

Vandana Shiva: 'We Must End Monsanto's Colonization, Its Enslavement of Farmers'

By <u>Dr. Vandana Shiva</u> Global Research, July 28, 2015

EcoWatch 25 July 2015

Region: <u>Asia</u>, <u>USA</u>

Theme: Biotechnology and GMO, Poverty &

Social Inequality

Citizens of the U.S. are being denied the right to know what they are feeding their families. Despite the fact that 90 percent of American citizens want GMO labeling on their food, big business is doing everything it can to prevent people from accessing their rights. Representative Pompeo's bill, popularly known as the DARK Act (Denying Americans the Right to Know), has been written almost entirely by the biotech industry lobby. While American citizens are advocating for their rights to knowledge and healthy, affordable food, Monsanto's legal team is busy on every legislative level trying to prevent this from happening.



Monsanto's subversion of democratic legal processes is not new. In fact, it is their modus operandi, be it the subversion of LA's decision to be GMO free by amending the <u>California Seed Law</u>—equating corporations with persons and making <u>seed libraries and exchange of seed</u>beyond 3 miles illegal—or <u>suing Maui County</u> for passing a law banning GMOs.

Decades before there was a "debate" over GMOs and Monsanto's PR and law firms became the busiest of bees, India was introduced to this corrupting, corporate giant that had no respect for the laws of the land. When this massive company did speak of laws, these laws had been framed, essentially, by their own lawyers.

Today, Indian cotton farmers are facing a genocide that has resulted in the death of at least300,000 of their brothers and sisters between 1995 and 2013, averaging 14,462 per year (1995-2000) and 16,743 per year (2001-2011). This epidemic began in the cotton belt, in Maharashtra, where 53,818 farmers have taken their lives. Monsanto, on it's own website, admits that pink bollworm "resistance [to Bt] is natural and expected" and that the resistance to Bt "posed a significant threat to the nearly 5 million farmers who were planting the product in India." Eighty four percent of the farmer suicides have been attributed to Monsanto's Bt Cotton, placing the corporation's greed and lawlessness at the heart of India's agrarian crisis.

There are three outright illegalities to Monsanto's existence in India.

First, Monsanto undemocratically imposed the false idea of "manufacturing" and "inventing" a seed, undermining robust Indian laws—that do not allow patents on life—and by taking patents on life through international trade law. Since 1999, Monsanto has had the U.S. government do its dirty work, blocking the mandatory review of the Monsanto Law in TRIPS (the Trade Related Intellectual Property Rights Agreement implemented through the WTO).

Second, since they <u>do not have a patent for Bt-Cotton</u>, Monsanto's collection of royalties as "trait value" or as a "fee for technology traits" (IPR category that does not exist in any legal framework and was concocted by Monsanto lawyers to work outside of the laws of the land) is illegal. These illegal royalty collections have been collected from the most marginal farmers, pushing them to take their own lives.

Third, the smuggling of a controlled substance without approvals (and thus Monsanto's very entry into India) is a violation and subversion of India's Biosafety Regulations. This includes the illegal introduction of GMOs into the food system in India, which poses grave risks to the health of ordinary Indian citizens.

Illegal entry of Bt Cotton into India

The Genetic Engineering Appraisal Committee (GEAC), the apex body constituted in the Ministry of Environment and Forests, is solely entrusted with the responsibility of approving field trials of any genetically modified organisms (GMOs). India's biosafety framework—one of the strongest in the world—is governed by The Rules for the Manufacture, Use, Import, Export and Storage of Hazardous Micro Organisms, Genetically Engineered Organisms or Cells (notified under the Environment Protection Act, 1986).

ARTICLE (7) OF THE RULES STIPULATES:

APPROVAL AND PROHIBITIONS ETC.

(1) NO PERSON SHALL IMPORT, EXPORT, TRANSPORT, MANUFACTURE, PROCESS, USE OR SELL ANY HAZARDOUS MICROORGANISMS OF GENETICALLY ENGINEERED ORGANISMS/SUBSTANCES OR CELLS EXCEPT WITH THE APPROVAL OF THE GENETIC ENGINEERING APPROVAL COMMITTEE.

On 10 March 1995, MAHYCO (which became Monsanto-Mahyco in 1998) imported 100 grams of cottonseed that contained the MON531-Bt Gene into India without approval from the GEAC. MAHYCO, under undisclosed circumstances, had obtained permission from the RCGM (Review Committee of Genetic Manipulation under the Department of Biotechnology (DBT)), which does not have the authority to approve such an import. Without the approval of the governing body responsible for the approval of the import (GEAC) Monsanto had smuggled a controlled substance into India.

ARTICLE (4) OF THE RULES STIPULATES:

(4) GENETIC ENGINEERING APPROVAL COMMITTEE (GEAC)

THIS COMMITTEE SHALL FUNCTION AS A BODY UNDER THE DEPARTMENT OF ENVIRONMENT FORESTS AND WILDLIFE FOR APPROVAL OF ACTIVITIES INVOLVING LARGE SCALE USE OF HAZARDOUS MICROORGANISMS AND RECOMBINANTS IN RESEARCH AND INDUSTRIAL PRODUCTION FROM THE ENVIRONMENTAL ANGLE. THE COMMITTEE SHALL ALSO BE RESPONSIBLE FOR APPROVAL OF PROPOSALS RELATING TO RELEASE OF GENETICALLY ENGINEERED ORGANISMS AND PRODUCTS INTO THE ENVIRONMENT.

Open field trials are a deliberate release of GMOs into the environment and, under the above Indian law, require approval by the GEAC. Eager to get to market and establish a monopoly in the cotton sector of India in 1998, Monsanto-Mahyco, without the approval of

the sole agency allowed to grant permission for open field trials—the GEAC—started large scale, multi-centric, open field trials of Bt Cotton in 40 locations spread across nine states of India.

The eventual clearance, long after the commencement of these field trials, came once again from the Review Committee of Genetic Manipulation (RCGM), which is not authorized to grant clearance for field trials. RCGM's mandate is restricted to guidelines for lab research. Without approval from the GEAC, Monsanto's open field trials of Bt Cotton in 1998 were blatantly illegal and an act of biological warfare against India through genetic pollution.

Furthermore, no post harvest management and safety was ensured in these trials by Monsanto-Mahyco. Monsanto was not concerned with the findings of the trials at all; they just wanted GM seeds to be introduced into Indian soil and they did so without due process. GMO traits, once released into the environment, cannot be contained or recalled. In fact, genetically engineered cotton was sold in open markets. In some states, the trial fields were replanted the very next season with crops including wheat, turmeric, and groundnut, violating Para-9 on "Post harvest handling of the transgenic plants" of the Biosafety Guidelines (1994), according to which, the fields on which GMO trials were conducted should be left fallow for at least one year.

It was in the face of these violations of Indian laws and the risks of genetic pollution India faced, that the Research Foundation for Science, Technology and Ecology (RFSTE) filed a petition in the Supreme Court of India in 1999 against Monsanto and MAHYCO. Clearly, Monsanto and MAHYCO had violated the 1989 rules for the use of GMOs under the Environmental Protection Act (1986). The government had allowed Monsanto to carry out field trials without the mandatory scientific biosafety tests.

Without waiting for the outcome of the petition pending in the Supreme Court—around President Bill Clinton's visit to India—in March 2000 the Department of Biotechnology gave biosafety clearance to Monsanto's Bt Cotton and in July 2000 the GEAC cleared large-scale field trials of Bt Cotton despite the pending Supreme Court case. This was two years after Monsanto first started illegal trials. CD Mayee, Co-Chairman of the GEAC, also became the first Indian board member of ISAAA, a biotech evangelist group, in 2006. He is the chairman of the sub-committee on Bt Cotton of the GEAC and interestingly, also sits of on the Agriculture Ministry's Committee on Endosulfan, an insecticide with acute neurotoxin properties developed by Bayer CropScience, which is a major funder—along with Monsanto—of ISAAA.

Monsanto Bt Cotton seeds had not yet been cleared for commercial release. While the RFSTE case against Monsanto was still in the Supreme Court of India, Monsanto reported to the GEAC, in 2001, that Navbharat Seeds Pvt. Ltd., a company in Gujarat, was selling Navbharat 151 seeds, which had the MON531 Bt gene. This was not a cowboy company selling on the black market. This was a company with enough Bt Cotton seeds for the 10,000 Hectares of Navbharat 151 planted at the time. On Monsanto's complaint, the GEAC started an investigation, carried out by the two-member team of CD Mayee and T.V. Ramanaiah (from the Department of Biotechnology (DBT)), who found Bt traits in the cotton. A case was filed in Gujarat against Navbharat Seeds Pvt. Ltd.

Post investigation, the GEAC ordered all standing crops of Navbharat 151 to be uprooted and destroyed along with seed production plots due to the major risks posed by Bt. In a submission to the court, the GEAC stated:

"12 (I) THE CROP WHICH IS STANDING MAY PASS TO THE SOIL THAT MODIFIED GENES WHICH IT CONTAINS. THE EFFECT ON SOIL MICROORGANISMS CAN NOT BE ESTIMATED AND MAY CAUSE AN IRREVERSIBLE CHANGE IN THE ENVIRONMENT STRUCTURE OF THE SOIL. IT IS A STANDARD PRACTICE TO UPROOT CROPS WHICH POSE SUCH A THREAT. THE DESTRUCTION BY BURNING IS TO ENSURE SAFETY TO ENVIRONMENT AND HUMAN HEALTH AND TO OBVIATE ANY POSSIBILITY OF CROSS-POLLINATION.

- (II) THE DESTRUCTION OF THE COTTON PRODUCE AS WELL AS SEEDS HARVESTED FROM THIS PLANT IS ALSO EQUALLY NECESSARY. THE COTTON WHICH HAS BEEN PRODUCED IS GENETICALLY MODIFIED COTTON, THE EFFECT OF WHICH I.E. ALLERGENICITY AND OTHER FACTORS ON MAMMALS ARE NOT TESTED. THE PRECAUTIONARY PRINCIPLES WOULD REQUIRE THAT NO PRODUCT, THE EFFECT OF WHICH IS UNKNOWN BE PUT INTO THE MARKET STREAM. THIS COTTON WHICH IN APPEARANCE IS NO DIFFERENT FROM ANY OTHER COTTON WILL INTERMINGLE WITH ORDINARY COTTON AND IT WILL BECOME IMPOSSIBLE TO CONTAIN ITS ADVERSE AFFECT. THE ONLY REMEDY IS TO DESTROY THE COTTON AS WELL AS THE SEEDS PRODUCED AND HARVESTED IN THIS MANNER.
- (III) SINCE THE FARMERS ARE BEING PUT TO A LOSS, THE FURTHER PROCESS TO DETERMINE THE COMPENSATION PAYABLE TO FARMERS, WHO HAVE UNWITTINGLY USED THIS PRODUCT HAS TO BE DETERMINED AND UNDERTAKEN.
- 13. I WOULD RESPECTFULLY SUBMIT THAT EVERY DAY OF DELAY IN THIS MATTER POSES A THREAT TO THE ENVIRONMENT."

Having just concluded that Bt was dangerous and all of it had to be uprooted and burned, a few weeks later the GEAC approved the commercial release of Monsanto-Mahyco Biotech (MMB) Bt Cotton.

The national farmers unions made a joint petition to the GEAC and asked for an inquiry committee to be set up and liability and compensation fixed on the basis of the "polluter pays" principle. Since Monsanto-Mahyco is admittedly the source of the GM pollution, they, along with Navbharat Seeds Pvt. Ltd, which has further spread the pollution, are jointly liable for the pollution caused.

Monsanto's Bt Cotton has also found its way into edible vegetable oils in India.

In a government document, the Department of Biotechnology states:

COTTON SEEDS CAN BE TOXIC IF INGESTED IN EXCESSIVE QUANTITIES BECAUSE OF THE PRESENCE OF ANTI-NUTRITIONAL AND TOXIC FACTORS INCLUDING GOSSYPOL AND CYCLOPROPENOID FATTY ACIDS.

but then goes on to say in the next sentence:

THE OIL AND LINTERS ARE USED AS PREMIUM VEGETABLE OILS AND AS CELLULOSE DIETARY ADDITIVES FOR HUMAN CONSUMPTION, RESPECTIVELY. TRADITIONALLY, WHOLE COTTON SEED IS USED AS CATTLE FEED IN INDIA. HOWEVER, THE INCREASE IN DEMAND OF EDIBLE OILS HAS NECESSITATED PROCESSING OF COTTON SEED FOR ITS OIL. THEREFORE, COTTON SEED OILCAKE/MEAL AFTER EXTRACTION IS NOW USED AS CATTLE FEED.

Monsanto's Bt Cotton, without the support of necessary precautions and scientific studies, has illegally found its way into the Indian food chain, endangering the health of 1.26 billion Indians. The health effects of Bt Cotton seed oil in "premium vegetable oil" (as the DBT calls it) must be investigated and the damage to people's health must be compensated by Monsanto.

Monsanto's illegal collection of super-profits as royalties

India's laws do not permit patents on seeds and in agriculture. But that hasn't stopped Monsanto from collecting close to USD 900 million from small farmers in India, pushing them into crushing debt. This is roughly the same amount of money Monsanto spent buying *The Climate Corporation*—a weather big data company—in a bid to control climate data access in the future.

Monsanto-Mahyco Biotech Ltd collected royalties for Bt Cotton by going outside the law and charging "technology fees" and "trait value". These are just clever names for royalty collection. In 2006, out of the INR 1600 (per 450 grams) price tag, INR 1250—almost 80 percent—wascharged by MMB as the trait value. Compared to Bt Cotton, local seeds used to cost INR 5-9 per kg before Monsanto destroyed alternatives, including local hybrid seed supply, through licensing arrangements and acquisitions.

In January 2006, the Andhra Pradesh Government filed a complaint with the Monopolies and Restrictive Trade Practices Commission (MRTPC) against Monsato-Mahyco Biotech (MMB), accusing MMB of overpricing genetically modified Bt Cotton seeds. The Research Foundation for Science Technology and Ecology had to intervene in the MRTPC case. In its submission, the Andhra Pradesh Government pointed out that Monsanto charged only about INR 400 for the same packet of seeds in China and only about INR 200 in the U.S.—9 times less than the amount they were forcing Andhra Pradesh farmers to pay. MMB said the royalty it charged reflected its research and development costs for Bt Cotton, admitting that they were charging Indian farmers royalty and that for some reason, Indian farmers owed them more for their research and development than farmers in the U.S..

On May 10, 2006, the MRTPC ruled in favor of the Andhra Pradesh government and directed MMB to reduce the trait value it was unfairly charging the farmers of Andhra Pradesh. Following this, on May 29, 2006, the Andhra Pradesh Agricultural Commissioner fixed the price of Bt Cotton seeds at INR 750 for a 450-gram packet and directed MMB and its sublicensees to comply with its order. Monsanto challenged the Andhra Pradesh Government and the MRTPC's decision in the Supreme Court, saying that the government's move was illegal and arbitrary. The Supreme Court did not stay the MRTPC's order, but while the appeal was pending before it, five states— Karnataka, Tamil Nadu, Gujarat, West Bengal, and Madhya Pradesh (now Maharashtra as well)—followed Andhra Pradesh's lead and ordered that Bt Cotton should be sold at a reduced price, dealing a blow to the inflated profits Monsanto was taking from Indian peasants and repatriating to their headquarters in St. Louis.

To side-step price control measures and avoid any regulation that had been applied to Bt Cotton, which was marketed in India as Bollgard, Monsanto introduced Bollgard II, its apparently 'upgraded' version with two Bt proteins. Monsanto's intentional scientific ignorance (despite the availability of scientific studies at the time) is obvious. GMOs which release the Bt toxin in high doses in every cell of every plant are highly toxic to pollinators and friendly insects and are a recipe for creating super pests through the emergence of

resistance. The pink bollworm underwent what every intelligent being does—it evolved—it became resistant to Bt. On it's website, Monsanto admits, "Measures to delay resistance are critically important" and "application of insecticide sprays during the crop season and proper management of crop residue and unopened bolls after harvest will help limit insects in cotton fields". What are farmers being made to pay for if normal bollworm control measures are still required, they are still expected to buy and spray insecticides and 80 percent of the cost of the seed goes for failed R&D?



Monsanto admitted that the pink bollworm was resistant to Bollgard and claimed Bollgard II, with it's two Bt proteins would control the bollworm epidemic. This allowed Monsanto to continue looting marginalised small farmers. By claiming Bollgard II was better technology than the first version, Monsanto was able to mislead farmers and charge even higher prices. (Oblivious to it's earlier Bt failures, Monsanto is currently working on a 3-protein Bt variety to continue it's looting)

And Monsanto still claims Bt Cotton is resistant to Bollworm and have all their <u>hired</u> <u>mouthpieces</u> claim that there is reduced pesticide usage due to this inherent trait. In reality, requirements of pesticide increase every year with Bt Cotton. Clearly misrepresenting their lacklustre product, the only reason for the existence of Bt Cotton is royalties. Monsanto itself is on record at the 52nd Meeting of the GEAC (held on 4 March 2005) saying that Bt is not resistant to Bollworm.

"TO A QUERY ON WHETHER THE BT VARIETY IS RESISTANT TO BOLLWORM COMPLEX OR ONLY EFFECTIVE AGAINST AMERICAN BOLLWORM IT WAS CLARIFIED THAT BT COTTON IS TOLERANT TO BOLLWORM AND NOT RESISTANT."

SOURCE: MINUTES OF THE 52ND MEETING OF THE GEAC

This ruthlessness is central to the crisis Indian farmers are facing. Farmers leveraged their land holdings to buy Bt Cotton seeds and the chemicals it demanded, but the golden promise of higher yield and lower input costs failed to deliver. They were left with no option but to take their own lives. (Incidentally, CD Mayee was the chair of the <u>GEAC subcommittee</u> on <u>Bt Cotton</u>, which still monitors the performance of Bt Cotton and his reports on the performance of Bt Cotton were and still are, very different from the real experiences of the farmers driven to suicide by failed harvests and <u>inferior quality</u> cotton yield.)

In 2007 Andhra Pradesh was forced to introduce the Andhra Pradesh Cotton Seeds Act to control the price of cottonseed, since Bollgard II prices were still astronomically high due to a majority royalty component.

The following Act of the Andhra Pradesh Legislature received the assent of the Governor in August 2007:

ACT NO.29 OF 2007

SHORT TITLE AND COMMENCEMENT

DEFINITIONS

AN ACT TO REGULATE THE SUPPLY, DISTRIBUTION, SALE AND FIXATION OF SALE PRICE OF COTTON SEEDS AND FOR THE MATTERS CONNECTED THEREWITH OR INCIDENTAL THERETO.

WHEREAS, COTTON SEEDS OF CERTAIN VARIETIES ARE NOT NOTIFIED UNDER SECTION 5 AND CONSEQUENTLY NO SALE OF SUCH SEEDS ARE REGULATED UNDER SECTION 7 OF THE SEEDS ACT, 1966;

AND WHEREAS, COTTON SEED IS NOT AN ESSENTIAL COMMODITY WITHIN THE MEANING OF THE ESSENTIAL COMMODITIES ACT, 1955 AS AMENDED BY THE ESSENTIAL COMMODITIES (AMENDMENT) ACT, 2006;

AND WHEREAS, THE PROVISIONS OF THE SEEDS (CONTROL) ORDER, 1983 ISSUED UNDER SECTION 3 OF THE ESSENTIAL COMMODITIES ACT, 1955 ARE NOT APPLICABLE IN SO FAR AS THEY RELATE TO THE COTTON SEEDS W.E.F. 12.2.2007;

AND WHEREAS, THERE IS NO PROVISION IN THE ENVIRONMENTAL PROTECTION ACT, 1986 TO REGULATE THE SUPPLY, DISTRIBUTION AND SALE OF TRANSGENIC AND GENETICALLY MODIFIED COTTON SEED AND TO CONTROL THE SALE PRICE OF SUCH COTTON SEED IN THE STATE;

AND WHEREAS, THE TRADERS IN COTTON SEED INCLUDING TRANSGENIC COTTON SEED ARE EXPLOITING POOR FARMERS BY COLLECTING EXORBITANT PRICES;

AND WHEREAS, THERE IS NO PROVISION TO REGULATE THE SUPPLY, DISTRIBUTION, SALE OF COTTON SEEDS AND TO CONTROL THE SALE PRICES OF SUCH COTTON SEEDS IN THE STATE;

AND WHEREAS, IT HAS BECOME IMPERATIVE ON THE PART OF THE STATE TO REGULATE THE SUPPLY, DISTRIBUTION AND SALE OF COTTON SEEDS BY FIXING THE SALE PRICE IN THE INTERESTS OF THE FARMERS IN THE STATE;

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ANDHRA PRADESH IN THE FIFTY-EIGHTH YEAR OF THE REPUBLIC OF INDIA AS FOLLOWS: - 1. (1) THIS ACT MAY BE CALLED THE ANDHRA PRADESH COTTON SEEDS

(REGULATION OF SUPPLY, DISTRIBUTION, SALE AND FIXATION OF SALE PRICE) ACT, 2007.

(2) IT SHALL BE DEEMED TO HAVE COME INTO FORCE ON AND FROM THE 28TH JUNE, 2007.

This restriction on their profits did not sit well with Monsanto, which then challenged the Andhra Pradesh Cotton Seeds Act. The Research Foundation for Science Technology and Ecology had to intervene in the case once more, which is still before the Andhra Pradesh High Court.

While Monsanto <u>does not have a patent</u> on Bt cotton in India, it goes outside the law to collect royalties as "technology fees". Most of the 300,000 farmers suicides in India since 1995 (when the WTO came into force) are concentrated in the cotton belt. And 95 percent of the cotton in India is controlled by Monsanto.

Out of India's 29 states, those with Bt Cotton have the highest suicide rates.



Correlation is the first step to <u>understanding causation</u>. Monsanto does not see the above correlation because the next logical step would be to plead guilty for the deaths of all the farmers whose lives have been reduced to numbers on a table, or a bank account in St Louis.

Additionally, Monsanto knows that Bt Cotton is dependent on irrigation. Despite this knowledge, Monsanto has pushed its Bt Cotton into regions that depend solely on rainfall, as opposed to irrigation. These include Vidarbha in Maharashtra, where most cotton farms are less than 1 hectare and are dependent solely on rainfall. The costs of Bt cottonseed and insecticide increase the risk of farmer bankruptcy in low-yield rainfed cotton. The criminal negligence of knowingly setting up marginal farmers—who can't afford to irrigate and whose options for obtaining seeds have been acquired by Monsanto—for dire failure, cannot be ignored.

A recent research paper published by **Environmental Sciences Europe** concluded:

"[THE] INABILITY TO USE SAVED SEED AND INADEQUATE AGRONOMIC INFORMATION TRAP COTTON FARMERS ON BIOTECHNOLOGY AND INSECTICIDE TREADMILLS. ANNUAL SUICIDE RATES IN RAINFED AREAS ARE INVERSELY RELATED TO FARM SIZE AND YIELD, AND DIRECTLY RELATED TO INCREASES IN BT COTTON ADOPTION (I.E., COSTS). HIGH-DENSITY SHORT-SEASON COTTONS COULD INCREASE YIELDS AND REDUCE INPUT COSTS IN IRRIGATED AND RAINFED COTTON. POLICY MAKERS NEED HOLISTIC ANALYSIS BEFORE NEW TECHNOLOGIES ARE IMPLEMENTED IN AGRICULTURAL DEVELOPMENT."

"Fourteen years after U.S. multinational Monsanto brought the genetically modified (GM) Bt Cotton (Bollgard) to India, there is no clarity on the discovery having ever been patented in the country," states a recent Times of India article. India does not recognize patents on life, including seeds. The royalties Monsanto has collected over the last 14 years are based on a patent that does not exist and is therefore, quite simply, theft. Monsanto is robbing the people who have the least, of the very last thing they can give—their lives.

Illegal patents on life through Monsanto's laws in the WTO

In 1980 the U.S. Supreme Court heard a <u>case</u> that is now famous for being the point in world history where life forms were first allowed to be patented—not only in the US, but through the WTO, in many other parts of the world. Ananda Mohan Chakrabarty, a General Electric employee, had applied for a patent for a process of producing a bacterium capable of eating crude oil spills and on the bacteria itself. The claim was rejected by the U.S. Patent office, but on appeal, was granted by a 5-4 majority in the Supreme Court.

"The decision of the Supreme Court in Diamond v. Chakrabarty, 447 U.S. 303, 206 USPQ 193 (1980), held that microorganisms produced by genetic engineering are not excluded from patent protection by 35 U.S.C. 101"

- 4. "This is not to suggest that § 101 has no limits or that it embraces every discovery. The laws of nature, physical phenomena, and abstract ideas have been held not patentable."
- 5. "Thus, a new mineral discovered in the earth or a new plant found in the wild is not patentable subject matter. Likewise, Einstein could not patent his celebrated law that E=mc2; nor could Newton have patented the law of gravity."

Source: http://www.uspto.gov/web/offices/pac/mpep/s2105.html

Genetic engineering has not been able to deliver on its promises—it is just a tool of ownership. Bt Cotton is not resistant to Bollworm, RoundUp Resistant varieties have only given rise to super weeds and the new promises being made by biotech corporations of biofortification are laughable. There is no benefit to things like Golden Rice. By adding one new gene to the cell of a plant, corporations claimed they had invented and created the seed, the plant, and all future seeds, which were now their property. Monsanto does not care if your cotton field has Bollworm infestations, just so long as the crop can be identified as theirs and royalty payments keep flowing in. This is why the failure of Bt Cotton as a reflection of bad science does not bother them—the cash is still coming into St Louis. At its core, genetic modification is about ownership.

In 1981, shortly after the precedence of life forms being patented had been set in the U.S., Monsanto, which was a chemical company at the time, decided—as it lays out on it's own website—that biotechnology would be its strategic research focus in the future. Selling chemicals requires raw materials that eat into profit. Intellectual Property, on the other hand, just pays. In the decade and a half since 1981, with this new "strategic research focus" and all the R&D dollars you can imagine, Monsanto has only been able to produce failures—failures that pay royalties from all across the world.

Monsanto saw that by claiming ownership of life forms, especially seed—the first step in the food chain—and destroying alternatives or making them illegal, would allow them to charge royalties for the source of food, fibre and fuel. It was easy money and a lot of it. The limited achievements of Monsanto's research focus have not given us better cotton, corn, canola or soya—they've merely made it all *theirs*.

Monsanto required new forms of property rights, inspired by the U.S. Supreme Court, to be able to claim as an invention that which is not invented by them—seed and life forms. This was achieved through the World Trade Organization (WTO), working closely with the U.S. Government and with the Trade-Related Intellectual Property Rights (TRIPS) agreement.

Patents are granted for inventions and give the patent holder the right to exclude everyone from the use or marketing of a patented product or process. Over the last two decades, patent laws have taken a different direction under the influence of corporations like Monsanto, from protecting the interests of genuine inventions and ideas to ownership of life and control over survival essentials like seed and medicine.

JAMES ENYART OF MONSANTO IS ON RECORD ILLUSTRATING JUST HOW DEEPLY THE TRIPS AGREEMENT IS ALIGNED TO CORPORATE INTEREST AND AGAINST THE INTERESTS OF NATIONS AND THEIR CITIZENS:

"INDUSTRY HAS IDENTIFIED A MAJOR PROBLEM FOR INTERNATIONAL TRADE. IT CRAFTED A SOLUTION, REDUCED IT TO A CONCRETE PROPOSAL AND SOLD IT TO OUR OWN AND OTHER GOVERNMENTS... THE INDUSTRIES AND TRADERS OF WORLD COMMERCE HAVE PLAYED SIMULTANEOUSLY THE ROLE OF PATIENTS, THE DIAGNOSTICIANS AND THE PRESCRIBING PHYSICIANS."

Corporations defined a problem—farmers saving seed—so that they could forcefully open the market. In turn, they offered a solution and the solution was the introduction of patents and intellectual property rights on seed, making it illegal for farmers to save their seed. This is how the Trade Related Intellectual Property Rights (TRIPs) Agreement of the WTO was born. For the U.S. Government, with an economy where the manufacturing industry was

slowing, the idea of royalties coming in to fuel the economy was perfect.

ARTICLE 27.3 OF THE TRIPS AGREEMENT STATES:

- 3. MEMBERS MAY ALSO EXCLUDE FROM PATENTABILITY:
- (A) DIAGNOSTIC, THERAPEUTIC AND SURGICAL METHODS FOR THE TREATMENT OF HUMANS OR ANIMALS;
- (B) PLANTS AND ANIMALS OTHER THAN MICRO-ORGANISMS, AND ESSENTIALLY BIOLOGICAL PROCESSES FOR THE PRODUCTION OF PLANTS OR ANIMALS OTHER THAN NON-BIOLOGICAL AND MICROBIOLOGICAL PROCESSES. HOWEVER, MEMBERS SHALL PROVIDE FOR THE PROTECTION OF PLANT VARIETIES EITHER BY PATENTS OR BY AN EFFECTIVE SUI GENERIS SYSTEM OR BY ANY COMBINATION THEREOF. THE PROVISIONS OF THIS SUBPARAGRAPH SHALL BE REVIEWED FOUR YEARS AFTER THE DATE OF ENTRY INTO FORCE OF THE WTO AGREEMENT.

This is the Monsanto Law of the TRIPS Agreement. Drafted by Monsanto lawyers and riding on the U.S. taxpayer's dollar, it bulldozes the world leaving behind nothing but royalty liabilities.

Section 3(b) of Article 27 is what is cleverly designed to be a trojan horse and to prohibit the free exchange of seeds between farmers, threatening their subsistence and their ability to save and exchange seeds. Shooting a gene into an organism through a gene gun is not a biological process. A seed growing into a plant that gives seed is a biological process. But the non-biological process of the insertion of a gene is patentable according to Article 27.3(b). Genetic engineering has been defined as "non-biological" and/or "microbiological" by the same lawyers that put the Monsanto Law into the TRIPS agreement, allowing the patentability of seeds and other life forms through genetic manipulation.

Objections to the Monsanto Law were raised owing to the basic idea that life cannot be patented.

India, in its submission, stated:

Clearly, there is a case for re-examining the need to grant patents on lifeforms anywhere in the world. Until such systems are in place, it may be advisable to:- (a) exclude patents on all lifeforms

The African group stated:

The African Group maintains its reservations about patenting any life forms as explained on previous occasions by the Group and several other delegations. In this regard, the Group proposes that Article 27.3(b) be revised to prohibit patents on plants, animals, micro-organisms, essentially biological processes for the production of plants or animals, and non-biological and microbiological processes for the production of plants or animals. For plant varieties to be protected under the TRIPS Agreement, the protection must clearly and not just implicitly or by way of exception, strike a good balance with the interests of the community as a whole and protect farmers' rights and traditional knowledge and ensure the preservation of biological diversity.

Due to the strong objections raised at the WTO it was decided that the Monsanto Law (TRIPs clause on patents on life) would be due for a mandatory review within the first 4 years of the WTO—by 1999. The review of the clause on patents on life has been blocked and subverted for the last 16 years by Monsanto and the Monsanto-friendly government of the United States, to protect the royalties that are moving money from impoverished farmers world over to the United States of America.

This is not for the benefit of the U.S. as a nation. The illegal royalties collected do not benefit citizens of the U.S.. In fact, the liberties and basic human rights of the citizens of the U.S. are being restricted by this royalty-hungry monster, just like those of the Indian cotton farmer. There is an attempt, in the U.S., by Monsanto and the aiding U.S. Government, to deem all non-patented seed illegal—even the tomato you have in your garden. And all this is being done in the name of "protecting and maintaining the food sources of America."

Since 1991, when the draft text of the WTO agreements was leaked, the National Working Group on Indian Patent Law worked with Parliament and the government to ensure that public interest was protected in any amendment made in India's patent laws in order to make India's IPR regime TRIPS-compliant. Methods of agriculture and plants were excluded from patentability in the Indian Patent Act to ensure that seed, the first link in the food chain, was held as a common property resource in the public domain and farmers' inalienable right to save, exchange and improve seed was not violated. And only process patents (patents on processes) were allowed in medicine.

When India amended her Patent Act, safeguards consistent with TRIPS were introduced based on a scientific definition of "invention".

ARTICLE 3 DEFINES WHAT IS NOT PATENTABLE SUBJECT MATTER.

ARTICLE 3(D) EXCLUDES AS INVENTIONS "THE MERE DISCOVERY OF ANY NEW PROPERTY OR NEW USE FOR A KNOWN SUBSTANCE".

This was the article under which Novartis's patent claim to a known cancer drug was rejected. This is the article that Novartis tried to challenge in the Supreme Court and lost.

ARTICLE 3(J) EXCLUDES FROM PATENTABILITY "PLANTS AND ANIMALS IN WHOLE OR IN ANY PART THEREOF OTHER THAN MICROORGANISMS; BUT INCLUDING SEEDS, VARIETIES, AND SPECIES, AND ESSENTIALLY BIOLOGICAL PROCESSES FOR PRODUCTION OR PROPAGATION OF PLANTS AND ANIMALS".

This was the article used by the Indian Patent Office to reject a Monsanto patent on climate resilient seeds and is also why farmers in India are, at the very least, safe from Monsanto lawyers, unlike the thousands of farmers across the world like Bowman, Steve Marsh and Percy Schmeiser being sued by Monsanto for being farmers.

India's patent laws, based on good science and drafted by conscientious people, get in the way of Monsanto's royalty collections, if only on paper. The U.S. Government, under the influence of Monsanto, has been pressurizing countries like India to change their patent regimes to fit into Monsanto's plan, meanwhile subverting the review of the Monsanto Law, though it has legally been obligated to do since 1999.

In 1996 the U.S. Government brought a case in the WTO against India due to the "alleged absence of patent protection for pharmaceutical and agricultural chemical products in India." It was to ensure protection of Monsanto's royalties on seeds and its carcinogenic Glyphosate molecule. Monsanto was attempting to subvert the democratic laws of India using the U.S. Government to strong arm India, as it is doing even today. U.S. President Obama's recent trip to meet Indian Prime Minister Modi in India was, aside from a show of wardrobe, intended to pressurize India into changing its IPR regime to better suit American industry. The proposed changes are in no way designed to foster innovation within India, for which Indian laws are quite good.

India's sovereignty is under attack by Monsanto. American citizens' rights to garden in their backyards with seeds they freely exchange with one another are under attack by Monsanto. African farmers' livelihoods are under attack by Monsanto. The world's food system is under attack by Monsanto. Hundreds of thousands of Indian cotton farmers have died under attack from Monsanto. It is a war being waged to profit from every grain of corn and soya, rice or banana you eat. The citizens of the world are victims of this war, from the U.S. and Argentina to India, across the Pacific through the Trans Pacific Partnership (TPP) and across the Atlantic through the Transatlantic Trade and Investment Partnership (TTIP).

If a country other than the U.S. was blocking and subverting the review of the Monsanto Law, that country would have been bombed by drones a long time ago. It is time to tell the U.S. Government to stop being a Monsanto Government writing laws on behalf of Monsanto at home and imposing them worldwide. It is time for the U.S. government to stop being a rogue nation and stop blocking the mandatory review of TRIPS, the International Monsanto Law—even if it's 16 years late. It is time to tell the U.S. government to stop criminalizing farmers who save seeds or whose seeds are contaminated by Monsanto.

Monsanto should be tried for its smuggling of a controlled substance into India and allowing genetically modified cottonseed oil into the premium vegetable oils of India, a country where GM is not allowed in the food system.

Monsanto must compensate farmers for royalties collected on the basis of an imaginary patent and the reparations due for the hundreds of thousands of farmers it has killed by collecting illegitimate and illegal royalties. Life is priceless. Monsanto can never return the father or the husband it pushed to suicide. Corporations like Monsanto will never really understand the value of life unless we put a dollar figure to the debt the widows and the children of the dead are owed. Insurance statisticians have put the life of a "prime aged worker", in the U.S., at a median value of USD 7 million. Eighty-four percent of 300,000 suicides, 252,000, are directly attributed to Monsanto's Bt-Cotton. By this calculation, Monsanto, in addition to the illegal royalties collected, owes the families of 'prime aged' working farmers in India an amount of USD 1.764 Trillion. We must ensure reparations are made and Monsanto does not shrug it's responsibilities by changing it's name, buying Syngenta, or through any other corporate tax evasion/liability reducing tricks it's lawyers conjure up.

Internationally Monsanto must be tried for its crimes against nature, people, science and knowledge, freedom and democracy. Our governments need to start working for their citizens instead of Monsanto and the mandatory review of the Monsanto Law of the TRIPS agreement must be done if the U.S. values 'freedom'.

We need to have reverence for nature and ecological justice must be served. Reparations,

for the genocide in India, in accordance with International Law, are due.

VII. VICTIMS' RIGHT TO REMEDIES

- 11. REMEDIES FOR GROSS VIOLATIONS OF INTERNATIONAL HUMAN RIGHTS LAW AND SERIOUS VIOLATIONS OF INTERNATIONAL HUMANITARIAN LAW INCLUDE THE VICTIM'S RIGHT TO THE FOLLOWING AS PROVIDED FOR UNDER INTERNATIONAL LAW:
- (A) EQUAL AND EFFECTIVE ACCESS TO JUSTICE;
- (B) ADEQUATE, EFFECTIVE AND PROMPT REPARATION FOR HARM SUFFERED;
- (C) ACCESS TO RELEVANT INFORMATION CONCERNING VIOLATIONS AND REPARATION MECHANISMS.

We must end Monsanto's colonization, its enslavement of farmers—for whom the only escape from the Monsanto treadmill is suicide. We must not allow Monsanto to profit from the loss of innocent lives. Private enterprise cannot be allowed to profit from global public risk. Real lives are more valuable than *fake* patents. This illegal takeover of our food, our seeds and our democracies and the killing of farmers must be stopped.

Sign the <u>Declaration on Seed Freedom</u>

And you can sign the open letter to President Obama and PM Modi here.

The original source of this article is <u>EcoWatch</u> Copyright © <u>Dr. Vandana Shiva</u>, <u>EcoWatch</u>, 2015

Comment on Global Research Articles on our Facebook page

Become a Member of Global Research

Articles by: Dr. Vandana Shiva

Disclaimer: The contents of this article are of sole responsibility of the author(s). The Centre for Research on Globalization will not be responsible for any inaccurate or incorrect statement in this article. The Centre of Research on Globalization grants permission to cross-post Global Research articles on community internet sites as long the source and copyright are acknowledged together with a hyperlink to the original Global Research article. For publication of Global Research articles in print or other forms including commercial internet sites, contact: publications@globalresearch.ca

www.globalresearch.ca contains copyrighted material the use of which has not always been specifically authorized by the copyright owner. We are making such material available to our readers under the provisions of "fair use" in an effort to advance a better understanding of political, economic and social issues. The material on this site is distributed without profit to those who have expressed a prior interest in receiving it for research and educational purposes. If you wish to use copyrighted material for purposes other than "fair use" you must request permission from the copyright owner.

For media inquiries: publications@globalresearch.ca