Ground Reality

Selected Essays on India's
Agrararian Crisis
and
Possible Solutions

Devinder Sharma

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FOREWORD

Even being agricultural country, India could not become self-sufficient in number of farm products. Albeit about 50 percent population is engaged in this profession, but their contribution in the gross domestic product of the country is just 19 percent including 5 percent of dairy where the rest of 50 percent are earning the rest 81 percent showing the big disparity in farm and non-farm income. It also showed the under employment in agriculture and either the population should shift to industry or service sector or the income of farm sector must enhance to the proportion of its population that seems a big question? But it can be concluded that farm sector of India must be provided the state patronization.

All India Pingalwara Charitable Society led by Dr Inderjit Kaur Ji, must be appreciated for this attempt to gather the different articles written by Mr. Devinder Sharma ji a renowned agricultural economist and publish them in the form of a book, that would be a store of very useful information concerned with agricultural economy of India.

India is the largest consumer, largest producer and largest importer of pulses where it is importing pulses worth Rs. 1.50 lakh crores every year and same is the case of oil seeds. On the other side very interesting and staggering example of Punjab where the state has only 1.5 percent area of the country, but had been contributing about 60 percent in the food stocks of the country. The same could not happen for other crops and for other areas.

Mr. Devinder Sharma has mentioned the various strings and obstacles in adopting the prudent policy for appropriate results. He had mentioned the emerging problem of water, inequality in income, and particularly the inadequate budgetary share. He is having strong views that budget must be according to proportion of the population. The agricultural research must be under the agricultural universities and research centers. The results of agricultural research must reach the farmers at the earliest.

It is true that government can not procure each and every product of the country but the procurement of wheat and paddy that had turned the country from food importing position to food export situation must be followed to enhance the production of other crops. India is divided in more than 15 agro-climatic zones, each zone has its specialty for the production of certain special crops. Even there are certain principal crops of certain states, as wheat and paddy in Punjab and Haryana, pulses and oil seeds in Rajasthan, cotton in Bengal, tea in Assam etc. The state government must come forward to procure the principal crops of their states, though with collaboration of the central government.

As 74 percent holdings of the country are below 5 acres, such holdings should never be put in the risk, because these holdings are to drive their income to fulfill their mundane household needs. Each and every product or each and every effort of the peasant must be secured by assured marketing of that product. A strategy has to be adopted for procurement. The vegetable procurement model of Kerala is much prudent. In that model 16 crops can be purchased by government in case their prices fell down from the M.S.P as announced by the government but not any quantity. There is policy that farmers must register themselves with the marketing deptt. And no farmer can grow more than 2 acres of a crop. It keeps the balance for other crops too. Such a model must be adopted even in food producing states of Punjab and Haryana.

Mr. Devinder Sharma stressed for more of farm research but equally warned that this farm research must not be the domain of private institutions. Rather it should be public institutions that could be helpful to provide the better guidance and extension service for the farming community. That is in the interest of the farmer as well as nation.

As this book published by Dr. Inderjit Kaur Ji, President of All India Pingalwara Charitable Society only and only for the general welfare of mankind and distribute these books free of cost. This book must be read by policy makers, politicians, economists, social reformers, students, research scholars and by general public in large.

I congratulate to All India Pingalwara Charitable Society for this venture and particularly the concern the institution has shown for farming community that is the profession of the largest section of the society.

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PREFACE

For someone who has followed agriculture for close to three decades, finding an answer to the worsening farm crisis has not been easy. Nor do I claim that I have my finger on the right pie.

But over the years, my efforts to seriously track the farming sector, looking into what had led to agricultural distress worsening over the years, has finally helped me narrow down the focus of my search for the right answer to what I have often said – Indian agriculture has been deliberately kept impoverished.

I realise that the match against farmers is already fixed.

Now let me explain. Perhaps you have already heard me saying this loudly. But nevertheless this is an example that needs to be told again and again. In 1970, the Minimum Support Price (MSP) for wheat was Rs 76 per quintal. Those were the formative years of Green Revolution and the country needed to produce more. In 2015, the MSP for wheat was raised to Rs 1,450 per quintal. Simply put, wheat price had increased by 19 times in a period of 45 years.

Going by the income parity norms, it became essential to ascertain how had the income of other dominant sections of the society fared in the same period. You will be surprised to learn that the average income of government employees had increased by 120 to 150 times. The income of university and college lecturers and professors had gone up by 150 to 170 times and that of school teachers was raised by a whopping 280 to 320 per cent. This increase in income was based only on calculating basic pay and Dearness Allowance (DA) that the employees get. A total of 108 allowances that the employees get were not included in this computation.

While the salaries of various sections of employees increased by 120 to 320 times in a period of 45 years, using wheat MSP as an example we realise that farm incomes had increased by only 19 times. I am sure you will agree that if the salaries of employees too had increased in the same proportion as that of farmers, many of them would have committed suicide or left their jobs.

But isn't it laudable that despite being paid such a low price for their crops, farmers have continued to produce a record foodgrain harvest year after year. With such low incomes – and that too deliberately, to ensure food inflation remains in control -- farmers remain at the bottom of the pyramid. Based on the latest Situational Assessment Survey for Agricultural Households 2019, the average income per farm household works out barely to Rs 10,218 per month. In other words, while we celebrate a record crop harvest almost every year, the farmers somehow continue to survive along the margins.

This is primarily to ensure that more and more farmers quit agriculture and migrate to the cities which are in need of cheap labour. Sacrificing agriculture for the sake of the industry remains the unwritten policy direction.

The discrimination that farmers face is not only confined to how indifferently they are treated when it comes to ensuring a living income for them. I find that most of the policies, and that includes how the rich are

treated by the banking system and how the farmers are ill-treated, too are responsible for the growing inequality. How the rich corporate defaulters get massive write-offs and that without even asking for it, meaning they have never been seen sitting at a protest even for a day at Jantar Mantar in New Delhi demanding their bad loans to be struck off by banks, whereas we often see farmers blocking highways and rail tracks, facing police lathis and jail terms, simply for an assured purchase or to be compensated for a crop loss, which you will agree is their right.

In this collection of essays, I have presented a few of my latest published articles that explain how the farming sector has been at the receiving end, and why it continues to seek economic justice. I am really thankful to Bibi Inderjeet Kaur of a great institution that I respect and admire -- Pingalwara in Amritsar, for publishing the essays in a book form. I hope you find the essay to be not only useful, but provocative enough to make you think, and hopefully to stand for farmers.

After all, our annadata too needs to be treated with a lot of respect and dignity.

Devinder Sharma

NO LESSONS LEARNT FROM FOOD CRISIS OF PAST

When Dr. Qu Dongyu, Director-General of the UN Food and Agriculture Organization (FAO), said on May 4 that a record 193 million people are faced with acute hunger and food insecurity, he actually was trying to draw attention of the international community to how severely the destruction of rural livehoods has pushed vulnerable populations to slide below the hunger line.

In fact, many believe that the world is already in the grip of what can be called as the third global food crisis.

In a special report titled 'Another Perfect Storm?', an International Panel of Experts on Sustainable Food Systems (IPES-Food) makes an attempt to address the critical food situation arising from the Russian invasion of Ukraine and seeks answers on how a failure to reform food systems has led to the third global food crisis erupting in the past 15 years. Ever since the first world food crisis of 2007-08, when 37countires were faced with food riots and that too at a time when there was no drop in the global food production, the world hasn't drawn any lessons.

Ever prior to the Ukraine war, food prices had elevated to a new high, reaching its peak since the days of the 2007-08 food crisis. The FAO's food price index rose to 140.7 points in February, a jump of 20.7 per cent from the previous year. The prices of maize, cereals, vegetable oils, cotton, soybean, sugar etc. showed an upward trend.

In other words, even before the war began, with food prices at a record high, the world was fast headed towards a food crisis. Unfortunately, for the same reasons that sparked the first world food crisis, the failure to address the structural causes was leading to yet another crisis.

"A new generation is once again facing mounting food insecurity, and it seems no lessons have been learned since the last food crisis," says Olivier de Schutter, co-chair of the IPES-Food. Jennifer Clap, vice-chair of the IPES-Food, adds: "Evidence suggests financial speculators are jumping into commodity investments and gambling on rising food prices and this is pushing the world's poorest people deep into hunger."

Monitoring futures markets and fighting against speculative behavior had been talked about by G-7 agriculture ministers earlier, but, somehow, it had failed to restrict speculation in commodity pricing, what to talk of banning it.

At the time the 2007-08 food crisis happened, the UN Human Rights Council was informed that excessive commodity trading and speculation were driving the international prices high. Accordingly, futures markets were blamed for at least 75 per cent of the crisis. Democracy Now, a popular TV show in the US, had a detailed programme on how speculation had brought in a huge fortune for the agribusiness companies while millions went to bed hungry. There was no slump in global food production and yet the prices were ruling high. All food majors were raking in profits.

In another report in The Wire (May 6, 2022) an investigation by the Lighthouse Reports, a non-profit, showed that “excessive speculation by investment funds and firms in the commodity markets has contributed to the spike in prices.”

This only shows that no lessons had been learnt from the first food crisis. Instead of rebuilding sustainable food systems and encouraging food self-sufficiency, the effort has been to enhance global market provisioning, which means letting the market forces operate at will. This has instead, shifted the focus to building international agri-supply chains, thereby increasing dependence on a handful of companies, which raise prices whenever convenient.

The Guardian reports that Cargill, one of the world’s biggest food companies, has already achieved record profits this year, and so is the case with two other giants- ADM and Bunge.

Earlier, US President Joe Biden had remarked: “In too many industries, a handful of giant companies dominate the market. And too often they use their power to squeeze out smaller competitors and stifle new entrepreneurs, marking our economy less dynamic, giving themselves free reign to raise prices, reduce options and exploit workers.” He cited the example of the livestock industry, which is effectively in the hands of four big companies, dictating the market prices at will. But strangely, there is no outrage over the predatory pricing being followed.

While the number of investment funds in commodity trading activities had grown, at least seven of the 10 buyers of futures trading in wheat contract reportedly were speculators. This provided a fillip to the commodity prices. No wonder, as per the World Bank,

the Agricultural price Index has already risen by 41 per cent over the prices prevailing a year ago. Wheat prices have risen by 60 per cent and maize by 54 per cent.

This does not, however, indicate any direct link between the rising food prices and speculation, but it certainly points to the growing trade interests in India, for instance, to export as much wheat as possible. The trade certainly wants unbridled exports to be allowed. They can see the growing profit margins, expected to rise still further.

The rise in global food prices hits poor countries the hardest, and at the same time makes imports costlier. Already, the poor in 53 countries-from Sudan to Afghanistan- are hit by acute food insecurity. “This is hunger that threatens to slide into famine and cause wide-spread death,” the FAO had said.

Over the years, and despite some countries facing continued conflict, not enough international effort has been made to encourage others to be food-secure. Similarly, creating regional food reserves- that could address any drop in food supplies- did not take off.

Although soaring food prices are generally considered to be resulting from a deadly combination of war, climate change, poverty and economic shock (including soaring food prices from speculation), what has been overlooked is the overdependence on food imports. For instance, the Russia-Ukraine region supplies wheat to 30 countries and many of these food-importing nations can, in any case, become self-reliant. There is a lesson here.

-The Tribune, 13 May 2022

REBUILD AGRICULTURE TO MAKE IT FUTURE-READY

Given the spectacular role Indian farmers have played in pulling the country out of the 'ship-to-mouth existence and turning it into a food-surplus nation, agriculture has emerged as the brightest star of the Indian economy. Whether we would like to publicly acknowledge it or not, a vibrant agriculture had laid out a strong foundation for economic growth.

As India celebrates 75 years of Independence, it is time to recognise that the pathway to attain a glorious future in the next 25 years passes through agriculture. With the right kind of policy mix and a renewed cycle of public sector investments, aimed more at farmers' welfare and protecting the environment, agriculture alone has the potential to reboot the economy, sustain millions of livelihoods, and in the process emerge as a powerhouse of economic growth. More so, at a time when the Inter-governmental panel on Climate Change has begun to question the GDP-based growth model, rebuilding sustainable agriculture will hold the key to India's development story.

From the time when Jawaharlal Nehru, speaking from the ramparts of the Red Fort on August 15, 1955, had said, "It is very humiliating for any country to import food. So everything else can wait, but not agriculture, " India has come a long way by attaining food self-sufficiency and leaving the painful history of repeated famines and starvations in the past. Subsequently, Nehru's successor, Lal Bahadur Shastri, faced the humiliation that comes along with food imports, Calling

the American war in Vietnam as 'an act of aggression' Shastri had annoyed the then US president Lyndon Johnson. Food imports into India under the PL-480 scheme were thereby reduced to a trickle, necessitating the Prime Minister to urge fellow Indians to fast once a week.

During that period, the Paddock brothers' book Famine 1975! had written off India and predicated that millions would starve to death in the years to come. That was the period when India earned the epitaph 'ship-to-mouth' existence when food would come directly from the ship to the hungry mouths. Anyway, what the authors popularly referred to as the prophets of doom, had failed to visualise was the potential of India to rebound on the food front, and usher in food self-sufficiency in the next few years.

When the then PM Indira Gandhi allowed the import of 18,000 tonnes of miracle dwarf wheat varieties in 1966, the seeds of the Green Revolution were effectively sown. With the scientific research and development infrastructure already laid out by Nehru when he had set up the first agricultural university at Pantnagar, followed by Punjab Agricultural University at Ludhiana, which along with the Indian Agricultural Research Institute, New Delhi, eventually helped adapt the dwarf wheat varieties to the Indian conditions. The seeds were distributed to farmes in 5-kg packs; and the over-enthusiastic Punjab farmers turned the tables, achieving a record harvest in the first year.

The success in wheat was followed in rice, and subsequently production jumped in crops like cotton, sugarcane, and fruits and vegetables. India now produces close to 315 million tonnes of foodgrains and 325 million tonnes of fruits and vegetables. From standing with a begging bowl, the long strides India had taken to first move to food self-sufficiency and finally emerging as a net agricultural exporter is a saga of valour, scientific acumen and the right kind of public policies. This included the two planks of a ‘famine-avoidance’ strategy providing farmers with the Minimum Support Price (MSP) to act as an incentive, and setting up of the food corporation of India (FCI) to mop up the huge market arrivals, and distribute the grain surplus in the deficit areas through a network of public distributions outlets.

Prior to the advent of the Green Revolution (a term coined later by William Gaud), Shastri had laid the foundation of a milk revolution when he launched the cooperative movement to increase the production of supply of milk. Called popularly as the white Revolution, it is considered to be the world’s most successful rural development programme. The dairy cooperatives have turned India into the world’s largest producer of milk, with production crossing 204 million tonnes. The combination of the White Revolution with the achievements of the Green Revolution transformed the face of India’s villages; dairy farming has come to be regarded as the saviour of the farming community reeling under acute distress.

Farmers have been producing a record harvest every year, but year after year, their income remain frozen or are in the decline.

Although the latest report of the Situation Assessment Survey for agricultural households, 2019 (pertains to a period before the lockdown) points to an average farm income of Rs 10,286 (including income from non-farm activities) per month the massive reverse migration that India witnessed after the lockdown was imposed clearly shows that the immediate need is to make agriculture more profitable and economically viable. At a time when the world is faced with jobless growth, with increased pace of automation taking away jobs at a fast pace, reviving agriculture remains on the only option to absorb the large workforce. This will drastically reduce the employment pressure on the cities.

With the Green Revolution having outlived its utility, it is time to move to the next stage. The 75th anniversary of Independence provides an excellent opportunity to rethink and redesign the future road map. This will call for a radical shift in the dominant economic thinking, moving away from the economic thought that has always relied on sacrificing agriculture for the sake of industry. It hasn’t worked, leading to massive inequality. The focus now has to revert back to rebuilding agriculture, making village the hub of hopes and aspiration of the future. Providing guaranteed income to farmers and shifting to climate-resilient agriculture calls for a transformation of the food systems that goes beyond the usual.

Agriculture leads to atmanirbharta and is the way to achieve the Prime Minister’s vision of Sabka Saath, Sabka Vikas. This is the way to new and assertive India.

"With Green Revolution having outlived its utility, it's time to move to the next stage. The 75th anniversary of independence provides an excellent opportunity to rethink and redesign the road map. This will call for moving away from the economic thought that has always relied on sacrificing agriculture for the sake of industry. The focus has to be on making the village the hub of hopes & aspirations."

-The Tribune, 6 August 2022

> ***"Agriculture is our wisest pursuit because it will in the end contribute most to real wealth, good morals and happiness."***
>
> ***-Thomas Jefferson***

SHIFT TOWARDS A RESILIENT FOOD SYSTEM NEEDED

Some years back, a study by the University of Sussex (UK) showed a dramatic decline in insect population within a nature reserve in Germany. Within a span of 25 years, almost 75 per cent of the flying insects inside the sanctuary had disappeared. The authors of the study had then called it as an 'Ecological Armageddon'. Shocked at the findings, some scientists had then termed it as an exaggeration and had wanted the report, at best, needed to be taken as a wake-up call by policymakers to mitigate the decline in biodiversity.

Five years later, the latest Living Planet Report 2022 released by the Worldwide Fund for Nature (WWF) has literally dropped a bombshell. Based on a Living Planet Index, which analysed 32,000 species populations, the report finds a 69 per cent decline in wildlife population in roughly half a century, between 1970 and 2018. While Latin America shows the highest decline of 94 per cent, even freshwater species have fallen by 89 per cent.

Not getting into other worrying details that the report carries, it was known for quite some time that the sixth mass extinction of species is already under way, but such staggering species population loss estimates overwhelmingly endorse what the US National Academy of Sciences had earlier called as 'a biological annihilation' leading to a 'frightening assault on the foundations of human civilizations'.

Aimed at providing enough food for thought, the sober tone of the WWF report should actually come as a shock for the society at large. But I doubt, considering that the mindset of most educated people has been swayed to believe that trees are an obstacle to development. To illustrate, diluting environment clearances for highways, mining and industrial projects, clearing vast swathes of forest lands for palm oil plantations, for instance, and also finding ways to divert more forest lands to non-forest users has become a norm rather than an exception.

Every year, the world is losing 10 million hectares of forests; and, in none of the Conference of Parties (COP) negotiations has there been a resolution seeking a cap on deforestation.

While the WWF report treats climate emergency and biodiversity destruction, both being inextricably linked, as the two challenges the world is confronted with, it does point to a major role played by the global food systems in exacerbating the crisis. Despite the warning, and contrary to what is expected, the transformation in, agriculture is on the lines being suggested by World Economic Forum which wants the Big Ag to play a dominant role.

This has been laid bare in another report wherein the acclaimed international organization—the Action Group on Erosion, Technology and Concentration (ETC)—has on the basis of a three-year study, 'Food Barons 2022: Crisis Profiteering, Digitalization and Shifting Power', detailed out how the concentration of power in a handful of players comprising the Big Food, the Big Tech and the Big Finance is strengthening control over the industrial food chain, thereby threatening to undermine the rights of farmers, fishermen, poison soil, acerbate water mining, contaminate environment and diminish biodiversity and, in the process, multiply its profits.

Already, 62 new 'food billionaires' were added to the super-rich class during the pandemic years. In the same period, Cargill, the world's biggest global trading company, increased its profit share by 64 per cent. So did numerous other food companies that passed on higher profits garnered as food inflation to consumers.

However, reading both these reports in tandem—and I suggest both should be a part of the agriculture university curriculum – what comes as a surprise is that probably the left hand does not know what the right is up to. The strong warning that the WWF report sounds is actually negated by the global developments on the farm front. As the ETC report illustrates, citing a lot of examples, but in essence saying that the digital food system channelises the humongous data collections into 'the cloud and Artificial Intelligence (AI) servers of Microsoft and Amazon to generate new business strategies.

A careful perusal of the report brings out how it is happening. Invoking climate change and biodiversity depletion, these players will then use sophisticated technological solutions—make high-tech seeds, including genetically modified, gene-edited seeds; promote digital farming in the guise of precision technologies; and bring in synthetic foods in the name of protecting biodiversity resources.

And if you are wondering whether the digital transformation will infuse efficiency in agriculture, the report tells you how exactly "major food corporations are ripping apart and remaking how the industrial food chain works under the banner of digital transformation." Calling it false solutions, the report very clearly shows how, through the application of new digital technologies, drones, sensors, satellite imageries and AI, coupled with acquisitions and mergers in areas like livestock, fisheries, commodity trading and food retail, it fast-tracks automation on the farm, thereby gradually pushing farmers and farm workers out.

From a 'dream tractor', fully automated, to move towards a fully robotic farm dubbed as 'Robot highways', the Big Tech backed by the Big Finance is taking the world to a future where farmers would hardly be required. Food security of the future is quietly getting into the hands of a few people sitting in the food company's board rooms. Surely, if 40 per cent of the commercial seed sale is in the hands of just two companies, they control the food chain, deciding as to what to plant, when to plant and, in collaboration with other food barons, decide how to harvest and, eventually, what should people be made to eat.

It is, therefore, obvious that the higher the degree of concentration, more frequent has been the volatility, leading to a higher vulnerability in the industrial food systems.

This calls for an immediate change, a radical shift towards a resilient food system. The next food system transformation has to be based on diversity and building on food sovereignty. The future global food system has to be back in the hands of 3.6 billion peasants, small farmers, pastoralists and fishermen where biodiversity protection, income security and climate justice go hand in hand.

-The Tribune, 26 October 2022

FIX AGRICULTURE FOR SUSTAINED GROWTH IN PUNJAB

After a decisive people's mandate, which was basically a verdict for change, the challenges it brings for the new Punjab government are enormous. While the expectations are huge, and given the precarious fiscal situation that Punjab finds itself in, there is no denying that the task ahead is monumental. But business as usual is certainly not the way forward.

The socio-economic crisis that Punjab is saddled with, an outcome of more than three decades of mis-governance certainly needs a new economic design to chart out a credible pathway. It cannot come alone from seeking investments for setting up new industries and expanding businesses. While the clamour for reviving industries and the need for 'industry-friendly policies' is growing, what Punjab desperately needs is to redefine economic growth, by adopting the principles of a double-engine economy— that focuses equally on reviving industries and at the same time revitalising agriculture.

Not to be confused with the political sloganeering of 'double-engine sarkar' which essentially means the same party forming the government at the Centre and the state, a double-engine economy relies on two thrust areas for economic growth—industry and agriculture – leading to a new but everlasting economic foundation. While economic reforms had focused solely on industry as the engine of growth, the neglect of agriculture over the years has only worsened the farm crisis. Nowhere is it as starkly visible as in Punjab, the food bowl. Even with a crop productivity of more than 11 tonnes per hectare per year, amongst the highest in the world, farm indebtedness has only grown over the years. Intensive agriculture has led to severe environmental crisis. Moreover, despite achieving record production year after year, Punjab has turned into a major hotspot of farmer suicides.

Emerging from the shadows of the iconic farmers protest at the gates of New Delhi, the underlying message that protesting farmers have delivered is loud and clear. Not to be lost in the noise and din of the electoral campaigns for the Assembly elections that followed, farmers had actually called for a systemic change in economic thinking. Instead of sacrificing agriculture for the sake of the industry, the need is to revitalise agriculture and treat it as the second engine of economic growth. Ignoring the powerful message would be like missing a great opportunity to bring about a healthy transformation.

Agriculture alone has the potential to reboot the economy, provided we fix the broken food system. A vibrant agriculture has the capacity to provide gainful employment, thereby taking away the pressure the governments face for creating job opportunities in the cities. Moreover, an economically viable and sustainable agriculture is the pathway to remove rural distress, move towards crop diversification, reduce groundwater depletion and also restrict international migration. It's time to realise that a healthy agriculture and rural sector is the first barrier against many of the social and environmental ills Punjab is faced with.

With more than 98.5 per cent of the cultivable area under assured irrigation, and with an elaborate

agricultural marking infrastructure, including a wide network of village link roads, a strong foundation for rural transformation already exists. Knowing that the AAP has already initiated efforts to focus on public health and education, adding agriculture to the list and linking it with non-farm activities will act like a booster dose for the economy.

To begin with, given the huge environmental fallout from intensive farming, and that includes devastated soil health, alarming levels of groundwater depletion, stubble burning along with the growing emergence of lifestyle diseases, Punjab needs to move towards an 'Evergreen Revolution'. Defying all doomsday prescriptions that are bound to be raised by powerful lobbies, political determination to shift to an ecological farming system, taking in the right kind of steps at the right time, can make Punjab the seat of 'Evergreen Revolution'. This will require appropriate changes to be made in research and educational curriculum, and also calls for reorientation of agriculture extension activities. This must be accompanied with an evaluation of ecosystem services approach, a concept that helps incentivise those farmers who protect natural resources.

According to the UN Food Systems Summit 2021 Scientific Group, the real cost of producing food is almost three times higher than what a consumer pays. Without realising the harmful impacts, the society at large pays for it in the form of environmental and health damages. The 'ecological footprint' of producing food, especially in areas like Punjab which rely heavily on chemicals for increasing crop production, has to be reduced. The sooner we begin, the better it will be.

While there has been a lot of discussion about crop diversification expecting farmers to move away from the intensive wheat-paddy crop rotation, the absence of an assured price and an enabling marketing infrastructure for the crops that are suggested as alternatives, has stood in the way. Let's first look at vegetables and fruits. Learning from the experience of Kerala, a system where the state government assures a minimum floor price which covers production cost plus 20 per cent profit for 16 vegetables and fruits, and step in whenever the prices fall below this band, should be introduced in Punjab. While Kerala has set aside Rs 35 crore for the purpose, Punjab being a bigger state should begin by allocating at least Rs 250 crore. In addition, like the vast Mother Dairy depots network in Delhi, Punjab can also plan for retail sabzi outlets.

Shifting to millets, pulses and oilseeds has also to be planned on similar lines. A lot more needs to be done, but given the constraints of space, let's leave it for some other day.

No agricultural reforms would be viable, unless Punjab first sets up a State Commission for Farmers' Income and Welfare with the mandate to ensure that the average monthly income from farm operations alone (excluding non-farm activities) should not be less than Rs 25,000. If farming becomes economically viable and sustainable, I see no reason why Punjab- adopting the double-engine economy approach—cannot be the harbinger of a new economic revolution.

-The Tribune, 18 March 2022

PUNJAB CAN SOW SEEDS OF A MILLET REVOLUTION

With 2023 being celebrated as the UN International year of Millets, the focus is once again back on rediscovering the magic of these wonder grains. By the time the year comes to a close, I am hoping it will at least manage to remove the mental block we have against coarse cereals, as the millet crops are generally referred to, and in the bargain, catapult India to effectively addressing the scourge of hidden hunger by tapping into and building nutrient-sensitive and environmentally sustainable local food value chains.

Coarse cereals are not rough and unhealthy grains. They are in fact nutritionally-rich and climate resilient smart crops. Cultivated in the dry and rainfed regions of the country the millets—nine grains that include bajra, jowar and ragi, besides other small millets—had been deliberately pushed to the margins. Because these super food did not form a part of the European and American diets, these were generally ignored.

But the rediscovery of millets, especially with the campaign conducted by civil society groups led by the Millets Network of India and others to push these grains in the public distribution system. Has now opened up the floodgates for a diversified food and farming system.

A lot has been written about the virtues of the millet crops, including the health and sustainability aspects and we will hear more on the unleashing of the potential of millets as the year progresses. The focus will remain on raising awareness, and also on aggregation, enhancing production and creating ample processing opportunities. But expanding the area under millets, which means diverting a significant proportion of the area from the water guzzling paddy crop, will only be possible by making millets an attractive proposition from the farmers.

Now, this is a lot easier said than done. We are aware that earlier efforts at diversifying the cropping pattern haven't succeeded.

Given that paddy requires between 3,000 to 5,000 litres of water for producing 1 kg of rice (depending upon the agro-climatic zones) and millets normally require about 200 litres, an effective price that augments the water saving potential of millets, environmental protection with hardly any application of chemical fertiliser and pesticides and nutritional superiority need to be acknowledged and accounted for. After all, millets can become an alternative to paddy provided their pricing is looked at afresh.

Ascribing economic value to the tremendous environment and nutritional gains that millets bring in, the commission for Agricultural costs and prices (CACP) should modify the pricing formula by adopting the principles of ecosystem services.

This assumes importance given the low share farmers in the end consumer price. Providing an assured price that is substantially higher can, therefore, be a win-win situation which benefits farmers as well as the society at large.

That makes me wonder. In addition to a reworked MSP for millets. What can prompt Punjab, a food bowl, to make a transition towards a diversified farming system? After all, undivided Punjab was cultivating more than 11

lakh hectares of bazar in the 1950s, which is now down to a mere 1,000 hectares. This decline is primarily due to the continuing policy emphasis on an intensive wheat-paddy crop rotation.

Shifting back to millets, besides pulses and oilseeds, is arguably the best way forward. Punjab, therefore has a double advantage by incorporating millets in its crop diversification programme. First, it will lead to setting its own house in order by getting away from the environmentally devastating consequences of the Green Revolution. And second it will trigger a huge demand for millets that can be replicated elsewhere.

Picking up from Andhra Pradesh where a collective of 11 religious places, under the banner of the Tirumala Tirupati Devasthanams (TTD), has in a tripartite agreement with the Centre for Sustainable Agriculture (CSA), the Rythu Sadhikara Samstha (RYSS) and the AP Markfed resolved to provide over 15,000 tonnes of 12 farm commodities, all naturally farmed. Under the agreement, farmers are being paid a price that is 10 per cent higher than the MSP and if the market price is higher, they get 15 per cent more.

Karnataka had earlier given a higher price—40 per cent more than the MSP—to encourage ragi cultivation.

Considering that Punjab has thousands of gurdwaras, a much bigger demand for millets (and organic produce) can be generated if religious bodies like the Shiromani Gurduwara Parbandhak Committee (SGPC) can be roped in to shift to organic langar, including millets in the menu. In fact, even for parshad, millet halwa and millet kheer are better alternatives.

Punjab's Markfed can be entrusted with the responsibility of creating adequate storage facilities and ensuring timely supplies. Similarly, non-profits like the Kheti Virasat Mission and others can be tasked with building organic farming clusters. The backward linkages to mark organic clusters source the produce and ensure quality can be easily worked out.

Add to it the demand from schools. There are nearly 30 lakh students enrolled in government schools in Punjab. If millets could be incorporated in their mid-day meal programme once a week to begin with the huge demand that is created will necessitate local supplies. A programme to source millets from Punjab’s farmers can be easily built on the TTD model that AP has created. For instance in the union territory of Chandigarh alone, which has more then 110 government schools, it is becoming difficult to source millets to meet the once-in-a-weak millet menu. If that is the situation in Chandigarh Punjab can definitely draw up an imaginative farm-to-week millet menu. If that is the situation in Chandigarh, Punjab can definitely daw up an imaginative farm-to-fork supply chain to match the increased demand that is expected from the mid-day-meal scheme as well as from the gurdwaras.

At the national level, with 120 million students in 1.27 million schools introducing millets in the mid-day-meal could be once of the biggest programmes towards encouraging farmers to take to the cultivation of millets in a big way.

Schools, hospitals and shrines can be the motivating factors in encouraging millets cultivation and bringing millets back on our plate. Let Punjab show the seeds of a millet revolution in india.

-The Tribune, 14 January 2023

REVIEW FARMING METHODS TO TACKLE WATER CRISIS

Presenting this year's budget, Punjab Finance Minister Manpreet Badal sounded on ominous warning. Not that it wasn't known earlier, but this was yet another official acknowledgement of a worrisome future scenario that is fast pushing the frontline agricultural state towards desertification and an impending ecological disaster. "76 per cent of the assessed blocks are overexploited and the estimated groundwater availability for future irrigation use is negative."

The warning had been sounded earlier. The two reports on crop diversification in 1986 and 2002, authored by eminent agricultural economist Dr. SS Johl, were essentially in response to groundwater depletion. I remember Dr. Johl making a very strong point as to how Punjab ends up virtually exporting water when it transports surplus wheat and paddy every year to the deficient areas. Later, in 2009, the observations of NASA's Gravity Recovery and Climate Experiment (GRACE) satellite data showed an equally worrisome trend. "We don't know the absolute volume of water in the northern Indian aquifers, but GRACE provides strong evidence that current rates of water extraction are not sustainable," hydrologist Matt Rodell of NASA was quoted as saying. Subsequently, a number of studies by the Indian Council of Agricultural Research, Central Ground Water Board and Punjab Agricultural University, among others, have pointed to a grim future.

Speaking in the Vidhan Sabha last month, Chief Minister Capt Amarinder Singh said the state had run out of options and there was an urgency required to tackle the water crisis, which may include changing the cropping pattern, going in for crop diversification and so on. But after all these warnings, the Finance Minister ended up reiterating the government's resolve to address the problem of groundwater depletion, using jargon like 'judicious, sustainable and equitable' use to manage water availability, and eventually informed the House that the government was in talks with the World Bank to find a workable solution. This clearly showed the lack of political courage to take the bull by the horns.

Like the previous governments, the Congress dispensation, too, has shied away from initiating any significant step to move away from water-guzzling crops, primarily paddy, lest it upset the predominant vote bank. Interestingly, almost at the same time the budget session was in progress, the coordinator of the All India Kisan Cordination Committee, Yudhvir Singh, while addressing a series of meetings organized by the Bhartiya Kisan Union (Lakhowal), was asking farmers to shift not only from paddy cultivation to restore groundwater, but also move away from intensive farming to agro-ecological practices. He wanted them to devote at least one acre out of the total land area to non-chemical agriculture. He urged farmers to reduce the crop output. "Your problem is that you produce more. If you were to reduce production by 10 per cent on an average, you will get a better price for your harvest and also save on chemical inputs."

With 98 per cent assured irrigation, and having the highest crop productivity in wheat, rice and maize-the cereal crops Punjab has the dubious distinction of

turning into a hotbed of farmer suicides. With over 16,600 farm suicides, including farm labourers, documented in a house-to-house survey between 2000 and 2017 by three public sector universities (Punjab presence) from one account to another. These transfers can easily span national boundaries. Similarly, online gambling, massive multiplayer online games and alternative banks that support crypto currency exchange and peer-to-peer payments (Revolut, Monzoetc.) can be used for money-laundering End-to-end encrypted messaging technologies such as Whatsapp and Instagram, and anonymous communication technologies such as Tor and Darknet further facilitate corrupt dealings without fear of detection. While data mining tools are increasingly being used by governments, such tools either have high false positives or high false negatives. Considering privacy laws and the cost and length of court cases in most jurisdictions, these tools are not much of a deterrent.

Technology may be even less effective in reducing 'grand' corruption (at the highest levels of the government). When the lawmakers are corrupt, they can create new instruments and policies to support existing corruption and enable its new forms. No amount of technology can serve as a deterrent. Similarly, vested interests can both bend state laws and influence them in such settings. Legal but corrupt activities such as initiating and approving projects to funnel resources to cronies can also go unchecked by technology.

Overall, while some forms of petty or systemic corruption may go down with technology, other forms may continue to thrive, and in some cases, increase.

Besides, while technology impacts vertical corruption (characterized by frequent but small corruption transactions with citizens), horizontal corruption (marked by infrequent but large transactions with commercial or high-worth entities) may largely be unimpacted.

Corruption is a social and economic problem. A multi-pronged approach that targets the entire corruption triangle (motivation, justification and opportunity) through different programmes and institutions is needed. Techno-utopianism that exaggerates the potential impact of technology on reducing corruption is not only wasteful, but also dangerous.

-The Tribune, 14 March 2019

With wrong farming methods, we turn fertile land into desert. Unless we go back to organic farming and save the soil, there is no future.

FARMERS NEED ASSURED PRICE FOR SUSTENANCE

Though India is the second largest producer in the world of essential foods like wheat, rice, fruits, vegetables and crops like cotton and groundnut and the largest producer of milk, jute and pulses, the long strides taken by the farmers, however, have not translated into higher incomes. Growth, in this case, has not led to prosperity on the farm. The invisible hand that Adam Smith talked about has actually failed to provide living incomes for farmers, not only in India, but across the globe.

We all know it by now. Agriculture was the saviour during the gloomy days of the pandemic. Not only that, an individual household got its regular supply of food during the lockdown, and those who could not afford were supplied with free rations, but agriculture also kept the wheels of economy moving. At a time when the economy had slipped by 23.9 per cent in the first quarter of the 2020 financial year, agriculture was the only bright spot, registering a gross value added (GVA) growth of 3.4 per cent.

All through the year, agriculture provided a solid foundation. Despite the Covid-19 disruptions, and at a time when all other sectors of the economy were struggling, desperately counting the emerging green shoots, the country achieved a record food grain production of 308.65 million tonnes. The bumper harvest reaped in 2020-21 was higher by 11.15 million tonnes over what was achieved in the previous year. In addition, the country also produced 329.9 million tonnes of fruits, vegetables and aromatic and plantation crops, including spices; around 204 million tonnes of milk, and 36.10 million tonnes of oilseeds.

Simply put, farmers produced economic wealth for the country. Not only during the pandemic, but what needs to be appreciated is that year after year, farmers have toiled hard to bring food to our table. From a stage when India was living in a 'ship-to-mouth' existence, and that was not too far distant in the mid-1960s, the role Indian farmers have played in turning the country self-sufficient in food is widely recognised. Agriculture has taken a quantum jump, increasing food production six times in seven decades, between 1950-51 and 2020-21.

A vibrant agriculture is what sustains a growing economy. But to believe that economic growth alone can address issues of hunger and malnutrition is nothing short of delusion. As the UN Food and Agriculture Organisation (FAO) itself acknowledges that 'economic growth is necessary but not sufficient to accelerate reduction in hunger and malnutrition', a study published in the scientific journal The Lancet shows a reduction in malnutrition by a maximum of 6 per cent even if the economic growth soars by 10 per cent. On the contrary, a well-fed nation builds up an efficient and productive manpower which is required to attain a higher economic growth.

Since 1950-51, if measured in terms of population growth, four times more Indian have been added. From 359 million in 1950-51, the country's population has multiplied roughly four times to 1.4 billion. Agriculture not only kept pace, defying the predictions of the Malthusian catastrophe, but has also produced an unmanageable surplus. Not only producing enough to feed the nation, the rise in the per capita availability of food grains, fruits, vegetables and milk also helped in meeting the

challenges of malnutrition and hidden hunger. That hunger still persists in some parts of the country is not because of any shortfall in food production, but is the outcome of the twin problems of access and distribution.

If growth and prosperity are the central theme of Adam Smith's seminal work, An inquiry into the nature and cause of the Wealth of Nations, it has to be accepted that the remarkable transition in Indian agriculture is what has essentially not only added, but led to the wealth of the nation. Though India is the world's second largest producer of essential foods like wheat, rice, fruits, vegetables and crops like cotton and groundnut and the largest producer of milk, jute and pulses, the long strides taken by the farmers to shatter all records, however, have not translated into higher incomes. Growth, in this case, has not led to prosperity on the farm.

The invisible hand that Adam Smith talked about has actually failed to provide living incomes for farmers, not only in India, but across the globe. One doesn't need to apply sophisticated economic models to find out how farm incomes have actually been squeezed over the years, and how free markets have sucked income from farmers. Instead, as the citation for this year's Nobel Prize in Economics admits: "Conclusions about cause and effect can be drawn from natural experiments." Agreeing, I feel there is no need for economists to hold econometrics studies when conclusions can be drawn easily from the available evidences.

The FAO has estimated India's gross value of crop production in 2018 (report released in March 2021) at $289,802,032 million and that of gross food production at $400,722,025 million. When it comes to the gross value of agricultural production at current prices, India stands second in the world, next to China, with a gross value of $418,541,343 million. Now before you get lost in the maze of production statistics, what is important to ascertain here is the enormous economic wealth that farmers produce and eventually what the agriculture sector generates. In other words, farmers too are wealth creators.

It, therefore, requires a change in economic thinking, which has traditionally banked on the assumption that only businesses — small and big — are wealth creators. The obscene wealth inequality that prevails is the result of this outdated economic thinking. Otherwise, I see no reason why at a time when the gross value of agricultural production since 1999 has grown at an average annual rate of 8.25 per cent, farmers should be at the bottom of the ladder. In America, the share of a farmer in every food dollar in 2018 has plummeted to just eight per cent. In India, the latest Situation Assessment Survey for agricultural households computes income from crop cultivation at only Rs 27 per day.

There is enough evidence to show how free markets have devastated farming across the globe. This has to change. It can only happen when we begin to treat farmers not simply as the primary producer but also as wealth creators, and ensure their contribution in wealth generation is adequately compensated. To sustain billions of farm livelihoods across the globe, and to celebrate the role farmers play in wealth creation, a beginning has to be made by guaranteeing an assured and profitable price for farmers.

-The Tribune, 21 October 2021

ENSURE PRICE GUARANTEE UNDER CONTRACT FARMING

A year after US President Joe Biden announced a $1-billion package to expand meat and poultry processing capacity so as to increase competition and thereby, reduce retail prices, egg prices have surged. The increase in egg prices 60 per cent jump in 2022 as per the US Consumer Price Index and 300 per cent in wholesale prices—comes at a time when prices being received by poultry farmers are in steep decline.

“As profits soar, the prices go up in the grocery stores, but the prices the farmers receive go down drastically,” President Bidden remarked. With four ‘livestock companies, controlling 85 per cent of the market, forming a cartel and, thereby monopolising the prices, the markets have been distorted. The result was that the retail egg prices in January had doubled from a year ago.

Nevertheless, since 96 per cent of the US poultry Farmers operate under a contract, and given the high expectations from contract farming that economists invariably Project, I see no reason why poultry farmers should be getting a raw deal. Considering that contract farming rises the bargaining power of poultry farmers, and also help remove several layers of middlemen, the benefit should flow to the producer and the consumer. But as President Biden acknowledged, the huge profits being taken out by the livestock companies was primarily the reason behind rising food inflation, and on the contrary had hit both the consumer as well as farmers.

For instance, Cal-Maine foods, which controls 20 per cent of the US retail egg market, raked in gross profits that soared by 600 per cent in a quarter. While the company's profits increased to $198 million in the quarter ending November 2022, and even with a huge jump in sales, up by 110 per cent, and driven by the spike in egg retail prices, the benefits did not trickle in the same proportion to the producer. The CNN called it 'making more money out of every egg'.

It is not as if a decline in income of US poultry farmers is a recent development. According to the National Chicken Council, when adjusted for inflation, the amount poultry farmers receive by weight is declining since the 1990s. Not only for broilers, a steady decline in income has also hit egg producers. Earlier, Farm Action 2022, which fights against monopolistic control over food and farming, had reported that 71 per cent of the chicken farmers, for whom poultry farming is a standalone activity, were living at or below the poverty line.

With concentration of power in a handful of companies that operate a contract, it is the weaker link that invariably tends to get exploited. With more than half of the US egg production in the hands of four large companies Tyson foods, Pilgrim's pride Sanderson Farms and Mountain Farm—contract farmers are a captive lot. It is true that the companies reeling out a contact provide chicks, feed, medicines, veterinary and technical advice, while poultry farmers are expected to ensure land and housing, which is an expensive proposition, and also day-to-day maintenance of the poultry birds for which they are paid.

The companies have now launched a 'tournament system' under which the efficient farmers who raise healthiest chicken are awarded but the soaring point is that even award money is deducted from the share of farmers who happen to be laggards.

Contracts ensure farmers get assured wages and a guaranteed market but farmers have often complained about low prices, exploitative practices and how the one-sided contracts are forced onto them. So much so that in 2015, Some contract farmers had filed a lawsuit against unfair, predatory prices and the growing indebtedness as a result. Interestingly, two of the major players, Tyson Foods and Perdue farms, agreed to an out-of-court settlement for $35 million. This shows that the malaise runs much deeper and calls for stiffer regulations. Meanwhile, another class action lawsuit has been field by contract farmers in south Carolina.

And as Animal outlook (September 2022) had observed "the contract farming system relies on taking advantage of farmers." Under such circumstances to imagine that an official of the rank of the SDM, like what was proposed in three central laws in India that now stand withdrawn, can protect the rights of the contract farmers against the monolithic power of agribusiness giants is simply an illusion,

As s study on 'Broiler Farming in Punjab' by Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, observed that farmers complain of increasing corporate control and unfair practices. The big companies have advantage of volumes and have huge institutional finance to distort the markets. The net returns for contract farmers. therefore, have been in the negative. Among its recommendations is the need to allow an aggrieved party to take the dispute to a civil court. Another interesting study 'integrated Contract Broiler Farming: An Evaluation Case Study in India' by the US Agency for international Development clearly shows that independent and non-contract farmers make higher profits than the contract farmers.

Simply put, contract farming in poultry isn't leading to higher prices for farmers. As both the studies point to it, the contact model of broiler farming only provides a 'lower but assured return'. This is exactly what the contact farmers in the US are also saying.In case of layers too, the scenario is equally distressing. Poultry farmers in Tamil Nadu recently protested outside the office of the National Egg coordination Committee seeking a higher price The Telangana State Poultry Federation estimates that farmers are losing around Rs 7,000 crore every year from low price realisation for eggs. They demand setting up a board, like in spices, to regulate prices.

That is why I maintain that any agreement under the contact model of farming, and irrespective of the number of the years of the contract, should be based on a mechanism that guarantees a price equivalent to MSP (minimum support price) or above. Guaranteeing a price under contract farming will ensure an economically viable livelihood.

-The Tribune, 4 March 2023

DON'T MAKE PUNJAB A JUNKYARD FOR MACHINES

At a time when farmers across the world are struggling to recover their cost of production, an Oxfam report says 62 new food billionaires have joined the super-rich club in the last two years. The report, of course, talks of 12 billionaires in the Cargill family, up from eight before the pandemic, to have jumped into the opulent bandwagon.

Riding on high commodity prices, soaring food inflation, record land values and a succession of technological innovations, all in the name of increasing productivity, the profits of the food industry are soaring. While Oxfam (Great Britain) Chief Executive Danny Sriskandarajah says: "At a time when hundreds of millions of more people are facing extreme poverty, there can be no excuse for governments not to address gargantuan profits and wealth in order to ensure no one is left behind ", what remains unexplained is why the roaring profits that the food supply chains ended up with did not percolate to the primary producer, the farmer.

After all, four grain-trading companies, including global giant Cargill, control 70 per cent of the international food trade. We know that the farm commodities being traded globally are produced by millions of toiling farmers who eventually fail to make a good living. In other words, the wealth that farmer produce is very conveniently sucked from the bottom to the top. Otherwise, I see no reason why farmers too should not be earning profits.

This is also true for the technology-rich companies which thrive on promoting technological fixes as the solutions to farming woes. While farmers struggle to eke out a living, stocks of technology companies stay bullish.

It is a wonder why despite all these technological innovations, industrial agriculture is blamed for generating a third of the global greenhouse gas emissions. Futhermore, the real cost of producing cheap food has been easily externalised. While the input suppliers invariably walk away with profits, the society is left to bear the resulting economic and environmental costs. This cycle has gone on relentlessly. Let's see how artificial intelligence (AI) tries to restore the balance.

This is a question that Rufo Quintavalle, a Paris-based private investor, asks in the very thoughtful essay *Food Doesn't Grow in Silicon Valley* that he wrote for the Stanford Social Innovation Review (March 12, 2014):

"The last hundred years have probably seen more innovations in the food system than any period in human history, and the common thrust of that innovation has been to drive down food prices, impoverish farmers, and degrade the environment."

In fact, all technological innovations are aimed at improving efficiency and attaining high productivity. These technological innovations should also lead to higher farm incomes. But the fact remains that the more the farmer produce, the steeper is their income decline. Take, for instance, the case of North America. For over 150 years, despite achieving very high productivity, the wheat price for farmers, adjusted for inflation, has been on a steep fall. For example, compared to the market price that a wheat farmer in Canada is getting now, his great-grandfather would have earned six times more.

This draws me the Punjab, the frontline agricultural state of India. Despite achieving record annual crop productivity- amongst the highest in the world –Punjab has turned into an environment mess. Technology did increase crop yield. Rather, in the bargain, excessive mining of groundwater has turned aquifers dry, chemical inputs have become extremely pervasive in the environment, soil fertility is declining and the burring of crop residues chokes the atmosphere. The food bowl has been left crying for a transformation towards a healthy and sustainable farming system.

Punjab provides an opportunity to understand how the politics of technology operates. The ongiong debate on saving groundwater reminds me of that time a few decades back when during a visiting assignment to the International Rice Research Institute (IRRI) in the Philippines; I came across a study that said there was no difference in crop productivity if you broadcast the seeds or transplant the paddy seedlings. Intrigued by the findings and knowing well that broadcasting of paddy seeds was earlier a common practice in several parts of Asia, I posed this question to a top rice scientist. The response I received was something like this: "We were trying to help the tractor industry. After all 97 per cent rice is grown in Asia and, perhaps, the change in cultivation practices was aimed at helping the tractor industry to grow."

Another IRRI study showed that there is no difference in pesticide efficiency if you keep the pesticides at the source of irrigation flow in a crop field or if you use a knapsack sprayer with different kinds of nozzles to spray the chemicals. This was contrary to what we were taught as students.

With policy- backing, subsidies and availability of easy credit, farmers are being pushed to buy more machines. To illustrate, Punjab has five times more tractors than required. A former chairman of the Punjab Farmer Commission had asked banks not to extend further cheap loans for tractors. Also, in the name of checking stubble burning, more than 75,000 machines have already been sold. Coming in sets of five or six, these machines are used for a maximum of three weeks. As more technological gadgets and machines are promoted, farmers are increasingly sucked into a debt cycle, while equipment manufacturers are laughing all the way to the bank.

It is not very often that a technology that does not require an equipment or machine to be sold is talked about One is not against technology, but the question that crops up is why only a branded technological innovation finds favour. A simple but effective technology like the Nidana model that the late Surinder Dalal perfected against cotton pests, for instance, in Haryana has not found many takers for the simple reason that it doesn't require any machine. The System of Rice Intensification (SRI) for paddy cultivation is another example. The list is long.

Mechanisation is certainly desirable. But in the process to modernise we must ensure that Punjab does not turn into a junkyard for machines. The mindset has to change towards sustainable technologies that require less external inputs and fewer machines.

-The Tribune, 2 June 2022

FOOD INFLATION ALL ABOUT EXPLOITATIVE PROFITS

In an interview with a student publication of the Indra Gandhi institute of Development Research (IGIDR), Mumbai, a question was asked about the steps that need to be taken to curb food inflation. Nothing unusual, this question is on everyone's mind. Right from the Reserve Bank of India (RBI) to any TV discussion or a newspaper report on inflation, it is invariably rising food inflation that appears to be the villain of the growth story.

We have been programmed to believe that food being necessary, the rise in its prices has to be contained within the macro-economic fix of 4per cent, plus or minus 2 per cent. Therefore, whenever the new procurement prices are announced, twice in a year and separately for rabi and kharif crops, the media is agog with fears of rising food inflation. This year too, when paddy prices were announced, a question repeatedly asked on TV channels (and in newspaper editorials) was whether it would fan food inflation. Even though the price announced for 11 of the 14 kharif crops was less than the inflation rate, and also less than the compound rise in input prices, still there are fingers pointed at the nominal hike in procurement prices for inflationary pressure.

That food carries a weight equivalent to about 45 per cent in the Consumer Price Index (CPI) is well-known. But sometimes I wonder why housing, whether rented or owned, and which has the largest share in monthly expenditure for any household, is never measured as an inflation matrix. Similarly, the expenses on travel, with fuel prices steadily rising and dynamic prices for air, train and taxi services often exceeding the average monthly kitchen budge, again don't get adequately reflected in the inflation index. Former J&K CM Omar Abdullah had recently termed the skyrocketing air ticket prices from Srinagar for a day when most flights were cancelled as an 'open loot'. Many have complained of paying an abnormally high air fare of Rs 25,000 for a one-way ticket between Mumbai and Delhi. That is why the need to revisit what constitutes real inflation, and recalibrate weights ascribed to different components.

The point I am trying to make is that no eyebrows are raised when taxi aggregators go in for frequent surge pricing even at an unearthly hour of 6 in the morning. But if tomato's prices jump from Rs20 to Rs 40 per kg., all hell breaks loose. The tomato price rise for a household may still be less than the surge price Ola\ Uber had charged from consumers during a day's travel, but it is invariably the rise in tomato prices that ignites anger. This is how our minds are wired. We have been made to believe that a supply-demand mismatch leads to rising prices, but what we normally don't realise is that there is a third hidden factor-manipulation. There have been instances when the shortfall in onion production for instance was barely 4per cent and the retail prices shot up by 600 per cent in several markets.

Listen to what MJ Prabu, an organic farmer in Tamil Nadu, has to say: "I sell coconut at my farm for Rs 8 per piece. The middleman sells it further at Rs 28 per piece, and the street hawker (as well as organised retail) sells it at a price varying between Rs 50 and Rs 55 per

piece." What the farmer gets is only a fraction of the end consumer price. It is the greed of the supply chain that inflates pieces seven times by the time a coconut reaches the consumer. Food inflation, therefore, has not much to do with farm piece, but is all about exploitative profits that supply chains end up with.

Visit a supermarket and scan the prices. A new emerging trend of an abnormal increase in the prices of large packs is visible. Normally economics tells you that big packs of processed farm products should be relatively cheaper. An analysis howsoever shows that prices of 62 per cent of bigger packs have been raised in the pasts three months. No one knows why. For example, take Tata Gold tea. For a 100-gm tea pack, the prices is Rs40 and for a 500-gm pack, the retail prices is Rs310. Ideally, the prices for a 500-gm pack should have been less than Rs200. Most FMCG products, and that includes soaps and toiletries, fall in this category. Many others haven't raised the prices for popular brands but reduced the pack size by 15 per cent.

While consumers have paid 10 per cent more for FMCG products, reports say the FMCG companies are making huge profits, recording a jump of 40 per cent on a year-to year basis.

This is a global phenomenon. In America corporate profits are at a 70- year high and the annual inflation rate zoomed to 8.6 per cent in May, the highest in 41 years. While profits for 2,000 US publicly traded companies have soared much beyond the prepandemic period, an Oxfam report has pointed to the increase in the number of 'food billionaires'. Strangely, while the farm incomes haven't raised anywhere, retail prices have already increased substantially. Even before the Russia –Ukraine war erupted, speculation had driven food prices globally to a record high, beating the time of the 2007-08 world food crisis.

To blame food inflation, therefore, is grossly unfair. There aren't many instances when high prices to farmers have resulted in an abnormal hike in retail food prices, expect in cases of short supply. It is simply the greed of the middlemen, and that includes agri-business giants, which results in manipulation of the prices at will. Recall the OECD-ICRIER study that said Indian farmers lost Rs 45-lakh crore in 16 years, between 2000 and 2016. Even during that period, when farmer earned 15 per cent less than the international prices, the food inflation rate was not in the negative but had remained quite persistent.

It is therefore time to replace food inflation with a more appropriate term-'greedflation.'

-The Tribune, 24 June 2022

WHY SUBSIDY FOR FARM SECTOR IS NO DOLE

I have calculated all my inputs and my overall costs. At the end of the day, I am not getting the returns. If I started making a balance sheet, I would be in the negative every year," rues Ammar Zaidi from Hardoi district in Uttar Pradesh. A former banker, he is now into sugarcane cultivation. Quoted in a news report, what Zaidi says is all-pervasive among the farming community.

In Punjab, the food bowl of the country, too, agriculture is in severe distress. Despite achieving record crop productivity in wheat and paddy—more than 11 tonnes per hectare per year—farmers carry an outstanding debt of Rs 1 trillion, pushing them deeper into crisis. With Rs 2 lakh of debt standing against every agricultural household, it only shows what was always known—farm returns are not enough to cover even the cost of production.

Whether it is in India, the European Union or America, agriculture continues to be in the grip of a terrible crisis. Summing up the tragedy that is affecting farmers globally, a British farmer was quoted as saying: "Every genuine farmer is now stuck unfairly on a treadmill with accumulating debts to meet unless he goes bankrupt, commits suicide or finds another source of income." Still, every time farmers demand a higher price, it is drowned in the cacophony raised by market apologists, who accuse them of inefficiency, and for living perpetually on government doles.

In reality, we have socialism for corporates, and capitalism for farmers. In a study on the first 10 years of the WTO Agreement on Agriculture, presented at the time of the 2005 WTO Ministerial Conference at Hong Kong, my assessment was that of the massive subsidies that the rich countries provide in the name of agriculture, 80 per cent go to agri-business companies.

Simply put, farmers are victims of a global economic design that has deliberately kept agriculture impoverished. Already at the bottom of the pyramid, markets have failed to prop up farm incomes. If the markets were so efficient, I see no reason why 40 per cent of the income of an American farmer and 50 per cent of the European farmer should come from subsidy support. Call it welfare economics, but the fact remains that there is little alternative to cover up for the losses.

The richest 10 per cent globally own more wealth than the bottom 76 per cent, says the Global Inequality Report. In India, the richest 10 per cent possess 77 per cent of the country's wealth. While the poorest half in India sees only 1 per cent rise in their wealth, globally the have-nots hold just 2 per cent of the total wealth. In other words, it is quite apparent that economic growth is no measure of social welfare. The widening inequality that has been built up by a capitalist economy is bringing the focus back to the role of a welfare state.

Nowhere else is it as starkly visible as in agriculture. US President Joe Biden succinctly summed it thus: "Fifty years ago, ranchers got 60 cents of every dollar families spent on beef. Today, they get about 39 cents. Fifty years ago, hog farmers got 48 to 50 cents for each dollar the consumer spent. Today, it is

about 19 cents. And the big companies are making massive profits.' Earlier, the Chief Economist of the US Department of Agriculture (USDA) had acknowledged that farm incomes in America have been on a steep decline since the 1960s. This is happening in a country where markets dominate, and where corporate profits have swelled up to $2.11 trillion in the last quarter of this year. To help the miniscule population remaining in farming, the US has to come up with massive subsidies and investments every five years.

In India, it's no different. Studies have shown that farm incomes have touched a 15- year low. Niti Aayog had earlier worked out the real farm incomes in the five-year period between 2011-12 and 2015-16 to be less than half a per cent every year, 0.44 per cent to be exact. In 2016, the Economy Survey itself had reported that the average farm income in 17 states of India, which means farm income in roughly half the country, stood at a meagre €20,000 per year. This comes to an average of less than Rs 1,700 per month. On the other hand, the latest Situational Assessment Survey for Rural Households in 2021 computes the average income of a farm household in the country at a low of Rs 10,218 per month, based on the data collected in 2018-19. But the income from farming operations alone (excluding non-farm activities) comes to a paltry Rs 27 per day. With such pathetically low income levels, over the decades, the resulting farm crisis has led to suicides and forced farmers to abandon farming and migrate to cities looking for menial jobs.

Any call for raising the prices for farmers is always met with stiff opposition from marketeers.

A dominant class of economists has often blamed farmers for not linking with markets, because markets value efficiency and provide economic justice. But even in the rich countries, what is not being explained is why the markets have failed to help farmers gain economic independence.

In such a dismal scenario, it is difficult to imagine how the farming communities survive. After all, Indian farmers are, in reality, wealth creators—the gross value of food produced in India being a staggering $400,722,025 (FAO, 2021). Moreover, with a record harvest year after year, farmers have continued to produce more despite not being paid a living income. A record production of 315.72 million tonnes of foodgrains, 342 million tonnes of fruits and vegetables, 210 million tonnes of milk, and with an equally high production in agricultural commodities like sugarcane, oilseeds, jute, etc, in 2022—farmers produce economic wealth for the country, but remain deprived of being adequately compensated.

Where markets fail, social responsibility can and must fill the void. In order to keep food inflation under control, successive governments have denied farmers their rightful income. The entire burden of keeping food prices low, therefore, has been very conveniently passed on to farmers. Providing farmers with direct income support, beginning with Rs. 6,000 a year, given in three instalments, is a welfare measure to fill for the price loss farmers suffer. Strangely, this is considered to be yet another dole for farmers, and a lot of questions are asked about the rise in fiscal deficit as a result. But I hope that in the years to come, the

Pradhan Mantri Kisan Samman Nidhi can provide support of at least Rs. 5,000 per month to every farmer, including tenant farmers.

When a corporate tax concession of Rs. 1.45 lakh crore is announced, like in September 2019, and that too when some economists were asking for support on the demand side, it is hailed as a supply-side reform needed to boost economic growth. Similarly, all kinds of questions are raised when farm loans of Rs. 2.52 lakh crores are waived off by a few state governments. While the farm loan waivers are seen as leading to credit indiscipline and a moral hazard, a corporate loan waiver is viewed as leading to economic growth.

Corporate bad loans totalling Rs10 lakh crore have been written off by banks in the last five years. This is just one illustration to show the bias in economic thinking, considering that both the corporate and the farmer take loans from the same bank.

Economists like Nobel laureate Joseph Stiglitz have already written the obituary for neoliberal economics. With some latest initiatives by the US President being considered as a step back from the policies enshrined under the Washington Consensus, the world is increasingly sliding back to welfare economics. Since agriculture, not only in America, but globally, has suffered from the policies that link it with markets, it is time to ensure that income parity or what we, in India, call a guaranteed price for farmers is enforced. That, I think, will be the best way towards farmer welfare.

When prices for all industrial products come with a price tag, there is no reason why prices of agricultural commodities should not come with a price tag. A legally guaranteed Minimum Support Price. (MSP) is the best mechanism to provide a price tag for every agricultural commodity. In my understanding, providing a legally-binding MSP for agriculture produce is what farmers need. While agriculture needs reform, the best way to pull farmers out of the prevailing distress is by providing them with an economically viable and profitable price. Like everyone else, farmers too need a living income that can inspire the younger generation to return to farming as a career.

-The Tribune, 1 January 2023

"Agriculture is the most healthful, most useful, and most noble employment of man," - George Washington

A PRESCRIPTION FOR DEBT-FREE AGRICULTURE

"Why do banks take away our tractor & machinery or seek to put us in jail? Why don't they instead take our crops?' says a distraught farmer."

It leaves you dumbstruck. The Reserve Bank of India (RBI) has directed banks to go in for a 'compromise settlement' with 16,044 fraudsters, crooks and wilful defaulters — people who can pay but give a damn — who had collectively defrauded the banks to the tune of Rs 3.46 lakh crore by the end of December 2022. After a cooling period of 12 months, the defaulters will be eligible for fresh loans.

This comes at a time when banks in Rajasthan have launched an exercise to impound the cultivable land of 19,422 farmers who have defaulted on loan repayments in the past four years.

A year ago, the Punjab State Cooperative Agricultural Development Bank had planned to issue arrest warrants to speed up the recovery process against 71,000 defaulting farmers. The unpaid amount was Rs 3,200 crore — a fraction of what the wilful defaulters collectively owe. The bank had, in fact, served legal notices to 2,000 farmers with landholding exceeding five acres, which the state government subsequently withdrew.

While a majority of the wilful defaulters, including a number of crooks who have run away with public money, will get the banks to write off their outstanding amount as part of the 'settlement', defaulting Rajasthan farmers have no such choice. A majority of the farmers will lose their only source of livelihood. With the RBI throwing a 'raksha kavach' around the crony capitalists, it is only the poor farmers (and defaulters in other categories) who are left to fend for themselves. This shows how the banking system actually helps the rich become richer and the poor to be driven against the wall.

A few months back, a pregnant daughter of a farmer in Jharkhand was mowed down by the goons of a non-banking firm under the tractor that they were forcibly trying to drive away with. In the past, there have been reports of auctions of tractors and other machines that are seized by the banks. Not only confiscating the movable property of farmers, but also impounding their arable land and even putting farmers in jail for dishonouring the cheques (that are taken blank from farmers) are routine tactics. Across the country, such stories abound where high-handedness against the defaulting farmers adds to the agrarian distress, pushing them to survive at the margins.

Non-payment of dues eventually turns out to be a torture for the defaulting farmers. They may have genuine reasons, such as crop failures and a sudden crash in the prices, but for the banking system, even if the defaulting amount is petty, they are an easy target. Much of the farm suicides that happen and the agrarian distress that exists are because of the indebtedness, which are mounting with each passing year.

The National Crime Records Bureau (NCRB) has often recorded this as the primary reason behind farm suicides and the latest Situational Assessment Survey for Agricultural Households, released in 2021,

has worked out that every farmer carries an average debt of Rs 74,121. With nearly 70 per cent of the farmers indebted, the average debt has steadily increased by 57 per cent since 2013.

Knowing that farmers have been denied their rightful income over the decades and considering that not more than 14 per cent of the entire harvest is procured at Minimum Support Price (MSP), for the farmers producing the remaining 86 per cent of the crops, the distress price they often get does not even cover the cost of production and, thereby, entails great pain, suffering, sorrow and mental distress. And finally, when the farmers fail to repay a bank instalment, even their lands are taken away. Imagine the mental strain the defaulting Rajasthan farmers must be under with the sword of Damocles hanging over their head.

This is the worry of a Karnataka farmer, Echaghatta Siddaveerappa. Hailing from Chitradurga district, he invited me a few days back to visit his village to see how they had found an ingenious solution to the vexed crisis. When a few farmers in his taluka received a bank notice asking them to pay the pending dues before the recovery proceedings were launched, these farmers came up with an innovative idea. Using the Swaminathan Commission's formula to estimate the comprehensive cost of production plus 50 per cent profit, they packed their crop produce (equal to the amount pending against their name) and reached the bank's office. They approached four banks, and asked the banks to accept their pending dues in kind.

"We took a crop loan from the bank. We produced a bountiful harvest. But with market prices remaining low, we are unable to recover even what we had spent. In that case, how do the banks expect us to pay back in time?" an anguished Siddaveerappa asked me, adding: "Sir, why should the banks take away our tractor and machinery or seek court's orders to put us in jail? Why don't they instead take our crops?"

Well, all said and done, there is certainly merit in what the angry farmers say. After all, they produced the crops for which the loans were taken. And they were willing to pay it back in kind.

To the question as to what the banks would do with the crop harvest, the answer is simple. If the banks can put to public auction the seized tractors or the impounded cultivable lands (for which they have no inbuilt expertise), they can also plan to put the harvested crop for sale. The banks will need to rent storage space or enter into an arrangement with Mother Dairy and other organised retailers like Reliance Fresh, Big Basket and Big Bazaar.

Certainly, this is not going to be a prohibitive cost that the banks cannot undertake. If the banks have the resources to write off corporate bad loans to the tune of Rs 13 lakh crore in 10 years, and are able to provide huge 'haircuts' to the defaulting units under the insolvency proceedings, it is time to put the profits where they belong. This surely is the prescription for a debt-free agriculture.

-The Tribune, 24 June 2023

WILFUL DEFAULTERS ENJOY HOLIDAYS, PETTY DEFAULTING FARMERS LANGUISH IN JAIL

A few years back, a Haryana farmer was unable to pay back Rs six lakh for an underground pipe that he borrowed the money for. A local court sent him to jail for two years and fined him an additional Rs 9.83-lakh.

Not only in Haryana, in recent years hundreds of farmers owing petty amounts to banks, have been put behind bars for unpaid dues across the country. If not sent to jail, banks continue to seize tractors and other movable assets before impounding cultivable lands of a large number of farmers. Instead of coming to the rescue of these small time defaulters, who are mostly unable to pay back the instalment because of crop failure or a price crash, the Reserve Bank of India (RBI) decided to instead throw a 'raksha kavach' (protective ring) around the rich crooks, fraudsters and wilful defaulters. Setting aside the principles of natural justice, it has allowed nationalised banks to undertake compromise settlements or technical write-offs for accounts classified as wilful defaulters. After a cooling period of 12 months, these defaulters, who have the ability pay but simply refuse to do so, can get fresh loans.

If this is a valid resolution mechanism as the RBI says, than the question that needs to be first settled is why has this resolution been rarely applied for farmers, MSME sector, and middle class, which puts its hard earned and tax-paid money to get a home loan and car loan. Otherwise I see no reason why goons hired by banks, non-banking financial companies (NBFCs) and the

Micro-Finance Institutions (MFIs) routinely apply harsh and rough tactics to confiscate movable possessions of the defaulters. In a recent case, a car was seized by recovery agents (read goons) from a defaulter at a toll barrier. At the same time, a NBFC chief had recently apologised for the death of a pregnant daughter of a defaulting farmer in Jharkhand. She was mowed down when the recovery agents were trying to flee with a tractor for which the loan was initially taken by the farmer.

The RBI had looked the other way. Firstly, I am actually shocked by the controversial RBI circular that allowed banks to enter into a compromise settlement with wilful defaulters, who actually should have been cooling their heels in jail by now, and secondly the meek clarification it issued after an uproar erupted raising more questions than answers. It only shows that the RBI's benevolence is preserved for the rich defaulters, who otherwise give a damn to the rules and regulations that the banking regulatory prescribes. Otherwise I see no reason how and why the number of wilful defaulters continues to swell. It has risen by 41 per cent in the last two years.

Wilful defaulters — there number having risen to 16,044 over the years — collectively owed Rs 3.46-lakh crore to banks. In addition, media reports say Rs 100-crore every day is the amount that has been lost to bank frauds and scams over the past seven years. In any case, many of the wilful defaulters, and that includes the likes of Vijay Mallya, Mehul Choksi and Lalit Modi, who have fled the country, will now get a reprieve with a compromise that banks will enter with them, and

many of them will get huge write-offs and will still be eligible for seeking fresh loans.

Isn't it a system that actually sucks! I wonder why such benevolence has never been shown by RBI towards the petty amount defaulters, including farmers. Why do small farmers have to undergo jail terms while the rich crooks in the business regularly get a bail out and hefty haircuts and therefore have nothing to lose? They continue to have birthday bashes, expensive holidays and maintain a lavish lifestyle. Thanks to the recent RBI circular literally allowing them a hefty bailout, the crooks in the trade now have nothing to fear. All they need is to be rich enough to fall in the category around which the bank throws a protective ring.

Sometimes I think that the banking system is itself the primary reason for the growing inequality. After all, if banks continue to treat borrowers who have defrauded the system with kid gloves, it only exposes the game plan that keeps the rich amassing wealth. Not because they are talented but because the banks continue to bail them out with public money. Already, banks have written off over Rs 13-lakh crore of non-performing assets (NPAs) over the past 10 years, and the discretion to the banks to work out a compromise formula for wilful defaulters will act like an icing on the cake for the Richie Rich.

While the All India Bank Officers Confederation and the All India Bank Employees Association have been critical of the RBI policy, most business media have been rather supportive. What is more intriguing is that whenever an issue that benefits the corporates crops up, a team of corporate economists will emerge from nowhere trying to defend howsoever wrong the decision may be. It happened when Oxfam International asked for imposing wealth tax to reduce obscene inequalities.

Some economists in India had then said that raising wealth tax from a minute layer of the wealthy will not be economical. It is equally baffling as to how some economists, trying to justify the RBI directive, even go to the extent of saying that while recovering a loan, a bank should not make any distinction between whether the default is wilful, fraudulent or otherwise.

If this be so, I wonder why this exception is not allowed for the middle class investors and farmers. You will see the same economists questioning the policy if the farmers and the middle class defaulters get the same privileges. It isn't surprising, therefore, that those experts and others in the media who questioned free travel for women on the roadways buses in Karnataka saying it will cost the State government Rs 4,000 crore a year, go conspicuously quiet when the question of an expected write-off of Rs 3.46-lakh crore and that too for a class of wilful defaulters comes up. They are fine with this largesse but always question the incentives that are announced for the poor.

I thought the RBI will at least stay away from this inherent bias against the poor labharti. On the contrary, the controversial circular that provides a protective lifeline for the crooks and fraudsters of the banking system clearly shows that RBI has a lot to learn, and perhaps make a concerted effort to stop having 'double standard' that favours the rich with all kinds of economic favours, and decry the poor for upsetting the national balance sheet and being a moral hazard.

-Bizz Buzz, 23 June 2023

DON'T LET ECOLOGY FALL VICTIM TO FIXATION WITH ECONOMIC GROWTH

Ireland's president Michael Daniel Higgins came down heavily the other day on the continuing 'obsession' with economic growth, saying that while " many economists remain stuck in an inexorable growth narrative… a fixation on a narrowly defined efficiency, productivity, perpetual growth has resulted in a discipline that has become blinkered to the ecological catastrophe we now face."

This remains me of what former UN Secretary General Ban Ki-moon had said almost a decade ago in his address to the World Economic Forum: "The world needs leadership that can overhaul the economic design that is leading to a climate catastrophe." In other words, he too was talking of the immediate need to overhaul the economic growth paradigm that has brought the world 'dangerously close' to abrupt and irreversible changes.

The warning, however, goes unheeded. Despite the international community expressing grave concern and the urgency to bring in climate-resilient policies approaches that can make a visible difference have remained elusive so far. Even the latest synthesis report of the Inter-governmental Panel on Climate Change (IPCC) clearly states that the window of opportunity to secure a liveable and sustainable future for all is rapidly closing. Still, the dominant economic system hasn't woken up. Whether it's the twin Breton Woods institutions or for that matter the foreign institutional investors and a handful of credit rating agencies which call the shots, the more the need for change, the more things have remained the same.

This is essentially because whenever relevant questions have been raised that challenge the mainstream thinking, the collective response from the economic fraternity has been to debunk these strong voices with the presumption that these are the people who perhaps do not understand economics. Corporate media obviously would like to convey this impression . In fact, a careful perusal of the articles published in major newspapers shows that increasingly, the space is being occupied by chief economists of banks and academicians from foreign universities who have been openly flaunting the argument to move towards a still higher growth. They have the usual justifications, but I thought at least given the existential threat the world is faced with, there should have been a change in tone and tenor.

For a section of the media and the educated people on the street, it is business as usual. This is primarily because of the TINA (there is no alternative) factor that has been engrained in our collective thinking. Whether we like it or not, we have been programmed to believe that economic growth will lead to 'all is well' and is infinite. Even if the climate goes topsy-turvy, economic growth will emerge as the saviour. This kind of general thinking exists because economists have refrained from telling us that the unprecedented crises the world is faced with, whether in environment destruction, natural resource depletion, climate catastrophe, and as well as the exploding income inequality that we witness, is

the outcome of the same economic principles, many of them outdated, that we rejoice in the name of growth.

The Irish President thinks it is the teaching of economics in colleges and universities that is solely responsible for the doctrine of economic growth being imbibed in successive generations. "The question of how economics is taught and encountered is a matter of importance" adding, that " to facilitate a pluralism of approaches in teaching economics is a deprivation of basic student rights, indeed citizen rights"

This writer, too, has time and again asked for similar concerns to be incorporated in economic studies to make them socially and environmentally relevant , to make growth people –centric . But when was the last time you heard of any mainstream initiative to rethink economics as if the people and the planed mattered?

The entire system is so designed that not only free natural capital (meaning natural resources and eco-services), the industries also benefits hugely from the state largesse. Let's first take a look at the appropriation and misappropriation of the natural resource base. The true cost it inflicts in reality is borne by the society at large. Just to illustrate, for every dollar worth of food we buy, the true cost is three time higher. We don't question it because we want food to be cheap.

A recent study on behalf of a UN initiative, The Economics of Ecosystems and Biodiversity (TEEB) , has looked into more than a thousand primary production and processing sectors globally, including wheat and rice farming in southern Asia, and as well as cattle ranching in the US, to estimate that $7.3 trillion per year is the price of natural capital that is being gobbled up in the quest to achieve a higher growth rate.

If we add the infrastructure freebies and the economic stimulus packages, quantitative easing (printing of surplus money), huge tax breaks and bank write-offs, the economic balance tilts heavily to serve the rich. The assumption that the benefits trickle down too is largely unsubstantiated. A London school of Economics study,for instance, has shown that over a period of 50 year (1965 to 2015), tax concessions in 18 of the rich countries " do not have any significant effect on economic growth and unemployment." Simply put, these tax breaks have for all practical purposes only succeeded in transferring income from the exchequer into the pockets of the stinking rich.

While Credit Suisse estimates that the top 1 per cent owns almost 48 per cent of the global wealth, an estimated 40 per cent of multinational profits are relocated to tax havens every year. This amounted to $ 1 trillion in 2019 alone. Add to it another $ 1 trillion profits by the Wall Street banks in the past decade –this is how an incompetent economic system has led to the piling of wealth at the top.

The economic growth model has clearly run out of steam. The fear of an impending climate catastrophe will hopefully force the world to give up its compulsive obsession with growth.

-The Tribune, 13 May 2023

HOW AGRICULTURE COULD RESOLVE INDIA'S UNEMPLOYMENT CRISIS

Instead of hoping that someday mfg sector will provide additional non-farm jobs, the right challenge that policy makers need to take up now is to shift the focus to rebuilding agriculture. Two years after millions of daily wager workers trudged home, walking hundreds of kilometres on foot, after a lockdown was suddenly imposed, the Centre for Monitoring of Indian Economy (CMIE) has come out with a study on India's labour force participation rate which says that 900 million people are not even interested in getting a job. "They even stopped looking for employment, possibly too disappointed with their failure to get a job under the belief that there were no jobs available," the report said.

In a country where job creation tops the country's political agenda, you will agree that 900 million not clamouring for any job is not a small number. It is almost equal to the combined population of Russia and the United States. That such a large proportion of India's population is disenchanted with any possibility of finding a decent job, and instead has decided to drop off the employment register, is a pointer to a historical blunder in economic thinking and approach. The bigger tragedy however is that we still fail to acknowledge where we have gone wrong.

When the lockdown happened, an estimated 100 million people had walked back inter-state and intrastate, many with their children in lap and baggage to drag. The reverse migration that the country witnessed on their TV Channels was perhaps no less distressing than the migration that shook the country at the time of the partition. Some migrant workers had returned back to the cities when the pandemic had eased, but a majority had preferred to stay back. Despite such a large influx, a distressed agriculture was still able to absorb the additional migrant workforce.

The CMIE now says that in March alone industrial jobs fell by 16.7 million. Agriculture made up for the job losses, adding another 15.3 million to the already existing workforce. But still I find that the dominant economic thinking relies on the revival of non-farm activities, and not agriculture, to create ample employment opportunities. This is what Economic 101 had programmed us to believe – to achieve higher economic growth; the number of people dependent on agriculture has to be brought down. This outdated economic thinking continues to dominate our public policy. Even now when the world is witnessing a job-loss growth, with automation and artificial intelligence taking over industrial production, our economic thinking – howsoever irrelevant it may be in the times we are living in – hasn't changed. While a big drop in employment opportunities by the big industry is being pointed to, some media publications even prefer to quote a 2020 study by McKinsey Global Institute, which says India needs to create another 90 million jobs by 2030. In my opinion, this is an outdated economic thought, a narrative built during the era neoliberal economics began to dominate. It still continues to prevail. I find even some of the best brains, and that

includes economists, academicians and writers, are unable to look beyond what they had studied in their graduation courses. Times have changed, and so have the employment dynamics but our economic thought process hasn't.

Let's first try to see what we are missing out. In both the cases – first the lockdown period and now the slump in labour force participation rate in March 2022 – the underlying message is that agriculture, despite the neglect and apathy over the decades, alone has the potential to absorb large sections of the population. Instead of pushing small farmers to migrate to the cities in search of menial jobs, revitalising agriculture can easily turn the tables, providing for gainful employment. Give farmers a guaranteed price, along with enhanced public sector investments, and agriculture can easily turn into a powerhouse of economic growth. And let me reiterate, agriculture alone has the potential to reboot the economy. After all, the 900 million people who have lost interest in seeking employment are not sitting idle. Whether we like it or not, a majority of them have a foot in farming, and with their household food security taken care of, they may be engaged in other part time activities. Instead of still hoping that someday the manufacturing sector will be back on track, and the higher economic growth projections that we continue to make – 9 per cent and above - will provide for additional non-farm jobs, the right challenge that policy makers need to take up now is to shift the focus to rebuilding agriculture. Although many economists feel elated when some reports appearing at different times indicate an increased rate of out-migration from villages, this economic thought is borne out of a mindset that refuses to see the changes on the horizon. With roughly 50 per cent of India's population, a little more than 600 million, dependent on agriculture, the challenge should be on how to make farming a viable enterprise. Instead of pushing people out of the villages, the better option would be to make villages prosperous. Just because the US and European Union have relentlessly pushed farming population to move to the cities doesn't mean that we too have to blindly follow that prescription. Let us not forget that a farmer is also an entrepreneur. Despite having small landholdings, 86 per cent owning less than 5 acres, they still continue to produce a record harvest year after year. With a continuous decline in public sector investments in agriculture, which the RBI had in a study calculated it to be around 0.4 per cent of the GDP between 2011-12 and 2017-18, we can't expect the small farmers to perform a miracle. But still they continue to provide a strong economic base for the country to rely on. If only we had given farmers their right due, and provide them with the right kind of public infrastructure, I am sure they would be able to convert farming into a favoured economic enterprise for the future. But first and foremost, our policy makers must acknowledge the historical blunder to treat agriculture as an economic burden, to treat agriculture as a laggard. For long, I have maintained that the policy of sacrificing agriculture for the sake of industrial growth is only helping in building a strong army of agricultural refugees, who are being deliberately driven out of agriculture to swarm into the cities in need of cheap labour. The over-emphasis on industrial sector had turned focus away from the agrarian

community. That was a mistake. If only, we had stood firm and instead focused on resurrecting agriculture, it would have been the most appropriate way to achieve Sabka Saath Sabka Vikas. Instead of worrying about the lack of non-farm employment, let's shift the attention to making farming a viable entity.

-Hans News Service, 1 May 2022

"Agriculture was the first occupation of man, and as it embraces the whole earth, it is the foundation of all other industries".

BIG PUSH FOR GM CROPS

The US field a fresh complaint against India at the World Trade Organization (WTO) last week. In its submission, the US sought withdrawal of India's import restrictions on genetically modified (GM) foods, including rice and apples. It said the demand for a non- GM certificate was disrupting American agriculture exports. This comes at a time when for no apparent reason the Ministry for Environment Forests and Climate Change has given an 'environment clearance' for a low- yielding GM mustard variety.

India is not alone. The US is spearheading a global assault to force developing countries to open up to unwanted imports of GM crops as well as GM technology. Besides the European Union and India; Mexico, Kenya, and Indonesia are on the radar.

Such has been the continuing pressure that Mexican President Adres Manual Lopez Obrador had in a press conference reiterated that Mexico would not import GM corn: 'We do not want GM. We are a free and sovereign country.' Earlier, through a presidential decree on January I, 2021, Mexico had announced the gradual phasing out of GM corn: 'we do not want GM we are a free and sovereign country.' Earlier, a presidential decree on January 1, 2021, Mexico had announced the gradual phasing out of GM corn and also the harmful glyphosate herbicide by 2024. This is expected to hit annual exports of 17-million tonnes of GM corn from America. Two US Senators, meanwhile, have requested the US Trade Representative Katherine Tai to take the issue to dispute settlement under the US-

Maxico-Canada Agreement (USMCA) to force México to rescind the order.

But not every country is as determined as Mexico to resist 'agrarian capitalism', as author Aniket Aga, an Associate Professor at Ashoka University, calls it. In Kenya, the Cabinet Trade and Industry Secretary, Moses Kuria, shockingly admitted a few days back: 'Being in this country you are a candidate for death. And because there are so many things competing for death, there is nothing wrong in adding GMOs to that list. That is why we have deliberately decided to allow GMOs into this country.' And then dutifully lifted a 10- year ban on import of GMOs, announcing duty-free import of GM corn and non-GM corn for the next six months. This announcement was quickly followed by a visit of a 32-member US trade delegation to Nairobi. The expectation being that perhaps Kenya will be able to absorb some of the GM corn supplies that US farmers are left saddled with after the Mexico ban.

In Indonesia, amid protest from farm groups, President Joko Widodo wants the country to grow GM soybean, and if necessary, import GM seeds to augment falling soybean production.

Let's return to India. First, instead of forcing India (and also other countries) to amend the food safety laws framed under the country's Environment Protection Act to allow for the import of unsafe and risky GM foods, why doesn't the US set its own agriculture in order? If the US wants to Grow GM crops for its own people, it's fine. But why can't it start growing non-GM corn, rice and apples to meet its export obligations? Why the

EU, and the developing world be forced to drop the guard against harmful GM foods and contentious crop seeds, which being largely herbicide-tolerant, end up increasing the sale of toxic herbicides? In India after the entry of Bt cotton in 2002, cost of pesticide for cotton has increased by 37 per cent per hectare.

The WTO needs to know that some non-GM farmers in the US have already announced that they can meet Mexico's requirement for non-GM corn. In fact, I am sure if India too stands firm on banning GM food imports from the US, it will send a strong signal to US farmers to switch over to cultivation of non-GM crops. That's what the world needs. Moreover, why should the WTO be more concerned about protecting US trade interests rather than ensuring safe and healthy food requirements of the developing countries? Every country should have the right to say no to what it doesn't want. This is the primary reason why the WTO is losing steam, and more and more countries are moving away into a protective shell.

Not only with GM food, the US agribusiness industry, which has been slapped with billions of dollars in fines and still faces thousands of law suits linked to its herbicides allegedly blamed for causing cancer, is desperately looking for an export market. No wonder, the questionable GM technology is getting a renewed push, including in India, Indonesia and Kenya. Take, for instance, the environmental clearance for a low-yielding GM mustard variety in India, a junk variety, which some agricultural scientists claim will meet the shortfall in domestic production of edible oils.

India currently imports nearly 55 to 60 per cent of its domestic requirement of edible oil. With imports touching 13 million tonnes or so, it has in the recent past emerged as the world's second biggest edible oil importer. Not because we couldn't produce enough edible oil but because of misplaced policies, drastically cutting down import tariffs to allow cheaper imports, India dismantled the Yellow Revolution that had brought the country to near self-sufficiency in 1993-94.

The low-yielding GM mustard variety DMH-11 carrying a set of three genes is a herbicide-tolerant crop. Against the yield potential of 2,626 kg per hectare for DMH-11, there are already five crop varieties, including DMH-4 variety with 3,012 kg per ha, yielding 14.7 per cent higher. Worst still, the GM variety has been tested against a still low-yielding variety, Varuna`, to claim an increase of 25 to 30 per cent. One fails to understand why misrepresentation with false data is often required to promote GM crops.

Using the System of Mustard Intensification (SMI) production technique with available mustard varieties, Madhya Pradesh has produced a record 4,693 kg/hectare, double than what GM variety claims. A nationwide drive by agriculture scientists and officials is required to promote and expand SMI production system to rebuild Yellow Revolution.

- The Tribune, 24 November 2022

TREAD WARILY ON GO-AHEAD TO GM CROPS

My science teacher taught me that science begins by asking questions and then seeking answers. In other words, science has always remained open to questioning. This open-ended exploration in science offers a critical space to interpret available evidence and rectify glaring misconceptions that can lead to socio-economic upheavals and aggravate environmental destruction.

But when economic interests begin to shut out scientific enquiry in an attempt to muzzle voices that try to uncover the truth, it is clear that the evidence itself is shaky. So, whenever a debate erupts over a genetically modified (GM) crop variety, the call by a dominant class of scientists to go by 'evidence-based' research and thereby ignore public scrutiny of scientific data and claims tantamounts to bulldozing an inquest to find the truth. As has been seen, the evidence on which the claims are made are often weak, do not conform to the guidelines, are manipulated and even unscientific in some cases, to say the least.

At the time when Bt cotton — the first GM crop to be allowed in India — was to be commercially released (in 2001), I happened to be in that meeting called by the Genetic Engineering Appraisal Committee (GEAC) the inter-ministerial regulatory body. All members of the GEAC, the Review Committee of Genetic Manipulation and the Monitoring Committee were present along with senior executives from Mahyco Monsanto, the seed

developer, and a few civil society representatives. To my surprise, the multi-location trial data for that particular year showed that the cotton crop was sown two months late, and yet the productivity achieved was 50 per cent higher, attributing the increased yield to the Bt variety.

Challenging the data and calling it unscientific, I asked the Chairman of the Monitoring Committee, the then Deputy Director General of the Indian Council for Agricultural Research (ICAR), to validate the data in any of the research institutes. In a crop, which takes normally five months to grow, it is practically impossible to sow the crop two months late and still get high productivity. Although the date of sowing is a very important aspect of agricultural research, and if an exception can be made for a private company, why can't the university scientists in future be asked not to worry about the date of sowing? To the GEAC Chairman, my question was that two months' delayed sowing can be a big saving for farmers, so why an advisory shouldn't be sent to farmers to sow the crop two months late?

The same evening, a senior ICAR functionary informed me that Mahyco Monsanto had been asked, despite its assertion that it had completed the research as required, to conduct another year of research trials. That is how the commercial approval for Bt cotton was pushed by a year─to 2002. Imagine if the 'evidence-based' research that was presented had gone without questioning.

In 2010, when the then the Environment Minister Jairam Ramesh announced a moratorium on Bt brinjal, he released a 19-page document titled: "Decision on

Commercialisation of Bt brinjal". Howsoever the scientific community may decry it, in my understanding it is a document that should be essential reading for every plant scientist. After elaborate research, consultation and interaction with distinguished scientists from India and abroad, the minister also took into consideration the views expressed by people at the seven public consultations he held across the brinjal-growing areas. This was the first time that such an extensive exercise had been held to gauge public perception of GM technology.

Using a cautious, precautionary, principle-based approach, he emphasised the dire need to ensure that any new technology or innovation should conform to the socio-cultural values of the communities.

While a section of the media has dismissed public scrutiny of GM crops as the handiwork of 'Luddites', I am glad the minister had acknowledged the validity of serious points of objection raised by responsible civil society groups. He also referred to the problems with the protocol of the studies, analysis of the data submitted, interpretation of the results, procedures adopted and the reporting by the GM seed developers. Such huge gaps in 'evidence-based' research show the need to scrutinise scientific methodologies, modelling practices and the claims.

Markets have a tendency to limit scientific enquiry, and for the sake of protecting business interests they have often helped build up a scientific tirade drowning saner voices. Even in the latest case of GM mustard, which was accorded environmental clearance

by the GEAC recently, and that too without the ICAR knowing what the actual yield potential of the genetically engineered DMH-11 variety really is, an attempt is being made to give the impression that this variety can reduce India's dependence on edible oil imports. Considering that the GM variety is low-yielding, this claim has been repeatedly questioned.

Interestingly, as per information obtained under the RTI Act, all test protocols for GM mustard were drawn up by Delhi University itself. The institute that is expected to meet the scientific protocols is first allowed to frame them. It is like asking a student to set the question paper for an exam.

Further, this herbicide-tolerant mustard variety did not even undergo the limited tests that Bt brinjal was subjected to. With no health expert participating in GM mustard appraisals, and the impact on honeybees still not studied, wonder how the GEAC gave the green nod, including granting permission for seed multiplication.

Science is about searching for the truth. This is exactly what Italian British Prof Michela Massimi said while delivering the 2017 prize lecture of the Royal Society, London: "I believe it is our job to contribute to public discourse on the value of science and to make sure that discussions about the role of evidence, the accuracy and reliability of scientific theories, and the effectiveness of methodological approaches are properly investigated."

-The Tribune, 22 December 2022

THE DEADLY HEATWAVE

With over 1,000 climate-related deaths reported from Spain and Portugal over the past week, as extreme temperatures break all previous records, and with Britain declaring a 'national emergency' over exceptionally high temperatures, expected to touch an all-time high of 40°C in a day or so, UN chief Antonio Guterres terms the 'record-shattering' heatwave conditions that have engulfed large parts of the globe as nothing short of 'collective suicide'.

Addressing ministers from 40 countries at the two-day conference on climate change, held at the beginning of this week in Berlin, the UN Secretary General reportedly warned: 'Half of humanity is in the danger zone, from floods, droughts, extreme storms and wildfires. No nation is immune. Yet we continue to feed our fossil fuel addiction. We have a choice, collective action or collective suicide. It is in our hands.'

The stern warning comes at a time when, smashing all previous records, extreme weather conditions appear to be fast hurtling the world towards an apocalypse. As someone said, it is not climate change but 'climate suicide'. From huge wildfires that have ravaged parts of Europe and North America, extreme heatwave conditions, and also incessant rains in certain regions of India, a terrible heatwave in Central Asia, the rapidly shrinking ice-shield in the Arctic and Antarctica, to drought in several parts of Africa, the global climate suddenly seems to be spinning out of control. It wasn't as if the havoc that climate change can result in was not

known but the massive damage it has begun to inflict has come much sooner than expected.

Here is what Prof Eliot Jacobson, formerly a professor of mathematics at Ohio University, using his prodigious mathematical mind, has worked out. Writing in his blog 'Watching the World Go Bye', he says: 'The planet is currently heating at the rate of over 13.3 Hiroshima nuclear bombs per second, or over 1,150,000 Hiroshima nuclear bombs per day.' He further calculates that the oceans are heating at the rate of over 12 Hiroshima nuclear bombs per second.

This is simply frightening. And yet, we aren't ready for any collective action. The visibly worried and upset UN chief had earlier remarked: 'Governments and business leaders are saying one thing, but doing another. Simply put, they are lying.' He was reacting to the latest report of the Intergovernmental Panel on Climate Change (IPCC) which wants the greenhouse gas emissions to peak in 2022 if the world is to be confined within a safe limit of 1.5°C rise in temperature in this century. But that doesn't seem to be happening. The clock is ticking fast.

Despite the repeated warnings, it is business as usual for political leaders, business leaders, neo-liberal economists, scientists and the media. These influential voices continue to convey a message that urges people not to unnecessarily panic, newer technologies will be able to fix the climate debacle. Numerous articles continue to appear worldwide, some even denying abnormal rise in temperatures to be associated with climate change, and justifying the destruction of natural resources for the sake of economic growth.

The world is certainly witnessing a strong opposition to the kind of economics that has led to the crisis. The demand for doing away with fossil fuels is gaining. There are a lot many influential voices that don't think like the mainline economists. British minister Zac Goldsmith is one of them. In one of his tweets, he writes: 'As fires rip through Europe and the world, as heat records are smashed in almost every region, as forests and ecosystems are being grubbed out at a record pace... it is worth reflecting that there are still politicians being elected who think protecting our planet isn't cost-effective.'

Ban Ki-moon, former UN Secretary General, had poignantly quipped at a recent World Economic Forum meeting that the world needed leadership that could overhaul the economic design that was leading to a climate catastrophe. To me, that is the crux of the climate problem that political leadership is afraid to take on. Unless the obsession with GDP as the growth matrix ends, there is no light at the end of the tunnel. Whether we like it or not, in reality it is the economic design that has not only widened inequality but also has led to an ecological crisis that has also brought the world at the edge of a precipice. The need, therefore, is for a radical economic transformation to fix the broken economic system. It can't go on for long.

Perhaps the deadly heatwave has come as a shock therapy, a kind of awakening for humankind, and thereby providing an opportunity to go for a structural change. After all, there is no Planet B that we can shift to.

That there is a direct link between gas emissions, climate change and wealth creation has been widely acknowledged. The higher the rate of economic growth, higher is the carbon emissions. The quest for a higher GDP is leading to heating of the planet. It is in this context that a leading economist, Dr Herman Daly, emeritus professor at the Maryland School of Public Policy, has, in an interview with New York Times, argued in favour of a steady-state economy. He says that 'every politician is in favour of growth', and understandably so, but very conveniently they duck the real question: 'Does growth ever become uneconomic?' He asks whether growth is making us really richer in any aggregate sense or is it increasing costs faster than benefits? That is a question to which mainline economists have no answer.

Besides the dominant economic thinking, people's behaviour too has to change. Reducing the economic footprint comes with a commitment to reduce consumption. We may not have created the climate crisis but have certainly helped sustain it.

-The Tribune, 21 July 2022

HOW CORPORATE TAX CUTS WORSEN INEQUALITY

Fifty years of tax cuts for the rich didn't trickle down, reported Bloomberg (December 16, 2020), quoting a study. Using sophisticated statistical methodology, and looking at the economic policies being pursued by 18 advanced economies, two researchers at the King's College in London found what most people had always argued, but obviously without much empirical evidence.

The evidence is there now. While there have been efforts by several Indian economists also to justify the need for corporate tax cuts, this study (and a few others) conclusively show that neither did the tax concession help in increasing growth nor did it provide for more employment opportunities. It only helped widen the existing wealth inequality by providing easy money into the pockets of the super rich. If it hasn't worked in rich economies, wonder how the tax concessions have led to growth in developing economies.

In India, where a debate rages over the 'revdi culture' with most newspaper articles slamming the freebies being doled out to the poor, including farmers, the issue of mammoth freebies to the corporate—nothing less than offerings of "milk cake" to the rich—is being brushed under the carpet. Except for a mere mention by some commentators, the extent and nature of corporate subsidies, including write-offs, tax holidays, stimulus packages, haircuts etc have been simply glossed over.

Although the Reserve Bank of India (RBI) hasn't defined what it means by saying "non-merit" freebies, surely global studies tell us that corporate tax cuts in India too would probably fall in that category. In an interview, Jeffrey Sachs, a distinguished economist from Columbia University, was once asked what happens to the massive tax cuts when it doesn't result in any increase in industrial output or creates additional employment; his short answer was that the money saved from tax concessions goes into the pocket of the top company executives.

Let us first look at how central banks of some major economies print surplus money that goes literally into the pockets of the super rich. 'Quantitative easing' as it is called in economic terms, ever since the days of the global economic meltdown in 2008-09, rich countries have printed $25 trillion of surplus money, which by way of federal bonds issued at a low interest rate, which averaged less than 2 per cent for quite some time, is made available to the rich. This money is invested in the stock markets in emerging economies, and we see the bull markets on a run. With recent hike in interest rates already causing turbulence, further tightening of Fed policy expecting rates to climb to 4 per cent, it looks the free ride the stock markets enjoyed will come in for much-needed course correction.

In an article, Ruchir Sharma of Morgan Stanley had explained how $9 trillion of surplus money printed during the pandemic years, with the aim to infuse stimulus into the ravaged economies, went instead into the pockets of the super-rich via the stock markets. This staggering amount by all accounts is a freebie.

In India, an economic stimulus of Rs 1.8 lakh crore in three tranches was made available to the industry in 2008- 09 when the global economy was in turmoil. This package should normally have been withdrawn after a year or so. But according to a news report, someone 'forgot to close the tap' as a result of which the stimulus continued. In other words, the industry got an economic stimulus of approximately Rs 18 lakh crore in the 10 year period. Instead, if this amount was made available for agriculture, it could have provided farmers with an additional direct income support of Rs 18,000 per annum under the PM Kisan scheme.

Then there was the category of 'revenue foregone' in earlier budget documents. Prasanna Mohanty, in his book An Unkept Promise: What Derailed the Indian Economy (2022), has clearly explained how a positive spin was given by dividing 'conditional' and 'unconditional' indirect taxes. As a result, tax benefits of more than Rs 5 lakh crore in 2014-15 subsequently were visibly squeezed to Rs 1 lakh crore. To hide the massive tax exemptions and concessions, the term 'revenue foregone' was also replaced with a new head 'revenue impact of tax incentives'.

In September 2019, another tax cut of Rs 1.45-lakh crore was given to the industry. This was at a time when most economists were asking for an economic stimulus to boost rural demand. While farm loan waivers totaling Rs 2.53 lakh crore have been blamed for disrupting the credit culture, a faulty narrative considers that massive corporate write-offs lead to economic growth. Rs 10 lakh crore of corporate bad loans have been written off

in the past five years, Parliament was recently informed. Unlike farm loan waivers, where the banks get back the outstanding amount from state governments, in case of corporate write-offs, the banks take a hit. Further, there are over 10,000 wilful defaulters those who have the capacity to pay but don't. A few months back, the Punjab Government had withdrawn arrest warrants against 2,000 farmers for defaulting on their loans; wonder why wilful defaulters go scot-free.

In addition, the huge haircut that banks and other lenders have to suffer in IBC (Insolvency and Bankruptcy Code) resolutions is actually seen as a legal route to siphon off public money. In 2021-22, haircuts averaged 90 per cent.

The erstwhile Planning Commission had in a working paper on subsidies pointed to a subsidy of Re 1 per acre for the 15 acres of land that Apollo Hospital in New Delhi received. Private hospitals, schools, industries, including the IT sector, have often been given land at Re 1 per square metre. Similarly, there have been subsidies for infrastructure, interest, capital and exports, besides ensuring electricity, water and precious natural resources. Add to it the numerous 'incentives' that many states provide to the industries, including 100 per cent income tax exemption, and SGST exemption; it will be interesting to study how corporate India too thrives on huge subsidies, and of course freebies. This eats away much of the resources, leaving only revdis for the poor.

-The Tribune, 1 September 2022

UKRAINE CRISIS THREATENS GLOBAL FOOD SECURITY

Following the Russian invasion of Ukraine, the global food markets are once again faced with turbulence, which can very well threaten food security for the vulnerable populations around the world. So much so that talking with Bloomberg, the executive director of the World Food Programme, David Beasley, recently acknowledged: “The bullets and bombs in Ukraine could take the global hunger crisis to levels beyond anything we’ve seen before.”

Having said that, it was in 2007-08 when an unprecedented global food crisis led to the commodity prices spiralling out of control. A series of factors- rising oil prices, more food production going into bio-fuels and high prices being driven by commodity futures- all interlinked, had not only tightened the global food supplies but also led to food riots in 37 countries.

But despite the prescription to ensure that a repeat does not take place, commodity prices had been on the rise even before the war. Food prices in 2021 had broken previous records.

Given that all the other factors too are once again emerging strong, and adding to it the supply disruptions caused by the ongoing conflict in the Black Sea region, which provides 30 per cent of wheat, 28 per cent of barley, 18 per cent corn and 75 per cent of the global sunflower oil supplies, the world is once again staring at yet another round of a severe food crisis. How severe it will be, only time will tell.

Already, food protests have been seen in Iraq and Sri Lanka. Many countries, meanwhile, have already withdrawn under a protectionist cover to keep domestic food supplies intact. As Bloomberg rightly observed: “In the aftermath lies a looming crisis: more people likely will go hungry.”

With food prices already on the increase and supplies on the supermarket shelves dwindling, food security is increasingly coming under threat. With US economic sanctions imposed against Russia, the prices of fertilisers too have increased. While Russia is the world’s biggest exporter of nitrogenous fertilisers, the region is also a dominant producer of phosphorous and potash fertilizers. The production cost for farmers in several countries, including India, therefore, is expected to increase. This will also affect crop sowings and, thereby, impact food availability. It is important to know that not only food shortages, but even affordability will determine to what extent the food crisis worsens.

Meanwhile, the Middle East, northern Africa, including the Horn of Africa region and countries like Afghanistan are likely to be hit first. Egypt, Madagascar, Morocco, Tunisia, Yemen, Lebanon in Africa and Indonesia, the Philippines, Bangladesh and Pakistan in Asia, and Turkey, Iran, Eretria and Iraq remain vulnerable, given the high food imports coming in from the war-torn region. In the European Union, the rising feed prices are hitting the livestock industry, sending meat process soaring. Spain has rationed edible oil supplies in supermarkets.

If the war continues for a little longer, the impact of the rising food prices will undoubtedly be felt across countries. Even before the war, wheat prices had touched a record high. In fact, the prices of most traded commodities have been soaring over the years. According to the UN Food and Agriculture Organization (FAO), in 2021, wheat and barley prices had risen by over 31 per cent over what prevailed a year earlier, in 2020. This gave a push to the maize prices, which too recorded an increase of 44 per cent over the previous year. Sunflower oil had recorded an increase of 63 per cent in 2021. Further, wheat futures in the first week of March this year had crossed the record level it had touched in 2008 at the time of the earlier food crisis.

The prices are likely to rise further by another 22 per cent of their already elevated levels, increasing the number of undernourished people by another 8 to 13 million in 2022-23, based on the two scenarios that the FAO has worked out. Hunger and malnutrition will grow mainly in the Asia-Pacific region, Sub-Saharan Africa, the Middle East and North Africa.

While grain exporters in India are bracing to fill the gap in the supplies, with the ITC expecting wheat exports to increase threefold in the year to come, touching almost 21 million tonnes, what I find strange is that those who used to criticise Indian farmers for producing a surplus year after year are now brimming with excitement at the possibility of meeting the huge shortfall in the global grain supplies. Nor do I hear any more voices expressing concern at the rise in the export of virtual water when India exports huge quantities of grains, nuts and pulses.

As stated earlier, the world, in any case, was heading towards another food crisis. Oil prices are on the rise, inflation too is accelerating, food prices are already very high, at their peak in 40 years, and bio-fuel production-utilising food crops-has only increased. In America, for instance, writes the New Scientist, a third of the maize crop grown is used for ethanol production, a total of 90 million tonnes of food crops, whereas in the European Union, 12 million tonnes of wheat and rice are converted into ethanol.

In the midst of all this, the US has allowed a few transnational companies to continue trading with Russia. Although Big Ag like Cargill, Nestle, Archer Daniels Midland (ADM), PepsiCo and Bayer have scaled down operations, they continue maintaining the ‘critical’ supply link. This brings up the question as to why food security has been conveniently passed on to the hands of a few big players.

This is where the prescription for saving the world from a repeat of the 2007-08 global food crisis has gone wrong. The global scramble for sourcing food supplies that we see now is primarily because countries were asked to stay away from food self-sufficiency. Building up global food supply chains, in the name of ensuring competitiveness, is what has led to the present crisis.

Learning from the crisis, the immediate need is to reduce the dependence on markets and make farming economically viable. Let’s not forget what MS Swaminathan had said: “The future belongs to nations with grains, not guns.”

-The Tribune, 8 April 2022

WITHOUT A REVITALISED ECONOMIC THINKING, AGRICULTURE WILL CONTINUE TO HANG PRECARIOUSLY BY A SLENDER THREAD

With rural wages remaining stagnant or declining over the past 10 years, and with farming continuing to be a loss making proposition, the disillusionment of farmers is certainly reflected in the electoral verdict. The ruling BJP suffered the consequences of not only the neglect and apathy towards farmers but also the high-handedness and police brutality with which it responded to their protests.

At least 38 Lok Sabha seats in Punjab, Haryana, Uttar Pradesh, Rajasthan and Maharashtra have gone to the Congress.

Prime Minister Narendra Modi did acknowledge the farmers woes, when at the victory speech at BJP headquarters the other day, he said: "We will keep prioritising the task of modernising agriculture from the level of purchase of seeds to the level of sales in the markets. From pulses to edible oils, we will constantly work to make our farmers self-reliant."

But before going any further, I think it is vital to first understand whether the farm crisis is because of inadequate modernisation or is it because agriculture has been deliberately kept impoverished. We cannot keep our eyes shut to the question of denying farmers a guaranteed price to first address serious livelihood issues.

To make it sound simpler, I take the example of Haryana. There is no denying that Haryana has definitely taken long strides to achieve an impressive performance when it comes to agricultural production. Not only being food self-sufficient, it has achieved record performances in various agricultural commodities. For quite a number of years, Haryana has remained as the second biggest contributor of surplus wheat and rice to the central kitty. Even now, its share in the supply of surplus food stocks to the central pool is 16 per cent.

Many experts will talk of crop diversification to be the answer. But what is very conveniently being brushed aside is that for diversification, the first need is to ensure that the net return from alternatives being offered are no less than what the farmers earn from wheat and paddy crop rotation. Although they receive MSP for wheat and paddy, it does not commensurate with the cost and expected profitability. The first step in any case should be to ensure price guarantee as per the Swaminathan Commission's formula.

There is no denying that there is a crisis of sustainability in farming operations resulting from intensive farming practices, but increasingly a sharp decline in farm incomes over the decades has rendered farming unviable. It has been very conveniently pushed under the carpet.

The migratory bug that has hit Haryana's youth bears testimony to the distress surrounding the rural landscape. Walk into any village, and you will hear stories of how land is being increasingly sold to fund the foreign dreams of children.

With agriculture not paying much, and with very limited job opportunities available in the cities, farmers are left with little choice but to sell off their land to send their children abroad. So much so, the craze to send children abroad has even picked up among Scheduled Caste families, many of whom have taken huge loans to send their children abroad. “Majority of our boys have gone. Only their parents have stayed back. Our village has 1,100 votes. And even if all turn up for voting, the number will not be more than 800. The rest have gone abroad,” Sewa Singh, a 70-year-old farmer from Dherdu village in Kaithal district had very proudly told the media.

Mushrooming of sign-boards announcing IELTS courses, and also billboards attracting the youth for prompt visa and employment opportunities, is a worrying trend. Such is the craving for greener pastures overseas that recently Haryana saw a large number of aspirants turning up for low-paid jobs in war-torn Israel despite being aware of the threat to their life. The desperation to hang on to even life-threatening jobs is clearly visible. One can certainly disagree, but this disturbing migratory trend could have been reversed if agriculture had evolved as an economically viable and a profitable enterprise.

As I had said earlier, while everyone talks of crop diversification as a way to emerge out of the crisis of sustainability and economic vitality, it isn’t working out for farmers.

Ramesh Panghal is a tomato grower from Tosham in Bhiwani district. He cultivates tomatoes in about 42 acres, much of it on land taken on lease. With the kind of

entrepreneurship he has shown, he is popularly referred to as the ‘Tomato King’ of Haryana.

Only a few days back, he marketed 351 crates of tomatoes (each carrying 26 kg) in the Gazipur Sabzi mandi in New Delhi. In total, he sold 9,126 kg of tomato on that particular day. From the price he received, and after deducting the expenses incurred on plucking, transportation and the costs incurred at the mandi, the net return he ended up with was only Rs. 1.48 per kg. At a time when the average price a consumer pays for tomatoes is around Rs. 40 per kg, Panghal is seething with rage.

“Tell me, how you expect a farmer to survive,” he asked me, and added: “It has become fashionable to talk about diversification. Government officials urge farmers to diversify from wheat and paddy to other alternatives, including tomato. But if this is the net return for me from cultivating tomatoes, why should farmers diversify? It is not as if other crops are more paying.”

Tomato is not the only crop where farmers are unable to cover the cost of production. But before I look at various other examples, let me give you an idea as to how non-remunerative farming has become.

A recent study by Dr. Vinay Mehla from CCS Haryana Agricultural University, Hisar, should serve as an eye-opener here. It clearly shows that agriculture continues to hang precariously by a slender thread. That farm incomes are the bottom of the pyramid was well-known, but this study comes as a shocker. Accordingly, small farmers end up with a debt averaging Rs. 1.31-lakh, every year.

This means that while the emphasis has been on increasing crop production all these years, farmers' welfare did not receive the kind of attention and priority that it deserved. If agriculture is a loss-making activity, as the study shows, it is futile to announce new schemes or introduce sophisticated technology that can pull farming out of the deep crisis of economic viability.

Instead of bringing new schemes, the State's emphasis must immediately shift to finding ways and means to raise farm incomes. The declining farm incomes are not because farmers are not hardworking and enterprising; it is simply because when they undertake cultivation they do not realise they are cultivating losses.

The new NDA coalition government needs to take a fresh look at the continuing debacle on the farm front. For over 75 years now, many permutations and combinations have been tried. While agricultural production has gone up, farm distress has only been deepening.

To realise the dream of a Viksit Bharat by 2047, there is no escape except to ensure that farming becomes profitable and economically viable.

-Bizz Buzz, 7 June 2024

THE PREOCCUPATION WITH FOOD INFLATION

Sometimes, I wonder how can a country poised to become the world's third largest economy in a few years get rattled by a rise in prices of the ubiquitous *aloo* (potato) and *pyaaz* (onion). The occasional spike in the prices of vegetables, fruits, pulses and cereals has often been blamed for weighing heavily on the inflation outlook, forcing the Reserve Bank of India (RBI) to hold on to benchmark interest rates.

With the retail inflation rate, based on the Consumer Price Index (CPI), now down to 4.85 per cent, it is the retail food inflation that remains a cause for concern. At 8.5 per cent for March 2024, higher food inflation had left no room for the Monetary Policy Committee (MPC) to cut the repo rate in the first quarter of the 2024-25 financial year. Given the inflation matrix, the way it is working out, the caution with which the MPC takes a call is aimed at ensuring that inflation aligns with the RBI's target of 4 per cent.

Since the CPI comprises the basket of goods and services consumed by an average urban and rural household, all eyes are on food inflation. An average household is actually impacted much more by the expenses it incurs on health, education and housing — the real drivers of inflation. Whether poor or middle class, every household ends up spending its lifetime savings (often backing it up with bank loans) on educating children, bearing the health expenses of the family and meeting the ever-rising cost of housing.

This is even reflected in the higher estimates for household debt, and the latest analysis by Motilal Oswal Financial Services points to a new high of 40 per cent of the GDP in December 2023. Surely, the growing financial stress necessitating the need for bank loans is not because of the skyrocketing food bill but is an outcome of the ever-increasing spending on health, education and housing. With more or less stagnant incomes (rural wages have barely risen in the past 10 years), a record jump in unsecured personal loans is also being seen. While the Finance Ministry sees the rise in personal loans as an indication of growing aspirations, many regard it as a sign of rising distress. Nevertheless, the latest RBI estimates also point towards declining net financial savings to 5.1 per cent in 2022-23, the lowest in almost five decades.

In a country where the average kitchen expenses of a household are between Rs 10,000 and Rs 20,000 per month, a surge in prices of vegetables can increase the monthly food budget of the middle class by around Rs 1,000 (or at the most Rs 2,000), and yet it sets the alarm bells ringing. With the media driving home the need to tame food prices, the RBI swings into action to ensure that food inflation remains confined to the limits. But I see no reaction when media reports highlight the rising cost of houses under construction in cities. In Patna, the prices have doubled in the past five years, and risen by approximately 50 per cent in cities like Lucknow and Bhopal. In any case, every 11 months, the house rent increases by an average of 10 to 15 per cent.

Earlier, a study by an independent policy think tank, the Centre for Social and Economic Progress, had

worked out that house prices in the country had shot up by 15 times over the past three decades. Given the high base level, the actual cost, in absolute terms, that any buyer ends up paying for the house is whopping by any standard.

An influencer writing on micro-blogging site X says: “My son is in Grade 3 in a reputed CBSE school in Gurugram. The school fee is Rs 30,000 per month (excluding bus transport).” Another person says: “My friend’s daughter is in an international board school in Bengaluru in Class II and her fees is Rs 8 lakh per annum, including food and transportation. With an increase of 10 per cent every year plus additional charges, the per annum fees when she reaches Class XII will be Rs 35 lakh.”

The average overall cost of schooling a child (from the age of 3 to 17) in a private school in India is nothing short of Rs 30 lakh. Add to it the cost of higher education, and most families end up spending their lifetime savings on giving their children the best education. Higher education costs top the inflation chart. Top B-school fees, for instance, have risen by an alarming 400 per cent since 2007.

A few days ago, a minister in Uttar Pradesh accused a private hospital in Lucknow of charging Rs 4 lakh for the four-day hospitalisation of his ailing mother. Appalled at receiving a hefty medical bill, he shifted his mother to a public sector hospital. “If it is so expensive for a minister to get treatment for his mother in a private hospital, imagine the fate of the ordinary citizen,” he told a TV channel.

In any case, it has been ascertained that increasing healthcare needs, coupled with high out-of-pocket expenditure, are among the major reasons for perpetuating poverty. The National Health Authority portal itself acknowledges that every year, higher health costs push nearly 6 crore Indians into poverty.

And yet, mainline economists remain stuck on food inflation. With a weightage of 46.48 per cent for urban areas and 53.52 per cent for rural ones in the consumption basket, the index for food inflation is very high. In contrast, the weightage ascribed to health is 5.89 per cent, education 4.46 per cent and housing 10.07 per cent, even though these constitute the biggest economic burden on any family.

Several generations of the farming community have lived in poverty because of an outdated macro-economic design. To keep wages low, food prices have been kept low. This has to change. After all, how long can we keep farming deliberately impoverished? Farmers, too, need economic freedom.

-The Tribune, 25 April 2024

EQUITABLE WEALTH DISTRIBUTION IS THE NEED OF THE HOUR

Even if it is for reasons that are purely political, a debate on redistribution of wealth in India is of utmost importance and is the need of the times. The obnoxious concentration of wealth in the hands of a handful minority of stinking rich, leading to the "Rise of the Billionaire Raj" as the Paris-based World Inequality Lab calls it, is certainly not because of the unleashing of an animal spirit of entrepreneurship but is a sad reflection of how gratuitously economic policies and resources have been placed at the disposal of a few.

When John Maynard Keynes wrote about "animal spirits" in his book 'The General Theory of Employment, Interest and Money' (1936), he explained it as an exceptional human behaviour that drives investors to take financial decisions at uncertain times. But probably what he did not realize was that denying the same opportunity to a majority population actually ends up destroying the animal spirits and passion prerequisite for a million flowers to bloom.

Keynes says: "... if the animal spirits are dimmed and the spontaneous optimism falters, leaving us to depend on nothing but a mathematical expectation, enterprise will fail and die." In any case, where Keynes goes wrong is that it is not important to have a handful of billionaires whose wealth keeps on rising at the back of a well-designed supporting system, and that includes tax breaks, bank write-offs and economic stimulus packages, but to spend the same resources to build an egalitarian society where happiness and satisfaction reigns. After all, resources are limited and it's important to see how these are distributed.

That is perhaps the reason why the four countries of the Nordic region – Sweden, Denmark, Norway and Finland – do exceptionally well and continue to top the happiness chart.

On a TV panel the other day, I was asked as to what the government can do now if it were to go in for redistribution of wealth.

To me, I said, it doesn't look that the idea being to grab the wealth of rich and distribute it among the poor. What is required is to reframe policies and approaches ensuring that the benefit percolates to the last man standing in any nook of the country. My first suggestion would be to ensure that at least 50 per cent of the annual budget, Rs 47.66-lakh crore for 2024, should go for agriculture, which forms roughly 50 per cent of the population. With such a large population engaged with farming, all that the sector receives at present is less than 3 per cent of the budget allocation. You can't accept a miracle to happen in agriculture if you are not willing to make an appropriate investment.

In a country where just 21 billionaires have more wealth than 700 million, and where 64.3 per cent of the Goods and Services Tax (GST) is coming from 64.3 per cent of the population and only three to four per cent from the top 10 per cent, it makes no economic sense in putting resources where already enough investments have been made. On the contrary, it is absolutely essential to redistribute the financial resources in a just and equitable manner. Why 50 per cent of the population

engaged in farming is deprived of its rightful share of economic resources when successive governments have been making bulk of the budgetary provisions for the industrial sector year-after-year. I was told that there is no tax on farm incomes, and that is a big financial support to this sector. In fact, a venture capitalist on the panel, even asked why shouldn't the rich farmers be taxed not realizing that only 1 per cent of the farming community owns more than 10 hectares in India, and the average income of the remaining 99 per cent of the farming community, hovers around Rs. 10,000 per month as per the latest report of the Situational Assessment Survey for Agricultural Household, 2019.

Unfortunately, corporate economists have little idea about the distress that prevails in the farming sector, and they still go by the outdated economic thinking that relied on pushing farmers to join the army of migrant daily wage workers in the cities. In my earlier columns in this newspaper, I have talked about agriculture being a victim of economic policies. Poverty is not pre-destined. As I have often explained, it is the outcome of flawed economics. On another panel discussion, I spoke about how corporates have walked away with Rs. 16 lakh crore worth of bank write-offs in the past ten years, and have in addition been given a tax cut of Rs. 1.45 lakh crore every year since September 2019. So much so that the Reserve Bank of India (RBI) has directed banks to get to a 'compromise' with the wilful defaulters, who owe Rs. 3.45 lakh crore, and have the resources to pay back but they give a damn. The way farmers are routinely put behind bars for their inability to pay back bank instalments, the 16,400 wilful defaulters too should have faced prison terms. Instead they were let-off easily. With such heavy write-offs the rich obviously get a reprieve. Their lifestyle goes on as usual. If such bail outs are also given to farmers let me assure you they too would be able to exhibit their 'animal spirits'.

At the time when the Vajpayee government first took oath in May 1996, at a meeting of economists called to suggest economic measures that the new government should take, my suggestion was to provide 60 per cent of the annual Budget for 60 per cent of the population engaged in agriculture (at that time agriculture formed 60 per cent of the population) if the idea was to avoid anti-incumbency. It may have been forgotten now but the Vajpayee government did announce that it would devote 60 per cent of its budget for agriculture. That would have been a turnaround that the country was looking for. It was also the first time as far as I can remember that an effort was made to redistribute resources.

Unfortunately, the government fell in 13 days.

If only the government had continued, the policy decision to spend 60 per cent of the budget allocation on agriculture would have surely revitalized the rural economy, and in turn created a boom for the national economy, thereby ensuring Sabka Saath Sabka Vikas by now.

With neo-liberalism gasping for breath, and in its final stages now, any talk of redistribution of wealth will be met by a strong opposition from the ruling class of economists. Don't be brow-beaten by them, and instead stand up and be counted. And be sure that wealth distribution is an idea whose time has come.

-Bizz Buzz,26 April 2024

THE RICH-POOR DIVIDE IS CAUSING MORAL TURBULENCE IN THE SOCIETY

The world has always been frowning at the enormous income and wealth inequality that exists. In 2018, and the trend hasn't changed since then, three richest Americans were known to have wealth equal to half the American population. In India, the richest one per cent own more than 40 per cent of the country's total wealth.

One of the reasons behind the rising inequality is the huge disparity among the salaries of CEOs and ordinary workers. Some studies in 2021 have shown that on an average a CEO was drawing 399 times more salary and perks leaving hardly any salary increase for 90 per cent of the work force. Globally, we also know that huge tax cuts and sops in the name of incentives for growth have accumulated more wealth in the pockets of the superrich.

Well, looking beyond what we already know, I am aghast thinking of where the worsening inequality is headed to. Although the United Nation says there has been some improvement in reducing inequality, and as per its latest estimates 71 per cent of the population lives in countries where inequality has actually grown. But let it be known that booming inequality comes in many different ways apart from income and wealth inequality.

Boarding an aircraft, you walk creepily towards the back end to find your seat in the economy class – which some have rightly termed it as cattle class. Trying to avoid the sly eyes, you pass with discomfort through the aisles in Business Class and Premier Economy. That may be the first time many of you may have encountered — or should I say 'felt' — income inequality. But it certainly will worsen as we get along.

With only 7.2 per cent of the population possessing a valid passport in India, and less than eight per cent of the population owning cars, the disparity certainly is huge. But once in a while, the aspiring class does make an effort to take the family out to a trendy restaurant for a delightful meal or take the family on a holiday looking forward to a comfortable stay in a hotel with star ratings.

This is about to change.

China, for instance, has developed a social credit rating system that asserts trustworthiness and moral behaviour of individuals. It uses a set of digital data aimed at rewarding people with high social credit score, and punishing those who do not score well. While The Guardian (June 17, 2018) compares it to an "Orwellian tool of mass surveillance" there are reports that people with low social credit score have been barred from taking flights and high-speed trains.

What began as a tool to ascertain financial credit worthiness of an individual has been expanded to cover good behaviour. Not only if you default banking systems but the data will be based on social behaviour that includes, for instance, smoking in public places, as well as ticketless travel and fake reports. In 2017, as per a news report, around 6.15 million people were temporarily or permanently barred from taking flights or trains. The very next year, the number of those barred

for air travel increased to 17.5 million, and another 5.5 million could not buy high-speed train tickets.

While a low score can limit your chances of getting a permanent job, it can also limit your rights as a citizen, and that includes getting access to a luxury hotel, night clubs and spas. Some think that the social credit rating system will encourage good behaviour and compliance with the law, and on the other hand many others believe it infringes on the individual rights of citizens. Imagine if a low score and that may come from low score for creditworthiness, bars you from staying in a star hotel or stop your family from getting a table in a top-end restaurant, there is hardly an indicator that can measure the embarrassment and shame it brings to your family.

If you think that this stems from fear-mongering rather than getting closer to any reality, then a recent development in the French tourist resort of St Tropez should be an eye-opener. The mayor of the city has threatened action against some of the top restaurants that restrict entry based on one's ability to spend. Even though there is no social credit rating in France, the restaurants screen your names against their own database and if you have not spent 'enough' during your last visit, they do not allow you to get access to a table even if the restaurant is not full. These expensive restaurants are often visited by celebrities and global jet setters.

The entry restrictions are also for those who do not leave 'enough' tip for the waiters and for parking.

For any tourist wanting to get a taste of an upswing restaurant in the sought-after area of the French summer haunt, being rudely told that the minimum spend would be

$ 2,000 per head can itself be disappointing and outright humiliating. The taste of mouthful humility that growing inequality leaves you with is discerning if not painful. That is why the Mayor of the city is contemplating strict action against these restaurants for indulging in 'racketeering' and bringing a bad name to the city.

Sooner or later, whether we like it or not, there would be an increased bureaucratic pressure to extend the CIBIL score that measures financial credit worthiness of an individual, to also cover good behaviour.

It began that way in China, where the credit score was launched in 2007 and later expanded to award people with good behaviour. According to reports, the 1.35 crore population has been brought under the social credit ranking system.

The rich-poor divide is therefore slowly getting to a bigger social divide that can cause moral turbulence. The divide has always been there, but was not so aggressively pursued. The middle class or let's say the lower middle class had always avoided entering high-end hotels or restaurants, but now asking even the aspiring middle class to stay out if they do not have 'enough' to spend, is like burgeoning the already existing gulf.

Widening income and wealth inequality had so far created a class difference between the haves and have-nots, but restricting the taste, comfort and opulence of the Richie Rich only for those blessed with deep purse strings, may be going a little too far.

-Bizz Buzz, 25 August 2023

INADEQUATE BUDGETARY SUPPORT PLAGUES FARMING

An elderly woman living alone in a village didn't have any viable livelihood option. She finally decided to buy a goat for a living. Since nationalised banks do not provide small loans, she approached a micro-finance institute (MFI) for a loan in the range of Rs 8,000 to Rs 10,000. She got a loan at an interest rate of 20-24 per cent, to be paid back at monthly intervals.

On the other hand, when Tata Motors decided to shift the manufacturing of its Nano cars from West Bengal to Gujarat, the then BJP government in Gujarat extended a soft loan of Rs 584.82 crore at an interest rate of 0.1 per cent. As per the lending provisions, this loan was to be repaid back in monthly instalments 20 years after the first Nano car was rolled out.

If only the elderly woman had got the small loan at an interest rate as low as 1 per cent (forget 0.1 per cent that Tata Motors got), I am sure she would have been driving a Nano car by the year-end. I have narrated the story to explain how inequality is woven into the economic system. Whether we like it or not, wealth has traditionally been very conveniently sucked from the bottom to the top. And we have no qualms about it.

Although many academics laud the MFIs for extending small loans that help in capacity-building of the people living at the margins, they go conspicuously quiet when big businesses are extended huge loans at almost negligible interest rates. This makes me wonder why abnormally high rates of interest for a meagre loan only help in capacity-building of the poor. Why is it that the rich, who have the capacity to pay back, end up receiving massive loans virtually as a grant? Add to it the numerous tax breaks, bank write-offs at the drop of a hat, generous economic stimulus packages, government contracts and the other incentives for growth; in reality we have socialism for the corporate.

It is only the average citizen and the poor who are left to face the vagaries of the markets. This is because the rich design the markets, and the markets work for them. A recent media advisory by Oxfam illustrates this anomaly. The world's biggest chocolate manufacturers — Ferrero and Mars families — have more wealth than even the combined GDP of Ghana and Ivory Coast, which supply 60 per cent of the cocoa beans. And instead of paying an economic and profitable price to farmers, the world's top four chocolate giants (including the two mentioned above) have in 2023 paid out 97 per cent of their net profits to shareholders. Ghana and Ivory Coast receive only 6 per cent of the total revenue of $160 billion that the industry makes. Ask for a Minimum Support Price (MSP) for these growers, and an uproar will happen, warning how it will distort markets.

That's how rigged the economic design is. In other words, the financial system actually helps provide wealth on a platter to the so-called wealth creators. In the digital age, we don't even realise that algorithms are designed to ensure that wealth flows sustainably to the top.

Former US Secretary for Labour Robert Reich says that the combined wealth of the world's billionaires at $14.2 trillion now exceeds the GDP of every country in the world, except America and China. In America,

400 billionaires collectively hold $5.8 trillion, which exceeds the entire wealth of the 65 million people in the bottom half. And still worse, billionaires have a lower effective tax rate than what the average working American pays. Giving massive tax breaks to the rich hasn't trickled down to the poor, as we were told. While the tax sops hasn't created additional employment nor has it boosted industrial output as was envisaged, it has certainly boosted the pay packets of CEOs and other high-paid workers by several times. In addition, corporations have used the profits generated to buy back stocks. For instance, Apple has announced $110-billion stock buyback, the largest ever.

The World Inequality Lab, in a working paper titled 'Income and Inequality in India, 1992-2023: The Rise of Billionaire Raj', had conclusively shown how inequality had worsened over the decades and is presently among the highest in the world. A report by the Centre for Monitoring of Indian Economy shows how personal tax collections now exceed corporate tax as percentage of the GDP. This is at a time when the top 1 per cent holds more than 40 per cent wealth. The bottom 50 per cent collectively owns only 3 per cent. What has to be understood is that it is not as if the poor don't work hard but they are denied the right kind of financial support and investment.

Take the case of agriculture. Despite bumper harvests year after year, if Indian farmers have been cultivating losses since 2000 (as per an OECD report), it only shows how inadequate the budgetary support has been for farming. If you don't make the right kind of investment, you can't expect a miracle to happen.

Of the Rs 48 lakh crore Budget expenditure spelt out for 2024-25, agriculture gets only Rs 1.25 lakh crore, which is less than 3 per cent. With roughly 50 per cent of the population dependent on agriculture, and without appropriate redistribution of resources, *Sabka Saath, Sabka Vikas* will remain an empty slogan.

Economist Jean Dreze recently summed it up neatly: “If a hundred workers were to work day after day at the minimum wage and save their entire earnings, how long do you think it would take for them to accumulate as much wealth as India’s richest business leader already has? Answers rarely cross a thousand years. The correct answer, however, is close to a million years. If you do not believe it, do the math.”

-The Tribune, 10 May 2024

"To make agriculture sustainable, the grower has got to be able to make a profit".

WHY A SHIFT TO NATURAL FARMING IS NEEDED

Addressing a Regional Consultation on Science of Natural Farming the other day, how Dr Yogita Rana, a Joint Secretary of the Ministry of Agriculture and Farmers Welfare, explained the importance of healthy foods, simply floored me.

I must say what the Joint Secretary said, and how well she articulated her argument against chemical inputs, was not only very courageous but exemplary. Although such saner voices in the bureaucracy are very limited, I only wish that the top administration – whether in science, agriculture and technology – were to introspect and see that the world has moved far away from the days of the Green Revolution when chemical fertiliser and pesticides were aggressively pushed to increase crop productivity.

While the era of chemically-induced farming systems is now gradually receding into history, what is now urgently required is a food system transformation that results in healthy food, healthy environment and wealthy farmers.

As a student of agriculture, and then as a researcher, writer and policy analyst, I was always appalled at the folly of applying huge quantities of poison to increase crop production. The quantum of chemical pesticides that the standing crops were literally drenched with, and also the overuse of synthetic fertilisers that not only destroyed soil fertility by harming millions of bacteria and fungi that helps create organic material so essential for plants that a naturally-endowed healthy ecosystem was uprooted. Again, when it comes to genetically-modified crop varieties, the effort was to transfer a gene from a related (and also from unrelated species) to enable the plant to build its own toxins so as to take care of harmful pests.

As a student, I remember reading one of the research papers of late Prof David Pimental, a distinguished entomologist at the Cornell University and an influential champion of the environment, where he concluded saying that only 0.1 per cent of the pesticides applied hit the target pests. The remaining 99.9 per cent of the chemical pesticides being sprayed contaminate the environment. This study came out in the mid-1970s, and was simply ignored. That was the time when Green Revolution was at its peak, and when in the quest for increased productivity agricultural universities across the globe were pushing for fertilisers, pesticides, herbicides etc which eventually did more harm to human health and environment.

This is where I see Yogita Rana very ably stirring the pot. Providing a peep into the future, and more importantly brushing aside the corporate pressures that bureaucrats always appear to be working under, her clarity of thought was very clear and of course impressive. Observing the global trends, especially at the time when temperatures are soaring, she said that the society is at a cusp in history when after a few years' synthetic fertilisers and other chemical inputs will not be a part of the dominant discourse. This is essentially because of a new awakening that has taken over the world in the post-Green Revolution period. People want safe and healthy food, and are willing to pay for it.

Curious, I followed her talk on YouTube (web link here: https://www.youtube.com watch? v= cy4A2DUJaUY). To make her point, she had carried a few packets of chemical fertilisers like Urea, Di-Ammonium Phosphate (DAP), and also a few micro-nutrients like Boron, Zinc Sulphate and Magnesium Sulphate that farmers normally apply in crop fields. To her question how much should we normally eat — a spoonful or a pinch of the chemical — that should be sufficient for a human body, there was no response. The huge audience, which mainly comprised of agricultural scientists and farm officials, had obviously gone quiet.

What she was trying to convey is that while scientist and agricultural officials invariably ask farmers to apply heavy doses of synthetic inputs, these chemicals gets absorbed by the plant system, and eventually ends up in the food we consume. It was a kind of shock therapy that she effectively delivered.

On an average, she said the average consumption of chemical fertilisers is 138 kg per hectare although in some areas the application is much higher. The higher the fertiliser dose, the higher is the intake by plants. And yet, no scientist wants to consume even a spoon of chemical fertiliser. At the same time, availability of carbon in Indian soils has come down to 0.3 per cent. But in lot many organic farms, the carbon availability is much higher. We have to learn from these farmers.

This reminded of a News Today programme which was telecast ten years ago by BBC News titled: How much sugar in Coca Cola? James Quincey, the then company's president for Europe, was taken by surprise when the journalist fished out a small cup that people normally buy in a cinema and poured out 23 sachets of sugar from the cup. The bigger cup that is also available in cinema halls contains as many as 44 sachets of sugar. This came as a shock for the company's president who obviously didn't know how to respond.

Similarly, the invitation to consume a small quantity of chemical fertilisers that scientists and agricultural officials otherwise force the farmers to apply, did come as a rude shock to those present. But I only hope they take home the underlying message, and start looking afresh at the polluting farm systems and how to transition towards healthier systems that do no more damage to the environment. As I have often said, agricultural universities have to take on the new role. They have to be not only the pivot but a driver of the agro-ecological farming systems that the world is looking towards. There is ample evidence available now that productivity of these farming systems is no less than conventional agriculture. So let's not be brow-beaten by the agribusiness industry that continues to create a fear psychosis saying the shift towards agro-ecology will create food insecurity.

I am only hoping that more and more bureaucrats, because they call the shots when appropriate policies are framed, are sent for study assignments to the rural areas, and are expected to learn the numerous chemical-free farming systems an amazing lot of progressive farmers have developed over the years. These time-tested technologies are not only regenerative but location-specific, and utilise the locally available resources. These organic systems, based primarily on Low External Input Sustainable Agriculture (LEISA)

approaches, should certainly be vetted by the formal agricultural research system and adopted. It is therefore high-time the Indian Council of Agricultural Research (ICAR) – the umbrella agricultural research body of the country – draws collaborative efforts with these farmers who hold the key to the future of Indian agriculture.

-Bizz Buzz, 31 May 2024

"The real path to natural farming requires that a person know what unaltered nature is, so that he or she can instinctively understand what needs to be done and what must not be done to work in harmony with it processes".

THE RISE OF THE ARTIFICIAL FOOD INDUSTRY IS NOT A GOOD PORTENT

The world is moving in a strange direction. While farmers are being encouraged to grow crops that feed automobiles, agribusiness companies are getting ready to produce lab-grown food for human consumption.

It is getting much closer than you think. The romance with food that we have enjoyed over the centuries is slowly getting to a close.

Several years ago, an American company dealing with a variety of nutritional food products announced a proposal for setting up a manufacturing plant somewhere near Bengaluru to convert rice bran into nutritious food, for which the company owned a patent. Given the high levels of nutritional insecurity being a serious cause for worry in a country which continues to trail in the Global Hunger Index (GHI), the idea was initially welcomed.

I question the development model that relies on converting rice bran, traditionally used as cattle feed (and also for producing edible oil) in India, into nutritional food for human beings and, at the same time, encouraging the export of rice, a staple food. It is clearly at a cross purpose. My argument is that when India exports rice (in 2021-22, it was the top rice exporter), much of it goes to feed the cattle of the western countries. Knowing that the protein pathway that western countries follow is by first heavily feeding livestock and then slaughtering it for human-edible protein conversion, my suggestion is to, instead, use the rice grain available within the country for meeting the human nutritional needs.

The project eventually didn’t take off.

In a lot many ways, the launching of the Global Biofuel Alliance during the recent G20 summit extends the misplaced development pathway a little further. With multi-stakeholder support coming from 19 countries and financial backing from the World Bank, Asian Development Bank, World Economic Forum, International Renewable Energy Agency and other international agencies, the alliance hopes to triple biofuel production by 2030.

Although it is aimed at providing a cost-effective and environmentally sustainable alternative to fossil fuels, the basic idea to produce fuel from food is in itself at variance with the development pathway for a sustainable future. Instead of adding more cars and other automobiles on the streets, the global effort should be to drive out cars from the cities. While more cars add to higher GDP calculations and that is what policymakers are keen to achieve howsoever unsustainable it may be, the real development index should be measured by how many car-free havens can be created. That’s the future.

If you think this is a utopian dream, you ought to know how Pontevedra, a small Spanish city with a population hovering around 80,000, has become almost car-free. There are at least 10 cities where most urban centres are becoming car-free. Knowing that automobiles leave behind a large environmental footprint, the challenge should be on how to drastically lower the air pollution levels. Investing in mass transportation systems and drastically reducing car sales should be a goal that G20 countries should, instead, be laying out.

To say that the *annadata* will soon become *energydata* may be a simple way of luring farmers to continue with the business. While it makes sense to use plant waste for biofuel production, like the 20 million tonnes of paddy stubble that Punjab produces every year, but to convert food crops to biofuel is a criminal waste. In America, 90 million tonnes of foodgrain are diverted for biofuel production. In the European Union, nearly 12 million tonnes of food crops are used for biofuels. Even during the Russia-Ukraine embargo on grain supplies, the G7 countries rejected a proposal from Germany and the UK to cut on diversion of grain for biofuel production.

According to the US Department of Agriculture (USDA), the US diverts 44 per cent of its domestic corn production for biofuels. In addition, another 44 per cent is used for animal feed. The remaining is used for human consumption, seed and industrial applications. This is happening at a time when the popular perception is that less land should be under cultivation. What we don't realise is that the crop area is expanding not for human consumption but for biofuels. While this is necessary to achieve 'net zero' emissions, as is generally believed, the reality is, as many studies have shown, that biofuels actually lead to increased Green House Gas (GHG) emissions.

Producing worth 38% of the global biofuel production, the US is the world's largest producer. India's renewed focus on biofuels has seen a huge diversion of rice in just two years — between April 2021 and May 2023 — by the Food Corporation of India (FCI). With the Global biofuel Alliance in place, the diversion of food crops will substantially go up.

Biofuel production is increasing at a time when globally, the trend is shifting to artificial food production. In the US alone, 15 per cent of the milk products on supermarket shelves are derived from non-dairy sources. Startups are already into the business of producing milk without any dairy cows and several techniques like fermentation and precision technology are being used for artificial foods.

The first commercial-scale food factory has already been set up near Helsinki in Finland. It has announced plans to manufacture 4 to 5 million meals per year using carbon dioxide from the air to interact with bacteria. It doesn't require any farmer, nor does it need land for growing plants.

This trend is fast catching up. Seen in the light of coercive action against 3,000 Dutch farmers, farmers in the developed countries are becoming a soft target to reduce the gas emissions emanating from intensive farming practices. Already, the insect-protein industry is booming at a scale that it is expected to partially meet the rising protein requirement. The insect industry is expected to grow to $7.9 billion by 2030.

Be prepared, because sooner rather than later, artificial food products are likely to hit the supermarkets close to you.

-The Tribune,20 September 2023

WHY INDIA'S WHEAT POLICY NEEDS A STEADY HAND

Snake and ladder is an exciting board game that is liked by young and old. A puzzle game with a lot of exhilarating moments makes it gripping. But I didn't know that even the policy makers like it.

As the wheat harvest season begins, the Centre has asked the private trade to stay away from mandis. The reason being that it wants to procure as much wheat as possible. Besides the Food Corporation of India (FCI) which normally oversees procurement operations, the National Agricultural Cooperative Marketing Federation of India (Nafed) and the National Co-operative Consumers' Federation of India (NCCF) have also been for the first time asked to procure wheat directly from farmers.

Among the 40-odd trading companies who have been asked to stay away includes Cargill India, Louis Dreyfus Company, ITC and Hindustan Unilever Ltd. News reports say even Railways have been directed not to accept any private sector indent for moving wheat.

The aggressive marketing is essentially to mop up every grain that comes to the mandis so as to bolster the plummeting wheat stocks. Against last year's procurement of 26.2 million tonnes, the Government plans to buy at least 30 million tonnes this year, which can even go higher to 33 million tonnes. Since the wheat export ban imposed in 2022 is already in place, the additional quantity that the Centre aims to purchase is only to ensure wheat prices don't go beyond control. That is why Nafed and NCCF have been brought in to

stabilize prices through the sale of Bharat Atta. Trade has also been directed not to exceed stock limits.

The policy shift from a comfortable position when India claimed to be emerging as the food provider for the world, and that was just two years back in 2022, to a sudden desperation in 2024 to procure as much wheat as possible so as to strengthen domestic reserves, appears to be more like the board game of snake and ladder. Why I say so is because only two years back policy makers were excited at the possibility of an impressive export potential that domestic wheat surplus stocks provided only to realize later that the changing weather patterns can spoil the party. Incidentally, only a few months before, in Feb-Mar 2022, a severe heat wave had hit the standing wheat crop, reducing production by an estimated 5 million tonnes, and yet policy makers were jubilant at the export potential.

The excitement was so high that the Government had even planned to send emissaries to nine countries to market India as an export destination for wheat that the world could look up to. It was at that time I had warned that the exuberance being exhibited can be short-lived if the weather again plays truant. My argument was that India could be importing wheat the next year if it goes by the advice of the agribusiness giants, which were keen to export as much as 21 million tonnes. Wise sense prevailed, and India not only stopped wheat exports in May 2022, but also brought in a ban on its export. Subsequently exports of wheat products were also restricted.

Two years before that, in 2020 wheat harvesting season, the Centre had asked bulk buyers, FPOs, cooperatives, processors and big retailers to purchase wheat directly from farmers. It asked States to allow direct buying outside the mandis even overlooking licensing or registration requirements. The idea was that such purchases will help decongest mandi yards overflowing with wheat stocks.

Within the past four years, it only shows there is a visible switch in policy approach.

Despite all these measures, wheat stocks had fallen to 9.43 million tonnes at the beginning of March this year. This is the lowest inventory in the past 18 years.

It was in 2005-06 that the then UPA Government had allowed private trade to buy directly from wheat farmers. This had resulted in a wheat shortage that made it difficult for the government to procure enough stocks for public distribution. Private trade had gone in for extensive purchases from farmers and refused to divulge how much stocks they were holding. As a result, the government was forced to import 7.1 million tonnes in the next two years at prices that were almost double the procurement price within the country. That is why I have always said that India cannot ignore the lesson from the wheat debacle of 2005-06.

In a span of almost two decades, India has swung from a dominant position when it allowed the private trade to purchase wheat directly from farmers, and now to a critical situation when it wants private companies to stay away from buying wheat. Putting the jigsaw together, it is quite apparent that instead of policy swings what the country needs is a policy framework that builds adequate inventory. At the time when wheat stocks

exceed the buffer limit, there is no need to panic over the carryover costs and be swayed by the prevalent economic thinking (which goes with what the private sector calls for) that wants to allow unbridled exports. Imagine if the country had bowed to agribusiness industry pressure that wanted to take advantage of the reduced global supplies arising from Russia-Ukraine war, the resulting shortfall to meet the national requirement could have led to food insecurity.

Even now, the US Department of Agriculture estimates that India will need to import at least 2 million tonnes this year.

The USDA projections are based on expected wheat production this year, and the available buffer stocks. Given the food ration requirements under the National Food Security Act provisions, and also the additional supplies of wheat to 81.35-crore beneficiaries under the PM Garib Kalyan Yojna, the buffer stocking norms must undergo a change that can ensure adequate availability of food stocks at any given time. We must steadily build a food reserve keeping the food security needs of the country at least for the next five years and not bow down to economic lobbying that shouts at the cost overruns from storing surpluses.

In fact, my suggestion is that instead of such ad hoc decisions – quite similar to playing snake and ladder – wheat procurement could have been easily increased by announcing a higher price. Alert policy makers could have announced before the code of conduct came into place that wheat farmers will be given a price of Rs 2,700 per quintal (as promised in Rajasthan and Madhya Pradesh a few months back at the time of state elections) against the procurement price of Rs 2,275 per quintal. Farmers would fill the grain reserves to the brim.

Every country, more so a country with the largest population must ensure food security at any cost. We should learn to sustain food surpluses than standing with a begging bowl at any time in future.

-Bizz Buzz, 5 April 2024

The wheat field has... poetry; it is like a memory of something one has once seen. We can only make our pictures speak.

PERILS OF PRIVATISING AGRICULTURAL RESEARCH

As a young student of plant breeding and genetics, I was fascinated by the Plant Breeding Institute (PBI) at Cambridge. By the mid-1970s, this public-funded institute had acquired the status of a world centre for excellence in plant breeding, and subsequently in molecular genetics.

Before it was privatised by then PM Margaret Thatcher in 1987, its overpowering performance in wheat research had enabled the institute to cover 90 per cent of the UK farmlands with its crop varieties and occupy 86 per cent of the total cereal acreage. Drawn by the admirable accomplishments, almost every second student of plant breeding in India at that time aspired to be at the PBI for higher studies.

In the quest to privatise agricultural research, this profit-making institute was sold to Unilever for £68 million; later, Monsanto acquired it for £350 million. Subsequently, when a fellowship brought me to the Cambridge University in 1996, I met Sir Ralph Riley, a fellow of the Royal Society, who had been the director of the institute from 1971 to 1978. He later became the Secretary of the Agriculture and Food Research Council, which was responsible for putting public funds into basic farm research. One day, he took me around the sprawling research farms of the institute, stopped his car, and in what was probably a strong expression of his dismay at the privatisation of agricultural research, lamented: “This is where plant breeding died.”

After it was privatised, the world hasn’t heard of any laudable achievement by the erstwhile PBI, whose ownership changed a number of times before it moved to its new location in Essex.

When the Indian Council for Agricultural Research (ICAR) announced in July its decision to open the doors for collaborative research with private companies, it didn't come as a surprise. In 2007, the ICAR had acknowledged tremendous possibilities to work with the industry and had called for agricultural transformation through public-private partnership. Collaborative research with the private sector was, therefore, waiting to happen.

Prior to that, the US-India Knowledge Initiative on Agricultural Education, Teaching, Research, Service and Commercial Linkages, signed on July 18, 2005, had created an investment environment for agribusiness. It had laid down the template for public-private partnership and 'market-oriented' agriculture.

Working with the industry and taking advantage of its strength in research, marketing and dissemination of technology is one thing, but whether we like it or not, taking up joint research projects will gradually shift research priorities to products and technologies that are profit-oriented. For an umbrella organisation, with one of the largest networks of agricultural research and educational institutes in the world, the challenge instead should have been to lead the way on farm research at a time of climate emergency to fix the broken food systems, thereby setting a research agenda for the private sector to follow.

No matter how the ICAR and the global agribusiness industry may try to justify the collaboration, the private sector has always had its sights on the profits

it can extract. This reminds me of what Dr Ismail Serageldin, a former Chairperson of the Consultative Group on International Agricultural Research — a global consortium of 15 publicly funded agricultural research centres — had said during a visit to India in the mid-1990s. He had explained how no private company was willing to undertake research on cassava, the staple food of Africa. The private sector refrained from research on cassava as it feared that there would hardly be any buyer for the improved seed varieties, given the low income of the largely subsistence farming community. But as soon as some US studies found that cassava could be a good source of feed for the $28-billion pig industry, the industry swung into action, launching numerous research projects.

Simply put, for the industry, pigs became a priority when actually the poor farmers needed research support for enhancing their livelihood security.

Nothing seems to have changed. Corporate greed for high profits has, in fact, grown over the years. Even during the Covid pandemic, an analysis by international charities Oxfam and Action Aid showed global food prices increasing by 14 per cent because of greedflation — a deliberate attempt to raise prices for garnering more profits. With hardly any sensitivity towards billions hit by the pandemic, 18 top food and beverage companies walked away with a windfall profit of $28 billion in just two years, 2020 and 2021. Nine fertiliser companies made a profit of $57 billion in 2022.

To expect the agribusiness companies that made profit from hunger to undertake research projects with ICAR for the benefit of small and marginalised farming communities in India would be a gross folly. In any case, I can't imagine a massive research infrastructure — 64 central research institutes, 15 national research centres, 13 project directorates, six national bureaus, 63 agriculture universities, four deemed universities and three central universities — seeking the help of the private sector to build research partnerships. It only shows that "the link between science and agriculture" had somewhere got snapped, as Dr MS Swaminathan, hailed as the father of India's Green Revolution, had once remarked.

Coming after the 2021 withdrawal of the three contentious farm laws and recent news reports indicating how a task force was constituted by the Niti Aayog at the suggestion of an NRI businessman to corporatise agriculture, the ICAR initiative to join hands with private companies for collaborative research seems to point to the underlying intent — privatising the entire farm-to-fork chain. You can be sure the efforts to privatise research will be back in one form or the other to drive the system away from public good.

The ICAR needs to rejuvenate itself and change with the times. Instead of setting up new research centres for fertilisers and pesticides, it must move away from toxic food systems towards regenerative agriculture. Instead of a collaboration with the industry, the ICAR must demonstrate renewed leadership and rebuild public confidence.

At the same time, let's not forget the classic fable of the camel in the tent.

-The Tribune,31 August 2023

ICMR MUST COMPEL PROCESSED FOOD INDUSTRY TO CONFORM TO ESTABLISHED STANDARDS

Sometime I wonder as to why we issue guidelines when we know a majority will never be able to follow it? For instance, I wonder how we expect a person to ensure that he/she keeps the intake of salt at 5 grams per day when highly-processed foods freely available in the market contain a heavy dose of sugar and salt.

The limit prescribed will certainly give you an idea that you have to keep salt intake as low as possible. Fair enough, but I don't think any household will begin to keep a measuring spoon or start reading the info on the product labels so carefully to maintain a track record of how much salt is being consumed daily.

The point I am trying to make is that in addition to prescribing these guidelines, it would have been more beneficial if the National Institute of Nutrition (NIN), Hyderabad, had come up with a set of dos and don'ts for policy makers. Like the 'go' and 'no go' areas in case of granting approval for industrial activities in the environmentally sensitive areas, a similar set of policy parameters need to be laid out to reduce the dietary burden.

Let me explain. When the Genetic Engineering Approval Committee (GEAC) approved the first genetically-modified crop — Bt cotton — for commercial cultivation, it came out with a guideline for farmers to grow 20 per cent refuge crop all around the field. When told that this guideline will never be followed, the then Chairman of GEAC is reported to have said 'so what, at least we are laying out a guideline for the farmers to follow'. As expected, nowhere in the world have farmers followed the guideline of growing a refuge crop. Even in the United States, satellite images show the absence of refuge crop thereby exacerbating resistance building up in the target pest species.

Balanced use of fertiliser has been proposed for several decades now. And yet, despite all the guidelines laid out, farmers have been over applying nitrogen fertilisers. Similarly, the guidelines for environmental protection have often been ignored so much so that in cases where tree planting measures have to be undertaken, the shortfall in number of trees planted is glaring.

Therefore to expect the dietary guidelines to be followed is perhaps asking for too much.

Why I am saying this is because meeting nutrition challenges for the general public is demanding but perhaps laying out a comprehensive policy outline will help draw a lakshman rekha for the processing industry. This becomes exceedingly important given that 56.4 per cent of the disease burden in non-communicable diseases – like coronary heart disease, hypertension, type-2 diabetes and cancer, among others – in the country is from unhealthy dietary habits. And if I look at a global study, 89 per cent of the processed food on the supermarket shelves in India has been found to be unhealthy. Unless the industry is tamed and mandated to strictly adhere to the quality standards laid out, I don't think it will ever be possible to nip the evil in the bud.

A more recent meta-analysis, published in the New York Times, and involving 10 million participants, links ultra-processed foods with 32 health problems, including

heart disease-related deaths, Type 2 diabetes and common mental health issues like anxiety and depression.

It is because of policy failure that the market is inundated with unhealthy, ultra-processed foods – which are high in fat, sugar, salt and edible oil. These processed foods are not only harmful but are also within the reach of the common man. Marketing blitz through advertisements for children (and also for adults, involving celebrities, and at times of IPL cricket matches), makes it not only accessible but also sought-after products. But it is the reluctance on the part of concerned ministries to initiate a tough action that the market for these processed foods proliferates. What is the use of asking the general public to avoid sugary drinks, processed fruit juices and saturated foods like packaged chips, cookies, ketchup and candy, among others when these are freely available?

Even in the residential societies, hawkers selling junk food do multiple rounds during the day. No RWA, to my knowledge, has ever restricted entry of junk foods in residential areas.

To say that it is not possible to contain the production of processed foods low in sugar, salt and fat is only a reflection of the incompetence of the concerned authorities. After the recent controversy on higher sugar availability in baby foods produced by Nestle (which was selling no-sugar version in Europe), a social media influencer by the name of 'Food Pharmer' has succeed in forcing the agribusiness giant PepsiCo to replace palm oil in its potato chip brand Lay's with sunflower and other vegetable oils. PepsiCo has not been using palm oil in its potato chip products being sold in the America. But it is because of one person's efforts alone that Cadbury's Bournvita and Maggi Ketchup brands have agreed to reduce sugar in its products. In fact, such was the public pressure that Bournvita has been subsequently deprived of using the ‘health drink’ tag.

If one person can do it, I see no reason why the Ministry of Consumer Affairs as well as the Ministry of Health continue to be mute spectators. How long can we allow the Food Safety Standards Authority of India (FSSA) to get away with claims of tough standards?

That is why I think it is important that ICMR takes up the responsibility to go beyond the guidelines and come up with a policy framework that it can recommend for binding the processed food industry to conform to the standards laid out.

Let us not spend time copying the international standards but come up with our own quality standards depending on the domestic needs.

All these are, however, linked to financial investments.

Just because a big agri-business giant wants to make a heavy investment does not mean that we should allow it without seeing the harm it eventually will end up doing to the society. Many dirty industries have entered the country under the promise of making huge investments. Whether we want to acknowledge or not, these investments have led to huge pollution fallout. It is time the Ministry of Commerce and Industry (as well as the State governments) draws policy parametres that firmly say no to such investments.

Guidelines alone will not help. Bold and tough decisions are required. It is the duty of the Union Government to ensure that what is available in supermarket shelves is safe and healthy.

-Bizz Buzz, 11 May 2024

A SCIENTIFICALLY-EVOLVED AND TRULY ACCOUNTABLE FSSAI NEED OF THE HOUR

Nestle India Chairman and Managing Director Suresh Narayanan’s denial of the accusation of a higher sugar content in baby food formulations as being “racially stereotyped is unfortunate” and untrue, has to be taken with a pinch of salt.

“There is no local of approach to making a nutritional adequacy study. Globally the recipes are engendered in an age where energy dense products are needed by growing children. So there is no distinction that is made between a child in Europe and a child in India or any other parts of the world,” he was quoted as saying in the media on April 29.

He was responding to news items based on a report released by the Switzerland-based NGO Third Eye and the International Baby Food Action Network (IBFAN) accusing the company of double standards — having high sugar content in the baby food cereal (Cerelac) that is marketed in developing countries, including India, when compared with the product sold in Europe.

“That we have the need in India is the reason why we have added this, but at levels which are much lower than what is even specified by the local regulator and I think one has to have the trust and confidence that the local regulator knows what we are putting there. So it is not a dramatic deviation that has been done.”

He further adds that the formulations get translated into a product locally on the basis of "different considerations on local regulatory requirements on local availability of raw materials on some of the maternal feeding habits."

If all that has been said by way of the denial statement was true, I don't see any reason why the Ministry of Consumer Affairs should have directed the regulatory agency — the Food Safety and Standards Authority of India (FSSAI) — to take "appropriate action" against Nestle.

Following the directive, the FSSAI has already initiated an investigation into the controversy regarding the composition of Nestle baby food product. And let me add here, despite the seemingly tough directive for probe into the allegations I am not sure how far will the promised investigations reach to its logical conclusions.

If the FSSAI had worked with an iron fist in first setting up tougher standards, and then following it up with tougher implementation, no food giant would have taken the Indian market so casually. The denial statement from Nestle itself bares the visible fault lines when it says (and I repeat): "That we have the need in India is the reason we have added this, but at levels which are much lower than what is even specified by the local regulator." If you look at this statement carefully, the question that immediately crops up is where is the need in India that prompted the company to go in for higher sugar content in baby food? Who has asked the baby food companies to add more sugar for the products sold in India?

I haven't seen any study or report from nutrition bodies in India that seek more sugar in baby foods as energy diffuser.

At the same time, Nestle says that it has added only 7.1 grams of sugar per 100 grams of feed, and that too against the permissible limit of 13.6 grams that the FSSAI has prescribed, opens up another worm of cans. It only shows how lax have been the FSSAI standards, allowing even an elephant to pass through. FSSAI should be asked to release the data based on which it set the permissible limit of sugar in baby foods. We can't let the FSSAI to get away with it. There are 26 scientific committees that FSSAI has constituted for setting standards and yet if the norms are so relaxed it becomes obvious that the 'conflict of interest' is much larger than what has often been talked about.

As senior science commentator Dinesh C. Sharma, says: "For years, consumer groups and public health experts have been demanding a distinct health label for food products high in salt, sugar and fats, but the food safety authority and the industry have constantly opposed this. On the other hand, the regulator is quick to meet industry demands and even endorse their products, which is not its mandate."

It only shows how corporations influence public policy.

Now let's move to pesticides. Amidst the heat generated over certain Indian spice brands violating the quality standards thereby inviting import bans, it has now become clear that the FSSAI (through an order issued on April 8, 2024) itself raised the permissible residue limit (MRL) of pesticides in spices and herbs by 10 times. Against the permissible limit of 0.01 mg per kg, the limit has now been raised to 0.1 mg/kg. This comes at a time when (based on RTI) it has been found that in the past five years, the presence of pesticide residues has increased from 22.6 per cent to 35.9 per cent in the tested samples.

Under the given conditions, and knowing that tighter pesticides regulations in Europe and America have led to Indian export consignments being increasingly rejected on quality parameters, the relaxation of MRL norms by FSSAI clearly comes as a surprise. Coming back to sugar, while it is important to be mindful of your sugar intake, much of it remains hidden in processed foods. Even an enlightened consumer will find it difficult to identify the added sugars. Since several studies have shown that there are at least 56 different names for sugar that normally are used to deceive consumers, but at least the FSSAI should be able to read these and drastically restrict its usage knowing the harm it causes.

I am not only talking of diabetes that too much sugar consumption can lead to, but as a study published in the Journal of Dermatology has shown that besides genetic characters, even sugar-sweetened beverages can lead to hair loss in men.

Where does it all lead to especially seeing the quantum jump in junk foods consumption over the years? If FSSAI could emerge as a tough regulator, the average consumer will become satisfied and comfortable with whatever he is buying off the supermarket shelves knowing it is safe and healthy. But it is not happening. A dominant section of the consumers knows that the processed foods that he/she is buying are not healthy but he is left with little choice. Global studies have shown

that a whopping 89 per cent of the processed foods available in India (and six other major economies) are unhealthy (see my earlier column: Processed foods and beverages are silent killers, Jan. 18, 2024).

We already have a situation where childhood obesity is going to be a bigger problem than childhood hunger. On the other hand, India is already among the top five countries in adult obesity. Reports say an estimated 135 million Indians are either obese or overweight.

I don't blame it entirely on food habits and consumption but the 'chalta hai' attitude to regulate quality of food is pushing more and more people in that trap. The urgent need is to convert FSSAI into a body that the country can have faith and confidence in. Even if it comes to overhauling the existing structure, we must do it.

That's the kind of guarantee the nation needs.

-Bizz Buzz,3 May 2024

HE LED INDIA OUT OF THE HUNGER TRAP

He was often hailed as the father of India's Green Revolution. Prof MS Swaminathan, the illustrious scientist-administrator, was a 'living legend', as described by then UN Secretary-General Kurt Waldheim in a letter congratulating him for being the first recipient of the World Food Prize. His death marks the end of an era.

"The history of the Green Revolution was actually written during a half-an-hour car journey that I once undertook with then Prime Minister Indira Gandhi," he once told me. To my question about how difficult it was to get the desired political will to back the agricultural revolution in the offing, Prof Swaminathan recalled that as then Director of the Indian Agricultural Research Institute in New Delhi, he once accompanied Mrs Gandhi to inaugurate a building in the Pusa complex. On the way, the PM asked him: "Swami, I would go by the new wheat dwarf varieties that you are talking about. But can you give me a commitment that you will give me a surplus of 10 million tonnes in a couple of years from now, because I want the bloody Americans off my back."

Swaminathan gave the commitment, and the rest is history.

For a country living a 'ship-to-mouth' existence, when food would come from the ships directly to feed the teeming millions, the remarkable turnaround in agriculture led India to not only be self-sufficient but also eventually a net exporter. The saga of the Green

Revolution, backed by appropriate policies, was primarily aimed at emerging out of the hunger trap. With Independence coming just four years after the Bengal Famine of 1943, the challenge of overcoming hunger had still not been met. For decades, food would come from North America under the PL-480 scheme.

Knowing that many globally influential voices had written off India, with some projecting that half of India would be led to the slaughterhouse by the mid-1970s, Prof Swaminathan's tryst with fighting hunger would go down in history as one of the most important economic developments the world had witnessed. This not only transformed the lives of millions of people within the country but also became an inspiration for the rest of the world.

Even as an architect of the Green Revolution, Prof Swaminathan was aware of the negative consequences of intensive farming. He was a visionary in every sense, and had forewarned a number of times about the debacle lying ahead. In 1968, a few years after the Green Revolution was ushered in, he had written: "Intensive cultivation of land without conservation of soil fertility and soil structure would lead ultimately to the springing up of deserts. Indiscriminate use of pesticides, fungicides and herbicides could cause adverse changes in the incidence of cancer and other diseases through the toxic residues present in the grains or other edible parts. Unscientific tapping of underground water would lead to the rapid exhaustion of this wonderful capital resource."

It was during his tenure as Director General of the International Rice Research Institute (IRRI) in the Philippines that he received an unusual alert from

Indonesian President Suharto. With the Indonesian rice crop devastated by the brown planthopper pest, Suharto wanted Prof Swaminathan to provide a way out. Instead of suggesting more potent pesticides, he put together a team of scientists who went to Indonesia and advised Suharto to ban pesticides used on the rice crop, and simultaneously launch integrated pest management. Suharto banned 57 such pesticides under a presidential decree.

Not many know that Prof Swaminathan was not a blind believer in technology. Even during the days when the campaign against genetically modified crops was at its peak, his response to then Environment Minister Jairam Ramesh was a key factor in the moratorium that came up against the commercialisation of Bt Brinjal. In a conference at the MS Swaminathan Research Foundation in Chennai, he presented a slide of a drumstick and then posed a question over the need for GM rice containing vitamin A. His point was that drumstick leaves cooked with rice were part of our traditional diet and could themselves provide vitamin A.

If only the environmental concerns raised up time and again by Prof Swaminathan had been appropriately addressed by the policymakers, Indian agriculture would not have been in the throes of a severe crisis in sustainability.

He also headed the Central Advisory Board on Plant Genetic Resources of the CGIAR (a consortium of international agricultural research centres). I was at that time a member of the CGIAR Central Advisory Board on Intellectual Property Rights. While the role played

by him to stall the outright sale of globally available plant genetic resources to private companies remains unacknowledged, I have been a witness to the enormous effort that had gone into thwarting every effort to privatise the immense wealth of global biodiversity.

When Prof Swaminathan was appointed Chairperson the National Farmers' Commission in 2004, he invited me to write the Zero Draft of the commission's report that would be subsequently discussed and deliberated upon across the country before being finalised. The mandate for me was to keep the farmer in the centre, and then see how his lot could be improved. When subsequently told to not only focus on the farmer but also include various stakeholders, I apologised. But all through, Prof Swaminathan remained focused on ensuring income security for farmers. He applauded the role played by farmers in increasing food production and was always dismayed at the plight of the farming community.

The Swaminathan Commission report, presented in five parts between 2004 and 2006, was aimed at enhancing productivity, profitability and sustainability of Indian agriculture. It remains the rallying point for farmer organisations throughout the country. His suggestion to provide farmers with 50 per cent profit over the weighted average has not been taken up by successive governments.

The best tribute that the country can pay to the great visionary is to implement the Swaminathan Commission's report in letter and spirit.

-The Tribune, 29 September 2023

TIME TO ADOPT THE ANDHRA PRADESH AGRO-ECOLOGY MODEL OF COMMUNITY MANAGED NATURAL FARMING SYSTEMS ACROSS INDIA

There are two developments this week that I think we need to be appraised of. If we can draw a link, while one development spells out the disaster that lurks, while the other provides an everlasting solution to address the huge crisis the world is faced with, which is likely to worsen in the years ahead.

While media reports say heavy and persistent rains have caused severe crop losses in France, the major wheat growing European country, a journalist from the Netherlands has written asking me whether the perceptible change in weather will be an economic disaster for farmers. Her concern arises from what she sees in Holland where the rains haven't stopped, inundating the crop fields as a consequence of which standing potato crop is rotting and vegetable seeds are not growing.

India, meanwhile, is hit with an unprecedented heat wave. As the normal temperatures continue to soar, fears are being expressed whether the country will able to address its food security needs in the years to come. A few years back, heat wave at the time of wheat harvest had taken a heavy toll. A year later, a pause in rains that extended for almost a month and that too during the monsoon season, had hit the standing paddy crop. Knowing that climatic aberrations can play spoilsport

in the future, the government is being over-conscious and has taken steps and that includes banning wheat and non-basmati exports and also clamped stock limits on various agricultural commodities to ensure food inflation remains under control.

As the Dutch journalist says climate change is becoming a worldwide phenomenon with an enormous impact on agriculture. While the industry finds it to be an appropriate opportunity for selling its climate smart technology, that it has been marketing for several years now, the bigger question is whether the world has thought of approaches, policies and strategies to provide for climate resilient agriculture.

The other development I want to share is that the prestigious Gulbenkian Prize for Humanity has been bestowed on Andhra Pradesh Community Managed Natural Farming (APCMNF) along with two other international recipients. Now before you ask me what has this to do with the food security concerns that I mentioned above, you need to know that the award recognises outstanding contributions to climate actions and climate solutions that inspire hope and possibility. The award carries Euro 1 million in cash. A day before, Vijay Kumar, the Executive Vice-chairman of Rythu Sadhikara Samstha (RySS), received the award at a glittering ceremony at Lisbon in Portugal from former German Chancellor Angela Merkel. APCNF was selected from among 181 nominations received from across the globe.

Now let's look at the two developments. There is no denying that agriculture in several parts of the world

– from Mexico in North America to the Philippines in Asia; and from Texas in USA to Maharashtra in India – is faced with severe climate impacts. In the past too, agriculture has been lashed by heavy rains, floods, freak hurricanes and increasing number of cyclones in some parts while it faces long dry spells and acute drought-like conditions in several other. Needless to say the onslaught of climate-induced weather patterns has had a cumulative damaging impact on farming. While farmers face the climate fury, the policy makers have been in a denial mode or have taken these destructive impacts as once-in-while incidents. It appears like there is nothing to worry in the long run.

While sustainable agriculture is being talked about, agro-ecological farming systems have received attention over the years.

It is here that I think the Community Managed Natural Farming systems being promoted in Andhra Pradesh stand out as the world's biggest laboratory for agro-ecology and in turn provides an ever-lasting solution to the hugely detrimental climate crisis that stares ahead. I see the agro-ecological solutions it provides to stand up to the climate crisis is full of hope and determination. It is high time the Andhra Pradesh model is replicated throughout the country, with location-specific adaptations.

As I have often said the eight-lakh farmers who have completely shifted or are in the process of shifting from chemical agriculture to natural farming practices face stiff challenges, which have been highlighted in the kharif and rabi season reports that have been brought out every year.

When Green Revolution came, an eco-system to cater to the intensive farming practices was very well planned and laid out. It included setting up of numerous agricultural universities, specialised research institutes, agriculture extension network, and farm credit mechanism, followed by appropriate marketing opportunities. Subsidies and investments flowed in as and when required. There was more support and that includes establishing fertiliser plants, pesticide units and seed development infrastructure that was specifically created.

In the case of natural farming, not even a fraction of the enormous supporting system that was laid out for aiding and helping Green Revolution has been provided. Although natural farming has clearly demonstrated its role and potential in addressing climate issue, it has still to be accorded due recognition as the way ahead; as the economic and social design for the future of agriculture at times of a climate catastrophe that the world has repeatedly been warned of. Similarly, due recognition must come for several other agro-ecological approaches that progressive farmers have shown in several parts of the country. Collectively, I suppose the time has come when non-chemical approaches should be accorded utmost priority in policy planning.

The first and foremost effort should be for developing a mechanism to hold periodic orientation for bureaucrats, judges and vice-chancellors. This is where the key lies.

To change the mindset of people who matter, who have been brought up in an environment where agriculture thrived on chemical inputs, is not that easy. It will require a continuous educational awareness programme; divided in short duration courses, to orient them to new agriculture that takes farming to the future. In economic terms, this is what is meant by disruption.

In short, moving from intensive agricultural practices to agro-ecological approaches will minimise the role agriculture plays in greenhouse gas emissions that leads to climate abruptions and at the same time it lays out mitigating strategies to minimise the impact of climate change on agriculture.

Shifting to agro-ecology therefore has twin advantages. In addition, the third advantage is that it provides healthy food for people. This is the kind of climate resilience that the country needs.

-Bizz Buzz,13 July 2024

THE GREAT INDIAN DIVIDE: OPULENCE AND STARVATION

The obscenity of a never-ending marriage is keeping the nation occupied. Almost six-months after a series of events leading to a vulgar display of wealth and opulence, the scene is now shifting for a three-month post-wedding celebration to London.

In the midst of all these celebrations, an equally outrageous study that says 55.6 per cent Indians can’t afford a healthy diet has got lost somewhere. Given that India’s population exceeds 1.44 billion, the report points out that at least 790 million people are unable to afford a healthy diet. For any country, this United Nation’s report should have been a topic for endless discussions in the media. But the cost of prevailing inequality is therefore before us. On the one hand we have the continuing marriage spectacle, with estimates of Rs 5,000-crores already spent, and on the other we have millions of people sleeping hungry every night that no one wants to talk about.

Still worse, the media has been conspicuously quiet

The Niti Aayog should have by now planned a series of meeting with the Chief Ministers, and worked out a strategy to combat hunger in a given timeline. As far as the media is concerned, if major newspapers could devote at least two full pages of news reports and analysis for a number of days after the death of Jessica Lal, and organise a media campaign with candle lights at the India Gate, I see no reason why the media should give the hunger and undernourishment statistics a quiet burial.

I agree that Jessica Lal's murder was heartbreaking and unfortunate, but if 55 per cent of the country's population is unable to have three meals a day, it is no less shocking, distressing and immensely perturbing. For a country that is on a high growth trajectory, the appalling hunger and undernourishment statistics are nothing short of a national disgrace.

Released on July 24, the latest report of the UN State of Food Security and Nutrition in the World (SOFI) says India has the highest percentage of undernourished people in the world. The number of undernourished in India stands at 194.6 million. This is almost equal to the combined population of UK, France and Germany.

While I agree that 63 per cent of low, middle-income countries cannot finance their food security, as the report says, but India certainly is not constrained by inadequate finance. Even with private companies not showing any interest in putting money where it counts – eliminating hunger, it shouldn't be difficult for India to spare adequate resources from its annual budget, which exceeds Rs 48-lakh crores in 2024.

Moreover, if the banks can write-off Rs 15.5-lakh crores of corporate toxic loans and the Reserve Bank of India (RBI) can direct banks to enter into a compromise with 16,600 wilful defaulters for practically writing-off another Rs 3.5-lakh crore, it is quite evident that there is enough money to fight hunger and undernourishment.

What is lacking is a strong political will

Coming at the time of Amrit Kaal, the fight to achieve 'Zero Hunger' cannot be treated casually and

has to be taken up in a mission mode. Making hunger history should become the top priority. It should also be based on an honest measurement of poverty, which means it should have an index that is close to reality.

In a very thought-provoking interview: 'Hunger, undernourishment stalking India; Placed worse than Least Developed Nations (The Wire, Jan 19, 2024) one of the country's best known economist, Prof Prabhat Patnaik from JNU, finds the Multi-dimensional Poverty Index (MPI) prepared by the UN Development Programme (UNDP) to be based on 'intellectual confusion'. "If we take access to 2,200 calories per person per day in rural India and 2,100 calories per person per day in urban India, as the benchmarks for defining poverty as the Planning Commission had done since 1973, then the proportion of the poor rose from 58 per cent in 1993-94 to 68 per cent in 2011-12 to over 80 per cent in 2017-18 in rural India. On the same dates, the proportions were 57 per cent, 65 percent, and an estimated 60 percent in urban India," he says.

Mind you, this interview was done in January, much before the UN released the State of Food Security and Nutrition of the World report in July.

To run down poverty estimates, and to claim that hunger has almost disappeared from India, a number of counter claims will obviously be made. But as I have often said that instead of getting into a tu-tu main-main over the methodology being used to measure hunger and poverty, the best way is to stand on a bridge at any railway station and look at the people disembarking from a long-distance train. The extent of poverty or what I call as the ‘algebra of poverty’ becomes starkly visible.

In addition to subsided food ration being supplied to over 80-crore labhartis under the National Food Security Act 2013; the government has launched the Pradhan Mantri Garib Kalyan Yojna in April 2020. It was extended in Jan 2023 for another five years. Under this programme, in addition to the food rations, 5 kg of wheat and one kg of dal is provided free of cost every month.

This clearly shows that while food availability is not a concern, what is more important is to work out a mechanism where agriculture and nutritional security is linked in a manner that ensures and assures a living income for farmers. Unless the farming household itself is food secure, it is futile to expect hunger and undernourishment to become history. Take for instance the latest report of the Situational Assessment for Agricultural Households 2019, which tells that farm incomes are the bottom of pyramid, even less than that of MNREGA workers. With an average monthly income of Rs 10,218 for a farm family comprising five members, it doesn't shock me anymore to know that 55.6 percent of the country's population sleeps hungry every night.

The fight to remove hunger therefore begins essentially at the farm level. As long as we continue to deny farmers a profitable price thereby ensuring economic viability of a farm; take it from me hunger and undernourishment will not disappear.

-Bizz Buzz, 27 July 2024

ENHANCE FARM INCOME TO TACKLE AGRARIAN DISTRESS

Over the past 25 years or so, virtually every Finance Minister has begun his or her Budget presentation by emphasising the significant role of agriculture in the Indian economy. From ‘*Kisan ki Azaadi*’ to ‘a lifeline of the country's economy’, several epithets have been used to highlight the focus of the Budget proposals. Arun Jaitley had talked of enhancing farm income and kept it at the top of the government's five priorities. Nirmala Sitharaman has also accorded due recognition to agriculture by giving it pride of place among the nine priorities she has spelt out.

The boost for agriculture in almost every Budget should have transformed the rural economy by now. But despite the focus, not even once did it look as if agriculture was on the path to recovery. This is because while the underlying emphasis has remained on increasing crop productivity — in the hope that it would get higher prices and income for farmers — the agrarian distress has only grown. If the average monthly income for an agricultural household has remained around Rs 10,218 even after a successful Green Revolution and despite all the budgetary support, the serious crisis on the farm cannot be denied.

Here is a reality check: in Karnataka, according to an official estimate, as many as 1,182 farmers have died by suicide in the past 15 months. In Maharashtra, 1,267 farmers took their lives between January and June this year, with Vidarbha's Amravati division alone witnessing 557 cases.

Farmer suicides are not a new phenomenon. A compilation of data by the National Crime Records Bureau shows a staggering number of farmer suicides in the past 27 years. This period coincided with the 25 years of heightened budgetary commitments for agriculture. Between 1995 and 2014, 2,96,438 growers had taken the extreme step. The period from 2014 to 2022 saw 1,00,474 farmer suicides. Simply put, close to four lakh farmers ended their lives between 1995 and 2022, and that too at a time when annual Budgets kept promising to turn agriculture around. The mismatch between the budgetary allocations and the continuing agrarian crisis is glaring.

Telangana is now in the second stage of providing a farm loan waiver. It is in the process of striking off Rs 6,198 crore of outstanding loans for 6.4 lakh farmers, with each of the indebted growers getting a waiver of Rs 1.5 lakh. In the first phase, 11.34 lakh tillers had received Rs 6,190 crore in their bank accounts. In the third phase, set to begin this month, 17.75 lakh cultivators will receive a waiver for Rs 12,224 crore. In all, 35.5 lakh farmers in the state are being given a debt waiver. It, however, does not mean that rising farm debt is not a concern in other states.

The latest global analysis by the Organisation for Economic Cooperation and Development (OECD) shows that among the 54 major economies it has worked out the producer subsidy support for, only in India's case are farmers bereft of adequate budgetary support to cover up the losses. The report states that Indian farmers have continued to incur losses year after year since 2000.

Would any other sector of the economy have survived the continuing losses?

While we can find fault with the methodology, the fact remains that no amount of support for technology or the injection of money into other schemes to increase productivity and production will see farmers' income go up. It hasn't happened anywhere. The OECD study is a testimony to this.

This is what I call the 'via Bathinda' approach. Why can't a direct effort be made to raise farm incomes rather than routing it through the input suppliers or technology providers? It hasn't worked in the past, and it will not work in the future either. Several studies have shown how the input suppliers rake in profits while the farmers remain at the bottom of the pyramid. Even in the case of supply chains, the growers' share in the ultimate profits is hardly 5-10 per cent or even less. A recent study in the UK said that while the retail profits from marketing strawberries and raspberries went up by 27 pence in 2021, the farmers' share was only 3.5 pence. Earlier, some studies had shown that for the six daily necessities that consumers depend upon, farmers get only 1 per cent of the retail profit. Therefore, the thrust on strengthening supply chains, as stated in the latest Budget, will only be helpful if the share of the primary producer is guaranteed.

With an allocation of only 3.15 per cent of the total Budget for agriculture, and that too for roughly half of the country's population engaged in the sector, nothing extraordinary can be expected. An outlay of Rs 1.52 lakh crore this year, a jump of about Rs 26,000 crore from the previous year, essentially covers the non-plan expenditure, as it was earlier referred to. Given that the budget for agriculture also includes an outlay of Rs 60,000 crore for the PM KISAN scheme, which provides a monthly entitlement of Rs 500 to every land-owning farmer, what is left is Rs 92,000 crore for agriculture. No wonder the Household Consumption Expenditure 2022-23 tells us that the median monthly per capita consumption expenditure in rural areas stands at a mere Rs 3,268. If agriculture is not viable, rural spending will remain low.

Hence, agriculture needs a serious rethink. There is a critical need to first address the issue of livelihood so as to bring about income parity with other sections of society. My suggestion is to set up a National Commission for Farmers' Income and Welfare, which should come up with specific ways to enhance farm income in a given time frame. Start by ensuring a legal framework for the MSP (minimum support price).

-The Tribine, 2 August 2024

PINGALWARA DIARY

(UPTO March, 2024)

Services rendered by Pingalwara Institution for the service of the suffering humanity are:-

1. **Homes for the Homeless**

There are 1806 patients in different branches of Pingalwara nowadays:-

(a)	Head Office, Mata Mehtab Kaur Ward, Bhai Piara Singh Ward	289 Patients
(b)	Manawala Complex	837 Patients
(c)	Pandori Warraich Branch, Amritsar	180 Patients
(d)	Jalandhar Branch	31 Patients
(e)	Sangrur Branch	263 Patients
(f)	Chandigarh (Palsora) Branch	105 Patients
(g)	Goindwal Branch	101 Patients
(h)	Pamali (Ludhiana) Branch	00 Patients
		Total 1806 Patients

The number of patients suffering from various diseases are as follows:

Disease	Number	Disease	Number
1. Mental Patients	313	9. Aids Patients	23
2. Paralysis, Polio	160	10. Epilepsy Cases	205
3. Mentally Retarded	512	11. Cancer Patients	02
4. Deaf and Mute	172	12. Diabetes	128
5. Old Aged	125	13. School going Children	58
6. Injured	36	14. Abandoned Children	06
7. T. B. Patients	05	15. Recovered	21
8. Blind	40		**Total 1806**

2. **Treatment facilities**

(a) Dispensary & Laboratory:- Pingalwara has a dispensary and a laboratory for the treatment of patients. It has an annual expenditure of about

1 crore 85 lakhs.

(b) Medical Care Staff:- Experienced medical staff like Nurses, Pharmacists and Laboratory Technicians are available for the care of the Pingalwara residents.

(c) Blood-Donation Camps:- A Blood Donation Camp is organized on Bhagat Ji's Death Anniversary every year. The blood is used for Pingalwara residents and road accident victims.

(d) **Artificial Limb Centre:-** There is an Artificial Limb Centre at Manawala Complex, dedicated to the memory of Bhagat Ji which provides free of cost Artificial Limbs to amputee cases and calipers to paraplegic, hemiplegic or polio affected people. 22480 needy people have benefitted till March 2023.

(e) **Ambulances:-** Ambulances with basic Medical aid are available for victims of road accidents on G.T. Road, round the clock and provide facilities for taking Pingalwara patients to the hospital.

(f) Physiotherapy Centre:- A Physiotherapy Centre equipped with state-of-the-art equipments is functioning in the Manawala Complex since June 2005. On an average 90-100 patients are treated everyday.

(g) Operation Theatre:- There is a well equipped Operation Theatre at Manawala Branch of Pingalwara for General surgery, Micro surgery where Cochlear Implants and major operations are carried out.

(h) Dental Clinics:- Dental Clinics at (Main office, Manawala branch, Palsora branch and Sangrur branch) have been set up to provide Dental services to Pingalwara residents, sewadars and their families.

3. **Education:**

Pingalwara Society is running Educational Institutions for the poor and needy children.

(a) **Bhagat Puran Singh Adarsh Sen. Sec. School, Manawala Complex, Amritsar:-** This school provides free education to 775 students from the poor and deprived sections of the society. They are provided with free books and uniforms. Children being brought up by Pingalwara Society are also studying in this school.

(b) **Bhagat Puran Singh School for Special Education, Manawala Complex, Amritsar :-** This school is providing Special Education to 225 Special children.

(c) **Bhagat Puran Singh School for the Deaf, Manawala Complex, Amritsar:-**Bhagat Puran Singh School for Deaf Children is functional at the Manawala Complex since May 2005. The school is equipped with state-of-the-art training aids and has 165 children on its rolls.

(d) Bhagat Puran Singh Institute for Special Needs, Manawala Complex, Amritsar: Under RCI two Diploma courses are running.

(i) Diploma in Special Education (Hearing Impairment) 35 Seats.

(ii) Diploma in Special Education (Intellectual Developmental Disability) 35 Seats.

(e) **Bhagat Puran Singh Adarsh High School, Buttar Kalan (Qadian), Distt. Gurdaspur:-** This school is dedicated to the sweet memory of Bhagatji. 440 students are getting free education under the able guidance of well qualified teachers. The school also provides financial help to students who have finished their school studies and are aspiring for higher studies.

(f) **Bhagat Puran Singh Deaf School, Katora, Firozpur:-**This School is running since 2016 in which 32 Students are studying.

(g) **Bhagat Puran Singh Deaf School, Sarhali, Tarn Taran:** 25 Students are taking education in this school.

(h) **Bhagat Puran Singh Deaf School, Village Kakkon, Hoshiarpur:-** 25 Students are studying in this school.

(i) **Bhagat Puran Singh School for Special Education, Chandigarh (Palsora):-** This school caters to the needs of Special adults of the branch and has 40 students.

(j) **Vocational Centre:-** This Centre is providing free training in embroidery, stitching, craft work, making washing powder, candle making and painting, etc. Young girls from the villages of surrounding areas are the main beneficiaries.

(k) **Computer Training:-** Computers are available in all the schools for academic and vocational training.

(l) **Sensory Room for Mentally Retarded Children:-** For development of mentally retarded children sensory room is established in Manawala branch of Pingalwara.

(m) **Hostel facilities:-** There are separate hostels for boys and girls in Manawala Complex. Many girls are pursuing higher studies in different colleges.

4. **<u>Rehabilitation:</u>**

Marriages:- After being educated, boys and girls at Pingalwara are married to suitable partners. 59 girls and 6 boys have been married off till date.

5. Spinal Cord Injury Rehabilitation Centre:-

Pingalwara has set up a Spinal Cord Injury Rehabilitation Centre in Manawala Complex for spinal cord injury patients in order to make them independent after surgery.

6. Bakery Unit:-

Bakery Unit is established at Manawala Complex. The patients are provided training in making hygenic eatables like biscuits, rusks and cakes. It also helps them to choose this as their field of work.

7. **<u>Environment Related Activities:</u>**

(a) **Tree Plantation:-** Bhagat Puran Singh Ji was deeply concerned about the degradation of the environment. A vigorous tree plantation campaign is conducted every year on Bhagat Ji's Death Anniversary. Trees are planted in various schools, colleges, hospitals, cremation grounds and other public places. These include Amaltas, Kachnar, Behra, Champa, Arjun, Sukhchain, Chandni, Zetropa, and Curry patta, etc. The saplings are distibuted to various institutions.

(b) **Nursery:-** Pingalwara has its own Nursery where saplings of various plants and trees are prepared and provided to the public free of cost. The aim of the nursery is to grow more than 54 different kinds of saplings every year.

8. **<u>Social Improvement Related Activities:</u>**

(a) **Awareness:-** Spreading awareness about societal evils is crucial for creating positive change. Pingalwara raises awareness by educating people through the literature printed and distributed free of cost among the general public. Books and pamphlets relating to religion, social, health and environmental issues are printed at the Puran Printing Press. The annual expenditure of printing and publicity is about 3 crore 80 lakh rupees.

(b) **Puran Printing Press:-** The Printing Press has been updated with an Offset Press.

(c) **Sewage Treatment Plant:-** Pingalwara operates a sewage treatment plant in its Manawala Branch. The treated water is reused for watering plants.

(d) **Rainwater Harvesting**

(e) **Solar Power Plant**

(f) **Gobar Gas Plant:-** A Gobar Gas Plan was inaugurated on 3 June, 2024 in Manawala Branch of Pingalwara. Gobar gas produced through the anaerobic breakdown of cowdung in the gobar gas plant is then used for cooking.

(g) **Museum and Documentaries:-** A Museum has been set up and a number of documentaries made on activities of Pingalwara. The CDs are freely available for the general public.

A feature film, EH JANAM TUMHARE LEKHE in Punjabi was produced by Pingalwara Society, Amritsar and released on 30 January, 2015. It depicts the life and work of Bhagat Puran Singh Ji, founder of Pingalwara.

9. **Aid for the victims of Natural Calamities:**

Pingalwara makes an effort to provide succour to the victims of natural calamities like floods, earthquakes and famines. Aid was sent for the earthquake victims in Iran, Tsunami disaster victims, Leh landslide and flood affected areas.

10. **Cremation of unclaimed dead bodies:**

Pingalwara cremates unclaimed dead bodies with full honour.

11. **Dairy Farm:**

265 cows and buffaloes at Manawala Complex and Dhirekot Farm provide fresh milk to the Pingalwara residents.

12. **Old Age Homes:**

Old age homes at Sangrur and Manawala Complex of Pingalwara caters to the needs of elderly people.

11. **Expenditure:** The daily expenditure of Pingalwara is more than 10.5 lakhs.

13. Bio-Medical Waste Management:- Bio-Medical Waste Incinerator was inaugurated on 20 November, 2020 in Manawala Branch of Pingalwara. Bio-medical waste (BMW) generated at Pingalwara is imparted necessary treatment through incineration to reduce adverse effects that this waste may pose. It is equipped with effective air pollution control system.

Other Details:

a) All India Pingalwara Charitable Society is a Registered Society, registered by Registrar of Companies of Punjab and Himachal Pradesh vide Registration No. 130 of 1956-1957 Dated 06-03-1957 as amended vide No. A-28/4540 dated 07-07-1998.

b) PAN Number of the All India Pingalwara Charitable Society is AAATA 2237R

c) All donations to Pingalwara are exempted under Section 80-G according to Principal commissioner of Income tax/Commissioner of Income tax by Unique Registration Number AAATA2237RF20217 Dated 23-09-2021. Donation through cash is limited only to Rs. 2000.

d) FCRA (Foreign Contribution Regulation Act) of All India Pingalwara Charitable Society is 115210002. GST No. 03AAATA2237RIZR. CSR Registration No. CSR004013643.

e) Annual Budget of All India Pingalwara Charitable Society is Rs 43 crores.

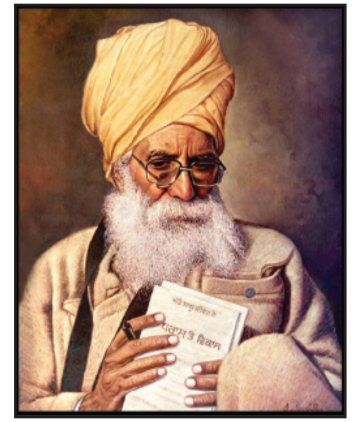
Wahe Guru Ji Ka Khalsa
Wahe Guru Ji Ki Fateh

Dr. Inderjit Kaur,
President,
All India Pingalwara Charitable Society (Regd.),
Tehsilpura, G.T. Road, Amritsar (Punjab)

A Humanitarian's Prayer

We are asked to offer prayers not only for creatures on this earth but for all living things in all the worlds. Here is one such prayer offered us for guidance:-

* *In all lands may all the sufferings of living beings come to an end!*
* *May the beaten be freed from blows!*
* *May those who are threatened with death be restored to life!*
* *May those are in tribulations become free from all pain!*
* *May those who suffer hunger and thirst receive food and drink in abundance!*
* *May the blind see and the deaf hear and women with children give birth painlessly!*
* *May sounds of pain be nowhere heard in the world !*
* *May living creatures avoid the low way!*
* *May the torments and anguish of those who dwell in narka lokas come to an end!*
* *May the animals renounce the habit of devouring each other!*
* *May the ghosts be happy!*
* *May living being be liberated from the cycle of re-incarnation!*



* Preserve natural resources.
* Service of the poor and destitutes is the service of God.
* Plant trees to save environment.
* Wear Khadi clothes to lessen unemployment.
* Simple living and high thinking is a bliss.
* Use less of diesel and petrol.
* Exercise restraint in your living habits.
* Don't forget to plant trees. They are the sign of prosperity of a nation.

—Bhagat Puran Singh

K.M. Munshi writes that Matsya Purana says: "One who sinks a well lives in heaven for as many years as there are drops of water in it. But to dig ten such wells equals in merit the digging of one pond; digging of ten such ponds was equal to making a lake; making of ten lakes was as meritorious as begetting a virtuous son but begetting ten such virtuous son had the same sanctity as that of planting a single tree."