A collage of various seeds and grains including almonds, corn, green peas, beans, lentils, and rice. The seeds are arranged in a grid-like pattern, with different colors and shapes. The text is overlaid on the center of the image.

# SEED SATYAGRAHA

(Civil Disobedience To End SeedSlavery)

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### SYNTHESIS

Humanity has sustained itself through organic agriculture for the last 10,000 years, working *with* nature, using nature's inherent urge to grow, adapt, create diversity; selecting good seeds for nutrition, taste and resilience. Food *is* Organic and despite corporate efforts, 70% of the food people eat worldwide still comes from small farms. Organic can feed the world if it was allowed to create the abundance it can deliver instead of being criminalised.

Since the second world war, fought over the control of resources, Oil Companies and Chemical Corporations that were beneficiaries of the World Wars - like Monsanto - have influenced geopolitical policy (masquerading as food policy) to create peace-time demand for and dependence on fossil fuels and toxic chemicals in the global food system. A system waging war on nature and human beings forcing countries to use war chemicals and technologies in the name of 'agricultural innovation'. A system that creates heavily subsidised chemical food and commodities that are incapable of nourishing humanity or protecting the planet and its vital ecological processes. A system that, by design, wastes 50% of global food and *creates* global hunger leaving a billion people perpetually hungry and 2 billion people suffering from food related diseases. A system that contributes 40% of green house gas emissions and is largely responsible for the climate crisis we face.

Within the last century, healthy, natural, organic food has been made more difficult to produce because of the chemical pollution, at first, and genetic pollution, more recently. A handful of companies have spread these toxics across our planet diverting US\$ 400 Billion of public money to subsidise their high cost chemical commodities to make them artificially "cheap". The costs of this "cheap" food are astronomical in terms of the health of people, the ecological damage it causes and its exploitation of farmers. If the true costs of chemical food were taken into account it would be unaffordable. Instead of subsidising chemical food and creating epidemics of food related diseases, public money, used for nourishment and the protection of public health through organic food would save us billions in health care. Denying people their right to healthy, poison-free food by manipulating laws, policy, science and the use of public money to impose a non-sustainable, unhealthy food is food-dictatorship.

This food-dictatorship has now grown to threaten our seeds, the source of all food. Without the diversity of open-pollinated, freely available, freely exchanged open-source seed humanity will not have food - we will only have toxic commodities.

"Control oil and you control nations; control food and you control the people".  
- Henry Kissinger

"Control seed and you control life, itself".  
- Dr. Vandana Shiva

Through imposing laws related to Intellectual Property Rights (IPR) & patents on seed which deny farmers and gardner the right to save and share seed, pseudo 'Hygiene' laws called Sanitary and Phyto-Sanitary (SPS) laws such as the Food Safety Modernisation Act in the US which deny local, small scale artisanal producers the right to produce and process safe and healthy food, and Acts like the *Safe and Accurate Food Labeling Act of 2015* (more accurately labeled the Denying Americans the Right to Know (DARK) Act), our diversity, freedoms and right to health are being criminalised. Precedent after precedent (See Bowman v/s Monsanto, Michael White v/s Monsanto, Percy Schmeiser – David v/s Monsanto, or the case of Steve Marsh in Australia) is being crafted to erode our rights to food and diversity, ensuring that in the long run all food and seed (except genetically modified, corporate owned sources of uniform seed) are made illegal and made to disappear.

The freedoms we enjoy today are the fruits of the struggles of our ancestors and forbearers, who refused to co-operate with unjust laws - whether it was slavery in the US, or racial segregation in South Africa and the US, or the colonisation of India. Our freedoms are gifts of *Civil Disobedience* and *Satyagraha*. In 1848, Henry David Thoreau coined the term 'civil disobedience' in his essay on why his commitment to the abolition of slavery led to his refusal to pay poll tax. Higher moral laws compel citizens to disobey lower laws that institutionalise injustice and violence.



"The only obligation which I have a right to assume is to do at any time what I think right.

It is truly enough said that a corporation has no conscience; but a corporation of conscientious men is a corporation with a conscience. Law never made men a whit more just; and, by means of their respect for it, even the well-disposed are daily made the agents of injustice"

- Thoreau

"One has a moral responsibility to disobey unjust laws"  
- Martin Luther King Jr.

"As long as the superstition exists that unjust laws must be obeyed, so long will slavery exist"  
- Mahatma Gandhi

It is for times such as these that Gandhi used *Satyagraha* – *the force of truth* to resist unjust laws peacefully and non violently. He first used Satyagraha in South Africa in 1906 to refuse to cooperate with the laws of the apartheid regime imposing compulsory registration on the basis of race. Our diversity, as the peoples of the world, includes the diversities of our cultures and our foods; and must be celebrated. Higher laws that flow from the laws of the Earth, reaffirmed by the laws of our humanity, compel us to question and resist the imposition of laws based on uniformity as an instrument of control being forced upon our diversity as peoples, cultures and the other species, which we have a duty to protect and defend.

The strategic implementation of post-war chemical agriculture has, in the last century, systematically destroyed the diversity that would be our greatest strength in combating the climate crisis created, to a large extent, by this very system of production and consumption of chemical food. In this period we have lost 93% of the varieties of food crops. The loss of this diversity in our diets has led to nutritional deficiencies. Having created these deficiencies by eroding diversity, chemical and biotechnology corporations are now offering the disease of monocultures as a cure for malnutrition through bio-fortification. Golden Rice is a startling example of the failed, obsolete science being used to impose food slavery on the people of the world. Especially the poorest, from the people of Africa and Argentina to the 300,000 farmers in India who have been driven to suicide by these new age colonisers through royalty collection and destruction of alternative sources of seed.

The “Free Trade” agreements of the World Trade Organisation (WTO) were the first attempt by chemical corporations like Monsanto, along with trade corporations like Cargill, to create Seed Slavery and Food Dictatorship. Monsanto wrote the

intellectual property agreement related to life forms, plants and animals. Cargill wrote the agricultural agreement and the food processing industry wrote the sanitary and phyto-sanitary agreement of the WTO. In effect all WTO agreements that impact our food and agriculture are corporate laws - first imposed on governments and later imposed through governments. People’s movements challenged corporate rule and corporate laws, prevented the corporate takeover of our seed and food through the WTO.

After failing to achieve their goal, through the WTO, these corporations are now creating ‘New’ ‘Free Trade’ treaties like the Trans Pacific Partnership (TPP), Trans Atlantic Trade and Investment Partnership (TTIP) and various bilateral and regional agreements, undermining national constitutions and laws, and changing existing laws to better suit their own interests, not those of the citizens of the various countries. Corporations, now desperate, are using undemocratic, illegitimate and unethical means to try and achieve their goal of a totalitarian dictatorship on food.

The chemical giants Monsanto, BASF, Bayer, Dupont, Syngenta and Dow have cross licensing arrangements, through which patented genetically engineered seed traits are shared among them, essentially forming one monopolistic *Seed Cartel*. Monsanto is attempting to buy Syngenta, thereby creating an even larger, more powerful entity, and avoiding US taxation and liability by shifting their offices out of the US.





#### **HOW DEMOCRATIC RIGHTS OF FARMERS AND CITIZENS ARE BEING DENIED:**

1) The Monsanto Law of WTO : Written by Monsanto, *Article 27.3 (b)* of the Trade Related Intellectual Property Rights (TRIPS) Agreement allows patents through Genetic Manipulation even. This law was due for mandatory review in 1999. The US Government has been blocking the review of this law in collusion with Monsanto, which has been charging illegal royalties on patents on life through this law.

2) Breeder's Rights Laws, known differently in different places, do not actually protect the rights of Plant Breeders, except corporate entities. The work of farmers, breeders, and even public sector agriculture universities, is being negated and denied. Through these laws the Seed Sovereignty of farmers and gardeners is being made illegal.

3) Seed Laws based on uniformity, and compulsory licensing and registration, criminalizing biodiversity and the act of seed saving. Since 2004, Monsanto has attempted to install legislation of their own in various places - India's 2004 *The Seeds Bill*, which would require farmers to register their own seeds and take licenses, effectively criminalizing the saving of traditional varieties of all seeds was prevented from becoming an Act. Attempts in Argentina failed as well. In the same year, they managed to pass a federal *Seed Act 2004* in the US which is now being used to shut down seed libraries across the US, classifying them as "Agriterrorists".

4) International and national biosafety laws that protect the environment and public health and guarantee citizens the right to safe food are being diluted and subverted. Monsanto is intent on imposing the fallacy of "Substantial Equivalence of GMOs" on other countries through *Harmonisation of laws* in the TPP and TTIP, undermining the constitutions and Biosafety laws of those countries by force.

5) Laws like the DARK Act in the US to deny citizens the right to know what they

are feeding their families and the right to labelling. Most importantly, the DARK Act prevents the identification of Monsanto products, laden with chemicals like RoundUp, that have been proven to cause cancers, birth defects and are strongly linked to the meteoric rise of autism seen only in the US, where Genetically Modified food has been forced on citizens without consent. Labelling would enable establishment of Monsanto's liability in endangering the health of American citizens.

6) In a move to throttle the thriving alternatives - that people are choosing over the corporate, toxic food system - local, organic, artisanal food is being criminalised through *Food Safety Modernisation Acts* while toxic, industrial chemical food is being given a free pass, ignoring the destruction caused by factory farming to the climate, soils and our health.

7) Investor-State Dispute Settlement Mechanisms, built into TTP and TTIP, allow corporations to sue Governments protecting the environment and public interest, essentially holding corporations in higher grace than the constitutions of entire nations and the rights of citizens those Constitutions are bound to protect. This would deny nations the ability to ban GMOs or the use of highly toxic chemicals from the same Seed Cartel.

If feeding the world was the goal for these corporations they would not need to make available and potential alternatives illegal, alternatives that have the power to nourish the world without the destruction of our health and the health of the planet. This corporate rule is being *forced* upon us because nobody will choose to feed their families empty, toxic commodities of their own free will. We will not allow our rights to healthy, natural, organic food be superseded by the imaginary rights of fictitious entities to unrestricted profits. The fact that alternatives exist makes it our moral obligation to protect these alternatives. Corporate dictatorship

on food cannot co-exist with the laws of ecology and the laws of the planet. It cannot coexist with human freedoms and liveable, just and democratic societies.

Satyagraha against this corporate rule, civil disobedience of fabricated, unjust laws, being forced on all citizens, across all cultures, in all societies, has become a moral and survival imperative. Whenever and wherever citizens and movements have organised against unjust seed and food laws, the corporations have had to retreat. This has happened with seed related laws in India, Europe, Columbia, Chile, Brazil and the struggle for Seed Freedom and Food Freedom continues all over the world. Through *Satyagraha* and *Civil Disobedience* we can end Seed Slavery and Food Dictatorship and build alternatives that protect and nourish the planet and people.

#### PLEDGE:

We have reverence for seeds we have received from nature and centuries of farmers' breeding.

We do not recognise seed to be a corporate invention, therefore, we do not recognise patents on seed and life.

We will support our local seed libraries as sources of fertile and open source seed. We do not recognise any laws, created by corporate interests, that interfere in our duty to save and share good seed so that the generations to come are as fortunate as we have been in receiving these gifts of diversity and nourishment.

We will not obey, or recognise any law that criminalises our time-tested seeds.

This is our Seed Satyagraha

From good seed comes good food.

We do not recognise tasteless, nutritionally-empty, toxic commodities as food.

For us food is, as it has always been, natural, organic, nourishing, healthy and safe. We refuse to accept an agriculture system based on poisons as safe.

We refuse to let another bee die.

We do not recognise the unscientific fallacy of "Substantial Equivalence" of Genetically Modified food with non GMO food.

We refuse to accept Industrial Agriculture as a solution to the climate crisis because we know it is one of the causes. We also know that Organic Farming and living soils hold the key to solving the Climate Crisis.

We will grow organic food everywhere-on our farms, our gardens, our balconies, our terraces.

We will eat organic, in our kitchens, our cafeterias, our schools and offices.

Our Gardens will be sites of Satyagraha.

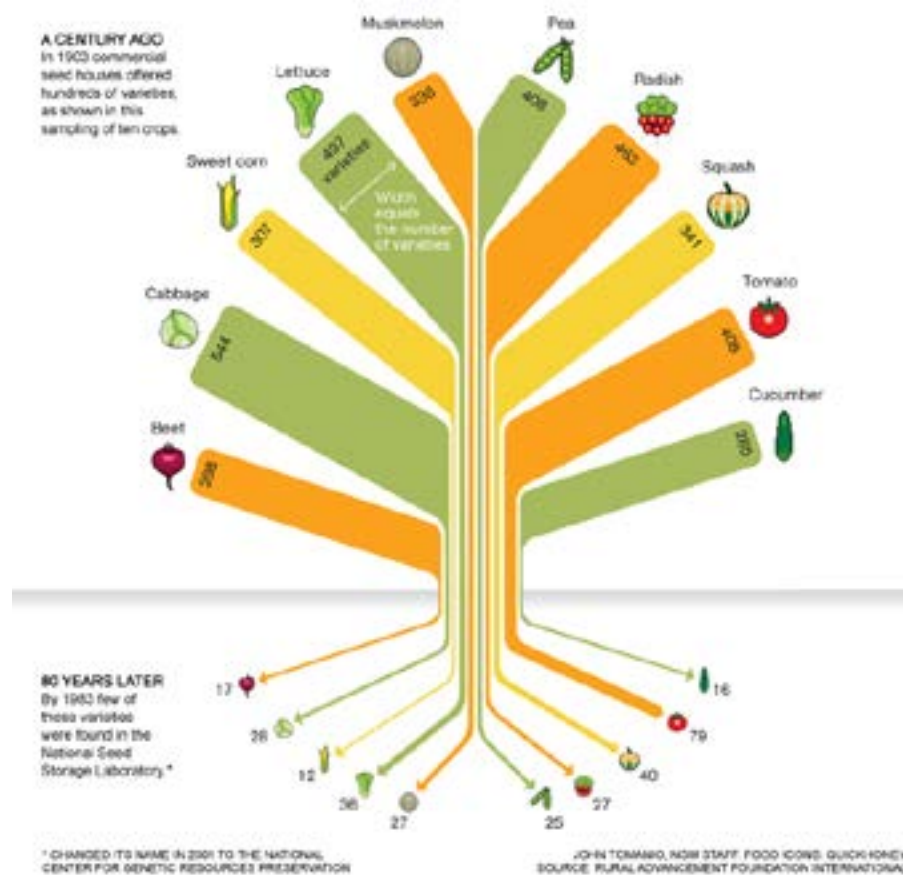
#### SEED IS AT THE CENTRE OF THE MULTIPLE INTERCONNECTED CRISES WE FACE TODAY

The three interconnected crises we face today – hunger, malnutrition and disease; climate change and biodiversity erosion; and the corruption of democracies along with the assault on peoples' freedoms by corporations parading as 'persons' - have, at their center, the issues of seed control, seed production and seed sovereignty. One billion people are perpetually hungry and two billion are chronically sick because of the chemical commodity system falsely claiming to "feed the world" while it makes billions suffer. The same industrial agriculture that creates hunger and disease is also contributing to Climate Change and the erosion of biodiversity. 40% of Greenhouse gas emissions come from this very model of Industrial agriculture, now also falsely claiming to be "Climate Smart". The monocultures that this system demands have also dramatically eroded the diversity in our diets by eliminating the diversity on our farms.

Most of mankind now lives on no more than 12 plant species, with the four biggest staple crops (wheat, rice, maize and potato) taking the lion's share. (Esquinas-Alcazar 2010). In India, rice varieties have declined from an estimated 200,000 before colonialism, to 30,000 in the mid 19<sup>th</sup> century with several thousand more varieties lost since the imposition of Green Revolution on India, in the 1960s. Similarly, Greece is estimated to have lost 95% of its traditional wheat varieties after being encouraged to replace local seeds with 'modern' varieties developed by CIMMYT.<sup>1</sup> The disappearance of this diversity in our diets has manifested in the epidemic of malnutrition, especially amongst the world's poor. Having created the epidemic, this failed system of chemical agriculture would like to force 'Golden Rice' and 'GMO Bananas' on us under the pretext of "bio-fortification" without appropriate and adequate testing.

Crop Genetic Diversity is indispensable in providing resilience to face unpredictable environmental and climate changes and meet the needs of an ever expand-

<sup>1</sup> Seed Freedom Report 2012, Living Seed – Breeding as Co-evolution, Salvatore Cecarelli



ing human population. The model of industrial agriculture and modern plant breeding has resulted in severe erosion of diversity of crop varieties. The changes in who controls seed production and seed supply have had devastating effects on genetic erosion. Either we can allow the power of diversity to enrich our soils, combat climate change and nourish us from disease to health or we can sit back and allow monocultures, chemicals and GMOs to drive humanity to extinction.

Seed has emerged as the site of ethical, ecological, ontological, scientific, legal, economic and political conflict between two world views and ontologies. One world-view is based on corporations as "persons" with "minds" that create and own "life" as intellectual property for corporate profits. The second world view is based on the recognition of the self organizing and self propagating nature of life forms, including seeds; of humans sharing the Earth with the diversity of life forms and all beings as an Earth Family- "*Vasudhaiv Kutumbkam.*"

Through patents on seeds and life forms, a new ontology is being created. The nature of being and existence is being redefined in such fundamental ways that life itself is threatened. When corporations, that were designed as legal constructs, claim "personhood", it is real people – who stand in line at polling booths, eke out livelihoods, and raise families - who lose their rights. By outlawing the availability of renewable, open-pollinated seeds, corporations selling non-renewable patented seeds would be able to force everyone, from large scale farmers to a balcony gardener, to buy only the seeds they sold, every year, ensuring an absolute monopoly and an end to our diversity.

Monopolistic control over seed has been the objective of industrial agriculture corporations throughout the last half-century. The main instruments used in imposing ownership of seed are patents and, the misleadingly named, Plant Breeder's Rights or Plant Variety Protection laws - which in fact are "Soft Patents" - an alternative to patents used in situations where the introduction of patents would face strong resistance from the people. Soft patents have been used to deny farmers their rights to save and share seed, and to enable corporations to establish "Soft Monopolies" until they can enact laws that enable them to cement their monopoly and through the monopoly, establish *Seed Slavery*.

We are witnessing the establishment of monopolies over seeds through patents, mergers and cross licensing arrangements. Large agrichemical businesses have joined together, as a cartel having agreements to share patented genetically engi-

neered seed traits amongst themselves, for total control over the seed supply and a total destruction of the very foundations of agriculture. 100% of the GM seed planted in the world is controlled by just six American and European companies - Monsanto, DuPont, Syngenta, Dow, Bayer and BASF - all originally, and mainly, chemical corporations. DuPont and Monsanto have settled their patent infringement suits against each other, making clear that the patents they hold are only to extract profits from the farmers and people of the world and not to protect their 'intellectual property' or 'foster innovation'<sup>2</sup>. These giant chemical and seed corporations are not competing with each other, they are fighting against peasants and farmers. Quite clearly, this seed cartel is one giant monopolistic entity with the common ambition of totalitarian control over our seeds and food.

Monsanto's goal was to privatise and colonise all seed, everywhere, by the year 2000 - quite obviously, it has failed miserably at achieving this stated goal. Having failed at their first attempt at outright control because of the rise of Seed and Food Movements across the world, movements that have built alternatives which are obstacles to these corporate objectives, corporations are criminalising these alternatives, especially people's seeds - evolved and tested by farmers over centuries. In 2004, simultaneously in India and the US, new laws were proposed based on Licensing and Registration in an attempt to destroy non-corporate sources of seed. The Indian bill did not become law because of resistance from the seed movement in India, but in the US it became law and is being used to serve notices to seed savers and seed libraries across the US today.

#### **LEGAL INSTRUMENTS OF SEED SLAVERY AND FOOD DICTATORSHIP**

Seed slavery is central to corporate dictatorship over food. To establish their rule over our food, our lives and the life of the planet, corporations are writing free trade agreements that are being imposed on nations globally, through brute force bullying by the US Government on behalf of this Seed Cartel, allowing them to function outside of the laws of these countries and undermining their constitutions. For example, Monsanto has been illegally charging royalty on its BT-Cotton seed in India since 1998, even though patents on life are not allowed under Indian law. Corporations have been writing laws that benefit them and forcing them onto entire nations in total violation of the rights and laws of the earth, the rights and laws of humanity and the rights and laws of democratic societies.

The World Trade Organisation (WTO) was the first free trade arrangement written by corporations. Monsanto wrote the intellectual property agreement related to life forms, plants and animals. Cargill wrote the agricultural agreement and the food processing industry wrote the sanitary and phyto sanitary agreement of the WTO. In effect all WTO agreements that impact our food and agriculture are corporate laws - first imposed on governments and later imposed through governments. Thanks to people's movements who challenged corporate rule and corporate laws, corporations could not complete the takeover of our seed and food. Corporations are now using every unethical, undemocratic, illegitimate and illegal means to establish Seed Slavery and Food Dictatorship. The TPP and TTIP and many other bilateral and regional agreements are successors of WTO to establish corporate control over our seeds, our agriculture, our health and environment. In addition, governments seem to be becoming willing partners in writing laws for Monsanto and other corporate giants.

In order to establish Seed Slavery and Food Dictatorship laws have been, and are being, enacted to:

#### **1) Establish corporate ownership:**

2) Laws for owning the Seed through patents under Intellectual Property Rights. Breeders Rights, which criminalize the seed sovereignty of small independent farmers and small scale breeders, including heirloom seed companies.

3) These laws are introduced through so called free trade agreements such as GATT/WTO which introduced TRIPS, and the new TTIP, TPP among other free trade agreements, which enhance corporate intellectual property rights, not people's rights.

#### **4) Criminalise alternative sources of seed:**

5) By enacting Seed Laws based on uniformity and compulsory licensing and registration, corporations are criminalizing biodiversity and seed saving in order to destroy alternatives and strengthen their Food Dictatorship.

#### **6) Weaken protections built into existing laws:**

<sup>2</sup> DuPont and Monsanto Reach Settlement of Litigation Involving Technology Disputes

7) Diluting and subverting international and national biosafety laws - that protect the environment and public health and guarantee citizens the right to safe food.

#### **8) Deny:**

9) Introducing laws to deny citizens the right to know what they are feeding their families and the right to labelling. True to the Food Dictatorship being created by them, corporations are silencing the voice of the majority. A voice demanding a ban on GMOs, or at the very least, labelling, which would allow people to choose alternatives.

#### **10) Discriminate and criminalize:**

11) By changing food safety laws and standards to criminalize diverse, local, organic, artisanal food and deregulate hazardous industrial food, corporations are making all alternatives to industrial seed and industrial food illegal under the guise of 'Food Safety', knowing that the food they are selling is far from safe.

#### **HOW CORPORATE LAWS VIOLATE HIGHER LAWS THAT FLOW FROM NATURE AND HUMANITY**

Seed is the source of life and it's sustenance. It is the very foundation of our being. Seed is the first link in the food chain and embodies millennia of evolution and thousands of years of farmers breeding, as well as the culture of freely saving and sharing seed. It is the expression of the earth's intelligence and the intelligence of farming communities through the ages. The growing of seed and the free exchange of seed among farmers has been the basis to maintaining biodiversity and our food security.



For millions of years, seed has evolved freely, to give us the diversity and richness of life on the planet. For thousands of years farmers have evolved and bred seed freely in partnership with each other and with nature, to further increase the diversity of that which nature gave us and adapt it to the needs of different geographies and cultures. Biodiversity and cultural diversity have shaped one another mutually.

The food web is the web of life. As the *Taitreya Upanishad*, an ancient Indian text says, “everything is food, everything is something else’s food”. When seed and food are manipulated, contaminated, privatized and commodified, the web of life is disrupted and polluted. Human rights are violated and abused

### **FALSE ASSUMPTIONS FOR CONTROL OF SEED**

To justify the Seed Slavery and Food Dictatorship being forced upon the world, corporations have made numerous false assumptions.

#### **1) False assumption that Uniformity is necessary for Food Security**

Uniformity, a mainstay of industrial, chemical intensive, fossil fuel dependent agriculture, is being imposed through IPR and seed laws as a measure of safety to legitimize the existence of unsafe, toxic commodities in our food. Biodiversity based, ecological agriculture and organic farming produce more food and more nutrition through diversity, using less resources and reducing atmospheric carbon. Navdanya’s work as well as the work of a number of scientists shows<sup>3</sup> that natural organic farming enriches the soil with nutrition, which in turn produces more nutritious crops<sup>4</sup> than industrial, chemical farming.

Farmers’ seeds are bred for diversity, resilience, taste, quality and nutrition. Seeds bred by corporations are bred to fit into their business model, which relies on uniformity, vulnerability to failure, industrial processing and long distance transport within a globalised commodity trade system. By assuming uniformity as a measure of safety, the Seed Cartel can make sure that only their seeds are deemed safe while criminalising the diversity of farmers seeds.

#### **Uniformity increases vulnerability and reduces stability in food production**

In the 20th century alone, the development of transportation and communication systems has greatly increased cultural integration, including the adoption of the eating habits of the dominant culture. The concentration of population in urban areas and the rising demand for food has created a situation in which high production based on uniform crops has been given priority over more reliable, diversified production. The introduction of modern farm machinery, marketing, and transport methods that require uniform crop characteristics have required the introduction of standard, homogeneous plants.

There is a trend of modern plant breeding towards uniformity both within varieties (pure lines in self-pollinated crops, clones in vegetatively propagated crops and hybrids in cross-pollinated crops) and between varieties, because the majority of the varieties of the most important food crops are often closely related. It appears as if the current dogma is that the uniformity is necessary to feed the world.

This trend fits well with industrial agriculture’s requirement for a uniform response to the application of chemicals to control pests, diseases and weeds or to fertilizers. On the contrary, farmers have traditionally used crop and variety diversity as a way of diversifying risk, a concept that is very clear to the managers of financial assets who always advice clients who want to minimize risk to diversify their financial investments. This concept, which was, and still is, present in farmers’ breeding, has disappeared from modern plant breeding, an activity which eventually affects food production and hence food security in a world where one of the major threats is climate changes and their consequences on, among others, pests and diseases.

#### **Uniformity destroys diversity that is vital for adaptation to climate change.**

In a number of countries, registration of varieties (and the need to be registered to be “legally” cultivated) requires testing for DUS (distinctiveness, uniformity and stability) and, for some crops, for VCU (value for cultivation and use) for a minimum of two years. Distinctiveness means that the variety must be distinguishable by one or more characteristics from all other registered varieties. Uniformity means that all plants from the same batch of seed must be the same. Stability means that the plant must be the same after successive generations. VCU implies that, compared to other registered varieties, the va-

riety being registered offers a qualitative or technological advance.

These three concepts do not have a biological justification. Whoever decided to impose uniformity because it makes easier to distinguish varieties from each other, probably ignores that in many countries farmers also grow heterogeneous landraces of the same crop that despite their heterogeneity are identified with distinct names and characteristics even if not uniform. They are kept in cultivation because they are much more stable (over time) than the Distinct, Uniform and Stable varieties.

Uniformity and stability are the opposite of what is needed in the presence of continuously evolving pests and diseases and the uncertainty of climate change.

Moreover breeding and so called “field trials” are often done in agricultural research stations under “ideal” or artificial conditions and not on farmers’ fields thus ignoring characteristics that are actually beneficial to farmers. The interest of farmers is consistency of production over time (resilience) and the interest of the seed companies is consistency of production over space – at the opposite ends, and not only the plant breeding programs but also the registration procedures, which concentrate on irrelevant aspects such as DUS are organized to respond to the latter. Legal constraints through privatization of the seed along with biological constraints imposed by uniformity hinder the evolution of the system to adapt to climate change.

#### **2) Definition of Life as a Machine**

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. But seeds are not automobiles or circuit boards. Life cannot be manufactured. It is not an invention. Living organisms are self organized complexity. Over the last 2 decades, under the influence of corporations, patent laws have moved away from protecting genuine inventions and ideas towards the ownership of life and control over survival essentials like seed and medicine.

#### **3) False assumption that GMOs feed the world.**

The study of the Union of Concerned Scientists, *Failure to Yield*, has established that there is no increase in yield of genetically engineered crops. Jack Heinemann’s study comparing EU and US data shows that the productivity of agriculture is higher in GMO Free Europe than in GMO dominated US agriculture.<sup>5</sup>

Even for nutritional deficiencies, that have been aggravated by monoculture, industrial, chemical agriculture, Genetically Engineered crops for bio fortification - such as Golden Rice and GMO Banana - are thousands of times less efficient than the crops these monocultures have banished from our farms. Biodiversity based alternatives have been found to be superior in providing diversity of nutrients at lower cost, and with higher democratic control over seed and food.<sup>6</sup>

Not only do GMOs fail to increase yields, they create new safety issues. New research is showing that there is no evidence of GMO safety.<sup>7</sup> Research is also showing the falseness of the assumption of *substantial equivalence* in studying the health and ecological effects of GMOs.<sup>8</sup> This is the reason why we have an international Biosafety Protocol under the Convention for the Conservation of Biological Diversity (CBD) as well as the *Codex Alimentarius*, which has recognized the Right of citizens to GMO labeling. 64 countries around the world have mandatory GMO labeling<sup>9</sup> Mandatory GMO labeling is, therefore, a minimalist requirement of Food Democracy, for the Right to Know and the Right to Safe Food. Safe Food comes from seeds that are chemical and GMO free, making Seed Freedom and Food Freedom inseparable .

#### **4) False assumption that farmers are not breeders**

For millennia, plant breeding was done by farmers. Selection started at the same time as domestication. After domestication, farmers have continued to modify crops for millennia and have been largely responsible for the spreading of crops across the planet. As they migrated across continents, they brought with them

5 <http://www.comsdev.canterbury.ac.nz/rss/news/?feed=news&articleId=888>

6 Biodiversity in women’s hands produces nutrition not GMOs and uniformity – [www.seedfreedom.info](http://www.seedfreedom.info)

7 <https://medium.com/insurge-intelligence/no-scientific-evidence-of-gm-food-safety-a1c814d0f70c>

8 <http://www.prnewswire.com/news-releases/systems-biology-group-international-center-for-integrative-systems-gmo-soy-accumulates-formaldehyde-disrupts-plant-metabolism-suggests-peer-reviewed-study-calling-for-21st-century-safety-standards-300112959.html>

9 [www.justlabelit.org/right-to-know-center/labeling-around-the-world/](http://www.justlabelit.org/right-to-know-center/labeling-around-the-world/)

3 Health Per Acre, Navdanya

4 <http://www.ncbi.nlm.nih.gov/pubmed/24968103>

their seed and animals, both of which needed to adapt to new environments and soil types. This was possible because the seed they were taking with them was far from being uniform and was able to adapt to different climates and soil types. In the plant breeding done by farmers there was an emphasis not just on adaptation to environments but also to uses, thus the same farmer would select different varieties of the same crop and different farmers would select different varieties to suit their specific needs.<sup>10</sup>

Long before modern industrial plant breeding for purely commercial purposes, farmers planted, harvested, stored and exchanged seeds, and fed themselves and others, through deep knowledge of their crops, the characteristics and utility of these crops and how they reacted to the surrounding environment. Commercial breeding moved the breeding of seeds from farmers fields to research labs, away from the environment and without consideration of utility, towards uniformity and ownership.

### 5) Biopiracy as “Innovation”

35 years of genetic engineering has given the world 2 traits, both of which have failed at delivering on the promises made to expedite their introduction without adequate safety studies by the Seed Cartel. Unable to justify the research dollars being spent, or out of laziness, corporations have continuously attempted to pirate and patent indigenous knowledge and farmers’ seed varieties. Corporations take varieties that have been evolved over millennia by generations of farmers, identify (mostly through trial and error and readily available trait information available along with the seed in gene banks) the genes that contribute to a certain characteristic and register a patent to profit from the work of all those generations of farmers, nature and the millions of pollinators.

Patents on living resources and indigenous knowledge are an enclosure of the biological and intellectual commons. Life forms have been redefined as “manufacture”, and “machines”, robbing life of its integrity and self-organisation. Traditional knowledge is being pirated and patented unleashing a new epidemic of “bio piracy”.

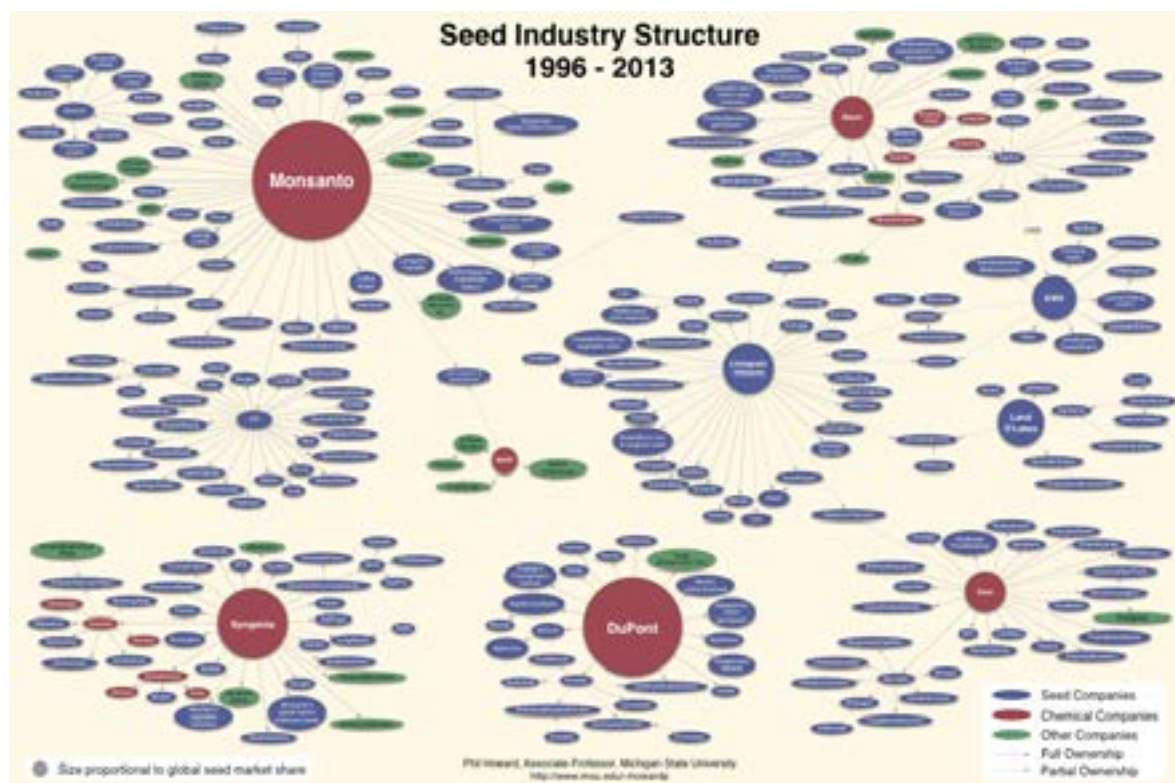
#### Cases of Biopiracy

To end this epidemic of biopiracy and to protect the rights of our farmers and citizens, it is required that our legal systems recognize the rights of communities, their collective and cumulative innovation in breeding diversity, and not merely the rights of corporations. The Intellectual Property Rights, as they stand, are in effect, a denial of the collective innovation of our people in favour of corporate theft.

**Patenting of *Neem*** The patenting of the fungicidal properties of *Neem* by the United States Department of Agriculture and the multinational corporation W.R. Grace was a blatant example of biopiracy and the theft of indigenous knowledge. On 10th May, the European Patent Office (EPO) revoked the patent (0436257 B1) following a lengthy challenge by The European Parliament’s Green Party, Dr. Vandana Shiva of RFSFE, and the International Federation of Organic Agriculture Movements. The patent was finally revoked on the grounds of “lack of novelty and inventive step”. The challenge to the patent was based on the fact that the fungicidal qualities of the *Neem* and its uses have been known in India for over 2000 years.

**Biopiracy of Basmati** On 8th July 1994, Rice Tec Inc, a Texas based company, filed a generic patent (Patent No. 5663484) on basmati rice lines and grains in the United States Patent and Trademark Office (USPTO) with 20 broad claims designed to create a complete rice monopoly patent which included planting, harvesting collecting and even cooking. After widespread protests, and the case in the Supreme Court of India, the U.S. Patent and Trademark Office struck down most sections of the Basmati patent.

**Monsanto’s Biopiracy of Indian Wheat** Monsanto was assigned a patent on wheat (No. EP 0445929 B1) on May 21st, 2003 by the EPO under the simple title - “plants”. On January 27th, 2004 The Research Foundation for Science,



Technology and Ecology, Greenpeace and Bharat Krishak Samaha filed a petition at the EPO challenging the patent. Monsanto’s patent through piracy was revoked.

**Monsanto’s Biopiracy of Climate Resilience** Monsanto applied for blanket patents for “Methods of Enhancing Stress Tolerance in plants and methods thereof” (The title of the patent was later amended to “A method of producing a transgenic plant, with increasing heat tolerance, salt tolerance or drought tolerance”). These traits, evolved by Indian farmers over millennia, using the depth of their knowledge of breeding, was clearly a case of piracy. On 5th July, 2013, Hon. Justice Prabha Sridevi, Chair of the Intellectual Property Appellate Board of India, and Hon. Shri DPS Parmar, technical member, dismissed Monsanto’s appeal against the rejection of these patents that claimed Monsanto has invented all resilience

#### Seed Monopolies - the concentration of corporate control

To establish Seed Slavery, the Seed Cartel has, over the last few decades, through mergers, acquisitions and licensing agreements, created one giant umbrella entity intent on controlling the world’s seed, and through seed, food - creating a Food Dictatorship. This concentration of corporate power coupled with the lack of competition and regulation spells disaster for farmers, and through food, humanity. Because of the Seed Cartel’s proximity to the White House, the USDA, the FDA and the US Department of Defence, anti-trust regulations - that would apply to any other industry with similar monopolistic practices - are not being applied to the seed industry. Contrarily, the Seed Cartel, especially Monsanto, have had a free hand at writing laws for their own benefit without any responsibility to and concern for the people and environment of the world, especially the United States.

(Ref : Phil Howard, Assistant Professor, Michigan State University – <https://msu.edu/~howardp/seedindustry.html>)

The ecological and biological laws of the Seed draw upon the perennial laws of nature and evolution based on diversity, adaptation, resilience and openness. They also draw on principles of jurisprudence of human rights, public good and the commons. In contrast, the dominant legislation today related to seed is in total violation of the Law of the Seed<sup>11</sup> and democratic processes with no basis in jurisprudence or science. A reductionist, mechanistic science and legal framework for privatizing seed and knowledge of the seed reinforce each other to destroy diversity, deny farmers’ innovation and breeding, and enclose the biological and intellectual commons for corporate profit.

<sup>10</sup> Source – Living Seed, Salvatore Cecarelli, Seed Freedom 2012

<sup>11</sup> Law of the Seed <http://seedfreedom.info/publications-and-campaigns/>





## PATENTS ON LIFE

### Trade Related Intellectual Property Rights (TRIPS)

**Written by Monsanto, for Monsanto; Signed, Sealed, Delivered by the US Government.**

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:

Cleverly, what allows the patentability of seeds is hidden in the clause for exclusion from patentability. By excluding “non biological and microbiological processes” from the exclusion, Article 27.3 (b) allows patents through genetic engineering - a non-biological and microbiological process. The door to patents on seed, and patents on life, was opened through genetic engineering. 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. In defining seed as their creation and invention in the TRIPS agreement, corporations like Monsanto shaped the Global Intellectual Property and Patent Laws to prevent farmers from seed saving and sharing.

“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.”

### India’s Patent Regime - An example of accurate patent law

Article 27.3 of the TRIPs Agreement, written by Monsanto 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

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

### Blocking the review of TRIPs to illegally impose patents on life

The TRIPs clause on patents on life was due for a mandatory review in 1999, four years after the WTO came into being. India in its submission had stated “Clearly, there is a case for re-examining the need to grant patents on life forms anywhere in the world. Until such systems are in place, it may be advisable to: (a) exclude patents on all life forms;” The African group too 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.”

This mandatory review has been subverted by Monsanto, through governments within the WTO. This long overdue review must be taken up to reverse Patents on Life and Patents on Seed. Life forms, plants and seeds are all evolving, self-organized, sovereign beings. They have intrinsic worth, value and standing. Owning life by claiming it to be a corporate invention is ethically and legally wrong. Patents on seeds are legally wrong because seeds are not and cannot be an invention. Patents on seeds are ethically wrong because seeds are life forms, they are our kin - members of our earth family.

### Patents and Monsanto’s War against Farmers

When a corporation controls seed, it controls life, including the lives of our farmers. Through patents on life, Monsanto seems to have become the “life lord” of the planet, collecting rents from life’s renewal and from farmers, the original breeders. “In fact, as a result of a landmark 1980 Supreme Court decision that made GMOs patentable, corporations filed 1,800 patent submissions for genetic material of seeds and plants. Also, the four biggest chemical companies quickly jumped into the seed production fray by acquiring existing seed firms. At least 200 independent seed companies were bought out and consolidated from 1996 to 2009.”<sup>12</sup> According to a 2011 U.S. Department of Agriculture (USDA) study, 72 percent of corn seed and 55 percent of soybean seed (biggest crops in the U.S.) came from the top four producers of these seed varieties in 2007: Monsanto, Dupont/Pioneer, Syngenta, and Dow. This monopoly control over seeds means that farmers are left with very few options to purchase seed. When a farmer buys GM seed, he is made to sign a technology use agreement which Monsanto calls a *Technology Stewardship Agreement*. However, farmers are to be restricted only to being stewards of Monsanto’s Intellectual Property and not be the stewards of seeds and genetic diversity. It is exactly the latter that Monsanto has criminalised through these “technology stewardship agreements” which forbid farmers from saving, exchanging, selling, and even replanting seeds.<sup>13</sup>

### Monsanto v/s 300,000 Indian Farmers

India does not recognise patents on life, including seeds. The collection of royalties by Monsanto over the last fourteen years are based on a patent that does not exist, and is therefore, quite simply, theft. While Monsanto does not have a patent 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% of the cotton in India is controlled by Monsanto.

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

Source: <http://ebrary.ifpri.org/utills/getfile/collection/p15738coll2/id/14501/file-name/14502.pdf>

### Monsanto v/s Bowman

In 2013, Vernon Hugh Bowman, the 75 year old soya bean farmer from Indiana was sued by Monsanto claiming he infringed upon their patents when he purchased

and planted seeds from a grain elevator since the majority of plants from the second planting were identified as products of its patented Round up Ready Seeds. However, Bowman had bought seeds from a third party, which were sold as a mix of undifferentiated commodity seeds and had never signed any company technology agreement with Monsanto. Bowman continuing to assert his right to save seed took the case to the US Supreme court arguing that the company’s patent had exhausted by the sale of its soya beans to the grain elevator. However, the Supreme Court chose to protect Monsanto over farmers. Instead of protecting farmers’ rights to save, sow and replant seeds, it effectively strengthened Monsanto’s ability to legally harass farmers for profit from royalty collections over life. Monsanto triumphant in its statement announced “The court’s ruling today ensures that longstanding principles of patent law apply to breakthrough 21st century technologies that are central to meeting the growing demands of our planet and its people.” However another effect this “breakthrough technology” has also had is that from 1995 to 2011 the average cost to plant one acre of soyabean rose by 325%, prices for cotton by 516% and corn seeds by 259%. In 2010, the spike in prices led to an anti trust investigation of the seed industry, the inquiry of which was closed in 2012 without charges being brought<sup>14</sup> This case once again confronts us with the question whether living things can be patented and what its effects are on farmer’s rights.

Table 2. The second official version: Farmer suicides in selected states and all India, 1997–06

| State          | 1997   | 1998   | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Maharashtra    | 1,917  | 2,409  | 2,423  | 3,022  | 3,536  | 3,695  | 3,836  | 4,147  | 3,926  | 4,453  |
| Andhra Pradesh | 1,097  | 1,813  | 1,974  | 1,525  | 1,509  | 1,896  | 1,800  | 2,666  | 2,490  | 2,607  |
| Karnataka      | 1,832  | 1,883  | 2,379  | 2,630  | 2,505  | 2,340  | 2,678  | 1,963  | 1,883  | 1,720  |
| Madhya Pradesh | 2,390  | 2,278  | 2,654  | 2,660  | 2,824  | 2,578  | 2,511  | 3,033  | 2,660  | 1,375  |
| Gujarat        | 565    | 653    | 500    | 661    | 594    | 570    | 581    | 523    | 615    | 487    |
| Other states   | 5,821  | 6,979  | 6,152  | 6,105  | 5,447  | 6,892  | 5,758  | 5,909  | 5,557  | 6,418  |
| All India      | 13,622 | 16,015 | 16,082 | 16,603 | 16,415 | 17,971 | 17,164 | 18,241 | 17,131 | 17,060 |

Source: NCRB various years.

Table 7. Area of adoption of Bt cotton in ha, by state, 2002–2006

| State/Region   | 2002   | 2003   | 2004    | 2005      | 2006      |
|----------------|--------|--------|---------|-----------|-----------|
| Maharashtra    | 12,424 | 21,854 | 161,475 | 508,692   | 1,840,000 |
| Gujarat        | 9,137  | 41,684 | 125,925 | 149,258   | 470,000   |
| Madhya Pradesh | 1,488  | 13,355 | 86,119  | 136,221   | 310,000   |
| Andhra Pradesh | 3,806  | 5,463  | 71,227  | 90,419    | 830,000   |
| Karnataka      | 2,186  | 3,035  | 34,304  | 29,345    | 85,000    |
| Tamil Nadu     | 374    | 7,689  | 11,995  | 17,017    | 45,000    |
| Northern Zone  | -      | -      | -       | 83,503    | 215,000   |
| Other          | -      | -      | -       | -         | 5,000     |
| Total          |        |        | 500,000 | 1,310,000 | 3,800,000 |

Source: Indiatat (2005) for 2002–05, ISAAA (2006) for 2006.

Monsanto has been using heavy handed investigations and ruthless prosecutions that have fundamentally changed the way American farmers farm. The result has been nothing less than an assault on the foundations of farming practices and traditions that have endured for millennia.

### Monsanto v/s Michael White

In 2003, Monsanto sued Michael White and his father Wayne White for patent infringement for unknowingly cleaning Round up ready Genetically Modified soya beans for a local farmer. He was kept under constant surveillance through private investigators. Michael White, a fourth generation farmer and seed cleaner who went toe to toe with Monsanto, describes in the film “Seeding Fear”, how these intimidation tactics which included threats to his life, effectively destroyed his family, his health as well as his livelihood. Most farmers go broke before they get cleared for a jury trial. Although confident he would win in court, Monsanto’s nearly infinite financial and legal resources would protract the case for years and cost millions. In 2006, after being cleared for a jury trial Michael settled with Monsanto while maintaining the freedom to speak publicly about his case.<sup>15</sup>

As of 2014, Monsanto sued 147 farmers for patent infringement. According to the Centre for Food Safety, “by the end of 2012, Monsanto had received more than \$423.5 million from patent infringement lawsuits against farmers and farm busi-

<sup>12</sup> <http://www.triplepundit.com/2013/02/bowman-monsanto/>

<sup>13</sup> Birgit Muller – Intellectual Property over seeds versus civil liberties 2013 <hal-00814901>

<sup>14</sup> <http://www.dailyfinance.com/on/monsanto-gmo-roundup-ready-seeds-patents-food-prices/>

<sup>15</sup> Seeds of Reprisal – Michael White v/s Monsanto

nesses, although “depicting the full scope of the industry’s pursuit of farmers is nearly impossible because many cases are settled by confidential out-of-court settlements.”

#### Number of Lawsuits Filed Against U.S. Farmers:

- As of November 28, 2012, Monsanto had filed 142 lawsuits against farmers for alleged violations of its Technology Agreement and/or its patents on genetically engineered seeds.<sup>17</sup>
- These cases have involved 410 farmers and 56 small farm businesses.

#### Status of Lawsuits:

- 72 lawsuits ended in recorded damages awarded to Monsanto.
- 27 lawsuits ended in unrecorded damages awarded to Monsanto (confidential settlements).
- 14 lawsuits were dismissed, with no indication of whether damages were awarded to Monsanto.
- 11 lawsuits were ongoing as of November 28, 2012.

#### Lawsuits Filed by State:

- Monsanto has sued farmers and small farm businesses in *at least* 27 different states.

#### Recorded Judgment (as of November 28, 2012):

- Sums awarded to Monsanto in 72 recorded judgments against farmers totaled \$23,675,820.99.
- The largest judgment was \$3,052,800.00.
- The smallest judgment was \$5,595.00.

**Source: CFS Monsanto V/S US Farmers 2012**

### **GMO, genetic contamination and use of patents to put the polluter pays principle on its head**

As described above, GE seeds and crops provide a pathway for corporations to “own” seeds through patents and intellectual property rights (IPRs). Patents provide royalties for the patent holder and corporate monopolies. However, patented GMO seeds also result in a severe ecological impact, the most significant being genetic contamination. For example, the contamination of canola in Canada is so severe that 90 percent of certified non GE Canola seed samples contain GE material.<sup>16</sup>

A report of the Japanese Institute for Environmental Studies (JIES) confirmed that herbicide resistant genetically engineered canola plants had escaped into Japanese ecosystems at major shipping ports along the Japanese coast.<sup>17</sup>

Another study in the US found that virtually all samples of non-GE corn, soya beans, and canola seed were contaminated by GE varieties (Mella M and Rissler J (2004), *Gone to Seed: Transgenic Contaminates in the Traditional Seed Supply*, Union of Concerned Scientists).<sup>18</sup>

*“Farmers have been sued after their field was contaminated by pollen or seed from someone else’s genetically engineered crop; when genetically engineered seed from a previous year’s crop has sprouted, or “volunteered,” in fields planted with non-genetically engineered varieties the following year; and when they never signed Monsanto’s technology agreement but still planted the patented crop seed.” (CFS – Monsanto v/s US Farmers 2012)*

When the genetically engineered crops contaminate neighbouring farmers’ fields, the “polluter pays” principle is turned on its head and corporations use patents to establish the principle of “polluter gets paid”. The most dramatic case of contamination and genetic pollution is the case of Percy Schmeiser, a Canadian Canola seed grower, whose crop was contaminated by Monsanto’s Round-Up Ready Canola. Instead of paying Percy for the damage of contamination in accordance with the “Polluter Pays” principle, Monsanto sued Percy for “Intellectual Property theft.”

#### **Percy Schmeiser – David v/s Monsanto**

The ordeal of Percy and Louise Schmeiser is an illustration of the depth and breadth of a patenting system that strips away farmers’ rights and ability to save seed. The Schmeisers, Canadian canola farmers and seed savers, were sued by Monsanto in 1996 after their fields became contaminated by GM canola. Monsanto charged that the Schmeisers owed Monsanto profits from their canola crop as well as technology fees because GM canola was found on their farm. Monsanto also asked for a million dollars in court costs. However Percy and Louise Schmeiser decided to **stand up to Monsanto**. They were seed developers of Canola for half a century and

16 ([www.lynnmaclaren.org.au/media-release-major-grain-traders-reject-gm-canola](http://www.lynnmaclaren.org.au/media-release-major-grain-traders-reject-gm-canola)).

17 (<http://www.greenpeace.org/international/en/publications/reports/canola-report/>).

18 For more details on GE contamination refer to the GMO Emperor has No Clothes, Navdanya 2012



it is their pure seed that got contaminated by Monsanto against their wishes. They insisted that this was instead a liability issue as it is farmers’ rights that were being infringed upon and thus it was Monsanto who should pay for damages.<sup>19</sup>

“Monsanto did not win the case. In the initial pre-trials, Monsanto withdrew all allegations that we had ever obtained or grown their seed illegally. But they said that didn’t matter. The fact that Monsanto found some of their GMO canola plants in a ditch along one of our fields meant that we had violated their patent. So that’s basically what it went to court on – patent law. The first trial judge at the Federal Court of Canada ruled, that it doesn’t matter how Monsanto’s GMOs get into any farmers’ fields, whether you’re an organic farmer or a conventional farmer. If it gets in there, you no longer own your seeds or plants. They become Monsanto’s property. The rate of contamination doesn’t mean anything. He also ruled that all our profit from our 1998 canola crop (we had approximately 500 hectares seeded) had to go to Monsanto – even from fields in which tests showed there had been no contamination. He said since we were seed developers using our own seeds from year to year, there was a probability of contamination. So basically, he ruled that a farmer ought to and should know when his fields were contaminated.

But how do you do that when your seeds look identical and your plants look identical? Based on this logic, we then stood up to Monsanto again and took it all the way to the Supreme Court.

Now, the Supreme Court ruled that I did not have to pay Monsanto one red cent. At one time Monsanto had wanted their court costs and came after me for a million dollars. They wanted a \$15 per acre technology charge; they wanted all my profits from my 1998 crop on 500 hectares. They didn’t get a cent. But the Supreme Court of Canada ruled that Monsanto owns and controls the gene if they have a patent on it. And that, I think, was a major loss for Monsanto, because if you own and control the gene and it gets out of control, you have a massive liability issue!” – Percy Schmeiser – GMO Emperor Has No Clothes

However, even though the Supreme Court of Canada acknowledged that the GM canola found on the Schmeisers’ property was clearly the result of contamination from a neighbouring farm, the Court ruled that patented GM crops are a corporation’s property regardless of how the GM material spreads to another property. This ruling is an example of the perverse logic that allows corporations to claim that GM seeds and crops are “novel” and therefore can claim patent rights while simultaneously allowing corporations to claim that GM seeds and crops are substantially equivalent (i.e., not novel) when GM crops contaminate non-GM crops. Seeds and life forms are not inventions, and thus allowing patent holders to prevent farmers from saving and conserving seeds, makes patents morally, scientifically and legally inappropriate

19 David v/s Monsanto <https://www.youtube.com/watch?v=oPKo5rc99p4>



### **Monsanto v/s Steve Marsh**

In December 2010, Australian organic farmer, Steve Marsh lost his organic status when his harvest was found contaminated with genetically modified Roundup Ready canola from his neighbour's field.<sup>20</sup> Both NASAA and the state Department of Agriculture confirmed positive GM tests on the wind-blown material. Marsh decided to claim damages for \$85000 by suing his neighbour Michael Baxter as the contamination meant a loss of half his farm and most of his livelihood. Using the legal rights of common law, trespass and nuisance Steve argued that his neighbour owed him a duty of care. The judge dismissed Steve's case prompting an appeal to the appeals court. His bid proved unsuccessful and the court instead ordered Marsh to pay legal fees of about \$804000. However, in March 2015 Steve appealed the court's decision in the appeals court. The Western Australian court ordered his neighbour, Michael Baxter to disclose any financial dealings and assistance he may have received from the Pastoralists and Graziers Association (PGA) or Monsanto for legal costs in the landmark case. This court order has forced Monsanto to reveal its support for Baxter but has not yet revealed how much financial support was supplied.

We now know that Monsanto funded the GM farmer in yet another David versus Goliath battle for the future of food and Steve's right to grow GM free organic food. The judgment is due sometime over the next six months.<sup>21</sup>

### **Brazilian Farmers v/s Monsanto**

In an epic legal battle 5 million farmers from Brazil took on Monsanto through a lawsuit demanding 6.2 billion euros as royalties illegally extracted from them for their RR1 Soybeans. Farmers protested the illegal royalties collected by Monsanto from "renewal seeds". Apart from charging royalties on the sale of the crop produced, Monsanto demands royalties from any crop generation produced from its seeds thanks to the patent. In April 2012, a judge in the southern Brazilian state of Rio Grande del Sul, ruled in favour of the farmers and ordered Monsanto to return the royalties paid since 2004 or a minimum of \$2 billion. Saying the business practices of Monsanto violate the rules of the Brazilian Cultivars Act (No. 9.456/97). Following the ruling, Monsanto then reached a deal with farmers' unions, for any farmer saying who wanted to plant RR2 Intacta soybeans. They would be locked in an agreement at point of purchase, "waiving their rights to a refund of the illegally

collected royalties. Moreover, the farmer would grant Monsanto the right to enter and inspect his property or even have part of his harvest confiscated and would agree to not sue Monsanto at any time. At the same time, the company would not guarantee a yield increase from RR2 Intacta.

In the latest ruling on 11 October, the judge blocked Monsanto's demands that farmers sign the agreement as a condition to buy RR2. The judge said that Monsanto is unfairly taking advantage of its favorable position in the market as the only technology provider of Intacta RR2, in forcing farmers to "to comply with clauses that are burdensome, if not illegal" as a condition of purchasing the product. In addition, the judge said that Monsanto's agreement may contravene Brazilian consumer law.<sup>22</sup>

### **Argentina farmers v/s Monsanto**

In a long battle with Monsanto, Argentinian farmers have been protesting Monsanto's illegal and outrageous methods to inspect shipments and analyze if grains contain their technology. Since early 2004, Monsanto was pushing the Argentine government for a system that will allow them to charge royalties for seed technology however was not able to reach an agreement with the Argentine Association of Seed Producers and the representatives of the unions. Monsanto then decided to enforce its rights directly, by demanding royalties from the export companies in the courts of European countries where it holds the patent for soya RR. The company inserted a clause in the grain purchase contracts with farmers asking them to either pay royalties when purchasing the seed or when handing over the grain to be exported. Farmers have criticized this system of inspection as illegal saying Monsanto has no authority to ask third parties to collect supposed royalties for them. Monsanto has been asking exporters to check the grain for them with an analysis kit supplied. The government has now decided to step in banning through a decree the practice of collecting royalties by grain handlers after the harvest on behalf of Monsanto.

It is worth noting that soya RR was released in 1996, but given that Monsanto had not followed the necessary procedure through the Ministry of Agriculture, Livestock, Fisheries and Food (SAGPyA) for its immediate commercialisation, it resorted to a system of licenses in order to market the RR technology. It is also necessary to point out that Monsanto does not own the breeder rights, because they never

20 (<http://www.perthnow.com.au/news/special-features/gm-contamination-of-organic-crop-confirmed/>).

21 (<http://stevemarshbenefitfund.com.au>)

22 (<http://www.gmwatch.org/news/archive/2013/15107-brazilian-judge-rules-in-favour-of-farmers-against-monsanto>)

completed the registration process with the National Register of Cultivar Ownership. Nor does it have the corresponding patent. With the help of other biotech industries, such as the Association of Argentine Seed Producers (ASA) and ARPOV (an Argentine subsidiary of UPOV), Monsanto's strategy has revolved around putting pressure on the Argentine government to modify both the Seed Law and the membership to UPOV91, which limits the farmers' own use of the seeds. Their strategy also demands payment of royalties for Argentine soya imports at the ports of entry. Monsanto initiated legal proceedings in Denmark and Holland in respect of global royalties.<sup>23</sup>

### **BREEDER'S RIGHTS - IMPOSING UNIFORMITY, DESTROYING DIVERSITY**

Plant Breeder's Rights or Plant Variety Protection were - and still are - initially pushed as an alternative to patents ('soft patents') where widespread opposition to patents on plants is anticipated. As with patents, plant breeders rights, created by industry, to establish monopolies and collect royalties on Seed and to prohibit farmers and breeders from having access to seed from non-industry sources. The irony of course is seed is bred from seed, and for every variety claimed to have been 'invented', farmers varieties have provided the plants and the genome. This contribution of farmers' breeding and their intellect is completely negated by Plant Breeders Rights laws. The initial move for the harmonization of plant breeders rights came with the adoption of UPOV in 1961.

#### **Origin of UPOV**

Plant Breeder's Rights were originally formulated in Europe and then spread to other parts of the world were pushed by industry associations as far back as 1911. In 1956, the body spearheading the breeders' demand for IPP, International Association of Plant Breeders for the Protection of Plant Varieties (ASSINSEL) called for an international conference to develop an international system for the protection of new plant varieties. The 1957 Paris Conference with France and 12 Western European Nations "recognized the legitimacy of breeder's rights and established as the preconditions for protection that a variety had to be distinct from pre-existing varieties and sufficiently *homogenous* and *stable* in its essential characteristics" culminating in the adoption of the International Convention for the Protection of New Varieties of Plants, or Union pour la Protection des Obtentions Végétales (UPOV) at the second session of the conference in 1961.<sup>24</sup>

Plant Breeders Rights are accompanied by DUS criteria and are granted for varieties that are distinct, uniform and stable, criteria that ensure that only commercial, industrial seeds meet the requirements. UPOV 1961 harmonised prevailing practices in seed-related legislations across Europe. While initially granting less powers than patents, subsequent revisions (1972, 1978 and 1991) made the laws more stringent on farmers, with stronger enforcement and enhanced protection for corporate interests, granting breeders monopoly rights. In the earlier versions of UPOV, there were some exceptions to the commercial monopoly. Farmers were still free to save and reuse their seeds of protected varieties and breeders were allowed to enhance PVP varieties through breeding programs. However, under UPOV 1991, farmers can no longer freely save seeds and protection of plant varieties extends to prohibit the agricultural production of the protected variety, including harvesting and the post-harvest produce. "If farmers infringe the regulation or are suspected of infringement, they can have their houses searched without warrant, their crops, harvests and processed products seized and destroyed, and they can be imprisoned for years. UPOV 91 also makes it much easier for seed companies to privatise farmers' own farm-produced seeds and to ban the use of local varieties."<sup>25</sup>

### **Article 27 3.b and the TRIPS compliant Indian Law on Plant Variety Protection and Farmers Rights**

#### **The *sui generis* alternative**

The Trade Related Intellectual Property Rights (TRIPs) agreement of the WTO is a powerful tool for the ultimate colonisation of biodiversity and diverse indigenous systems of knowledge concentrated in the third world while denying the innovations and community knowledge of indigenous cultures. For the last three decades, third world countries have been pressured to change their IPR regimes to better suit western interest, ignoring the interests of their people, cultures and their nations.

TRIPs recognises only the Western industrialised model of innovation and has failed to recognise the more informal, community based systems of innovation through which Third World farmers produce, select, improve and breed a plethora of diverse crop varieties.

Countries like India strongly resisted TRIPs, and called for evolving a *sui generis* system to push for the protection of collective innovation and the protection of the creative potential of their people. "If India does not evolve its own *sui generis* system centred on community intellectual rights of farmers and adopts the UPOV model, a rights regime will have been created that protects the rights of the seed industry but offers no protection to the rights of farmers. This in turn will allow a free flow of agricultural biodiversity based on centuries of breeding from the fields of Indian farmers, while the farmers have to pay royalties to the seed industry for the varieties derived from farmers' varieties." (Vandana Shiva – The Need for Sui Generis Rights)

India did draft a Sui Generis system which was not UPOV, and which clearly articulated farmers rights. Dr. Vandana Shiva as part of the expert group helped drafted the Plant Variety Protection and Farmers Rights Act 2001.(PVPFR)

The clause on farmers' rights in the Indian law PVPFR 2001, states

***"a farmer shall be deemed to be entitled to save, use, sow, resow, exchange, share or sell his farm produce including seed of a variety protected under this Act in the same manner as he was entitled before the coming into force of this Act"***

#### **Kokopelli v/s Graines Baumax**

Association Kokopelli, a non profit organization based in France, has been involved in the preservation and distribution of organic, open pollinated seeds of heirloom varieties since 1999. However, the activities of the association faced serious threats from other market competitors who used the European Directive on Marketing of Seeds to hamper the free exchange of endangered seeds. In the year 2005, the seed company Graines Baumax, issued a writ against Kokopelli at the civil court of Nancy, France on the basis of 'unfair competition'. Both Graines Baumax and Association of Kokopelli were operating in the sector of old or collectors' seed varieties. The company claimed that of the products, which they were marketing, 233 were identical or similar, and since they were supplying the same customers (amateur gardeners) they were therefore competitors. It was, thus, considered that Kokopelli was engaging in acts of unfair competition by selling vegetable seed, which was neither in the French catalogue nor in the common catalogue of varieties of vegetable species. This is against the European Union Marketing Directive, which insists that the vegetable seeds must be listed in the official catalogues for the member states before it is marketed. A variety is, moreover, accepted for inclusion in the official catalogues of the Member States only if it is distinct, stable and sufficiently uniform. This directive restricts the marketing of old or collectors seed varieties within the Member States. Association Kokopelli decided to appeal against this judgment. At first Kokopelli fought the lawsuit against the accusation of 'prejudice' and the compensation Baumax was claiming. However, after much deliberation, the organisation decided to question the validity of the European Marketing Directives which curtailed the right to trade seeds freely.

The organisation pointed out that the freedom to produce and distribute seed is denied by the present system which insists that all seed distribution must be submitted to prior authorization for marketing, an expensive and time consuming procedure. In fact, this procedure does not ensure any benefits in terms of health or environment. Instead, it ensures that only a limited number of big companies have the access to market.

Through an order, dated 4th February 2011, the Appellate Court of Nancy acceded the submission of the case to the Court of European Union. The arguments presented before the Court of European Union by Kokopelli were similar to those presented before the Appellate Court. On the 19th January 2012, the Advocate General of the Court of European Union, Ms Julianne Kokott, accepted the arguments of Kokopelli and arrived at the conclusion that the ban on marketing of seeds belonging to a variety which is not registered in the official catalogue, imposed by European legislation as well as by the French regulation, violated the principle of proportionality, free enterprise, free movement of goods as well as the principle of non discrimination. Moreover, the Advocate General affirmed that the rules regarding the inclusion of seeds into the official catalogue have " no bearing whatsoever with the health of the plants" and " it is up to farmers to decide which varieties they will cultivate". However, in its verdict on 12 th July 2012, the

23 Source: Argentina - Reclaim Seed As Commons by GRR, Global Citizens' Report on Seed Freedom, pg 188

24 Plant Variety Protection, International Agricultural Research, and Exchange of Germplasm: Legal Aspects of Sui Generis and Patent Regimes iphandbook.org

25 iphandbook.org

Court of Justice of the European Union rejected Kokopelli's arguments and upheld the European Legislation regarding the marketing of seeds. The Court justified the ban on the marketing of ancient varieties of seeds on the basis that it ensured "increased agricultural production". This expression, which was used 15 times in the Court's decision, affirmed the powerful influence of yield driven cultivation models. The decision to rule against marketing these seeds meant that once again many varieties will not be available and many more will be at risk.

However, in September 2014, The Court of Appeals at Nancy overturned the European Court ruling saying that Kokopelli could not be accused of unfair competition as long as the it markets public domain varieties that could very well be registered in the Official Catalogue by Baumaux if the company truly wished to expand its commercial catalogue in the same proportion as Kokopelli. Baumaux was trapped in its own declaration that registering varieties in the official catalogue was very simple and cheap.

However, it still does not mean that Kokopelli's activities are legal (as a matter of fact they are not, and that was confirmed by the Court), but that it does not generate a situation of unfair competition. For now, Kokopelli is safe from these charges coming from the seed industry.<sup>26</sup>

### The attack on seeds in Africa

Africa is becoming a battleground for 2 very different approaches to agriculture. One is the agro ecological approach, based on the use of traditional seeds, diverse crops, trees and livestock, with smallholder farmers and the right to food at the core. 80% of all seed in Africa comes from small farmers and on farm seed saving systems. The other is an industrial system based on monocultures, the use of fertilisers and genetically modified organisms (GMOs), where companies such as Monsanto, Dupont, Syngenta, BASF and Dow are dominant along with philanthropic and international development aid institutions seeking a secure space for private companies to profit from seed. The privatization and control over seed is at the heart of this model.

Corporations, governments, foundations and aid agencies are writing and changing laws all across Africa to prepare for a takeover of its lands, agriculture and seeds "the key players being The World Bank, The African Development Bank, the United Nations Food and Agriculture Organisation (FAO), the G8, the African Union, the Bill Gates-funded 'Alliance for a Green Revolution in Africa' (AGRA), the International Fund for Agricultural Development (IFAD), and the International Fertiliser Development Centre (IFDC), African regional trade blocs such as the Southern African Development Community (SADC) and Common Market for East and Southern Africa (COMESA); intellectual property agencies such as the African Regional Intellectual Property Organisation (ARIPO) African governments through regional harmonization processes and trading blocs are being pushed to change their seed laws and supporting the implementation of PVP laws based on UPOV 1991. "The strategy is to first harmonise seed trade laws at the regional level, such as border control measures, phyto sanitary control, variety release systems and certification standards, and then move on to harmonising PVP. The effect of these collective efforts is the creation of a bigger, unhindered seed market, where the types of seeds on offer are restricted to commercially protected varieties."<sup>27</sup>

The main agenda of the harmonization process is effectively aimed at replacing traditional varieties with uniform commercial varieties and increasing dependency of smallholders towards commercial seed varieties and transform African agriculture from peasant based to Green Revolution/industrial agriculture.

Efforts are underway at **regional economic and political blocs, the SADC and COMESA**, to introduce harmonized seed policies likely to impact on farmers' seeds negatively. The COMESA seed protocol seeks to open national borders through easing market and regulatory requirements on registered commercial seeds. This removes the hurdles to movement of registered seed within the regional countries at the ports of entry, which affected timely delivery of seeds to recipient countries. In general, this will flood both the regional and local markets with hybrid and genetic modified (GM) seeds and thus push out traditional seeds. The SADC seed harmonisation policy seeks to promote the "commercial breeders' rights" through Plant Variety Protection (PVP) based on "DUS" (Distinctiveness, Uniformity, Stability). This favours commercial breeders and criminalize smallholder farmer



seed saving and exchange.<sup>28</sup> Moreover The COMESA policy is also pushing GMOs throughout Africa flouting international biosafety laws through imports, food aid and commercial plantings. (AFSA )

The Arusha Protocol for the Protection of New Varieties of Plants (the 'Arusha PVP Protocol'), a harmonized regional legal framework for the protection of plant breeders' rights was recently adopted at a diplomatic conference held by ARIPO (African Regional Intellectual Property Organization) in Tanzania in July 2015. This protocol is a slightly revised version of the original ARIPO protocol based on the UPOV 91 Convention. "The ARIPO PVP Protocol proposed extremely strong intellectual property rights to breeders while restricting the age-old practices of African farmers freely to save, use, share and sell seeds and/or propagating material. These practices are the backbone of agricultural systems in Sub-Saharan Africa; they have ensured the production and maintenance of a diverse pool of genetic resources by farmers themselves, and have safe-guarded food and nutrition for tens of millions of Africans

The regional legal framework is part of the broader thrust in Africa to harmonise seed laws at the regional economic community level to ensure regionally seamless and expedited trade in commercially bred seed varieties for the benefit of multinational seed companies. It is also designed to facilitate the transformation of African agriculture from peasant-based to inherently inequitable, dated and unsustainable Green Revolution/industrial agriculture. It is also a mechanism designed to coerce African countries into joining UPOV 1991, a restrictive and inflexible legal regime that grants extremely strong intellectual property rights to commercial breeders and undermines farmers' rights."<sup>29</sup>

**The G8 New Alliance for Food Security and Nutrition** was launched in 2012 by Germany, France, Canada, Italy, USA, Russia, UK and Japan to mobilise private capital for investment in African agriculture. To be accepted into this program, African governments are being made to change their seed and land laws.

The terms are being set by the multinationals to push for favourable seed laws, access to land, free trade and intellectual property rights as the preconditions for investment.

Recently, Tanzania adopted a UPOV 1991-compliant Plant Breeders Rights Act (2012) which is designed to protect the interests and intellectual property rights of large scale commercial seed companies (e.g. Monsanto, Syngenta etc.) who are keen to penetrate the African market with hybrid and GM seeds, supported by leading governments under the G8 New Alliance for Food Security and Nutrition. The changes criminalize (for PBR protected varieties) the traditional farmers' prac-

26 A longer version of this originally published as Kokopelli Association Versus Graines Baumaux Company Blanche Magarinos-Rey – Seed Freedom Report 2012. For the latest on the case see <https://kokopelli-semences.fr>  
27 Harmonisation of Africa's seed laws : A recipe for disaster ACB

28 ZIMSOF – Strengthening community based seed systems in Zimbabwe – Seed Freedom Report 2014  
29 <http://afsafrica.org/aripo-sells-out-african-farmers-seals-secret-deal-on-plant-variety-protection/>



tice of breeding, saving, and exchanging seeds. With the new PBR in place, Tanzania is about to become the very first Least Developed Country (LDC) in the World to join UPOV91.<sup>30</sup>

**The Alliance for a Green Revolution in Africa (AGRA)** established in 2006 by the Bill and Melinda Gates Foundation and the Rockefeller Foundation and currently funded by several development ministries, foundations and programmes, including DFID, IFAD and the Government of Kenya aims to establish an “enabling environment”, including seed and land policy reforms, to boost private investment in agriculture and encourage farmers to change practices access, policy and advocacy and support to farmers’ organisations.

AGRA’s policy interventions on seed include: Supporting the strengthening of internal seed laws and regulations; Advocating for minimal delays in the release of new varieties; Advocating for the easy access to public germ plasm; Supporting the implementation of regionally harmonised seed laws and regulations; and working to eliminate trade restrictions.<sup>31</sup>

#### **SEED LAWS BASED ON UNIFORMITY, MARKETING AND COMPULSORY LICENSING AND REGISTRATION - CRIMINALIZING BIODIVERSITY & SEED SAVING**

In countries across the world, regulations related to the marketing of seed, ostensibly to protect farmers as consumers of seed in order to ensure that they are only given ‘good’ seeds define strict criteria in order for them to be marketed. The legislation on the marketing of seeds, designed and put in place since the 1960s in Europe, and spread throughout the world, mainly due to pressure from commercial interests, and supported by some international agreements, is pushing activities of “on farm” conservation of biodiversity and traditional breeding methods into illegality. They are oriented towards the protection of mere commercial interests of the breeding industry. These legislations are being shaped by a handful of corporations which privilege uniformity, monocultures, privatization, pushing farmers further into the industrial agricultural system and trapping them in it. They often take the form of compulsory registration or catalogues where only those seeds which meet the DUS criteria (Distinct, Uniform and Stable) are allowed to be placed on the market, making it impossible for small farmers to grow their own diversity forcing them into dependency of giant corporations.

Heirloom/traditional/farmers’ varieties cannot be registered on official catalogues because they have richer criteria, beyond DUS, for which they are bred. In order to restrict farmers further, the term ‘marketing’ includes free exchange, transfer and barter between farmers and growers.

#### **The Seeds Bill 2004, India - Prevented from becoming an act**

<sup>30</sup> Status of seed sovereignty in Tanzania – Saidi Singo, Seed Freedom Report 2014

<sup>31</sup> Seed Systems and Seed Sovereignty in Africa – Mariam Mayet, Seed Freedom Report 2012

The corporations, unhappy with the Farmers Rights clause included in the Plant Variety Protection and Farmers Rights Act of India, tried to get the government to introduce The Seeds Bill, as they were simultaneously doing in the US. The Seeds Bill would require farmers to register their own seeds and take licenses for the, effectively criminalizing the saving of traditional varieties of all seeds. By outlawing the availability of renewable, open-pollinated seeds, corporations selling non-renewable patented seeds would be able to force everyone, from a large scale farmer to a balcony gardener, to buy only the seeds they sold, ensuring an absolute monopoly. By creating a Seed Satyagraha - a non-cooperation movement in Gandhi’s footsteps, handing over hundreds of thousands of signatures to the prime minister, and working with parliament – Indian movements have so far prevented the Seed Law from being introduced.

#### **The struggle against the EU Seed Legislation**

Legislation in Europe has been increasingly restricting access to seeds in the past decades, with industrial agriculture becoming the dominant model of farming and encouraging the marketing in EU of only those seed varieties that fit this model. They must go through massive administrative hurdles, passing complicated and costly testing and registration procedures, thus imposing increasing limitations for biodiversity and farmer’s seeds. Current seed regulation has meant that many once freely available varieties have disappeared along with the useful traits that breeders and growers may wish to utilise in the future. This legislation has dramatically reduced diversity of seed varieties which is seriously threatening our food security. Seeds are no longer in the hands of farmers and gardeners.

On May 6, 2013, the European Commission launched a legislation on the “marketing of plant propagating material” required, seed varieties to be registered on the EU Common Catalogue of Seeds, imposing stringent DUS criteria on seeds was tailor made to serve the needs of multinational seed industry restricting small farmers’ seeds to tiny bureaucratic niches. It would further restrict and reduce agro-biodiversity and the free access of seeds for farmers and citizens, and encourage multinational seed companies to claim exclusive rights on the marketing of seeds. On the other hand, small farmers’ seeds bred for diversity, pest resistance and the ability to adapt to climate change were to be excluded from the market or restricted to so-called niches. “The message of the law was clear: Diversity and farmers’ seeds must be an exception; industrial crops must be the rule.”

Movements throughout Europe rose to fight the seed legislation that was seeking to criminalize diversity by imposing compulsory registration of seeds on the criteria of uniformity. On the invitation of the European Greens and local seed movements and organizations, Dr Vandana Shiva and the Seed Freedom Campaign were invited to speak at a series of key conferences and public meetings at the European Parliament in Brussels in September. Organizations such as Arche Noah collected more than 900.000 signatures against the seed marketing legislation.<sup>32</sup> After a huge wave of protest arising from different European Member States the European Parliament rejected this proposal in the first reading in March 2014. This was indeed an important victory for movements fighting for biodiversity, farmers’ rights and the struggle to keep the seed free.<sup>33</sup>

#### **US State governments crack down on seed exchange and seed libraries**

In times of economic, environmental and food crises, when the failure of industrial agriculture has been acknowledged globally, a new model of local agriculture based on biodiversity and agro ecology is the way to the future and is indeed gaining strength throughout USA. However, this future is being criminalized through a crackdown on seed saving and seed exchange using unjust seed laws that favour seed monopolies and the failed industrial agricultural model.

In 2004, the same year when an attempt was made in India to enact The Seeds Bill, prohibiting local seeds through compulsory registration, the US government passed a Federal Seed Act ,2004. Under which, States across USA have started serving notices to seed libraries.

Calling seed sharing “agri-terrorism”, The Pennsylvania Department of Agriculture, cracked down on a seed library in the Joseph T Simpson Public Library, which was distributing seeds to its members. According to the Pennsylvanian authorities, The Simpson Library would have to put each of its 400 seeds of each variety through seed testing procedures according to “AOSA rules testing procedure” in order to determine quality, germination rates etc., before distributing them.

<sup>32</sup> <https://www.arche-noah.at/english/seed-policy/eu-seed-law>

<sup>33</sup> <https://www.youtube.com/watch?v=lm5w3anM1QE>

The library was asked to apply for a distributor license under the PA Seed Act for sharing and exchanging seeds with the community. “Lawyers and a high-ranking official of the Pennsylvania Department of Agriculture arrived in late July to investigate the Simpson Library’s violation of the Pennsylvania Seed Act of 2004, which protects corporations’ interests regarding patents on genetically modified (GMO) crops; this in spite of the fact that the seeds available at the Mechanicsburg Library were heirloom vegetable varieties, most of them organic, not commercial GMO products.

Pennsylvania Agricultural Commissioner Barbara Cross defended the costly investigation. **“Agri-terrorism is a very, very real scenario. Protecting and maintaining the food sources of America is an overwhelming challenge,”** she declared, adding it makes sense to address the issue now while it was still small.”<sup>34</sup>

SIMPSON LIBRARY  
16 NORTH WALNUT STREET  
MECHANICSBURG, PA 17055

06-12-14

Dear Sirs,

As the Seed Control Official for PA I would like to inform you about the PA Seed Act and Regulations. It has come to my attention through various avenues (TV, postings, word of mouth, Internet) that you plan to offer your patrons the option to participate in a “Seed Library”. My understanding is that patrons will be able to “check out” seeds, take them home and plant them, harvest any resulting fruits, collect seeds, and “return” the collected seed to the “Seed Library” for planting the following season. I whole heartedly support the promoting of gardening, sharing of resources and connecting people through a communal experience, but I believe there are some issues of seed distribution that you may not be aware of.

-The Pennsylvania Seed Act requires all distributors of seed to purchase a seed license. (The PA Seed license cost \$25.00 a year and is good for the calendar year for which it was bought). The distributor would be defined as the person/company/organization that is importing, consigning, offering for sale, selling, bartering or otherwise supplying seed in the Commonwealth of Pennsylvania. Such an entity would need to have their name and address appear on the seed label. (If you are dispersing packaged seed, that is already properly labeled, with a licensed wholesaler/guarantor, you would not need a Seed License.)

-All Seed being distributed in Pennsylvania must be labeled according to the PA Seed Act and Regulations. This includes, but not limited to, such things as Germination Test date, Sell by date, lot #, Seed Kind, distributor’s name and address.

-Harvested seed being “returned” to the library would need to be tested using the “ADSA Rules for Testing Seed” and labeled with the testing information accordingly before distributing them. (As a general rule, 400 seeds are required for an official germination test)

The Cumberland County Library in Pennsylvania was told that the library could not function unless its staff tested each seed packet for germination and other information. Seed exchange programs throughout the country including Maryland, Nebraska, Iowa and Minnesota found themselves outlawed. In May 2015, an amendment was passed to the state’s seed law in Minnesota allowing for the non-commercial exchange of seed through a local seed library.

Similar work on the interpretation of seed laws is under way in other states too. Seed saving movements with the help of legal organizations such as SELC are working towards interpreting state level seed laws and advocating seed libraries to be exempted out of seed regulations.

However, the threat to Seed Freedom and exchange of open pollinated, heirloom and farmers varieties of seeds among farmers and growers goes beyond proving the legality of seed libraries and exempting them from seed regulations. The new seed laws are, at their very core, instruments of monopoly.

This is evident in the **Seed Law AB2470 in California** that went into effect Jan 1<sup>st</sup> 2015, which prohibits farmers from even exchanging seeds with people who live more than 3 miles away from them unless they adhere to the same testing and labelling standards as that of large corporations. Some of the sections in the California seed law read as follows:

**“Existing law defines “person” for purposes of the California Seed Law to mean an individual, partnership, trust association, cooperative association, or any other business unit or organization.”**

<sup>34</sup> <http://www.utne.com/community/government-crackdown-on-innovative-seed-library.aspx>

***This bill would clarify that definition of “person” to include corporations.***

***The bill would also clarify the term “neighbor” for purposes of the labeling requirements specified above to mean a person who lives in close proximity, not to exceed 3 miles, to another.***

***The Legislature further declares that the success of agriculture and the seed industry in this state depends upon the continued commitment to industry-funded research in order to improve the quality and variety of seed available to the consumer-buyer. “***

These four statements grant corporations ‘personhood’, create 3 mile embargo circles and force expensive labelling requirements on alternative seed - strengthening corporate Seed Slavery through seed monopolies.

As an act of Satyagraha against such unjust laws, protesters in California celebrated Seed Freedom Day trading a rainbow assortment of seeds: purple dragon heirlooms, yellow squash, black Aztec corn and white pumpkin to name a few.<sup>35</sup>

### **Chile and Guatemala Movements defeat Monsanto Law**

The Plant Growers Law — commonly known as the “Monsanto Law” introduced during the President Michelle Bachelet’s first term in office (2006-2010 and officially proposed to update Chilean legislation over seed and plant patenting in order to respond to international standards, was, in reality, largely intended to benefit big seed developers to the detriment of small scale farmers. Despite claims of modernization, advanced by the lobbies, the bill would have given multinational agribusiness corporations the right to patent seeds they discover, develop or modify. The Monsanto Law would have allowed companies to register patents for the vast majority of seeds in Chile, and require small and medium producers to pay those companies for the right to use similar seeds preventing indigenous communities and farmers from saving and planting seeds developed for generations and forcing those who cannot afford this, to leave agriculture and sell their lands, perhaps to the same corporations that caused their bankruptcy.

Civil society, indigenous communities and farmers joined forces and succeeded in the withdrawal of the commonly known “Monsanto Law” causing a big blow to the corporates lobbies active in Chile and sending a clear message to the government against privatization of seeds and spread of GMO crops and in favour of small scale agricultural production.<sup>36</sup>

Similarly, in Guatemala, thanks to resistance and pressure from seed and agricultural movements, the **Guatemalan** Congress repealed its own “Monsanto law” (The Law for the Protection of New Plant and Varieties). This law would have given “strict property rights in the event of possession or exchange of original or harvested seeds of protected varieties without the breeder’s authorization.” threatened biodiversity and native seed varieties that are over 7,000 years old and have never required patents or labs, but have been able to sustain the lives of the Guatemalan people”.

### **The new assault on Costa Rica’s Seed and Food Sovereignty in 2015**

A desperate biotech lobby is hell-bent on destroying one of the richest capitals of biodiversity in the world which is transgenic free. As of 10th August, 2015, in order to fast-track it’s approval without due consideration and consultation, the *Reform of the Seed Law No. 6289 of December 4, 1978* bill has been moved from the Committee on Agricultural Affairs to the Executive in Costa Rica.

This bill, although presented as a certification law, including conservation of plant genetic resources, is actually a law outlawing peasant seeds. It also reinforces the intellectual property measures to harmonize them with the requirements of Costa Rica’s Free Trade Agreement with the US, its ultimate goal being the implementation and enforcement of intellectual property rights on seed (patents and titles UPOV).

According to the Network of Biodiversity Coordination (RCB), this reform would ultimately define the seed as a commodity and farmers and peasants would be reduced to “consumers” - their ten thousand year old practice of breeding their seed would be made a crime overnight. As it currently stands, the bill should be called “defending Monsanto” because it does not address the quality of the seed but rath-

<sup>35</sup> <http://www.record-bee.com/lifestyle/20150701/a-seedy-situation>

<sup>36</sup> <http://newamericamedia.org/2014/03/chile-derails-monsanto-law-that-would-privatize-seeds.php>





er, the economic interests of the industry. The bill is outrageous, it would make all the following traditional practices illegal: seed exchange, seed improvement/breeding and the buying and selling of non-industrial, patented seed. The bill does not protect small seed companies either, and completely denies the rights of farmers enshrined in the International Seed Treaty that Costa Rica ratified in 2006.

Eva Carazo, of the Red de Coordinación en Biodiversidad (Biodiversity Coordination Network) states: "if the government of citizen participation actually has a vocation for dialogue, it should withdraw the fast tracking of the proposed bill and open an inclusive process involving farmers' organizations and environmentalists in order to draft an alternative regulation text which would not affect farmers who need them and protect the seeds, and which would defend farmers at all costs anytime they are forced to challenge by the Legislative Assembly or the Executive Power."

"Environmental organizations understand the need to update legislation and strengthen the institutional framework, but not at the expense of the rights of the people and farmers, or by limiting or endangering peasant agriculture, sovereignty and food security.

#### **DILUTING OR DISMANTLING LAWS ON FOOD SAFETY AND BIOSAFETY (GMO SAFETY)- AN ISSUE OF DEMOCRACY**

Most countries have had Food Safety Laws . There is an international Law on Biosafety, The Cartagena Protocol on Biosafety to the UN Convention for the Conservation of Biological Diversity.

In recent years corporations have made attempts to bypass these laws, or dismantle them, altogether. Examples are the attempts to replace India's Biosafety Laws by an Industry written Biotechnology Regulatory Authority of India (BRAI) Act, which would have allowed the Biosafety industry to self regulate, and a provision to arrest and fine critics of GMOs. Movements and the Indian Parliament prevented this law from being introduced.

The US Food Safety Modernisation Act is an example of a corporate written law

which criminalises local, artisanal food production, and deregulates large-scale, toxic, industrial production. This is what prompted organic farmer Joel Salatin to write his book *"Everything I do is illegal"*

#### **DENIAL OF LABELING AS THE DENIAL TO CONSUMERS OF THEIR DEMOCRATIC "RIGHT TO KNOW" AND "RIGHT TO CHOOSE"**

64 countries around the world require labelling of genetically engineered foods, which include 28 countries in the European Union, Japan, Australia, Brazil, Russia, New Zealand and China. However, according to current US FDA regulations, consumers in the US have no right to know or choose when it comes to Genetically Engineered ingredients in their food. In 2014, 36 bills were introduced in 20 states in United States demanding labelling of GE food. Connecticut and Maine passed GE labeling laws in 2014, however both bills include a trigger clause that requires several other states to enact such legislation. Vermont was the first state to pass a no-strings-attached labeling law, set to go into effect in 2016. In "a desperate attempt to protect corporate shareholder profits at the expense of consumers' rights and health", Monsanto, along with the biggest food lobby in the world - the Grocery Manufacturers Association - responded by suing the state of Vermont, claiming the new law violated the companies' "right to free speech".<sup>37</sup> To sue a society defending its rights, is putting Human Rights on its head and a danger to democracy. The campaign in Oregon and Colorado narrowly lost the state ballot initiative to label GMO foods, in the case of Oregon by a mere 837 votes. All of these GE labelling initiatives have been characterized by agri-chemical and big food industry pouring in millions of dollars to defeat the citizens' right to know what's in their food.<sup>38</sup>

In November 2012, USA's biggest biotech, chemical and food companies joined hands pouring \$45 million to defeat citizens initiative for the Right to Know in California (Prop 37). The same companies poured millions against the ballot initiatives in Washington, Oregon and Colorado.

<sup>37</sup> Ronnie Cummins – National Director, Organic Consumers Association  
<sup>38</sup> <http://www.centerforfoodsafety.org/issues/976/ge-food-labeling>



Source : Justlabelit.org

## The DARK ACT

Despite the fact that 90% of American citizens want GMO labelling 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.

HR 1599, the **Safe and Accurate Food Labeling Act of 2015** was voted by the House of Representatives with a majority of 275 to 150. The act, described by the movements of the civil society as the next gift to Monsanto and to the biotech industry, aims to prevent governments to label genetically engineered foods despite the extended protests of activities, farmers, consumers, voters. The next step will be the US Senate where the text is expected to be discussed in September 2015.

The federal law, aims to create a national standard regarding the labeling of genetically engineered organisms and explicitly denying the right of States and local communities to adopt their own laws. The Dark Act also *prevents* the FDA from requiring companies to label G.E. ingredients and perseverating the voluntary labeling policy, already demonstrated to be ineffective in the last 14 years of its application. In this period of time a grand total of *zero* companies agreed to label their GMO products. The Act aims to deny democratic choices already been expressed - denying Vermont the ability to put their enacted law into action and preempting the laws of Maine and Connecticut - laws that have already been passed.

But these are not the only cases in which voters decision will be at stake considering that in 2013 and 2014 more than 70 G.E. labeling bills were introduced across 30 states. The non democratic nature of the DARK Act is confirmed by all the surveys that show how an overwhelming majority of Americans want to know the origin and the composition of the food products they buy. An **Associated Press/**

**GfK poll** conducted last year found that 66 percent of those polled supported mandatory labeling, while just 7 percent object to it.

The DARK Act is a tool for corporations to silence the public opinion and dictate rules on producers and consumers and protect their profits, despite the people's will. As the Centre for Food Safety stated "H.R. 1599 has sweeping preemptive effect, which could negate well over 130 existing statutes, regulations, and ordinances in 43 states at the state and municipal level. This radical federal overreach could take away local governments' ability to enact measures to address the specific locality's cultural, agricultural, and ecological concerns, issues that have long been recognized as falling under local governments' traditional police powers". The struggle for democracy and emancipation from corporate seed slavery has just begun, with hundred of organizations, movements, activities joining forces to oppose the federal takeover by this food dictatorship.

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 California Seed Law—equating corporations with persons, and making seed libraries and exchange of seed beyond 3 miles illegal— or suining Maui County for passing a law banning GMOs.

When those that need to be regulated write the laws to get absolute power and absolute ownership over seed, which is life itself, while freeing themselves of all ecological and social responsibility of the impact of monopolies and genetically engineered seeds associated with it, we do not just have a crisis of food and agriculture, we have a crisis of democracy. Every level of legislation has a Monsanto Law, from Chile to the WTO. Monsanto has managed to become a cancer in every democracy it has encountered. Monsanto is not just a reflection of everything that is wrong in the world today - it may just be the definition of it.

*"So long as the superstition that men should obey unjust laws exists, so long will their slavery exist."*  
 – Mahatma Gandhi

*"One has a moral responsibility to disobey unjust laws"*  
 - Martin Luther King

*"The only obligation which I have a right to assume is to do at any time what I think right. It is truly enough said that a corporation has no conscience; but a corporation of conscientious men is a corporation with a conscience. Law never made men a whit more just; and, by means of their respect for it, even the well-disposed are daily made the agents of injustice"*  
 - Thoreau

In 1848 Thoreau coined the term civil disobedience in his essay on why his commitment to the abolition of slavery led to his refusal to pay toll tax. Higher moral laws compel citizens to disobey lower laws that institutionalise injustice and violence. The freedom movement of India, the fight against apartheid in South Africa or the abolition and civil rights movement in the US were all inspired by Satyagraha (civil disobedience).

It is for times such as these that Gandhi coined the use of **Satyagraha – the force of truth**, to resist unjust laws peacefully and non violently. He first used Satyagraha in South Africa in 1906 to refuse to cooperate with the laws of the apartheid regime imposing compulsory registration on the basis of race. He later practised it in India in 1917 as the "Champanan Satyagraha" to resist the compulsory planting of indigo, and in 1930 as the Salt Satyagraha for non cooperation with the salt laws of the British prohibiting Indians from making salt

Just as slavery and colonisation went hand in hand with violence and denial of fundamental freedoms to citizens, the contemporary attempt by corporations to establish slavery through seed and a dictatorship through the control of food is based on violence – against nature, against farmers, gardeners and growers, against citizens, against structures and processes of democracy thus denying us Seed Freedom –without which there is no Food Freedom.

## Seed Freedom is Nature's Rights and Human Rights

*"Seed freedom is rooted in the Rights of Mother Earth and the Rights of all species ... it is the right of the seed in all its diversity, integrity and self-organization to evolve freely into the future."* Dr. Vandana Shiva at Rio+20 Earth Summit

Seed Freedom flows from the freedom of the seed to reproduce, multiply, evolve, adapt in its integrity and uniqueness.

**Nature's Law of Seed** is based on diversity, evolution, resilience and adaptation. On Nature's Rights are based Human Rights related to Seed Freedom of both growers and eaters of food.

**The Rights of Farmers and growers** are inalienable rights based on thousands of years of farming and breeding. Farmers and gardeners' rights include the free reproduction, conservation, breeding, sharing and sale of seed of farmers' varieties between farmers and growers. This freedom also includes the freedom to be chemical free and GMO free. Farmers' varieties also refer to as traditional varieties, heritage varieties heirloom varieties, or local varieties are constantly evolving through farmers' selection and improvement and are not stagnant. They are based on a co-creation and co-evolution between nature and farming communities. They are therefore a joint expression of nature's seed freedom and farmer's seed freedom.

**Seed Freedom for citizens** translates into food freedom and includes the right to have access to chemical free, GMO free, safe and nutritious food. This right rests on food grown from seeds that are chemical free, GMO free, and rich in nutrition. It also includes the Right to Know what we are eating, and a right to make informed choices and hence a Right to labeling of GMO foods .

**Food Freedom** includes the duty to care for the farmers who save our seeds and grow our foods, and the duty to care for the living seed and living soil and living earth as earth citizens, recognising that food is the currency of life, and the human right to safe healthy nutritious adequate food is dependent on the human responsibility to protect the rights of the earth and all her species.

Both Nature's Rights and Human Rights embodied in Seed Freedom are under severe threat across the world, in the North and the South, in the East and the West. Monsanto is the leading corporation in the threat to Seed Freedom at every level, in countries across the world.

Nature's Right to Seed Freedom is threatened by the promotion of uniformity (that destroys biodiversity of plants), chemical monocultures and GMOs - which are killing pollinators such as butterflies and bees. Nature's Right includes the urge of life to reproduce. Terminator technology that create sterile seeds are thus a violation of Nature's Rights and have therefore been banned by the UN CBD.

Nature's Rights are violated when seeds are contaminated by GMOs, and when species are killed by pesticides, herbicides and GMOs as has been witnessed in the decline of the population of the Monarch butterfly because of Roundup Ready crops, and decline of bees because of pesticides and pesticide producing Bt crops.<sup>39</sup>

The Right to Seed Freedom of Farmers and growers is threatened by new laws such as patent laws which falsely define seed as an invention and intellectual property and thus defining the saving and exchange of seed as a crime. Such patent laws or "Monsanto laws", were introduced in the TRIPS agreement of the WTO by Monsanto. Across the world they are being imposed through pressure from Monsanto. In countries such as India, movements have ensured stopping of patent laws that falsely treat biological processes as inventions. However, Monsanto continues to illegally collect royalties, and continues to use the US government to put pressure to force them to change their laws.<sup>40</sup>

Monsanto has used patents on seeds to sue US farmers who used their own seeds (White v/s Monsanto) or bought grain the market to sow (Bowman v/s Monsanto) It has sued farmers whose crop it contaminated with its GMOs such as Percy Schmeiser in Canada, turning the ecological law of Polluter Pays into an anti-nature, anti human rights law where instead the polluter gets paid.

The second set of Intellectual property laws are Plant Breeders Rights based on UPOV. These laws impose uniformity, and thus violate the Law of the Seed and Farmers breeding which is based on Diversity. Breeders Rights also prevent farmers from saving and sharing Seeds.

In addition there are Seed Laws such as marketing laws, which criminalise Biodiversity and Saving and Using of open Source farmer and gardener bred varieties. Such laws are usually based on compulsory registration and compulsory licensing of seeds.

All laws related to Seed -Patents, Breeders Rights, Seed Laws- are in effect the enclosure of the biological and intellectual commons, and are designed to make seed an intellectual property monopoly, so every farmer is forced to buy seeds and pay royalty to the corporate giants.

The Right to Seed Freedom and Food Freedom of citizens is threatened by destroying the diversity of seeds that produce healthy, tasty and nutritious food, by denying the Right to Know through GMO labeling, and forcing GMOs and chemically contaminated food on citizens against their will and.

While at the global level, corporate control is trying to shape our food and agricultural systems, at the local level hundreds and thousands of farmers and growers, seed savers, seed defenders are saving seeds and working to protect and keep seeds free and fighting laws that undermine our seed sovereignty. Through alliance building and a co-ordinated approach we can connect the the many voices around the planet, adding strength to the movement of Seed Freedom

### **SATYAGRAHA FOR SEED FREEDOM and FOOD FREEDOM**

We are seed savers and seed defenders, farmers and gardeners, practitioners of ecological agriculture and participants in fair trade, we are citizens of the Earth and democratic societies.

We are committed to align our thoughts and actions with the laws of Gaia, Pachamama, Vasundhara, Mother Earth.

We protect the biodiversity of the planet by defending the freedom of the seed to evolve in integrity, self-organisation, and diversity.

Our right to save and exchange our open pollinated, non GMO, non patented seed is non alienable.

Farmers rights are non negotiable.

We will resist every law and technology that attempts to undermine our freedoms, and the freedom of the seed, which is intimately linked to the freedom of Mother Earth.

We are committed to preventing Monsanto and other chemical corporations from taking total control over our Seeds through GMOs, patents, and Intellectual Property Rights.

We will not allow the imposition of Seed Laws based on Uniformity, that criminalise our diversity and seed freedom.

We breed for diversity, quality, resilience-not for chemical monocultures.

Across Diverse Ecosystems and cultures we are united in defending Seed Freedom/Seed Sovereignty as the foundation of Food Freedom/Food Sovereignty - based on ecological production and fair and just distribution, beginning with protecting and promoting local food systems.

Our diverse seeds, used in agro ecological systems produce more food and nutrition per acre and are the real solution to hunger and malnutrition, not GMOs.

Our evolutionary seeds, continuously adapting to climate change, are the real answer for climate adaptation and resilience, not GMOS - now falsely packaged as "Climate Smart Agriculture"

With all our love, we will protect our seeds and biodiversity.

We will care for the Earth and all her species.

With centuries of knowledge of our ancestors, reinforced by the new sciences of agroecology and epigenetics We will resist the imposition of obsolete, limited and flawed reductionist - mechanistic science, failed GMOs and toxic chemical technologies on our food and agriculture systems.

With our intense commitment, and deep solidarity, we will collectively defend our Seed Freedom, Food Freedom, and Democratic Rights to shape a future of food that protects life on Earth and the well being of all of our Earth Family.

<sup>39</sup> <http://www.greens-efa.eu/give-bees-a-chance-9982.html>

<sup>40</sup> <http://vandanashiva.com/?p=260> <http://navdanya.org/campaigns/478-seed-freedom-and-food-democracy>



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