

A Quarter Century of Globalization in India: Impact on Food and Medicines

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1. Introduction

The genesis of globalization can be traced back to Bretton Woods Conference of 1944. The Conference resulted in the establishment of new organizations such as World Bank, International Monetary Fund and the General Agreement on Tariffs and Trade [GATT]. The GATT culminated in the formation of the World Trade Organization [WTO] on 1 January 1995. The WTO covers trade in goods, services, intellectual property, investments and agriculture. India is a member of WTO.

India embarked on the path of liberalization, privatization and globalization in 1991, when the eighth Uruguay Round of GATT negotiations was in progress. It was then projected that India would benefit by opening her

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economy to the world. This paper examines whether a quarter century of globalization has secured Indian masses food and livelihood security and access to quality healthcare at affordable prices; or has it resulted in denial to a large section of Indian population access to food and safe and cheap medicines causing widespread and chronic hunger, malnutrition and sickness.

2. Agriculture

India is a country of villages. Agriculture is the lifeline of Indian economy. Though the share of agriculture in GDP has fallen from thirty five percent in 1991 to fourteen percent in 2015, it yet provides livelihood to sixty five percent of the population. Over the years our farmers, diligently and tirelessly, built a strong foundation for agricultural development. From being a net importer of agricultural products, the country went on to become self-reliant and then an exporter of food products. Hence for India, agriculture is not a subject of trade. It is a source of survival and employment for the masses.

But the provisions of the WTO Agreement on Agriculture relating to minimum market access, domestic subsidies and export competition have dealt a severe blow to Indian agriculture, the food security of the nation and livelihood of the farmers. The situation has aggravated due to patenting of plant varieties and plant breeders' rights under the TRIPS Agreement, resulting in denial of rights of our indigenous farming communities, piracy of our bio-diversity and traditional knowledge, and erosion of our genetic resources.



2.1. Agreement on Agriculture [AoA]

The AoA mandated a minimum commitment on market access to agricultural goods of member countries. India had therefore to import a minimum proportion of agricultural products, including food grains. Consequently we were enjoined to replace all types of non-tariff barriers such as quantitative import restrictions, variable import levies, minimum import prices, discretionary import licensing, non-tariff measures maintained through state-trading enterprises, etc., with ordinary customs duties; and then to reduce these customs duties under a time bound program.

India announced several import incentives and permitted import of hybrids of coarse cereals, oilseeds, pulses, fodder, etc. Import of planting materials and seeds of vegetables and fruits were directly allowed. Items freed of quantitative restrictions were fish, milk, coconut, coffee, spices, tea, ragi, bajra, neem products and even basmati rice. Worse still we were asked to open up our markets even before the elimination of food subsidies by the food exporting countries. The inability to insulate our markets from artificially cheap imports caused a further deluge of apples, oranges, kiwi and a multitude of exotic fruits from different countries. This market access has destroyed the local markets, intensified poverty and inequity within rural areas and between rural and urban areas. Agriculture not being a viable option, the number of farmers in India has fast dwindled, threatening the food self sufficiency of the nation.

The Special Product Protection [SPP] and the Special Safeguard Mechanism [SSM] under Article 5 of the AoA are an eye-wash. Though under SPP, a country can protect agriculture by designating some agricultural product lines as special products on consideration of food security, liveli-



hood and rural development; and can declare these product lines outside the ambit of tariff reduction formula, India grows hundreds of crops, each of which is linked to the livelihood of thousands of small farmers. How many special products can India designate? And how many of these designated products will be permitted by the food exporting countries? Similarly SSM, which provides a country the right to deal with sudden surge in imports that harm the interest of farmers, is merely a temporary measure to be adopted only in an emergency. Moreover whenever these issues are raised by developing agricultural countries at the ministerial conferences of WTO they go unheard and un-addressed. The last ministerial held at Nairobi in December 2015 bears testimony to this fact. It is ironical that countries with industrialized agriculture, growing fewer agricultural products, have used these provisions and protected their agriculture, thereby further hitting at the already declining exports from India. And this is despite the 'special and differential treatment for developing countries' stipulated in the AoA under which developing countries are to have more market access in the developed world markets.

Regarding domestic support/subsidies, the AoA ordained that the aggregate measure of support [AMS] to agriculture given by a member State should not exceed ten percent of its value of agricultural production in the case of a developing country and five percent in the case of a developed country. Where the support exceeded the prescribed percentages the members were required to reduce it so as to be in conformity with the provision.

The points to be noted are: one, an agricultural country like India, where there are 263 millions of small and marginal farmers, supports agriculture to ensure food security and employment for its masses and not for exporting its agricultural produce.



Two, the base year for pricing of food grains is pegged at 1986-88 prices i.e. thirty years old prices. After 1988 the prices of food grains have gone up astronomically. So India is bound to breach the subsidy cap, even if it has not done so far. To ensure food security to masses and to assure price support to farmers, India purchases rice and wheat (at a higher price) from the farmers at rates fixed administratively under the minimum support price program. This is then supplied to ration shops for distribution to below the poverty line households at a low price. The difference between the two prices is treated as subsidy and this subsidy should not exceed ten percent of the value of production in 1988, when prices were obviously much less than they are now.

Three, why should subsidies provided for public stockholding be included in the calculation of AMS when green box measures used by countries with industrialized agriculture have been exempted from inclusion in the calculation of AMS? The developed countries too had to reduce their hefty subsidies. But they circumvented this provision by providing blue and green box subsidies. And by juggling the subsidies from one box to other they have actually succeeded in increasing the subsidies manifold.

Four, under the special and differential treatment provision India is allowed to procure and sell the public stockholding at an administered price. But at Nairobi meet pressure was exerted on India to slash its food support and to purchase and sell the public stockholding at current global market prices and not at the rates fixed administratively. And the current global market prices, due to enormous amount of farm subsidies, are artificially depressed.

It warrants noting that these trade distorting domestic subsidies, which were promised to be eliminated at the Uruguay Round, have more than



doubled and are even being given to non food crops such as cotton and tobacco and further they are being enjoyed by the rich farmers too in the developed nations. It is these mammoth subsidies that have totally crippled Indian agriculture and deepened the distress of the resource-poor and subsistence farming families. India can export its agricultural goods only if the international prices are not artificially depressed. This inability to export coupled with the compulsion to import has entailed an epidemic of kidney sales and suicides by our farmers.

The thrust of WTO is on exports. The AoA is no exception to this rule. The undue and unfruitful emphasis on exporting agricultural products from India has decreased the food supply for the masses living and working in the rural areas. The desirability of exporting agricultural produce in large quantities to earn foreign exchange is itself questionable – given the widespread poverty and hunger prevailing in India. Even today we are self-sufficient to the extent that those who can afford food can have it. Millions of Indians go hungry to bed every night. Thousands have died of starvation. Article 12 of The International Covenant on Economic, Social and Cultural Rights recognizes the right of everyone to be free from hunger and to enjoy an adequate standard of living, including adequate food. The same right is also recognised by Article 25 of The Universal Declaration of Human Rights.

Moreover, the efforts to promote export agriculture have resulted in agricultural production having shifted to commercial and exportable crops. Food crops have been replaced by cash crops, fruits, vegetables, aquaculture, etc. Thousands of local but nutritious staples, coarse grains, legumes, lentils, etc., have become extinct. Some tribal communities, which once survived on maize, have been compelled to change over to cash crops. This



shift from food crops to commercial crops has had a disastrous result on the livelihood of small and marginal farmers as well as on the food security of the country. The total area under food grains has declined with a corresponding increase in area under non-food grain crops. This has threatened the food security of the poorer sections of the Indian society. The heart-rending Bengal famine during the British period was the result of emphasis on export oriented agriculture, namely indigo.

Further, exporting agricultural produce from India is extremely difficult. Even if we succeed in entering the highly cartelised market, the international prices fall. The massive subsidies given to domestic farmers in industrialised countries generate over-production. The resulting surpluses are dumped in world markets with the help of yet more subsidies. These highly subsidised exports from rich countries drive down the prices for exports from developing countries, devastating the prospects of small and poor farm families.

Further still, export agriculture is capital intensive and beyond the reach of a small farmer who lacks not only the infrastructure to take advantage of market openings but also access to productive assets such as land and credit. Life styles have changed. There is a demand for processed, ready-to-cook and fast foods, and not for raw food grains. Technical tie-up with MNCs – which have entered Indian food processing industry – is an essential precondition to sell our products in the global markets. Our farmers have thus been reduced to mere suppliers of raw agricultural materials to these huge corporations, who lap up the profits. The ban on seafood exports from India was a culmination of a calculated move to prevent the Indian exporter from diversifying into export of cheap, cooked, processed and value- added seafood; and to restrict him to exporting only raw seafood which is con-



verted into value added food by such corporations and then sold in the international markets at exorbitant rates! Above all, even the meagre Indian gain became uncertain because of the stringent sanitary and phyto-sanitary norms; social barriers; green barriers and other protectionist measures adopted by the advanced countries. One has merely to recall the ban on export of Indian goods on account of so called 'Surat plague', 'inflammable skirts', 'carcinogenic garments', 'child labour employed in carpet industry', 'fishing vessels not equipped with turtle excluding devises'. Examples such as these can be multiplied.

2.2. Patenting/Protection of Plant Varieties under the TRIPS Text of WTO

Article 27.3 (b) of the TRIPs Agreement outlines the obligations of WTO member countries vis-à-vis plant variety protection. The member countries are to provide for the protection of plant varieties either by patents or by an effective sui generis system such as plant breeders' rights under UPOV. This has devastated our farming families by depriving them of their right to save, breed, exchange and sell the seeds. It has also legitimized piracy of our rich genetic resources; and ignored the pivotal role of indigenous communities in conservation of biodiversity and generation of traditional knowledge. Further, it has lead to erosion of our genetic resources.

Plants are not inventions. They are products of nature. They do not qualify for grant of patents. By sanctifying patenting of plant varieties and seeds the Text affects the availability of seeds, bio-fertilizers and bio-pesticides to poor farmers at affordable prices. The seed corporations have sought total



control over the seed, the first link in the food chain. Biotech companies have patented several genetically engineered plant varieties of coffee, pepper, cauliflower, cabbage, mushrooms, melons, peas, etc. Terminator seeds have been developed. Once the seed is patented the farmer loses his right to modify, retain or use his seeds. He becomes dependent on the patent holder or plant breeder for his seed requirement. Consequently the price of seed escalates. In India when W. R. Grace obtained a patent on a product which required the use of the pesticidal extract, azadirachin, from the Indian neem tree, the price of neem seed shot up from rupees 300 per ton to rupees 4000 per ton.

The TRIPS Text has also legitimized piracy of our abundant genetic resources and ignored the pivotal role of our indigenous farming communities in conservation of biodiversity and generation of traditional knowledge. Bio-diversity is found in the poor and resource-starved farmer's field. The small scale subsistence Indian farmer under the traditional low input farming system and mixed cropping pattern has maintained and generated bio-diversity. From time immemorial our farming communities identified, domesticated, improved, conserved and developed plant species. Not only did they create the basis of agriculture by producing rice, wheat, cotton and other cash crops by breeding wild forest plants, but they also identified important traits such as high yield, disease resistance, resistance to water logging, salt and heat, and drought tolerance in these plants. Each farmer shared his innovations with others without maintaining a record as to who innovated what. Hence genetic research and knowledge of bio-diversity in India was considered as farming community knowledge. But in the restructured and globalised economy our pool of rich genetic resources and our traditional knowledge was pirated by formal innovators



who were gigantic corporations. The genes from our plants, which constituted the raw material for developing new agriculture and medicine, were re-shuffled after a minor modification and converted into intellectual property over which these corporations claimed exclusive rights. During the mid nineties, Delhi customs officials found a Bavarian entomologist and a forest officer smuggling out of India four large cardboard boxes of 30000 neatly packed insects, moths, butterflies, grasshoppers and ants. These were to be put to commercial biotechnical applications in Germany. It is ironical that India was neither paid for her genetic material nor permitted to use that same genetic resource to create similar application. We had to pay hefty price for the products created from our genetic resources found in our eco system. One has to only recall patents granted by the United States Patent and Trade-mark office on karela, jamun, brinjal, turmeric (later cancelled), neem, basmati, etc. Such patent grants ignore the fact that the medicinal properties of these plant varieties form part of common traditional knowledge in India.

According to a UNDP Report, eighty per cent of the world's population, for its food and medicinal needs, depends on the knowledge of indigenous communities. The Report cites more than hundred cases where developed countries have benefited from the bio-resources and the indigenous knowledge of developing countries. And this benefit to the developed nations has been free of cost, without compensating the farm communities either for their bio-resources or traditional knowledge. And this is despite the fact that The Convention on Biological Diversity and The International Treaty on Plant Genetic Resources recognise and reiterate the sovereign right of the nations and their farmers over their genetic resources; protec-



tion of indigenous knowledge and traditional life styles; and provide for an equitable sharing of benefits arising from such resources.

Patenting of seeds and plant varieties has also resulted in erosion of genetic resources and a drastic reduction in diversity of food crops, as fewer varieties are monopolised by the seed corporations. The anxiety to develop improved plant varieties and seeds has resulted in extinguishment of traditional varieties, contributing to shrinkage in the genetic diversity of cultivated species. India could once boast of possessing the largest diversity of cultivated crops in the world. One species of mango had diversified into at least one thousand varieties and one species of rice into eight hundred varieties.

3. Pharmaceuticals

Next to food and employment security, public health is the second major concern for India. Poor health leads to poverty and poverty in turn breeds poor health. Providing quality medicines at affordable costs to the poor and ailing section of Indian society is vital for our very existence. The country's track record in achieving self-sufficiency in manufacture of pharmaceuticals has been without product patent protection. The Indian Patent Act 1970, before its amendments, prohibited product patent protection for pharmaceutical inventions.

Inclusion of intellectual property/patents in WTO was at the behest of pharmaceutical corporations of nations who had near monopoly of knowledge and technology. Patents are limited monopolies granted by national governments. Why should they be regulated by an external supra-



national body like the WTO? Patent issues are not trade issues to be negotiated. They are development issues and hence best left to each national government to legislate, depending upon its stage of development. Patents, leading to monopolistic control and escalation of prices of medicines, can impinge upon the human rights of people. Article 25 of The Universal Declaration of Human Rights proclaims that everyone has a right to health and medical care. Further, Article 12 of The International Covenant on Economic, Social and Cultural Rights enjoins the member states to recognise and accept the right of everyone to the enjoyment of highest attainable standards of physical and mental health. The Covenant urges the States to take steps to prevent, treat and control epidemic, endemic, occupational and other diseases and create conditions which would assure to all, medical service and medical attention in the event of sickness. The Supreme Court of India too has held that right to health and medical aid is a fundamental right under Article 21 of the Indian Constitution read along with Directive Principles of State Policy. The Indian Government is planning to enact the National Health Rights Act which will ensure health as a Fundamental Right. This implies that primacy must be given to public health; and access of public to sufficient quantities of safe medicines at affordable prices must be ensured.

Patent regime in any country should therefore be so devised that it ensures the people, especially the poor, the right of access to affordable and quality healthcare. And this is possible only if protection given to patents for medicinal drugs does not impede protection of public health. It warrants noting that even UK did not have product patent for medicines till 1948, France till 1966, Germany till 1967, Japan till 1976, Switzerland till 1977, Italy and Sweden till 1978 and Spain till 1986.



3.1. The Indian Patent Act, 1970

The pre-independence patent law of 1911 had strangulated domestic pharmaceutical industry and rendered the Indian market subservient to British pharmaceutical industry. The foreign patent holder exploited the needs of Indian society by importing drugs and selling them in India at astronomical prices. In 1961, Kefauver, a US senator, had remarked, 'In drugs, generally, India ranks amongst the highest priced nations of the world'. This gloomy situation was reversed after independence, thanks to the Indian Patent Act of 1970, which was replicated verbatim by countries such as Argentina, Brazil, Chile, Egypt and Mexico.

The 1970 Act struck a harmonious balance between the rights of the patent holder and his obligations to the society that grants him such rights.

Recognizing the sovereign right of a nation to exclude certain specific subject-matters from patentability in order to serve its specific national, economic and technological objectives, the Act totally excluded atomic energy and methods of agriculture and horticulture from patentability.

Product patents for inventions, except food, medicine, drugs and substances produced by chemical processes, were permitted. This deliberate omission of product patents for pharmaceuticals and agrochemicals enabled competitors to discover new, improved, advanced and economical processes for producing the same product, resulting in technological development and up-gradation. It contributed to the exemplary growth of generic pharmaceutical companies in India, making quality medicines available to the public at reasonably affordable prices. The Indian pharmaceutical industry rapidly developed into a world class generic industry, the largest producer and exporter of generic drugs in terms of volume. Being the



'pharmacy' of the developing world, India supplied medicines not only to developing countries but also to the developed countries.

Keeping in mind the pace at which technology was moving, patent protection was for fourteen years. In case of food and medical drugs, where only process patent was permissible, the patent protection was seven years from date of filing or five years from date of sealing, whichever was earlier.

The law mandated compulsory working of a patent thus assuring transfer of technology and conservation of precious foreign exchange. The patentee could not hold the patent in India and import the product from another country.

Compulsory licensing provisions ensured that where the patent holder refused to make available the patented drug at an affordable price, a person or company could, subject to certain terms and conditions, apply for a compulsory license to manufacture the patented drug.

3.2. TRIPS Text

The TRIPS Text expanded the scope of patentability. It says patents shall be available for all inventions, whether products or processes; and in all fields of technology. Further plant varieties too have to be protected either by patents or by an effective sui generis system. The term of protection too has been extended to twenty years. And the provisions relating to compulsory licensing have been made stringent. As the TRIPS Text allowed developing countries ten years transition period, i.e., up to 2005, to shift over from process patent to product patent, the developing countries had to provide for setting up of a 'mail-box' for receiving the applications for



product patent made after 1 January 1995 to be dealt with on merits when the provisions for product patent would be in force in 2005. Such countries had also to grant exclusive marketing rights for five years to an applicant who had made a mail-box application.

3.3. Amendments to Indian Patent Act 1970

India amended its Patent Act in 1995, 2002 and 2005 to bring it in conformity with the TRIPS provisions. The current law is fully compliant with the TRIPS Text. The amended law provides for both product and process patents for pharmaceuticals; the period of protection has been extended from seven years to twenty years; the mail-box facility for product patent application was set up; exclusive marketing rights were granted during the interim period from 1 January 1995 to 31 December 2004; a sui generis system for protection of plant varieties was adopted and a law was enacted.

Despite being fully TRIPS compliant India has been criticized for her weak intellectual property laws and listed on Special 301 report, which is prepared every year by the USTR office to identify trade barriers to American companies. The report is a unilateral measure to pressurize India to accept intellectual property protection beyond WTO obligations in order to maximise the profits of American pharmaceutical companies at the cost of public health in India. That new medicines cost billions of dollars and companies need incentive to make this investment is a specious argument. According to Bernie Sanders, the longest serving Vermont congressman and campaigner of 'medicines for all', the top seven drug companies took more in pure profits than the top seven auto companies, the top seven oil compa-



nies, the top seven airline companies, the top seven media companies. One drug company, Merck, made more profits than all the airline companies on the Fortune 500 List.

The reason for criticizing Indian law is obvious. India has used the flexibilities available under the Paris Convention, TRIPS Text and the Doha Declaration of WTO on 'TRIPS and Public Health' to safeguard its public health.

3.4. Flexibilities available under the Paris Convention, TRIPS Text and the Doha Declaration of WTO on TRIPS and Public Health to safeguard public health

The Paris Convention, TRIPS Text and the Doha Declaration of WTO on TRIPS and Public Health embody provisions/flexibilities for better access to essential medicines and to safeguard public health.

Article 2(1) of TRIPS says:'.......Members should comply with Articles 1 through 12 and Article 19 of the Paris Convention.' And Article 5A(2) of the Paris Convention reads: 'Each country of the Union shall have the right to take legislative measures providing for grant of compulsory licences to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent, for example, failure to work.'

There are ample flexibilities in the TRIPS Text for member countries to safeguard not only their national pharmaceutical industries but also the public health of its citizens. WTO members are no doubt to comply with TRIPS/ patent provisions but they are under no obligation to implement in their laws more extensive protection than is required by the TRIPS Text



[Art.1]. The objectives of protecting and enforcing intellectual Property rights such as patent rights are loudly and clearly spelt out in Article 7 of the TRIPS, which reads as: "The protection and enforcement of intellectual property rights 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 technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations." Further the Text permits the members while formulating or amending their laws to adopt measures necessary to protect public health and nutrition, and to promote public interest in sectors of vital imtheir socio-economic portance to and technological development...."[Art.8(1)]. Similarly, members may adopt appropriate measures to prevent the abuse of intellectual property rights by right holders or the resort to practices which adversely affect the international transfer of technology [Art.8(2)]. Yet another TRIPS Article worth noting is Article 31, which allows 'other use' of the subject matter of the patent. This includes use, by government or a third party authorised by government, of the subject matter of a patent. However, the proposed user, prior to the use, should have made efforts to obtain authorisation from the right holder on reasonable commercial terms. This requirement may be waived in case of national emergency or circumstances of extreme urgency or in case of public noncommercial use.

The Doha Declaration of WTO on TRIPS and Public Health clarifies the rights of member countries in regard to granting compulsory licenses in paragraphs 4 and 5 of the Declaration. Para 4 says "......TRIPS Agreement does not and should not prevent members from taking measures to protect public health......the agreement can and should be interpreted and imple-



mented in a manner supportive of WTO member's right to protect and in particular to promote access to medicines for all." The Declaration reaffirms the right of WTO members to use, to the full, the provisions in TRIPS which provide flexibilities for this purpose. In Para 5 of the Declaration, the flexibilities include: a) Each member's right to grant compulsory licences and the freedom to determine the grounds upon which such licences are granted; b) Each member has the right to determine what constitutes a national emergency or other circumstance of extreme urgency.

The 2002 Report on 'Integrating Intellectual Property Rights and Development Policy' by the Commission on Intellectual Property Rights set up by the British Government and the 2006 Report of WHO Commission on 'Innovation and Public Health' have both in unequivocal terms suggested that as the term 'invention' is not defined in the TRIPS Text, developing countries may determine in their own way the definition of an invention, the criteria for judging patentability, the right conferred on the owners and the exception to patentability. The U.K. Report has gone a step ahead by advising developing countries to limit the scope of subject matter that can be patented.

The 69 World Health Assembly, which took place between 23 and 28 May 2016 reiterated the rights of developing countries in using provisions present in the TRIPS Text regarding flexibilities to protect public health. The Assembly has re-affirmed that governments can invoke compulsory licensing provisions to make medicines available in their countries in the interest of public health.

In view of the above flexibilities available to WTO members, many countries have utilised these flexibilities to safeguard the health of its masses. Italy invoked compulsory licensing provisions for finasteride, active in-



gredient of a medicine patented by Merck and meant for use by prostate cancer patients but which is now being used widely by anti-balding clinics. Again, Glaxo's patent rights for a drug used to treat migraine were waived and Fabbrica Italiana Sintetici, an Italian chemical company, was allowed to manufacture the active ingredient-sumatriptan. Egypt waived Pfizer's patent rights on Viagra, a drug to enhance male potency. Countries ranging from France and Germany to Thailand, Mexico and Chile have laws that allow their Patent Offices and Courts to waive patent rights and let cheaper versions of medicines be manufactured on payment of royalty. Even in the US, Glenmark launched an affordable version of Merck's, anti diabetic drug, januvia, at a fraction of the price of the patented drug. Sun Pharma got compulsory licence in the US for anti cancer drug lipodox, the monopoly drug of Johnson and Johnson.

The compulsory licensing provision was used by the Indian Patent Office in 2012 to waive Bayer Corporation's patent rights over nexavar, a renal cancer drug. Natco pharmaceutical, an Indian company, was allowed to sell it at a fraction of the cost, viz., at Rs. 8800 for a month's therapy as compared to Bayer's at Rs. 2.8 lakhs.

But the same Patent Office rejected the application of BDR Pharma for a generic version of Bristol-Myers Squibb's [BMS] dasatinib, an anti cancer drug, on the ground that the Indian company did not make enough effort to obtain a voluntary licence from BMS. A monthly dose of dasatinib costs 1 lakh and BDS Pharma had agreed to sell the drug for Rs. 8100, if the compulsory licence was granted. This example bears testimony to the fact that the Indian patent regime and its provisions on compulsory licensing are in conformity with the international standards. The allegations that Indian patent laws are weak, stand refuted. India is not granting compulsory licences



indiscriminately. Compulsory licence is being granted on a case to case basis.

During circumstance of extreme urgency such as AIDS, SARS, Anthrax there is no need to consult the patent holder and the government can waive requirement of consultation. Two decades back when AIDS became a global pandemic, it was an Indian generic company, Cipla, which provided unlimited supply of medicine at 300 dollars per patient per year as against Novartis, which supplied the same medicine at 10000-15000 dollars per patient per year.

The Indian Patent Office revoked a patent on asthma drug, spiriva, held by Boehringer Ingelheim on an opposition filed by the generic company, Cipla, on the ground that it lacks an inventive step and fails to demonstrate therapeutic efficacy. But again, sofosbuvir an exorbitantly priced hepatitis C drug, developed by the US Company, Gilead Sciences, was recently granted a patent in India despite huge protest as a twelve week treatment in the US costs between 84000 to 168000 dollars and its generic version is available in India for just 335 dollars. The Indian Patent Office has also rejected the application of Lee Pharma on Astra Zeneca's diabetic medicine saxagliptin, even though India is known as the diabetic capital of the world.

Re-patenting, especially of essential drugs, jeopardises affordable cure in all countries. It entails a lifetime of artificially high priced medicines because only one manufacturer is allowed to supply the drug. Pharmaceutical companies are known for making minor tweaks to their existing drugs and then re-patenting them, thereby extending their monopolies indefinitely and keeping their patents ever-green. There should be no ever-greening of patents, especially for medicines treating chronic ailments. Keeping this in mind the Indian law prevents ever-greening of a patent by prohibiting



grant of a patent to a new form of a known substance unless the new form actually makes the medicine more effective. That was the reason why Novartis was refused the patent because it was re-patenting its cancer drug, glivec, in India. Novartis sells its drug at Rs 120000 for a month's treatment, whereas an Indian company sells its generic version for just Rs 10000 for a month's treatment. India has one of the highest cancer rates in the world. There are more than 2.5 million cancer patients in India alone, many of whom die a painful death every year just because they cannot afford the expensive drug. India is also exporting this generic version to several countries and helping in treating 80% of the people afflicted with cancer all over the world. The French NGO, Medicins Sans Frontieres, imports the generic version of glivec from India and distributes it free of cost all over the world. If Novartis had succeeded in re-patenting the drug it would have had monopoly over the drug for another twenty years. Moreover other pharmaceutical companies too would have re-patented their life-saving drugs and ousted other drug companies from manufacturing affordable generic versions of such drugs for chronic diseases. Medicines are a matter of life and death. They are not mere commodities for trade and profit.

3.5. Acquisition of Indian Pharmaceutical Companies

Not only is pressure being exerted on India to dismantle its flexibilities and to water down its patent law but there is also a calculated move to take-over Indian pharmaceutical companies by foreign pharmaceutical companies. Examples are galore of brownfield investment (acquisition of existing businesses) in India. Ranbaxy Laboratories was acquired by Daiichi



Sankyo of Japan (and then by Sun Pharma), Shantha Biotech by Sanofi Aventis of France, Piramal Healthcare by Abbott Laboratories of US, Matrix Lab and Orchid Chemicals by Mylan Inc. and Hospira of US, Dabur Pharma by Fresenius Kabi of Singapore. At this rate there will be no Indian pharmaceutical company left to manufacture cheap generic drugs. Acquisition of existing Indian pharmaceutical companies by foreign pharmaceutical companies will impact the introduction of cheap generic versions of patented drugs and the consequent availability of affordable medicines in India and the world over as well. It may be recalled that Daiichi Sankyo, immediately on acquisition of Ranbaxy, withdrew all its patent challenges on Pfizer's drug, Lipitor, filed in more than eight countries. The long term implication of such take-overs will be on the research and development base of Indian pharmaceutical companies. Pharmaceutical MNCs invest in R & D and bulk drug production only in their own countries and never abroad. Abbott, John Wyeth, Bristol Meyers, Merck have invested money for conducting research in the US but not in Japan, Germany or France, even though these countries had product patent protection. Presuming for a moment that these MNCs will invest in R & D in India, would they invest in conducting research to manufacture new drugs for chronic Indian or third world diseases such as tuberculosis, malaria, meningitis, dengue, elephantiasis, gastroenteritis, etc?

In order to discourage production of generic drugs in India, pharmaceutical MNCs are now asking for data exclusivity to disable others from using data and formulas of patented drugs.

From 1 January 2005 we are WTO-bound to grant product patents to them; and we have been doing so. But this does not mean that we cannot adopt flexibilities available/permissible under WTO and TRIPS and utilize



legislative spaces to safeguard our pharmaceutical industry and health of our citizens. It would not be out of place to quote India's statement at the 2015 General Assembly of WIPO: "....we need to be conscious of our roles as welfare States in safe-guarding and providing for the needs of not only our own citizens, but also of the entire world community..... with intellectual property rights come intellectual property duties, and we have to remain fully conscious of both."

4. Conclusion

Globalisation has become a manifestation of the expansionary needs of mammoth agricultural and pharmaceutical corporations. The inequitable and unfair rules of globalisation have resulted in profits being privatized and costs being socialized. The poor have been priced out from the food and healthcare market. The basic premise of global trade is that it culminates in greater growth, prosperity and a better quality of life for all. Unfortunately globalized trade in agriculture and medicines, instead of being a source of shared prosperity and poverty reduction has become a source of misery and distress for millions of Indians. If globalization is to satisfy the demands of only the affluent sections of Indian society at the cost of denying human rights to the vast majority of Indians then it is a travesty of development. End of all development is human development. Indian agricultural and healthcare policies should be human rights based and must favour the fundamental rights of the poor and vulnerable to food, medicine and health.



Abstract

A Quarter Century of Globalization in India: Impact on Food and Medicines

India has witnessed a quarter century of globalization. In 1991 tall claims were made that India would benefit by opening her economy to the world. This paper segregates the hype from reality by highlighting the impact of globalization on two vital sectors of Indian economy - agriculture and pharmaceuticals. After tracing the genesis of globalization and birth of WTO on 1 January 1995, the first part of the paper, dealing with agriculture, scrutinizes the deleterious impact of market access, domestic subsidies, export competition; and the patenting/protection of plant varieties on food and livelihood security of the nation; rights of farm families and indigenous communities; and our genetic resources and traditional knowledge. The second part of the paper critically examines the history and the provisions of The Indian Patent Act 1970, before and after the establishment of the WTO; the flexibilities permissible under the TRIPS Text to safeguard public health; and the attempts made by pharmaceutical MNCs to dilute our laws in order to make us TRIPS-plus compliant and to throttle Indian pharmaceutical companies through takeovers. The paper concludes by saying that India should beware the expansionary needs of gigantic agricultural and pharmaceutical corporations and continue to protect its agriculture and public health. Agriculture and patent issues are not trade issues. They are survival/livelihood and development issues; best left to national government to legislate, depending upon its stage of development.

Keywords: globalization, India, agriculture, public health, security.