

Will Singh Preside over New Indian Famine?

by Ramtanu Maitra

India's unwillingness to rejuvenate its vast agricultural sector, by not pushing through water management programs, power, education, etc., verges on criminal neglect. But, there is a lesson in India's story for most other nations as well. Not a single nation on Earth, during the last two decades in particular, has directed its energy and resources to build the foundation of an ever-growing agricultural sector and thus, to ensure food security to its own people. As a result, the world teeters on the brink of famine, ready to strike any time in some part of the world.

April 15—In the cacophony of numbers about India's growth and how it "managed" its economy with flying colors, amidst the ruins of a global financial collapse, what remains unspoken is the fact that food prices are soaring like never before. Neither Prime Minister Manmohan Singh nor his agricultural minister, Sharad Pawar, a sugarcane tycoon, has anything to say beyond reiterating over and over again that the cause is the drought of 2009, and that the crisis will blow away soon once the Winter harvest hits the market.

The reality is somewhat worse. India has at least 500 million people whose income is enough to feed the family, but with no surplus. These million of people have been now put to the sword, with the price of staples (wheat and rice) showing a 15-25% rise over its

price last year. Some other agricultural products, such as sugar, show an even steeper rise, but the poor in India have long stopped being major consumers of such products, because they cannot afford them.

That is the reality, and it is ugly, because those who took control of governing this nation of 1.1 billion people were fully aware that, throughout the 1990s and during the better part of the present decade, India's agriculture sector was growing at a rate of 2-2.5%. No one in the top leadership in New Delhi has the courage to address the issue the way it must be addressed, but they were often heard parroting each other, that India has achieved the status of the second-fastest-growing economy of the world.

The facts are right in front of these leaders: 60% of India's population depends on the agricultural sector, and its offshoots, to stay alive. A 2-2.5% growth rate of the sector they depend on for survival ensures two things: It keeps them permanently poor, and it destroys the future for a majority of India's next generation. Instead of addressing what should be considered as the key to India's survival and future success, leaders in New Delhi sing hosannas about the phenomenal growth of Information Technology, and its direct offshoots, which serves not even 1% of India's 1.1 billion-and-growing population. By all definitions, this is criminal negligence, with the potential of leading to deaths of innocent millions.



Famine during the British Raj in India (photo from 1868-75): the result of British colonial/Malthusian policies. Viceroy Lord Lytton told district officers, during the 1877-79 famine, to “discourage relief works in every possible way.”

Back to the Raj Days?

Indian farmers had gone through catastrophic food shortages for ages before Shrimati Indira Gandhi (1917-1984) moved decisively in the 1960s, with the help of the best agro-planners and agro-scientists, to make the country food-secure. That decision saved India from becoming a victim of the carnivorous IMF-World Bank predators. By the 1980s, India became self-sufficient in food, and the pundits around the world stopped claiming that India would fall apart because of internal upheavals caused by food shortages.

But, what Prime Minister Indira Gandhi achieved has been systematically undermined, wittingly or unwittingly, by those who followed her. According to the Indian English news-daily *The Hindu*, the neglect of the agricultural sector in the 1990s and the 2000s, drove as many as 200,000 farmers to suicide. While that rush of suicides among farmers has declined, New Delhi’s policy of considering the agriculture sector as an adjunct, and not a motor for growth, has continued, and if this is not reversed immediately, the days of the British Raj will be replayed in India’s farmland within a decade—with hell to pay for the nation’s “leaders.”

What happened during the days of the British Raj is not remembered by the people who have since taken over power in New Delhi. This is partly because they

were mostly British-educated, working with the British-trained *babus* [bureaucrats], and also because it is too horrid a past to recall. It is easier to have friendly relations with Britain, and other colonial masters, if these unpleasant issues are forgotten. In addition, most of those millions of people that were killed by the British-created famines were poor; they never got anywhere near power in New Delhi in the post-Raj days.

The famines that occurred in India during the British days have all been recorded. Nonetheless, a sample is given here, lest that situation be revisited because of New Delhi’s unwillingness to understand what Shrimati Indira Gandhi grasped: that the survival of India, and building of a future India, depend heavily on erasing poverty from India’s rural farmlands and, providing this vast, under-

nourished majority’s next generations with hope.

1770: Territory ruled by the British East India Company experienced the first Bengal famine; an estimated 10 million people died.

1783-84: Up to 11 million died in the Chalisa famine in the regions of present-day Uttar Pradesh, Delhi region, Rajputana (now, Rajasthan), eastern Punjab region (this is the Indian part of Punjab), and Kashmir.

1788-92: Another 11 million may have died in the *Doji bara* famine (Skull famine) in Hyderabad State (now part of Andhra Pradesh), Southern Maratha country (most of which is now Maharashtra State), Gujarat, and Marwar.

1800-25: 1 million Indians died of famine.

1850-75: 2.5 millions died in the Orissa famine of 1866 and the Rajputana famine of 1869; due to a generous relief effort, however, there was no mortality in the Bihar famine of 1873-74;

1875-1902: 7-8 million Indians died of famine (the Great Famine of 1876-78 took 5.25 million lives).

1943: The second Bengal famine resulted in over 3 million deaths.

These were the major famines. In fact, records indicate many more famines took place throughout Indian colonial history, claiming many more millions of Indian lives. But to the British colonial rulers, this was not kill-

ing, but more like culling of the Indian population.

Mike Davis, in his book, *Late Victorian Holocausts: El Niño Famines and the Making of the Third World* (2001), pointed out that after the 1877-79 famine, when some British liberals called for policy reforms so that famines would not take away so many lives, Viceroy to India Lord Lytton replied, "Let the British public foot the bill for its 'cheap sentiment,' if it wished to save life at a cost that would bankrupt India." He ordered: "There is to be no interference of any kind on the part of Government with the object of reducing the price of food," and instructed district officers to "discourage relief works in every possible way. . . . Mere distress is not a sufficient reason for opening a relief work."

Under the Raj, Indians had to accept that fascist diktat. It is unlikely that leaders in New Delhi will be as lucky as Lytton and his murderers' row were.

Why the Crisis?

The genesis of this crisis, which may make its presence known within a decade in a brutal form, lies in not doing what was needed to be done, and resorting to knee-jerk reactions to a mega-crisis. There are many, who were trained abroad and representing Wal-Mart, or business management consulting houses, or global financial institutions, who proffer their advice to the eager ears of New Delhi authorities, saying India does not have a food-generation crisis, but only a distribution problem. Many such lies are being circulated to prevent New Delhi from paying due attention to the agricultural sector, where the growth is less, and foreign direct investment is negligible. In other words, not much money can be made there.

Then again, take the case of Agriculture Minister Sharad Pawar. As an Indian news journal, *Tehelka*, pointed out: "When he took the job in the summer of 2004, many had hoped Pawar would use his vast knowledge to reform policy to begin pulling farmers out of poverty, while keeping prices down with lasting food stocks without increasing imports. But for six years the Indian Agriculture Ministry under Pawar—who the media has chronicled far more for his exploits in the management of cricket than agriculture—has pursued policies that have done little to mitigate the misery of the poor farmers, or to better manage food stocks. Instead, his ministry has gone to bat for a demand-and-supply market economy, for big business, for higher imports, and for water- and other resource-intensive crops such as rice, wheat and sugarcane. . . ."

Setting aside these petty detractors, the fact remains that New Delhi has not taken up water management and power generation the way it should have for the last two decades. These sectors are vital for agricultural growth, along with education and health care. New Delhi has done precious little to make a dent in the education and health-care sectors in rural areas as well.

It is likely that India will be generating a lot more electrical power in another two decades, and when that occurs, the power requirements of the agricultural sector will be met. However, the question is, what will happen to the agricultural sector between now and then? What will happen to the millions, and their children, who are increasingly undernourished, if not starving, because of New Delhi's policies?

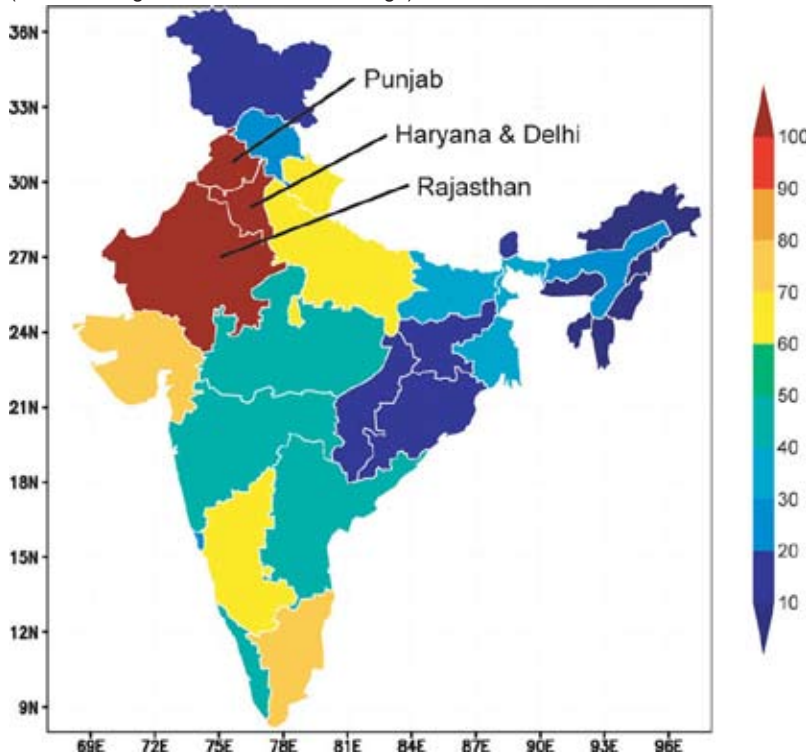
Even if there is a light at the end of the power tunnel, there is hardly any relief in sight for meeting India's water requirements for agriculture and other purposes.

According to a study by NASA hydrologists, Northern India's water tables have fallen by about one-fifth more than expected because of excessive use, posing serious threats to the farming, food, and potable water supplies. A team of hydrologists, led by NASA's Matt Rodell, said the water is being pumped and consumed faster than the aquifers can be recharged through natural mechanisms. Their research—published in the Aug. 20, 2009 issue of *Nature*—was based on observations from NASA's Gravity Recovery and Climate Experiment (GRACE), the NASA Earth Science Team said.

Figure 1 shows groundwater changes in India during 2002-08, with losses in red and gains in blue, based on GRACE satellite observations. The estimated rate of depletion of groundwater in northwestern India is 4.0 centimeters of water per year, equivalent to a water table decline of 33 cm/year. Increases in groundwater in southern India are due to recent above-average rainfall, whereas rain in northwestern India was close to normal during the study period.

"If measures are not taken to ensure sustainable groundwater usage, consequences for the 114 million residents of the region may include a collapse of agricultural output and severe shortages of potable water," said Rodell. Groundwater across the three northern Indian states of Rajasthan, Punjab, and Haryana dropped by about 4 cm a year between 2002 and 2008. "The northern Indian states of Rajasthan, Punjab, and Haryana have all of the ingredients for groundwater depletion: staggering population growth, rapid economic development and water-hungry farms, which account for

FIGURE 1
Withdrawals of India's Groundwater, by State, 2002-08
 (As Percentage of Groundwater Recharge)



Sources: NASA/Matt Rodell, with data from India's Ministry of Water Resources.
The three states that are labeled are those included in the Rodell team's NASA study.

about 95% of groundwater use in the region.” the NASA team said.

On the other hand, India gets a lot of rainfall—an average of 4 trillion cubic meters every year, although most of it over a short period time, say 10-12 weeks. Unfortunately, only 48% of the rainfall ends up in India's rivers. Due to lack of storage and crumbling infrastructure, only 18% can be utilized. Rainfall is mostly confined to the monsoon season, June through September, when India gets, on average, 75% of its total annual precipitation. Once again, due to lack of storage, the government is unable to store surplus water for the dry season.

Unfortunately, this uneven seasonal distribution of rainfall, occurs every year about the same time and is known to one and all, yet has not inspired authorities to develop better capturing and storing infrastructure, making water scarcity an unnecessary, yet critical problem. Instead, failure of monsoon rains, as was the case in 2009, is being mouthed by one and all, including Pre-

mier Manmohan Singh, as the reason for the present rise of food prices.

A Man-Made Problem

India's water crisis is predominantly a man-made problem. Extremely poor management, unclear laws, government corruption, and industrial and human waste have caused the problem, and rendered what water is available practically useless, due to the huge quantity of pollution. Meanwhile, the authorities go for band-aid solutions and play with people's lives, in the process.

India's agricultural sector currently uses about 90% of the country's total water resources. Irrigated agriculture has been fundamental to economic development, but unfortunately caused groundwater depletion. Due to pollution of rivers, India draws 80% of its irrigation water from groundwater. Anjana Pasricha, in her article, "India's farm sector fails to get sufficient attention," in *One World South Asia* on March 30, pointed out that agricultural scientists blame overuse of unbalanced chemical fertilizers, especially urea. In the 1960s, to raise food production for a populous country, India gave its farmers high-

yield varieties of seeds, and heavily subsidized fertilizers to make them affordable for farmers. The "Green Revolution" transformed agriculture in the northern states of Punjab, Haryana, and Western Uttar Pradesh. It helped India overcome decades of food scarcity, become the world's second largest producer of wheat and rice, build huge buffer stocks, and even export food grains, Pasricha said.

But because of the neglect of the sector, farmers have been caught in a vicious cycle. They use heavier doses of urea to coax the same yields from their land, but this degrades the soil even more. It also increases the crops' thirst for water, prompting farmers to drill deeper to extract groundwater for irrigation. But as a result, groundwater is running out, Pasricha reported.

One of the key individuals in Indira Gandhi's successful launching of India's Green Revolution, agroscientist M.S. Swaminathan, told Pasricha that these unsustainable farming practices have been encouraged by bad government policies. "This region has been



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The late Prime Minister Indira Gandhi with constituents in Srinagar, in the State of Jammu and Kashmir. Shrimati Gandhi mobilized agro-scientists in the 1960s to make the country food-secure; self-sufficiency was achieved in the 1980s—and then lost, in the next two decades.

doing more or less land mining and water mining. It is no more agriculture, it is mining. Water has gone down and down,” said Swaminathan. “Part of it is due to wrong public policy, for example, free supply of electricity to pump out more groundwater, what I call ecological suicide. That is unnecessarily done for political reasons. Similarly, government only subsidizes nitrogenous fertilizer, with the result there is no balance in the use of fertilization.”

What Needs To Be Done ... Now

As water scarcity becomes a bigger and bigger problem, rural and farming areas will most likely be hit the hardest. Even if New Delhi deals with food shortages in the future by importing food from abroad—an absurd concept, considering the tiny food surplus that exists in the world today and may vanish at any time, and the size of India’s requirements—India will end up being a net importer of food, which would have massive ramifications for maintaining its sovereignty. It is exactly for that reason that India developed its independent closed nuclear fuel cycle, and Shrimati Gandhi ensured

food security in the 1970s.

India must now take on management of water on a war footing. Besides developing large reservoirs to store monsoon waters, India will have to manage the waters of its main rivers, the Ganges, Brahmaputra, Mahanadi, Godavari, Krishna, Kaveri, Indus, Narmada, and Tapti, which flow into the Bay of Bengal and the Arabian Sea, and hold the waters for storage and use. The Himalayan rivers, such as the Ganges, are formed by melting snow and glaciers, and therefore have a continuous flow throughout the year. The Himalayas contain the largest store of fresh water outside the polar ice caps, and feed seven great Asian rivers.

This region receives very heavy rainfall during the monsoon period, causing the rivers to flood. The coastal rivers, the Brahmaputra and the Krishna, especially on the west coast, are short in length, with small catchment areas. The peninsular rivers, which include the Mahanadi, Goda-

vari, Krishna, and Kaveri, flow inland and also greatly increase in volume during the monsoon season. Finally, the rivers of the inland drainage basin, such as the Mahanadi and the Godavari, dry out as they drain towards the silt lakes such as the Sambhar, or are lost in the sands.

In addition, India is now capable of mass-scale building of small nuclear reactors—first, those fueled by natural uranium, then, thorium-fueled—to desalinate water all along India’s long coastline. That water would not only be used for domestic and commercial purposes, but must also be stored in reservoirs for agricultural and other uses. These reactors can be 50-100 MW capacity, and Indian manufacturing facilities are quite capable of churning them out in large numbers. All it requires is direction from New Delhi, with a clear understanding that it *has* to be done, whether marketing managers approve it, or not.

If Manmohan Singh, and future Indian authorities at the helm of power, do not want a revisit of the famines created by the British Raj, it is difficult to see why New Delhi is pushing the agriculture sector to a massive crisis.