a higher price. There is a belief that when a country provides inadequate IP protection, the foreigners will either take their products and technology elsewhere or simply make available the products / technology that is obsolete, which they can afford to lose.

Therefore if the technology in question is highly complex, unique and involves substantial investments in R & D, the company would exercise the maximum control over its introduction in foreign
countries especially the developing countries. On the other hand if the technology is not complex, not unique, does not involve substantial investments in R & D and in addition the life cycle is expected to be short, the company may probably employ the method to commercialize the said technology by way of licensing or other means to introduce the technology product, process to the widest possible world market at the earliest feasible time.

Even if free compulsory license is made available for a product, no local company will take up the manufacture of such products. From the practical standpoint, the question of working of a patent in the country which grants the patent assumes significance only when it is commercially viable to manufacture the products in the country and the enterprise wanting to manufacture it has the capability to do so. The capability of the compulsory license seeker to manufacture the product cannot be taken for granted in all cases. Market in the developing countries which will also be detrimental to the development of the developing countries.

A measure of involuntary licensing is implicit in Article 31 of the text under the title "Other Use Without Authorization of the Right Holder". But there are fundamental differences between the traditional provision of 'compulsory licensing' and those in Article 31. The most fundamental difference is that whereas the former is intended to serve the public interest, the whole purpose behind the latter is to protect the interest of the right holder even while allowing for 'use without authorization' of the patent under exceptional circumstances. The
scope of authorization under Article 31 is for a limited purpose of non-commercial use only and limited duration. This will not serve the purpose of meeting the requirement of the general public. A number of conditions must be fulfilled before 'use without authorization' is made.

D) Protection of living matter

The provisions of TRIPS in the Agreement excludes "plants and animals" from patentability, but makes it obligatory to provide patent protection for "microorganisms" and "microbiological process". The term "microorganism" is not defined in the Agreement nor does the Agreement specify any parameters concerning the scope of protection to be provided. Therefore there is a doubt as to what sort of microorganisms have to be given protection.

By the incorporation of provisions to provide protection to microorganisms and non biological and microbiological processes, which are powerful tools for developing processes to produce products by the application of biotechnology, in which technology the developed countries have already established expertise. The intention seems to capture the enormous markets for such products in the developing countries. Consequently the developing countries may be in a disadvantageous position.

As regards protection of Plant Varieties an option has been given to the member countries to select whether the protection is to be provided by way of patents or through a separate sui generis system. The only requirement is that whatever system is adopted it should be effective. Again what is meant by effective is also not clear.
e) Regarding protection of Traditional Knowledge :-

The developing countries have over the years established varied degrees of knowledge based on continuous practice which has now come to be referred to as traditional knowledge. These knowledge extends to variety of areas such as medicines, plants, art and culture.

Recognizing the importance and value of such knowledge the developed countries in some pretext or other are taking undue advantage at the cost of the developing countries to secure patent or similar protection for such knowledge. As an example one may consider the US patent for the use of turmeric powder for healing of wounds. Such instances are likely to happen more and more in the coming years. There is a genuine apprehension amongst the developing countries that by this method they will lose their legitimate rights on the knowledge created by their long and sustained practice of the knowledge. To overcome this the developing nations should create data bank and place details in public domain.

f) Reversal of burden of proof:

This provision of the reversal of burden of proof seems to be another concern for the developing countries because normally in the case of an infringement the burden of proof is always on the Plaintiff namely the patentee. There is an apprehension that the provision of reversal of burden of proof may be a disadvantage for the developing countries in that the incentive to develop alternative processes for the existing known products may be lost due to the fear of litigation by
the patent holder for the products. It is to be noted that this provision applies only in the case of new products and if such a process for the said product is developed during a reasonably short period of time. This provision is not applicable for those products which are already in public domain.

g) Exception to exclusive rights

The provision titled "other uses without authorisation of the right holder" seems to give an extraordinary power on the patentee even in an emergency. In the cases of use of the invention covered under a patent during emergency or public non-commercial use without the patent holder's authorisation, the patentee has to be informed quickly. In other instances if use of the invention has to be made it may be permitted if prior to such use, the proposed user has to make efforts to obtain authorisation from the patentee on reasonable terms and conditions.

h) Transition period

Though the TRIPS provisions provide certain transition period to the developing countries and least developed countries, it is considered as illusionary and not real. The developed countries will have the advantage of the new patent regime under the TRIPS w.e.f 1.1.95. This is because it is required that from the date of coming into force of WTO agreement, all the member countries including countries which have been given the transition period, will have to
provide the benefits of the new patent regime. This is because the member countries should receive the applications for patents if filed containing claims for the new products in the fields of pharmaceutical and agricultural chemicals from the above mentioned date. In addition, the applicant for such an application should also be given Exclusive Marketing Rights to sell the product in the country as explained above.

It is to be noted that it is not possible for any country especially a democratic country to change the existing laws within a very short period of time as it has to follow the procedure prescribed in each country. The transition period, as mentioned above, has been provided for the benefits of the developing countries to meet the situation. But this benefit seems to be nullified by the incorporation of the provision relating to the grant of Exclusive Marketing Rights (EMR) for pharmaceutical and agricultural chemical products. These products, incidentally, fall under important areas where there is not only large market potential but also the need to maintain appropriate public health in the developing countries. It is also to be noted that in such products the developed countries have advanced expertise which they are trying to utilise to their advantage.

Under the circumstances, it seems, that the incorporation of the provisions providing transition period on the one hand has been taken away by the other hand by incorporating the provisions of EMR. In other words, the provision of transition period provided in the TRIPS seems to be illusionary and not realistic.
1) Disclosure of invention

One of the essential requirements of patent law is to disclose the invention in a such a manner that a person having ordinary skill in the art to which the invention relates will be able to carry out the invention without any assistance from the inventor. The patent law also stipulates that the patent document (specification) should disclose the best method of performing the invention which the inventor has in his possession. Even though the applicants are not required to disclose the know how of the invention they have to give in the patent document sufficient information about the invention.

In the present day it has become a regular practice that the applicants keep as much information as possible confidential and provide only a general description of the invention. This is being done by clever manipulation of the information. This practice is against the philosophy of patent system. The TRIPS provisions appear to support such a manipulation of the information by the provision regarding "protection of undisclosed information". On the basis of this provision the information cannot be disclosed to others in a manner contrary to honest commercial practices. Further information in the form of undisclosed test or other data which are the result of "considerable effort" and supplied along with the application for marketing rights of pharmaceutical or agricultural chemical products shall be protected against "unfair
commercial use. "Members are also required " to protect such data against disclosure , except where necessary to protect the public.”

Article 31 of the TRIPS may be adverse to the promotion of technological innovations or transfer and dissemination of technology effectively in developing countries. There is no clear guideline for the revocation or forfeiture of the patent rights even though there is a statement " an opportunity for judicial review of any decision to revoke or forfeit a patent shall be available ". This statement again seems to favor the patentee who in majority cases would be from developed countries.

J ) Costs of Technologies

There is a genuine apprehension amongst the developing countries that under the new IPR regime the costs of procuring technologies from developed countries may raise. Consequently such technologies may not be accessible to developing countries.

The capability of the developing countries in developing IPRs may be by the utilization of local resources like minerals , natural products , agricultural crops etc. The developing countries themselves own very little IPR ( less than 4% of the global IPR ) The cost of developing IPR is also very high and its protection globally is still more expensive . Even if it is protected the expenses of fighting any infringement cases would be very prohibitive

k) In the case trade mark the treaty provides sale of Trade Mark with or without the organisation which goes against the very concept of
trade mark that is it indicate the owner of the goods which again a false if the new purchaser buy and use reputed trade mark and sell superior goods. In this regard in India some of the popular brands are purchased by TNCs of developed nation and they enter the market and vice versa.

To sum up, IPR issues in the areas of biotechnology, biodiversity, environment, protection of traditional knowledge and heritage is likely to play an important part in the coming years, all of which are of great importance to the developing countries esp India which possess in abundance.

1) The new order will result in foreclosing for developing countries, several of the policy options and instruments that today's developed countries have been able to use for decades until a very late stage of their economic development, in order to accumulate capital and knowledge, attain self-sufficiency and export surpluses in production and reach the present level of affluence. Given the same starting points, they have had much longer time margins to develop their service industries, accumulate agricultural surpluses, and attain their present level of technological advance, under government patronage and behind protectionist walls, than they seem to be inclined to grant the developing countries.

m) The developing countries have undertaken extensive commitments of an irrevocable nature in diverse areas. They have abandoned several of their restrictive and discretionary trade and industrial policy tools and accepted new disciplines in areas previously beyond the pale
of any international regime. To give only a few examples, the developing countries have bound 72 per cent of their industrial tariff lines as against 22 per cent prior to the Uruguay Round. In agriculture, the bindings of the developing countries increased from 22 per cent to 100 per cent, as against the increase in the bindings of developed countries from 81 per cent to 100 per cent. Binding means effectively ending freedom to turn back to the protectionist instruments of the past. In the Agreement on Subsidies, the developing countries have undertaken a commitment to eliminate subsidies having an impact on export prices. This means that they have lost one of the most important instruments for pursuing a policy of export-led growth which the present developed countries followed for decades and the newly industrialized countries followed up to the present.

n) The ability of the developing countries to impose quantitative restrictions for balance-of-payment purposes will be severely curtailed and all such existing restrictions will have to be phased out within a time limit. They would no longer be able in effect to impose such restrictions for protectionist purposes and broader developmental purposes as they were entitled to do under Article XVIII of GATT. Above all they have accepted far-reaching obligations and restrictions on domestic policy actions in such areas as intellectual property rights, services, agriculture, etc. at a much earlier stage of their development.
The increasing concern over IPR came together with growing investments by the transnational corporations and other private sector enterprises in the North on research and development. Such investments were made in recognition of the fact that science-based technologies have now become a major factor for gaining competitive advantage this calls for larger and more risky investments. Hence the desire to ensure quasi-rent through a more stringent regime of intellectual property rights.

With increasing globalization, there developed a growing tension between governments of developing countries and transnational corporations as the former wanted to impose obligations on the corporations to work a patent and the latter wanted to eliminate such requirements and other conditions on the exercise of IPRs. In this battle the governments of developed countries openly sided with their transnational corporations and mounted a campaign to safeguard their interest. The Agreement on TRIPS was the culmination of this effort. The TRIPS Agreement is thus a movement in the opposite direction from the draft Code of Conduct on the Transfer of Technology negotiated in the UNCTAD, and the draft Code of Conduct for Transnational Corporations negotiated in the United Nations, both of which were designed to require transnational corporations to transfer technology to developing countries and to function in conformity with public interest and national development objectives and priorities of the host country.
The Uruguay Round was different from all previous rounds of trade negotiations under GATT in several ways. Firstly, this was the only round of trade negotiations which the developing countries went on resisting for several years and ultimately did agree to its being launched, they saw their main task as minimizing the damage that the Round could inflict upon their economies rather than securing any significant gains for themselves out of it. Therefore much of the claim now being made as to how much the developing countries have got out of the negotiations, is in the nature of a rationalization of the inevitable.

Secondly, these were the first GATT trade negotiations in which the developed countries, apart from seeking the liberalization of the agricultural trade in all countries, targeted the markets and the economic playing fields of a dozen or so large-size and more developed among developing countries, including India, for seeking liberalization for their goods and services. This circumstance gave to these developing countries a bargaining power of the kind they had not enjoyed in any of the previous rounds of trade negotiations which were conducted mainly among the 'principal suppliers' and in which the concessions exchanged in the process were extended to all others on the basis of the Most-Favoured-Nation principle. Developing countries lamentably failed to take advantage of this unique bargaining power, mainly because under the pressure of the IMF and World Bank, they were already committed to a much more extensive
programme of unilateral liberalization than that involved in the Uruguay Round.

Thirdly these were the most far-reaching negotiations ever undertaken under GATT. For the first time, it brought agriculture under the discipline of GATT. It established separate rules and regimes in the new areas of TRIPS, TRIMs and Services.

The first GATT trade negotiations, which went beyond the traditional GATT jurisdiction of regulating trans-border trade transactions and paved the way for a massive intrusion into what may be called "the sovereign economic space" of the developing countries. The new regimes under TRIPS, TRIMS and Services provide for right to establishment and operation in the sovereign territory of other states and significant moderation in the macro-economic policies followed by Member States, which go much beyond the realm of trade. These regimes will have serious implications in terms of abridging the economic sovereignty of developing countries, upsetting their development priorities and inhibiting their pursuit of self-reliant growth based on the maximum utilization of their own material and human resources.

The provisions of Article XVIII on Government Assistance to Economic Development and Part IV of GATT on Trade and Development still exist on paper. But they will gradually become ineffective as a major thrust of the Final Act is to do away with the special privileges and the positive discrimination the developing
countries have so far enjoyed under GATT. New measures of positive
discrimination, such as non-reciprocity, preferences, and other forms
of assistance for development, cannot be taken for granted. These can
henceforth be obtained only by negotiation and after the payment of
quid pro quo. This is very clear from the provisions in the General
Agreement on Trade in Services (GATS) where every form of flexibility
for and assistance to developing countries is subject to negotiation
and where no provision is made for developing countries to apply
import restrictions on protectionist ground - a privilege which
developed countries have so far enjoyed in the services sector.

However in spite of this eloquent recognition of the principle and
objective of the Treaty, the existence of the problem of the abuse of
IPRs, the Agreement does not contain any binding or enforceable
measures to prevent such abuses. On the contrary, the text of the
Agreement is weighted heavily in favour of IPR holders who will have
under the Agreement all the rights they claim, but hardly any
obligations.

Purely in economic terms, there is genuine ground to believe
that global welfare deteriorates with higher level of intellectual
property protection. In extending IPR protection, a society incurs costs
in terms of inefficient factor allocation and in the form of monopoly
profits paid to investors. There is also a distortion of consumer's
choice due to monopoly pricing. Moreover patent protection conflicts
with consideration of equity, for it involves a substantial transfer of
welfare from developing to developed countries. Thus from the global point of view the costs of IPR protection heavily outweigh its benefits.

The net effect of the provisions in the Agreement on TRIPS will be to freeze the present technological asymmetry between developed and developing countries. It will consolidate a system of an international division of labour under which developed countries will generate technology and developing countries will provide the markets for the resulting goods and services in favor of the developing countries.

The TRIPS Agreement is thus one of the most potent instruments for preserving the status quo in the world economic structure.

The TRIPS Agreement will have the effect of impeding the development, adaptation and absorption of technology in and transfer of technology to developing countries. The Agreement prohibits the present practice in many developing countries and the erstwhile practice in several developed countries of granting process patent only in such areas as pharmaceutical, chemicals, food-processing, etc. This will adversely affect the policies of technological self-reliance. It will prevent the development of processes appropriate to the domestic environment, socio-economic conditions and the resources endowment of developing countries. It will result in the dismantling and reversal of policies in certain sectors to develop, through domestic R&D effort, the nation's capacity to adapt, absorb and develop
technology. More specifically, it will prevent the so-called 'reverse engineering', which several of the present highly developed countries have resorted to in order to reach the present level of sophistication of their industrial and technological structures. It will be a strong disincentive to local R&D effort because a large part of the present process of making incremental innovations on technologies acquired from abroad will be declared illegal and hence will have to be dismantled.

According to Article 46 of the Agreement, goods produced in units operating on the basis of a system of process patent only and the resources and implements used for producing such goods may be ordered to be destroyed or dismantled. This will adversely affect the sizeable export of pharmaceutical products that Indian companies have built up recently by successfully exploring alternative technological routes to producing the same products, made possible by the process patent only regime. Indian scientists have demonstrated a genius for finding superior formulations and Indian formulations are the cheapest in the world. India will be required to close down some 10,000 units in the pharmaceutical sector, throwing out of employment thousands of scientists and technicians and adversely affecting an export business of approximately $550 million in per annum. Foreign entrepreneurs would displace local firms, particularly in areas of very advanced technology. National development will suffer and there will be a sharp increase in the profits and royalties remitted abroad. Just to cite one example, in
1981, Mexico paid $818 million or 1.5 per cent of its manufacturing GNP, by way of royalties.

This will hurt the developing countries more because as compared to developed countries they are to a far greater extent users rather than generators of technological innovations. There is yet another way in which higher level of IPR protection will impose additional burdens on their balance-of-payments position: they will now be importing goods which they have been producing domestically through reverse engineering.

In one of the studies on this subject, it has been calculated that the welfare loss to a sample of developing countries i.e. Argentina, Brazil, India, Mexico, Korea and Taiwan, due to higher level of IPR protection provided in the TRIPS Agreement would range from $3.5 billion to $10.8 billion, while the income gains by foreign patent owners would be between $1.2 billion to $1.4 billion. Country wise annual welfare losses, according to various estimates, would be $67 million to $387 million for Argentina, $220 million to $1.3 billion for India, $153 million to $879 million for Brazil and $75 million to $428 million for Mexico.

After the introduction of patents for petro-chemical products in Italy in 1979, the prices of medicines increased, on an average, by 200 percent. In an exercise carried out in 1994 which compares the prices of patented drugs in Malaysia (where patent protection for pharmaceuticals is reasonably high) with those in India (where it is
not) it has been found that the Malaysian prices are 17 to 767 per cent higher than those in India. According to another study the introduction of product patents for pharmaceuticals in Argentina will imply an additional expenditure of $194 million per annum with a reduction of 45.5 per cent in the consumption of medicines as a result of a price increase of about 270 per cent.

The Government of India will find itself helpless in getting the drugs imported than manufactured in the country because of the provision in the TRIPS Agreement that 'importation' is as good as 'production'. And even if the drugs are manufactured in the country, the prices will be higher than under the present conditions of free competition, because of the monopolistic position enjoyed by the patent holder.

With regard to pharmaceutical and agricultural chemical products, the TRI grantedPS Agreement effectively, even if not nominally, provides for pipeline protection. Pipeline protection is given to those patents for which an application is pending in one member country and for which patent has been ranted in another member country and marketing approval obtained in the latter country. Article 70(8) of the agreement obliges member states to provide, as from the date of entry into force of the WTO Agreement, machinery for the filing of applications for patents for inventions in the pharmaceutical and agricultural chemical sectors. However, the application will be considered on the basis of the criteria for patentability laid down in
the Agreement and it is presumed that action on the application need not be taken until after the expiry of the transition period of ten years in respect of such products, for the developing countries. This would appear to rule out any obligation to grant pipeline protection.

But paragraph 9 of the same Article provides that once an application for patent protection in these areas has been filed with a country like India where set is not amended to provide product patent and patent is granted for that product in another member country and marketing approval obtained there, "exclusive marketing rights"(EMRs) shall be granted for a period of five years" in India or till the Act is amended to provide product patent whichever is earlier. This will enable the patent holder to enjoy monopoly rights even if proper patent protection may not be granted until after the expiry of the interim period. The provision of 'exclusive marketing rights' confers as much as a monopoly right as does a patent. This provision makes the 'transition period' for the developing countries an empty promise.

In sum, all developing countries will have to incur costs for implementing their commitments under the TRIPS Agreement which most of them would lack in human skill, infrastructure and resources to be able to gain significantly from the new regime, and some will lose the domestic industries dependent on the pre-Uruguay Round practice of compulsory licensing and reverse engineering.
One of the authority who associated with GATT and in the negotiation in TRIPS draws a balance sheet showing the advantages and disadvantages to INDIA and the limitation of projections in regard to the submission of facts for the consideration of discussion.

**BALANCE SHEET FOR INDIA**

**Advantages:**

* Benefits from reduction of tariffs on the products of export interest to India.

* Improved prospects for agricultural exports as a result of likely increase in the world prices of agricultural products due to reduction in domestic subsidies and barriers to trade.

* Likely increase in the export of textiles and clothings due to the phasing out of the MFA by 2005.

* Advantages from greater security and predictability of the international trading system due to the revamped dispute settlement procedures, and the agreements on Safeguard, Subsidies and Anti-Dumping Measures.

* Compulsion imposed on us to be competitive in the world market.
Disadvantages:

* Tariff reductions on goods of export interest to India are very small. On the other hand, there will be erosion of the preferences enjoyed by India and India will most probably be graduated out of the Generalised System of Preferences (GSP).

* Meagre prospects of increase in agricultural exports due to the very limited extend of agricultural liberalisation.

* There will be hardly any liberalisation of our textile exports during the next 10 years, with most of the liberalisation expected to come at the end of this period.

* We will be put under tremendous pressure to liberalise our services industries.

* There will be only marginal liberalisation of the movement of labour services in which we are competitive.

* We will lose policy options in several areas because of:
  - The extensive bindings undertaken by us
  - prohibition of certain types of subsidies and making certain other types actionable.
  - giving up the option of granting process patents only in some sectors.
  - limitations put on our ability to apply restrictions on balance of payments ground.
**Increased outflow of foreign exchange due to commitments undertaken in the field of TRIPS, TRIMs and Services.**

**Technological dependence on foreign firms will increase as the R&D required to take advantage of the Uruguay Round may not be undertaken on an adequate scale due to paucity of resources.**

**Concentration in market structure whereby only a few large firms or transnational corporations may benefit and smaller and tiny firms may disappear.**

**Increasing intrusion in our sovereign domestic space in TRIPs, TRIMs, Services and Agriculture.**

**The Uruguay Round has paved the way for similar other intrusions in future through linkages between trade and environment, trade and labour standards, and a new regime for the treatment of foreign capital.**

**Trend towards neo-protectionism in developed countries against our exports.**

**Possibility of cross-retaliation against our export of goods and services.**

**LIMITATIONS OF PROJECTIONS**

**They use different models, with different sets of assumptions, for projecting losses or gains.**
* They use different time horizons and take into account different agreements of the Uruguay Round.

* Some of the losses and gains were estimated before the full final outcome of the Uruguay Round was known.

* It is difficult to attribute all the gains claimed, to the Uruguay Round.

* Some of the changes in trade policies would have taken place autonomously under the momentum of structural adjustment programmes; they therefore cannot be attributed to the Uruguay Round.

(An unequal treaty by Muchkund Dubey)

To sum up, prima facie it looks that the TRIPS provisions are not to the advantage of the developing countries and the latter have to take appropriate initiatives to counter the disadvantages of the provisions. Therefore the developing countries have to be very cautious inframing th municipal laws taking into account the principle and objective provided in Treaty and the Fundamental obligation provided under the constitution as its cardinal governance.