# **Reclaim the Seed**



### **Dr Vandana Shiva**

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"First the Seed" "Ekam Bijam"

#### 3 decades of Seed Satyagraha & Defense of Seed Freedom

Seed is the source of life.

Seed creates, recreates, regenerates, multiplies itself, begins. Again.

Seed is *autopoiesis,* the poetry of life, performed as it is written by the orchestra of life in interconnected autonomous harmony, self organised inter being, self regulation and coherence, from the molecule, to the cells, to the organism as a whole, a part of a bigger whole. Seed, the universe, a process, perpetual. Seed is alive, and living.

It holds the past of cultural biology and evolution. It enfolds the future potential, an unfolding of evolution in diversity, vibrance, resilience.

Seed is not a machine. Seed is not an invention. Seed is not "created", seed *creates.* 

The abundance and diversity of seeds which give us food, have been co created and co evolved by small farmers, specially women, over centuries. They are the first breeders.

Yet, the Chemical Industry takes farmers' seeds for free, to breed then into seeds that respond to high chemical inputs, or genetically engineer them with toxic genes and patent them, making them non renewable while collecting royalties from farmers from whom they took the original seed.

Genetically modifying and patenting seed, using "Terminator Technologies" to create infertile seed, is violence against the seed and the rights of the seed to be fertile, to hold life, to renew, to multiply, to evolve freely, to create abundance for all beings, to *thrive*.

Patents on Seed, Intellectual Property Rights on Seed, and criminalising seed saving and seed exchange, violate Farmers Rights to sow, save, exchange, breed, sell their seeds freely.

The chemical industry is enclosing the commons of our seeds and biodiversity through "intellectual property rights." Led by Monsanto, now Bayer and Gates, our biodiversity was declared "raw material" for the biotechnology industry to create "intellectual property," to own our seeds through patents, and to collect rents and royalties from the peasants who maintained the seed commons. This is Seed Imperialism. In 1987, at a conference on Laws of Life ,the chemical industry said that by the year 2000, there would be five companies controlling seed, all seeds would be genetically engineered and patented, and it would be illegal for farmers to save and share seeds. GATT, which became WTO, was to be the legal instrument to impose Seed Imperialism.

#### http://www.daghammarskjold.se/wp-content/uploads/1988/08/88\_1-2.pdf

That is when I decided to dedicate my life to saving seeds, and defending the freedom of seeds and farmers.

Reclaiming the commons of our seed has been my life's work since 1987. Inspired by Gandhi, we started the Navdanya movement with a Seed Satyagraha.

We declared, "Our seeds, our biodiversity, our indigenous knowledge is our common heritage. We receive our seeds from nature and our ancestors. We have a duty to save and share them, and hand them over to future generations in their richness, integrity, and diversity. Therefore we have a duty to disobey any law that makes it illegal for us to save and share our seeds."



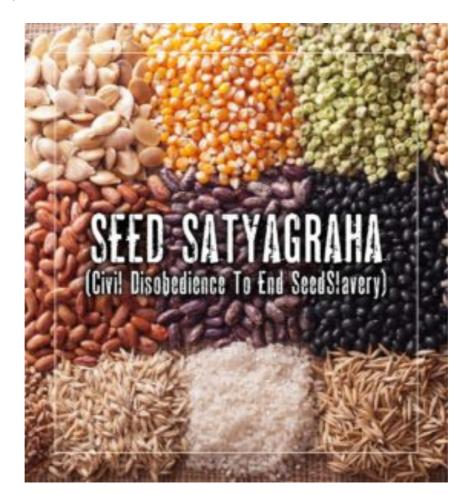
The Seed Satyagraha was launched as a national movement in 1991.

https://www.navdanya.org/site/living-seed/seed-satyagraha

When attempts were made to make farmers seed saving illegal in Europe, in US and in many countries, the Seed Satyagraha became global.

"Through imposing laws related to Intellectual Property Rights (IPR) & patents on seed which deny farmers and gardeners the right to save and share seed, our diversity, freedoms and right to health are being criminalised.

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.



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"

https://navdanyainternational.org/publications/seed-satyagraha-civil-disobedience-to-end-seed-slavery/

Seed Imperialism begins by imposing Intellectual Property Rights Regimes, including Patents on Seed, and Breeders Rights. This was the primary objective for Monsanto to introduce the IPR's on Seed Article 27.3 b in the TRIPS agreement of GATT/WTO.

In India, the Bija Swaraj/Seed Soveregnty movement was successful in defending the freedom and integrity of the Seed, and Farmers Rights and Farmers Freedoms in our laws.

Art 3j of the Indian Patent Act clearly states that plants, animals and seeds are not inventions, hence not patentable

"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 article of No Patents on Seeds was used by India's Patent Office to reject Monsanto's patent application on Climate Resilient crops

Laws in Brazil, Argentina, Mexico also prohibit patents on Seed, and Monsanto is suing governments and farmers in each of these countries.



Art 39 of the Plant Variety Protection and Farmers Rights Act which states

"A farmer shall be deemed to be entitled to save, use, sow, re-sow, 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

This article prevented Pepsi from suing 4 Indian potato farmers for Rs 10 million each.

In Europe 180,000 citizens have submitted a petition on No Patents on Seed.

https://www.no-patents-on-seeds.org/en/news/petition

Patents based on Digital Genome Sequencing violate the integrity of the seed and of farmers rights. No Patents on Seed implies no patents on seeds via genome sequence information (or via any other "innovative" buzzworthy tech jargon name).

Another strategy of robbing farmers of their freedom to save and share seed is by imposing "compulsory registration" and "compulsory licensing". This was tried in Europe ,India and the US in 2014. In the US, notices were sent to Seed libraries. Some notices even referred to Seed Saving as a terrorism. The Seed Freedom movement resisted through Seed Satyagrahas and we stopped the criminalisation of Seed Saving in defence of Seed Freedom.

https://navdanyainternational.org/publications/seed-satyagraha-civil-disobedience-toend-seed-slavery/

In Indonesia farmers were taken to court and arrested for breeding using their own seeds. The courts said, "Do not be too creative, do not **breed your own** seed, or you will be prosecuted." The creativity of farmers, the first breeders is therefore made illegal. I made a trip to Indonesia to offer solidarity to farmers.

https://seedfreedom.info/tv-special-with-dr-vandana-shiva-in-indonesia/

https://republika.co.id/berita/nawdw911/vandana-syifa-tokoh-benih-dunia-indonesia-harusberdayakan-petani

https://web.huma.or.id/kehutanan-dan-perubahan-iklim/vandana-shiva-peluang-bagi-pemerintahbaru-indonesia.html

https://grain.org/en/article/2208-indonesian-farmers-prosecuted-for-breeding-their-own-seeds

<u>https://asianfarmers.org/case-documentation-indonesian-farmers-jailed-for-planting-</u> <u>"company"-corn-seeds</u>

In the 1980's the chemical corporations started to look at genetic engineering and patenting of seed as new sources of super profits. They took farmers varieties from the public gene banks, tinkered with the seed through conventional breeding or genetic engineering, and took patents. We named this Biopiracy and legally challenged the patenting of our native Basmati by RiceTec and Native wheat by Monsanto.

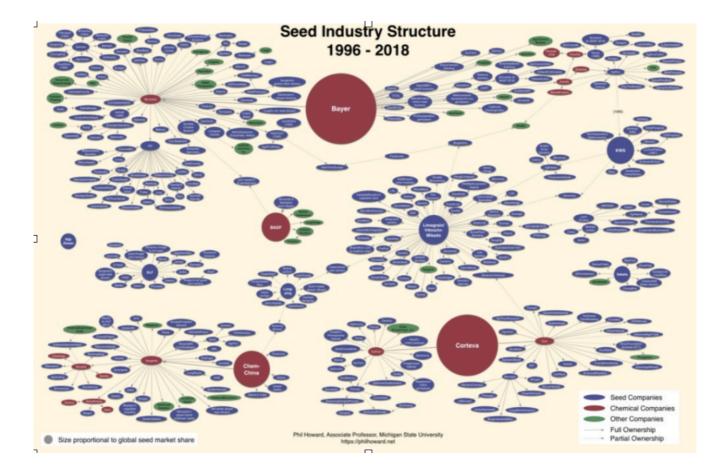
(Vandana Shiva et al, Origin : The Corporate Plunder of Nature and Knowledge, Natraj Publishers, Delhi, 2018)

(Vandana Shiva et al Reclaiming the Commons, Synergetic Press, Santa Fe, USA, 2020)

Through patents, and attempts to make it illegal for farmers to use their seeds, the chemical giants, who I refer to as the Poison Cartel, started to take control of the seed and establish monopolies.

Over the last two decades, 4 giant chemical corporations - Bayer-Monsanto, Dow-Dupont, Syngenta- ChemChina and BASF have taken control of 60% of the world's Seed Supply. This was not done through a better business model, it was achieved via illegal means, while making alternatives illegal. https://www.navdanya.org/site/living-food/colonialism,-globalisation-are-at-the-roots-ofecological-emergency,-farmers-distress

Gates is now leading the Gold Rush to control seeds through Digital colonisation and Big data. And he is building his empire in partnership with Bayer Monsanto, Syngenta and the Poison Cartel. Genetic data is data.



The Iraq war was also a Seed War. The Iraqi seed bank Abu Ghraib was turned into a prison. On April 26, 2004 Paul Bremer, the administrator of the Coalition Provisional Authority (CPA) in Iraq passed the Iraqi order 81, forbidding Iraqi farmers from using native seeds, to control Iraq's agriculture. Article 14 of this law states "Farmers shall be prohibited from re-using seeds of protected varieties".

The Order was a declaration of war against farmers of the fertile crescent. That is why I joined hands with Dr Brian John, Wafaa' Al-Natheema and gave the call to movements to celebrate 26th of April as International Seed Day in defence of Seed Freedom.

"Therefore organizations, activists, organic food advocates, farm owners and farmers around the world are joining hand to advocate for patent-free seeds and biodiversity and to educate about the criminal practices by agricultural corporations and how their unjust laws have and will affect the future of agriculture."

https://www.navdanya.org/site/latest-news-at-navdanya/148-control-by-seed

https://www.gp.org/international seeds day



Source - https://www.annalaurent.com/iraq

#### CGIAR, the Green Revolution and Seed Colonialism

When the Green Revolution was pushed on farmers in India and Mexico, farmers' seeds were freely collected from farmers by the CGIAR system which used farmers varieties to breed "Green Revolution" varieties which are responsive to chemicals. The Green Revolution varieties were forced on farmers through the so called Green Revolution, first in India and Mexico, now across Africa through AGRA.

The first two institutions were the International Rice Research Institute (IRRI) established in by Ford and Rockefeller Foundation in 1960 in the Philippines and the International Maize and Wheat Improvement Centre (CIMMYT) established in 1966 in Mexico on the basis of Agriculture Research carried out by Rockefeller Foundation Office of Special Studies (Oficina de Estudios Especiales, or OEE) in Mexico since 1943. Norman Borlaug was part of the Of-

fice of Special Studies, carrying out his research at Universidad Autónoma Chapingo.



12th August 2016 Standing in front of The Goddess of Corn at Chapingo campus, in Mexico the land of Corn.

**CGIAR** gene banks presently manage **768,576** accessions of seeds taken from farmers. Taken together, **CGIAR** gene banks represent the largest and most widely used collections of crop diversity in the world. <u>https://www.cgiar.org/the-genebank-platform/</u>

A new Seed Colonialism was imposed which erased farmers knowledge while taking the farmers seeds that embodies their creativity and knowledge of breeding. The "civilising mission" of Seed Colonisation is the declaration that farmers are "primitive" and the varieties they have bred are, "primitive", "inferior", "low yielding" and have to be "substituted" and "replaced" with superior seeds from a superior race of breeders, so called "modern varieties" and "improved varieties" bred for chemicals.

Farmers are the first breeders who have evolved the rich diversity of crops that feeds us. Yet farmers varieties were declared "landraces", suggesting that farmers minds and creativity made no contribution, erasing farmers knowledge of breeding and contribution to evolution of our rich seed diversity. Farmers were reduced to "consumers" of toxics and toxic seeds, paying often with their lives, as in the case of Bt Cotton Farmers in India

(Research Foundation for Science Technology and Ecology, Seeds of Suicide)

The 100,000 varieties of rice in the IRRI gene bank were taken from national collections such as the national seed bank at Cuttack, Orissa the Cuttack Rice Research Institute (CRRI) inspite of protests of the then Director and world's leading rice researcher, Dr Richaria.

India is a Vavilov centre for the diversity of the indica varieties of rice. According to Dr Richaria, Indian farmers evolved one wild grass, Oryza sativa into the richness and abundance of more that 200,000 rice varieties. Unfortunately Dr Richaria was removed from CRRI under World Bank Pressure and the rich rice diversity bred by Indian peasants was handed over to IRRI.

The Indian Rice institute existed before IRRI, had the largest collection of rice diversity and was the biggest rice "bank" in the world. Dr Richaria refused to allow IRRI in the Philippines to pirate the collection saying it was the heritage of Indian farmers. The World Bank put pressure and had Dr Richaria, the guardian of India's rice biodiversity and knowledge, removed from CRRI so that it could transfer the rich rice diversity Indian peasants had bred to the international institute (which later became part of the Consultative Group of International Agriculture Research).

https://www.scribd.com/document/118909028/The-Great-Gene-Robbery-by-Claude-Alvares

<u>https://www.flipkart.com/life-work-dr-r-h-richharia/p/itm5db6cddd50948</u> <u>http://www.vijayvaani.com/ArticleDisplay.aspx?aid=2137</u>

Vandana Shiva, The Violence of the Green Revolution, Natraj, New Delhi and Kentucky University Press, USA )

Seed Colonialism of the Green Revolution did not just steal our seeds. It destroyed our biodiversity, our knowledges, our cultures.

For us seeds are relatives, they are part of our earth family. We nourish them and they nourish us. They have personality and names. They have taste and quality. They have standing. The Green Revolution took away the names of our seed that describe their identity and replaced them with numbers. They destroyed the diversity and quality of our seeds and replaced it with yield and quantity.

Farmers were forced to use IRRI varieties which were dwarf varieties bred for intensive fertiliser inputs which needed intensive irrigation.

IR 8, was introduced in Punjab in 1966. Punjab varieties that followed were crosses with IR 8 and other IRRI varieties.

Year of release	Varities	Cross
1966	Taichung Native 1	DGWG/Tsai Yuan Chung
1968	IR8	Prta/DGWG
1971	Jaya	T(N) 1/T 141
1972	RP5-3 (Sona)	GEB 24/TN 1
1972	Palman 579	IR 8/ Tsdukan
1972	RM 95	Jhona 349/T(N)1(IrrF2)
1976	PR 106	IR/Peta5/Bella Patna
1978	PR 103	IR 8/IR 127-2-2
1982	PR 4141	IR 8/ PJI/IR 22
1986	PR 108	Vijaya Ptb 21
1986	PR 109	IR 19660-73-4/ IR 21415-90-4/ IR 5853-162-1-2-3

#### Semi dwarf rice varieties released in Punjab

The large scale spread of exotic strains of rice with a narrow genetic base was known to carry the risk of large scale spread of diseases and pests.

The IRRI varieties being pest and disease prone needed more pesticides. The CRRI showed that most Green Revolution varieties were susceptible to major pests with crop losses of 30 to 100%.

The CGIAR promoted non sustainability through giving priority to uniformity in breeding and the monoculture paradigm in agriculture.

The CGIAR Institutions took diversity from farmers' fields and replaced the diversity with chemical monocultures of rice, wheat and corn.

We have to bring diversity back on our farms and plates for the health of people and planet.

When I started the Seed Saving Movement in 1987 which evolved into Navdanya in 1991, it was Dr Richaria who guided me, teaching me how farmers are scientists and breeders, and conserving and using our rich biodiversity of seeds is the path to prosperity and livelihood and economic security of peasants, and food and nutrition security of communities and the country.

We used to eat more than 10,000 species. Farmers of India bred more than 200,000 rice varieties. Green Revolution breeding has reduced the biodiversity and the nutrition in our food.

Navdanya's "Law of the Seed" contrasts the paradigm of uniformity and monocultures based on maximising "yield" of one part of one crop that drives corporate industrial breeding with the paradigm of breeding for diversity, nutrition, taste, quality and resilience.

https://www.navdanya.org/attachments/lawofseed.pdf

As the Leipzig Conference on Plant Genetic Resources acknowledged in 1996, 75% of the disappearance of agricultural biodiversity was because of the introduction of "Modern Varieties". The imposition of WTO and globalisation of industrial agriculture has led to further acceleration of the disappearance of diversity.

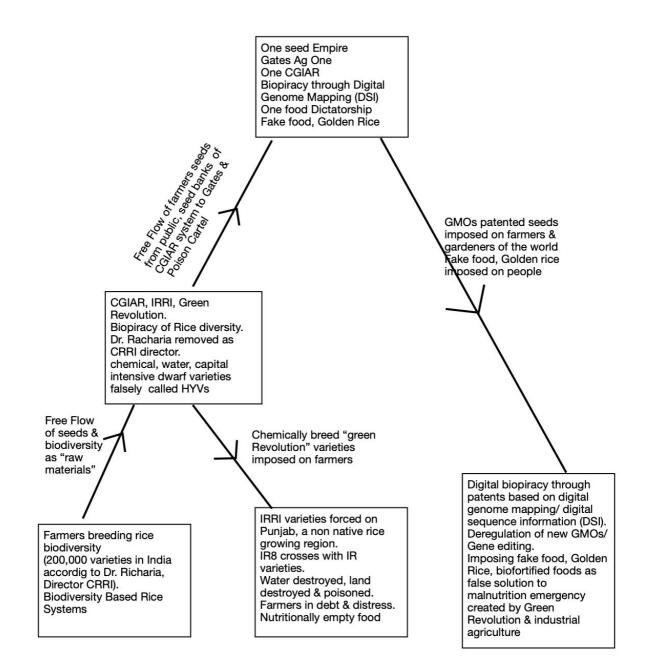
http://www.fao.org/WAICENT/OIS/PRESS\_NE/PRESSENG/H19F.HTM http://www.fao.org/WAICENT/OIS/PRESS\_NE/PRESSENG/H22F.HTM

It was in Leipzig that Maria Mies and I issued the Leipzig Appeal to say No to GMOs and No to Patents on Seed. https://www.iatp.org/sites/default/files/Leipzig Appeal for Womens -

Food Security.htm

#### From Seed Colonialism to Seed Imperialism :Gates takes control of world's seed heritage in CGIAR gene banks

#### Seed Imperialism, Food Dictatorship: CGIAR, IRRI, & Gates



When I wrote the book on the Violence of the Green Revolution, it was the World Bank, and the Rockefeller and Ford Foundations which were controlling the CGIAR system. Today it is Gates.

# The Consultative Group on International Agricultural Research (CGIAR) System 1984

Acronym (Year Established	Center	Location	1984 budget ( Mil- lions of dollars
IRRI (1960)	International Rice Research Institute	Los Banos,	22.5
CIMMYT(1966)	Centro In- ternational de Mejoramientio Maizy Trigo	Mexico City Mexico	21.0
IITA ( 1967 )	Internaional Insti- tute of Tropical Agriculture	Ibadan, Nigeria	21.2
CIAT(1968)	Centro In- ternational de Agri- culture Tropical	Cali Colombia	23.1
CIP ( 1971 )	Centro Interna- cional dela papa	Limaperu	10.9
WARDA (1971)	West African Rice Development As- sociation	Monrovia, Liberia	2.9
ICRISAT(1972)	International Crops Research Institute for the Semi – Arid Tropics	Hyderabad, India	22.1
ILRAD ( 1973 )	International Labo- ratory for Research for Animal Dis- eases	Nairobi, Kenya	9.7
IBPGR ( 1974 )	International board for Plant Genetic Resources	Rome, Italy	3.7
ILCA ( 1974 )	International Live- stock Center for Africa	Addis Ababa Ethio- pia	12.7
IFPRI ( 1975 )	International Food Policy Research Institute	Washington DC, USA	4.2
ICARDA ( 1976 )	International Cen- ter for Agricultural Research in the Dry Areas	Aleppo Syria	20.4

ISNAR(1980)	International Ser- vice for National Agriculture Re- search	The Hague Nether- lands	3.5
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**Source**: Consultative Group on International Agriculture Research, Washington, DC 1984

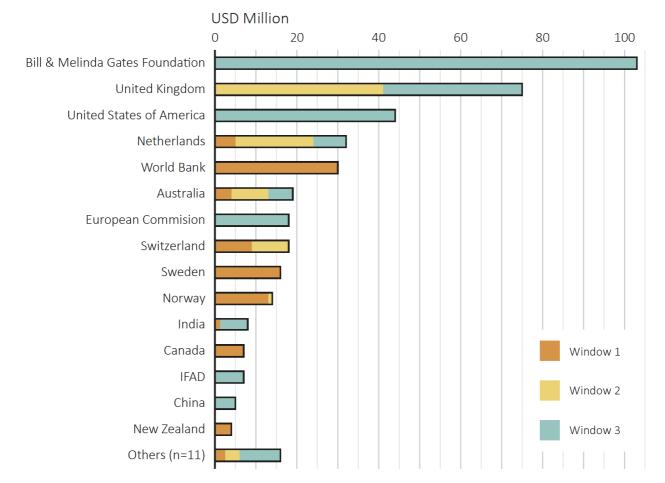
The Bill & Melinda Gates Foundation is the new World Bank and the New Monsanto when it comes to using finances to take control of seeds, of agriculture and influence policies in agriculture. The Gates Foundation is a major funder of the CGIAR system — and through its funding, it is accelerating the transfer of research and seeds to corporations, facilitating intellectual property piracy and seed monopolies created through intellectual property laws and seed regulations. Control over the seeds of the world for "one agriculture" is Mr Gates' target!

https://www.independentsciencenews.org/commentaries/gates-ag-one-therecolonisation-of-agriculture/

https://navdanyainternational.org/publications/report-synthesis-gates-to-a-global-empire/

Since 2003, CGIAR centres have received more than \$720 million from Mr Gates.

#### Principal Funders and main funding channels in 2017



A- PRINCIPAL FUNDERS OF CGIAR TRUST FUND

https://storage.googleapis.com/cgiarorg/2018/11/Capture-d'écran-2018-11-09-à-19.33. https://www.cgiar.org/funders/ Project grants funded by Bill and Melinda Gates Foundation to the CGIAR and its research centers (2008-2020).

Agricultural Research Center	No. of Projects	Total Grants (US \$)
Int'l. Maize and Wheat Improvement Center (CIMMYT)	25	28,01,55,682
Int'I. Food Policy Research Institute (IFPRI)	27	17,48,69,347
Int'l. Institute of Tropical Agriculture (IITA)	26	15,86,02,630
International Rice Research Institute (IRRI)	15	15,45,44,972
Int'l. Crops Research Institute for the Semi-Arid Tropics (ICRISAT)	11	12,79,34,330
International Potato Center (CIP)	11	9,05,88,729
Int'l. Livestock Research Institute (ILRI)	16	6,59,07,489
Int'l. Center for Tropical Agriculture (CIAT)	13	2,92,29,888
World Agroforestry Center (ICRAF)	3	1,89,17,317
Int'l. Water Management Institute (IWMI)	1	90,12,826
Africa Rice Center	3	60,04,502
Bioversity International	3	50,97,884
Center for Int'l. Forestry Research (CIFOR)	0	_
Int'l. Center for Agric. Research in the Dry Areas (ICARDA)	0	
WorldFish	0	_
SUB-TOTAL (Research)		1,12,08,65,596
CGIAR System Organization	4	1,54,94,677
GRAND TOTAL		1,13,63,60,273

https://www.gatesfoundation.org/How-We-Work/Quick-Links/Grants-Database/Grants (accessed June 8, 2020) (Cited in Chito Medina) https://navdanyainternational.org/bmg-foundation-and-irri-corporate-hijackof-rice-science/

Farmers' seed heritage is held in the seed banks of CGIAR, a consortium of 15 international agricultural research centers, which is the single biggest recipient of grants from Mr Gates.

#### Membership of the Consultative Group on International Agriculture Research (January 1983)

Countries	International Or- ganizations	Foundations	Fixed – term members repre- senting develop- ing countries
Australia	African Develop- ment Bank	Ford Foundation	Asian region : In- donesia and Pa- kistan
Belgium	Arab Fund for Eco- nomic Develop- ment	Research and de- velopment	
Brazil		Research Centre	African region : Senegal and Tan- zania
Canada	Asian Development Bank	Kellogg Foundation	
Denmark	Commission of the European	Leverhulme Trust	Latin American re- gion : Colombia and Cuba
France	Communities	Rockerfeller Foun- dation	
Germany	Food and Agricul- ture organization of the United Nation- als		Southern and Eastern European region : Greece and Romania
India			
Ireland	Inter – American Development Bank		Near Eastern Re- gion : Iraq and Libya
Italy	International Bank for Reconstruction and Development		

Japan		
Mexico	OPEC Fund	
Netherlands	United Nations De- velopment Pro- gramme	
Nigeria		
Norway	United National Environment Pro- gramme	
Philippines		
Saudi Arabia		
Spain		
Sweden		
Switzerland		
United Kingdom		
United States		

**Source:** Consultative Group on International Agricultural Research, 1818H.Street NW, Washington DC 20433, USA.

(Extracted from Vandana Shiva, Violence of the Green Revolution ,1986)

By taking control of the CGIAR system, not only has Gates taken control of the world's seeds and agricultural research, he is now attempting to centrally control all agriculture research ,and the world food system. He is working towards "one CGIAR" which is part of his "One Agriculture" or the Gates Ag One programme.

https://navdanyainternational.org/publications/gates-ag-one-the-recolonisation-of-agriculture/

https://www.independentsciencenews.org/commentaries/gates-ag-one-therecolonisation-of-agriculture/

The rhetoric is that

"Gates Ag One aims to provide smallholder farmers in developing countries, many of whom are women, with access to affordable tools and innovations to improve crop productivity and adapt to the effects of climate change. The company intends to enable the advancement of resilient, yield-enhancing seeds and traits globally and facilitate the introduction of those breakthroughs into specific crops essential to smallholder farmers, particularly in sub-Saharan Africa, home to around 1 billion people, and South Asia, with a population of about 1.8 billion. In those regions, approximately 60% of the population lives in rural areas that typically depend on smallholder agriculture for food and income. Yields on farms in these regions are already far below what farmers elsewhere in the world achieve.

According to its mission statement, The Gates Foundation works to help all people lead healthy, productive lives. In developing countries, it focuses on improving people's health and giving them the chance to lift themselves out of hunger and extreme poverty."

As already mentioned, "yield" is an extractive, colonial context. Chemical, GMO Monocultures do not produce more health and nutrition, they spread more poisons, more malnutrition, while extracting profits for those who control food and agriculture.

Gates does not create climate traits, he pirates them. By taking control of the CGIAR systems he controls the world's climate resilient seeds.

Controlling the CGIAR system is controlling the future of seed, food and agriculture Destruction and enclosure of seed diversity and the seed commons is at the root of debt, poverty, suicides as the case of Bt Cotton in India has shown.

At a time when the world is waking up to the value of decentralisation, localisation and food democracy ,Gates wants a centralised system of control over agriculture to dominate over the food systems of the world and destroy the biodiversity of crops, ecosystems, farming systems adapted to climates, and diversity of food cultures. Indigenous people know that diversity is key to democracy, justice, sustainability and health.

Gates has proposed "One CGIAR Common Board", and the budget to increase from \$850 million to \$2 billion a year.

https://www.etcgroup.org/content/three-big-battles-global-food-policy-looming

It is an attempt to control the research of 1500 scientists and the 773,000 seed accessions collected from farmers. Control over the seed is control over knowledge, agriculture and food systems, driving diversity violently into one monoculture of industrial farms, one monoculture paradigm of agriculture, and one unhealthy, disease creating globalised food system.

The dystopian vision of one Agriculture for a world of diversity is hyper "Monoculture of the Mind", intolerant of diversity, democracy and sovereignty, with an urge to extinguish seed freedom, knowledge freedom, food freedom and health freedom.

Besides taking control of the seeds of farmers in CGIAR seed banks, Mr Gates (along with the Rockefeller Foundation) is investing heavily in collecting seeds from across the world and storing them in a facility in Svalbard in the Arctic — the "doomsday vault". The **Svalbard Global Seed Vault** (Norwegian: *Svalbard globale frøhvelv*) in the Arctic Svalbard archipelago holds the global collection of seeds and is run in association with the Consultative Group on International Agricultural Research (CGIAR) and the Crop Trust

CGIAR has shared many of its collections with Svalbard.

By May 15, 2014 a total of 820,000 **accessions** were stored in the **Svalbard** Global Seed Vault – a mere fraction of its 4.5 million **accessions** capacity.

https://www.croptrust.org/blog/india-deposit-svalbard-global-seed-vault/

The largest numbers of accessions stored in the Seed Vault are varieties of rice, wheat and barley crops; more than 150,000 samples of Wheat and rice and close to 80,000 samples of Barley. Other well represented crops are sorghum (>50,000 accessions), Phaseolus bean species (>40,000), maize (>35,000), cowpea (>30,000), soybean (>25,000) and kikuyu grass and chick pea, both with more than 20,000 seed samples. Crops as potatoes, peanuts, Cajanus beans, oats and rye, alfalfa, the cereal hydrid Tritikosecale and Brassica's are represented by between 10,000 and 20,000 seed samples.

https://www.washingtonpost.com/news/energy-environment/wp/2016/04/15/why-theworld-is-spending-half-a-billion-dollars-to-protect-humble-seeds/

The Crop Trust based in Germany funds and coordinates the Svalbard Seed Vault. Among its funders are the Gates Foundation, and the Poison Cartel -Crop Life ( the other name of the Poison Cartel) Dupont /Pioneer Hibred,KWS SAAT AG,Syngenta AG.

DONORS	<b>RECEIVED US\$</b>
Australia	2,01,65,706
Bundesverband Deutscher Planzenzuechter	25,735
CropLife International	43,726
Czech Republic	40,000
Dupont/ Pioneer Hi-bred	20,00,000
Egypt	25,000
Ethiopia	25,000

#### **CROP TRUST DONORS**

Gates Foundation/UN Foundation	80,03,118
Germany	5,07,26,348
India	4,56,391
International Seed Federation	80,785
Ireland	41,44,250
KWS SAAT AG	35,589
Norway	3,14,91,161
Netherlands	4,89,000
New Zealand	14,53,800
Republic of Korea	4,42,556
Slovak Republic	20,000
Spain	26,29,650
Sweden	1,18,86,620
Switzerland	1,09,92,704
Syngenta AG	10,00,000
United Kingdom	1,94,68,582
United States – before Farm Bill	4,28,25,073
United States – US Farm Bill*	1,15,85,120
Sub Total	22,00,55,915
Concessional Loan **	5,90,55,611
Sub Total	5,90,55,611
Grand Total	27,91,05,526

https://www.croptrust.org/about-us/donors/

### Patents, Biopiracy & Digital Maps : Creating a Seed Empire through Digital Genome Mapping

A great seed and biodiversity piracy is underway and it must be stopped. The privateers of today include not just the corporations — which are becoming fewer and larger through mergers — but also Tech Billionaires like Bill Gates.

Making maps and declaring ownership to territory is the colonising enterprise.

The British colonised India and the world by making maps and claiming the land of indigenous people's as the territory and property of the Empire.

Today's Seed Empires being are based carving territories over life by "mapping" genomes and digital genome sequences.

The language of "dematerialisation" of seed is being introduced to create an illusion that making a genomic map is "creation" of the seed.But seeds do not disappear. Farmers Seeds are still the material basis for breeding crops and growing food.

Such constructs of dematerialisation were used to appropriate enclose the commons and create private property in land. Locke said it was the "spiritual labour" of the owner of "capital", not the material labour of those who work the land who create "value".

John Locke's treatise on property ( John Locke ,Two Treatises of Government, ed Pater Casket,Cambridge University Press, 1967) created the jurisprudence of private property through theft and robbery during the enclosures of the commons in England. According to him, property is created by removing resources from nature and mixing g them with labour. But this "labour" is not physical but labour in its "spiritual" form as manifested in the control of capital. According to Locke, only those who own capital have the natural right to own natural resources, a right that supersedes the common, customary of rights of indigos people with prior claims. ( Vandana Shiva. Biopiracy, Natraj).

Digital Genome Mapping to own and control the Seed is a similar erasure of the living seed and its self organisation, and the cocreativity of farmers as farmers.

While living seed needs to evolve "in situ" on living farms, patents through genomic maps can be taken through access to seed "ex situ" gene banks like the CGIAR collection. Gates now controls the "ex-situ" collections as well as the tools of digital colonisation.

The control of the farmers varieties held in the CGIAR system and digital genome mapping are the basis of the Gates Empire over Seed. And the basis of new forms of Biopiracy.

Today, biopiracy and the enclosures of biodiversity and indigenous knowledge is carried out through the convergence of information technology and biotechnology.

A map does not create the land or life. But it becomes an instrument of ownership and control.

A genomic map does not create a living seed that grows into a plant, nourishes the soil and the web of life, and gives us food.

Without knowing the seed, without breeding, just using the passport data of seeds in the gene banks, Billionaires like Gates and the Poison Cartel they collaborate with, are using AI and algorithms to guess which part of the genome contributes to a particular trait that farmers have bred and evolved with deep knowledge and deep care and cocreativity.

#### One such platform is "Athlete"

Evogene Ltd. has patented a computer pro- gramme for reading the genome. Evogene's proprietary in silico "gene discovery technology" is called the "ATHLETE." 29 (In silico, as opposed to in vivo or in vitro, refers to investigations performed through the use of a computer or computer simulation).

ATHLETE is the company's proprietary computer database and analysis program for finding gene function by comparing sequences from as many different plant species, tissues, organs, and growth conditions as possible. Evogene says its database consists of 8 million expressed sequences, 400,000 "proprietary gene clusters," and 30 plant species. The program clusters sequences according to a variety of criteria, and then determines which gene candidates to investigate further. It is an informed winnowing process.

Evogene's website describes the platform it uses to identify key genes: "Athlete uses vast amounts of available genomic data (mostly public) to rapidly reach a reliable limited list of candidate key genes with high relevance to a target trait of choice. Allegorically, the Athlete platform could be viewed as a 'machine' that is able to choose 50-100 lottery tickets from amongst hundreds of thousands of tickets, with the high likelihood that the winning ticket will be included among them."

(http://www.navdanya.org/site/attachments/article/617/Seeds-of-Hope-Report-Download-.pdf

https://www.navdanya.org/site/climate-change/seed-of-resilience

Seeds are not just germ plasm. They are complex ,living, self organised, evolutionary systems. They are intelligent. They are beings and subjects of evolution, history, culture and relationships.

Seed colonisation and **Seed Slavery** is an attempt to make it illegal for farmers to save, share and use their seeds freely as they have done over millennia. The CGIAR system took farmers seeds, but imposed the chemically bred varieties on them through the Green Revolution. After the 1990s corporations imposed GMO seeds that are high cost, have to be bought every year, and are not bred for eating but to sell more chemical by destroying farmers Seed Freedom. They knew no independent and free farmer would choose GMO seeds are that are costly, non renewable and inferior in terms of quality ,taste, and nutrition. Independent and free farmers will not adopt them. Therefore to impose GMOS on farmers alternatives have to be destroyed, and farmers have to be locked into Seed Slavery.

Seed Imperialism and Seed Freedom cannot coexist. Multiple strategies are used to impose Seed Slavery.

Gates is financing Start Ups such as Crop In to digitally enclose the seed commons, introduce a surveillance system for 'Seed Policing" of farmers, thus taking away farmers freedom and farmers rights enshrined in national and international law.

https://www.navdanya.org/bija-refelections/2019/09/07/seed-of-sustenance-freedom-vsseeds-of-suicide-surveillance/

#### **Biopiracy of Climate Resilient traits farmers have bred**

Biopiracy and patenting of Climate Resilient traits that farmers have bred is an attempt to take control of seeds that farmers need in the context of increasing floods, cyclones, draught due to climate change.

One of the major projects that Gates is funding is Stress Tolerant Rice for Africa and South Asia (STRASA). From 2007 to 2010, and 2011 to 2014 Gates gave US \$20 million for each phase to IRRI. The third phase from 2014 to to 2019 had a budget of US\$ 32.77M

After spending millions, Gates claims that he suborned the innovation of flood tolerant rice Swarna-Sub1 rice. However, the flood tolerant traits were derived from an Indian variety Swarna and bred into Sub 1 rice using marker assisted selection.

https://navdanyainternational.org/bmg-foundation-and-irri-corporate-hijack-of-rice-science/ Climate resilience is a complex trait, and cannot be "engineered" through the crude tools of transferring single gene traits from one organism to another.

What corporations and the Gates foundation are doing is taking farmers varieties with known climate resilient traits from public gene banks, mapping their genome, and taking patents on the basis of guesswork and speculation, about which part of the genome con- tributes to the known trait.

Like Columbus -- setting out for India, getting lost and arriving in the Americas, "discovered" "America" -- Gates and Monsanto are "discovering" climate resilience.

Just as the narrative of Columbus' Discovery erases the indigenous people who lived across the American continent, as well as those who had travelled before Columbus, the patenting of climate resilience erases farmers breeding, and the biodiversity which they have given us. It erases the source of the seed, the culture of the seed, the commons of the seed. It is an enclosure through piracy - Biopiracy.

#### Flood Tolerance

Rice as a crop was brought from the arid areas to the coastal plains centuries ago. e tall indica rice varieties, thus evolved, has the ability to survive sub-mergence

Instead of Gates controlling seeds of climate resilience through his Seed Empire, we need to spread seeds of reliance, seeds of justice, seeds of freedom through community seed banks everywhere. Reclaiming seed freedom is reclaiming the Commons of Seed

Patenting life through biopiracy or genetic engineering is rapidly giving way to patenting life through mapping the genome, very much like Columbus" 'discovery" of America. Navdanya's Community Seed Bank in Orissa has conserved more than 800 rice varieties and multi- plied and distributed salt tolerant varieties and flood tolerant varieties.

The "innovation" to evolve these climate resilient traits has occurred cumulatively and collectively over thousands of years. These traits and crops are a commons. However, the traits evolved by nature and farmers over centuries are now being presented as the "invention" of "scientists", who rename the flood tolerant property in the farmer's variety such as "Dhullaputia" from Orissa as the Sub1A or the submergence tolerant gene. "Using marker-assisted selection (not transgenics) the researchers were able to isolate the submergence tolerant gene, Sub1A, and then transfer it to a rice variety that is grown on more than 5 million hectares in India and Bangladesh, known as Swarna. Most rice can tolerate flooding for only a few days, but researchers say the new variety, Swarna-Sub1, can withstand submergence for two weeks without affecting yields".

This is scientifically flawed description, based on genetic reductionism, because flood tolerance, like other climate resilient traits such as salt tolerance and drought tolerance, are multi genetic traits, they cannot be identified as a "Sub1A gene". Because it is not "a gene" it has been referred to as "Sub-mergence tolerance 1 (Sub1) Quantitative trait locus (QTL)"

What marker assisted selection does is identify the genetic sequence that is always linked to varieties which share a trait.

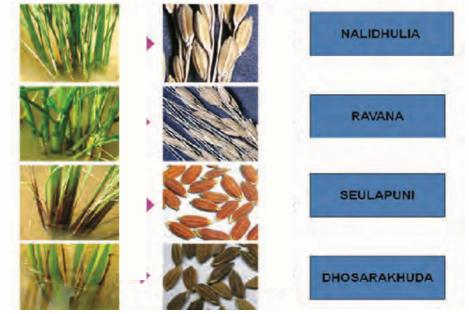
http://www.greenpeace.org/australia/PageFiles/348427/ smart-breeding.pdf

Such varieties are then selected for crossing conventionally with varieties like Swarna. Farmers who have bred the traits did not need MAS to breed for climate resilience. This is why we need to recognise the diversity and pluralism of knowledge systems and diversity of languages to describe and name processes and organisms.

The Agrichemical and Biotech industry is now using the climate resilient crops bred by farmers to do their genomic mapping and claim the farmer bred traits as their inventions through patents. This is not breeding. It is Biopiracy, Piracy.

Gates steals centuries of breeding by farmers and describes it as New floodtolerant rice offers relief for world's poorest farmers. This is how the Gates Foundation redefines the Biopiracy of Flood Tolerant Rice from India farmers as "Innovation" funded by Gates - farmers as breeders disappear and as the source of flood tolerant traits disappear. They become recipients of the which came from them in the first place. This is the regime of BioNullius, building on the concept of Terra Nullius –that farmers minds are "empty", and their seeds "empty". "innovation" begins when Gates and Big Money takes over.

#### PPBSA - NAVDANYA, ORISSA ACCESSION AND CONSERVATION OF FLOOD TOLERANT RICE VARIETIES



Some varieties are more able to withstand complete submergence for days together. A gene named "sub IA" has been identified in these rice varieties. Such genes have been evolved naturally in these rice varieties which are cultivated in predominantly sub merged coastal flood plains of Orissa where the crop plants remain wholly under water for days together yet survive to hand over a good yield.

### Using Digital Maps to Undermine of UN Treaties to safeguard Seed Sovereignty and Biodiversity Sovereignty,

In the 1980s, Monsanto led the push for GMOs and patents on life. Today it is Bill Gates. One rich individual is able to use his wealth to bypass all international treaties and all multilateral governance structures to help global corporations grab the biodiversity and wealth of peasants by financing unscientific and undemocratic processes to take control of farmers seeds, violate national and international laws to protect farmers rights and seed sovereignty.

Over the last two decades, humanity has taken actions and written laws to protect the biodiversity of the planet and the rights of farmers to seed, the rights of consumers to safety.

These laws include: The Convention on Biological Diversity (CBD); the Cartagena Biosafety Protocol to the CBD; the International Treaty on Plant Genetic Resources Treaty for Food and Agriculture (ITPGRFA).

Gates is financing research on new GMOs which he refers to as "gene editing" in the arrogance that life if a word programme which can be cut and pasted ,not a complex self organised system. He is investing in company's taking patents on new GMOs. And he is financing the deregulation of GMOs

Josè Esquinas-Alcazar, the architect of the Seed Treaty at the FAO evolved to recognise and protect farmers rights and seed sovereignty warns how the treaty to protect our agricultural biodiversity is being undermined by the Gates led Digital Genomic Mapping of ex situ collections.

Aidé Jiménez-Martínez and Adelita San Vicente Tello show how the Nagoya Protocol under the Convention on Biodiversity negotiated by the world community to protect Biodiversity and Seed Sovereignty could be rendered meaningless unless Digital Sequence Information is included in its ambit.

(Biopiracy, the plunder of Biodiversity and Knowledge in Gates to a Global Empire)

https://navdanyainternational.org/publications/report-synthesis-gates-to-a-global-empire/)

Bypassing international treaties to protect seed sovereignty is the clear aim of Digital Colonisation of Seed. The International Digital Council for Food and

Agriculture presented at the Global Forum on Food and Agriculture in Berlin in 2019 proposed data gathering on a global scale.

#### " These practices would extend to genetic digital sequence information (DSI or digital DNA) and **could pre-empt already-contentious access and benefit sharing (ABS) negotiations in the Biodiversity Convention and the FAO Seed Treaty**"

#### https://www.etcgroup.org/content/three-big-battles-global-food-policy-looming

This is why the digital colonisers say that data is the new gold.

#### Controlling Seed to create a Fake Food Empire: "GMO Golden Rice" and "Biofortification" as false solutions to problems of malnutrition created by the Green Revolution.

Control over CGIAR Institute IRRI provides a glimpse of how Gates is setting up his Empire over Seed and Food.

- 1. Control the Seed Banks of the World to Control the World's Food
- 2. Control the Agriculture and Research of the World to eclipse farmers knowledge and ecological regenerative alternatives.
- 3. Force Feed people lab made fake food biofortified food and genetically engineered GMO Golden Rice pretending you are saving the planet and preventing hunger and malnutrition.

### Erasing Farmers Knowledge, Breeding out Nutrition and Resilience to create nutritionally Empty Crops

Nutrition and health are the continuum from the soil to the plants and to our food. Nutrition in the soil has been destroyed by chemical agriculture while organic regenerates soil health and nutrition.

Chemical breeding has bred for chemical intensification and yield maximisation, not increasing health and nutrition per acre.

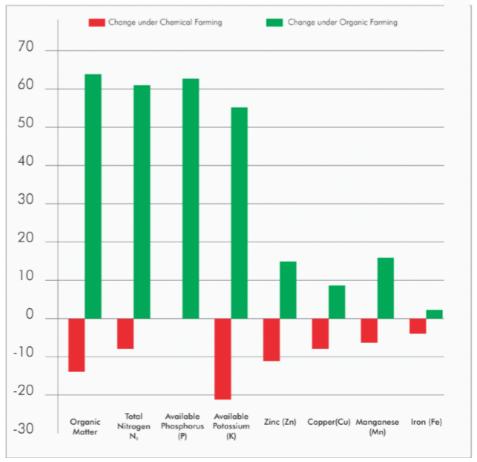
The denial of farmers breeding and farmers knowledge of agroecology and organic farming has contributed to the malnutrition crisis by breeding out diversity in farming and nutrition in crops. Farmers breed seeds for nutrition and resilience. These were declared inferior and primitive. were declared

The shift from seeds evolved for diversity, cooperation and coexistence necessitated a shift from biodiversity and mixtures to monocultures, mimicking the "plantation" economies of colonialism.

The Green Revolution, Industrial Agriculture and Industrial breeding are an extractive industry - taking farmers seeds for free, breeding them to max-

imise chemical inputs, and maximising extractive yields of monoculture commodities.

"Yield" is an extractive measure which does not measure true productivity, true cost, biodiversity, or the quality and nutrition of food.



Changes in soil nutrition in Chemical and Organic Farming

V. Shiva, Biodiversity, Agroecology, Regerative Organic Agriculture: Sustainable solution for Hunge Poverty and Climate change/ Westville publishing House, New Delhi

Instead of measuring the weight of nutritionally empty commodities and suffering the illusion that we are growing more food, we should replace yield per acre with the more appropriate measure of nutrition per acre that Navdanya has adopted. We can feed two times India's population with full nutrition if we grow our native varieties, and intensify biodiversity instead of chemicals.

https://www.navdanya.org/attachments/Health%20Per%20Acre.pdf

Native farmers varieties provide more nutrition because they are bred for eating, increasing nutrition, taste and quality.

The seeds bred through the Green Revolution model are bred for taking up more chemicals. Green Revolution varieties are called High Yielding Varieties (HYV). This is a misnomer. As the UN pointed out in 1970's, they are

not High Yielding in and of themselves. They respond well to chemicals, and should more accurately be called High Response Varieties.

#### Vandana Shiva, The Violence of the Green Revolution / Natraj Publication

In terms of nutrition, the so called modern varieties have low nutrition compared to native varieties. When measured in terms of nutrition, Green Revolution varieties are "low yielding" and native varieties are "high yielding". A recent study carried out by scientists in Calicut University, Kerala comparing 13 traditional varieties with two Green Revolution varieties showed that native varieties had more than 11% protein compared to so called HYV. They had higher mineral content Zinc, manganese, potassium calcium and iron.

https://t.co/0e1ISpAlhP?amp=1

Native wheat varieties also have higher nutrition content than the Green Revolution varieties released by Govt for increased "Yield". Protein is more than 11.3 percent ,total fibre was nearly double in "kudrat" varieties, Bansi has high iron and potassium content, and Rajyog is rich in Calcium and Magnesium.

https://www.researchgate.net/publication/330872207\_PROFILING\_OF\_NUTRITIONAL\_TRAIT-S\_IN\_INDIGENOUS\_WHEAT\_CULTIVARS

Navdanya's research and practice over 3 decades has shown the nutrition in our crops and food is a combination of breeding and methods of farming

Having bred out nutrition to produce nutritionally empty commodities ,and having deleted soils of their nutrition, the next step of seed imperialism and seed colonialism is "Biofortification", genetically engineered "GMO Golden Rice", or industrial breeding of zinc from rices pirated from farmers.

#### **Biofortification and GMO Golden Rice**

Gates is funding IFPRI,CIAT, IRRI big alliance of nine CGIAR research canters, universities, private sector, NGOs, and other international/national agricultural research institutes. To create Harvest PLUs This program aims to develop crops to provide higher levels of micronutrients such as iron, zinc, and vitamin A through biofortification. Rice biofortification is done through conventional breeding (high zinc rice), transgenic biofortification (GMO Golden Rice) and gene editing biofortification (high zinc rice). The denial on nature, biodiversity, farmers breeding as a source of a nutritionally abundant harvest is being denied. The paradigm that created the malnutrition crisis that soil, seed and food are empty containers into which industrial experts pour nutrition is now being extended to the false solutions of biofortification and genetic engineering.

The idea of GMO Golden Rice to address via A deficiency was first introduced in 2000 as a private public partnership We rejected it in India because there were many biodiverse alternatives to a GMO rice.

https://navdanyainternational.org/wp-content/uploads/2020/10/THE-GOLDEN-RICE-HOAX.pdf

https://navdanyainternational.org/publications/gates-to-a-global-empire/

https://www.asianage.com/columnists/avoid-miracle-rice-just-eat-carrot-216

Syngenta has the commercial patents to GMO Golden Rice even though it is claimed that the patents are being waived for humanitarian purposes.

http://www.goldenrice.org/Content2-How/how9\_IP.php

https://grain.org/en/article/6067-don-t-get-fooled-again-unmasking-two-decades-of-liesabout-golden-rice

Gates is now funding genetically engineered GMO Golden Rice in IRRI inspite of two decades of research showing it is a failed experiment. Gates gave a total of more than US \$10M to IRRI from 2010 to 2017 for the the first phase of the GMO Golden Rice project. Gates is now funding the second phase from 2017 to 2022 with a total grant of US\$ 18 M with the aim of getting GMO Golden Rice approved commercially stage in Bangladesh and in the Philippines even though Biosafety assessment is not part of the Gates GMO Golden Rice project. Food safety and Feed Safety standards are not the same as GMO Biosafety rusk assessment systems. Scientic standards are clearly being compromised in Bill Gates pseudo science blind push for GMO Golden Rice

V. Shiva, Green Solution Vs Golden Rice

https://www.independentsciencenews.org/wp-content/uploads/2021/03/Attach-1-re-DAresponse-GR2E.pdf

https://navdanyainternational.org/bmg-foundation-and-irri-corporate-hijack-of-rice-science/

Meantime a Stop GMO Golden Rice campaign has spread.Source :A demonstration against GMO Golden Rice, Manila Photo: Ryan Damaso/MASIPAG



Gates funding to CGIAR and IRRI indicates the future he wants is that all seeds, all food, all knowledge be under his control. The Gates dystopian vision is based on the end to Seed Sovereignty and Food Sovereignty, Seed Freedom and Food Freedom. It is based on the end of science and knowledge, environmental and health regulations, democracy and self determination.

IRRI and GMO Golden Rice are an example of how Gates plans to build his empire of One Ag, one Fake Food system by taking control of the seed. It shows how his philanthrocapitalism works - give a few million, take control of the seed to control, food and agriculture, harvesting trillions in future profits.

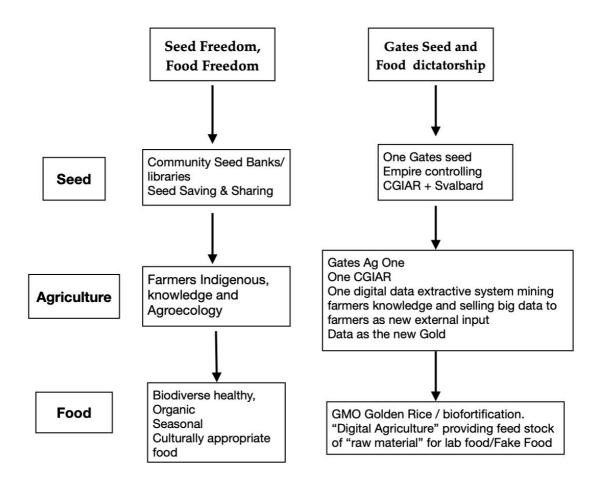
He has stated in his interviews and his writings that he intends to shift people's eating patterns to fake food through behavioural change. And if that does not work through regulation.

Just as corporations have been trying to make it illegal for farmers to breed ,save and exchange seed freely, the billionaires like Gates who now own the corporations through their investment funds want to make it illegal to grow and eat real food.



We must stop his seed imperialism and seed slavery to stop his food dictatorship and food slavery and the destructions of our freedoms and sovereignties. We must join hands, minds and hearts to protect our seeds, our food, our health, our freedom.

### **Two Systems of Seed and Food:** Democracy or Dictatorship?



#### Reclaim the Seed Reclaim Food and Health Freedom Reclaim Life

Life begins with seed. Food begins with Seed. Health begins with food.

Seed Freedom is Food Freedom.

Seed Freedom is Health Freedom.

Let us reclaim our Seed Freedom.

Seed Freedom is freedom to live with other beings who have a right to live, thrive and flourish.

Saving seed has been our highest duty in the past, and must become our first duty in the present and future.

From the duty to save seeds and biodiversity flow our rights to life and livelihood, food and health. From our duty to defend the freedom of seed to evolve, multiply and be shared flows our seed freedom and food freedom.

Save your seeds, in a pot in your windowsill, in your garden, in a community seed bank or seed library, on living farmers.

Reclaiming our seed commons is reclaiming the future of humans and all species.

Food begins as seed.

Food, nourishment, nutrition is the currency of life, the flow that weaves the web of life.

Food is Health. As Hippocrates said "Let Food be they Medicine"

Grow nutrition, Grow health. Grow real living food from real living seed. in your window, your balcony, your terrace, your garden.

Create a food community so you know your food, you know the community that grew it.

Growing and Eating real food for health is a revolution each of us can start. Each of us must start

Farmer bred varieties have much higher nutrition than industrial varieties bred for maximising yields of nutritionally empty commodities.

Reclaiming seed is the first step in reclaiming our food and health freedom. It is a vital step in defending our freedom and democracy.

In a time of Seed Imperialism and Food Dictatorship, reclaiming food by reclaiming seed becomes the most revolutionary act.

#### Actions to Reclaim the Seed

On 26th April 2021, International Seed Day, let us join hands to begin a decade of actions to reclaim the seed with renewed urgency, and prevent the tech billionaires of the world like Bill Gates from establishing an Empire over our seeds, our food, our health.

Let each of us begin with a simple pledge to the earth, to our ancestors, to future generations -to protect the seed in her rich diversity, nutrition, evolutionary potential and freedom.

Take a pledge with your community that from 2021 to 2030 you will spread seeds of life and seeds of love to reclaim our loving relationship with the earth and join her power of providing Abundance for all.

The privatisation of the world seed heritage held the CGIAR system by Gates must be stopped.

The Seed Freedom and Seed Freedom movement has been calling for a return of farmers varieties to farmers by the CGIAR gene banks. The lessons from the Green Revolution since the 1960's has shown us that the chemical path of monocultures has undermined the Earth's capacity to support life and food production by destroying biodiversity, soil and water and contributing to climate change. It has dispossessed small farmers through debt for external inputs. And it has undermined food and nutrition security. The experience of the last half century is pointing to Seed Sovereignty, Food Sovereignty and Knowledge Sovereignty as the future for food and farming. Ignoring all the knowledge of farmers and public researchers, Gates is blindly

rushing forward with a failed paradigm of the Green Revolution, an unjust system of denial of Farmers Rights ,and the inappropriate urge to centralise and control.

Instead of Gates taking control of the CGIAR collections, the seeds should be repatriated to farmers and the communities and countries from whom they were taken. Let us start community seed banks everywhere.

We need to stop all Patents on Seed. Patents violate the Right of Seeds, and rights of growers and eaters to the Seed Commons where seeds can be saved and exchanged freely, and where healthy, nutritious, tasty food can be grown freely without surveillance, policing and prohibitions by a corporate state run by billionaires.

Where "No Patents on Seed" and Farmers Rights laws exist, we must defend them with all our democratic power.

Farmers have bred Climate Resilient Seeds. Corporates and Gates Pirate Climate resilient traits. They do not invent them. Biopiracy is a crime and is illegal.

We must defend national and international laws which have been put in place to prevent Biopiracy and protect Seed Sovereignty. Digital Genomic Mapping and DSI must be government by these laws such as the Nagoya Protocol of the CBD and the Seed Treaty of the FAO.

National and International laws on Biosafety to assess and prevent harm to biodiversity, public health and livelihoods from GMOs need to cover new GMOs.

We have a right to choose GMO free food. We have a right to know what we are eating. We have a right to GMO labelling.

Malnutrition is a result of industrial breeding which breeds out nutrition and industrial agriculture which produces nutritionally empty commodities. Genetically engineered GMO Golden Rice ,Gene Edited Zinc enriched rice, and lab made fake food will aggravate the poverty and hunger crisis. It is not a solution to malnutrition.

The ecological and people's solution to malnutrition and zero hunger is

1. Growing Biodiversity of crops and maximising health and nutrition per acre, not yield of nutritionally empty commodities. Biodiversity produces more nutrition per acre. We need to grow Gardens of Hope everywhere with seeds of freedom. Nature has given us a rich Biodiversity of plants rich in Vit A.

(Earth Rising, Women Rising)

2. Organic Farming increases nutrients in the soil and in the plants. We do not need to engineer zinc into plants through gene editing. We can take care of the soil, and soil organisms, which can remove all micronutrient and trace element deficiencies in our food

Join the regenerative agriculture movement to heal the planet and grow healthy food.

Join and support the "Stop GMO Golden Rice" campaign. Join and support the GMO free campaign.

Billionaires like Gates think that by controlling the seed they can take away our freedom to grow nutritious and healthy food, and through seed slavery they can lock us into food slavery and health slavery.

The so called "Green Revolution" institutionalised a new Seed Colonialism, turning seed into a new 'intellectual' colony, locking farmers into seed slavery, locking countries in a new Food Imperialism. As Kissinger declared "Food is a Weapon-control food, you control people". Corporations and Billionaires now want to privatise and control the Seeds in the public Gene Banks of the CGIAR system. They want to use Digital Colonisation for a new Seed Colonialism. Control over seed means control over food and Health, control over biodiversity and knowledge, control over life itself. Seed Imperialism is Bioimperialism.

With new threats to our seeds, our food, our health, let us reclaim our seeds, so seeds can be free and we can live free, happy and healthy, cocreating with the rich biodiversity that the earth and our ancestors have gifted us.

Slavery was part of colonialism. We got rid of it.

We must rise together to end the new Seed Slavery, which is an Empire over life itself, claiming life to be a corporate invention, trying to control our seeds, our food, our minds, our lives, the future.

Let us continue the Seed Satyagraha for Seed Freedom and begin a global Food Satyagraha to stop the Fake Food Empire of Bill Gates.

Every seed is an embodiment of millennia of nature's evolution and centuries of farmers' breeding. It is the distilled expression of the intelligence of the earth and intelligence of farming communities. Farmers have bred seeds for diversity, resilience, taste, nutrition, health, and adaption to local agroecosystems. In times of climate change we need the biodiversity of farmers varieties to adapt and evolve. Climate extremes are being experienced through more frequent and intense cyclones which bring salt water to the land. For resilience to cyclones we need salt tolerant varieties, and we need them in the commons.

The Intelligent, responsible road to the future of food and farming is based on the deep awareness that the earth, the farmers, and all people are intelligent beings. And we grow food sustainably through care for the soil and the seed, not through exploitation and privatised profits. If we can look through the degenerate Public Relations Fog, we can find our way to the road that will ensure we rejuvenate the planet, we regenerate the soil, and we ensure the well being of all.

We are pebbles. We can create ripples which can become waves. Waves can grow into ever expanding, never ascending, oceanic circles of our seed and food freedom.

Seed by Seed, farmer by farmer ,Gardner by Gardner, community by community, country by country, let us continue to resist the Seed Empire

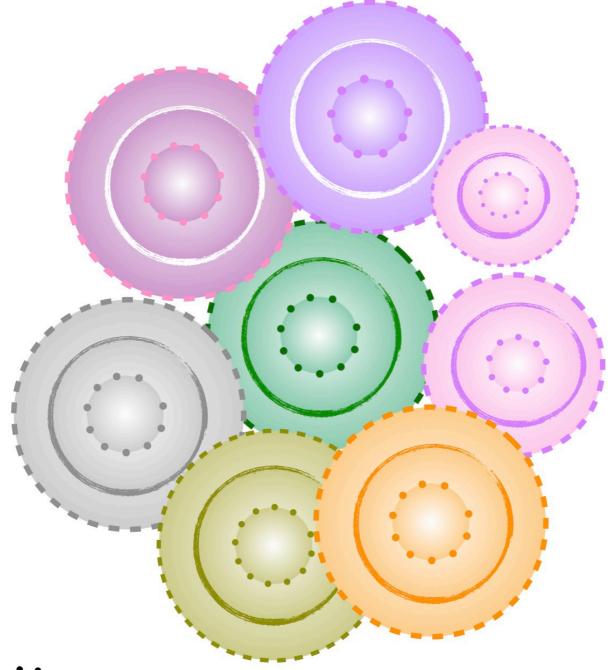
and Seed Slavery. Let us reclaim our seed freedom which is the basis of our food freedom and health freedom. Our freedom to live healthy with happiness and well being for all.

Seed Freedom is our birthright. Food Freedom is our birthright. Health freedom is our birthright.

"In this Earth In this Soil In this pure field Let's not plant any seed Other than seeds of compassion and love" Rumi

### **Reclaim the Seed:**

Ever expanding oceanic circles of Seed Freedom, Food Freedom



Community seed banks & Seed libraries

Small gardens & small farmers growing healthy, biodiverse food for local food system & circular living economies.

One seed, One garden, One farm, One community, One bio region at a time creating ever
expanding, never ascending, oceanic circle till the whole planet is a garden of hope, health and biodiversity.