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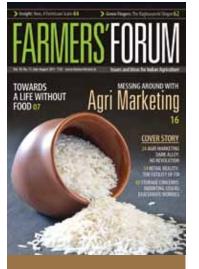




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Overseas Associate: Unacoma Service Suri, Via Venafro, 5, 00159 Rome, Italy Tel : 39 06 432981 Fax : 39 06 4076370 E-mail: unacoma@unacoma.it

### **EDITORIAL**



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Editor, Printer & Publisher Ajay Vir Jakhar

Editorial Board Prof. M. S. Swaminathan Dr R. S. Paroda J. N. L. Srivastava Prof. R. B. Singh

Editorial Support Paranjoy Guha Thakurta Aditi Roy Ghatak

**Design** © Peali Dezine *pealiduttagupta@pealidezine.com* 

**Contact us** editor@farmersforum.in

Advertising Sunil Kumar (+91 9811222902) sunil.kumar@farmersforum.in

**Subscription** subscription@farmersforum.in

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# India's Misunderstood Culture: AGRICULTURE

H. Moreland, the celebrated writer of *From Akbar to Aurangzeb*, commenting on the agrarian system of Mughal India, said that: "the peasant is the last person to benefit from price rise while he is the first to suffer from a fall." It is not a little curious that this realisation does not dawn on Indian experts who have been dealing with agriculture policy for decades. In no other sector of the Indian economy is the principal protagonist such a pathetic victim as he is in Indian agriculture.

It is even more curious that agriculture is put to strange comparisons: comparing oranges with apples would seem normal in a world where the farm sector is compared with the automotive sector. The reasoning is so erroneous that it would be hilarious had it not been about such a critical sector of the Indian economy that provides India with the ultimate security of food. Man cannot live by the motor car alone and yet, when it comes to consideration of sectoral policies, one hears of discussions where farming and the automotive sector are placed on the same plane. So much for national priorities.

The Indian automotive industry will be employing two million people by 2020 and contributing to about 15 per cent of India's gross domestic product, which is the same as the contribution of agriculture and that of 60 million farmers. This is an often-made pronouncement from automotive sector platforms and repeated in the media with great alacrity. Apart from the grave ignorance of fundamentals of economics, ethics and even ecology that

such reasoning demonstrates, the worry is that such arguments are increasingly dominating Indian policies.

Even so, agriculture is the biggest private sector activity in the country and willy nilly India has to make it a profitable enterprise. Marketing of farm produce is perhaps one of the largest 'unorganised sectors' businesses in the country though it is the state sector that has a 'near monopoly' in the procurement and a lead role in the distribution of cereals (the main agriculture crops). The state is conspicuous by its absence in the distribution and marketing of perishables (horticulture crops). With the sole exception of Mother Dairy's 'Safal' brand of outlets in the National Capital Territory of Delhi, the distribution is in the hands



AGRICULTURE IS THE BIGGEST PRIVATE SECTOR ACTIVITY IN THE COUNTRY AND WILLY NILLY INDIA HAS TO MAKE IT A PROFITABLE ENTERPRISE

### EDITORIAL

Photo: Manish Mandlik



of private guilds, which do not encourage the entry of new players.

These private guilds of middlemen, commission agents at the sabzi mandis (wholesale markets), street vendors and vegetable sellers in the retail market work in tandem to make huge profits on sale of perishable commodities sold by farmers. Given the perishable nature of food like fruit and vegetables, the farmer needs to sell his crop when it is time to harvest. He cannot wait for a better price, thus exposing himself to exploitation by the guilds and this has been happening since time immemorial. They buy cheap and allow no competition or transparency in the market. Yet, when it comes to preparing guidelines for foreign direct investment in retail, the government curiously can only think of trying to secure the right of these very guilds from anticipated

competition of large format stores. These guilds exploit both the farmer and the consumer as the farmers' share in the consumer price keeps falling even as the consumer keeps paying more.

Most agriculture produce sold in such retail stores will be fruits and vegetables. Growing these perishable commodities is a labour-intensive activity and undertaken in India by small-holder farmers and producers. Since foreign investment in multi-brand retail is almost a done deal, it is important to consider the following recommendations while the policy for multi-brand retail is being finalised. Foreign investment in retail can be allowed provided:

- 75 per cent of the total retail sales of agriculture produce are purchased directly from the farmers.
- 50 per cent agriculture produce purchased directly from the farmers is from within 100 km of every store.

Attention to at least these two details will benefit all stakeholders and will specially help farmers get higher prices for their produce and, amongst other benefits, will also help in diversification of agriculture. It is perfectly fair for the government to consider the position of the many small and medium enterprises and small kirana store owners but could it not spare a thought for the poor farmer too?

Ajay Vir Jakhar *Editor* 

THE GUILDS EXPLOIT BOTH THE FARMER AND THE CONSUMER AS THE FARMERS' SHARE IN THE CONSUMER PRICE KEEPS FALLING EVEN AS THE CONSUMER PAYS MORE

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# LETTERS

# Letters to the Editor

### 'Moving' fingers

Sir, – I read with great interest your section on Green Fingers in every issue of *Farmers' Forum*. The section reflects the true story of the farmers, without any fuss or hype. I was particular moved with the focus on Apthamu's Ethiopia (May-June 2011) and the manner in which you have explained the difference between the Indian and the African farmer. These small farmer stories truly motivate others.

B.K. Swamy, Nellore, (Tamilnadu)

#### Poor, poorer, poorest

Sir, – The article by Naresh Minocha, Food Inflation: India's permanent challenge (Farmers' Forum, May-June, 2011) is an eye-opener. He uses both facts and figures to explain his case. I was specially happy with the manner he drove home the point that the "frequent and steep rise in food prices not only hurt the poor but also make them poorer and push others down the poverty line".

Rajender Rawat, New Delhi

#### Vanishing 'daal'

Sir, – Apropos of your May-June, 2011 issue of *Farmers' Forum* on India's pick-pocketing prices, your editorial places the entire food inflation phenomenon in correct perspective. Your perceptive comment that "daal has disappeared from the poor person's diet of daal roti", will find a receptive audience in many Indian households because even the middle-class is finding it hard to afford it and the ineffective Indian government is unable to



# Well produced

Sir, – Apropos of your May-June, 2011 issue of Farmers' Forum on India's pick-pocketing prices, not only was the issue well produced but the editorial was particularly thought provoking. I also read with deep interest your interview with Dr Ashok Gulati. Chairman of the Commission for Agricultural Costs & Prices on the politics, economics and solutions for India's food inflation. The question is: Is there a solution in sight. Sunil Radhakrishna, Delhi resolve this issue. This is why everyone blames everything else for the mess around food inflation but no one fixes the problem or takes the right steps to address the issue.

It is not the intent of the public to force people to accept responsibility but the fact is that those in charge of managing the economy have to address the emerging issues, especially those that are getting to be intractable, on a permanent basis even if some measures are not politically expedient. The fact of the matter is that the political class will have to act instead of feeding the public with lies and more lies.

Amit Yadav, Jaipur, (Rajasthan)

#### Judge and jury

Apropos of your May-June, 2011 issue of Farmers' Forum, featuring an interview with Dr Ashok Gulati, Politics, economics and solutions for India's food inflation, I am aghast to learn that the Commission for Agricultural Costs & Prices recommends a price both for the farmers and the consumers. That seems to be absolutely unfair to the farmers and it is small wonder the farmers are always upset with the declared minimum support prices. I hope Dr Gulati can actually do something worthwhile because even with the best intentions he is burdened with an establishment that refuses to change or listen. Also, it is clear from the interview that even if the CACP should decide to change its ways, it only has recommendatory powers.

Ramjas Choudhary, Alwar

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# *'I don't want to ever beg for food.'* Indira Gandhi

# Towards a Life Nithout Food A Farmers' Forum Report

# PERSPECTIVE

ormer Indian Prime Minister, late Lal Bahadur Shastri, was compelled to declare that all Indians should fast once a week so that another might get a meal. Most Indians of today were not born then and most of the adult population would have forgotton those harsh times. The spectre of food insecurity stalks the country again and there are genuine fears that the country is entering a phase of food imperialism as in the earlier times of colonial imperialism. Indeed, today India's choice is between food imperialism and technology imperialism. A right thinking nation, that believes that it will conquer the 21st century, should not have to make such a choice but to avoid that unpleasant option, India would have to invest in agriculture research and development as its top priority. Or else it may find itself being forced to accept what is given to it on prices and terms it cannot afford or like.

The Food and Agriculture Organisation estimates that since 2004, world food prices on average have soared by an unprecedented 240 per banks and hedge funds. It started in 2007, during the U.S. sub-prime crisis and gained momentum as other investments in stocks and bonds became suspect. There has been a "predictably rapid rise in starvation, hunger and malnutrition in poorer populations around the world." The *Farmers' Forum* report draws extensively on the information and analysis provided by Engdahl article that points the finger at the forces and interest groups that have artificially created a scarcity of nutritious food in a multidimensional global phenomenon that begins with the ability to "manipulate the price of essential foods worldwide at will," almost irrespective of the physical supply and demand for grains.

There are, course, powerful groups that accuse the writer of cleverly manipulating the truth to suit his point of view but a rational assessment of what is being said is essential because the phenomenon is recent and little understood. Remember, till the mid-1970s grain crisis there was no single "world price" for grain, the benchmark for the price of all foods and food products. There is another truth to

# The Food and Agriculture Organization estimates that since 2004, world food prices on average have soared by an unprecedented 240 per cent

cent. In India, the government is at its wit's end trying to tame food inflation that has placed food out of the reach of vast sections of India's below the poverty line people. Globally, even in the advanced world, there is talk about a not-too-distant future where the local supermarket will not be able to supply whatever one wants at prices that one can afford. To the west, food insecurity is an unknown phenomenon. It is not so in India and large parts of Africa and South Asia. What, however, is unknown is the impact that big finance may have had on arriving at this state of affairs.

In a remarkable two-part article, 'Getting used to life without food', published in *Financial Sense*<sup>1</sup>, F. William Engdahl<sup>2</sup> connects the current state of affairs with the emergence of food as a commodity for speculative transactions by large be borne in mind: that there is enough food to feed the global population despite the spectre of food insecurity. As Mahatma Gandhi said: enough for everyone's needs but not enough for everyone's greed, especially given the current population trend that indicates growing numbers till 2050, when population and, hopefully, demand will stabilise.

#### Eliminating emergency reserves

Almost all cultures have stored stocks of a grain harvest since times immemorial for the rainy day. Storing processes evolved around the best scientific practices of the times. Things started changing with the post World War II General Agreement on Tariffs and Trade (GATT) to push free trade among major industrial nations, especially the European Community. Agriculture was, however,



<sup>&</sup>lt;sup>1</sup> http://www.financialsense.com/contributors/william-engdahl/2011/06/29/getting-used-to-life-without-food-part-1

<sup>&</sup>lt;sup>2</sup> F. William Engdahl has written on issues of energy, politics and economics for more than 30 years, beginning with the first oil shock in the early 1970s. He has contributed regularly to a number of publications, including Japan's Nihon Keizai Shimbun, Foresight magazine, Grant's Investor.com, European Banker and Business Banker International. He has also spoken at numerous international conferences on geopolitical, economic and energy subjects, and is active as a consulting economist.



kept off the table at the insistence of the Europeans (especially the French), "who regarded the political defense of Europe's Common Agriculture Policy (CAP) and European agriculture protections as non-negotiable." In the 1980s, courtesy Margaret Thatcher and Ronald Reagan, the extremist free market views of Chicago's Milton Friedman gain credence with the leading European power circles and the resistance to the Washington agriculture free trade agenda dissipated. "After more than seven years of intense horse-trading, lobbying and pressure, the European Union finally agreed in 1993 to the GATT Uruguay Round, requiring a major reduction of national agriculture protection. Central to the Uruguay Round deal was agreement on one major change: national grain reserves as a government responsibility were to be ended," Engdahl argues.

The 1993 GATT agreement was to be implemented by the policing powers of the World Trade Organisation that could enforce sanctions against violators as 'free trade' in agriculture products became "an agreed priority of the world's major trading nations!" Thus grain reserves came to be managed by the 'free market,' by private companies led by the U.S. grain cartels, the behemoths of American agribusiness. They argued that they step in with supplies should there ever be a shortage and spare the government the Since 2000, the investment in various commodity index funds (the GSCI being the largest) has risen from some \$13 billion in 2003 to \$317 billion during the oil and grain speculation bubble in 2008. This was documented in a study by Lehman Brothers.

trouble. What they led to to was the opening of "the floodgates to unprecedented grain market shenanigans and manipulations." USA took the lead by passing the 1996 Farm Bill and eliminated its grain reserves and the E.U. followed suit. Save for China and India, few countries cling on to a strategic security policy of nationally held grain reserves. India has been accused of poorly managing its reserves and, while the government has been promising to ensure that food is competently, stored, processed and made accessible to food starved areas, there exists a gaping hole between promise and performance.

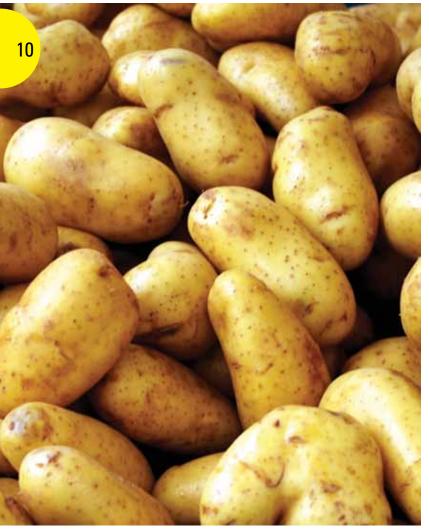
#### **Enter Wall Street**

Where does Wall Street fit into this developing drama? With the grain reserves gone in the USA, E.U. and major OECD countries, it was time to do away with the agricultural commodity derivatives regulation and permit speculative manipulations. "Under the Clinton Treasury (1999-2000) the elimination of grain reserves was formalised by

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the Commodity Futures Trading Commission (CFTC) — the government body charged with supervising derivatives trade in exchanges such as the Chicago Board of Trade or NYMEX — and in legislation drafted by Tim Geithner and Larry Summers at Treasury." Henry Kissinger, former Secretary of State, worked with the Department of Agriculture and major U.S. grain trading companies, to achieve a 200 per cent jump in grain price, triggered off by the USA signing, just then, a three-year contract with the Soviet Union that had a failed harvest. There were global crop failures around that time and the US had no hesitation to "sell the entire U.S. grain cupboard to an ostensible Cold War opponent!"

Expectedly, an explosive price rise followed and the American press called it the Great Grain Robbery, with Kissinger even arranging for much of the cost of shipping U.S. grain to the Soviets to be paid by American taxpayers. Alongside began a 20year process whereby global grain markets would be transformed into "venues for controlling essential



human and animal nutrition by manipulating grain prices regardless of supply" and the US would gain control of world grain markets and prices. Thanks to the 1980's advent of financial commodity index trading and other derivatives, the stage for set for the take over. "In 1999, at the urging of major Wall Street banks such as Goldman Sachs, JP Morgan, Chase Manhattan and Citibank, the Clinton Administration drafted a statute that would fundamentally alter grain-trading history. It was called the Commodity Futures Modernisation Act and was made law in 2000." First, the CFTC proposed to deregulate trading in derivatives between major banks or financial institutions, including derivatives of grain and other agricultural commodities.

In essence, the deregulation virtually did away with government supervision of derivatives trading and cleared the way for derivatives games that led to the 2007 financial collapse. "It also formed the deregulation free-for-all that is behind much of the recent explosion in grain prices." Earlier, in 1991, Goldman Sachs had rolled out its own commodity index, which eventually became the global benchmark for derivatives trading of all commodities, including food and oil. The Goldman Sachs Commodity Index or GSCI was a new derivative that tracked the prices of some 24 commodities; from corn to hogs to coffee to wheat to precious metals and energy. From the Wall Street perspective, the brilliant idea "let speculators gamble on the future price of an entire range of raw materials in one step, a kind of Wall Street version of a 'one-step' gambling mall."

The CFTC deregulation of commodity trading in 1999 positioned Goldman Sachs for substantial benefits and bankers, hedge funds and other speculators could take huge positions or bets on the future grain price with no need to take delivery of actual wheat or corn at the end. "The price of grain was now run by the new masters of grain supplies – from Wall Street to London and beyond – who traded grain futures and options in Chicago, Minneapolis, Kansas City. No longer was future price a form of hedging limited to knowledgeable active participants in the grain industry, whether farmers or millers or large grain end-users – the individual traders who

During the speculation-driven grain price explosion in 2008, more than a quarter billion people became what the U.N. terms as 'food insecure'.

Photo: Jonathan Ruchti

had relied on futures contracts for more than a century to insulate themselves from risks of harvest failure or disasters."

Established as a new speculative field for anyone willing to risk investors' capital (including high-risk offshore hedge funds) grain joined the company of oil that had been almost decoupled from everyday supply and demand in the short term with prices manipulated, even if for for brief periods, through rumors. These speculators neither produced nor took delivery of the corn or wheat they gambled with - possibly took delivery of 10 tons of hard red winter wheat and stored it - but what they introduced was a "complex new form of arbitrage where the only rule was to buy low and sell high. Derivative instruments and U.S. Government laissez faire regulatory negligence allowed the players' potential profits from the game to be leveraged often manifold."

More interesting was the Goldman Sachs' GSCI that was structured so that investors could only buy the contract. The industry calls it "long only" and no one could bet on a fall in grain prices with it. "You only stood to profit from an ever-

The FAO calculates that food-deficit countries will be forced to spend fully 30 per cent more on importing food, valued at \$1.3 trillion. Three decades ago, that international market was tiny; today it is overwhelmingly dominated by a small handful of U.S. agribusiness giants.

by Olivier de Schutter, a U. N. Special Rapporteur on the Right to Food: "a significant portion of the increases in price and volatility of essential food commodities can only be explained by the emergence of a speculative bubble." The good news was that the money made out of commodities offset some of the losses on home mortgages! With the dot.com stock bubble in 2000, as Wall Street and other major financial players began seeking alternatives, commodities and high-risk derivatives based on baskets of commodities became a major speculative investment theme for the first time.

Between 2003 and 2008, the investment in various commodity index funds (the GSCI being the largest) has risen from some \$13 billion to \$317 billion during the oil and grain speculation bubble

# Established as a new speculative field for anyone willing to risk investors' capital (including high-risk offshore hedge funds) grain joined the company of oil

rising grain price and that happened as ever more innocent investors were suckered into high-risk commodity speculation creating a kind-of selffulfilling prophesy." That long-only feature served to encourage bank clients to leave their money with the bank or fund for the long term and give the banks a free hand with client's money and secure potential windfall profits. The losses would be borne by the clients. "The fatal flaw was that the GSCI structure did not allow 'short selling' that would force prices down in times of grain surplus. Investors were lured into a system that required them to buy and keep buying once grain prices rose for whatever reason."

Barclays, Deutsche Bank, Pimco, JP Morgan Chase, AIG, Bear Stearns and Lehman Brothers entered with their own commodity index funds as high-risk commodity investing (including grain and agri produce) became a financial instrument for the ordinary individual who could hardly have realised the import of his investment. The grain price bubble of 2007-2008 was put in perspective in 2008 and commodity index funds have been fed by supplies as food prices have shot through the roof. Between May 2010 and May 2011, wheat prices increased by another 85 per cent as food deficit soars. The FAO calculates that food-deficit countries will be forced to spend fully 30 per cent more on importing food, valued at \$1.3 trillion. Three decades ago that international market was tiny; today it is overwhelmingly dominated by a small handful of U.S. agribusiness giants.

"Importing food is today the rule rather than the exception as cheap, globalised agribusiness products, often under IMF pressure, are being forced on to populations across the developing world, including formerly self-sufficient food-producing societies now rendered dependant on imported food. This is done in the name of 'free trade' or what is often called 'market-oriented agriculture.' Left unsaid is that the so-called 'market' is colossally inefficient and unhealthy, literally and financially. Imported food dependency is artificially created by huge multinationals. The cheap agribusiness imports





often undercut the prices of locally grown crops, driving millions from their land into overcrowded cities in desperate search of jobs." As 'paper wheat' (derivatives) controls the price of real wheat, large banking and hedge fund speculators outnumber bona-fide agriculture industry hedgers four-to-one.

This marks a 360° turn in the circumstances controlling grain prices for the past centuries. For some 75 years, the CFTC had imposed limits on how much of certain agricultural commodities, including wheat, cotton, soybeans, soybean meal, corn and oats could be traded by non-commercial players who were not part of the food industry. The 'commercial hedgers' - farmers or food processors - could earlier trade unlimited amounts in order to manage their risk. With the advent of pure speculators, matters have changed. The earlier order was meant to prevent manipulation and distortion in relatively small markets but things were changed with the passage of the Summers-Geithner Commodity Modernisation Act of 2000 and the 'Enron Loophole' permitting exemption from

the U.N. terms 'food insecure', or a total of one billion human beings, a new record." This was a clear consequence of USA deregulating grain speculation, with support from the Congress over the past decade or more. By early 2008, upwards of 35 per cent of all U.S. arable land was being planted with corn to be burnt as biofuel under the new Bush Administration incentives. In 2011, the total is more than 40 per cent. Thus, the stage was set for the slightest minor market shock to detonate a massive speculative bubble in grain markets, as was then being done by the use of the same GSCI index games as are played with oil.

### Agribusiness as a long-term strategy

The obscene profits apart, the global food price spike is apparently an integral part of a long-term strategy whose roots go back to the years just after World War Two "when Nelson Rockefeller and his brothers tried to organise the global food chain along the same monopoly model they had used for world oil. Food would henceforth become just

# Commercial hedgers could earlier trade unlimited amounts in order to manage their risk. With the advent of pure speculators, matters have changed

government regulation. If one could play ducks and drakes with energy derivatives, what could be wrong about doing so with food commodities?

"The dam broke in 2006 when Deutsche Bank asked for and was granted CFTC permission to be exempt from all trading limits. The regulatory authorities assured them that there would be no penalties for exceeding the limits. Others followed. For some two billion people in the world who spend more than half of their income on food, the effects have been horrifying. During the speculation-driven grain price explosion in 2008, more than a quarter billion people became what

What biofuels and their pushers, combined with the decisions of governments from Washington to Berlin to Paris and beyond, have accomplished is the elimination of grain security reserves worldwide. This has been vigorously mixed with a cocktail of deregulated free commodity derivatives trading to create the ingredients for the worst potential food crisis in human history.

Photo: Rodrigo Vieira

another commodity like oil or tin or silver whose scarcity and price could ultimately be controlled by a small group of powerful trading insiders," says Engdahl. The Rockefeller brothers were expanding their global business reach from oil to agriculture in the developing world through their technology-driven Green Revolution scheme after the war. They were also financing a little-noticed project at Harvard University. The project would form the infrastructure for their plan to globalise world food production under the central control of a handful of private corporations, who named it 'agribusiness'.

Once the David Rockefeller-backed Presidency of Jimmy Carter in the late 1970s came about, U.S. multinational business was "able to begin the rollback of decades of carefully constructed government regulations of health, food safety and consumer protection laws, and open the doors to a new wave of vertical integration of agriculture. The vertical integration process was sold to unaware citizens under the banner of 'economic efficiency' and 'economy of scale'." All this was driven with the propaganda backing in mainstream media that



government encroachment into the daily lives of its citizens had to be cut back and that the answer lay in 'deregulation'. In effect, it meant transfer of regulation from the government to private coteries. In agriculture, the big four grain cartels gained domination of the world's grain markets from the 1970s and were ably supported by big Wall Street derivative players. By end 2007, trading in food derivatives was fully deregulated and the USA's grain reserves had gone. There was nothing to prevent the food price rises.

#### The final assault

Then came the beautiful concept of environmental stewardship and as the USA was trying to pick itself up after the financial meltdown. There was the George Bush year 2007, State of the Union Address where he introduced the '20 in 10' concept for cutting America's gasoline use by 20 per cent by 2010 to bring down the country's dependence on imported oil and, of course, to cut greenhouse gas emissions. It was a good idea to sell for taxpayers would not subsidise ethanol corn instead of feed corn and, in fact, cut their own pockets by getting the price of everyday food to shoot up. Farmers and big agribusiness giants got subsidies to grow corn for fuel instead of food and, even today, ethanol producers in the USA get a subsidy of 51 cents per gallon of ethanol. The subsidy is paid to the With the dot.com stock bubble in 2000, as Wall Street and other major financial players began seeking alternatives, commodities and high-risk derivatives based on baskets of commodities became a major speculative investment theme for the first time.

blender, usually an oil company, that blended it with gasoline for sale. "In the 2011 harvest year, an estimated 40 per cent of all corn acreage in the United States is expected to be grown for biofuel".

It was too good an idea for E.U. to ignore and Brussels came up with its "10 in 20" for 10 per cent of all road fuel in the E.U. to be biofuel by 2020, ignoring its own reports on the impact of such subsidisation of biofuels. This January, the Institute for European Environment Policy (IEEP), an independent body, issued a report on the role of bioenergy in E.U. saying that "More than half of the renewable energy which E.U. Member States expect to consume annually by 2020 will consist of bioenergy, e.g. biomass, bioliquids and biofuels." It worked out the required acreage for the massive increase of biofuels by 2020 to between an additional 4.1 million hectares and 6.9 million hectares in the European Union. What biofuels and their pushers, combined with the decisions of governments from Washington to Berlin to Paris

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and beyond, have accomplished is the elimination of grain security reserves worldwide. This has been vigorously mixed with a cocktail of deregulated free commodity derivatives trading to create the ingredients for the worst potential food crisis in human history.

Where does that leave India? The use of food as a lever in international politics/relations is hardly new. Not only did the USA profit from it, it has used food as an instrument to drive weaker economies away from the Soviet Union. Former U.S. President, Lyndon Johnson, repeatedly interrupted food aid to India, during the terrible famine of 1965-66, in retaliation against New Delhi's criticisms of the U.S. war in Vietnam. In 1974, as a million people in Bangladesh perished in a famine, the U.S. cut off food aid because Bangladesh sold jute to Cuba. In 1982, when famine struck Ethiopia, the U.S. held up relief

In 1943, the Rockefeller Foundation established the precursor to the International Maize and Wheat Improvement Centre, CIMMYT, to assist the poor farmers of Mexico. Dr Norman Borlaug's leading research achievement was to hasten the perfection of the dwarf spring wheat. Once Rockefeller's Mexican programme was producing high-yield dwarf wheat for Mexico, Dr Borlaug began to argue that India and other nations should switch to cereal crops. The proposition was controversial then and remains so today, some environmental commentators asserting that farmers in the developing world should grow indigenous crops (lentils in India, cassava in Africa) rather than the grains favoured in the West. Dr Borlaug's argument was simply that since no one had yet perfected high-yield strains of indigenous plants (high-yield cassava has only recently been available), CIMMYT wheat would produce the most food calories for the developing world. He particularly favoured wheat because it grows in nearly all environments and requires relatively little pesticide, having an innate resistance to insects.

In 1963, the Rockefeller Foundation sent Dr Borlaug to Pakistan and India, which were then descending into famine. He failed in his initial efforts to persuade the parastatal seed and grain monopolies that those countries had established after independence to switch to high-yield crop assistance because Addis Ababa was a Soviet ally. Washington had turned starvation into a routine instrument of foreign policy.

Based on Indian experience of food shortages and world food aid, it is time that Indian policy makers were cautioned against the machinations of the global food powers and they learnt to protect Indian interests through focused investing in agriculture research and development and agriculture infrastructure to make farming a profitable enterprise. It needs to be borne in mind that even large and appropriate investments in R&D will start yielding results in after a decade and a half and the country would need different breakthroughs for different agroclimatic zones. Meanwhile, it is time for policy-makers to read the writing on the wall because there is no insecurity more damning that food insecurity afflicting three quarters of a billion people.

strains. By 1965, famine on the subcontinent was so bad that governments made a commitment to dwarf wheat. Borlaug arranged for a convoy of 35 trucks to carry high-yield seeds from CIMMYT to a Los Angeles dock for shipment. The convoy was held up by the Mexican police, blocked by U.S. border agents attempting to enforce a ban on seed importation and then stopped by the National Guard when the Watts riot prevented access to the L.A. Harbor. Finally, the seed ship sailed. Dr Borlaug says: "I went to bed thinking the problem was at last solved and woke up to the news that war had broken out between India and Pakistan."

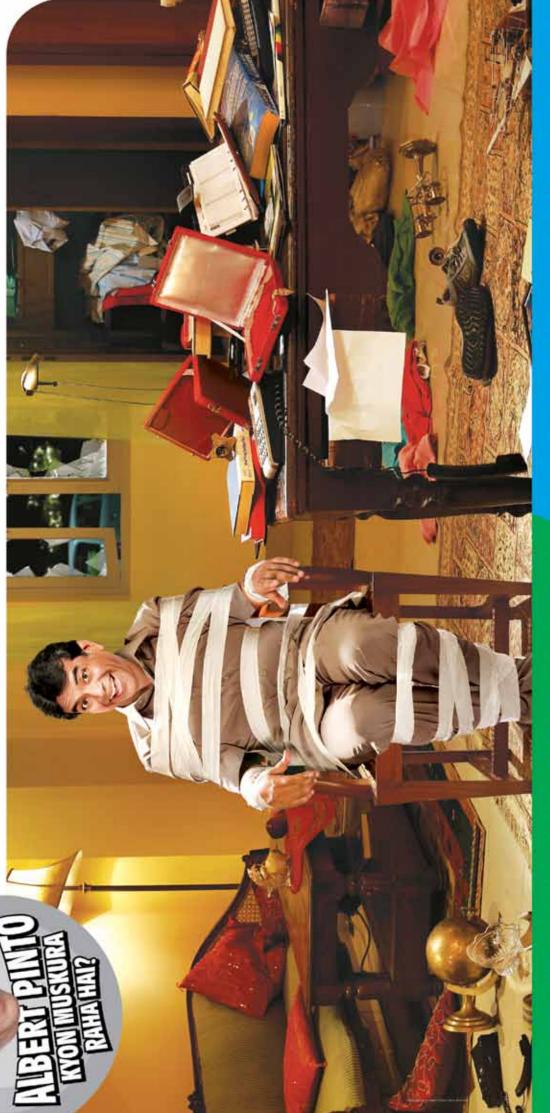
By 1968, Pakistan was self-sufficient in wheat production. India required only a few years longer. Paul Ehrlich had written in The Population Bomb (1968) that it was "a fantasy" that India would "ever" feed itself. By 1974, India was self-sufficient in the production of all cereals. Pakistan progressed from harvesting 3.4 million tons of wheat annually when Dr Borlaug arrived to around 18 million today, India from 11 million tons to 60 million. In both nations food production since the 1960s has increased faster than the rate of population growth. Briefly in the mid-1980s India even entered the world export market for grains.

Excepted and adapted from *The Man Who Defused the 'Population Bomb'*; September 16, 2009, Gregg Easterbrook; *Wall Street Journal* 

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# Messing Around with AGRI MARKETING





id someone say that this is the 'age' of marketing? Did someone point out that agriculture is the most important space in the Indian economy and the countryside home to around two thirds of the Indian population? Did someone note that despite all its inefficiencies the farm sector accounts for around 15-16 per cent of India's gross domestic product? Does anyone want to know why, despite India's top agenda being inclusive growth, a humungous number of its farming community is desperately poor and often because there is no fair return on his produce? So why is 'marketing', in which management discipline India has some of the most outstanding minds, in the agriculture space so dismal? Why is it that the country is still trying to get a fix on what its agriculture marketing norms should be and how it can implement them across the land? Questions, questions...

It is not Farmers' Forum case that it has all the answers. It is the purpose of the issue to force stakeholder attention on this crucial facet of the farming space because given the technology available in the country and the little islands where it has been applied, effecting agriculture marketing can rejuvenate the farming landscape and help keep prices on hold. There are numerous instances in India and in the world in which effective use of opportunities and technologies have created unprecedented opportunities for the farmer, helping him evolve into an agribusiness entrepreneur. Whatever be the deal, it is important that the farmer-seller have an idea about what the prevailing prices are and for the system to help him to hold on to his produce so that he can realise the best possible price instead of intermediaries down the line profiting from better prices.



Photo: Fred Fokkelman

# There are numerous instances of effective use of opportunities and technologies creating opportunities for the farmer, helping him evolve into an agribusiness entrepreneur

There is also a very important case to be made for the horticulture sector that is amongst the most productive silos of the Indian economy despite the lack of attention and infrastructure. It is not that nothing is happening in the space; things are happening but amidst a confused haze with no one apparently in control over the macro picture. On the one hand, there are production issues, which are not the focus of this issue; on the other is the marketing aspect. Experts point out that well-functioning agricultural markets have a tremendous beneficial impact on all stakeholders vis-à-vis reducing uncertainties along the supply chain on the one hand and enhancing food security for the smaller stakeholders in particular, on the other.

What a well organised marketing system would need – shorn of bureaucratic jargon – would be institutions and services to first disemminate information down the line; second, establish grades and standards (around quality and





weights for starters); three, invest the process with transparency; four, have systems to manage risks; five, have effective monitoring to enforce contracts; six, especially in the Indian context, to de-layer Indian agriculture so that the interface between producer and consumer becomes a little less infiltrated by vested interests; seven, institute a system of formal credit that would reach the farthest corner of the country to do away with the need for intermediaries.

Yet consider the situation in the Indian agrimarketing space. In his lead article in our cover story, 'Agri-marketing: dark alley; no revolution', Naresh Minocha explains the tangle at the policy making level with no inter-ministerial forum to periodically guide and monitor the integrated development of different components of marketing. "The central government functions through 35 groups of ministers, 14 empowered groups of ministers and 10 cabinet committees but there is no panel to provide political guidance to transform agricultural marketing into a potent weapon against inflation, as an economic growth multiplier and as an employment generator." Yet, the employment potential of agricultural marketing is perhaps bigger than the mobile telephone services industry, which is often showcased as an example of economic reforms.

If this represents a loss of opportunity, there is worse news to come from the horticulture front. The National Horticulture Mission estimates post-harvest loss of 30 per cent of horticultural

# COVER STORY



produce. Minocha refers to an NHM presentation to its general council in February 2011, when it pointed out that the country's 5,386 cold storages have a capacity to handle only 10 per cent of India's annual horticultural produce of 226.87 million tonnes. Only two per cent of horticulture produce is processed today!

With a policy and infrastructure level mess of this kind, it is small surprise that seasonal and regional price swings continue to be the norm across the country. Supply-side glitches always stoke the fires of food inflation. The Indira Gandhi Institute of Development Research talks of an imperfect transmission of prices from farmgate to retail and has mooted comprehensive research aimed at improving understanding of farm output, agricultural markets and the price formation, Minocha says.

There is also the emerging phenomenon of foreign direct investment visiting the agriculture space. P. Muralidhar Rao, in his article, 'Retail reality: the futility of FDI', dismisses it as bizarre. "The UPA has now come up with the bizarre proposition that inviting foreign players and capital into the retail trade is the panacea for all our inflationary ills. This is either a bankruptcy of ideas and an abdication of its primary responsibility of managing the economy for the benefit of all or is motivated by vested interests." His contention is that once FDIbacked players are allowed to operate, over the years, consolidation of the market in the hands of a few will become reality. These multinationals will then dictate terms to both consumers and small producers, including farmers. Without taking sides, it is important to state that this point needs to be discussed seriously at the policymaking level and the contentions of the various sides be put in public domain.

In a special report, *Farmer's Forum* also revisits the storage issue around Indian agriculture. The article: 'Storage concerns: mounting stocks exacerbate worries' focuses on India's stockpile of grains. While the country has finally allowed exports of a million tonnes of non-basmati rice and an unspecified amount of wheat, easing curbs clamped down on overseas sales of the staples since 2007, these permissions – aimed at trimming the country's bulging stocks – have failed to create ripples in the world market because these exports were too late and too little. Analysts are not surprised by the lukewarm response of the

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# The share of revenue to the states from fruit and vegetables from total mandi tax collections is a meagre Rs 700 crore for the country

international market, which does not see India as a dependable, long-term supplier of commodities. The point is that despite being saddled with unmanageable grain stocks, given more than five consecutive bumper harvests, the government kept dithering on allowing grain exports. The delay will hit exports, especially of wheat. Indian wheat is overpriced by \$50 a tonne, thanks to Russia's entry into the export market. As a result, government warehouses will remain chocka-block. Overflowing grain bins will force the government to store a large quantity in the open, exposing more rice and wheat to rot and decay in a country with 450 million poor. Also, higher output targets will exacerbate storage concerns.

Where does this mess fit into the globalisation and liberalisation game that India is playing? The high volatility of food prices in India is caused by a lack of Indian integration with international markets. Price volatility is inversely proportional to the market size. In a larger market there are more players and, thus, more competition and smaller chances of cartels succeeding. Besides, there is more opportunity to exercise options based on market intelligence. Therefore, in the world market that is integrated and larger, volatility is much less compared to the smaller market of Indian sabzi mandis.

It should also be noted that the share of revenue to the states (fruit and vegetables) from mandi tax collection is meagre at seven per cent, amounting to only Rs 700 crore for the whole country. States are foregoing their rightful share of revenue from the mandi due to lack of transparency and under-reporting of sales in the prevailing system. The central government can remove fruit and vegetables from the preview of all taxes in the country and, if required, compensate the states for their loss of revenue.

Proceeding from a fundamental misunder-

# COVER STORY





standing about agriculture, the fate of this sector seems to enter into even stranger terrain. In the globalised world that India exists in, it is easier to import food into the country than to transport it across the nation. One world yes; but one nation? This is possibly why the country cannot have one market. What farm produce must, therefore, endure is walls at every state border where it must wait and be taxed before it can move on. No one has questioned why one can easily buy Australian apples in Bengal but not Kashmiri apples. No one asks why all stakeholders and aggregators cannot be allowed to buy, store, transport grain, fruit and vegetables without licensing and innumerable regulations.

What happens if one abolishes the APMC Act, as Bihar and Kerala have done without any dislocation in their farm marketing systems whatsoever? Why has no one insisted on the removal of inter-state walls that are no longer required as India is one country. Why is it that information technology that is becoming India's primary instrument to bring about an inclusive society is allowed to bypass agricultural marketing and people are unable to buy and sell freely on the net?

There is yet another concern. India is a land of marginal and small land-owners and there is

no way to increase the size of the land holdings. The only available option is to greatly increase the productive capacities of small holders. Horticulture sector is more profitable and labour intensive. Thus it is perfect for small holders, as the entire family can together work on the land using the manpower available at home as an advantage. This is an Indian reality and cannot always be appreciated by international solution providers that are increasingly advising the country.

Horticulture involves higher capital costs. Covering just one per cent of India's cultivable land under protected cultivation would require around Rs 30,000 crore. However, even this high cost will be far more economical and productive than other interventions currently being planned by the government like the National Food Security Act.

It would be wiser to invest in developing markets for small farmers to help them sell their agriculture produce and make them self-sufficient rather than encourage them to be dependent on government dole. After all, investment in infrastructure is an investment in the future while money spent on subsidies is just an expenditure. Why is it that a developing country like India, cash-starved though it is, always opts for waste of money rather than productive investments? •

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# **AGRI MARKETING** Dark Alley; No Revolution

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Naresh Minocha

# COVER Story

ndia's trudge from green revolution to evergreen revolution requires an appropriate blend of technological innovations and multi-faceted market initiatives. While sustainable farming is often extolled as the key to evergreen revolution, agricultural marketing continues to cry for attention, burdened as it is with innumerable regulations. It has been developed haphazardly and the absence of a holistic approach makes the situation akin to the parable of five blind men describing an elephant on the basis of their touch and feel experience. The ministries at the Centre and the states, companies and other stakeholders grapple with one or a few aspects of marketing based on their understanding, interest or span of control.

An obvious instance in point is the loud thinking by a few ministries on allowing foreign direct investment (FDI) in organised multi-product or multi-brand retail (MBR) with stipulations that the concerned companies or joint ventures invest in agricultural supply chain including cold storages and contract farming. The Cabinet Secretariatconstituted inter-ministerial group (IMG) on inflation has, for instance, made a case for allowing FDI in MBR at the earliest. The IMG's recent position paper on inflation says: "While this policy alone may not achieve all the results, it can be an important step in serving the interests of both the consumers and farmers in the long run. This could provide remunerative prices for farmers and fair prices for consumers especially during the peak marketing season."

Instead of such top-down approaches to marketing reforms, it may make sense to focus on a bottom-up approach, the first priority being all-weather rural roads and primary agricultural markets or to stimulate, methodologically, the growth of markets from both the top and the bottom. Proponents of an integrated package of agricultural marketing reforms are hard to come by and few discourses on agricultural marketing demonstrate the realisation that farmers are themselves the consumers of agri-inputs as well as consumer goods.

The farmers have to be provided with total agricultural solutions instead of being sold seeds, fertilisers or pesticides. Marketing of customized farm solutions is a sunrise area for companies and an area of darkness for the government. A few companies aspire to market all essential items to farmers through their chain of retail outlets.



One has even ventured into English-teaching for rural people. The marketing policy and regulatory turf, however, remains as fragmented and as nebulous as ever.

Take a look at the government at the Centre.

- The subject of rural roads, which is the first building block of agricultural marketing infrastructure, comes under the Ministry of Rural Development.
- Agricultural markets falls under the purview of Ministry of Agriculture.
- Warehousing is under the Ministry of Consumer Affairs, Food and Public Distribution, which also controls food procurement and public distribution, forward trading, essential commodities and several other elements of marketing.



In a research proposal submitted to the Agriculture Ministry in April this year, the IGIDR says that price changes are not being transmitted fully. There is a lag in price adjustments between respective stages in the marketing chain. There is asymmetric price reaction to positive and negative changes. An insight into these areas can help policy-makers make-course correction in different elements of agricultural marketing. Rickety marketing networks rob the farmers of the opportunity to fetch remunerative prices for perishables and the consumers end up paying very high prices.

or indirect say in marketing and, for instance, commissioned two studies on food storages, which could have been handled just as well by the Department of Food in October 2010.

The ministries have their own appendages such as the Cotton Advisory Board, Tobacco Board, Rubber Board, Coffee Board and Insecticides Registration Committee that have some role to play in the marketing arena. All such entities have hardly ever coordinated and synergised their policies and schemes. The Textiles Ministry, for instance, supports the packaging of all foodgrain and sugar in jute bags under Jute Packaging Materials (Compulsory Use in Packing Commodities) Act, overlooking the fact that such bags are prone to grain and sugar losses. The ministry thus acts against the objective of the Food Ministry to reduce food wastages during the marketing and distribution phase.

The government has not created any inter-

The government has not created any inter-ministerial forum that can periodically guide and monitor the integrated development of different components of marketing

- The marketing of jute and cotton fall under the Textiles Ministry.
- Marketing of plantation crops is handled by the Ministry of Commerce and Industry, which also regulates agricultural imports and exports as a part of foreign trade policy.
- Horticulture comes under the ambit of the Agriculture Ministry, while horticulture-based industries are regulated by the Ministry of Food Processing Industries.
- The Planning Commission also has a direct

ministerial forum that can periodically guide and monitor the integrated development of different components of marketing. The central government functions through 35 groups of ministers (GOMs), 14 empowered groups of ministers (EGOMs) and 10 cabinet committees but there is no panel to provide political guidance to transform agricultural marketing into a potent weapon against inflation, as an economic growth multiplier and as an employment generator. The employment potential of agricultural marketing is perhaps bigger than the



mobile telephone services industry, which is often showcased as an example of economic reforms.

The disjointed initiatives of different stakeholders have thus failed to generate the requisite momentum for a marketing revolution. The governments have launched policies, projects and schemes separately at different points of time without building synergies. Moreover, all such investments are too short to make up for the years of neglect. It is, thus, hardly surprising to learn that the missing link in agriculture growth is the wellknit, comprehensive agricultural marketing policy.

The brunt of the famished state of agricultural marketing is borne by the country in terms of enormous wastages of farm produce. The National Horticulture Mission (NHM) estimates post-harvest loss of 30 per cent of horticultural produce. In a presentation to its general council in February 2011, it pointed out that the country's cold storage capacity in its 5,386 units is only10 per cent of the horticultural produce of 226.87 million tonnes in a

year. Only two per cent of horticulture produce is processed at present.

Seasonal and regional price swings continue to be the norm across the country. Supply-side glitches always stoke the fires of food inflation. As noted by the Indira Gandhi Institute of Development Research, there is an imperfect transmission of prices from farmgate to retail. It has thus mooted comprehensive research aimed at improving understanding of farm output, agricultural markets and price formation.

In a research proposal submitted to the Agriculture Ministry in April this year, the Indira Gandhi Institute of Development Research says that price changes are not being transmitted fully. There is a lag in price adjustments between respective stages in the marketing chain. There is asymmetric price reaction to positive and negative changes. An insight into these areas can help policymakers make course correction in different elements of agricultural marketing. Rickety marketing networks rob the

# The disjointed initiatives of different stakeholders have failed to generate the requisite momentum for a marketing revolution



Photo: Senthilkumar Aanand

farmers of the opportunity to fetch remunerative prices for perishables and the consumers end up paying very high prices.

The Steering Committee on Agriculture (SCA) for the 11th Five Year Plan said in its report submitted in April 2007: "Agricultural markets are still underdeveloped and in several cases farmers do not receive remunerative prices." There are no arrangements for procurement at support prices for quite a few crops in several parts of the country. Thus, the minimum support price in such cases is only notional and not effective, it stated. The SCA did not hesitate to call a spade a spade and further noted: "Market and post-harvest infrastructure has not kept pace with the growth of output over time. Agricultural markets are crowded, dominated by smallscale operators who can hardly think of improving operational efficiency and scale advantage. The mere presence of a large number of market functionaries does not promote competition; rather it increases price spread. There are also reports of collusion among middlemen and malfunctioning of regulated markets in ensuring fair and proper grading, weighing and auction procedures.



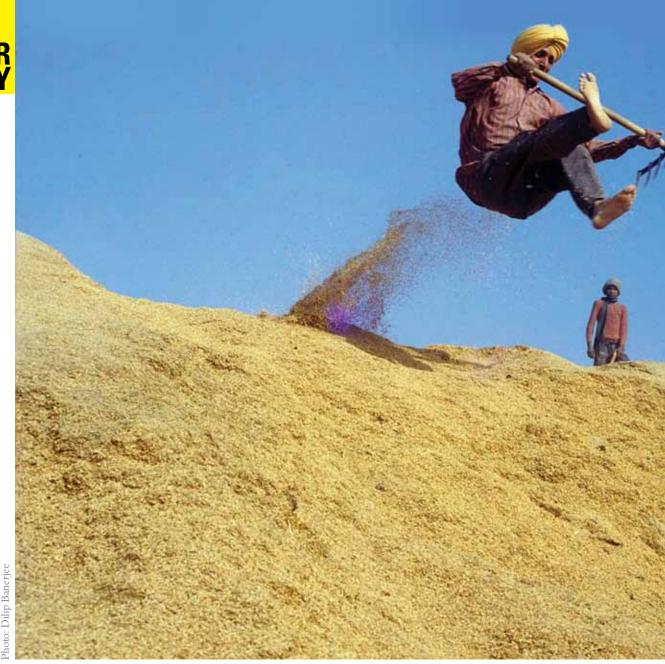
"Post-harvest infrastructure in handling, transport, processing and ports remained awfully poor. The potential of the private sector to contribute to agriculture growth and benefit farmers through participation in marketing and processing remained largely unrealised because of various types of restrictions and regulations. Reforms to improve and address this situation at the state level are slow and reluctant." The penetration and expanse of agricultural markets, especially the primary markets, has to be improved substantially. The average area served by a rural market is 116 square kilometres (sq km) as against 80 sq km recommended by the National Farmers Commission.

What makes the marketing more challenging is that is that it is a State subject under the Indian Constitution. The Centre can thus only play the role of advisor, financier and lawmaker and enforcer in certain areas such as regulating essential commodities, warehouses and forward trading. Last year, the Centre constituted a Committee of State Ministers incharge of agriculture marketing to expedite market reforms that hinge on fullThere is no political guidance around transforming agricultural marketing into a potent weapon against inflation, as an economic growth multiplier and as an employment generator. The employment potential of agricultural marketing is perhaps bigger than the mobile telephone services industry, which is often showcased as an example of economic reforms.

scale adoption and enforcement of the model Agricultural Produce Marketing Committee (APMC) Act, which was circulated by the Centre in September 2003. This model legislation forwarded to the states in September 2003 has become outdated but has not yet been embraced lock stock and barrel by all states.

The IMG has recommended that "the government review and revise the model Act keeping in mind the need to keep inflationary pressures down." Certain states are keen to secure central funding without even talking of reforms. However, the Union Agriculture Ministry said





in a letter (February 25, 2010) to the states that "the operational guidelines for NHM (National Horticulture Mission) stipulate that assistance for creation of market infrastructure will be linked to market reforms. But it is observed that most of the project proposals under this component are for providing assistance to the projects promoted by state government agencies including APMCs which levy cess on such products."

With this missive, the Centre decided that it would henceforth release funds only to those states, which at least waive market fees on horticultural commodities and permit direct marketing by farmers. It is not yet known whether the ministerial committee is working on a new agri-marketing law and other reform initiatives. The government has not put in public domain the work done by this committee even though agricultural marketing affects each and every citizen.

The working group on agricultural marketing

(WGAM) for the 11th Plan, in its report submitted in January 2007, called for shifting of the subject 'agricultural marketing' from the list of State subjects to the Concurrent List for speeding up the progress of market reforms and evolving a unified national market. This requires constitutional amendment, which is very difficult to realise in the present era of fractured mandates and the resulting coalition politics.

It also mooted the dovetailing of domestic marketing and price policies with trade policies by redefining the terms of reference of the Commission for Agricultural Costs and Prices (CACP) to include trade policy related matters, including import duties on agricultural products. The WGAM also suggested that the government avoid knee-jerk decisions in marketing and trade related matters like decisions on wheat imports/ exports, ban on exports of pulses, re-imposition of food stocking limits and such other actions.



The assets include rural roads, markets ranging from village mandis to the state of the agricultural marketing terminals, post-harvest facilities varying from grain dryers to food irradiation units, storages, food processing units, marketing innovations such as warehousing receipts, futures and options, standardisation, grading and branding of farm produce under quality labels such as Agmark, market information especially the real-time data available through SMS on mobile phones and internet-empowered kiosks or computers, timely availability of requisite inputs such as fertilizers and pesticides.

The market enablers include macro policies and initiatives. These include:

- Timely announcement of support prices for major crops such as wheat and paddy
- *Ad hoc* market interventions for other crops such as apples and onions
- Finance of all sorts such as cess on high speed diesel, half of which is used for building rural roads
- Soft loans from multilateral institutions such as Asian Development Bank
- Post-harvest insurance framework
- The agricultural market reforms-linked central subsidies to the states
- Centre-state interface on marketing reforms
- The centre's strategy to attract private capital through public private partnership
- State's contract farming regulations

# There is nothing available in the public domain to suggest that the government is considering a bold revamp of policies

There is nothing available in the public domain to suggest that the government is considering such bold revamp of policies even though successive governments have tried to address specific issues in the marketing arena through policy and regulatory interventions at different points of time, they have never thought of prioritising the initiatives and preparing an all-inclusive roadmap for reforming and revolutionizing agricultural marketing. The elements of agricultural marketing are too many. These can be broadly grouped into two categories – assets, both tangible and intangible and market enablers.

- Tariff on agricultural imports and exports
- Frequent changes in foreign trade policy
- Domestic marketing-exports matrix
- More than two dozen laws that directly or indirectly impact marketing of both agri-inputs and farm produce.

It is time to identify enablers that need to be revised or weeded out. It is time to prepare a template of all elements, establish their linkages and re-work reforms.

On the agricultural inputs side, the situation is equally pathetic. Hardly any crop season passes without instances of regional shortages of certain fertilisers. There have been instances of shortages



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# COVER STORY





The author, a senior journalist, specialising in chemicals, fertilisers, energy and telecommunications is Consulting Editor, taxindiaonline. com and Associate Editor, gfiles india triggering riots. States often reiterate demand for timely availability of fertilisers in their Kharif or Rabi campaign presentations to the centre.

Many a farmer has to live with sub-standard or spurious inputs especially pesticides and seeds. The states continue to be reluctant to wield the stick against peddlers of non-compliant inputs. In its agenda notes for the two-day National Conference on Agriculture for Kharif Campaign-2011 held in April, the Centre pointed out that that the states launch "very few prosecutions" against alleged violators of fertiliser quality provisions of the Fertiliser Control Order notified under the Essential Commodities Act.

There is a need to revisit marketing, packaging and labeling provisions of Fertiliser Control Order as well as similar provisions of relevant pesticide and seed laws to make distribution of farm inputs flexible and efficient. The fertiliser packaging rules, for instance, stipulate packaging of fertilizers in 50 kg bags. In a recent presentation, Coromandel International Limited (CIL) suggested: "Bag specifications should be removed keeping in view the fact that 78 per cent of the farmers own less than two hectare." The CIL has also noted that existing regulations are hindering marketing of balanced nutrient packages such as sale of 5 kg of bentonite sulphur along with a major fertiliser such as urea to remove the soil's sulphur deficiency. The existing rules, however, do not allow marketing 'bag in bag', an initiative conceived to promote use of micro-nutrients and bio-fertilisers along with staple fertilisers that carry primary nutrients. CIL has mooted amendment of the Weights and Measurements Act as well as the Packaging Act to modify penalties for flaws such as smudged minimum retail price (MRPs), faded MRPs and such like. The authorities should consider intent while booking cases, it says.

Given the complexity of the challenge, it may be prudent for the government to create an agricultural marketing regulator at the national level with powers to oversee the working of all segments of the markets. Even if it cannot be empowered, at least it would issue timely advice to different stakeholders, thereby creating some public pressure. It is time to take agricultural marketing out of the dark alley.

# **ROUTE TO FARM EFFICIENCY**

Rural roads are a sure-fire means of reducing the rural-urban divide. They provide means to farmers and other villagers to improve their income, apart from providing other benefits to all, but remain totally neglected even today. Despite significant investments on rural roads by the Union Government since the turn of the century, 277,215 lakh habitations/villages are still without all-weather roads. (See table habitations coverage) and roads are never considered as the first and most important component of agricultural marketing.

Many newly built rural roads are sub-standard. A few exist only on paper. Many more disappear due to floods or due to normal wear and tear. The condition of rural roads speaks volumes about governance deficit. The centre is now trying to cover up this deficit by toying with the idea of bringing rural roads construction under public private partnership.

An official inspection of the rural roads constructed under the Pradhan Mantri Gram Sadak Yojna (PMGSY) indicated that 30 per cent of the sample roads were not maintained. As many as nine per cent of completed roads were found unsatisfactory, according to the minutes of the Performance Review Meeting on PMGSY held under the aegis of the Ministry of Rural Development on 23 December 2010.

Launched in December 2000, the PMGSY marked the watershed in rural roads development. Its objective was to provide road connectivity to 170,000 habitations, each with a population of more than 500 in the plains and more than 250 in the hills. Its secondary objective was to upgrade existing rural roads to all-weather roads.

Under this project, roads are built with 100 per cent central funding and the money comes from 50 per cent of the proceeds of the cess on high speed diesel and as soft loans from Asian Development Bank (ADB), International Development Agency (IDA), Indian banking sector's Rural Infrastructure Development Fund (RIDF) and such others. Rural roads, which are linked to district roads and state highways, secured additional funding by virtue of being one of the six components of the Bharat Nirman programme announced in February 2005.

Prior to the PMGSY, rural roads were built under centrally sponsored schemes such as Jawahar Rozgar Yojna, National Rural Employment Programme and Rural Landless Employment Guarantee Programme. The centre has been allocating funds for rural roads since the start of the 5th Five Year Plan prior to which it was largely left to the states to finance rural roads as it was a state subject under the Constitution.

"As the development of rural roads is a subject of the state list, the Central Government's attention towards rural roads was the least until 1967," says a study of Bharat Nirman's rural roads released by the Planning Commission's Programme Evaluation Organization (PEO) in May 2010. The study, conducted across seven states, showed that farmer's income increased by 17.66 per cent in the sample States collectively. The development of all weather-roads facilitated a shift from traditional farming to horticulture and off-season vegetable cultivation, the study noted.

Like rural roads, rural bridges also bring about notable transformation in farm landscape following the construction of rural bridges as observed by the National Bank for Agriculture and Rural Development in a study published in 2004. Referring to a bridge laid over river Mahanadi in Jagatsinghpur district of Orissa that connected 80 villages and four strategic markets in Orissa, the bridge facilitated farm mechanization, crop diversification and commercialization of agriculture.

The ADB-sponsored studies on the impact of rural roads have also arrived at positive conclusions. As put by an ADB



presentation released in May 2010, rural roads resulted in a 20 per cent increase in visits by farmers to nearby haats (markets) and 13 per cent decrease in incidence of agricultural produce being spoiled or damaged in transit. The IDA, the soft-loan arm of the World Bank, is equally excited about the impact of IDA-financed roads. The roads have not only helped farmers increase their income by better and timely access to markets but also improved their agricultural practices and thus crop yields.

The IDA says: "A study in India found that government spending on rural roads had significant impact on poverty reduction and on productivity growth: for every 1 million rupees spent on rural roads, 163 people were lifted out of poverty."

Such encouraging results should have inspired both the centre and states to provide and maintain rural road connectivity across the entire length and breadth of the country. Rural Roads, coupled with proposed rural broadband project and cellular empowerment, should serve as the launch-pad for the next generation of green revolution.



rime Minister, Dr Manmohan Singh, has moved foreign direct investment in retail to the top of his "must-do" list, vindicating those who alleged that U.S.based multinationals were dictating Indian policy. The Inter-Ministerial Group (IMG) on inflation, in keeping with the Prime Minister's agenda, has recommended FDI in multi-brand retail, ostensibly to bring about efficiency in the farm-to-fork supply chain. Economic advisor, Dr Kaushik Basu, laid it out by saying: "We are taking a clear position on FDI in multi-brand retail....there is a need to....reduce the price gap between farm gate and consumer prices."

The IMG's recommendations are little more than a cut and paste job, lifting from reports trotted out

by hired consultants of Walmart and its kind, the International Monetary Fund and the rest of the U.S. establishment and its ancillaries. Big retail wants in and the UPA government is not just laying out the red carpet but prostrating itself on it.

Having failed abysmally to tame runaway inflation despite repeated assurances from the Prime Minister and the Finance Minister, the UPA has now come up with the bizarre proposition that inviting foreign players and capital into the retail trade is the panacea for all our inflationary ills. This is either a bankruptcy of ideas and an abdication of its primary responsibility of managing the economy for the benefit of all or is motivated by vested interests.

COVER STORY

"We are taking a clear position on FDI in multi-brand retail... there is a need to... reduce the price gap between farm gate and consumer prices" – Dr Kaushik Basu

Retail trade in India is a family-driven, community-centric undertaking. The unorganised retail trade represents the traditional, low-cost and employment-intensive business that includes a wide variety of enterprises like kirana shops, proprietorrun general stores, street-corner paan/beedi shops, convenience stores and pavement vendors selling off their carts or the road. The whole family and the community it is a part of, is engaged in the trade in a defined area, with every member, including the children, participating. It is collective and an unincorporated enterprise formed by communities entirely on the basis of trust generated through relations now increasingly termed as social capital. The IMG, in its eagerness to draw foreign companies into the Indian market, has ignored the critical contribution of the existing retail trade to the Indian economy and society.

This multi-layered retailing from top metros to tiny villages is the most decentralised economic activity in India after agriculture and it constitutes almost 98 per cent of total trade with an estimated 12 million outlets. The organized trade accounts for just two per cent. After agriculture, it is the largest employment provider, providing nearly 40 million livelihoods. By contrast, retail giant Walmart employs only 5 lakh people.

Global retail giants are highly capital intensive and generate fewer jobs. Retail trade in India contributes to over 14 per cent of India's GDP,



while the share of all companies in the BSE 500 index put together is some four per cent! This segment has been growing at an average of over eight per cent per year for the last eight years [1999-00 to 2006-07], second only to the construction trade that grew at some 10 per cent.

If FDI in multi-brand retail is allowed, 12 million small shopkeepers and 40 million hawkers will be adversely affected. Apologists for FDI can argue that it will generate more employment, citing the example of China. There is, however, not a scrap of empirical data to bear this out. The ground realities in India are very different. Currently, India allows 51 per cent FDI in retail for single-brand retailing and 100 per cent FDI is permitted under the automatic route in wholesale cash-and-carry trading, including business-to-business trade and export trading. Also, up to 100 per cent FDI is permitted with prior government approval in the trading of items sourced from the smallscale sector and also for test marketing.

The Standing Committee of Parliament made an in-depth assessment of the subject, after interactions with policymaking bodies, trade and government organisations and trade representatives. Its report, submitted in June 2009, clearly outlined the drawbacks of allowing FDI in retail and also suggested steps to create a level playing field before opening the sector to foreign capital.

Interestingly, it pointed out that companies permitted FDI in single single-brand retailing and cash-and-carry wholesale were not adhering to the regulations and were resorting to multi-brand and consumer retailing through the back door. It may be recalled that the Punjab Excise and Taxation department conducted raids on "Best Price", a joint venture between Bharti and Walmart and found that although licensed to carry out wholesale, it was indulging in retail trade through the issue of membership cards to those who did not have a valid VAT number. This, according to press reports, resulted in big losses to the government in the form of tax.

The UPA has now come up with the bizarre proposition that inviting foreign players and capital into the retail trade is the panacea for all our inflationary ills. This is either a bankruptcy of ideas and an abdication of its primary responsibility of managing the economy for the benefit of all or is motivated by vested interests.





Once FDI-backed players are allowed to operate, over the years, consolidation of the market in the hands of a few will become reality. These multinationals will then dictate terms to both consumers and small producers, including farmers.

- The parliamentary committee further observed that:
- Big retail chains, by offering cheap prices initially, would wipe out competition, thereby destroying small retailers and then they would dictate prices. The same would be the fate of farmers who would be forced to sell produce at cheap rates because of the resultant monopolistic situation.
- A regulatory framework and enforcement mechanism should be put in place to ensure that small retailers are not forced out by unfair means by the big players.
- The government should establish a national retail commission to study the problems facing this sector.
- There should be a retail regulatory authority before this sector is opened up.
- The government should take appropriate steps to provide credit facilities to small retailers to empower them to face the competition.
- A model central trade law should be put in place after consulting the state governments to regulate the sector as a whole.

Tinkering with the existing system without ground-level preparation as suggested by the Standing Committee of Parliament will have a devastating impact on the economy and the employment situation, thereby leading to social unrest. Studies have found that "the agriculture sector in India is already overburdened as it employs nearly 60 per cent of the total workforce, so it cannot absorb any more. The manufacturing sector, which absorbs only 21 per cent of the workforce, cannot accommodate more because there has been no capacity addition to it in recent years, so the services sector is the only alternative and in this sector too, retail is the biggest employment provider."

They are already under heavy stress due to non-availability of capital including working capital from formal banking institutions. Heavy dependence on moneylenders for capital needs is creating a non-level playing field with the big domestic organised retailers.

It is often argued that FDI in retail will attract







The author is National Secretary, BJP and former convenor of the Swadeshi Jagran Manch

## Today, channel costs in India are efficiently-managed by India's resource-conscious retailers, unlike the verticallyintegrated behemoths of the west

investment both at the front-end and the backend, thereby creating a world class supply chain, backed by state-of-the-art warehousing and storage infrastructure. This is a spurious argument. According to the government's own estimate, Rs 7,687 crore is required for the creation of modern storage infrastructure – given the size of the food subsidy bill, this is hardly an unaffordable investment! Certainly not enough to warrant the demise of small retailers and the consequent impact on their families. This leads us to the conclusion that the argument has been advanced purely to legitimise the entry of multinationals in the retail sector.

The argument given in the report that existing retailers could be rehabilitated in the new set-up is ridiculous, as big retail would prefer Englishspeaking personnel. The millions of street hawkers – the rehri, patri, khomcha wallahs as well as the small shopkeepers –will have no place to go if the retail sector is taken over by foreign players.

The Indian retail market, estimated at between

\$400 billion and \$450 billion and growing, is a precious economic asset. Instead of protecting and effectively utilising the same to promote Indian entrepreneurship and leveraging it in future negotiations in the process of emerging as an important player in international politics, the government is putting it up for sale.

Photo: Gavin Mills

The decentralised retail market is best serving billions of consumers and producers, most of whom qualify as "small" in terms of income. Once FDI-backed players are allowed to operate, over the years, consolidation of the market in the hands of a few will become reality. These multinationals will then dictate terms to both consumers and small producers, including farmers. Today, channel costs in India are efficiently-managed by India's resource-conscious retailers, unlike the verticallyintegrated behemoths of the west. The argument that the farmer would be getting a better price for his produce is without any substance whatsoever. The very same argument was given in the context of commodity trading and has proved false.



Realizing the need to bring in high value agribusiness activity into the country, IFFCO, Asia's largest fertilizer company through its SPV IFFCO Kisan SEZ Ltd., has embarked on the development of an Agri-based Special Economic Zone based on the concept of "Agroparks" (AP) in Nellore in the state of Andhra Pradesh. The developer has brought in the expertise and lessons learned by the northwestern European agro sector in innovating metropolitan agriculture by forging strategic consultants with Wageningen University and Research Center, the Netherlands and YES BANK Limited.

•IFFCO Kisan SEZ is a notified Multiproduct Special Economic Zone spread over 1000 hectares located 22 KM North of Nellore, A.P. It comes with many customs duty and sales tax concessions provided by the government of India to promote economic activity in notified Special Economic Zones. The concept of Agropark is based on the principles of sustainable development, i.e.

- Application of principles of industrial ecology, i.e. mutual use of waste and by-products.
- Advantages of scale through industrial production and processing.
- Improvement of farmers position as a preferred supplier.
- · Independence from seasonality and land during the whole year of production cycle
- Significant reduction of costs

Locational Advantages: IKSEZ is at a distance of just 50 Km from Krishnapatnam Sea Port, a new mega port on the east coast, and within a reach of three hours drive from Chennai International airport.

Nellore, the catchment area which is the Heart of Indian Aquaculture, is a strong source of various agricultural produce such as paddy, sugarcane, fruits & vegetables (especially tomato) and is a prime source of supply of poultry products and milk to near by metropolis. Major fruits include mango, citrus, papaya, banana & sappota.

Infrastructure that is being provided: The IFFCO Kisan SEZ comes with a bundle of world class common infrastructure conforming to international standards including internal roads, high quality rain harvest supported water supply, uninterrupted power supply, common operation, maintenance and management of security, logistics, ICT etc. Moreover, the Agropark offers a framework of industrial ecology, managing waste and byproducts thus significantly reducing costs.

 Land at IFFCO Kisan Project site is being offered on long term lease basis for 33 years for potential Entrepreneurs for setting up their units on attractive terms and conditions. For further details contact our website <u>www.iffcokisansez.com</u> or can be obtained from,

#### Head Office :

Indian Farmers Fertiliser Cooperative Limited IFFCO Sadan, C-1, District Centre, Saket Place, Saket, New Delhi-110017 Ph.: +91-11-42592626, 26510001 IFFCO Kisan SEZ Limited 2nd Floor, Srinivasa Towers, Srinagar Colony, Nellore-524003, Andhra Pradesh Ph.: +91-861-2320483,

Project Office:

mail-guptark@iffco.nic.in, raja@iffco.nic.in, dsrmurthy@iffco.nic.in, mlnmurthy@iffco.nic.in

## COVER STORY

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1. OBFES

# STORAGE CONCERNS

Mounting Stocks Exacerbate Worries

A Farmers' Forum Analysis

ndia, sitting on huge stockpiles of grains, has finally allowed exports of a million tonnes of non-basmati rice and an unspecified amount of wheat, easing curbs clamped down on overseas sales of the staples since 2007. The permission for exports, aimed at trimming the country's bulging stocks, failed to create ripples in the world market because these exports were too late and too little. Analysts are not surprised by the lukewarm response of the international market, which does not see India as a dependable, longterm supplier of commodities.

Despite being saddled with unmanageable grain stocks, a result of more than five consecutive bumper harvests, the government kept dithering and prevaricating about allowing grain exports. The delay will hit exports, especially of wheat. Indian wheat is overpriced by \$50 a tonne, thanks to Russia's entry into the export market. As a result, government warehouses will remain chock-a-block. Overflowing grain bins will force the government to store a large quantity in open, exposing more rice and wheat to rot and decay in the country with 450 million poor. Also, higher output targets will exacerbate storage concerns.

In July, Agriculture Secretary, Prabeer Kumar Basu, said that his ministry aimed to produce a record 245 million tonnes of grains in the crop year that began in July. An output of 245 million tonnes in 2011-12 will be a rise of four per cent from the previous year's all-time high harvests of 235.9 million tonnes, adding to already higher stocks. On June 1, stocks at government warehouses surged to a record 65.6 million tonnes - 27.6 million tonnes of rice and 37.8 million tonnes of wheat - surpassing the record of 64.8 million tonnes in 2002 when India had to export around 34 million tonnes of grains at substantially lower prices to avoid damage. Stocks continue to remain high. On July 1, 2011, wheat stocks were 37.1 million tonnes, substantially higher than a target of 17.1 million tonnes, while the rice inventory was at 26.8 million tonnes against a July target of 9.8 million tonnes.

To add to the woes, the agriculture ministry has said the country's farmers produced a record 241.56 million tonnes of grains in the 2010-11 crop year, with wheat harvest at an all-time high of 85.93 million tonnes and rice production estimated at 95.32 million tonnes. Pulses production also bounced back, notching 18.09 million tonnes against 17.29 million tonnes in the previous year.



Ironically, higher output means fresh troubles for the food ministry, which hurriedly called a meeting of state ministers to help boost storage space. Food Minister K. V. Thomas has said Central, state governments and private firms should come together to build new warehouses.

Recognising the need to step up efforts to improve warehousing facilities and to add new godowns, the government set up the Warehouse Development and Regulatory Authority last year. The regulatory body is supposed to spur the process of building modern, scientific warehouses, look into warehousing accreditation, popularise warehouse receipts as negotiable instruments and take up the quality certification of goods. The government has also firmed up plans to create a special purpose vehicle to monitor grain storage and handling. Besides, it will focus on transportation and cold chain infrastructure.

Despite the efforts, the situation is going to get worse in October when the state-run Food Corporation of India, the main grain procurement agency, will have to buy the new season rice from domestic farmers. The idea behind the permission for exports was to make some room for the kharif, or summer-sown, rice. The situation is not

Peeved over media reports of rotting grains, last year the Supreme Court severely criticised the government. The situation may be worse this year.





going to improve. Many experts believe that the government will again come under severe criticism for its inability to store grains. Peeved over media reports of rotting grains, last year the Supreme Court severely criticised the government. The situation may be worse this year.

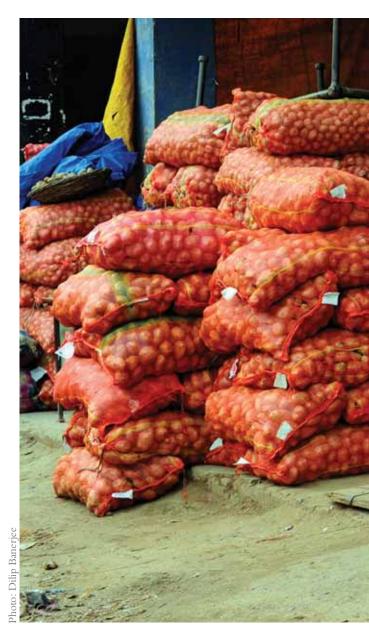
The Food Corporation of India (FCI), the Central Warehousing Corporation (CWC) and the state warehousing corporations have a combined capacity of 63.4 million tonnes, while current stocks are at around 65.6 million tonnes. Of the 63.4 million tonnes of available storage space, the FCI and the CWC have only 37.4 million tonnes of capacity, which includes hired space from private firms. The rest is with state warehousing corporations, jointly owned by the CWC and state governments. The government is trying to give incentives to private companies to create an additional 13.5 million tonnes of storage, in addition to 2 million tonnes through silos. The food ministry has assured private warehousing firms rent for 9-10 years but the progress has been rather slow.

The government aims to boost warehousing capacity by 6.5 million tonnes in the current financial year, with 1.5 million tonnes additional space from the CWC and state warehousing corporations. Besides, the CWC has decided to add 200,000 tonnes of capacity annually for the next 10 years. According to an estimate, the whole project will cost Rs 70 billion.

"We not only need to build large, efficient warehouses, we also need to remove the regional imbalance. We do have reasonably okay warehousing facilities in some of the leading grain producing states. The actual dearth of godowns is in consuming states. There is a need to focus there," a senior food ministry official, who did not wish to be identified, said.

Unsurprisingly, there has been almost negligible capacity addition by the government in the past 10 years. On the other hand, private companies have substantially ramped up capacities to 54.6 million tonnes, up from 16.2 million tonnes 10 years ago. However, almost 75 per cent of warehouses are

Of the 63.4 million tonnes of available storage space, the Food Corporation and the Central Warehousing Corporation have only 37.4 million tonnes of capacity, including hired space from private firms.



small, with capacity of less than 1,000 tonnes. As a result, between 20 per cent and 30 per cent of the harvest rots. Despite the need and potential, neither state-run firms nor private companies are investing enough in building modern silos. India's farm output fluctuates, making investments in silos unattractive.

"I will prefer to build conventional warehouses than silos. Tomorrow, if farm production falls, I can easily offer my space for other commodities. If I build silos and, god forbid, rice and wheat productions drop, I will lose money on my investment," said an official with a private warehousing firm. Private firms are not the only ones that are risk averse. Even banks avoid financing large farm projects, as investment in agriculture is largely viewed as risky and unattractive.



The Food Security Bill will further aggravate the situation as the government will need 61 million tonnes of grains annually for the scheme.

The policy of relying on private firms to build warehouses and rent out the space to the government is not an efficient way of ensuring adequate storage space. The government must step in and provide money to the FC and the CWC to build modern silos. Silos will not only add space, they will reduce damage to grains stored at conventional warehouses. Some experts, however, say that unlike some leading wheat producing countries, such as Australia and the United Stares, silos will not be a panacea for India, which also produces substantially large quantities of rice. They say rice tends to break in silos as paddy has more than 30 per cent husk and bran. Silos are popular in wheat producing countries. India will have rely of modern and scientific multi-commodity warehouses, with features like automatic temperature control, they On July 1, 2011, wheat stocks were 37.1 million tonnes, substantially higher than a target of 17.1 million tonnes, while the rice inventory was at 26.8 million tonnes against a July target of 9.8 million tonnes.

say. Poor transport facilities accentuate the need for better warehouses.

The Food Security Bill, an election promise of the ruling Congress party, will further aggravate the situation, as the government will need 61 million tonnes of grains annually for the scheme, over and above the strategic reserves of five million tonnes. The government buys about a third of the country's total grains output for subsidised sales through fair price shops.



#### Paranjoy Guha Thakurta

hen, in February 2008, the first United Progressive Alliance (UPA) government announced a more than Rs 70,000 crores farm loan waiver scheme, it was hailed as a path-breaking move that would go a long way towards alleviating an important problem afflicting Indian agriculture, that is, rural indebtedness. What is more, the decision to write off bank loans

given for agriculture was perceived as a masterstroke on the part of the political leadership that helped it return to power with a stronger mandate from voters in the April-May 1999 Lok Sabha elections.

At the time the loan waiver scheme was announced, the government's critics complained that the decision would discourage honest borrowers from repaying their loans in the future in the hope that there would be more loan waiver schemes, a phenomenon that is somewhat esoterically described as a "moral hazard". The loan waiver scheme was also criticised on the ground that its benefits would accrue mainly to the relatively well-off sections of the farming community and not to small and marginal farmers, nor to landless agricultural workers, who do not borrow from banks but tend to be indebted to local moneylenders or mahajans who disburse loans quickly without paperwork but also charge borrowers usurious rates of interest that make them fall into a debt trap.

It now transpires that there is a huge scam behind the farm loan waiver scheme and also on account of the more recently announced concessional interest rate and interest rate subvention schemes on agricultural loans. The scandal does not pertain to a few unscrupulous individuals nor is it a case of a small section of smart borrowers exploiting loopholes in the system. There is growing evidence to indicate that the scandal is a gigantic one and that the amounts involved are substantial. All of which calls for a detailed inquiry.

Facts about the geographical dispersion of agricultural loans are startling, to say the least. Two small parts of the country, the national capital of Delhi and the union territory of Chandigarh, had hogged the lion's share of inexpensive farm loans during the financial year 2009-10. Borrowers in Delhi and Chandigarh had obtained agricultural loans worth more than Rs 32,000 crore that year, although there is hardly any farm land in these two urban areas. The scale of the scam becomes evident when one realises that in the same year, a smaller amount of money was borrowed in the four states of Uttar Pradesh, Bihar, West Bengal and Jharkhand. These four states received concessional agricultural loans worth less than Rs 31,000 crore that year.

The politics of the scheme is apparent. The highest disbursement of farm loans in 2009-10 was to Tamil Nadu (then ruled by the coalition of Dravida Munnetra Kazhagam and the Congress) loans of up to Rs 3 lakhs had stood at seven per cent but what the finance minister did in his Budget for the current year is to announce an interest rate subvention of three per cent to those who repaid their loans on time. Thus, the effective interest rate came down to four per cent.

What happens thereafter is that after obtaining a loan at an annual interest rate of four per cent, the concerned "farmer" does not use the money for agricultural purposes. Instead, the funds are parked in various fixed deposit schemes of banks that earn the depositor annual interest rates ranging between seven per cent and 8.5 per cent.

In other words, by illegally diverting agricultural loans, the so-called farmer earns an annual interest income varying between three per cent and 4.5 per cent for doing next to nothing, by exercising what in technical parlance is called an "arbitrage opportunity".

Banks are keen on meeting their "priority sector" lending targets stipulated by the Reserve Bank of India (RBI) and often fail to ensure due diligence in seeing that the funds loaned at low rates of interest are being used for the purpose these have

### By illegally diverting agricultural loans, the so-called farmer earns an annual interest income varying between three per cent and 4.5 per cent for doing next to nothing

amounting to Rs 41,100 crore. Two Congress-ruled states, Andhra Pradesh and Maharashtra, together received concessional loans worth 61,000 crore that year. More than half (52 per cent) of the farm loans disbursed in 2009-10 went to six states or union territories that were ruled by the Congress or the UPA. These were Andhra Pradesh, Maharashtra, Delhi, Haryana, Tamil Nadu and Chandigarh.

Between 2007-08 and 2010-11, Delhi received loans in excess of Rs 57,000 crore while the figure for Tamil Nadu was Rs 61,000 crore. Maharashtra and Andhra Pradesh together received a total of Rs 1,54,000 crore worth of loans in these three years. The total budgetary allocation for subsidised agricultural loans has jumped in the recent past: from Rs 86,000 crore in 2004-05 to a budgeted Rs 4,75,000 crore during the current financial year.

The story does not end here. In February this year, finance minister Pranab Mukherjee reduced the effective rate of interest on farm loans to four per cent per year. How did this happen?

The rate of interest on short-term agricultural

been disbursed, namely, for agriculture. In certain parts of India, banks easily extend agricultural loans at concessional interest rates against deposits of gold jewellery. Working in collusion with corrupt individuals, the loans meant for farming end up financing various other commercial and business activities, including real estate development.

It is not as if the managements of banks, the RBI and the ministry of finance are not aware of these malpractices that have become widespread over the last few years. This is hardly the first time the corruption in the manner in which farm loans are being disbursed is being discussed in the print media. But the authorities do not seem to have taken action against those responsible for perpetrating this scandal.

In this season of corruption, is the government waiting for one more major scam to blow up in its face? •

The article was printed in various editions of Asian Age and Deccan Chronicle on June 7, 2011. Used with permission. The author is an independent journalist and educator

### **OUTLOOK**

# Little Help for India's Wonder Crop: Jute

Dr Dhrubajyoti Ghosh





hat the battle between environmentalists and agricultural experts is all set to intensify is well known. That the fight will be over the unprecedented loss of human life, biodiversity stock and severe damage to ecosystems -- water quality, food quality, soil quality - being caused by dangerous agricultural practices thanks to the overuse of fertiliser and pesticide by sections of the farming community is also well known. The concern here is not about that though. By and large, environmentalists and agricultural experts agree that there are a few crops that have positive ecological impact: the concern is that even this area of commonality is being betrayed.

The best-known example in India is jute, once known as India's golden fibre, which is cultivated over eight lakh hectare, engaging around four million farm families. There are several points that commend jute cultivation.

- An hectare of jute plant can absorb 15 tons of carbon dioxide and release more than 10 tons of oxygen through a jute growing season of about 100 days.
- Jute products are 100 per cent biodegradable and are also recyclable.
- If jute waste is dumped in an open field the mixture of soil and jute becomes natural manure. Jute is well known as one of the best replacements for plastic bags and can reduce the consumption of mineral oil to a large extent. The damage caused by plastic bags need not be discussed here.
- More importantly, growing jute needs very little fertiliser and pesticide, so much so that its effect on the ecosystem is yet to become a cause of concern.
- Furthermore, the green leaves, which the jute plant sheds (about six tons per hectare) are rich in macro and micro-nutrient content.

Yet jute is a much-ignored agri-product. Jutebased handicrafts, which come in a plethora of remarkable design and uses, have not become

#### **OUTLOOK**





popular enough in the national and international markets and deserve dynamic promotional initiatives. Given the inadequately developed market, jute growers suffer from lack of demand and receive poor prices from the intermediary buyers. Particularly distressful is their lot in areas where yield is lower because of soil quality. A case in point will be the plight of jute workers in the Beldanga block of Murshidabad district in West Bengal.

During the second week of July 2011, a number of farmers told this writer in a village in Beldanga Block, Murshidabad district, that they spent Rs 12,000 per acre to grow jute (JRO-524 variety) and expected less than Rs 5,600/acre when they sold it, that too if the middleman was happily disposed towards them. Have they discussed their plight with anyone? Yes, they have: they have submitted representations to various places with little to show for them. Political parties have assured them of action; they were asked to join processions to affirm their loyalty but they are yet to see the fruit of these efforts.

Jute has been grown in Beldanga Block for more than 20 years and the returns from jute cultivation have shown a diminishing trend for about a decade. On July 26, 2011, a technical team from the Central Research Institute for Jute and Allied Fibres (CRIJAF) went to Beldanga to impart training. After the training the local farmers politely reminded them about the cost and benefit of growing jute. The scientists were apologetic and said they had no idea about the reality, said a local farmer, Pradyut Mondol. Elsewhere, there are fixed worker wages, those who are in service have a fixed salary, private tutors take fees they negotiate but the jute farmers do not have any assured return that can even cover their cost of production.

It takes four months to grow jute. Expectedly, the remaining eight months are used to grow other kinds of crops that can compensate the loss incurred in growing jute. Essentially one crop of paddy followed by one crop of pulse is the principal choice. The pulse crop is broadcast, does not need irrigation or additional nutrients. The residual water and nutrient after growing paddy is good enough to grow the crop. Monsoon paddy is also important as it provides the basic food need for the farmer's family and also a little more earning to overcome pauperisation.

The point is not about the way the jute growers defend their propensity to hold on to a losing proposition. Apparently, a farmer thinks it a matter of shame to keep his land uncultivated in these parts: it is a ritual that people from the city or policymakers at different levels know little about or even try to understand. There is definite need for



state intervention. The country has a national jute policy to develop 'a strong vibrant sector' that can,

- ensure remunerative prices to jute farmers in the country
- produce good quality fibre and products to meet the growing needs of the country and international buyers
- increasingly contribute to the provision of sustainable employment and economic growth for the nation and finally
- compete with confidence for an increasing share of the global market.

The farmers should be able to feel the impact of a policy intended to serve their purpose, their lives and livelihood. The policy statement will have to travel far beyond the confines of officialdom and make its presence felt where it is needed most.

Probably the jute growers of Beldanga block will no longer grow jute after a while. After all, the price of jute in other districts in the current year, although lower than the previous years, is much better (Rs 2,200 per quintal where one acre of land produces about 12 quintals of jute) than what the Beldanga farmers get. This rate prevails in both Nadia and North Dinajpur districts, which are best known for growing jute in West Bengal.

What most jute growing areas; probably most wetland crops (essentially paddy) lack is able



stewardship. Dealers in fertilisers and pesticides have done immense harm by inculcating the practice of overuse. This must be replaced by institutional stewardship that will honestly and scientifically guide the farmers so that they do not lose on account of a worthwhile product that they grow; because they do not damage the soil by overusing the chemical inputs; and because they do not waste water by overusing it. The task of stewardship runs down to setting up a support system comprising

- strict monitoring of the local vested interest working in tandem with the different levels of the market
- provision of a certain amount of assistance to encourage an environment friendly crop: for example, technical guidance to reduce the growing expenses and access to improved accessories; preferably free of cost for the initial period
- organising low interest credit (so that a farmer is comfortable and gets money exactly when he needs) and
- transparent policing of the manipulating intermediaries and overseeing the payment to the farmers to spare them threat-based buying.

These are by no means extraordinary assistance to ask for but most jute growers in India do not get even this help. •

#### Dr Dhrubajyoti Ghosh is a U.N. Global 500 Laureate and Regional Chair (South Asia) Commission on Ecosystem Management; International Union for Conservation of Nature, India

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## A Roadmap for Agriculture Beions A Farmers' Forum Report

he National Academy of Agricultural Sciences (NAAS) is working on a white paper to address issues around India's Millennium Development Goals (MDGs), especially those goals of eradicating hunger and poverty while ensuring environmental sustainability. The preliminary document outlining the raison d'être (NAAS/I.2.63/10/88) of May, 2011 sets out the backdrop to the current crisis around Indian agriculture and the issues that need to be considered by a broad spectrum of stakeholders including policy makers and farmers.

During the Green Revolution, from the mid-1960s to the mid-1990s, accompanied with the White, Blue and Yellow Revolutions, food and agricultural production and productivity had nearly tripled and the intensity of hunger, malnutrition and poverty had halved. However, the Green Revolution has now waned. India is still home to one-fourth of the world's hungry and poor and their numbers have increased in recent years. Over 40 per cent of world's under-nourished children are our own children. Further, the country is far from meeting the MDGs.

Since the mid and late1990s, while the overall GDP growth rate of about eight per cent was recorded, the agricultural growth rate was sometimes outstripped by the population growth rate. The slow agricultural growth and productivity growth has also meant a slowdown in agricultural employment generation. These have resulted in further widening of the gap between per worker GDP in agricultural and non-agricultural sectors from 1:3 to 1:5. Thus, the high growth rate overall GDP was largely hollow for the rural masses. The decelerated agricultural growth had caused further marginalisation of rural population and created hot spots of farmer's distress, indebtedness and deprivation.

Such ethically outrageous situation stems from the stubbornly high food insecurity and poverty levels. Given the demographic, geographic and socio-economic setting in our country, agriculture is still the foremost hope to alleviate hunger and poverty, especially in the vast rural areas. Yet, investment, capital formation and human resources in agriculture have declined and dwindled. The rising food prices and increasing vulnerability to climate change and market volatility have drawn the poor further from food. Moreover, the total factor productivity growth rate has considerably slowed down and declined. On the other hand, towards the year 2030, primarily driven by population

#### Scientists, academicians, management experts and professionals in committee to create the roadmap:

V.S. Vvas, chairman H. K. Jain, co-chair J.N.L. Srivastava, member P. L. Gautam, member K. L. Chadha, member S. L. Mehta, member B. R. Barwale, member M. P. Yadav, member Raj K. Gupta, member K. D. Kokate, member Ramesh Chand, member P. K. Joshi, member Paranjoy Guha Thakurta, member Surender Sud, member Ajay Jakhar, member Anwar Alam, member secretary

growth, income enhancement and urbanisation, the demand for foodgrains, fruits and vegetables, milk and other livestock products and fish will increase by 60 per cent and 80 per cent.

Such trends must sensitise us to pursue business unusual route and provide impetus for breaking the inertia of entrenched hunger and poverty and for achieving the MDGs. The NAAS, the Brain Trust of India's agriculture and agrarian development, must address the issues and challenges. We ought to be the intellectual backbone of our big society, especially the rural masses. As per the Academy's mission, we must help formulate informed policies, promote excellence in science, help generate appropriate technologies, and synergistically integrate policy and science to become a powerful instrument for the growth of national economy with a vibrant farm sector.

Clearly, we need a roadmap to transform India's agriculture to address various challenges and the MDGs, especially the goals of eradicating hunger and poverty while ensuring environmental sustainability. The roadmap must have a crisp plan of urgent and collective actions, which involve solutions with short and medium term goals that can be reached through the most effective route. The path should provide an agreed framework to plan and to coordinate for accelerated and inclusive agriculture-led development. Further, the roadmap should lend itself to structured monitoring, evaluation and adjustment.





## HORTICULTURE: A MATTER OF VALUE ADDITION

Sanjeev Chopra, the joint secretary in charge of both the National Horticultural Board and the National Horticultural Mission and an officer of the Indian Administrative Service (IAS) of the 1985 batch, West Bengal cadre spoke to Ajay Vir Jakhar and Paranjoy Guha Thakurta of Farmers' Forum on a range of issues from the growing importance of horticulture in the national scheme of things to the mission mode on which the National Horticulture Mission is functioning to support horticulture across the country. The importance of horticulture is evident from the fact that this sector produces more value than all agriculture in India put together and from one tenth of the land.

Sanjeev Chopra in conversation with Farmers' Forum



### FACE TO FACE

Farmers' Forum: Please explain the differences between the National Horticultural Board and the National Horticultural Mission, in terms of their focus and the nature of their work and activities.

**Sanjeev Chopra:** The National Horticultural Board (NHB) is an independent institution, with the Minister for Agriculture as its chairman. It has a Managing Director and its office is in Gurgaon. The National Horticultural Mission, whose Mission Director I am, has come about only during the last Plan and was introduced as one of the first North-Eastern initiatives. Its success there led to its extension to the Himalayan states of (Uttarakhand, Jammu and Kashmir, and Himachal Pradesh). After the success of the Horticultural Mission for North Eastern and Himalayan states, it became mainstream for the rest of the country. It was on the basis of this that the National Horticultural Mission (NHM) was set up.

Under the National Horticultural Mission, 85 per cent of the share is contributed by the government of India and 15 per cent by the states. Each state gives us a clear vision and perspective about what it would like to do at the beginning of the year and this could involve a whole set of things, from planting potatoes to establishing nurseries or postharvest management. We have an annual budget of about Rs 1,200 crore, which takes into account all the non-HMNEs states (the non-North-Eastern states, non-hill states) and is available for a wide range of activities. The NHM funds the NHB through the Horticulture Division.

The main difference between the NHM and the NHB is that the former works primarily with state governments while the latter with individuals and corporate entities. The NHM also works with individuals and corporate entities but only with those recommended by the states. There is some occasional overlap but those who work with state governments tend to prefer the NHM, while the others tend to prefer the NHB. In a way, they are complementary.

Another difference is that the NHB is a perpetual entity while the NHM is a Mission Mode Programme. It is there till the 12th Plan and

The government fertiliser subsidy is over Rs 100,000 crore: more than the defence budget. Of this, 50 per cent goes to the co-operative sector. If a sector is being subsidised to the extent of Rs 50,000 crore, there is bound to be some control on the part of the government. should ideally accomplish its mission within the Plan. If need be it could be concluded within the 13th Plan period. By then, whatever interventions need to be made will have been made. Missions represent a focused intervention strategy: there is a time to begin and a time to end.

Farmers' Forum (AVJ): It has been argued that the NHB is inaccessible to individuals because of its poor officer strength. For example, in Abohar, where I come from, 55 per cent of the Punjab citrus grows within 30 km of my village. That is around 55,000 acres of citrus. There is one fourth-class officer in the NHB office and no supervisor. He comes to office, cleans it but does no productive work and provides no access to people. For any information one needs to go to Chandigarh, which deals with Punjab and Haryana. There is a great demand for more staff so your schemes become accessible to more individual farmers, rather than just corporates.

Sanjeev Chopra: The entire horticulture sector, not just the NHB and NHM, produces as much in terms in volume and much more in terms of value, as the agriculture sector but in one tenth of the land. The fact remains that it is a new sector. Given that India was facing tremendous food security issues until recently, very little focus was given to horticulture. Until a few years ago, the total allocation for the sector was no more than between Rs 700 crore and Rs 800 crore. Only in the 11th Plan did government funding for the horticultural sector go up substantially. Prior to that, the entire focus was on rice, wheat, sugarcane, cotton and tobacco probably because horticultural crops were not mainstream in Indian lifestyle and diet. Since then, purchasing power has improved and the Indian middle class has grown, which perhaps explains the sudden spurts we have seen in the prices of onions, tomatoes and potatoes. There is a section of the population that can afford much more.

I share your concern about shortage of people on the ground but that will not change overnight. We have to make our systems more amenable: improve our website, develop e-monitoring and take such steps. We cannot put an NHB office everywhere. In any event most NHB projects are bank-linked. The essential interface for a farmer setting up a project is the bank. The NHB's strategy will, therefore, be to educate bankers about what the NHB schemes are. Farmers need their help to formulate their schemes.

Farmers' Forum: That is another problem. If

a farmer wants a subsidy from the NHB for drip irrigation or a tank, he has to go to the bank. If he does not take a loan, he is not eligible for a subsidy. So the subsidy that is released by the NHB, with good intention, is kept by the bank and is adjusted against interest of the loan, during the loan period. Would it be possible for the government to finetune the schemes so that the farmer actually gets the subsidy and the bank does not retain the money?

**Sanjeev Chopra:** The problem is that, at a certain point, securitisation of the loan becomes important. There are genuine farmers and not-so-genuine farmers. The system has to be designed to keep the latter category out. It is the dilemma that we all face. Our intention is to provide the best possible support. However, in designing safety vaults, sometimes the genuine people suffer. Without the bank appraisal, there could be misuse of public money. The bank provides us with an independent third-party monitoring system. now that the NHM and the Rashtriya Krishi Vikas Yojana (RKVY) exist and the government is committed to the capitalisation of Indian agriculture, we should see some improvements.

However, a very interesting development has been the incentivisation of state governments to put more money into agriculture. In order to be eligible for the RKVY, which is the big daddy of agricultural schemes, the state must spend more of its budget on agriculture, in percentage terms, than the previous year. Further, the more you spend, the more will the government give. Once state governments put more money into agriculture, posts will begin to get filled. There is no substitute for this; we need people in the field.

Farmers' Forum: Farm subsidy is the other really contentious issue. Are there adequate safeguards to protect Indian farmers, fruit growers and vegetable cultivators against unrestricted imports

## Post 2007, a lot of money is being pumped into the horticulture, agriculture and the allied sectors and there are funds to implement projects but no staff!

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Farmers' Forum: Much work needs to be done around extension services too. The problem arises from services coming under the purview of the state government. However, many of them do not have the funds to pay salaries to the extension services workers. Sanjeev Chopra: Prior to 2007, there was very little central government funding for agriculture and the states did not allocate sufficient budgets for horticulture and agriculture either. After the success of the Green Revolution, between the early 1990s and 2005-2006, there was very little money available to the state governments from state or central government sources to run extension services. Therefore, when one compared the Plan and non-Plan expenditures of the state governments, one realised that they were spending almost all their agricultural budget on non-Plan expenditure. The question then was: if there is no money for the extension services staff to use, why have them?

Post 2007, a lot of money is being pumped into the horticulture, agriculture and allied sectors and there are funds to implement projects but no staff! This problem was discussed by the working group for the 12th Plan. In the sub-group that I head, we stressed that the government fill these positions. Fortunately, from countries that have very large subsidies for their farmers? They have large farms, mechanised cultivation and, simply put, our farmers cannot compete, making it a livelihood issue.

Sanjeev Chopra: In agriculture you have the exportable hypothesis and the importable hypothesis. For imported apples to sell in India at a lower price than Himachal or Kashmir apples, the foreign subsidies would have to be very intense, given the added transportation costs. We can do nothing with regard to foreign subsidies. What we can do is to ensure access for Kashmiri apples in Cochin and Kolkata by a modern cold chain. Adani and Fresh and Healthy Enterprises (100 per cent owned by CONCOR, a government of India enterprise) have set up major facilities in Himachal. The interventions of Adani and Fresh and Healthy have transformed the economy of Himachal. Lahaul and Spiti, incidentally, is India's richest district, in per capita terms and it is all based on potato production.

The point is that until a system of pre-cooling produce has been set up, so that the produce can be introduced competitively into our own markets, we should not concern ourselves with foreign produce, which is beyond our control. My belief In a typical year, Azadpur reports that, in wholesale value terms, only Rs 7,990 crore of fruit and vegetables are being sold every year in Delhi. This is impossible. My guess is that the figure must be 15-20 times more.

is that apple to apple, given a proper national rate, Kashmir and Himachal apples can compete with any imported apple. What may come are more exotic varieties; cherries, peaches, pears, kiwis, and such others. The Agriculture Ministry can do little with regard to foreign produce but we can make our produce more competitive, cut the intermediation cost, and set a cool chamber chain in place. We can compete with any commodity in the world because we have the some of the best farmers, the best soil and the best techniques.

Farmers' Forum: About 99 per cent of nurseries are not accredited and the planting material being sold to the farmers is sub-standard. This is a national waste of funds and a waste for the farmers. What is the Ministry of Agriculture proposing to do about this? **Sanjeev Chopra:** Yes, indeed, the Honorable Minister said in his speech at the National Mission on Micro-Irrigation seminar that fertigation issues through micro-irrigation are going to become very important. The whole aspect of liquid fertiliser and fertigation will be brought up in the discussion and deliberation on fertiliser policy.

Farmers' Forum: What about urban vegetable clusters? China seems to have done better than India at promoting backyard farming. How can the government help encourage backyard farming?

**Sanjeev Chopra:** We have not really taken on the domain of backyard farming. What the Finance Minister has announced is the National Vegetable Crop Initiative, which aims to encourage farmers to develop vegetable clusters by ensuring that there is traceability, permission for credit and aggregators in place. We need to put in place a system that will enhance productivity and profitability. We are currently dealing with systems that are pretty ancient. It is taking time but there have been improvements.

The ministry has been rating nurseries, through star ratings. It encourages farmers to buy from highly rated nurseries. However, there are insufficient numbers of such nurseries

**Sanjeev Chopra:** We are moving from an absolutely unregulated domain to a domain of regulation. From last year, the ministry has been rating nurseries, through star (five star or four star) ratings. It encourages farmers to buy from highly rated nurseries. However, there are insufficient numbers of such nurseries around the country but, hopefully, in a year or two, farmers can be directed to buy planting material only from accredited nurseries. We can make it mandatory for farmers spending NHM or NHB funds to buy their produce only from highly rated nurseries. Before we do that though, we need a minimum of rated nurseries.

Farmers' Forum: Drip-irrigation subsidy has been targeted to optimise delivery of water but can also be used for Integrated Nutrient Management by Fertigation. No organisation is supporting or propagating fertigation. Would the agriculture ministry consider streamlining its subsidy system to incorporate fertigation? Farmers' Forum: We have seen some cooperatives doing famously. If there is one brand that is quintessentially Indian, it is Amul, which competes with multinational brands very successfully. However, the success of the cooperative movement has been uneven. How do you govern this sector and ensure that it flourishes?

**Sanjeev Chopra:** Cooperatives are put in place to cater to the needs of their members, when other institutions of society are not in a position to meet those needs. Human needs can be met by several organisations. These could be family; the church, temple or mosque; the state; the market. Take an institution like marriage. First, it was a family affair. Then, religious sanctification became important. Then, as the influence of religion decreased, the state began to play a part. It became compulsory to register one's marriage with the state. Now, marriage has entered the market and different organisations cater to different aspects of the ceremony, the reception and so on.





Something as basic as the need of a man and a woman to stay together, to cohabit and to have children has developed over the course of the centuries. Any need that society has can be met by many different organisations. If a market can meet a need efficiently, it will do so. If it cannot, the state or the family will do it. If it cannot be met by any of these institutions, another institution is required. Cooperatives are needed when no institution – the market, the state, the family or religious institutions – are responsive. For instance, farmers have a lot of surplus at the end of the year – the market is imperfect. The state does not buy their produce; the family cannot consume it. So another institution is required to handle it.

Take a simple example. When I was at the Mussouri Academy as a probationer in 1985, there were hardly any shops near the academy. We had Hari's and we had a super bazaar cooperative store. The store catered to our needs because there was no market. Now, there is a chain of shops and the cooperative is becoming defunct because the market is meeting all the needs. The services are being provided and on credit; at the doorstep; and 24/7. That is how the centrality of a cooperative loses its tract.

In the past, credit was given only by one agency, the cooperative. The idea was that the credit needs would be met by the local cooperative: whatever the village can collect for itself it will use and the differential it will borrow from the cooperative bank. One reason that the farmer is getting an increasingly smaller fraction of the consumer price is because the transactions are not transparent. If produce is sold electronically in Delhi, there will be a price discovery mechanism and it will be possible to trace where the consumer's rupee is going

Now that there is a banking network spread over the country, the State Bank of India can do a real time gross settlement transaction to its most remote branch. The cooperative cannot compete with this.

Some aspects of the decline of cooperatives can be explained by the fact that other institutions have developed to meet those needs and rendered the cooperatives redundant. Throughout the world, cooperatives are entering into newer areas such as crèches, childcare and care for the aged. Care for the aged is something that the market cannot do, families cannot do and the state and the church are unwilling to do. So elderly people get together, pool in their resources and set up a hospital or a living centre for themselves. Such cooperatives or informal groups are dramatically increasing in the West. So cooperatives move into some areas and out of others. We should not make a holy cow out of a cooperative. Just because something has been the domain of cooperatives for the past 15 years does not mean that this is the best way to do it.



One of the problems with cooperatives is that when people start co-operating, their economic means and their interest are at par but they do not remain so over time. For example, we set up a housing cooperative society 10 years ago. Initially, we came from the same earning bracket and found that we could afford about Rs 10 lakh to buy a plot of land. Some 15 or 20 years down the line, our situations and spending capabilities are very different and it is much harder to come to decisions that are favourable to all parties.

A similar thing has happened with milk cooperatives. At the beginning, everyone contributes two or three cows, so everyone has similar interests but 20 years down the line, the more enterprising farmers have 50 cows, while others still have only one or two. At this point, the farmers contributing less have an equal say in the activities of the cooperative to those who are contributing more. Cooperatives do not have a method to deal with transactionbased decision-making. The system works on the democratic principle: one person, one vote. Even if a farmer contributes 80 per cent of the cooperative's produce, those who contribute less than five per cent can outnumber him. In Punjab and Haryana, the political economy of the arthia is very strong and the middleman has been institutionalized, legitimized within the system. For crops picked up by the FCI, the farmer is not at a loss.

the National Cooperative Consumer Federation of India Limited (NCCF) or the National Agricultural Cooperative Marketing Federation of India Limited (NAFED) or the Indian Farmers Fertiliser Cooperative Limited (IFFCO), are essentially doing "state functions". The government fertiliser subsidy is over Rs 100,000 crore: more than the defence budget. Of this, 50 per cent goes to the cooperative sector. If a sector is being subsidised to the extent of Rs 50,000 crore, there is bound to be some control on the part of the government. For self-reliant cooperatives, not using public funds, there is no need for regulation. Most big cooperatives, however, deal with large amounts of government money. Therefore, the regulations.

Farmers' Forum: Yes but institutions like the IFFCO deal with their own members. The

One of the problems with co-operatives is that when people start co-operating, their economic means and their interest are at par but they do not remain so over time

Farmers' Forum: We live in a society in which economic inequalities have sharpened in recent times. The difference between the rich and the marginal farmer has widened.

**Sanjeev Chopra:** Indeed but the cooperative system has to take into account changes in circumstances, competences and abilities. We cannot expect to go down the route of forced collectivisation or communitarianism. The truth is that unless cooperatives develop transaction-based decision-making, they will get into the hands of people who have less and less of a stake in the cooperative.

Farmers' Forum: There is a fear that the government is introducing measures and regulations that were once done away with, in order to control the cooperatives.

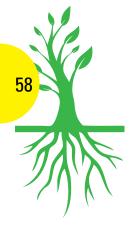
**Sanjeev Chopra:** There are cooperatives dealing with their own money and cooperatives dealing with government money. Organisations such as

government does not provide subsidies to the sector, it provides subsidy to the farmers. So the idea of regulating an institution that does not have government shareholding does not make sense.

**Sanjeev Chopra:** The IFFCO is only one example but most other organisations survive on government funds.

Farmers' Forum: At the height of the onion crisis, NAFED asked the Delhi government to allocate it space in the Okhla Sabzi mandi (market) so that it could sell onions at reasonably subsidised rates but the government refused. Did the arthia (middleman) association play a role in this or was it just bad governance?

**Sanjeev Chopra:** The refusal came from the Agricultural Produce Market Committee (APMC), which is technically different from the state government. The APMC of Azadpur is controlled by its 1,500 members who have formed a cartel and do



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not want others to join. The main problem in Delhi is that while production and the number of consumers has expanded multifold, the number of middlemen has not increased.

The Azadpur Mandi came up during the late 1970s to rehabilitate traders from inner Delhi. In the case of the Okhla Mandi, these people were ousted from Chandni Chowk. So the people in Azadpur and Okhla have been in this business for generations. They do not want others to enter their trade because it represents competition. This is part of the reason for the spikes in prices of fruit and vegetables in Delhi.

Another problem is that, in a typical year, Azadpur reports that, in wholesale value terms, only Rs 7,990 crore of fruit and vegetables are being sold every year in Delhi. This is impossible. My guess is that the figure must be 15-20 times more. This means that (a) all transactions are not being reported because there is no transparency and (b) that the Delhi government is losing a large amount in revenue. The APMC continues to insist did not exist and many aspects of the feudal system were still prevalent. That has changed now. Democracy, demographics, information technology, communications have changed the scenario.

## Farmers' Forum: In this changed scenario, what are we to do with the APMC Act?

**Sanjeev Chopra:** Getting rid of it entirely is the best option. Bihar and Kerala have done so. The next best option is to reform it to allow the corporate sector to set up its own mandis.

Farmers' Forum: There has been a huge debate on the corporatisation of Indian agriculture. It is argued that a corporate entity has disproportionate power and influence compared to the small farmers. Even if, initially, an attractive agreement is worked out, the relationship becomes exploitative. What are your views? Sanjeev Chopra: Well, the same fear can be expressed by potato producers or workers in shoe factories. The point is that the factories cannot operate without the workers. Even a monopoly

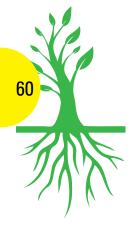
### The APMC continues to insist that one must own a space in the mandi to be able to sell produce. Almost all mandis in the world have moved away from such physical auctioning

that one must own a space in the mandi to be able to sell produce. Almost all mandis in the world have moved away from such physical auctioning. Produce coming into Delhi should be put on an open auction platform, through electronic trading and everyone wanting to transact should be able do so, from their computer, sitting anywhere.

Farmers' Forum: The mandis are under the purview of the state governments. There is only so much that New Delhi can do.

Sanjeev Chopra: New Delhi can do a lot. If Delhi were to reform the APMC Act, at least 10 corporate entities would be prepared to set up a terminal market in Delhi. The NHM supports the establishment of terminal markets around the country but only if the state has reformed the APMC Act. It was designed to handle non-perishables, where there is at least a possibility that the produce can be sold later if the mandi cannot accommodate it immediately. However, in the case of perishables, farmers have to sell immediately. The APMC Act was designed in the 1960s to save the farmer from the clutches of the middleman. Modern communications technology cannot operate beyond a certain level. So this argument has been overused. No one is compelling the farmer to enter into this arrangement. Further, given the existing land laws, no corporate entity can own land beyond a certain acreage. Corporate entities may enter into contracts or partnership farming with producers groups or associations. In several states such as West Bengal, they are advocating that corporates enter into relationships not with individual farmers but with groups of producers. This is also what we are advocating with the National Vegetable Initiative. So far the farmers have been very happy with these arrangements. This is because the most important aspect for them is to achieve price predictability and working with the corporate sector allows them to do this.

Farmers' Forum: *The farmer's share in consumer prices is falling every year. What can be done about this?* Sanjeev Chopra: One of the things that I have proposed is a system in which, at least for large aggregators, the payment they receive on selling their produce is only a part of their total payment. Then, as the produce goes along the value chain, a



certain bonus goes to the farmer, according to how well the produce does. In this way, the additional incentive given for exports from rural areas, instead of going entirely to the industry, could be shared with the farmer.

However, that is possible only if we are able to document where the produce came from and what transactions were conducted. One reason that the farmer is getting an increasingly smaller fraction of the consumer price is because the transactions are not transparent. If produce is sold electronically in Delhi, there will be a price discovery mechanism and it will be possible to trace where the consumer's rupee is going; how much has gone to the producer, to cooling, to transport, how much was taken by the vendor and so on. As of now, there is no such system.

In Punjab and Haryana, the political economy of the arthia is very strong and the middleman has been institutionalised, legitimised within the system. For crops picked up by the FCI, the farmer is not at a loss. There is no opposition movement to the arthia in these states. The only way that the role of the arthia can be removed, minimised, or controlled, is through transparent transactions.

As things stand, as long as the Azadpur mandi

allows only 1,500 people to trade, the arthias are inbuilt into the system. The only way to remove them is for the Azadpur mandi to go online and become transparent. Let it become the most modern mandi and let it set the example.

Farmers' Forum: There are still vested interests working against transparency. What can the NHM do? Sanjeev Chopra: The NHM is not a policing agency but it is sensitising people across the country to the issues. We have spoken to the Competition Commission (CC) and made a representation to the government of Delhi. The Chief Minister and CC, Delhi, have been very responsive. In principle, every government says it will take steps to promote transparency. We are incentivising them and we believe there is light at the end of the tunnel.

We are first doing this with the terminal market scheme. After the last increase in prices, all governments are increasingly facing the wrath of the consumer and are willing to take proactive steps to improve the situation. The most significant intervention has been the National Vegetable Initiative announced by the Finance Minister on February 28, which will look at setting up structures that will set things going in the right direction.

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Raghuvanshi displays his high-yielding wheat varieties to former President APJ Abdul Kalam at an exhibition in New Delhi

> Nation

## "Beej daan, mahawaan the Raghuvanshi slogan

## **Bhavdeep Kang**

veryone has a talent, says conventional wisdom. Prakash Singh Raghuvanshi's wisdom is seeds. He has a knack for developing high-yielding, openpollinated cultivars, known as "farmers' varieties". Christened as "Kudrat (natural)" and "Karishma (miraculous)", his seeds have found their way to farms all over India where, by all accounts, they are producing good results.

When "Kudrat" wheat grown by farmers of Jalgaon was displayed at a farmers' meeting in Buhranpur in Madhya Pradesh earlier this year, participants admired the extra-long ears with double the usual number of kernels. They claimed yields of 45-50 quintals per hectare. Small wonder that "Kudrat" became a talking point among the farmers. A few weeks later, when Raghuvanshi visited the state for a workshop on seed selection and multiplication, the state's agriculture minister, Ram Krishna Kusmaria, told the farmer-activist that he had sourced "Kudrat" seeds for his own farm.

Recipient of a national award for agricultural innovation from the President of India, Raghuvanshi's mission is to reduce farmers' dependence on commercial seeds. He reasons that this can be achieved by making non-hybrid, improved varieties available, so that cultivators can save and multiply home-grown seeds. "A farmer must become self-sufficient in seeds. In this way, he not only saves on the cost of seeds but is sure about their quality", says Raghuvanshi. The tall, spare 49-year-old farmer's personal odyssey began on his father's farm in Tadia village, some 30 kms from Varanasi, 16 years ago. It is a medium-sized farm, a little less than 15 acres in size. As the eldest of three brothers, he manages the jointly-owned farm. He grows rice, wheat, vegetables, oilseeds and pulses, as well as fodder. The farm output is both for personal consumption and for the market. He makes a good living, is debtfree and managed to marry off his eldest daughter in style earlier this year.

His home, where he lives with his wife, five of his six children and one of his brothers, is nothing out of the ordinary. He maintains a dozen head of indigenous cattle (he does not believe in exotic or "imported" breeds). If there is something visibly different on the farm, it is his living "seed bank", a three-acre plot, where he develops and preserves his seed varieties.

So far, Raghuvanshi has developed some 80 varieties of wheat, 25 of paddy and 10 of pigeon pea, green gram, peas, mustard, papaya and okra. He makes it a point to have his varieties tested by academic institutions. The results have been positive, bearing out his claim that his seeds make more economic sense than hybrids. His paddy seeds, he says, yield 25-30 quintals per acre and wheat varieties give about 18-20 quintals per acre. By Indian standards, these are excellent.

Raghuvanshi points out that the seed market is currently dominated by "sankar" or hybrid seeds, which have to be purchased afresh every sowing season (hybrids do not breed true and therefore cannot be reused). Buying seeds year after year, paying ever-increasing royalties to seed companies, does not make sense if equally productive varieties are available. Besides, a farmer can never be sure about the performance of store-bought seeds. In case of poor germination, he stands to lose an entire season's earnings and has little hope of redressal, Raghuvanshi says.

Unlike hybrids, his open-pollinated cultivars do not require high doses of fertilizers and pesticides. This represents a substantial additional saving for the farmer (sustainable agriculture pioneer Dr Vandana Shiva refers to hybrids as "high response varieties" rather than high-yielding varieties, as they perform well in response to heavy doses of agrochemicals and water). Raghuvanshi says that farmyard manure, easily available on a farm that houses cattle, is the best input. In fact, it was his disillusionment with chemically intensive farming that led Raghuvanshi to look for an alternative to hybrid varieties.

#### **KUDRAT WHEAT**

Three wheat varieties, Kudrat 5, Kudrat 9, Kudrat 17 were developed from Kalyan Sona and RR21 varieties. The plant height of Kudrat 9, Kudrat 5 and Kudrat 17 is 85-90 cm, 95-100 cm and 90-95 cm respectively. The lengths of the spikes are 9 cms, 6 cms and 10 cms and the weights of 1,000 seeds are 70-72 grams, 58-60 grams, 60-62 grams while the yields per acre are 20-25 quintals,15-20 quintals and 22-27 quintals respectively.

#### **KUDRAT PADDY**

The three paddy varieties Kudrat 1, Kudrat 2 and Lal Basmati were developed from HUVR-2-1 and Pusa basmati. The number of days to maturity for Kudrat 1, Kudrat 2 and Lal basmati varieties are 130-135 days, 115-120 days and 90-100 days respectively while the yield per acre is 25-30 quintals, 20-22 quintals and 15-17 quintals.



#### **KUDRAT ARHAR**

The three Pigeon Pea varieties, Kudrat 3, Chamatkar, Karishma were developed from Asha and Malviya 13. Kudrat 3 is a perennial variety while the other two are annuals. The number of pods per plant in cases of Kudrat 3, Chamatkar and Karishma are 500- 1000, 400-600 and 450-650 respectively while the yield per acre is 12-15 quintals, 10-12 quintals and 10-12 quintals respectively.

#### **KUDRAT MUSTARD**

The three improved varieities of mustard, Kudrat Vandana, Kudrat Gita and Kudrat Soni, are characterized by bunchy pods, abundant seeds per pod and a higher oil content. Their average seed yield is 1430.52 kg/ha, 1405.24 kg/ha and 742.23 kg/ha respectively while their average oil content is 42.30%, 39% and 35.55% respectively.



Source: National Innovation Foundation



The efforts to develop new varieties distinguished by high yields, disease-resistance and ability to adapt to extremes of climate were initiated by his late father. When he passed away, Raghuvanshi carried on the work. He received a great deal of support from Dr Mahatim Singh, former vicechancellor of Pantnagar Agricultural University and erstwhile professor at the Benares Hindu University. The unqualified encouragement received from a renowned agricultural scientist gave him the confidence to carry out his work, says Raghuvnashi. Today, with a national award under his belt, he is not in the least self-conscious about his lack of a college degree.

Farmers are the best and most innovative plant breeders, says Raghuvanshi. They have been selecting and developing seeds from traditional varieties for millennia. He himself has no formal training, having dropped out of school to help on the farm in his teens. His accomplishments are all the more remarkable, given that he has been visually impaired since childhood. "I was given penicillin as a child for some ailment. I reacted badly to the medicine and my eyesight is poor since then", he recalls. Raghuvanshi has to wear dark glasses at all times to protect his eyes. When he travels, as he frequently does, either his son or his nephew accompanies him, with a sack of seeds for distribution and a box of samples.

He is proud that his work has been recognized by the government of India. In 2009, Raghuvanshi received the National Award for Innovation in Agriculture from President Pratibha Patil. In 2008, he was invited to the Terra Madre festival in Turin, Italy. "I did not know that I was not supposed to take seeds into the country, so I carried some samples with me. They generated a lot of comment".

Among those who support his work is

### Farmers are the best and most innovative plant breeders; they have been selecting and developing seeds from traditional varieties for millennia

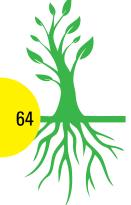


the Ahmedabad-based National Innovation Foundation, which has given him a grant of  $\overline{\mathbf{x}}1.9$ lakh under its Micro Venture Innovation Fund. He has also received financing from Narayan Sai ji, a spiritual leader based in Ahmedabad, who has used Raghuvanshi's seeds on his extensive farms. Sri Sri Ravishankar, the Art of Living guru, is also familiar with and supportive of his work.

Once Raghuvanshi was confident of his new varieties, he approached agricultural universities to conduct trials. Some obliged. He also began attending "kisan melas", where he disseminates his seeds. A decade ago he started a "Beej daan, maha daan" campaign. Its objectives were primarily to:

- popularize his high-yield non-hybrid cultivars
- encourage farmers to start village seed banks to conserve their local seed varieties
- teach farmers the basics of plant selection and breeding
- encourage local breeds of cow and
- promote organic farming

This "humble farmer" from Uttar Pradesh now travels all over the country, distributing seeds free of cost to deserving candidates and training farmers in seed selection and development. In the course of his beej yatras, he estimates that he has distributed seeds to 20 lakh farmers in 14 states over the past 15 years.





Raghuvanshi's efforts have been recognized by government, industry and farmers' groups

#### **SEEDS BILL, 2010**

Seed price regulation is a major bone of contention between farmers and government, holding up the passage of the Seeds Bill. Farmers insist absence of seed price controls allow arbitrary pricing by seed companies, adding significantly to farm input costs and thereby pushing up food prices. But the Ministry of Agriculture is not inclined to subject the billiondollar commercial seed sector, dominated by private players, to price regulation.

State governments have been attempting to control seed prices, mainly those of Bt Cotton seeds, through various mechanisms. This has led to litigation and an increasing demand that Clause 5 of the Seed Bill 2010 be amended to empower the Central Seed Committee to regulate seed prices. Otherwise, agriculture policy analysts warn, a stage will come when subsidy on seeds will become unavoidable.

The Union government has consistently opposed regulation of seed prices, arguing that seed multinationals may well withdraw their products from the country if they are subjected to price controls. The flip side of the picture is that 80 per cent of the seeds sown in the country are non-commercial seeds, so the impact would not be as significant as believed. Besides, if the government regulates output cost by fixing a minimum support price (MSP), it can as well fix input costs, including that of seeds.

The Bill has been further criticized for not imposing adequate liability on seed companies for peddling spurious or sub-standard products and for creating market monopolies by allowing re-registration of seeds. Nor does it impose strict curbs on import of seeds. Lack of safeguards against bio-piracy of indigenous varieties is seen as another major drawback. Experts have also expressed fears that transgenic seeds will gain backdoor entry through the "provisional registration" facility.

Bihar Chief Minister Nitish Kumar, one of the Seeds Bill's most vociferous critics, described it as "dangerous", "anti-farmer" and "brazenly favouring multinationals."







Embarking on a Beej Kalash Yatra

**Receiving the National Innovation Award from President Pratibha Patil** 

He says that he finds support wherever he goes – like the Rashtriya Asmita Manch in Mumbai or the Madhavashram in Bhopal. A Delhi-based philanthropist has been a reliable financier, while scientist B. Sahu of Kota has helped disseminate Kudrat varieties in Rajasthan. Most farmers are conversant with the basics of plant breeding but any practicing cultivator is welcome to visit his farm for trainings and first hand observation, he says. Raghuvanshi emphasizes the importance of preserving traditional varieties of seeds, as these will form the basis of improved varietals. Landraces are disappearing under the onslaught of hybrids all over the country. "We are losing our natural wealth", he rues.

He has now started maintaining a database of farmers to whom he has provided seeds, so that he can follow up on their activities. Any farmer who receives his seeds is expected to multiply and distribute them further. His seeds are not available commercially as he is yet to receive patents. Some farmers, who had sourced seeds from him, have begun selling them under the "Kudrat" brand, which amounts to a breach of trust.

A simple farmer with no political affiliation or sympathy for a particular ideology, he is surprisingly *au fait* with issues related to the agricultural sector, be it transgenic seeds or the proposed Land Acquisition Bill. One does not need to be an intellectual to understand the problems of farmers in India, he says. Raghuvanshi believes firmly not only in seed self-sufficiency but in seed sovereignty, which is possible only through the preservation of our bio-diversity. His favourite slogan is "Apni kheti apni khad, apna beeja apna swad".

Nor can he see the logic in introducing transgenic seeds when it is possible to develop desirable traits from existing seed varieties. "Wherever my seeds have caught on, sales of multi national seed companies have dipped. I see this as the only way forward. Beej bachao, desh bachao", he says.

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