

# Globalization, Food Security, Public Health & Prosperity Focus on India

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## Responses

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## Introduction

Approximately seven thousand years ago, the world was composed of essentially three civilizations, including Egyptians, Sumerians and the Indus Valley people. Among the three the most advanced in terms of agricultural development used to be the Indus Valley Civilization. It was in this part of the world where the cultivation of cotton, sugarcane and cattle was developed into highly sophisticated industries for commerce. Speaking about cotton, Nearachus who was naval commander in the Alexandrian army wrote that the people of India wore white apparel spun out of wool growing on trees (322 B.C.). The word sugar which is borrowed from the Indian vernacular *shakkar* is also related to the Arabic words *shukra* and *shukria* for offering sweet thank-you notes to each other. As for the contributions of cattle to Indian food and agriculture the majestic Brahma bull stands as a living testimony to the indelible love and affection that the people of India bestowed upon their bovine foster mother as *gau mata*.

Thus, globalization of agriculture and allied industries is not a new phenomenon to India but one which arose in this country many thousand years ago. The prosperity that these industries generated was not limited to India. It extended to all parts of the world. On the other hand, the envy that it caused among outsiders resulted in perpetual raids and invasions of this land up to the present time. Greeks, Arabs, Turks, Huns, Portuguese, Dutch, French and British are all known to have taken their turn at entering India for agricultural trade, plundering it and leaving it poorer. Colonization of the Americas and the resultant slave trade from Africa and indentured labor from India have all been part and parcel of basically the same aggression to control the whole world supply of food and agricultural goods in the name of prosperity.

History shows that selfish control of other people's food and agriculture never led to a lasting prosperity for anyone. The grave is full of many great warriors, such as Nebuchadnezzar, Alexander, Constantine, Napoleon, Hitler and others, whose armies ended up starving to death without bringing the promised prosperity to their people back home. In that sense, the American war in Korea, Vietnam, Iraq and Afghanistan are having a similar effect. It is bringing the great American enterprise to meltdown.

## Issues

The foremost issue that comes to mind in this regard is as follows: What is the sense of fostering in India and elsewhere the American-type green revolution with chemical fertilizers, pesticides, genetically modified organisms (GMOs), hormones, antibiotics and the recycling of slaughterhouse refuse into food-producing crops and animals? The only countries that insist on sticking to these products in agricultural production are USA and Canada. Other nations that would rather not employ any of these substances in food and agricultural industries include India, Brazil, Indonesia, South Africa and EU countries. Nations

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<sup>1</sup> Dr. Chopra's book, *CORRUPT TO THE CORE: Memoirs of a Health Canada Whistleblower*, published in 2008, is available at: [www.kospublishing.com](http://www.kospublishing.com)

that remain ambivalent about this issue with a wait-and-see policy to their peril include China, Australia, New Zealand, Argentina, Chile and the old Soviet Union countries.

The matter is presently being negotiated at the World Trade Organization (WTO). The position that India and its associates took at the latest Doha Round of WTO in 2008 was that their people do not wish to be led by the American methodologies to increase food production and if that means less international trade they would be willing to accept it rather than suffer any unforeseen consequences to public health. The public health consequences that they worry about include increasing incidence of cancer, reproductive and immune disorders, diabetes and many other ailments since the introduction of these materials into food and agricultural production. In addition, they are concerned about the toxic effects that these substances cause to the soil, water and air. Most of all they worry about the negative effects that these methodologies produce on the livelihood of farmers.

For example, since the introduction of so-called green revolution to agriculture the water table in India has dropped to disastrously low levels. The same is proving to be true in Africa and wherever else these technologies were utilized during the last fifty to sixty years. The drop in water table is due largely to the reduction in earthworm population which for many millions of years before the rise of human civilization had been digging and pulling up water and clay to the surface to make and enrich top soil. Reduced as well are the populations of many additional diggers and pullers like ants, beetles and other insects that used to help in this same process of making surface soil. Gone for the most part are also the populations of nitrogen-fixing bacteria and innumerable other soil-enriching microorganisms. Much reduced also are the previously evanescent species of bees, butterflies and birds that used to help in the pollination process for food production. Gone also in large measure are the populations of predators like frogs, reptiles, eagles, vultures and hawks that kept the *inter alia* “pests” in check.

## Solution

The only reasonable alternative to these problems is to stick to the well tested natural methods of farming without the introduction of chemical fertilizers, pesticides and all the rest of products that bring disease and untimely death to the various species of crops, animals and people. The following is a list of products that must be eliminated from going into any foods of plant or animal origin:

1. Hormones
2. Antibiotics
3. Slaughterhouse Waste
4. Genetically Modified Organisms
5. Pesticides

Note: Exclusion of these materials in food production is described in my book: *CORRUPT TO THE CORE*, as the *Five Pillars of Food Safety*.

Evidence shows that by not using these products in agriculture, the soil, water and air can be healed within three years. The earthworm returns to do its usual work of digging and pulling in the earth to maintain ecological harmony. Furthermore, the bees, butterflies and birds come back to hum and sing in the fields and at the same time pollinate the bloom on the plants and should these fauna become too much of a pest the predators return to keep them in check.

Unfortunately, the option of not to utilize these products cannot be left solely to the farmers with chemical companies knocking on their doors with promises of handsome profit-making. It requires critical introspection on the safety and security of food supply by everyone concerned. In particular, it needs policy changes to the present legislation, enforcement and education.

## Legislation

Notably, the first three out of the five above mentioned products are legally banned in EU countries, Japan and South Korea. Final decision on the fourth is not yet made while on the fifth all these countries are leaning toward a rigorous ban. As for India, the only substance which is legally banned here is a hormone, Oxytocin, to be utilized for milking dairy cattle without letting the calves have their due share of the milk. Even in this instance the law is being openly defied with apparently no enforcement by government officials. All other products in this country appear to be an open game for profit making regardless of its consequences on public health or food security. For instance, the opinions expressed by the Union Minister of Health and Minister of Agriculture on the use of GMOs in India are at variance with those of the Minister of Agriculture. While the Minister of Health is avowedly opposed to GMO technology for agricultural purposes the Minister of Agriculture is all for it. The same applies to their advisors at the various agricultural and veterinary institutions and presumably the national Planning Commission. The same is also true in the various state governments.

Meanwhile, certain Indian companies involved in food and agricultural production seem to be leaning toward a free-for-all adoption of foreign technologies, including GMOs. For instance, Mr. Ratan Tata was recently reported to have donated fifty million dollars for some undisclosed research at Cornell University, which is an agricultural university in New York State, U.S.A. Likewise, Monsanto and other foreign companies are reportedly accosting Indian agricultural institutions for similar purposes. Whether these actions represent globalization at its best or worst is anybody's guess. Meanwhile, thousands upon thousands of Indian farmers are reported to be committing suicide due to their inability to pay for government sponsored subsidies to use chemical and GMO technologies. Severe damage is also occurring due to the absence of legislation or policy in other areas of agriculture. The most telling example of that is observed from a completely unnecessary culling of millions upon millions of chickens due to a rumored expectation of avian influenza pandemic. This is nothing but a clever scheme by the multinational corporations to grab control of the global supply of poultry meat, which is becoming the most desirable staple throughout the world. Surprisingly, the only demands for change are being made by some non-government organizations (NGOs), with no precise commitment by politicians.

Statements made by politicians can be helpful in molding public opinion. For instance, in the run up to accommodate the Nano car industry in the dairy district, Anand, the Honorable Chief Minister of Gujarat, Mr. Narendra Modi, was reported to comment that the people of this state should welcome the Nano as Lord Krishna was welcomed by Yashodha. What a skillful metaphor it proved to be for the Nano politics of Gujarat! However, the problem that it created was that the established dairy industry would need to be relocated elsewhere and for which Messers Tata and Modi promised to help out with additional investments of money in agriculture. Unfortunately, nobody remembered the missing link, in that Lord Krishna whom Yashodha fostered as her own son transformed into a divine cowherd (*Gopala*) while his step-brother, Balrama, ploughed the fields to grow wonderful food for man and beast alike. One hopes that Indian statesmen of today will be persuaded to help the farmers of this land to produce similarly wonderful food as in the days past.

## **Enforcement**

Probably the best legislation applying to health products and food exists in U.S.A. and Canada. However, the worst enforcement of legislation in this regard is in Canada. The Canadian food supply has turned out to be the most contaminated with various noxious agents. For all intents and purposes, the situation in U.S.A. is no better. As for India, legislation in this country even if it does exist is not enforced, the best example of which is observed in the situation pertaining to Oxytocin for milking dairy cows and buffalos. What other hormones, antibiotics or slaughterhouse wastes are being utilized in this country in food production remains unreported. There is not even a national consensus on what products should or should not be allowed in food production. It is a situation waiting to explode in India on a colossal scale.

## **Education**

The greatest need for a policy change in India is in the education system, which is presently patterned after the Western view of science and technology. While it may be useful to keep in mind every modern technology regardless of its source for food and agricultural production, it should also be kept in line with the home realities of same. For instance, the farmer who knows best about these areas of endeavor is treated as the most ignorant simply because he is presently illiterate. Bear in mind that lack of literacy does not automatically translate to ignorance especially when it pertains to agriculture.

Few people realize that knowledge of agriculture is deeply imbedded in the ancient traditions of India. Unfortunately, most of this knowledge is regarded by the modern scholars of science and technology as superstitious mythology. Also, scholars of modern science and technology are the only ones who get to be heard by the decisions-making politicians and industrialists. They even tend to ignore what the Veda, Ramayana, Mahabharata and Buddhist, Jain and Sikh scriptures taught, and also what most of the modern gurus are still teaching about the safety and security of food. What needs to happen is a complete overhaul of the education system from kindergarten class to the end of the higher secondary schools along Gandhian ideology.

Everyone knows that the three most critical necessities for life are water, air and food. Human life is no exception. However, the human species, which is supposed to be intellectually the most advanced, is the only species damaging all three of these blessings of nature to the point of committing suicide. Ironically, the worst damage being done is to food supply via the advent of modern technology to produce prosperous living in which less and less money is being spent on food and more and more on everything else. The question that India must address is whether prosperity at incremental risk to public health and wellbeing is worth it and, if not, the place to decide it should be in the education system. India needs to produce a national policy on education whereby students of all ages receive in-house and hands-on training in agriculture and food production as an integral part of their daily curriculum. Teachers for such training must be experienced hands in respect to natural farming. Every village and every district along with the local village council should be institutionalized to run its day-to-day administration. The students thus raised will not only learn how to grow healthy food but also how to manage the business end of it. This is also the most certain way to stop rural migration towards city sprawls. In a system such as that most food items will be grown and consumed locally and there will be no scope for factory farming to raise any kind of foods, including grain, vegetables, milk and meat. Finally, higher education in food and agriculture research should be directed away from producing more and more abundant and yet less and less healthful food. In doing so, the whole of India, including the farming communities, will be much healthier and richer. It will certainly prevent undue disease and death.

## **Conclusion**

The current population of India is approximately 1.2 billion, about three-quarters of which is engaged in food and agricultural production. Most of these people receive meager food, no modern education and other necessities of life. On the other hand, the wealth that they generate by being in agriculture is being spent on mainly the development of new infrastructure, ivory-tower research facilities, armed forces, luxury goods, entertainment and to serve other corporate interests. Ironically, the most fundamental need which is being neglected concerns the safety and security of food supply for all the inhabitants of India. It is causing serious health problems to the poor and prosperous alike. The fact that the father of the nation, Mahatma Gandhi, concluded that "India has nothing to learn from the west" was therefore not without reason. It must surely retain home rule over the safety and security of its food supply.