

## Seeds of Truth -- a Response to The New Yorker

Dr. Vandana Shiva

Seeds of Truth

August 26, 2014

<http://vandanashiva.com/?p=105>

(A response to the article 'Seeds of Doubt' by Michael Specter in *The New Yorker*)

I am glad that the future of food is being discussed, and thought about, on farms, in homes, on TV, online and in magazines, especially of *The New Yorker's* caliber. *The New Yorker* has held its content and readership in high regard for so long. The challenge of feeding a growing population with the added obstacle of climate change is an important issue. Specter's piece, however, is poor journalism. I wonder why a journalist who has been Bureau Chief in Moscow for *The New York Times* and Bureau Chief in New York for the *Washington Post*, and clearly is an experienced reporter, would submit such a misleading piece. Or why *The New Yorker* would allow it to be published as honest reporting, with so many fraudulent assertions and deliberate attempts to skew reality. 'Seeds of Doubt' contains many lies and inaccuracies that range from the mundane (we never met in a café but in the lobby of my hotel where I had just arrived from India to attend a High Level Round Table for the post 2015 SDGs of the UN) to grave fallacies that affect people's lives. The piece has now become fodder for the social media supporting the Biotech Industry. Could it be that rather than serious journalism, the article was intended as a means to strengthen the biotechnology industry's push to 'engage consumers'? Although creative license is part of the art of writing, Michael Specter cleverly takes it to another level, by assuming a very clear position without spelling it out.

Specter's piece starts with inaccurate information, by design.

"Early this spring, the Indian environmentalist Vandana Shiva led an unusual pilgrimage across southern Europe. Beginning in Greece, with the international Pan-Hellenic Exchange of Local Seed Varieties Festival, which celebrated the virtues of traditional agriculture, Shiva and an entourage of followers crossed the Adriatic and travelled by bus up the boot of Italy, to Florence, where she spoke at the Seed, Food and Earth Democracy Festival. After a short planning meeting in Genoa, the caravan rolled on to the South of France, ending in Le Mas d'Azil, just in time to celebrate International Days of the Seed."

On April 26th, 2014, at the Deutsches Theater Berlin, one of Germany's most renowned state theatres. I gave a keynote speech for a conference on the relation of democracy and war in times of scarce resources and climate change. From Berlin I flew into Florence for a Seed Festival organized by the Government of the Region of Tuscany, Italy, The Botanical garden of Florence (the oldest in Europe), Banca Etica and Navdanya. I was joined by a caravan of seed savers, and we carried on to Le Mas d'Azil where we had a conference of all the European seed movements.

It would be convenient in the narrative that Specter attempts to weave, to make this exercise look like a joyride of 'unscientific people on a "pilgrimage"'. Writing about the European governments, universities and movements accurately would not suit Specter's intention because the strong resistance (including from governments) to GMOs in Europe is based on science.

My education doesn't suit his narrative either: a Ph.D. on the 'Hidden Variables and Non-locality in Quantum Theory'. Specter has reduced my M.Sc. Honors in Physics to a B.Sc. for convenience. Mr. Specter and the Biotech Industry (and *The New Yorker*, by association) would like to identify the millions of people opposing GMOs as unscientific, romantic, outliers. My education is obviously a thorn in their side.

"When I asked if she had ever worked as a physicist, she suggested that I search for the answer on Google. I found nothing, and she doesn't list any such position in her biography."

Specter has twisted my words, to make it seem like I was avoiding his question. I had directed him to my official website since for the past few months I have repeatedly been asked about my education. The Wikipedia page about me has been altered to make it look like I have never studied science. The Biotech Industry would like to erase my academic credentials. I have failed to see how it makes me more or less capable of the work I do on evolving and ecological paradigm of science. I consciously made a decision to dedicate my life to protect the Earth, its ecosystems and communities. Quantum theory taught me the four principles that have guided my work: everything is interconnected, everything is potential, everything is indeterminate, and there is no excluded middle. Every intellectual breakthrough I have made over the last 40 years has been to move from a mechanistic paradigm to an ecological one. I had the choice to continue my studies in the foundations of Quantum Theory at the Tata Institute of Fundamental Research (TIFR) or to take up a research position in interdisciplinary studies on science policy at IIM, Bangalore. I chose the latter because I wanted a deeper understanding of the relationships between science and society.

This was my email response to Specter, copied to the editor of *The New Yorker*, David Remnick (the following is transcribed from a graphic in the original article -- <http://vandanashiva.com/wordpress/wp-content/uploads/2014/08/Specter-Email-for-Response-723x1024.jpg>):

**Some questions that I wish I could have asked in person**

From: Vandana Shiva <REDACTED>  
To: Michael Specter REDACTED, mich REDACTED  
Cc: REDACTED, REDACTED  
REDACTED  
Subject: Re: Some questions that I wish I could have asked in person  
Date: Wednesday, June 18, 2014 8:37 PM  
Size: 21KB

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Dear Mr. Specter,

As per your initial email, quoted below, I was under the impression that you were pursuing a story on 'globalisation and the future of food'. Your questions to this effect, however, appear to be more interested in my academic qualifications of four decades ago than a genuine journalistic inquiry into globalisation and its consequences for the poor.

Please find a link to my biography here, which includes both my academic qualification as well as a list of books and publications in which the arguments you have asked me to rehash for this

interview are clearly laid out and referenced. If you have trouble finding the correct book, a Google search for their synopses should suffice.

For photographs, please write to **REDACTED**

Best

Dr. Shiva

From Michael Specter <**REDACTED**>  
Subject: New Yorker Story about globalization and you  
Date: 13 March 2014 2:39:52 am IST  
To: **REDACTED**

Dear Dr. Shiva: I am a staff writer at the New Yorker and I focus on science and the environment. I am planning to write a long story over the next month or two on the future of food - and how globalization has effected the developing world (mostly with regard to agriculture and food, but in general, too.) I would want to concentrate on you and the work you do - which means you would have to waste some time on me. My hope is that I could come to India in about two weeks and be there for a week or ten days. I could see and speak to you then (and go wherever you go if you permit.) In fact, if you were traveling at all out of Delhi that would make it more useful (though we can figure that out later.) I am sure you know a bit about the New Yorker; one thing I can promise is that you would be able to have a fuller airing of your views than you have had in any other publication. We have a million subscribers but the stories also whip around the internet.

Well, I don't mean to go on. Getting your take on these events in agriculture (and not just in India, but I am interested in the world - particularly Africa, too.) would be fantastic.

Best

--  
Michal Specter  
Staff Writer  
The New Yorker  
REDACT  
Phone: (Work, Cell, SMS)REDACT

A tight schedule must have kept Specter from mentioning Africa in his piece, although he intended to, given that a considerable amount of the world's poor are also in Africa and must be fed. But Africa might not have needed addressing, probably because the Biotech Industry is happy with the progress they are making in deploying GMO cotton and banana in Africa. In the US, six-week human trials of these bio-fortified bananas are happening as I write this. And what are these bananas? They are bananas into which they have put a gene found in another variety of banana that has elevated levels of Beta-Carotene. They could have just used the banana with higher Beta-Carotene if the intent was to alleviate Vitamin A Deficiency, but there's no money in that.

Specter calls me a *Brahmin*, which is inaccurate and a deliberate castist aspersion, insinuating falsely, elitism. '*Shiva*' is not a Brahmin caste name. My parents consciously adopted a caste-less name as part of their involvement in the Indian Independence Movement that included a fight against the caste system. But this is inconvenient to Specter's narrative.

Specter's gift for half-truths is evidenced when he says:

"Shiva said last year that Bt-cotton-seed costs had risen by eight thousand per cent in India since 2002. In fact, the prices of modified seeds, which are regulated by the government, have fallen steadily."

"Bt-cotton-seed costs had risen by eight thousand per cent in India since 2002" is incorrect. I did not say that. The cost of cotton seed after the 2002 approval of Bt-cotton, when compared to the price of cotton seed before Monsanto entered the market in 1998, has increased exponentially. The percentage was used in reference to this increase. I was a little conservative when I said "8000%", since I didn't maximize the number for effect. I'm not predisposed to hyperbole. I am grateful to Specter for pointing this out. I'll redo the math now.

Monsanto entered the Indian market illegally in 1998, we sued them on 6th Jan in 1999. Before Monsanto's entry to the market, local seeds cost farmers between rup5 and rup10 per kg. After Bt Cotton was allowed into the market Monsanto started to strengthen its monopoly through (i) 'Seed Replacement', in which Monsanto would swap out farmers seeds with their own, claiming superiority of their 'product', and (ii) 'Licensing Agreements' with the 60 companies that were providing seeds in the Indian market at the time. Monsanto ensured a monopoly on cotton seeds in India and priced the seeds at rup1,600 for a package of 450 gms (rup3555.55 per kg, out of which the royalty component was rup1,200). rup3555.55 is approximately 711 times rup5, the pre-Bt price. The correct percentage increase would be 71,111%. It is this dramatic price increase that I always talk about.

The reduction of prices that Specter mentions was because the State of Andhra Pradesh and I took the issue to the Monopoly and Restrictive Trade Practices Commission (India's Anti-Trust Court) and Monsanto was ordered, by the MRTP Court and the Andhra Pradesh Government, to reduce the price of its seed. Monsanto did not willfully reduce its prices, nor was an "Invisible Hand" at work. He quotes the Farmers Rights Clause in Indian law from the Plant Variety Protection and Farmers Rights Act, deliberately misnaming a clause as an act, misleading anyone who might want to do some research of their own, as many readers of *The New Yorker* do.

"Shiva also says that Monsanto's patents prevent poor people from saving seeds. That is not the case in India. The Farmers' Rights Act of 2001 guarantees every person the right to "save, use, sow, resow, exchange, share, or sell" his seeds. Most farmers, though, even those with tiny fields, choose to buy newly bred seeds each year, whether genetically engineered or not, because they insure better yields and bigger profits."

I do say Monsanto's patents prevent poor people from saving seeds. They prevent anyone who is not 'Monsanto' from saving or having seeds including researchers and breeders. This is true in most parts of the world. Specter makes it appear as though Indian farmers are protected and have always been, merely by mentioning "The Farmers' Rights Act of 2001". I happen to have been a member of the expert group appointed by our Agriculture Ministry to draft that very act. We have worked very hard to make this happen and I am very proud of the fact that India has built Farmers Rights into its laws. But the farmers are not completely protected since Monsanto has found clever ways around the laws, including collecting Royalties renamed as 'Technology Fees'. This issue has many pending cases in Indian courts.

This section in Specter's piece is designed to deliberately break the established connections between GMOs, Seed Patents and IPRs, and mislead his readers to echo Monsanto's attempt to hide the catastrophic implications of a seed monopoly and Bt-Cotton's failure in India as it tries to enter new markets in Africa proclaiming it's success in India. Indian farmers can't choose to buy genetically modified or hybrid varieties. Choosing would require choice, an alternative. Monsanto has systematically dismantled all alternatives for the cotton farmer. Monsanto's hold on corn, soya and canola is almost as strong as their monopoly on cotton. Approximately \$10 billion is collected annually from U.S. farmers by Monsanto, as royalty payments. Monsanto has been sued for \$2.2 billion by Brazilian farmers for collecting royalty on farm-saved seeds. The seed market is no longer governed by market forces. The element of choice is missing altogether. The farmer can only choose if he has an option.

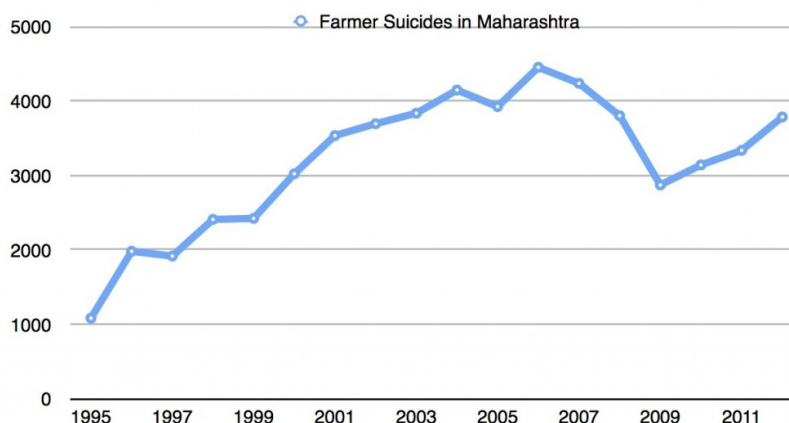
In its evidence to the Parliamentary Standing Committee on Agriculture, the Monsanto representative admitted that half the price of Monsanto seeds is royalty. My work and the work of movements in India, has prevented Monsanto from having patents on living resources and biological processes. Article 3(J) of our patent clause was used by the Indian Patent Office to reject Monsanto's broad claim patent application on climate resilient seeds. In other countries that do not share our history, Monsanto uses such patents to sue farmers, such as Percy Schmeiser in Canada (for \$200,000) as well as 1,500 other farmers in the US. In the case of *Monsanto vs Bowman*, Monsanto sued a farmer who had not even purchased seeds from them.

If Specter had really listened, he would have heard what I was actually saying about seed monopolies, even if it was inconvenient to his story. I'm sure that during his research over the last 8 months, he would have come across at least some of these examples of oppression.

"Although India bans genetically modified food crops, Bt cotton, modified to resist the bollworm, is planted widely. Since the nineteen-nineties, Shiva has focused the world's attention on Maharashtra by referring to the region as India's "suicide belt," and saying that Monsanto's introduction of genetically modified cotton there has caused a "genocide. "There is no place where the battle over the value, safety, ecological impact, and economic implications of genetically engineered products has been fought more fiercely. Shiva says that two hundred and eighty-four thousand Indian farmers have killed themselves because they cannot afford to plant Bt cotton. Earlier this year, she said, 'Farmers are dying because Monsanto is making profits—by owning life that it never created but it pretends to create. That is why we need to reclaim the seed. That is why we need to get rid of the G.M.O.s. That is why we need to stop the patenting of life.'"

If Specter had actually travelled across the cotton belt in Maharashtra State (surely the Monsanto office could have easily directed him there), he would have heard from his trusted sources that there is a decline in Bt Cotton cultivation in favor of Soy Bean due to failed Bt crops. He would have heard of Datta Chauhan of Bhamb village who swallowed poison on November 5, 2013, because his Bt cotton crop did not survive the heavy rains in July that year. He would have heard of Shankar Raut and Tatyaji Varlu, from Varud village, both who committed suicide due to the failure of their Bt Cotton. Tatyaji Varlu was unable to repay the Rs. 50,000 credit through which he received seeds. Specter could have met and spoken to the family of 7 left behind by Ganesh,

in Chikni village, following the repeated failure of his Bt Cotton crop. Ganesh had no option but to buy more Bt Cotton and try his luck multiple times because Bt Cotton was the only cotton seed in the market, brilliantly marketed under multiple brand names through Licensing Arrangements that Monsanto has with Indian companies. Multiple packages, multiple promises but the contents of each of those expensive packets is the same: it's all Bt. It's vulnerable to failure because of too much or too little water, reliant on fertilizer, and susceptible to pests without pesticide, all additional costs. The farmer, with a field too small to impress Specter, does not choose Bt Cotton of his free will. That choice is dictated by the system Specter attempts to hail.



Specter and the BioTech twitter brigade have found resonance and are harping on my "*confusing a correlation with causation*". Allow me to explain the *cause* to these scientific and rational people and hopefully help them pull their heads out of the sand.

By destroying the alternative sources of seed, as I explained earlier, a monopoly was established. Promises were made of higher yield and a reduction of pesticide costs to initially woo farmers. With a monopoly, Monsanto increased the price of seeds since it didn't have to compete in the market. In India, the agents that sell Monsanto seeds also sell the pesticides and fertilizer, on credit. A Bt Cotton farmer starts the cultivation season with debt and completes the cycle with the sale of the crop after multiple applications of fertilizer and pesticide acquired on more credit. As the Bt-toxin was rendered useless, the crop was infested by new pests and yields of Bt Cotton started to decline, more fertilizer and pesticide were purchased and used by the farmers in the hope of a better yield next time around, destroying soil health. Degraded soil led to lower yields and further financial losses to the farmers. Many farmers would plant seed from another brand, not knowing it was the same exact Monsanto seed Bollguard, and that it would not fare any better and would require more fertilizer and pesticide than before, going deeper and deeper into debt. This cycle of high cost seeds and rising chemical requirements is the debt trap, from which the farmers see no escape, and which drives these farmers of the cotton belt to suicide. There is a *cause* for each and every farmer taking his own life, he is not driven to it by correlation. And the *cause is a high cost monopoly system* with no alternative. If it were any other product, Monsanto would be liable for false advertising, and a product liability claim due to intentional misrepresentation regarding Bt Cotton. Specter promotes a system of agriculture that fails to deliver on its promises of higher yield and lower costs and propagates exploitation.

Not only does Specter support a system which leaves no alternatives for farmers, he also promotes the force feeding of consumers, with GMOs, including victims of disasters.

"In 1999, ten thousand people were killed and millions were left homeless when a cyclone hit India's eastern coastal state of Orissa. When the U.S. government dispatched grain and soy to help feed the desperate victims, Shiva held a news conference in New Delhi and said that the donation was proof that "the United States has been using the Orissa victims as guinea pigs" for genetically engineered products. She also wrote to the international relief agency Oxfam to say that she hoped it wasn't planning to send genetically modified foods to feed the starving survivors. When neither the U.S. nor Oxfam altered its plans, she condemned the Indian government for accepting the provisions."

Specter is ill informed about the cyclone in Orissa, or he copied this information from another inaccurate report accusing me of making the cyclone victims starve. The US aid was a blend of corn and soy, not grain. The agency distributing it was C.A.R.E. After the cyclone in 1999 that devastated the east coast of India, Navdanya was involved in the rehabilitation of the victims on the ground in Orissa and has been involved in such efforts each time there has been a calamity in that region. The shipment Specter mentions, under a humanitarian guise, was an attempt to circumvent India's ban on the import of GMOs. The farmers who received the tainted shipment called it inedible. A nondescript mixture of soy and corn is not food for rice eating peoples. We tested this mixture and found it to be genetically engineered corn and soya. The results were sent to the Health Ministry and ***the Government ordered an immediate stop to the illegal import of GMOs.*** The hybrid rice available in the market would not grow in the saline soil left behind by the cyclone. Navdanya provided the farmers with salt-tolerant varieties to allow them to rebuild their livelihoods and for them to have food. The Orissa farmers, later, shared their salt-tolerant seeds with the victims of the tsunami that hit Tamil Nadu in 2004. Monsanto, through its influence in USAID, has used every natural and climate disaster to push its GMO seeds on devastated communities, including Haiti after the earthquake, where farmers protested against this imposition. Monsanto has also taken thousands of patents on climate resilience in traditional seeds and has acquired climate research corporations to exploit the vulnerability of communities in the future. This is not humanitarian from any perspective.

Specter is also supporting the Biotech Industry attack on Governments passing GMO labelling laws in the U.S. Coincidentally, following *The New Yorker* piece, Michael Specter just wrote another piece questioning GMO labeling in America. The Biotech Industry is now suing the state of Vermont for its labeling laws. The grounds of Monsanto's suit is that labeling their product would infringe on Monsanto's first amendment right. Specter's two articles work very well together. An obvious question is whether Specter set out to do a profile on me at all or whether this was a calculated attempt to attack the burgeoning anti-GMO movement within the US? Both articles were conveniently timed to mislead consumers in the US about legislation in their own country by using fallacies about the situation in India.

"Between 1996, when genetically engineered crops were first planted, and last year, the area they cover has increased a hundredfold—from 1.7 million hectares to a hundred and seventy million. Nearly half of the world's soybeans and a third of its corn are products of biotechnology. Cotton that has been engineered to repel the devastating

bollworm dominates the Indian market, as it does almost everywhere it has been introduced."

Being the only seed in the market through monopoly would, of course, be domination. The Bt-cotton seed is not dominating markets because it is effective. Bt-cotton has led to the emergence of resistance to Bt in the Bollworm and the emergence of pests that never affected cotton earlier, forcing the increased use of pesticides accompanied by lower yields. Specter quotes acreage but fails to mention that in the US, Round-Up Ready corn and soya are plagued by super-weeds. The only new 'technologies' being touted by the Biotech Industry are Bt and Ht (Herbicide Tolerant). Both these 'technologies' have failed to deliver on what they promised- the control of pests and weeds. This is because they got the science wrong, the ecological science that allows us to understand pests and weed control, and the evolution of resistance in pests and weeds.

Almost a century and a quarter after *The Jungle Book*, Specter is stuck in Kipling's India. He uses imagery of elephants and natives to subtly invoke a fetishized idea of eastern cultures that resonates with a western perspective, a truly romantic one.

"The majority of local farmers travel to the market by bullock cart. Some walk, and a few drive. A week earlier, a local agricultural inspector told me, he had seen a cotton farmer on an elephant and waved to him. The man did not respond, however, because he was too busy talking on his cell phone."

The third person account of a farmer on an elephant with a mobile phone makes for a lovely visual. What is Specter trying to achieve with this? There is an implication of contradictions here, an idea that milestones in 'development', like the cell phone, symbols of modernity, have no place in the same frame as an elephant. If Specter looked around, listened and understood, he would have noticed that the cell phone is a necessity of life in the 21st century, even in India. In fact, India has more mobile phone subscribers than the US. We also have elephants and they do exist together. Elephants cost more than a midsize car, to buy and to keep, especially in a semi-arid area like Aurangabad.

Invoking imagery of a quaint India reveals an ethnographic prejudice that fits right into the strategy of seemingly 'helping' India while extracting, like colonizers, capital and natural resources from the colonies. In ways other than the obvious, Specter sounds like an Angrez Sahib (English Sahib) describing the 'natives' in 1943, when he notes

"skin the color of burnt molasses and the texture of a well-worn saddle"

One can only hope that he may overcome his disdain of non-white, non-industrial populations, Indian farmers, and farmers in general, because he seems to view them as inferior and incapable of feeding themselves and their growing population even though the Food and Agriculture Organization reports that 70% of global food comes from small farms. It shows the sort of narrow minded thinking that is paraded as reason in a bid to justify the imposition of GMOs to create new sources of royalties. A system of food production that accounts for only 30% of the food people eat cannot be presented as a solution to hunger.

Specter attempts to use the 100-degree heat and dusty roads to distract from the elephant in the



room, which incidentally has a farmer riding it, no cell phone, just crippling debt. How are second-hand stories from one village, during a fleeting visit "a scientific study" about the situation across the 3,500,000 hectares of cotton cultivation in Maharashtra State. I have been going to Vidarbha in Maharashtra since 1982 when we launched *Samvardhan*, the national organic movement, from Gandhi's ashram in Seva Gram. I have seen, first-hand, a proud region of hard working, productive farmers, growing diverse and multiple crops, reduced to indebtedness and a complete desperation. And Navdanya has been working in this devastated region for the past two decades to create hope and alternatives for the farmers and the widows of those who were driven to suicide. The crisis we witness today is like the crisis created by colonialism. Specter mentions the Great Bengal Famine but only provides partial information.

"In 1943 alone, during the final years of the British Raj, more than two million people died in the Bengal Famine. "By the time we became free of colonial rule, the country was sucked dry," Suman Sahai told me recently."

The Bengal Famine was caused by the ongoing war as well as a tax in which the British took 50% of every farmer's crop. This sort of taxation, in today's India has taken the form of royalties, especially in cotton. Even before a seed has been planted, money has left the farm and made its way to St. Louis. It can't be difficult to see the similarity between seed monopolies and colonialism.

The real reason for the Bengal Famine was speculation—as evidenced by Amartya Sen's extensive work—that drove the prices of food so high that most people could not afford it. It was mostly a man-made famine. The same system of speculation that caused famines, like that of 1943, exists today. It's now more organized, more lethal and captained by Wall Street. Large Agri-business, armed with near-monopoly power, increase prices beyond market determined increases in costs.

Although, Specter writes about India becoming an exporting nation, he hides the fact that as a result of 'Free Trade' India has now become heavily dependent on imports of oil-seeds and pulses—staples for millions of Indians. In the nineties, because of the North American Free Trade Agreement (NAFTA), prices of tortillas in Mexico City rose sharply while the price of corn, sold by Mexican farmers, went down. Free trade does not imply free-market, and more often than not it means the poor go hungry while profits of corporations, especially in agriculture, increase.

International financial speculation has played a major role in food price increases since the summer of 2007. Specter quotes import and export data many times in his piece. Most of this trade is mandated by trade agreements written by these very corporations. Due to the financial collapse in America, speculators moved from financial products to land and food, which explains the increasing speculation on food and land-grab. This directly affects prices in domestic markets. Many countries are becoming increasingly dependent on food imports. Speculators bet on artificially created scarcity, even while production levels remain high. Based on these predictions, Big Agriculture has been manipulating the markets. Traders keep stocks away from the market in order to stimulate price increases and generate huge profits afterwards.

In Indonesia, in the midst of the soya price hike in January 2008, the company PT Cargill

Indonesia was still keeping 13,000 tons of soybeans in its warehouse in Surabaya, waiting for prices to reach record highs. This artificial inflation of prices is a result of profits to be made from financial speculation, and creates hunger when there is actually enough food to feed everyone on the planet. Frederick Kaufman, in his *Harpers Magazine* article entitled, "How Wall Street starved millions and got away with it", writes that "*imaginary wheat bought anywhere affects real wheat bought everywhere.*"

Specter would have served *The New Yorker* and himself well by doing a little more research before narrating the stories from his trip to India. His one-day trip speaking with one farmer and a nameless agricultural inspector is hardly part of scientific reasoning. Specter's piece is ripe with fabrication. He says he went and met cotton farmers near Aurangabad in:

"late spring, after most of the season's cotton had been picked."

For the record, in the Maharashtra state, cotton is a Kharif crop, sown in June or July depending on the monsoon and harvested between the months of November and February. It is unlikely that the farmers would have waited for Mr. Michael Specter to show up this May so that he could catch the tail end of the harvest. As curiously, Specter chose not to go to the Vidarbha region with the most Bt-Cotton related farmer suicides.

We work with the farmers and the widows in Vidarbha to rebuild their lives and give them hope. Farmers that have escaped the debt-trap created by Bt Cotton and its ancillary requirements of chemical fertilizers and pesticides have done so through the use of seeds made available through organic farming and community seed banks set up by Navdanya. Through the availability of these seeds and not having to buy pesticides and fertilizers, the net income of these farmers has increased.

Nilesh, a Bt cotton farmer in Chikni village in Yavatmal District, for an acre in 2013-14, spent rup1,860 for seeds, rup1,000 for pesticides, rup1,500 for fertilizer, rup500 for irrigation. Without adding any other expenses he might have had his expenses amount to rup4,860 per acre. His yield per acre of 1 quintal (100 kg) that sold for rup4600 left him with a loss of rup260 per acre. In contrast, Marotirao Deheka who farms organically in Pimpri village in Yavatmal District spent rup400 on seeds, rup750 on irrigation, rup3,000 on all other costs to a lower total of rup4,150 per acre. Yet, his yield of 3 quintals, which sold for rup15000, earned him a net *profit* of rup10,850.

The role of "journalist-turned-activist", or more accurately "pundit," we now see across the pro-GMO lobby. Take the case of the British "activist", Mark Lynas, who touts himself as an anti-GMO turned pro-GMO activist. Following his conversion, he has subsequently written extensively in favor of GM crops. But no one in the UK's anti-GMO movement had ever heard of Mark Lynas – until his much publicized talk in Oxford. Like Specter, Lynas has become one of the strongest, most articulate voices for the GMO movement. The question remains – are these journalists "sponsored" by the GMO movement? Or are they simply writers who believe that GMO crops are good for the world (despite information to the contrary)?

Whatever is the case, it's undeniable that the pro-GMO lobby is adopting a more sophisticated approach to its propaganda machine. It has turned its story of debt, hunger and suicide into the

articulate voices of storytellers, of communicators, of respectable media houses.

Has *The New Yorker* been influenced by loyalty to its benefactors? Marion Nestle, a dear friend, and Francis Lappe's (another dear friend) daughter, Anna Lappe, received invitations from Condé Nast to participate in an image clean up for Monsanto. They obviously refused. Please refer to the recent article (August 7, 2014) entitled: *Read the Emails in the Hilarious Monsanto/Mo Rocca/Condé Nast Meltdown* (<http://www.motherjones.com/tom-philpott/2014/08/monsanto-and-conde-nast-offered-big-bucks-writers-pr-project>)

For the record, ever since I sued Monsanto in 1999 for its illegal Bt cotton trials in India, I have received death threats, my websites have been hacked and turned into porn sites, the chairman of a girls' college founded by my grandfather has been harassed. Actions have been taken to impede Navdanya's work by attempting to bribe my colleagues to leave—and they have failed. None of these systemic attacks over the last two decades have deterred me from doing my research and activism with responsibility, integrity, and compassion. The concerted PR assault on me for the last two years from Lynas, Specter and an equally vocal Twitter group is a sign that the global outrage against the control over our seed and food, by Monsanto through GMOs, is making the biotech industry panic.

Character assassination has always been a tool used by those who cannot successfully defend their message. Although they think such slander will destroy my career, they don't understand that I consciously gave up a 'career' in 1982 for a life of service. The spirit of service inspired by the truth, conscience and compassion cannot be stopped by threats or media attacks. For me, science has always been about service, not servitude.

My life of science is about creativity and seeing connections, not about mechanistic thought and manipulated facts.

***"The intuitive mind is a sacred gift and the rational mind is a faithful servant. We have created a society that honors the servant and has forgotten the gift."***

***- Albert Einstein***