PROFITEERING FROM DEATH: TRIPS AND MONOPOLIES ON SEEDS AND MEDICINES

Vandana Shiva¹

1 WTO AND THE TRIPS AGREEMENT

The Trade Related Intellectual Property Rights Agreement of WTO is the most far reaching in terms of creating corporate rights and corporate monopolies.

During the Uruguay Round of the GATT, the United States introduced its flawed patent system into the WTO, and thus imposed it on the rest of the world. US Corporations have admitted that they drafted and lobbied on behalf of TRIPs. As a Monsanto spokesman said, "The industries and traders of world commerce have played simultaneously the role of patients, the diagnosticians, and prescribing physicians."

TRIPs not only made Intellectual Property Rights (IPR) laws global geographically, but also removed ethical boundaries by including life forms and biodiversity into patentable subject matter. Living organisms and life forms that are self-creating were thus redefined as machines and artifacts made and invented by the patentee. Intellectual property rights and patents then give the patent holder a monopolistic right to prevent others from making, using, or selling seeds. Seed saving by farmers has now been redefined from a sacred duty to a criminal offence of stealing "property". Article 27.3 (b) of the TRIPs agreement, which relates to patents on living resources, was basically pushed by the "Life Science" companies to establish themselves as Lords of Life.

The chemical companies of the world have bought up seed and biotechnology companies and reorganized themselves as Life Science corporations, claiming patents on genes, seeds, plants and animals. Ciba Geigy and Sandoz have combined to form Novartis, Hoechst has joined with Rhone

¹ Phd in the Philosophy of Science (1978), Right Livelihood Award (1993), director of the Research Foundation for Science, Technology and Ecology, New Delhi, India.

Poulenc to form Aventis; Zeneca has merged with Astia; Dupont has bought up Pioneer HiBred; and Monsanto now owns Cargill Seeds, DeKalb, Calgene, Agracetus, Delta and Pine Land, Holden and Asgrow, Seminis. Eighty percent of all genetically engineered seeds planted are Monsanto's "intellectual property." And Monsanto owns broad species patents on cotton, mustard, soyabean – crops that were not "invented" or "created" by Monsanto but have been evolved over centuries of innovation by farmers of India and East Asia working in close partnership with biodiversity gifted by nature.

There are three perversions inherent in patents on living material:

1.1 ETHICAL PERVERSION

This refers to the claim that seeds, plants, sheep, cows or human cell lines are nothing but "products of the mind" "created" by Monsanto, Novartis, lan Wilmut or PPL. Living organisms have their intrinsic self-organization; they make themselves, and hence cannot be reduced to the status of "inventions" and "creations" of patent holders. They cannot be "owned" as private property because they are our ecological kin, not just "genetic mines."

1.2 CRIMINALIZATION OF SAVING AND SHARING SEEDS

The recognition of corporations as "owners" or seed through intellectual property rights converts farmers into 'thieves" when they save seed or share it with neighbours. Monsanto hires detectives to chase farmers who might be engaging in such "theft".

1.3 ENCOURAGES BIOPIRACY

"Biopiracy" is the theft of biodiversity and indigenous knowledge through patents. Biopiracy deprives the South in three ways:

 It creates a false claim to novelty and invention, even though the knowledge has evolved since ancient times. Thus, biopiracy is

- intellectual theft, which robs Third World people of their creativity and their intellectual resources.
- It diverts scarce biological resources to monopoly control of corporations, depriving local communities and indigenous practitioners. Thus, biopiracy is resource theft from the poorest two thirds of humanity who depend on biodiversity for their livelihoods and basic needs.
- It creates market monopolies and excludes the original innovators form their rightful share of local, national and international markets. Instead of preventing this organized economic theft, WTO rules protect the powerful and punish the victims. In a dispute initiated by the United States against India, the WTO forced India to change its patent laws and grant exclusive marketing rights to foreign corporations on the basis of foreign patents. Since many of these patents are based on biopiracy, the WTO is in fact promoting piracy through patents.

Overtime, the consequences of TRIPs for the South's biodiversity and southern people's rights to their diversity will be severe. No one will be able to produce or reproduce patented agricultural, medicinal, or animal products freely, thus eroding livelihoods of small producers and preventing the poor from using their own resource and knowledge to meet their basic needs of health and nutrition. Royalties for their use will have to be paid to the patentees and unauthorized production will be penalized, thus increasing the debt burden.

The new IPR laws embodied in the TRIPS agreement of WTO have unleashed an epidemic of the piracy of nature's creativity and millennia of indigenous innovation. RFSTE / Navdanya started the campaign against biopiracy with Neem Campaign in 1994 and mobilized 1,00,000 signatures against neem patents and filed a legal opposition against the USDA and WR Grace patent on the fungicidal properties of neem (no. 436257 B1) in the European Patent Office (EPO) at Munich, Germany. Alongwith RFSTE, the International Federation of Organic Agriculture Movements (IFOAM) of

Germany and Ms. Magda Alvoet, Former Green Member of the European Parliament were party to the challenge. The patent on Neem was revoked in May 2000 and it was reconfirmed on 8th March, 2005 when the EPO revoked in entirety the controversial patent, the adjudged that there was "no inventive step" involved in the fungicide patent, thus confirming the 'prior art' of the use of Neem.

In 1998, Navdanya started a campaign against Basmati biopiracy (Patent No. 5663484) of a US company RiceTec. On August 14th 2001, Navdanya achieved another victory against biopiracy and patent on life when the United States Patent and Trademark Office (USPTO) revoked a large section of the patent on Indian Basmati rice by the US corporations RiceTec Inc. These included (i) the generic title of the RiceTec patent No. 5663484, which earlier referred to Basmati rice lines; (ii) the sweeping and false claims of RiceTec having 'invented', traits of rice seeds and plants including plant height, grain length, aroma which are characterstics found in our traditional Basmati varieties and (iii) claims to general methods of breeding which was also piracy of traditional breeding done by farmers and our scientists (of the 20 original claims only three narrow ones survived).

The next major victory against biopiracy for Navdanya came in October 2004 when the European Patent Office in Munich revoked Monsanto's patent on the Indian variety of wheat "Nap Hal". This was the third consecutive victory. This was made possible under the campaign against patent on life as well as against biopiracy respectively. Monsanto, the biggest seed corporation, was assigned a patent (EP 0445929 B1) on wheat on 21 May 2003 by the European Patent Office in Munich under the simple title "plants". On January 27th 2004 Research Foundation for Science, Technology and Ecology (RFSTE) alongwith Greenpeace and Bharat Krishak Samaj (BKS) filed a petition at the European Patent Office (EPO), Munich, challenging the patent rights given to Monsanto on Indian Landacre of wheat, Nap Hal. The patent was revoked in October 2004 and it once again established the fact that the patents on biodiversity, indigenous knowledge and resources are based on biopiracy and there is an

urgent need to ban all patents on life and living organisms including biodiversity, genes and cell lines.

Through citizens actions, we have won three-biopiracy battles and have thus contributed to the defense of farmers' rights, indigenous knowledge and biodiversity. Navdanya's focus on collective, cumulative innovation embodied in indigenous knowledge has created a worldwide movement for the defense of the intellectual rights of communities.

Indian farmers, traditional practitioners, and traders will lose their market share in local, national and global markets. For example the US government granted a patent for their anti-diabetic properties of karela, Jamun and Brinjal to two non-resident Indians, Onkar S. Tomer and Kripanath Borah, and their colleague Peter Gloniski. The use of these substances for control of diabetes is everyday knowledge in authoritative treatises like the "Wealth of India," the "Compendium of Indian Medicinal Plants" and the "Treatise on Indian Medicinal Plants."

If there were only one or two cases of such false claims to invention on the basis of biopiracy, they could be called an error. However, biopiracy is an epidemic. Neem, haldi, pepper, harar, bahera, amla, mustar, basmati, ginger, castor, jaramla, amaltas, karela and Jamun have all been patented. The problem is not, as was made, out to be in the case of turmeric, an error made by a patent clerk. The problem is deep and systemic. And it calls for a systemic change, not case-by-case challenges. That is we demand a change in TRIPS and Patent Laws

Some have suggested that biopiracy happens because Indian knowledge is not documented. That is far from true. Indigenous knowledge in India has been systematically documented, and this in fact has made piracy easier. And even the folk knowledge orally held by local communities deserves to be recognized as collective, cumulative innovation. The ignorance of such knowledge in the United States should not be allowed to treat piracy as invention.

The potential costs of biopiracy to the Third World poor are very high since two thirds of the people in the South depend on free access to biodiversity for their livelihoods and needs. Seventy percent of seed in India is saved or share farmers' seed; 70 percent of healing is based on indigenous medicine using local plants.

If a patent system that is supposed to reward inventiveness and creatively systematically reward piracy, if a patent system fails to honestly apply criteria of novelty and non-obviousness in the granting of patents related to indigenous knowledge, then the system is flawed, and it needs to change. It cannot be the basis of granting patents or establishing exclusive marketing rights. The problem of biopiracy is a result of Western-style IPR systems, not the absence of such IPR systems in India. Therefore, the implementation of TRIPs, which is based on the US style patent regimes, should be immediately stopped and its review started.

TRIPS allows rich countries to pirate knowledge freely from other countries, patent it, and then fiercely protect this stolen knowledge as "intellectual property". Knowledge flows freely from the South to the North through biopiracy but is prevented from flowing freely from the North to the South through patents. If biopiracy is to stop, then TRIPS change.

2 SEED MONOPOLIES AND FARMERS SUICIDES IN INDIA

As a result of globalization, corporations like Monsanto have gained monopoly control over seed. (See Table 1) In India, they first entered through hybrid cottonseeds and later with genetically engineered Bt cottonseeds. High cost seeds, which are both non-renewable and unreliable, have pushed hundreds of thousands of Indian farmers to suicide. In a parliamentary debate in 2006, the government figures were 150,000 farm suicides in the last decade. The "suicide belt" overlaps with regions where corporations like Monsanto have established seed monopolies.

S.No	Company	2004 Seed Sales (US Millions)
1	Monsanto (US) + Seminis (acquired by	\$2,277
	Monsanto 3/05)	
2	Dupont/Pioneer (US)	\$2,600
3	Syngenta (Switzerland)	\$1,239
4	Groupe Limagrain (France)	\$1,044
5	KWS AG (Germany)	\$622
6	Land O'Lakes (US)	\$538
7	Sakata (Japan)	\$416
8	Bayer Crop Science (Germany)	\$387
9	Taikii (Japan)	\$366
10	DLF-Trifollum (Denmark)	\$320

Table 1. World's Top Ten Seed Companies*

The Andhra Pradesh Government has filed a contempt petition before the Monopolies and Restrictive Trade Practices Commission (MRTPC) on June 26, 2006 against Mahyco – Monsanto Biotech (India) td. For not obeying the commission's order on 'trait value' of Bt. Cotton seed.

Monsanto enjoys a monopoly on production, supply and marking of Bt. Cotton seed in India. The firm operates through its subsidiary – Mahyco. From the last few years, the company has been charging a 'trait value' (price fixed for research and development on Bt. Cotton seed, which can resist local pests) at Rs. 1750 per pack of 450 grams of seed.

The MNC gets the seed for Rs. 300 per pack of 750 grams from the farmers who grow it under the company's supervision. The Government has challenged the validity of the 'trait value' in the court and demanded its abolition. The Government has also demanded Rs. 400 crore from the company, which it collected from the farmers.

The MRTPC directed the Mahyco-Monsanto to reduce the 'trait value' to a reasonable extent. The MNC tried to approach the Supreme Court to stay the order of the MRTPC. But the apex court refused to grant a stay.

Meanwhile, the Andhra Pradesh Government had conversed a meeting of the seven other states – Orissa, Karnataka, Maharashtra, Tamil Nadu,

Revista Brasileira de Direito Internacional, Curitiba, v.4, n.4, jul./dez.2006

^{*} ETC Group 2005, "Global Seed Industry Concentration", ETC Group, Sept - Oct 2005, Canada

Madhya Pradesh, Punjab, Haryana. It was decided in the meeting to bring pressure on Monsanto to reduce the price of Bt. Cotton seed so the farmers are not over burderned by the exorbitant price.

The Andhra Pradesh government, in its petition, said that the company had deliberately ignored the MRTPC order and withheld the stocks and failed to supply the seed even after the onset of monsoon.

The government told the commission that there were a large number of complaints from the farmers about the attitude of the seed suppliers including Monsanto about withholding stock in the market. The State government held meetings with the seed producers about their marketing plans and asked them not to charge the 'trait value' beyond Rs. 750 per 450-gram pack.

The petition says that after the Supreme Court declined to stay the Commission Order on May 30, 2005 the company fixed the value of Bt cottonseed at Rs. 880 per unit of 450 gram. This violates the commission's direction to the company to fix a reasonable 'trait value' on the lines of China.

The act of the company in fixing the price of Rs. 880 exhibited its callousness and utter disregard to the commission order, the government said in its petition before the MRTPC. The government also asked the commission to initiate contempt proceedings against the company and its officials.

3 MONOPOLIES OVER MEDICINE

Not only has TRIPs encouraged monopolies over seed, threatening the very survival of farmers, it has also led to monopolies in medicine.

India's national laws did not allow products patents in medicine. Only new processes could be patented. Through a dispute brought by the US to WTO India has been forced to amend her patent laws thrice. The Third Amendment introduced product patents in medicine, but restricted the patent to new medical entities, to prevent companies from ever-greening their patents and hence their monopolies. Novartis has sued India and challenged the law, which protects the rights of citizens to affordable medicine by providing generic drugs.

India is the world's biggest supplier of generic medicines, supplying 67% generics to developing countries. That is why, the global giants are targeting India because establishing a monopoly in India is central to their establishing a global monopoly access the Third World. This is why, Novartis has sued the Indian government in the Madras High Court, accusing it of violating the TRIPs agreement.

Novartis had applied for a patent for a cancer drug Imatioib mesylate, marketed under the brand name Gleevec/Glivec. The patented drug is sold at \$2,600 for a month of treatment, compared to \$200 per month for the generic version. The clause Novartis is challenging is one that prevents evergreening of patents. Section 3 (d) of the Patents Act stated contains a key public health safeguard. The patent law does not allow patents merely on the "discovery of a new form of a known substance, which does not result in the enhancement of the known efficacy of that substance or the mere discovery of any new property or new use for a known substance or of he mere use of a known process." This defines invention in a clear way and awards patents only when there is a substantive improvement of the existing drug formulation.

In 1998, Novartis had sued earlier the South African government because South Africa was importing generics from India. In 1977, the South African government also passed a law to provide access to affordable medicines by using the provisions of compulsory licensing and parallel imports. The aim was to reduce the cost of treating HIV/AIDS by 50 to 90 per cent. With over 4 million AIDS patients, the government action was a public health imperative. Yet, all pharmaceutical giants mobilized to challenge the South African law.

The AIDS epidemic has made evident the fact that the cost of health care and drugs is becoming prohibitive in the entire world as a result of implementing US style patent regimes. Currently there are approximately 32.3 million cases of HIV/AIDS in developing countries. More than 2.5 million people die each year from the disease. While a cocktail of drugs has reduced mortality by 75 per cent and morbidity by 73 per cent over a three-year period in the US, the treatment is costly. Annual treatment costs range between US \$10,000 and

US \$15,000. Even if the UNAIDS initiative subsidized the price by 85 per cent, the cost would be approximately US \$2250 per year. And AIDS is only one among other killer diseases like malaria and tuberculosis in the Third World.

Generic medicine for AIDS from India is available for \$200 for a years treatment. It is this access to medicine that the global corporations are seeking to destroy to make super profits through monopolies.

On 6th May 1982, Prime Minister Indira Gandhi, addressing the World Health Assembly in Geneva, said:

"Affluent societies are spending vast sums of money understandably on the search for new products and processes to alleviate suffering and to prolong life. In the process, drug manufacturers have become a powerful industry. My idea of a better ordered world is one in which medical discoveries would be free of patents and there would be no profiteering from life or death."

4 THE G-8 IN SUPPORT TO IPR MONOPOLIES OF GLOBAL CORPORATIONS

Monopolies on medicines and seeds are threatening the lives of millions. What is needed is a completion of the review of TRIPs and implementation of the Doha public health declaration.

Article 27.3 (b), which allows the patents on seeds and plants, was to be reviewed in 1999 and by 2000, countries could amend the TRIPs agreement as a whole. However, the G-8 has systematically blocked the review process. In 2001, countries signed the Doha Declaration, which states, "The TRIPs agreement cam and should be interpreted and implemented in a manner supportive of WTO member's right to protect public health and in particular to promote access to medicine for all."

Yet, instead of promoting access to seed for all farmers and access to medicines for all, the G-8 is promoting access to monopoly markets for those pharmaceutical giants, which are also the seed biotechnology giants.

The priorities for the G-8 submitted as identified by the Personal Advisor to the Chancellor (Berlin, October 10, 2006) repeated refers to stronger IPR rights for corporations, and hence weaker rights to food and medicine for citizens. The note on priorities states,

Revista Brasileira de Direito Internacional, Curitiba, v.4, n.4, jul./dez.2006

"Innovation is at the root of welfare in knowledge-based societies. Protection of innovation, especially in international trade and investment relations, plays a decisive role for the willingness to invest in research and development. We see a need for action particularly in the improvement of international cooperation to implement intellectual property rights in the fight against product and brand piracy."

There is no mention of biopiracy. Product patents are, assumed to be a right and process patents are defined as "product piracy". This is a trait support to corporate monopolies over seeds and medicines.

Instead of making a commitment to the outstanding review of TRIPs, the G-8 priority is to create new agreements to enforce monopolies for corporations.

"The ability of knowledge based societies to innovate is increasingly challenged by violations of intellectual property rights. In this context, the German G8 Presidency aims to bring the protection of innovation through international and domestic law onto the G8 agenda. Our particular attention goes to improving the implementation of intellectual property rights. However, we are primarily concerned with developing new initiatives within the G8 framework, for instance few international agreements that are necessary to solve problems with the implementation of existing national and international rules. In particular, we aim to initiate a structured dialogue with emerging countries about the protection of intellectual property. We assume that given the effort to develop their own technological innovations, these countries will also have a growing interest in improving the protection and implementation of intellectual property rights. India and China are resisting another international agreement, to force implementation of the biased TRIPS agreement which needs reform not implementation.

This sounds like TRIPs plus. If TRIPs has killed hundreds of thousands of farmers, by denying them seeds, and threatens to kill millions of people by denying them medicine, how much more violence will a TRIPs plus, driven by the G-8, unleash on the poor of the world? Corporate intellectual property rights have become a threat to the survival of the poor. The G-8 cannot talk about achieving the Millennium Development Goals while it promotes monopolies on

seeds and medicines. It cannot talk of a knowledge economy if it robs people of access to knowledge. And it cannot talk of equitable globalisation if it denies the right to food and the right to health through monopolies in agriculture and medicine. It cannot talk of a knowledge economy if it robs people of access to knowledge. And it cannot talk of equitable globalisation if it denies the right to food and the right to health through monopolies in agriculture and medicine.