



INTELLECTUAL PROPERTY RIGHTS: GEAR UP INDIA TO MEET THE CHALLENGES AND OPPORTUNITIES

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The paper highlights the entry, existence, competition and complementarity of Intellectual Property Rights (IPRs) in India.

One of the most controversial outcomes of the Uruguay Round (UR) is the Agreement on Trade Related Intellectual Property Rights (TRIPRs). IPRs along with TRIMs and services were called the new issues negotiated in the UR.

Protection of Intellectual Property Rights has become a thorny issue of wide and serious debate, with the formation of the General Agreement on TRIPRs under World Trade Organisation. It is feared that IPRs regime is largely against indigenous communities in developing countries and would escalate bio-piracy in the name of Science and Development. Indian Government wants a balanced view on IPR, adding that phenomenal technological advancement was a double edged weapon which posed serious challenges along with opportunity¹. IPRs agreement put numerous burdens on the developing countries-raising cost consumer products such as medicines and hindering innovation and technology upgrading².

I.0. Definition

IPRs may be defined as “information with commercial value”. IPRs have been characterised as a composite of “ideas, inventions and creative expression” plus the public willingness to bestow the status of property. IPRs are nine categories: patent, trademarks, copy rights, geographic indications, undisclosed information (such as trade secrets) industrial designs, industrial designs, integrated circuits, micro-organism and plant variety protection³. Special (*Sui generis*) forms of protection have also emerged to address specific needs of knowledge, products in the case of plant breeder’s rights and the protection of layout designs of integrated circuits.

I.1. Objectives

The following are main objectives

- a. To Encourage and Reward Creative Work : Protection of copy right and related rights is to encourage and reward creative work.
- b. To Encourage Innovation : They are designed to provide protection for the results of investment in the development of new technology.
- c. To Promote Fair Competition : To protect distinctive signs and other IPRs
- d. To facilitate Transfer of Technology : To facilitate foreign technology in the To Help Consumer Protection : To protect distinctive signs and other IPRs aims to stimulate and ensure fair competition among producers.
- e. form of FDI, joint ventures and licensing. There should be a balance in between legitimate interests of right holders and of users.

I.2. Benefits

Stronger IPRs protection may encourage investment, both foreign and domestic. Stronger implementation of IPRs could be expected to give a boost to R & D in countries like India, whose intellectual capital potential may be expected to grow in great width and depth. IPR system provides a great opportunity to developing countries to benefit from protection of indigenous property rights and traditional knowledge. Developing countries hold approximately 90 *per cent* of world biological resources, which are particularly important in the development of new pharmaceuticals. Mechanisms of sharing the proceeds from commercialising genetic resources can be written into the IPR law⁴.

I.3. Disadvantages

The developing countries are very poor and are ill equipped for significant R & D. Industrial countries are the major producers of technology and developing countries heavily depend on imports of technology. Probably, IPRs turn out to be generally, more beneficial to industrial countries than to developing countries. Developed countries enormously benefit from the benefits of higher prices resulting from the market power provided by IPRs, at the expense of developing countries. Industrial countries gain huge amounts of net transfers from TRIPRs, developing countries including India, are expected to experience net outwards transfers on account of TRIPRs. A strong IPRs regime without adequate safeguards to protect interests of weaker sections can create very serious problems in developing countries. Exorbitant prices will make patented essential drugs beyond the reach of common man.

Developing countries don't have adequate institutional mechanism and resources to properly administer IPRs regime. For example, a proper competition law (made in India) and its efficient enforcement are required to combat the potential anti-competitive abuse of IPRs. While in many industrial countries such abuses are dealt with by general Competition Law.

Unless developing countries rapidly establish adequate competition frame works and regulatory institutions that also address monopoly abuse of IPRs, it is possible that increasing IPR protection could result in welfare losses from monopoly behaviour. This country preserves 6 *per cent* of world's flowering plant species, 14 *per cent* of worlds birds, one third of the world's identified plant species numbering over 45,000 and over 5 *per cent* of the 81,000 species of wild animals (The World Bank 1996). Biological resources immensely contribute to agriculture; at least 166 species of crop plants and 320 species of wild relatives of cultivated crops originate in India. 90 *per cent* of medicinal plants are harvested. Under IPRs it may endanger species as forest authorities are not allowing people.

II.0. Experiences and Practices

Studies have shown that a realistically designed IPRs system becomes beneficial after a country has attained a certain level of technological development and R & D capability. It is observed that although ensuring a core level of IPR protection may increase developing country access to foreign technologies by safeguarding returns for foreign technology producers, excessively strong IPRs can inhibit the diffusion of knowledge. In developing countries, knowledge is built more through access, imitation and diffusion of foreign technologies rather than only local research. Japan introduced patents in the early 20th century after reviewing IPR systems in Europe and the United States. Malaysia and Korea's, growth in industrial sectors took place under weak IPR regimes, and later periods governments emphasised incentives for innovation in IPRs as sophisticated local technology sectors developed.

Developing countries can avoid patenting life forms and can apply special provisions under TRIPRs to exempt public goods from IPR protection. They can expand IPR scope to protect genetic resources, traditional knowledge and folklore, as is promoted by the World Intellectual Property Organisation. Free trade in IPR protected goods ensures competition in product markets, reduces prices, and enhances consumer access to new technologies. But trade in IPR protected products may restrict access to new technologies for developing countries. TRIPRs neither endorses nor prohibits parallel imports.

II.1. Patents

A patent is a legal protection granted for an invention that is new, non-obvious and useful. The patent grants the patent holder the exclusive right to make use or sell the patented products or process. The main purpose of the patent is to benefit the society patents, by providing an opportunity to recoup the cost of invention and to make profit out of the invention, encourage research and development and thereby contribute to the well being of the society. An invention, to be patentable, must satisfy three conditions – it is new, it is useful to the society, it is non-obvious to a person possessed of average skill in the art.

Exclusion of an invention from patentability for commercial exploitation is permitted if it is necessary to protect public order or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment.

II.2. Indian Patent Law

East India Co., was introduced patent law in 18th century. Formal patent protection was enacted as patent Act, 1911. The patents Act, 1970 amended and consolidated the law. Being a member in World Trade Organisation, India was accepted to follow it with effect from January 1, 2005. The Indian patents Act 1970, as amended and effective from Jan 1, 2005 as follows – eligibility, procedures and conditions for grant of patents, inventions and other subjects not patentable, Rights and Obligations of patentee, grounds for revocation of patents, matters related to working of the patent and compulsory licensing and Rights of government regarding patented products. The amendment expanded the scope of patentability to all fields of Technology including food, drugs and pharmaceutical and agri-chemicals⁵.

II.3. Items not Patent

Inventions which are frivolous or contrary to public interest; method of agriculture or horticulture; any process of treatment of human beings or animals; plants and animals; a mathematical or business method or a computer program *per se* or algorithms; the mere discovery of a scientific principles or the formulation of an abstract theory or discovery of any living thing or non-living substance occurring in nature; a mere scheme or rule or method of performing mental act or method of playing game; a presentation of information; topography of integrated circuits; an invention which, in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known components.

II.4. Patent Product and Period

The amended Act provides for grant of product patent. Previously, for food, pharmaceutical and chemical products only process patent was granted in India. This meant that any body was free to manufacture the same or similar product by a process different from the patent one. For Food, Pharmaceutical and Chemical products, previously the patent period was 14 years. Now patents are granted for all products for a period of 20 years from the date of application. Patents are granted merely to enable patentee to enjoy a monopoly but to encourage inventions and to secure that the inventions are worked in India on a commercial scale. The benefit of patent invention would be available at affordable price to the public.

The critics fear that adoption of product patent will enable the multi-national drug firms to exploit the Indian consumers. The patent protection period of 20 years is too long a period. Five to seven years may be reasonable period.

By participating in the international system of IPR protection, India, with its vast pool of scientific and technical personnel, and well-established expertise in medical treatment and health care, has unlocked vast opportunities in both exports and outsourcing and has the potential to become a global hub in the area of Research and Development based on clinical research.

III.0. Biodiversity and Traditional Knowledge

The Doha Ministerial declaration emphasized the importance of traditional knowledge (TK). It instructed the Council for Trade-Related Aspects of Intellectual Property Rights (TRIPRs) “to examine, *inter alia*, the relationship between the TRIPRs Agreement and the Convention on Biological Diversity, the protection of traditional knowledge and folklore, and other relevant new developments raised by members. Traditional knowledge is essential to the food security and health of millions of people in the developing world. In many countries, traditional medicines provide the only affordable treatment available to poor people. Moreover in developing countries upto 80 *per cent* of the population depend on traditional medicines to help and meet their healthcare needs. However, it is only recently that the international community has started giving recognition to traditional knowledge.

Some of the patents are even based on Geographical Indications (GIs) from developing countries; for instance, patent on Basmati rice from India and jasmine rice from Thailand. After a patent on Basmati rice lines and grains granted by USPTO to M/s Rice Tee Inc., USA on September 2nd, 1997, India contested this patent. In a long litigation of almost five years, ultimately the title of the patent was changed in the year 2002. The products list could include goods such as Indian saris. Oriental carpets specialty Teas such as Darjeeling (India), Cheeses such as parmigiano Reggiano (Italy), Jamon de Huelva (Spanish Ham), art paper (China), porcelain from Limoges (France)⁶.

III.1. Geographical Indications

Geographical Indication (GI) is defined as an indication which identifies a good as originating in the territory of a member country of the WTO or a region or locality in that territory where a given quality, reputation or other characteristics of a product is essentially attributable to geographical origin. Often it was an indication of source of the product, like Swiss Watches, German Lens, Florida Oranges, and was the “appellation of origin”⁷.

A GI certificate will mean that only the rice grown in India will qualify to be called as “thus conferring legal protection to the product and safeguarding its un-authorized use by other countries or producers besides eliminating unfair competition for the benefit of genuine producers and consumers. Basmati is a major export earner for India with exports touching 11,20,000 tones in 2005, registering a growth of about 45 *per cent* over the previous years. In value terms, exports rose to \$596 million in 2005 from \$432 million the previous year.

The application filed with geographical Indications Registry in August 2004 by Heritage Foundation, a trust based in Karnal, Haryana for registering basmati as a GI is found to be flawed in terms

of representation of basmati growers / farmers on the trust⁸. Europe Union alone has granted so far more than 5,000 different GI's.

India's ancient use of Haldi (Turmeric) was sought to be patented under the American law in 1995. Luckily for India, Dr. R.A. Mashelkar, Director General, Council of Scientific and Industrial Research Challenged it. The U.S. patent office acknowledged its mistake and cancelled the patent on "Haldi". An American Company has been granted a patent right for Neem as a pesticide.

IV.0. IPRs on Indian Economy

India felt IPRs had disastrous effects especially more on two vital areas i.e., pharmaceuticals and agriculture. Both these areas affect the well being of the people. A dangerous provision has been introduced in patent protection and this relates to changing the philosophy of the patent regime whereby products imported or locally produced, will be covered under patent protection without any discrimination. This implies that the patent regime not only tries to establish import monopoly.

Pranab Mukerjee, former Minister for Commerce stated that India does not recognize patents in the field of drugs, food products and chemicals, has been allowed a transition period of 10 years for establishing a product patent regime for such items. Government retains the right to institute price control on drugs. Many intellectuals may not accept it. India is plagued by mass poverty and high unemployment, which is needed life saving drugs and other basic medicines should be available at affordable and low price. This can be achieved by control over drugs of prices at global level. The government has to continue with the drug price control and keep medical treatment at lower level, reach to the poor. Already, the situation has been changing in this direction with the growing trend of privatization in health. Stronger IPRs can increase the price of input and consequently denial of life saving medicines to the poor⁹.

The Government of India has been under constant attack that the *Sui generis* (plant Breeder Rights) system is against the interest of the farmers and would act as an impediment to the development of new plant varieties.

IV.1. IP on seeds and Monopolisation of life

The inherent right of the farmers to save and exchange seeds is under threat. The proposed plant variety protection act fails to protect the rights of the small and marginal farmers. The patents (second) Amendment Act 1999 provides for patenting on life and promotes biopiracy of our indigenous knowledge and resources.

The plant variety, protection act is being amended to allow corporate IPRs on farmers varieties. This made the farmers were become custodians and steward of biodiversity and its knowledge. IPRs on biodiversity as evidenced in Canada, the US and other countries where they are in place, increase the cost of seed for the farmers leading them deeper into debt.

The Biodiversity act is better as a Biopiracy Act, as it takes away the rights of our communities and indigenous healers to use biological resources for their livelihood and survival. The importance of IPRs to agri – chemical and agri-business corporations revolves round the fundamental issue of control. Seed is the first link in the food chain. Whoever controls the seed, controls the food supply. Therefore Monsanto spent over \$8.5 billion acquiring seed and bio-tech companies Dupont spent over \$ 9.4 billion to acquire pioneer Hi-Bred, the worlds largest seed company and Dow chemical brought Cargill seeds north America in Mid September 2000. Today, the farmers saved seed and state run seed programmes are worth around \$22 billion which is almost equal to the \$123 billion total commercial seed market worldwide. Thus the Gene Giants are developing new mechanisms such as the genetic Engineering technology to enforce their corporate monopolies. Biological control by corporate lead to enslavement's of agriculture. In 1999, at least 43 patents were issued relating to genetic trait control technology. Patent and IRPs regime as system of monopoly control will further aggravate the severe crisis the farmers facing. The TRIPRs regime of W.T.O. will therefore create conditions for a deepening of the economic crisis for the farming community in India. Therefore, Indian Government and Multinationals have to share equally the responsibilities and liabilities to balance the production of seed and distribution, we must develop our indigenous *Sui generis* system to protect farmers seed sovereignty.

Traditional rights of the farmers to freely conserve, develop use share, exchange their seeds are fundamental rights, which can not be alienated by any IPR law. To defend the rights of the small farmers and for the food security of people there should be a call for exclusion of seeds, life and life forms from TRIPRs/W.T.O. In fact, farmers representatives should be adequately represented in the commission on Agriculture on commodities and prices¹⁰.

IV.2. Biopiracy from India

Large number of patents were grounded over genetic resources without the consent of the indigenous people, who possess Indigenous Environment Knowledge (IEK) over the resources in India. Aswaganda traditional aurvedic system of medicine of India has been patented to Reliv International Inc. for Dietary supplement for nutritionally promoting healthy joint function. Karela, Jamun and Bringal have already been patented to non resident Indians. Patent has also been granted to cromark research Inc. US on Karela, Jamun and Gumar for herbal diabetic properties to reduce sugar. India's herbal products like Amla, Vasab, Saptrangi and baelbel have been granted patent by the US patent and trade marks office for their derivatives. Pepper, ginger, mustard, bitter gourd, soapnut, gooseberry black berry, cumin – India's traditional herbs, plants and fruits have all been Patented. In this economic hijack, the corporations were gained people and nature loose.

The use of bio-resources including turmeric, Neem, basmati has been inscribed in an Ancient Sanskrit Text and it has been the long standing art and common knowledge and practiced for thousands of years by India's indigenous community. Some of the popular / journals like *Down to Earth and Honey Bee* are also exposing the apathy of local communities usage of bio-resources in their respective regions¹¹.

Maintenance of biodiversity register at the national level comprising documented indigenous knowledge is the need of the hour. The future economic development making use of a variety of diversity resources such as genes and plant varieties etc is impossible without prior consent of the holders of IPRs on such resources. It is difficult to sustain the balanced and equitable multi-lateral trade based on the principle of shared access. Finally, patent regime would put farmers to depend upon multinational corporations for seeds to food and health of a nation.

V.0. Conclusion

Introduction of Intellectual property rights by World Trade Organization in Indian Agriculture would bring many reforms both advantages and disadvantages. New knowledge is patented is good, but developing countries have not produced it. They have to depend on developed countries. Transfer of technology can change the developing countries economies, but developing countries also be ready to change their mindset for exporting it. With robust optimism developing countries should facilitate to modernise their “knowledge centres” to generate innovations and inventions in order to copy foreign technology. Our indigenous flora and fauna are to be protected and sustained and keep multinationals as competitive and complementary. Under IPRs regime, many products prices many rise, but state has to take firm steps to produce and keep them affordable to the poorest of the poor. Nonetheless, India has to gear up it’s economy to face challenges and took it as an opportunity to make India as a developed country in 2020 through IPRs.

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