

Vol. 15; No. 04; Aug-Sept 2015 ₹100 www.farmersforum.in

Issues and Ideas for Indian Agriculture

THE ROOTS O PAL DIS P

J. K. BAJAJ I V. M. SINGH | NITIN SETHI | JAIDEEP HARDIKAR BISWAJIT DHAR | DHRUBAJYOTI GHOSH | SUBIR GHOSH

More Crop Per Drop

More crop per unit land- More crop per unit input.

JAIN CONSTRUCTS POLY HOUSE/SHADE HOUSE/NET HOUSE and POLY TUNNELS

JAIN IRRIGATION BRINGS PROSPERITY TO FARMERS;

THRU WORLD CLASS QUALITY MICRO IRRIGATION AND FERTIGATION SYSTEMS.

BOTH ARE ESSENTIAL FOR HIGHTECH FARMING.

JAIN EXPERTS ASSIST FARMERS IN HIGHTECH PRODUCTION METHODS

Empower the farmers with SUSTAINABLE FARMING AND HIGHER PROFITS.



Jain Irrigation Systems Ltd....

- The largest manufacturer and supplier of drip and
 Undertakes training of trainers and farmers. sprinkler systems in the world.
- Offers complete crop production packages for open field and protected cultivation.
- Only company that provides end-to-end solution for hi-tech farming.
- Offers systems for climate control and input supply in Poly houses.
- Provides full Automation for all systems.

- Farmers learning thru experiencing at Jain R&D&D farms.
- One stop shop for all agricultural inputs.
- Company with rich experience in India and abroad with internationally qualified experts.
- Only Company with inhouse training center and R&D&D farms.



Tel: +91-257-2258011; Fax: +91-257-2258111; Jain Irrigation Systems Ltd. E-mail: jisl@jains.com; Web.: www.jains.com

Offices (Tel): Ahmedabad 09426511403, Anantur 08554-274226, Bangalore 080-25361257, Bijapur 09448286500, Bhavnagar 02846-294222, Chandigarh 09417202115, Chennai 044-22200500, Coimbatore 0422-2457318, Deharadun 0135-2669865, Guwahati 9435199998, Hyderabad 040-27611706, Indore 0731-4265112, Jabalpur 09200025444, Jaipur 0141-2203515, Kolkata 033-24198648, Lucknow 0522-4021067, Mumbai 022-22109090, 22610011, New Delhi 011-26691569, Patna 0612-6560266, Pune 020-26057777, Ranchi 0651-2532240, Raipur 0771-2582091, Sundernagar 09418169333, Shimla 09418171333, Sanchore 02979-285730, Vadodara 0265-2356727,

Cochin Office: CC29/1288 E, 1" floor, vyttila, Ernakulam, Cochin – 682019, Tel: 0484-2307642, Mob: 9446363742, 09446504333.

EDITORIAL



Volume 15; No. 04; August-September 2015 RNI No. DELENG/2001/5526

Editor, Printer & Publisher Ajay Vir Jakhar

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

Editorial Support Paranjoy Guha Thakurta Aditi Roy Ghatak

Design © PealiDezine *pealiduttagupta@pealidezine.com*

Contact us/Subscription ho@bks.org.in

Owner Bharat Krishak Samaj

Published at Bharat Krishak Samaj, A-1, Nizamuddin West, New Delhi 110013

Printed at Brijbasi Art Press Ltd., E-46/11, Okhla Industrial Area, Phase-II, New Delhi

Cover photo © Dinodia

The opinions expressed by the authors of the articles are their own and may not neccessarily be endorsed by the Bharat Krishak Samaj.

All rights reserved by Farmers' Forum

Death in the Time of Data Fudge

irst they lowered the monetary poverty threshold to prove that poverty had been reduced. They subsequently changed how the gross domestic product (GDP) is formulated; to prove growth. They did not even spare the farmer suicides data. Even after such accounting jugglery, when policy makers failed to justify their years of folly, they changed the measurement scale. When changing the scale did not help, they trashed the data as garbage. They may even alter the definition of a farmer to justify the abolition of subsidies but they cannot change the realities on the ground.

Scientists try and prove hypotheses. Economists and academics follow the path of research too, but have it much easier, as they can change the arrangement of data to uphold or decry an idea. The way data is classified and presented influences policy. Biraj Swain explains how by reducing the baseline for defining poverty by just 26 cents from \$1.51 to \$1.25, the number of poor people has decreased from 1.75 billion to 733 million. That is how poverty is reduced. Trying to prove a hypothesis through data, one will generally find what is being sought. Yet, not even the much vaunted national skill development programme will empower farmers to develop the number crunching skills to counter absurd viewpoints.

It is fair to say that poverty is a precursor to farmer suicides in a majority of cases. If a dot were to be placed for every poor farmer and farmer suicide on a map of India, it would mostly fall over areas where farming is dependent on the rains. Even as ridiculous and often obnoxious reasons are cited for farmer suicides (impotency, barrenness and love affairs, to name a few), there is no denying that farmer suicides are on the rise.

Only once every few years do commodity prices spike in the international market. When prices of commodities

like wheat, rice and onions spike, the government imposes an arbitrary ban on exports. When prices fall in the years following a ban, as it has for potatoes, the government and academics do a Houdini-style disappearing act, leaving farmers in peril. Arbitrary and reactive decisions are the bane of farm policy and such export restrictions are a form of regressive taxation on the farmers and detrimental to their interests.

When prices do rise, the farmers have an opportunity to make a profit and use the proceeds to repay their past obligations. When farmers are denied the opportunity to realize better prices by export restrictions, they remain burdened with IF THE FARMER'S OPINION IS AN UNWANTED BURDEN FOR GOVERNMENT, INDIA WILL ALWAYS BE A DEVELOPING NATION 03

EDITORIAL



old debt, with moneylenders compounding interest. In the ensuing years, when production is hit by weather calamities or when prices tank (last year production and prices tanked simultaneously) the farmer's financial burden shoots up, aggravating an existing crisis and leads to larger number of farmer suicides. Suicides, however, are just statistics to academics. The absence of good policy compels farmers to abject poverty and suicides. Compensation packages are not the answer.

As ensuring cheap food in times of food scarcity is perfectly justified, government intervention when farm prices are low is just as desirable. Economists, howsoever curiously, engage in writing endless documents to establish that farmers are a pampered lot that deserves to have subsidies and support terminated. The thinking behind restricting exports of nonfood items like *guar* or cotton, however, beats reason.

For over two decades the debate on farmer issues has been languishing and it was considered necessary to revive discussion on farm issues at a national level. While some sort of a momentum has been created around understanding that perpetual farm distress is the horrifying new normal, there is also the abject failure to protect the farmer's turf from questionable academic erudition and farm representatives who don't farm.

Policy makers focus on tackling food inflation. The truth is that the real fear is around food deflation and this provides one of the many reasons for farmers to remain at odds with

agriculture academicians. Policy makers first aggravated food inflation and are now conveniently propagating importing food as a means to keep it in check. Economists have pessimistically built their arguments on the assumption that food inflation is perpetual and cannot be solved at home.

Farmers are optimistic about being able to produce amply to feed the nation but are threatened by a deflation problem. Supply will continue to outpace demand for years to come. This month the Food and Agriculture Organization of the United Nations validated such a deflation forecast. Inflation has more to with issues of hoarding, governance and marketing bottlenecks than production constraints. If, like the United Progressive Alliance, the National Democratic Alliance too remains convinced that only academics possess knowledge and the farmer's opinion is a best ignored burden, India will permanently remain a developing nation.

It is common practice for industry associations and international, corporate funded institutions to commission studies, projects and reports to influence policy, opinion and newspaper articles. Allowing only academicians to frame farm policy is akin to asking genetically modifying seed manufacturers to frame food labelling guidelines.



Ajay Vir Jakhar *Editor* twitter: @ajayvirjakhar blog: www.ajayvirjakhar.com

WHEN TRYING

TO PROVE A

HYPOTHESIS

DATA, ONE WILL

GENERALLY FIND

WHAT ONE IS

THROUGH

SEEKING

COVER STORY GETTING TO THE ROOT

GETTING TO THE ROOTS OF RURAL DISTRESS

FARM POLICY: FROM IGNORANCE TO INEFFICIENCY 08 Ajay Vir Jakhar

FARM STRESS NOT ORDAINED BY NATURE 10 J.K. Bajaj

FARM STRESS: A PRODUCT OF POOR PRICES 14 VM. Singh

THE LAWLESSNESS OF AVERAGES 18 Nitin Sethi

DISTRESS: WHEN DEATH IS CHEAPER THAN LIFE 24 Jaideep Hardikar

FINISH OFF THE FARMS AND FARM DISTRESS DISAPPEARS 28 Biswajit Dhar

POLICY MAKERS AND INTELLIGENTSIA: OF IGNORANCE AND ARROGANCE 32

THOUGHT LEADER

WHY IS AGRICULTURE NOT INTEGRAL TO INDIAN EDUCATION? 42 Hannan Mollah

INSIGHT

MISSION CLEAN GANGA: THE CASE FOR FARM AND FISHERY LED INTERVENTION 50 Dhrubajyoti Ghosh

SPECIAL REPORT

COTTON FARMER ON THE GLOBAL FASHION RAMP 56 Subir Ghosh

GREEN FINGERS A DATE WITH DATES 64 Ajay Vir Jakhar

<mark>letters</mark> To the Editor

Stressed across the board

Sir, In your editorial 'Farmer Forgives; Nation Forgets' (Farmers' Forum, June-July 2015), you have clearly exposed the faulty policy formulation for farmers. The constant number crunching by economists to conjure success out of failures - even as wrong and insensitive policies are playing ducks and drakes with the lives of the small and marginal farmers in particular, while the government plays its curious games has been the bane of Indian agriculture. You have effectively rounded up the gamut of groups that are bringing death and destruction to our countryside. India's farm policy is contrived "by economists, directed by industry and hemmed in by high-profile NGO's, making inclusive growth improbable". Between themselves, thev have transformed an unequally prosperous rural society to one that is equally distressed across the board.

Vinod Singhi,

Bangalore, Karnataka

Plan, do not execute

The article, 'Designed to Fail: CAG Raps Flawed Planning for RKVY Woes' by Sneha Mukherjee (Farmers' Forum, June-July 2015), only reinforces the argument in your editorial about the miserable state of planning in India, especially for the farm sector. It is hardly shocking that the performance audit report on the Rashtriya Krishi Vikas Yojana talks of ineffective policy implementation and



Negative income!?

I was shocked by the pathetic facts revealed in 'Farmland Security -Insuring Against Suicides' (Farmers' Forum, June-July 2015) by A.K. Ghosh. For small farmers, who represent 10 per cent of the community, having one to two hectares of land, the monthly saving is ₹500, after meeting all expenses; for marginal farmers, the figure is minus ₹1,500 a month, signifying a state of critical existence. How does anyone expect the countryside to survive after this?

> Raghuvir Singh, Rohtak, Haryana

Farmers' Forum website www.farmersforum.in is now up and running. Log in to check out all the earlier issues. irregularities. Between 2007-08 and 2012-13, against an allocation of ₹32,460.45 crore, ₹30,873.38 crore was released to twenty eight states and seven union territories, out of which only ₹28,083 crore could be spent. What else is left to say?

> **Manoj Biswas,** Kolkata, West Bengal

Travel and tell

Your Green Fingers article 'Down Under, Farming is a Wonder' (*Farmers' Forum*, June-July 2015) was as good as always. You travel a lot and share your experiences and farming knowledge of various countries, which is an excellent idea. I was particularly taken up by the commission, charged by agents or middlemen at auctions being as high as 15 per cent, and your realization that the system was very fair. In India, there was no cartelization by the middlemen.

Suresh Chand,

Mumbai, Maharashtra

Quit farming

Your Cover Story, (*Farmers' Forum*, June-July 2015) 'Fatal Farms: Inertia at the Time of Crisis' by Naresh Minocha, leaves me stupefied and makes me wonder whether my family, farmers for generations, should indeed give up farming. Truth to tell, we know very little else but to farm and we see very little help on offer to empower us to adopt alternate professions. Selling the land and eating off the money does not seem to be an interesting option.

> Mangaram Sau, Deoghar, Jharkhand



Getting to the Roots of Rural Distress

ndian farmers do not have the luxury of operating out of the 'salubrious' environments which those who discuss them do. The heat, the dust and their sweat provide them with food for sustenance and although every politician and political party in the country swears by the farmers repeating slogans like 'Jai Jawan, Jai Kisan' - when it comes to policies and programmes - often government schemes do not help farmers. On the contrary, on certain occasions, they threaten the interests of the farming community. This is true not only for those who own land but also those who work on the land and whose livelihoods depend on it. Land, which at the best of times suffers from droughts and floods. Just witness the countryside in eastern India today.

The farming problem in India is clear and evident to everybody. Agriculture today accounts for between 16 per cent and 17 per cent of India's GDP but at least half of the population depends on it, either directly or indirectly, for its livelihood. Rural distress is not a new phenomenon, as is apparent from the frequency of uncertain monsoons, unseasonal rains and hailstorms. One is always unsure of how the monsoon will play itself out, even when at least half of the total

AN INDUSTRY AS UNCERTAINTY DRIVEN AS INDIAN AGRICULTURE MUST FACE STRESS

crop area in India is directly dependent on it and everybody, from the farmer in the field to the finance minister, prays to Lord Indra. Any industry that is so uncertainty-driven must face stress, asserted Paranjoy Guha Thakurta, while initiating a discussion at a seminar, 'Rural Distress' in Delhi, on June 16, 2015, under the aegis of the Bharat Krishak Samaj (BKS) and Farmers' Forum. Speakers at the seminar were Ajay Vir Jakhar, Chairman, BKS, Dr J.K. Bajaj, Director, Centre for Policy Studies, New Delhi, V.M. Singh, Convenor, Rashtriya Kisan Mazdoor Sangathan, Nitin Sethi, Senior Associate Editor, Business Standard, Jaideep Hardikar, Special Correspondent, The Telegraph and Dr Biswajit Dhar, Professor, Centre for Economic Studies and Planning, School of Social Sciences, Jawaharlal Nehru University. The discussions were moderated by Guha Thakurta, veteran journalist and educator. •



07



FARM POLICY From gnorance to From gnorance to Defice poly Ajay Vir Jakhar



hy is there distress in villages today? Why are people clueless about what afflicts Indian farming and farmers? Why is rural distress the new normal? The government, non-government organizations (NGOs) and a large section



AJAY VIR JAKHAR Chairman, Bharat Krishak Samaj

of the urban population believe that farmers are not aware of what is best for them. Most farmer organizations in India are run by people who do not farm but act as urban representatives for the farmers. The truth is that farmers are in distress because their genuine interests go unrepresented.

Many of those who understand farming are unable to articulate their positions. Those that do talk about issues concerning farming are unaware of the reality. There is no platform for farmers from which to espouse their views and although there are several NGOs and farmers' organizations in existence, as they are not rooted in farming, they tend to provide shallow or wrong analyses which are in line with their interests.

Farmer organizations are run by people who do not farm themselves. They tend to overlook farmers' interests

The *Bhagwad Gita* speaks of working without worrying about the results. That is exactly what India's farmers have been doing. This situation will continue until farmers and society hold politicians responsible for the policies they frame.

First, society must ensure that farmers are are allowed to represent their own community. As a farmers' organization, the Bharat Krishak Samaj (BKS) has tried to encourage independent and diverse views on various issues related to farming. Irrespective of whether BKS agrees with them or not, it has published such discussions in its magazine *Farmers' Forum* (which, incidentally, has reached the landmark of five years of continuous publication in 2015) to initiate debate and encourage understanding and convergence.

This seminar, 'Rural Distress' is in line with the philosophy of appreciating diverse positions while pressing on for what BKS believes to be right.





Farm Stress not Ordaned by Nature J.K. Bajaj

he great Hindu mythological epics, from the *Ramayan* to *Mahabharat*, emphasize the term *adevmatrik*, which means that one of the primary duties of the king is to ensure that agriculture remains free from dependence on God or nature. In the *Ramayan*, when Bharat goes to meet Lord Ram, the latter enquires about the state of affairs in their kingdom, Kosala. He asks: "Are our oxen fine?" He also asks: "Are our wells and ponds sufficiently full with

water? Has agriculture become God-dependent?" There are similar instances in the *Mahabharat*, including the questions on agriculture to which Yudhishthir is subjected. India is a country with a prominent monsoon and has been so throughout its long history.

If we are to consider a figure that clearly reflects the issue at hand, rural distress, we could start with the fact that India's per capita production of foodgrain is a little less than 200 kg per person.



J.K. BAJAJ Director, Centre for Policy Studies, New Delhi

Subtract the wastage and it drops a little more. This figure has become a constant in agriculture economics. From around the period that the British came to India to the present day, the figure has not changed. It has an intriguing history. In 1890, the British government in India set up a Famine Commission which, in its massive report, highlighted that the administration must ensure availability of 200 kg of foodgrain per person annually. That might not have ensured their health or that they

were adequately fed but at least prevented deaths from starvation.

Clearly, this figure was recommended to avoid famine but not to avoid malnourishment or ensure good health. The economist, Amartya Sen has reflected on how democratic societies cannot afford people dying of hunger, but can allow to let them stay hungry. He also stated that the number of people who die of malnutrition and even hunger every decade is equal to the number of lives lost in



the catastrophic Cultural Revolution in China.

Any economist looking at the figure of 200 kg per capita foodgrain would conclude that this country is under farm distress. It is most disheartening that every year the Food and Agriculture Organization statistically concludes that India is the hungriest country in the world. There are anthropologists who say that Indians have been malnourished for so many years that their food requirement has reduced, implying that their metabolism has slowed down. This is more a policy concern than a political question. All the political parties seem to have worked out a consensus that the agricultural sector need not grow beyond the point from which it can deliver 200 kg per capita foodgrain. The changes, if any, must be effected by a change in the mindset of the policy makers.

Consider some vignettes which attest to the extent of the distress. About thirty years ago, a colleague and I travelled from Allahabad in Uttar Pradesh to Darbhanga in Bihar. We went from village to village in this region, which is one of the most naturally endowed areas in India in terms of soil fertility and water availability, as it is part of the Gangetic plains. We found that farmers were generally inclined to do only the minimal amount of farming that was required to meet their needs and nothing more.

A farmer in the Saran district of Bihar, which is exceptionally rich in soil fertility and water resources said that he was reasonably content with his 40 maunds of crop (about 16 quintals, less than two tonnes) and that it was sufficient for him and cattle fodder too. He did not intend to sow the next crop, *kharif*, which meant that there would be no paddy crop, as neither he nor the other villagers had the capacity to incur the risk of the crop being washed away – a possibility that paddy crops faced once every two or three years. We wondered why such a fertile region was being wasted. In this phenomenon lay the seeds of rural distress. There were no water or fertility constraints, only economics and policy.



In the western part of the country, especially





All political parties seem to have worked out a consensus that agriculture as a sector need not grow beyond the point from where it can deliver the 200 kg per capita foodgrain mark

the Vidarbha region in Maharashtra, farmers were shifting from one crop to other, for instance, by abandoning their cotton crop to grow soyabean. Unlike the eastern part of the country – with the privilege of abundant natural resources suitable for farming but where people lacked will and perseverance - in western India the land itself was damaged and there were no sincere effort to make water available for farming. Village after village showed such visibly clear signs of distress and even tragedy that they had practically become banal and lost significance. A man, whose son had committed suicide, explained the reason for his son's drastic action: "He had gone mad, the debt had made him very anxious even though I said that farmers live with debt and, anyway, I would have to clear it and he did not have to worry?"

I could not fathom why farmers had shifted to soyabean when they had been growing cotton so successfully until one farmer, Patel, explained. The farmers here were simply hesitant to admit the real reason: procuring seeds for cotton had become very expensive and beyond their affordability. By comparison, soyabean cost next to nothing and was therefore the cheaper option. This does not, however, mean that distress is the natural state of affairs in agriculture. With some efforts and government initiatives, the scene could be altered.

The Datia district in the northern part of the Bundelkhand region in Madhya Pradesh (MP) has witnessed a green turnaround after water was made available through a canal connected to the Betul river that flows along Jhansi. In MP too, state initiatives have helped the agriculture sector to register healthy growth rates over the last five years. This year witnessed an impressive 22 per cent growth. Jhabua, a tribal district in southern MP, has shown remarkable improvement in agricultural productivity because of government-supported irrigation projects.



FARM STRESS A Product of Poor Pices V.M. Singh

few days short of the National Democratic Alliance's one-year anniversary, the Bharatiya Janata Party (BJP) president Amit Shah is said to have made the following claim to a group of media associates over an informal dinner: "Not an acre of land acquired by the government will be handed over to industrialists" (under the proposed Land Acquisition Amendment Bill, 2015). A few hours earlier, the subject had come up during a meeting with the

representatives of the Rashtriya Swayamsevak Sangh's frontal organizations like the Bharatiya Kisan Sangh, the Bharatiya Mazdoor Sangh and the Swadeshi Jagran Manch, all of whom opposed the



V.M. SINGH Convenor, Rashtriya Kisan Mazdoor Sangathan

amendment Bill. Shah assured them it was kosher: the private sector would not get its hands on government-acquired land.

The reality however, is quite different, since agriculture has not figured among the government's priorities for a long time. The farmer is the last man standing in the queue, trying to draw the government's attention. Although there is no food shortage in India – the country produces 40 per cent more wheat than required, 30 per cent more rice and sugar – farmers die

because they are not paid the right price for the produce. That is what ails the farm sector.

As Ajay Vir Jakhar has asserted, farmer representation and politics in this country have



indeed fallen into the hands of people who do not know anything about agriculture. When the Rashtriya Kisan Mazdoor Sangathan (RKMS) raised issues related to the Land Acquisition Ordinance and staged a dharna at Jantar Mantar in New Delhi, Anna Hazare, who had nothing to say when hundreds of farmers committed suicide in Vidarbha in his home state, wanted to lead the stir. The RKMS put its foot down and did not allow the agitation to be hijacked by people who had no knowledge of farming and farmers' problems.

Nowadays it is practically fashionable to talk about farmers. Today, the real problem is not food production: there is enough food. The challenge is how to protect the farmer and his interests. A symptom of the crisis is that a hailstorm led 1,153



A small thing that government can do is learn how to buy at the minimum support price

farmers in Uttar Pradesh to either commit suicide or lose their lives from shock. Meanwhile, the farmer has become a political football: even to be provided with the compensation package for crop damage caused by natural calamities, he is confronted with a corrupt labyrinth of red tapism in his dealings at the level of the *patwari* and *lekhpal*.

A small thing that the government can do is learn how to buy at the minimum support price (MSP) — the price at which government buys a farmer's produce when he is unable to sell it in the market. After swearing support for farmers during the elections, every political party leaves them to the mercy of the moneylenders. Farmers are also themselves to blame for becoming victims of such deception because they are divided along the lines



15





Why is the quantity of cane to be supplied to a mill predetermined but not the price or date when farmers are paid? NITI Aayog must create a farm policy with the right intentions

of caste, religion and region during elections and do not vote as farmers. They fail to judge what lies in store, what prices they will get for their produce and whether it will benefit them.

Many lament that there is no policy for farmers and this comes to the fore after every meeting on agriculture. When there is a policy for other stakeholders in agriculture, for instance, the sugar mill owners, why is there no policy for the 50 to 80 million people, who, directly or indirectly, are related with and dependent on sugarcane farming? Why is the quantity of cane to be supplied to a particular mill predetermined but not how and when the sugarcane farmers are paid? Whatever the name may be – Planning Commission or NITI Aayog – it must create a farm policy with the correct aims which is subsequently supported by fair implementation.

Farmers should be treated as human beings and

not merely as vote banks. The condition of farmers is so poor that the new generation does not want to continue in the same profession because they view it as a loss-incurring proposition. It is attracted instead to other avenues of employment, for instance. Sons of many farmers want their fathers to sell land and invest in other profitable ventures or shift to other occupations.

If the government was prompt about addressing farming issues, farmers would not have to move courts to get the MSP fixed every time the yield is in excess and remains unsold. Sometimes even bailouts, like the recent ₹6,000 crore bailout package for the sugarcane industry, are more directed towards mill owners than the ordinary farmer. The fundamental problem is that those in power have inflated opinions of themselves and expecting them to work to alleviate farmers' problems would be asking for the moon. ●

PIONEER.

Right Product, Right Acre

For over four decades, we have provided high quality seeds to ensure improved agricultural productivity for more than 3.5 million farmers in India. Our endeavour is to bring crop genetics, advanced seed technology and traditional farming practices together uniquely to deliver right product on the right acre.

Our world class scientists not only develop products considering crop diversity but also diverse growing conditions— such as resources availability, irrigation facility, disease incidences, land type, grain type preferences.

In India, Pioneer[®] brand product offerings include corn, rice, cotton, pearl millet, and mustard crop seeds - Each product delivering its promise of increasing the farmer's profitability through higher and better yield, every seed contributing towards making India one of the top agrarian economies.

PHI Seeds Private Limited Babukhan Millenium Centre III Floor, 6-3-1099/1100 Rajbhavan Road, Somajiguda Hyderabad - 500 082 Andhra Pradesh. Ph : 91 - 40 - 30434400



The Lawlessness Di Averages Nitin Sethi



s a journalist, I will limit myself to commenting on things that I notice sitting in Delhi, things that I see harvested from government files, in government schemes; how governments operate and their perspective. That is a safer area for me to operate within, as I rarely encounter any farms here, in the city.



NITIN SETHI Senior Associate Editor, *Business Standard*

My home is in Arunachal Pradesh but examples from there would not be fitting here: what I see in my fields does not apply in this case. My sister was telling me about the floods and her district being cut off, yet she was apprehensive that the state might face a drought. I could not comprehend how an excess of rain could still lead to a drought.

Arunachal needs 400 mm rain in the next seven days (June 2015) to make sure that the *jhoom* farming is not adversely affected. The locals were apprehensive and had planned the evacuation of the village when it rained. They would move up the hills and ensure that they were safe. If it did not rain and the Brahmaputra valley did not get flooded, it would be very bad for the *jhoom* farmers. This example does not work as a model for the rest of the country but it has to fit in to the jigsaw somehow. This is what, as a journalist, I can attempt to explain: the operation of the government.

Two weeks ago an assessment of how the monsoon season was shaping up was carried out. The Indian Meteorological Department (IMD) stated, "till now, the rainfall is normal" and suggested that it may not be as bad as had been predicted. Neither the ministers nor the bureaucracy were informed that the average calculated was based on the excessive rainfall that took place in northern India over the last two weeks. So much so that three lakh people in Assam remain displaced because of floods but that is compensated for in the calculation by the lower rains in the south. Thus the conclusion drawn was that the monsoon seems to have done well; that it was normal, or at any rate near normal, and that it was necessary to work on irrigation over the long term. After the Prime Minister met the concerned officers, they decided that the way to approach the drought this year would be to work on irrigation schemes for the next three years. This one works on 'averages' while sitting in Delhi and typically, a journalist has only three hundred words to say





on almost everything. The 'average' is conveniently deployed to summarize what is happening.

The social milieu in rural India is not just about the farming sector. There has been a systematic change in how government perceives society at large, not a matter of right and wrong. When this government came to power, it decided to use the 14th Finance Commission numbers and to provide more money to the states to do what they wanted.

Many forgot that the government had also withdrawn a lot of money which was being provided on central schemes to states. Logically, it was not a bad idea, as schemes for rural development and social development are often better implemented when handled from close to the field. The sequence followed here, however, was rather foolish because the first decision was to provide money under the 14th Finance Commission that involved transferring more money to states. Then a new regime of surcharges and taxes was created that would not devolve to the states. Therefore the overall tax being generated could not actually devolve to the states because they had already been turned into surcharges, which are not shared with the state but kept in the central kitty.

Halfway through their budget year, the states were asked to revise their scheme. Knowing how bureaucracies work, it will take them another four months before they can do so and by then nearly the entire financial year will be over. Thus there can be no funding in the social sector for the whole year. Most of the meagre social sector funds go to the rural regions and not the urban areas. Consequently, in several states across the regions, salaries have not been paid to people working in the social sector. Funds that have been provided for the last month's delivery have disappeared.

The same is the case with the Mahatma Gandhi National Rural Employment Gurantee Act (MGNREGA), where the government withdrew its statement on its own accord and admitted, "the minister's statement on MGNREGA has caused psychological damage to the scheme". The minister had been saying that the scheme should be closed because the funds were not reaching in the first place and they were squeezed out for the last six months anyway. It is not just this government that is doing so; the previous government had done roughly the same but with slightly better grace.

If one asked any district magistrate in the country,

States cannot spend beyond 15 per cent of their budget in the last quarter of the financial year. Centre withholds funds till the last quarter and then questions why the state did not spend

What followed then was that the central funding schemes were withdrawn, including those that were to be funded purely by the central government and not in ratio with the state government. This was done after the state government had, by and large, completed their preparatory work for the budget, which meant that most states were not prepared to understand what was going to happen with this money. When they drew up their budget, they completed the social scheme spending and were suddenly told that no additional funding would be coming to them. One is experiencing the consequences of this now.

After all this has occurred, some state and central ministers may sit together and wonder where the money went and who was providing the money for those twenty four or five schemes. The Centre will claim that it had provided additional funds and ask why they were not being used. Meanwhile, the states have already drawn 44 per cent of their allocation for the social sector; the Centre's budget is around 30 per cent or even less.

he would say that since the scheme is about to close, investment in it was being discontinued. Many of them told me that it would be insanity to invest and continue with the work because the funds would not come through and they would be threatened or assaulted. None of them generated work for six months and one saw the worst phase of the MGNREGA. Once it realised that the issue was being discussed in the media and by the Congress (which itself had not handled the MGNREGA any better in the last two years) and therefore was overtly politically sensitive, the government came up with a better way of doing things. The government said that it would carry on and provide an allocation when required.

When a scheme is considered and a new formula devised, the 'average' figure becomes handy. First, the demand for the first year is reduced and then the last three years' average is considered as an estimate of the demand for the next year. The demand for the previous year having reduced by 80 per cent,





the resultant figure is far lower. Thus, demand is first artificially suppressed and then deployed as the basis for calculating the demand for the next year. Even by this measure the number was substantial: it was almost ₹70,000 crore and the government did not want to provide more than ₹33,000 crore.

For the next exercise another 'average' was taken. Since the plan was meant to work for the poorest districts which needed the most funds, the government analysed 600 blocks that would need more work to be generated. It was discovered that in a slightly richer state, no district fell into this category. In the case of Punjab and Haryana, the allocation had to be cut by 60 per cent. They had no poor districts. Clearly, if Punjab is compared with Chhattisgarh, it will not have poor districts.

The bureaucracy worked on the average and decided that two hundred districts would need to generate three times the work. The government claimed that the overall allocation was the same, which meant that the rest of the districts got an 80 per cent cut. Thus, four months after the budget, the minister and the government agreed to put in the money. The next month was spent on figuring out how to invest this money and even for this a new average formulation was created.

A year has been spent on examining different areas and averages, attempting to find methods of reducing expenditure is a clear route whereby funds can be held back. There exists a convenient clause: a state cannot spend beyond 15 per cent of the budget for the allocated year in the last quarter of the financial year. Therefore the Centre holds back everything till the last quarter and then begins writing to the state inquiring why they were not spending. The state responds by saying that it has been instructed not to spend beyond 15 per cent and the Centre then replies claiming that the mistake was on the part of the state and that it should have spent the money.

Next is the question of the utilization certificate. If it is not given, the budget for the next quarter is not be released. Thus, in the next quarter, one holds back again and goes back to the 'average' business. The Bharatiya Janata Party (BJP) is learning the game, the United Progressive Alliance played it extremely well over the last three years, constantly cutting down funds where it was required by creating these artificial mechanisms and in the meantime, sitting in Delhi deploying these skewed average figures.

Tripura presents an interesting perspective. I was planning to go there next week because recently the Armed Forces Special Powers Act was recalled and I wanted to check how this decision impacted ordinary people, namely the 30 per cent tribal population, the rest of the migrant Bengali population and the other Indian citizens settled there more than three or four generations.

Tripura presents another interesting perspective because of its rubber plantations, which changed



the economic scenario of Kerala. Tripura is India's second largest producer of this cash-rich crop. Investment is required for the initial seven years while the rubber plant grows for which government subsidies are avialable. The per capita income of the state on average has increased rapidly in the last ten years and it appears to be doing much better than most states, except if one examines the period prior to the existence of the rubber plantations.

Who were the original owners of the farmland on which the rubber plantations were grown? Most of the tribal population does not own land. They were supposed to use the forest land in the lower region, but a scheme was offered to them whereby they would be relocated near the highway to be better connected with services like hospitals. In a democratic country like India, it is startling that of the 30 per cent tribal population, 27 per cent was shifted down. One is aware of the Salwa Judum camps in Chhattisgarh but in Tripura too this was systematically done over eighteen years.

The people were supposed to be removed from the forests, brought down to the roadsides and given small plots. I asked one of them to produce papers that he might have received from the government during this shift. A friend's father showed me the document: he had been given two hens, a goat and a buffalo. He was to get the buffalo (that he never laid eyes on) and the hens were naturally handed over to the Central Reserve Police Force camps. It has been eight years and he is still looking for his land. There is no land available. Check who has the land by the highway.

Eventually, he became a labourer in a rubber plantation and earns ₹400 a day if he works for eighteen hours. Obviously he cannot work that long, especially in a society in which it is the women who put in the extensive work needed for *jhoom*. Men have been found to be unsuitable for *jhoom* cultivation. Under the new dispensation, women have now stopped working in Tripura's tribal areas. It has altered the gender dynamic so much that although traditionally money would be given to the bride, now there is a regular dowry system in place. Amidst stories about the rising average per capita income of Tripura, these narratives seem to disappear or are silenced. Such instances can be located in different states in the country.

When the BJP came in, it logically mooted the idea of central fund devolution for different schemes. Funds should be given to individual states and not lie the Centre. Nor should the

The tribals were asked to move from the forests in lieu of land by the highway, plus livestock. Rubber plantations have now come up there. They have received neither land nor livestock

Centre be determining the fate of crores of farmers about whom it has minimal knowledge. There is a certain logic behind the government's working and one expects it to be slightly more efficient than it was in previous years. In a federal structure – as the current government says – the states will have competitive federalism. This implies that there will be a complete devolution of funds, intended for the social sector, to the states.

What remains by way of a role for the Centre in this case? Is its role only to create more infrastructure and generate growth and demand that the states manage the entire social sector? If that is true, the government has not declared this upfront. Had it done so, it would essentially have told the states to take care of themselves. If its job is to ensure eight per cent to nine per cent growth and create enough infrastructure so that the state can benefit, the rest becomes the state's business — the task of managing health issues, including the *anganwadi* workers and their salaries, a large employment space in rural India.

Quite clearly such a dramatic change would need preparation and since the states are not ready, it is imperative that a discussion takes place between the state and the centre. How the states will take over specific roles and what the Centre would do needs to be planned. Today, there is the NITI Aayog that is still trying to determine what its role is. This is a substantial question that only the middle and upper classes can afford to ask. The others continue to worry about their sheer survival.

One is approaching the middle of the 12th Five Year Plan. There are three years left and no midterm review has been done so far. One does not even know if there will be a 13th Plan, because although the power sector has prepared a 13th Plan document, the government is suggesting that the planning itself is being relocated. There is, therefore, complete chaos and uncertainty about which way the Centre wants to move.

The BJP clearly has a different stance towards economic growth. The point of the anecdotes and averages provided in this article is that the government has taken too long to ascertain its ideology and the procedures that would make it work. What is the plan to shift the country towards the economic growth that the ruling party wants to achieve? Ushering the country in a certain direction would require a roadmap of sorts. A year after the government has been in power, it should at the very least, have a roadmap, especially if its wants to continue for the next 10 years. If it does not, it may well end up doing a hit-and-run job.



23



Ideas & Issues in Indian Agriculture

Discussed and debated by experts in India and abroad.

Read Farmers' Forum

Subscription For 6 issues in one year: For individuals: ₹600 For others: ₹1200

Send your subscription by Cheque or Demand Draft in favour of *Bharat Krishak Samaj* payable at Delhi with your mailing address to:

Farmers' Forum A-1 Nizamuddin West New Delhi 110013 SUBSCRIBE TO INDIA'S MOST AUTHORITATIVE MAGAZINE ON AGRICULTURE

For more information, log on to www.farmersforum.in



DISTRESS Unen Death s Cheaper than life

Jaideep Hardika

he process of chronicling what happens in the countryside over the last ten to fifteen years, has changed my perceptions of agriculture and agrarian transitions. One is facing rural distress of unprecedented proportions, which is possibly entering the second or third phase. This means adversity that is not just confined to rural areas but that which will be felt all over India, since it is difficult to compartmentalise any particular set of people living in rural India as being only rural.

One could even increase the scale without exaggerating, because there is indeed a global crisis. The scenario faced by a farmer like Ram Rao in a small village in Maharashtra's Yawatmal district, is, in all likelihood, being replicated in a western African nation as well, with some part of Ghana selling or leasing land. April, May and June are very crucial months, for this is when the farmers and the landless in the countryside calculate the accounts for the previous year and make their budget for the forthcoming year.

In these three months, if one happens to end



JAIDEEP HARDIKAR Special Correspondent, The Telegraph

up on a farmers doorstep one random evening, one will find people chatting about their lives, the year gone by and their feelings about the future. While the powers in Delhi are obsessed with the national budget and matters of state, the world of Indian farmers appears to be entirely alienated from them. The issues and debates are completely different from those discussed in the capital. In Delhi, the major preoccupation is how not to spend. In the villages the predominant anxiety is

about where the next meal will come from.

A Dalit farmer farmer in his mid-fifties, with whom I had a chance meeting, was sitting with a *jhola*; looking worried and tense. He had with him a written application, a small request for the government, which would probably have ended up in a dustbin. The two-page narrative in Marathi is a summary of the farm economics of 2015. It states what he expects from the government if he was to survive. He claims that 2014-15 has been the worst period in all his forty years as a farmer. Neither has there been a crop nor a price. Over the past twenty years, he has been depositing less money in the

24



Ram Rao consumed pesticide and survived, only to wonder if it was adulterated. Now his medical bills are so steep, he feels death would have been cheaper

bank while withdrawing more every year.

Some scientists suggest that too much is being withdrawn from the soil as well and that there are no micronutrients left. Similarly, while connecting the dots in the economy, as a journalist, one finds that from a state of composure about indebtedness during the early nineties, the afflicted can no longer handle their anxieties. They are quick to seek the easier and cheaper option of death by suicide. Fiftyfour-year old Ram Rao said that he consumed two bottles of pesticide and survived, only to ask me whether the pesticide was adulterated. His medical expenses were so steep that it would have been more economical to die than pay the bills. He said: "For me death was cheaper, life is very expensive".

Whether in rural India or city slums, a state of distress is identifiable when death is cheaper than life, a calculation deeply rooted in economics. It does not matter in the least to the farmer in debt, who needs to resolve his urgent debt issues, whether one is a market fundamentalist or Bt Cotton supporter, in favour of genetically modified food or a Marxist. The problems in the farm sector have been created over the last forty to fifty years. The farmer does not deliberate nor affix signatures to agreements at bilateral conferences and multilateral conferences. Farmers do not agree to American chickens flooding the market. The farmer's concern is whether the people who creating such policy structures are attempting to grapple with the consequences of such actions.

What the economic recession has done to the villages is unprecedented. How long can a farmer keep postponing his son's marriage? In 1987, 2005 and 2009 there were droughts, which recurred in 2013 and 2014. This goes on without a foreseeable end. Rao has sold his last remaining asset this year, a bullock, and has nothing left to sell. He could sell his land but there are no buyers.

Across the countryside, in Vidharba and



Marathwada for instance, exceptional farmers have withstood the pressure. Extremely diligent communities are also trying to stay together to face the market and other social pressures. When the entire economy is in a bad shape, economic uncertainties overwhelm farmers like Rama Rao, whose distressed circle is growing.

The problems are not appropriately represented by the fact that certain households report two or three suicides. For instance, children of the farmer, whose suicide I reported in 1987, have grown into their own stressful worlds. On December 8, 2014, I was travelling in Yavatmal, when a contact in a small cotton *tehsil* called me to say that there had been two suicides and the bodies were still in the mortuary. The meetings now take place in the mortuary because of rapid, multiple deaths in the neighbourhoods.

Who are these farmers committing suicide? It is alarming that there is no time to average out the deaths. Farmers killing themselves tend to be in their thirties – they belong to the generation whose farming, but they had no alternative. Out in the wider world, one is constantly hearing renowned great economists of the country talking about farmers needing to move out of agriculture.

Having survived the recession, it is not rocket science to theorise that a farmer should quit. At least 150 million families have quit agriculture and become landless labourers. The 2014 Census



With the economy sagging, the landless left villages in droves in the 1990s, in a massive wave of migration. Now, with food growers in trouble, a second phase is brewing

shows that the small towns/the census towns are swelling. There are people moving into small urban areas, not just to the metropolitans. They do not know what to do; they are stranded halfway between rural and urban areas. It is a growing trend and youths have been moving to Pune and Bangalore to try their luck there.

The ten families which had members committing suicide were visited by Congress leader Rahul Gandhi. All of them had young children who had gone looking for employment but returned empty-handed. They thought it would be better to try their luck on their own land as their parents were ageing and attempt capital intensive farming, for which they had to invest in tractors and other expensive equipment. One farmer was juggling twenty-two loans, a remarkable feat, but he is not accorded the status of a farmer within the government lexicon, because by definition a farmer has to own the land. A recent amendment says that if a farm labourer dies in the village, he should be considered a farmer.

These young farmers make up the second pattern of suicide cases. They were told to farm progressively and experiment with hi-tech farming. That has not been successful. The biggest wave of migration occurred in the 1990s, when the landless were actually leaving the village because the economy was sagging, but the signals were missed, the signals were overlooked. The symptoms for the second phase of the crisis is that food growers are in trouble. In the last two years, suicides have





not just been confined to the cotton and vanilla farmers. The latest belt where suicides have been reported is in north India.

As in Vidarbha, there is a crisis unfolding in Haryana, Punjab and Uttar Pradesh. Here, it is difficult to comprehend what is happening because foodgrain was the alternative to cotton. In Chhattisgarh, farmers are uncertain about what will happen in the forthcoming year because halfway through the season the government has stated that it will not procure the entire foodgrain. Besides that, there is uncertainty over the monsoon. There are uncertainties about policies, massive social misgivings and price uncertainties as well. Cotton prices could be ₹4,000 per unit in the morning and go up to ₹5,000 per unit by the evening, but then drop to ₹3,300 per unit by the next morning.

What about climate change? Neither the farmers, nor the country as a whole is prepared to deal with climate change. It is going to be the most severe challenge for the Indian agrarian

communities. Erratic rain and sudden hailstorms have a catastrophic effect. The villagers of Buldana collected the hailstones and stored them in a well, but the frost on the farmland completely destroyed the crop over the one month that it stayed. Horticulture and perennial crops are in trouble as well. One is unsure of which annual crops to plant. The varieties are dwindling because India is in a completely hybridized world that may be conducive to these climatic changes.

Governments like that of Maharashtra are paying out more in compensation than in the planned agriculture budget. The planned agricultural budget is ₹7,000 crore but Maharashtra spends ₹13,000 crore on compensation, which means that more is being spent on contingency than on planning.

The late farmer Sri Krishna Kadam committed suicide but he lives on through his poem. "We are dumb hungry cows. We tend to our cows. But the thieves walk away with the milk." •



Finish off the Farms and Farm Distress Disappears

Biswajit Dhar

lobally, for every urban dweller, there were 6.7 rural dwellers in 1990. Projections for 2025 indicate that there will be about three urban dwellers for every two rural dwellers (Satterthwaite, McGranahan & Tacoli, 2010). The United Nations has projected that between 2000 and 2030, urban land will triple and the urban population will double to 4.9 billion, leading to shortages in water and other natural resources along with pressure to eat into prime agricultural land.



BISWAJIT DHAR Professor, Centre for Economic Studies and Planning, School of Social Sciences, Jawaharlal Nehru University

Nitin Sethi said today that NITI Aayog

is not very clear about the way forward. I beg to differ. A few weeks back, the head of NITI Aayog said that agriculture should gradually be phased out and make way for services. The sense one gets from people in places of power today is that they would like to see agriculture phased out to obviate discussions of this kind on rural distress. There will be no rural areas. If you have a headache, just cut off your head. Finish off the poor and poverty is eradicated.

India seems to be progressing in that direction.

big countries think about its policies.

One of the saving graces of the Indian economy has been the subsidy for the small farmer. Even today, many of these subsidies are actually permitted and India can even increase the subsidies although one country in particular, the USA, is exerting tremendous pressure regarding the reduction of the subsidy. Something over which India has a legitimate right is being questioned at the WTO and for some incomprehensible reason the response from the government does not indicate a willingness to stand up and declare

declare that it is the country's right to continue with those subsidies.

The response has arrived in the form of the Shanta Kumar Committee Report on 'restructuring' subsidies in a manner that may well kill the entire subsidy regime courtesy direct payments. One is not sure how they will be made. The country has inadequate land records; it does not exactly know the number of landless in the country and the move really means that the government will cut down its subsidy bill. It also seems that there are

Agriculture subsides for small farmers are the saving grace of India's economy. However, there is pressure for cuts, an ongoing reordering of the entire subsidy system

There are several books and seminars that project what India needs to do to become a developed country by 2050. It is being said that India needs to reduce the workforce dependent on agriculture to five per cent, as in other developed countries. So news related to farmers committing suicide should be good news for such policy makers. It would help them to get to that five per cent figure.

Take the question of subsidies. India is doling out all kinds of subsidies but one does not know who the recipients are because agricultural subsidies are being cut down. Clearly there is an ongoing reordering of the entire subsidy system. Where is it coming from? Today, India is a part of the global community; an integrated economy which is signing various trade agreements and making commitments under the WTO. There are certain regulations that the WTO imposes, restrictions visà-vis subsidies that the country in question can or cannot give. More than at any time in the past, India is being sensitive to what the global community or people who believe that the Indian budget will look much better if it goes down that route.

Meanwhile, the USA has enacted its Agricultural Act in 2014, promising to steeply increase subsidy. The USA's subsidy bill, as reported to the WTO, in the last twenty years (WTO was formed in 1995), much lower than the actual figures, shows that from around \$60 billion, its subsidies went up to \$140 billion in 2012 and between 2014-18 it will be higher still. It is appreciated that subsidies will go up steeply this year because the international market has crashed. If the USA faces a crash in the global markets it will be the first to jump in favour of the farmers, who account for no more than two per cent of the work force.

Even with two per cent of its population dependent on agriculture, USA has had a farm policy in support of the farmers since 1933. Farmers within the European Union (EU) account for no more than five per cent of its population. The first thing that followed the birth of the EU as a





One is not sure how direct payments will be made. The country has inadequate land records; it does not exactly know its number of landless people. This is a move to cut down the subsidy bill

common market was a common agriculture policy. India has 50 per cent of its population directly dependent on agriculture and another 10 per cent indirectly depending on it, but India does not have a definitive farm policy.

This is something that the government should be asked to respond, especially when there is talk of a host of new polices like the manufacturing policy. Why is there no policy that looks at the benefits of 60 per cent of the Indian work force? This is a major issue that needs to be given prominence. There is definite case for concern especially given the prognosis in places of power about the need to phase out agriculture. Who will feed this country if that was to happen? This is the most important question.

In the earlier government, some wise advisors would vaguely talk about importing food and say that in a globalized world, if India cannot produce, it can import food. As they started looking at the numbers and understanding the reality, they realized that agricultural commodities, especially food crops, are traded over extremely narrow spaces. The global history of rice trade and global productions show the limited quantities that have been traded. In wheat, it is less than 20 per cent of the production.

Imagine a situation where Indian agriculture is phased out and only five per cent of the population produced food. Where will the food for the people of this country come from? This is a reality that policy makers in India do not want to understand. Working closely with the agriculture ministry, I have shown them the numbers to say that this should be the starting point for having an agriculture policy. If India does not produce food, it cannot feed itself and that is the fundamental crisis.

There is a larger sociological problem around the way India thinks in terms of development. Agriculture is not considered as development or





30





else urbanites would not use the term *dehati* (rustic villager) to describe the farmer. It is a problem with the mindset of the people. Policies do not come out of thin air, they come out of mindsets, which is the biggest problem today. Policy makers do not think in terms of policies that would make the country food secure. India made a hue and cry about the food security issue at the WTO, which evidently was a sham because its policies are driving the country towards food insecurity.

China's total foodgrain production is more than 520 million tonnes. India's output is known and India has a comparable population. There is no need to work out the per capita availability of food for Indians. That is the situation to which the country has reduced itself. If this government is serious about the Food Security Act (FSA), it should focus on producing more to deliver the promised foodgrain to its people. The FSA would need more grain; it cannot afford to have food rotting. If the government is serious it should solve the distribution issues which are the real problem. That is the change of mindset that the country needs. Without that even the cities will face distress, a phenomenon which can already be witnessed today, not merely at the rural level but also the national one.



POLICY MAKERS AND INTELLIGENTSIA Of Ignorance and Arrogance





ARJUN UPPAL

Vice President, Corporate Affairs, DCM Shriram Ltd

There seems to be too much cynicism around agriculture. One gentleman said India's food consumption is only 200 kg food per capita per annum. The reality is that in terms of the food basket: milk consumption has gone up from 100 ml to 350 ml, consumption of eggs is up three times, vegetable consumption has increased five times. India has surplus food and is the single largest grain exporter in the world. India exports grain since because there is no demand for it in the country. What this actually means is that the country is exporting water, which is used to grow the food to feed the rest of the world. Biswajit Dhar said that China produces more grain than India but the truth is that China has been moving people out of agriculture. All that extra grain is being used to feed cows and pigs, for beef and pork. The per capita consumption of food in the United States of America is much higher because of the value provided for beef. I think that the comparisons are invalid and such cynicism needs to be addressed.

BIRAJ SWAIN

Co-Director, Global Call to Action Against Poverty

Let me add to the chorus of cynicism because I think fake optimism is one of the things plaguing the current government. We do not need to belong to the Marie Antoinette school of public policy. I came here hoping to get a holistic picture of rural distress, given that the government has an obsessive focus on infrastructure. People have been doing a lot of number crunching, considering that Qatar has become a death trap for Indian migrant labour.

India refuses to 'red flag' the crisis because the current death rate in the Indian construction sector is 161 per thousand. So while there is talk of 2,000 Indian farmers leaving the profession every single day (according to the 10 years of census data), it is certain that they are not going to be superstars in Bollywood or write the Union Public Service Commission examination to become bureaucrats or, for that matter, become parliamentarians. They are moving into the construction sector, which is the genocide sector in India. In any case, the situation is one of distress for these farmers from whichever angle we view it. So it might be interesting to see this comprehensive picture of the Indian farmer's distress.



VIJAY SARDANA

Co-Chairman, Agri-Business Committee, PHD Chamber of Commerce and Industry

Agricultural policies across the world show that they are not made for the farmers. There is no mention of farmers at all. They talk about food security, the affordability of food and distribution of food because of obvious reasons such as population pressure. To ensure affordability, there are subsidies that come from the urban and industrial sectors. This works in the developed world in which the two per cent agricultural population can be sustained by the 98 per cent non-agriculture population. The taxpayers can afford it. In India, the situation is reversed and it is necessary to highlight that the farming policies do not talk about the farmers. The word 'farmers' is missing from the agricultural policy. Are we saying that the agriculture policy is only for affordable food for consumers? There is also talk of budget cuts. The only way forward is for India to provide affordable food to consumers and a respectable income for farmers.

GUNWANT PATIL

Farmer Leader, Shetkari Sanghatana

India produces such large quantities of foodgrain that two years ago, the east and north Godavari regions had to declare a crop holiday; people did







Gunwant Patil

The word 'farmers' is missing from agricultural policy. Is this policy meant only to provide affordable food for consumers? Farmers also need a respectable income

not sow new rice. India does not keep proper records for foodgrain but China, for instance, has the figures because of state procurement. Only the produce that Indian farmers take to the market is recorded; their personal consumption is not. India's production is significant and it does not need to import anything except pulses and *til* (sesame) to manage to feed its large population.

As far as subsidies are concerned, India gives no subsidy to the farmers. On the basis of world cotton prices, from 1990 to 2000, the Indian cotton farmer received ₹3,000 per quintal less than the cost. The cost to produce the cotton was ₹6,000 and the government bought it from us at ₹4,000. If India is an agricultural country, where are the rich farmers? People keep talking about the subsidies on power or fertilizers but if the input-output prices are compared, farmers get a negative subsidy. I have worked in Vidarbha and in 1997 when the first farmer suicide happened in Andhra Pradesh, I went to Vijaywada to conduct the survey. The reason was that farmers from Tamil Nadu. The produce could not cover their costs. For farmers with their own land, the normal rate of return on the land is not calculated as a part of the input costs. The inputs of the farmer do not match with the outputs. The farmer does not want to be paid more but the government should at least disclose the correct world prices.

S.P. SINGH

President, Surajmal Memorial Education Society

Only a farmer knows what farming is all about but people who do not know whether a sugarcane is a tree or a shrub are deciding policies for us. They do not understand farming. The first speaker quoted examples from Maharashtra and Madhya Pradesh (MP). The chief minister of MP is the son of a poor farmer and has given a boost to farming in his state. There are other chief ministers who have been associated with the agriculture sector as mill owners but not as farmers. They have enjoyed the urban life, the city life, but not the villages, not the state of affiars in Vidarbha. One needs the will to make a change. V.M. Singh is a big landholder, one of the largest landowners in Delhi. If such a large

August-September 2015 Farmers' Forum

COVER STORY



36

People are ready to apply an income-tax on farming. There is no income in this profession but a few offices will be constructed for the income-tax department

farmer is worried, what about the farmer in Uttar Pradesh (UP) who owns two acres?

The United States has a far lesser population than India, but even they first made an agricultural policy and then an industrial policy. The people in NITI Aayog are framing industrial policies on priority. They should focus on agricultural policy, improve the general standards of farming economy and then ask the farmer to become industrialized. They cannot ask the farmer to become peons or chowkidars in their houses, because even for that one post, there will be five contenders from one family and three of the five sons will still be unemployed. Policies should be such that the problem gets solved rather before the land is acquired for industrialization. Jobs may be made available to start with but what after that? Even straightforward problems are not resolved. The



problem of untimely rain is enormous but no government has had a sustainable insurance policy. If there was a proper insurance policy for us, farmers would not be collecting cheques for ₹15.

When the BJP won 60 of their 85 seats during the first NDA government - under Atal Behari Vajpayee - from UP, I had asked the current finance minister Arun Jaitley, if they ever give a thought about us farmers. They made policies that benefitted a minority of the people but nothing to benefit those 60 seats. Their policies benefitted four or five seats but there was nothing for the others. He smiled and I understood. People are ready to apply an income-tax on farming. There is no income in this profession but a few offices will be constructed for the incometax department. What is needed is the will to do something. As Chaudhary Charan Singh said, if the town is prosperous, it reflects on the villages around.

KAPTAN SINGH

Chairman, Gramin Kalyan Sansthan

There are 200 Members of Parliament associated with the agriculture sector but no voice for the farmer. Either they are not farmers or they cease to be farmers the second they enter Delhi. Nobody discusses the quality of life in villages. One reason for high levels of migration is the poor quality of life in the villages. There are so many programmes

Farmers' Forum August-September 2015


on television but nothing that addresses the issues of the farmers. There is a school in Shamli whose principal told me that most parents are not interested in educating children, which reflects the actual distress in villages. Once the child is educated, he stops working in the fields but cannot manage to get a job. The state of education in villages shows the distress level there.

AMITA JOSEPH

Director, Business and Community Foundation

Rural distress is also affecting the handloom sector. Few months ago, handloom workers were agitating about the de-reservation policy in the handloom sector that employs the largest numbers after agriculture. If there is no will (*niyat*), how do we make things happen? Why is the Swaminathan Commission report not getting implemented? Can we go to the courts directly and make it happen? Can we go for public interest litigation? Why and what are we waiting for and what are the solutions? I get sleepless nights when journalists like Palagummi Sainath or Jaideep Hardikar describe farmer suicides, but where are the solutions?

PARANJOY GUHA THAKURTA

Senior Journalist and Educator

America is the only country in the world where

they have more people behind bars than in farms. Three per cent of the American population is in jail; two per cent in farms. America has a 300 million population that is being compared with a country of 1.25 billion people. We are talking about various issues but I think the recurring theme is that those who are in positions of power and authority, are not really aware of these issues and problems.

BISWAJIT DHAR

Professor, Jawaharlal Nehru University

The increasing number of undernourished people in this country makes the global community wonder (at international conferences) why in India, with the biggest democratically elected government, does the number of under nourished keep increasing. The point is that India is home to the largest number of poor in the world and it is a problem of purchasing power. The biggest irony is that people go hungry and do not have money to purchase food while foodgrain rots in the godowns.

It money is placed in the hands of the people, India will not have enough food. India's agriculture productivity and yield are matters of shame. It is shocking that India calls itself an agricultural country. Smaller countries have increased their yield and if India does not invest in agriculture, it gets nothing out of agriculture. If you want to leave agriculture to the mercy of just about anyone do you think we are going to get anything out of it?

There should be more cynicism about what is going on and India is not responding to this challenge. Indians are not even waking up to this huge problem that is facing the country: that it might go hungry. India came out of the "ship to mouth" existence and is in a situation where it might get pushed back into that position. All the development indicators concerning human conditions place India lower than some of the least developed countries. It is a shame that Indians do not feel the shame. It is quite shocking that people here are talking about us being cynical. These are the kind of people that need to be sensitized. We need more of these discussions and fora.

Someone should talk to these Members of Parliament and tell them that these issues should be raised by them in Parliament; that these are the concerns that they have for the citizens and present them in a manner that they cannot be brushed off. I have a huge problem with the issue of negative subsidies. Let us just not say that agriculture subsidies do not exist but find ways in



37





which to come to a solution. What has not been discussed here is what happens to the farmer after he produces his grain; what happens between the grain leaving him and reaching the consumer. The marketing issue has not been discussed and that has been a complete institutional failure. There is no doubt that the problem of Indian agriculture will not get fixed until the farmer gets the right price.

JAIDEEP HARDIKAR

Special Correspondent, The Telegraph

India looks very different in the hinterland. One needs to examine two maps, the map of poverty and map of dryland agriculture, to get a sense of the situation there. Small shining dots will come up as cities. If the country is cut vertically, the left will be slightly greyish, not completely poor. The right side will be the most impoverished part of the country.

Structurally, the big problem before the world, not just India is addressing the issue of fragmentation of land, which Dr B.R. Ambedkar had talked of in the 1930s: this country is going in a direction where land fragmentation is not viable. The other question is, how will sustainability of rainfed farming be addressed. I differ with the whole concept of production and productivity. The Green Revolution in Punjab and Haryana, the model states of high



Conference on RURAL DISTRESS ew Delhi | Tuesday, June 16, 2015



productivity has, 30-40 years down the line, found its limits with the land ecology.

Rural distress is not just about land and productivity and agriculture, it is all about a family unable to fulfil its aspirations. How can one deny someone the right to aspire to study at the Indian Institute of Technology and buy an expensive car? Whatever is popular across the country, in its culture, in its economy, will spread across the entire country. If one sees people in the cities making lots of money and living luxurious lives, it is bound to raise the aspirations of the rural people. The different pay scale revisions are an indicator of the government adjusting salaries to the inflation. Why is the same not applicable for someone who is

Banks have accumulated NPAs worth ₹10,00,000 crore but refuse to lend to the farmer. The reason: their inability to pay back



a farmer. Subsidies are also provided in the urban sectors, in metros and in buses. It is the urban sector that benefits from the most number of subsidies.

There are also non-performing assets worth $\overline{10,00,000}$ crore with banks but the farmer does not get credit easily. The bank manager has an economically valid point in denying him this $\overline{10,000}$ credit because the chances of it coming back are low.

PARANJOY GUHA THAKURTA

Yet the bank can lend ₹10,000 crore to Vijay Mallya, Chairman of the UB Group.

JAIDEEP HARDIKAR

In the last four elections, Parliament and legislative assemblies as well, the big shift has been in that the semi-urban and urban areas are deciding the outcome. In 2014, rural India did decide but the massive swing of those 10-12 per cent votes came in from the small towns. People born between 1980-96 in India comprise the youth and are either buried under education loans or they have dropped out. They are struggling in the job markets. The population does need to shift away from agriculture but there is no ready alternative.

NITIN SETHI

Senior Associate Editor, Business Standard

There is talk of a movement towards urbanization and smart cities. They will not come up even in the next five years with just about ₹150 crore per city to build up these 100 smart cities. There is no money for that. The non-performing assets of banks are so huge that the public-private partnership models are being restructured and the private sector is too scared to invest; nor does it have resources. The farming sector needs to aggressively take back the policy space that has disappeared.

At the Krishi Call Centre (started to solve agricultural problems and respond to queries) behind Krishi Bhavan a few days ago, there were 10 people who had no clue about any issues from the southern part of India. All of them were from the northern states and any queries from the south had to be parked because there was no one with any knowledge about the area or the language. On another occasion, there were three



"scientists" in the Jaipur centre, two of whom were chemical engineers.

Farmer groups need to invest energy and take over from the urban educated with little knowledge of rural problems but are fighting for policy space. Some 11 per cent of the space in Delhi is taken by cars, eight per cent of the people in Delhi own cars. One tenth of the city is owned by people with cars and they pay zero tax on it. When a car is parked for a month one pays ₹11 to ₹12 for that space. That is a subsidy. The conversation needs to change and farmers need to reclaim that political space.

V.M. SINGH

Convenor, Rashtriya Kisan Mazdoor Sangathan

The Swaminathan Report is just a report, not a law. Until it becomes a law, little can be done about it. Neither Modi nor Mulayam wants to implement the report. What is the lacuna in the report? How is the cost of production determined? The government needs to set up a committee, have a debate on the Swaminathan Report and then get it implemented. If the lacunae is not addressed, the problem does not go away. The government announced that ₹20,000 was to be paid to Delhi farmers as compensation for crop damage. While some farmers are receiving it, others have not and should go to the courts. They can go to the courts since it is a law but they cannot do so just for a report.

Everyone takes advantage of the farmer's innocence. If a farmer receives a good MSP (not the Commission for Agricultural Costs and Prices - CACP - price, not what the CACP is discussing - the rate of sugarcane in 2017 without an idea of oil and other future prices) and a guarantee to get the payment on time, his children will not need to go far to get a menial job. The day a farmer earns



a lakh of rupees from his sugarcane farms, his son will not need to serve anyone else. The assessment needs to be right, the policymaker's own ethics needs to be right and one cannot just go about pleasing the politicians.

People need to start accepting the realities, especially those that belong to institutions in the system. Someone from the DCM Shriram Group called us cynics. DCM Shriram did not compensate farmers who perished in Mawana with the suspected cause alleged to have been created by them.

J.K. BAJAJ

Director, Centre for Policy Studies

There must be genuine interest in agriculture and a genuine will to improve the situation. India's education system too needs to instill a sense of interest and pride in agriculture. I was asking someone if there was a policy behind the sudden



The day a farmer earns a lakh of rupees from his sugarcane farms, his son will not need to serve anyone else. The assessment needs to be right; the policy maker's own ethics needs to be right

improvement in the agriculture situation in Madhya Pradesh and was told that the chief minister was from an agricultural background, he understood farming and had chosen a few good officers. If that is all it takes to improve the situation, it cannot be that tough. The rest is dependent on water and sunlight. Water needs to be managed better so that it is available in all areas. Crop insurance needs to be implemented earnestly.



V.M. SINGH

I had filed a writ for crop insurance in the courts that the second a farmer takes a loan he should get a default insurance. The finance ministry has received a notice and the answer is awaited.

J.K. BAJAJ

The country has become cynical because it does not pain Indians to see that the greatest number of hungry people can be found here. I wrote a book explaining that we are not cynical, we are sinful. Ancient Indian books say that if one is filling one's despite the knowledge that another person who is going hungry, it is a sin. That is what we are all committing.

PARANJOY GUHA THAKURTA

It used to be said that the amount of food that is wasted in developed countries like the USA, could feed the stomachs of all the hungry people in the world. My mother once told me a story of how they had newly started using steel plates that would be licked clean. The Brahmin cook would think it was a fresh plate and drop it when he was told that it was a used one. My mother had seen the Bengal famine and knew better than to waste food. Even seeing the amount of food people waste today, in weddings in Delhi for example, is extremely upsetting.



Why is Agriculture not integral to Indian Education? Hannan Mollah



ifferent modes of production, d e v e l o p e d down the ages that cater to various human needs, production processes and production relations, have served as the guiding force of human history. In the beginning, the human being was a hunter-gatherer, hunting animals or collecting food,



HANNAN MOLLAH General Secretary, All India Kisan Sabha

which was the only need they had at that primitive stage, from nature. The uncertainty of this process propelled humans towards cultivation. Agricultural production provided for the nutritional needs of man and animal that was essential for existence.

Industrial and technological production, the most important mode of production, continues to be reinforced. Alongside this different types of services production took on a dominant position in developed society. There was also what one could call intellectual production to cater to the mental and psychological needs of the people.

Industrial and technological production took care of worldly necessities and commodities while service production catered to innumerable institutional and communications services that continued to increase in the modern era. Intellectual needs were catered to by the production of literature, arts, music, film and cultural products which in turn also took care of education and religion, while various scientific materials supported the growth of human civilization and mankind's evolved knowledge systems.

Providing food for all has been the first need guiding human activity. This quest led to the discovery of cultivation or reproduction of food from seeds and domestication of animals that could provide meat and milk. Additionally, methods that would preserve all output using the latest in science and technology were used to advance the system to its present stage.

First, there was production for food, followed by the produce being exchanged for other things and then as a commodity for sale, followed by the need to market and profit and, finally, as an instrument for exploitation and to establish domination in the hands of the ruling class.

At the time of independence, Indian agriculture was traditional and production relations were feudal or semi-feudal. Agricultural production was much lower than the needs of the country and food



imports had become inevitable during the colonial period. Thus, after independence, it had become important to increase food production. This meant reorganizing land relations through scientific land reform and improving the modes of production using modern scientific methods. In effect, this meant helping farmers in every manner.

The government policies were directed accordingly, though the domination of landlords and big landowners in the rural economy was very strong, their influence extending to the political system, especially in the states. These ensured that land reform remained ineffective even though all assistance given to the big landowners - such as fertilizers, seeds, subsidies, bank loans, extension services, minimum support price for their produce, procurement by government agencies and expansion of irrigation - was sustained and increased. These comprise the measures the 'Green Revolution' took to increase agriculture production and they did help achieve selfsufficiency in food production.

It invested large sums of public money in the Five Year Plans for the agriculture sector. The nationalized banks were entrusted with social responsibility. Lending and agricultural co-operatives were encouraged. Research and development for agriculture was taken up and the extension service was provided to farmers. Broadly, the government policy was pro-farmer, although this implied that it was pro-rich farmer. In spite of that, Indian agriculture was partially developed, production increased and the country became by and large self-sufficient in food production.

The farmer-oriented policy changed over time and a capitalist development programme was adopted by the ruling establishment. Capitalist agriculture grew rapidly and the motive to produce changed dramatically. From food production, the stress shifted to commodity production – from production for consumption, production became export driven. Markets gradually became the motivating force for agrarian products. Policy was changed from its consumption-orientation

The domination of landlords and big landowners in the rural economy was very strong, their influence extending to the political system, especially in the states

Thus agriculture was partially modernized and production increased, though the major beneficiaries of this policy were the powerful landlords and rich peasants. In the absence of real land reform, the poor and marginal farmers, lakhs of small peasants and landless people – about 70 to 75 per cent of the peasantry – did not benefit much. The upper strata of the peasantry, rich and big land owners cornered the lion's share of the benefits. Yet, for a long time, the government had an important role in agriculture.

It took ages to reach the point of settled cultivation or agriculture as we know it today. Humans learnt to collect seeds, sow them, reproduce grain, collect and stock it for the future, consume it and again begin reproduction. From this evolved new methods to grow more, to preserve for longer periods and, later, the acts of exchange and sale of produce. Thus evolved today's modern and advanced agricultural production system that is organized, comprehensive and developed with a scientific mode of production that is being continuously improved. to a market-orientation and then became profitoriented and export-oriented.

This policy matured in an environment of globalization and export-oriented agriculture was promoted by the ruling class. Developed countries had excess food production and needed large markets for absorbing it. The developing countries could provide these markets. The General Agreement on Trade and Tariffs (GATT) was signed, forcing the developing world to remove quantitative restrictions and tariff and duties on imports and open their markets to the developed countries.

The obvious outcome in a country like India was a drop in production of food crops, shrink in acreage under food crops, and the threat that one day India's food security would be endangered. The WTO is forcing developing countries to accept the condition of the rich countries. When poor countries collectively fought at the Doha Round, rich countries started entering into bilateral free trade agreements (FTAs) with those countries. India too signed FTAs with many rich countries. Indian farmers were exposed to the stiff competition with highly subsidized foreign



products in global markets with little protection.

The adoption of neo-liberal economic policies and changes in Indian agriculture policy after 1991 pushed agriculture into a serious crisis. Agriculture subsidies were reduced and there was minimum public investment in agriculture, planning and the budget as the government virtually withdrew from agriculture. The costs of inputs increased manifold. No remunerative price was given for the produce. Farmers were caught in a severe debt trap as agriculture became a loss-making venture. More than three lakh farmers have committed suicide in the past decade. According to a study, more than 40 per cent farmers want to give up agriculture since it is no longer considered viable.

Another section of the rural poor, agricultural workers, has also not been getting jobs or proper wages and has no social security. The Mahatma Gandhi National Rural Employment Guarantee Act was passed for providing 100 days of work to them but gave no more than 34 days of work, pushing this entire segment into a grave crisis. The government now proposes a new dangerous policy of public-private participation in agriculture, under which big corporates will capture agriculture and farmers will become the slaves to corporate houses.

The massive land loss due to corporate and real estate takeover of land has become a challenge for the farmers. While the farmers must resist it, students and youth must understand the issue. Developing countries, including India, were forced to remove the quantitative restrictions, tariffs and duties on imports and open their markets to the developed countries. Advanced countries, with cold climates that could not grow many products that they needed, could have such products produced in other countries. They forced developing countries to produce vegetables, fruits, flowers, cashewnut, spice, tea, coffee, cocoa and to export them to the developed world. They also wanted the poor countries to produce inferior quality grain for the animal feed in advanced countries or crops for alternative fuel.

This attack on agriculture, anti-farmer policies of the government, corporate grabbing of land and the growing pauperization of the farmers by multinational corporations should be challenged by all farmers, agricultural workers and patriotic Indians. The student community should understand this danger to Indian agriculture and also join in the struggle to save it.

Why has agriculture been neglected? One knows that a section of farmers wants to quit farming, given the opportunity, and that the new generation from farming families is averse to taking up agriculture. It is perfectly understandable that they want to change their profession. This is being driven by the theory that one has to move to industry and shift



from rural to urban life and, indeed, there is fastpaced urbanization taking place in India. However, people are just not migrating in search of a livelihood but also because of the many attractions of urban life. This change is not unnatural.

Yet there are clear reasons why this is happening. The average Indian's attitude to agriculture is not one of respect. Indian agriculture is still to emerge from the clutches of feudalism; there is feudal dominance in the agrarian society. The Indian agricultural sector follows old, traditional methods. Modernization and scientific practices do not dominate; research and technology have not been ushered into agriculture in a big way and the general picture of farmers is that of illiterate, superstitious, half-naked, bare-footed rural folk; yokels moving in bullock carts.

The anti-farmer policies of the government, corporate grabbing of land and the growing pauperization of the farmers by multinational corporations, should be challenged by all farmers, agricultural workers and patriotic people of our country. The student community should understand the danger to agriculture in India and join in the struggle to save it. Why do Indians construe the rustic farmer as being backward? Why is the Indian farmer never thought of as an educated, cultured, modern, technology savvy person, free from superstition; with some education and culture and well-dressed to boot? Why could he not be imagined as the driver of a modern vehicle? With changing times, the stereotyped image of farmers should have changed. The total absence of agricultural subjects in the education system is one major reason.

Any education system is expected to consider equally all streams of production, which is not the case in India. It focuses on industrial production, service production, culture and intellectual production with minimal stress on agriculture production, the oldest mode of production. The school education system (primary to secondary level, especially after standard IX) emphasizes a science curriculum, because students pursuing mathematics, computer science, engineering and electronics take the science stream. In the same way those pursuing the medical or para-medical streams take up biology in school, for instance, while those pursuing commerce, trade, banking, insurance, management, clerical and accountancy select commerce in the school. There is also the



There is no depiction of the modern age farmer in urban conversations, culture, art or literature. The urban middle class and the educated – who dominate the consciousness of the people – only reveal their mental poverty in the denigrated image of the farmer that they hold. There is near zero content around agriculture in the Indian education system. The truth is that the farmers are very innovative and hardworking and have indeed developed improved varieties of crops through their own initiatives.

and efficient farming practices, the profession will soon be considered respectable. Farmers would then send their children to study agriculture and the current apathy of the young towards it will be halted. When agriculture fetches good earnings leading to better living standards, production will increase manifold and the exodus from rural to urban areas will be stemmed. Indian leaders and educationists have paid scant attention to this lacuna in the education system.

As one goes up the academic ladder, there should

For a country where 40 per cent of people are engaged in agriculture there are no provisions in schools for students to study agro-science or train as agriculturists

humanities stream for those wanting to pursue careers in literature, arts, culture, music, film, songs and drama. These are well structured streams of education.

Yet for a country where 40 per cent of the people are engaged in agriculture, there is a negligible number of institutions teaching the subject. For instance, there are no provisions in schools from standard IX onwards for students to study agroscience or to train people interested in becoming agriculturists.

There are 300 medical colleges to train 40,000 doctors, 1,000 engineering colleges to train 1.50 lakh engineers, but by comparision there is negligible academic infrastructure to train, say, 50 million agriculturists in India every year. While other streams receive huge investments for training a few lakh graduates, India does not wish to loosen its purse strings to train its agricultural graduates.

If agriculture gets adequate attention in education and India can train farmers in modern

be options to specialize in streams like horticulture, floriculture, dairy, fishing, and goat-rearing. Yet just a handful of agriculture universities teach them. The need is for many institutions and lakhs of teachers on these subjects. Agro-science can become part of rural life and develop as a modern generator of employment.

Another reason for the apathy that farming children develop towards their forefathers' profession is the quality of rural life, which is often monotonous as opposed to fast-paced urban life. Even if agriculture cannot be brought to the cities, some city attractions can definitely be brought into villages. Yet, despite the propaganda around rural development, Indian has failed to make its village life more attractive, even after six decades of independence.

If some urban facilities can be accessed in the countryside, most villagers will continue to stay there, and their children will continue with the profession. There will be less migration to the city to swell its slums. The policy makers in the



THOUGHT LEADER

There is less pollution in villages and the atmosphere is cleaner but there is no clean drinking water. Natural beauty is to be seen in abundance but no good roads. There are many children but no good kindergarten schools. Villages have their own cultural understanding and art forms but no infrastructure to practice them. There are no good cinemas, theatre halls or stadiums. There are more patients but no good hospitals. There are many students but no good schools. Cities thus serve as a magnet with their attractions.

country, mainly urban dwellers, do not think on these lines. Thus no concrete action has been taken to bridge the urban-rural divide.

Farming needs to be improved, scientifically and technologically, to suit the mind of the young farmer and to earn him a decent income. This will also attract modern educated youth towards agriculture and villages. The aim is to make agriculture lucrative enough to attract millions of farming children to a modern, efficient and profitable system that is suitable for modern living. It is necessary to make agriculture a significant part of education.

Agricultural products are the main raw materials for many industries and there is no contradiction in focusing on both in rural life. Agro-based industries must be set up and encouraged to cater to the local agricultural producers and thereby increase agricultural production as well as



India has to make massive public investments in agriculture, revamp its education system and encourage younger generations to pursue agro-science

employment in rural areas. The government must play a major role here along with co-operatives and farmers themselves. Instead of becoming the arena of corporate loot, agriculture can become the main source of livelihood and living. Only then will the new generation engage with this mode of production with a sense of pride and self-respect about its work.

Agriculture is not only about cultivating crops in the field. Everything related to food and consumption is agriculture. The close relation between agriculture and industry should be leveraged so that rural India becomes a place of attraction, even for urbanites. Modern jobs can be created on a massive scale and food production increased manifold by involving the entire farming community, implementing proper land reform and modernizing all agricultural processes.

With the rise of living standards and changes in consumption pattern – people consume less cereals and more fruits and vegetables for vitamins and animal products for protein – there is need to produce adequate quantity of such produce for the 1.2 billion of people. There is a massive requirement for horticulture for nutritional food, to provide a diet which is rich in vitamins and proteins that are present in dairy produce, fishing, goatery and poultry. There is increased demand

Farmers' Forum August-September 2015



for flowers too and floriculture should produce flowers that will need to be marketed.

This will create the need for professional agricultural marketing, more banks for loans and more co-operatives for agro-management, which in turn means more jobs. This would mean qualitative and basic changes in the agrarian policy. The IMF-World Bank-WTO guided agro-policy mainly seeks to serve the corporates, multinational corporations and advanced capitalist countries. This should be reversed.

India has to make massive public investment in agriculture, revamp its education system by giving more importance to agriculture in the syllabus at all levels of education and encourage the younger generations, especially from rural areas, to join agro-studies. There should be facilities and encouragement to study agriculture to make it more respectable and attractive in education and Farmers' children do not think agriculture is a profitable or respectable profession. They wish to quit farming. Youngsters from other sections too are not as attracted to agriculture as to management and other professions.

research institutions.

It is the youth and the student community that should raise this demand and launch a veritable students' movement. It should be taken up with the policy makers, and the education and agriculture ministries and the Planning Commission or its equivalent. The prolonged neglect of agriculture in India's education system should be debated at all interested quarters, so that agriculture can be established in its real glory, as a respectable way of life, as a saviour of humanity and one that propels civilization forward. **INSIGHT**

MISSION CLEAN GANGA The Case for Farm and Fishery Led Intervention

Dhrubajyoti Ghosh

An ecosystem-based approach essentially involves modifying the land ethics; the way people use their land all over the river basin in agriculture, fisheries, or even forestry



leaning the Ganga is one of the longest-running government-sponsored environmental initiatives in Asia since 1985 but not many people have been impressed.



of the country who are the irrevocable base of any political structure. The cleaning of the Ganga with its enormous socio-economic influence and ecological impact over the land must, however, be a scientific decision too.

In its first avatar, the mission to clean the Ganga made avoidable mistakes. Any government seeking to set this right must analyse the previous mistakes and set rules to ensure the faithfulness of the project in its second incarnation. These should concern the efficacy and transparency of the expenditure incurred. How does one ensure this?

The following are the ground rules:

- 1. In what has been a structural approach, constructing conventional sewage treatment plants or crematoria or dykes to strengthen riversides, it would be desirable to add a nonstructural/ecosystem-based approach as well. This involves modifying land ethics, the way people use their land on the river basin for agriculture, fisheries or forestry.
- 2. Irrespective of the strategy, the primary target is to reduce pollution in the river. The pre-project and post-project data of pollution levels must be placed in the public domain; loud and clear.
- **3.** All indicators to be used should be standard and clear. 'Ecological flow' is a typical measure being discussed for which there is no reliable definition in any book on the subject.
- 4. People should know how much has been spent to improve a certain pollutant level. The simplest

Thirty years have passed since 1985, with manifold multiplication of agricultural pollutants being added to the flow of water, both above and underground



DHRUBAJYOTI GHOSH U.N. Global 500 laureate unit will be Rs/million litre of flow, which will be spent for reducing target pollutants like faecal coliform, heavy metals, arsenic.

5. Project preparation and implementation should be inclusive and knowledgebased. Competent authorities who are proven caretakers of pollution control and land use management should be responsible.

The National Mission for Clean Ganga has for the first time focused

on forestry intervention and non-point source pollution for cleaning the Ganga. It has clearly identified the latter as a problem. Such problems were discussed by this author at an international conference (workshop on Managing Community Development in Response to Climate Change in the Ganga Basin, September 2010, Kolkata) five years ago. It may be pertinent to point out that the omission of non-point source pollution as a target was deliberate and appropriate at the inception of the Ganga cleaning project.

Way back in 1979, the late Prime Minister Indira





Gandhi entrusted the late Niloy Chaudhuri, then chairman of the Central Pollution Control Board, to carry out a comprehensive survey of the entire stretch of the river Ganga to assess the pollution load and its source. The survey held municipalities as the main source of pollution (about 70 per cent), followed by the industries that drained their untreated sewage into the river. These were termed as point source pollution, which meant that the polluter can be apprehended directly by assessing the discharge quality through the effluent points.

However, pollution from the vast agricultural fields, in the form of agro-chemical wash, which invariably creeps into the flowing river, was deliberately ignored. In that specific context, that was a pragmatic approach. It was too difficult to trace pollution from non-point sources. It was assumed that considerable success would be achieved by reducing the point source pollution along the course of the river. The Ganga Action Plan (GAP) was launched in 1985. That was Phase-I of Asia's premier river cleaning initiative. That it did not work out is a matter extensively deliberated in the public domain.

Subsequently, Phase-II started with renewed hope but even in this phase, the problem of pollution from non-point sources has remained outside the remit of the grand plan. Thirty years have passed since 1985, with excessive agricultural pollutants being added to the flow of water, both above and underground, most of which reach the river either rapidly or slowly. From the turn of the century, dealing with non-point source pollution has become more crucial.

What is non-point source pollution? Farming has been the harbinger of water and soil pollution, thanks to the excess use of both pesticide and nitrogenous fertilizers. Most of the Ganga basin comprises farmlands that are a major polluter of rivers and the wetlands. They have destroyed biodiversity on land and in water along the entire stretch of the river; often irreversibly. Imprints of such biodiversity loss abound in the countryside. Even a few decades ago, paddy fields would accommodate water bodies that grew large quantities of small fish, which was the basic source





of protein in rural diets; particularly for children.

These fish do not spawn anymore because of the pesticides applied in the farms. Speak to the village elders and you will be told of the dwindling bird and tree species and of the vanishing frogs and such others. Frogs would consume at least 20 per cent of the insects in the agricultural fields. Similar loss of biological life of the river is not easily visible but it drastically reduces the river's self-purification property; something for which the Ganga has been rated to be the most outstanding. The accompanying diagram attempts to capture the major effects from overuse of agrochemicals.

Pollution-free Ganga will be a mirage unless the problem of pollution due to excess fertilizers and pesticides is taken up.

As a welcome shift, the National Mission for Clean Ganga has taken up an ecosystem approach to clean the river and is going ahead to try the prospects of forestry intervention for the Ganga. The forestry intervention has the following objectives:

- Identification and prioritization of critical areas/ villages for the implementation of the proposed plan based upon the initial investigations and stakeholder consultations.
- Identification of possibilities for regeneration/ improvement of forest catchment areas and its treatment through appropriate native local species for augmenting water flow.

- **3.** Dovetailing the ongoing forestry activities of the states that can address the issues of Ganga rejuvenation.
- Developing a consensus among various stakeholders like local communities, fishing community, industries, NGOs, scientists, research institutes for participation in the plan to draw a roadmap.
- **5.** Implementing treatment activities through biofiltering and development of artificial wetlands for treatment of waste water.
- **6.** Examining the possibility of eco-tourism and other income generation alternatives for the selected areas.
- 7. Plantation of medicinal plants and restoration of Bhoj and other appropriate species in the upper reaches of the Ganga.

The plan is to focus on :

- Biodiversity conservation and development
- Development of a riparian zone with biological filter
- Establishing biological filter zones four tiers of plantation filters
 - * 1st tier plantation
 - \star 2nd tier plantation
 - * 3rd tier plantation
 - \star 4th tier plantation
- Increasing tree and forest cover in the Ganga basin Not only is this language vague, there is no clear





identification of the types of pollutants sought to be removed. It is difficult to imagine how the project can be implemented at the behest of the state forest departments, while most of the basin is a non-forest area.

This emphasises the fundamental reason to rethink and reconstruct the project giving agriculture and fisheries a stewardship role. In fact, a major weakness of the forestry intervention project is its failure to visualize the impact of wastewater fisheries on the reduction of fecal coliform as well as the role of the farming community in reducing non-point source pollution.

What must be recognized is the alternative worldview where municipal wastewater is considered as a nutrient in place of 'pollutant', as it is conventionally described. The farmers of the East Kolkata Wetlands have, since about 1930, used wastewater as a nutrient in their fisheries. They have been growing prolific amounts of fish, and in the process, have been purifying the wastewater in their natural biological system. In fact, these ponds do better than any conventional sewage treatment plant, at least so far the reduction of fecal coliform bacteria in the tropical countries is concerned. Furthermore, the energy source for the process is entirely solar.

The basic idea is to introduce an agricultural and fisheries-based intervention agenda for reducing

the non-point pollution load in the Ganga Basin. The action plan can trigger a change in social and cultural institutions for the conservation and wise use of ecosystems. This would guide the mission towards ecosystem improvization plans by the villagers and their implementation through the decentralized institution of rural governance. The powers and authority conferred by the 73rd Amendment of the Indian Constitution have provisions enough for every village to have its own land use management plan. The content of the management plan would feature locationspecific initiatives.

What is important in India's case is that in terms of content, all these projects become 'Participatory Empowerment Projects' and are completely different in their ethical anchor. The participants, at all levels of planning, design, implementation and maintenance do not prove their loyalty to any externally constructed campaign or failed fundamentals of the sanitary engineers. The erstwhile paradigm was conspicuously indifferent to experiential knowledge, the beginning of sustainable management of ecosystems. The proposed paradigm, on the contrary, is glued to the outcome and flourishing of the ecosystem. The Ganga cleaning project can then become a festival of the Indian masses, the farmers and the fisherfolk in the main.



SPECIAL REPORT

Cotton Farmer on the Global Fashion Ramp Subir Ghosh

ew sectors of the economy have as much bearing on people's lives as the textiles and apparel industry. It affects as many people as the food sector. Nobody stops eating or, for that matter, wearing clothes. The sheer spread of the sector and its longdrawn and intricately woven supply chain has an over-arching effect on innumerable other sectors of the economy. The fashion industry is one of the most esoteric sectors. Considering the case of the beleaguered

cotton farmers in India, their hope may lie in how the fashion industry reacts to their plight.

Indeed, a model with the fashion industry as the front end and textile-apparel as part of the back can change the face of this country, quite literally. The 'fashion industry' is, an umbrella term that denotes



SUBIR GHOSH Bangalore-based independent journalist, writer and researcher

a number of industries. Consider four of its phases: the production of raw materials, principally fibres and textiles, leather and fur; production of fashion goods by designers and manufacturers; retail and e-commerce sales; and various forms of advertising.

A Wikipedia entry simplifies matters: 'These levels consist of many separate but interdependent sectors. These sectors are textile design and production, fashion design and manufacturing, fashion retailing, marketing and merchandising,

fashion shows, and media and marketing. Each sector is devoted to the goal of satisfying consumer demand for apparel under conditions that enable participants in the industry to operate at a profit'.

At a time when heated debates rage on the pitiable condition of farmers and their rate of



suicide, it is pertinent to understand how one end affects the other. For those working in the fields of agriculture, it is extremely important to understand that fashion-textile-apparel trends may decide the future of cotton farming.

It is, therefore, not surprising that the country's textiles and apparel sector accounts for 26 per cent of the manufacturing sector, 14 per cent of the total industrial production, 18 per cent of industrial employment; it results in direct employment to 45 million and indirect employment to another 60 million, earns 13.65 per cent of the export earnings and contributes six per cent to the GDP. Yet, the scope lies in exports: its share of global exports is around five per cent, whereas the Chinese share stands at a relatively staggering 39 per cent.

The Indian textiles industry, estimated to be \$108 billion at the present, is expected to touch

The Indian textiles and apparel industry is one of the 26 sectors of the economy that is being projected as a growth opportunity for the 'Make in India' initiative.

- India is the second largest producer of raw cotton in the world
- The second largest producer of cotton yarn
- The second largest producer of cellulosic fibre/yarn
- The second largest producer of silk
- The fourth largest producer of synthetic fibre/ yarn
- The largest producer of jute.

\$200 billion in another five years. It has the potential to grow five-fold over the next ten years, to hover around the \$500 billion mark on the back of growing demand for polyester fabric, according to a study by Wazir Advisors and PCI Xylenes and Polyester. The figure would include domestic sales of \$315 billion and exports of \$185 billion. The current industry size comprises the domestic market of \$68 billion and exports of \$40 billion. Experts believe that the 2016-2020 period will be a golden one for the Indian textiles and apparel industry. It would be unfortunate if cotton growers are left out, by design or by default.

All discussions concerning textiles and apparel invariably veer towards exports, probably because of the enormous scope of the industry. It is not that the domestic textiles and apparels market is a laggard. The demand for these in India comes from three major segments: the household sector, non-household sector (institutional, industrial and technical) and export sector. The household sector consumes the largest share of textiles and apparel in India (60 per cent), followed by the non-household sector (21 per cent) and then exports (19 per cent).

Rising incomes, changing lifestyles and rapid urbanization impact the textiles and apparel industry, but not significantly. India still has the least per capita expenditure on apparel, among developed and BRICS countries. The per capita spend on it in 2013 was a mere \$37 against China's \$122 and Brazil's \$287. Industry estimates suggest that this will rise to \$129 in another decade.

There are driving forces, nonetheless. According to the consultancy firm Technopak, a number of trends are changing consumption patterns in the country. The consumer wardrobe has changed





from 'need-based clothing' to 'occasion-specific dressing' and is becoming more 'detail oriented'. Women shoppers are gaining more importance due to their higher spending power and requirements for specific clothing. The growth of e-tailing is fuelled by changing lifestyles of domestic consumers and increasing penetration of technology. The domestic sector currently faces a decline in the purchasing power of people due to high inflation. Exports, however, are a different ballgame.

The dynamics of the global textiles and apparel industry changed in 2001 when China joined the World Trade Organization (WTO). Already a big market, the introduction of its biggest player changed all the rules of the game. The traditional quota system for textiles and apparel was phased out. It had provided attractive opportunities to countries that were so far restricted by the quota system and posed challenges to those that had previously been protected.

The rise in cotton prices during the 2008-2011 recession was the result of low cotton supply. China, where the minimum cotton price was one-and-half times the international prices of \$0.90, piled up stocks. The price volatility threw the industry out of gear. Global cotton yarn production fell and rose correspondingly. The latter was a fall-out of China's expansion of installed spinning capacities.

India is under increasing pressure to cut subsidies given to the textiles sector. This was reflected in the Foreign Trade Policy (FTP) 2015-2020, announced in April 2015. It did not announce new subsidies but replaced old ones. India's export subsidies existed under the Focus Market Scheme (FMS), Focus Product Scheme (FPS), market-linked FPS, Export Promotion Capital Goods (EPCG) Scheme and interest subvention on pre and post-shipment export credit, besides tax breaks for special

India is home to the second largest population in the world: 1.2 billion people live in over 330 million households, as per the 2011 Census. Hence, the demand for textile products in India is immense and growing at an increasing rate in tandem with the increase in disposable income of the people. A very high proportion of the young and working population is also a favourable factor influencing domestic demand for textiles and garments, the Strategic Plan 2012-2017 document of the Ministry of Textiles points out.



economic zones (SEZs). All of these would have been phased out sooner or later.

The FTP has been criticized. Cotton textile products, which face high tariff barriers and preferential treatment by importing countries, have been given a duty credit scrip of two per cent while handlooms, carpets, coir products have got higher rates of between two per cent and five per cent under the Merchandise Exports from India Scheme (MEIS). The cotton yarn sector is said to have been ignored at a time exports have declined sharply and there are high logistics costs when exporting to markets like Latin America. Despite growing opportunities for yarn, fabrics and madeups to China, these items have not been included under market access negotiations with that country.

The FTP has come in at a time when major threats are looming large on the horizon, the biggest of them being the Trans-Pacific Partnership (TPP), a proposed regional regulatory and investment treaty





that includes 12 countries. Together, the US-led bloc accounts for 38 per cent of global GDP and 25 per cent of global trade. It is a powerful trade group that wants to trade with itself. The TPP can be the biggest challenge for India since the US accounts for almost one-fourth of India's apparel exports.

Unless India gets its foreign trade strategies right, exports might suffer. It is imperative for India to push through Regional Comprehensive Economic Partnership (RCEP, which includes China, 10 ASEAN countries, Japan, Korea, Australia and New Zealand). It also needs to reopen the stalled negotiations with the EU Indian apparel exporters have been seeking expeditious finalization of the India-EU free trade agreement (FTA) to enable better market access for exporters. The EU markets account for 12 per cent share of India's apparel exports. Deliberations have not taken place since 2013, with both sides at loggerheads over issues like automobiles and India's demand for a dataExporters from India would be at a disadvantage with regard to tariff, while those from Vietnam (part of Trans-Pacific Partnership or TPP) would get preferential access to the US market. Moreover, since the yarn-forward rule makes it mandatory to source yarn, fabric and other inputs used in making clothes from TPP partners only, in order to avail of duty preference, this would make apparel manufacturers in TPP countries source their input only from other TPP countries, even if suppliers in that region are not efficient. Both the TPP and Transatlantic Trade and Investment Partnership between the USA and the European Union (EU) are said to be aimed at clipping the wings of China.

secure nation status. The best way out would be multiple FTAs.

There is also the China factor. In June this year, Beijing announced that it would start selling a massive cotton stockpile that the International Cotton Advisory Council (ICAC) estimates at 11.3 million tonnes; one million tonnes of cotton until the end of August through daily auctions. The Chinese government, as part of a policy designed to support the country's textile industry after the 2008 slowdown buys and stockpiles domestic cotton after prices fall below a target level.

Since 2011, it has stockpiled so much that in 2013 it was forced to do a rethink: it set a 3:1 domesticto-imported cotton quota for textile factories. That obviously has not helped and it is also not that farmers have reaped the benefits from the scheme. That is because the government buys processed, not raw, cotton for its stockpiles. In other words, the ones who benefit are refiners. That is one reason why domestic cotton production has fallen 6.4 per cent since stockpiling began.

While China has been under tremendous pressure to release the stocks to recover part of its stockpiling costs, big discounts could risk pushing down market prices and lead to increased costs for the government under its subsidy scheme to farmers. That is because the Chinese government currently pays farmers the difference between the target price and the average market price. The subsidy scheme had replaced the earlier stockpiling scheme. Yet, China's stockpiling has actually protected the world market in the past four years because supply has exceeded demand.



China is also in a bind over how to find new ways of supporting farmers, with farmer groups in the United States complaining that China has gone beyond the World Trade Organization (WTO) allowance. China contends that it needs time to perfect the new subsidy policy currently covering cotton and soybeans before extending it to other crops. Cotton output in China is expected to drop after the overhaul of support policies.

According to the ICAC, stocks held outside of

Expectations of a stockpile sell down have resulted in a sluggish demand for cotton in China as mills are keeping inventory to a minimum. How China will reduce inventory without having an adverse effect on prices remains to be seen. It will either back track or bring prices crashing down. As it is, global cotton prices have been hovering around five-year lows for the past 10 months, under pressure from weak demand and large stocks. Subsidies, however, mean that Chinese cotton farmers keep growing, resulting in continued over-production visà-vis the global demand. There is a political compulsion too. Most cotton farmers are from the Xinjiang province that has been seeing considerable political unrest.

China are expected to decrease by three per cent, to just under nine million tonnes by the end of 2015-16. However, this depends on how the Chinese government handles its reserves. No further details have been announced and it is uncertain whether China will be able to sell its excess stock without destabilizing the market.

When auctions began in early July, the sales were not significant, with only high quality fibre seeing a keen interest from buyers. China has previously supported demand for low grade fibre from its inventories by allowing mills import quotas of high grade fibre to blend with domestic product.

Overall, it is not looking too good for cotton itself. According to the ICAC, world cotton area in 2015-16 will go down six per cent to 31.3 million hectares. China's cotton area will decrease by 12 per cent to 3.8 million hectares and production by 16 per cent to 5.4 million tonnes in 2015-16. Imports in China are expected to fall to the lowest level in 13 years due to continuing import restrictions accompanying efforts to reduce government-held stocks. Lower Chinese imports imply lower Indian exports, since China has been the largest importer of Indian cotton over the last three years.

In India, the low cotton prices of 2014-15 are expected to cause cotton area to decrease by five per cent to 11.6 million hectares in 2015-16. Falling prices for competing crops and a modest increase in minimum support price (MSP) may stall a greater decline. With the monsoons marginally better this year, yields may improve three per cent, the ICAC predicts. The Cotton Association of India (CAI) has already reduced its production estimate of cotton for 2014-15 to 38.27 million bales (of 170 kg each) from the previous estimate of 39 million bales announced in March this year.

India is trying to increase cotton exports to both Bangladesh and Thailand, as it will now have a surplus. Most expert predictions agree on one trend: that cotton prices are going to fall. That is bad news for farmers, even though MSP of cotton has been raised by ₹50 to ₹4,100 per quintal for long staple and ₹3,800 per quintal for medium staple cotton for 2015-16.

World fibre consumption has been steadily trending up over several decades. Per capita consumption was about 3.7 kg in 1950 and climbed to 10.4 kg in 2008. The final products of fibres can be grouped into three categories: apparel, home industrial textiles. These respond differently to changes in income and prices, depending on The real threat to cotton producers will come from man-made fibres. The trend in the textiles industry already shows a proclivity towards them. Those concerned about the state of cotton production in the country need to understand this: the demand for fibres depends upon the demand for yarns and fabrics, which in turn depends on the consumption of finished textiles, namely apparel and made-ups.

exceeded its level in 2007 by 4.3 million tonnes.

So far, the Indian textiles industry has been cotton-focused, with cotton accounting for 55 per cent of the total fibre consumption in 2012. However, consumption of polyester fibre is gaining momentum due to the fluctuation of cotton prices, sourcing by global brands where polyester fibre dominates, growth of the womenswear segment and value retail. The trends in India are evident: cotton fibre, which constituted 60 per cent of the market in 2000, dipped to 55 per cent in 2012;

India's textile industry was cotton-focused, accounting for about 55 per cent of total fibre consumption in 2012. Consumption of polyester fibre is now gaining momentum

whether they are consumed as necessary goods, luxury goods, or durable goods. Therefore, world total fibre consumption is exposed to the influence of global economic developments.

According to the World Apparel Fibre consumption Survey 2013, produced by the Food and Agricultural Organization (FAO) and the ICAC, the changes are stark. Mirroring global economic developments, after peaking in 2007 at 67.7 million tonnes, textile fibre consumption declined 4.3 per cent to 64.9 million tonnes in 2008. Demand destruction of textile fibres amounted to 2.9 million tonnes. In 2009, total textile fibre demand increased by 0.4 per cent to 65.1 million tonnes. In 2010, the total textile fibre demand increased by 4.6 million tonnes to 69.7 million tonnes.

The main driver of the recovery in textile demand was the synthetic (non-cellulosic) fibre group that, in 2008, experienced demand destruction of 938,000 tonnes but rapidly recovered all the volume lost and expanded by 314,000 tonnes in 2009, and expanded further by four million tonnes in 2010. At 41.9 million tonnes, demand for synthetic fibres in 2010 while polyester fibre consumption grew from 34 per cent to 38 per cent during the same period. Even globally, the fibre consumption till 2000 was led by cotton.

Trends have changed dramatically after the system of import quotas that dominated international trade in textiles was phased out in 2005. The share of polyester went up from 36 per cent in 2000 to 43 per cent in 2007 and further to 50 per cent in 2012. During the same period, the share of cotton saw a steady decline: from 37 per cent in 2000 to 31 per cent in 2012. The gap between polyester and cotton, which has been widening by the year, is expected to close up in another 10 years.

India's overall share in the textile and apparel trade was about five per cent in 2013 but out of a total of 864 textile and apparel commodities there were 317 in which India's share was less than one per cent. Though the collective trade in these commodities was roughly \$208 billion, India's trade in them was only around \$385 million (0.19 per cent). It is this virtually untapped segment (which is based on man-made fibre or MMF) that





India will be looking at if exports have to grow.

The MMF demand will not be just be exportoriented. The domestic consumption of MMFs is going to rise phenomenally. There are a number of segment trends to watch out for. One of the fastest-growing segments in the apparel industry today is activewear. India's large youth population is showing interest in fitness and global sports brands, a trend that will boost MMF consumption. The workwear and branded lingerie segments

In May 2012, the world's largest summit on fashion sustainability was organized in Copenhagen, where more than 1,000 key stakeholders from the industry discussed the necessity of making the fashion industry sustainable. The Copenhagen Fashion Summit (CFS) has since then become one of the most important events for the fashion industry. The same year, in July, the Sustainable Apparel Coalition launched the Higg Index, a selfassessment standard designed to measure and promote sustainable supply chains in the apparel and footwear sectors of the fashion industry. will also opt more for MMFs. The share of MMF in India's fibre consumption has stagnated on account of rising cotton production and increased demand for cotton by textile manufacturers to cater to export demands. The demand for cotton has risen because of textile manufacturers in China, who want to maximize advantage of quota abolition in import markets like the US and the EU. Due to the rise in the global consumption of cotton, international cotton prices lowered, leading to a decline in domestic cotton prices as well. This contributed to increasing demand for cotton in the domestic market beyond demand for manmade fibres. With the post-quota era stabilizing and the demand for cotton going down, the focus of the Indian textiles industry might see an affinity for man-made fibres.

When the term "sustainable fashion" first started doing the rounds a decade back, it was dismissed by many as a fad that would fade. It did not and sustainable fashion today embodies both ecofashion and ethical fashion. The concerns are clear: environmental sourcing and manufacture of materials, reduction of carbon footprint and safety of consumers and workers. The two keywords are



'people' and 'planet', which came into the limelight with the release of the Brundtland Commission's report in 1987 and Rio Summit of 1992.

Vogue first wrote about environmental trends in fashion in the 1990s. In 2001, British fashion designer Stella McCartney, who does not use leather or fur in her designs, launched her own fashion house in a joint venture with Gucci Group (now Kering).

Three years later the first Ethical Fashion Show was held in Paris. In 2007, *Vogue* insisted that sustainable fashion was not a short-term trend but would probably last for multiple seasons. Earlier, the fashion world supported environmental causes through charity but now designers are introducing eco-conscious methods at the source, deploying environment-friendly materials and socially responsible methods of production.

Since then, the trend has been rising. New York launched its first Eco Fashion Week in 2009 and the first sustainable-fashion show at London Fashion Week (LFW) was held in 2010. Highstreet fashion label H&M launched its Conscious Collection. The fad had become a movement by LFW 2013. In 2005, less than five per cent of the

MMF consumption has not stolen a march over cotton so far. The value chain in the MMF textile industry is weak as of now, with smaller units still unable to take advantage of the situation (demand). Moreover, most units work with obsolete technology. This has a negative effect on high-quality products. The result is that despite India being a leading MMF manufacturer, a lot of MMF-based processed fabric is still being imported into the country. There are other reasons why the MMF sector has not grown rapidly. The cellulosic fibre or yarn industry falls under the administrative control of the Ministry of Textiles while non-cellulosic industry is under the Ministry of Chemicals and Fertilisers (Department of Chemicals and Petrochemicals). It is only a matter of time before this is sorted out.

designers were sustainable fashion brands but by 2013, almost a third of designers were decidedly eco-focused.

There is no point in making a fashion statement if it does not sell. It is just as important to look at the cash flow. The growth of sustainable fashion is also reflected through revenues. According to the Ethical Consumer Markets Report 2012, the sustainable fashion industry was worth £150 million (\$237.5 million) in 2011; a minuscule fraction of the £21 billion value of the entire British fashion industry but a huge jump from its £5 million value in 2000. It is a fast growing niche.

The turning point came with the Rana Plaza tragedy of 2013. The fashion industry was shaken and the global outcry ensured that brands could no longer live in denial. These are still early days but there is a growing initiative within the fashion industry to clean up the supply chain. The point is that this is an image-conscious industry. Brands and designers in the fashion industry want to come across as clean and rising consumer awareness is making them clean up their act.

Indian cotton farmers will, however, have to bide their time. Sustainable fashion does not rule the industry yet but it soon might. Just as Western consumers threw a fit over the Rana Plaza incident, it is only a matter of time before the #whomademyclothes campaign extends to farmers. The fashion industry will not want to have blood on its hands.



A Date with Dates Ajay Vir Jakhar

leave home before sunrise with my friend Ravi Sweemar, a passionate vegetable farmer from a neighbouring village of Dharampura. It is drizzling as we set out to visit Mahesh Sharda's khajur (date) plantation in 7 NDR Haripura Chak (tehsil and district Hanumangarh). A resilient farmer, Mahesh has a never-say-die attitude. After twenty years of grappling with jojoba which was destroyed by a termite attack, he first shifted to pomegranate which was attacked by bacterial fungus and later amla that did not survive the frequent frost attacks. In between, he even tried growing aloe vera, which has more than four hundred varieties, but planted the wrong variety and was forced to give up. Finally, he appears to have hit the jackpot with dates.

Dates are mentioned in both the Bible and the Quran and are generally associated with the Arabian Peninsula and Egypt, even though they are known to have beem planted in the Indus Valley. Rahul Gala from Bhuj in Gujarat, a famous date farmer, learnt the technique in Israel and advised Mahesh to grow dates. These better techniques have captured the imagination of the farmers. Indians have become accustomed, over thousands of years, to relishing dried sweet dates from the Middle East. Mahesh is growing the 'Barhi' variety that looks like a *ber* (Indian jujube) and turns goldenyellowish when ripe (see photo above). The word is derived from the Arabic *barh*, meaning a 'hot wind'. 'Barhi' is spherical and light amber in colour, fit for table purposes. 'Barhi' or 'Barhee' or 'Khujuria', can be eaten in the *doka* (early) stage of development (see photo on page 66), while most other varieties have too much tannin at that stage. 'Barhi' could make good wine too.

It is highly probable that most Indians have never eaten raw dates. Due to their very short shelf life and primitive transportation practices, in previous times dates could never be transported in bulk. Indians are more accustomed to the 'Halawy' or 'Medhjool' varieties. Upon harvest in the *doka* stage, 'Medhjool' dates are soaked in boiling water for four minutes. After being removed from the water, they are initially dried in the shade for thirty minutes and subsequently dried again for twenty days. Only then are they ready to eat. Dates have high therapeutic value and enough nutritional



The sweet fruit lures wild predators. Dates need to be protected from foxes, ants, *neelgai* (blue bull), parrots and dogs to name a few

value to make a horse run fast and long.

When we reach the farm, the drizzle stops and the wind picks up speed as if to allow us the time to observe and enjoy the plantation. The air is charged with negative ions, all the plants, whether wild or cultivated, are burdened with small water droplets.

Mahesh explains that government intervention and proper incentives can speed up diversification and initiate a change in the mindset. The Rajasthan government subsidized date saplings, selling a $\overline{3}$,500 sapling for $\overline{3}$ 50. Good planting material and care have surprisingly ensured zero plant mortality on the farm. Normally, a few plants are expected to die for various reasons within the first few years of transplanting.

In collaboration with Israel, Rajasthan has



also invested in research into olive plantations. A forward-looking government, sharing crop insurance premium, has allowed crop insurance to cover fifty per cent of the state's cropped area. Sometimes farmers can only appreciate the quality of the governance in their home state when they have had the opportunity to study the policy failures of other states.

Mahesh transplanted saplings on his land in August 2010, at intervals of 25x22 feet. These trees started to bear fruit in three years, the quality improving every year. Date palms bear male and female flowers on separate trees; the male-female ratio of trees being thirty female trees to one male tree. This is Mahesh's fifth year and the yield per tree is 40 kg, which is expected to rise to an annual 200 kg from the tenth year onwards. The tree will hopefully have a life of over fifty years.

The sweet fruit lures wild predators. Dates need to be protected from foxes, ants, *neelgai* (blue bull), parrots and dogs to name a few. In the fifth year, the fruit is close to the ground and is easy prey for animals. As the tree grows to about twenty feet the fruit is safer but the cost of harvest increases substantially, although this is compensated for by the increased yield.

Imagine living amidst a twenty foot high dates plantation on top of a high sand dune. That is what dreams are made of. I can smell the land, hear the bees hum and the birds chirp. The sense of being at one with nature under a clouded sky with a cool soothing breeze blowing, eating raw dates plucked from a tree, is quite divine. I also venture to forecast a future of desert or farm tourism, right here, in the middle of nowhere.





66



Imagine the breathtaking views one would have when residing amidst a twenty foot high dates plantation at the tip of a high sand dune. Farm tourism has a future here

Yet life for Mahesh is not easy. Water (slightly saline) involves laying a pipeline from a tube well over a mile away. Each tree requires 150 litres of water per day in peak summer. Contrary to popular belief, dates do not require less water. The electricity supply has improved and is available for six hours a day, which is enough to water the plantation deploying drip irrigation.

Farming in Rajasthan is better in situations, where a 60 per cent subsidy on fertilizers is provided to dates farmers for a limited period of time. Mahesh uses NPK, boron and calcium nitrate from February to June. The targeted subsidy to create the incentive for a new crop has proved to be a very good strategy. Other farmers will surely learn from the success stories and adopt the crop. Thus far, Mahesh has not had to use pesticides, but he may have to at a later date.

Pollination is done by hand. One collects pollen in a box and sprinkles it with a dry brush, (as if sprinkling salt) on the female flower plants. A bunch of flowers has to be pollinated at least thrice within a span of fifteen to twenty days. It takes one person a month to pollinate 10 *bighas* of trees. In May the fruit tends to be very small and therefore some of it needs to be thinned out manually, through brushing, in order to get produce that is of a better size and quality. The tree yields fruit once a year in August. After the harvest the new shoots are trimmed in September.

I estimate that cost of upkeep of each tree is approximately ₹1,000. The cost of harvesting and grading the fruit is ₹7 per kg. Additionally, the packaging requires two boxes. Initially, the fruit is packed in small plastic boxes with a capacity of 500 grams that cost ₹4 each. These boxes are then put in a carton which holds 20 kg and costs ₹40. To my mind the selling price should stabilize at ₹50 per kg over time. Marketing is a challenge. A single buyer in the wholesale market seems to be unable to sell more than a quintal each time in the market. The supply is limited and the market is just waking to a delightful new crop : the possibilities are as expansive as is Mahesh's spirit.

It is time to return to my own farm but my heart yearns to linger on. Like all idyllic breaks this too must end and I have to leave. There is work to do.







Leaders in Hybrid Vegetable Seeds









SUNGRO SEEDS LTD.

An ISO 9001:2008 Certified Company

2nd Floor, Manish Chambers, B.N. Block, Local Shopping Centre, Shalimar Bagh (West), Delhi-110088 India Tel.: +91 11 27471117 / 27472574 / 27488272 Fax: +91 11 27470333 E-mail : customercare@sungroseeds.com Website: www.sungroseeds.com





BRINGING SEEDS OF PROSPERITY