Devinder Sharma (born 1955) is India's leading agriculture and food policy expert, thinker, researcher and writer. Trained as an agricultural scientist (holds a Master's in Plant Breeding & Genetics), he is an award winning journalist and is widely respected for his views and analysis on food and trade policy.

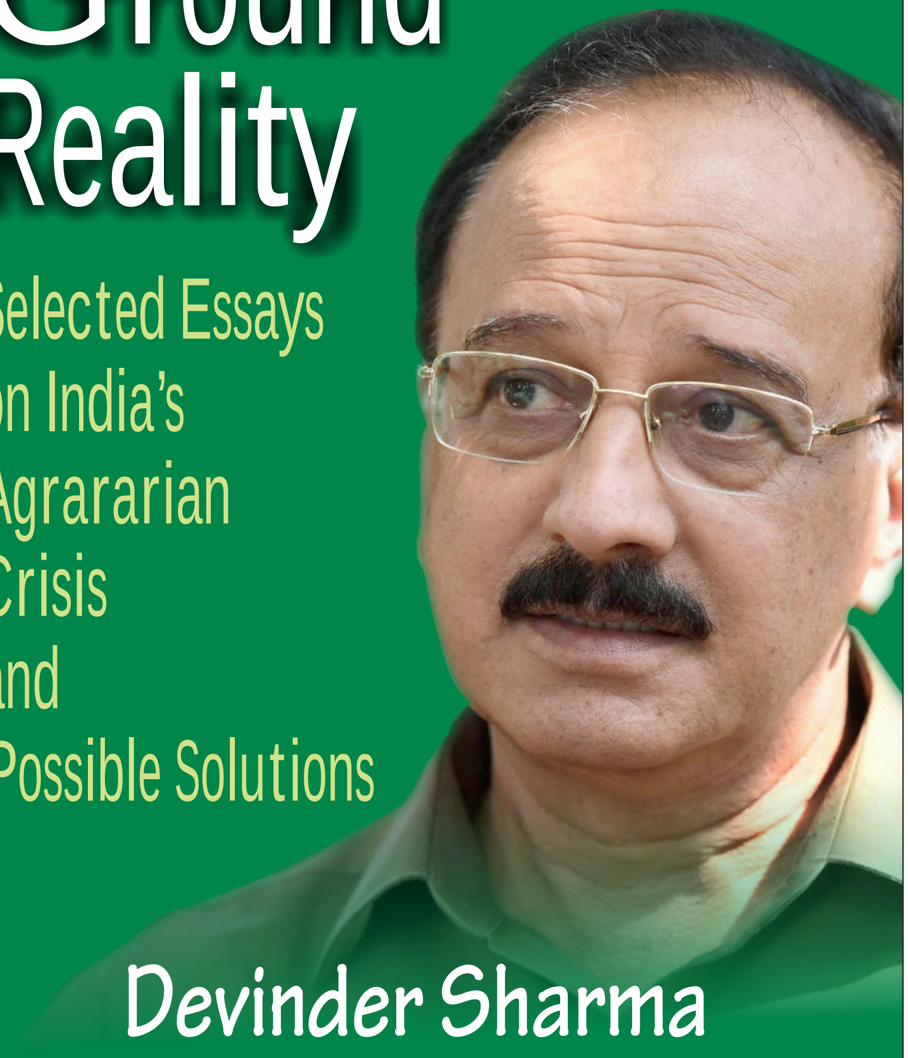
His deep understanding of the global and national economic and trade policies make him a prominent global thought leader. His untiring crusade for ensuring income security for millions of farmers, which finally culminated in the launch of direct income support for the farmers in 2018, and his continued struggle to provide farmers with a living income makes him a strong votary for farmers' rights and providing farmers with dignity and pride.

The popular Indian weekly magazine The Week in its Independent Day Special (issue dated Aug 16, 2009) had listed him among the 25 Most Valuable Indians, calling him *Green Chomsky.*

He is also being increasingly referred to as the *Voice of the 99 per cent.*

Ground Reality

Selected Essays on India's Agrararian Crisis and Possible Solutions



Devinder Sharma

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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

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

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

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

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

PINGALWARA DIARY

(UPTO March, 2023)

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

1. **Homes for the Homeless**

There are 1800 patients in different branches of Pingalwara now a days:-

(a)	Head Office, Mata Mehtab Kaur Ward, Bhai Piara Singh Ward	282 Patients
(b)	Manawala Complex	859 Patients
(c)	Pandori Warraich Branch, Amritsar	170 Patients
(d)	Jalandhar Branch	36 Patients
(e)	Sangrur Branch	257 Patients
(f)	Chandigarh (Palsora) Branch	105 Patients
(g)	Goindwal Branch	95 Patients
		Total 1800 Patients

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

Disease	Number	Disease	Number
1. Mental Patients	313	9. Aids Patients	24
2. Paralysis, Polio	158	10. Epilepsy Cases	207
3. Mentally Retarded	500	11. Cancer Patients	00
4. Deaf and Dumb	166	12. Diabetes	129
5. Old Aged	123	13. School going Children	67
6. Injured	35	14. Abandoned Children	06
7. T. B. Patients	10	15. Recovered	24
8. Blind	38		**Total 1800**

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. 19236 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 equipment is functioning in the Manawala Complex since June 2005. On an average 90-100 patients are treated everyday.

(g) Operation Theatres:- 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 Clinic:- Dental Clinic 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 School, Manawala Complex, Amritsar:-** This school provides free education to 740 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 232 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 aid and has 153 children on its rolls.

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

(i) Diploma Special Education (Hearing Impairment) 25 Seats.

(ii) Diploma Special Education (Mental Retardation) 25 Seats.

(e) **Bhagat Puran Singh School for the Deaf, Attari, Amritsar:-** 10 Students are taking education under the guidance of well qualified staff.

(f) **Bhagat Puran Singh Adarsh 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.

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

(h) **Bhagat Puran Singh Deaf School, Sarhali, Tarn Taran:** 23 Students are taking education in this school.

(i) **Bhagat Puran Singh Deaf School, Village Kakkon, Hoshiarpur:-** 22 Students are studying in this school.

(j) **Bhagat Puran Singh School for Special Education, Chandigarh (Palsora):-**This school caters to the needs of Special adults of the branch and has 35 students.

(k) **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 surroundings areas are the main beneficiaries.

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

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

(n) **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. 61 girls and 5 boys have been married off till date.

5. Spinal Cord Patients Rehabilitation Centre:-

In Manawala Complex Rehabilitation centre for spinal cord patients is established with the efforts of Pingalwara Organisation so as to become these patients independent after surgery.

6. Foundation of Bakery Unit:-

Pingalwara patients of Manawala Complex are provided training of makeing hygenic eatables like Biscuits, Rusk and Cake. For this purpose Bakery Unit is established. It also help them to choose this as their field to 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 campaign of tree plantation is started every year on Bhagat Ji's Death Anniversary. Each year 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 Kari-patta, etc. These are distibuted to different institutions.

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

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

(a) **Awareness:-** Pingalwara has played an important role in spreading awareness about the evils in the society. This has been done by printing literature onreligious, social and environmental issues at the Puran Printing Press, Amritsar and is being distributed free of cost. Annual expenditure of printing and publicity is about 1 crores 50 lakhs rupees.

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

(c) **Water Treatment plant:-** This instument used to clean water so as to use in trees and plants. It is in Manawala.

(d) **Water Harvesting**

(e) **Solar Power Plant**

(c) **Museum and Documentaries:-** A Museum, and a number of documentaries have been prepared on Pingalwara activities as well as on zero budget natural farming. The C.D.s are freely available from Pingalwara.

A feature film produced by Pingalwara Society, Amritsar on 30 January, 2015 EH JANAM TUMHARE LEKHE (Punjabi) on Bhagat Puran Singh Ji, founder Pingalwara and his struggle not only for selfless services of wounded humanity but for Environment Crisis also, has proved a beacon for the generations yet to come after us.

9. <u>**Help to the victims of Natural Calamities:**</u>

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

10. <u>**Cremation of unclaimed dead-bodies:**</u>

Pingalwara cremates unclaimed dead bodies with full honour.

11. <u>**Dairy Farm:**</u>

265 cows and buffalos at Manawala Complex and at Dhira kot Farm provide fresh milk to the Pingalwara residents.

12. <u>**Old Age Homes:**</u>

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

11. <u>**Expenditure:**</u> The daily expenditure of Pingalwara is more than 9.5 lakhs.

13. Medical Waste Incinerator:

Special Plant for kindling the bio-medical waste was inaugurated on 20 November, 2020 in Manawala branch of Pingalwara. Through this plant diapers, syringe and drip bottles of patients of Pingalwara is kindled by putting them in machine. That's way hundred feet firewood is attached in this plant so as to arrange the smoke produced through this plant in such a way so as to make the surroundings pollution free.

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 be—getting a virtuous son but begetting ten such virtuous son had the same sanctity as that of planting a single tree."

Details of Banks for sending Donation through Online/ Cheque/Draft may be sent in favour of: All India Pingalwara Charitable Society (Regd.), Amritsar' (PAN No.: AAATA 2237R)

(The donations made to Pingalwara are exempt from Income Tax under Section 80G of I.T. Act. 1961)

S.No.	Name of Account	Name of the Bank	Account No.	Swift/IFS Code
		(FOR FOREIGN CONTRIBUTORS)		
	All India Pingalwara Charitable Society (Regd.), Amritsar.	State Bank of India Main Branch 11 Sansad Marg. New Delhi 110001	40102643733	SBININBB104
		(FOR INLAND CONTRIBUTORS)		
1.	All India Pingalwara Charitable Society (Regd.), Amritsar.	Punjab National Bank Mewa Mandi, Amritsar.	01562010003720	PUNB 0052300
2.	All India Pingalwara Charitable Society (Regd.), Amritsar.	State Bank of India,Town Hall, Amritsar.	10978255668	SBIN0000609
3.	All India Pingalwara Charitable Society (Regd.), Amritsar.	Bank of India, City Centre, Amritsar.	630510100026147	BKID0006305
4.	All India Pingalwara Charitable Society (Regd.), Amritsar.	Axis Bank Ltd., City Centre Amritsar.	685010100009799	UTIB0000685
5.	All India Pingalwara Charitable Society (Regd.), Amritsar.	Punjab National Bank, Hall Bazar, Amritsar.	0018002100097336	PUNB0001800
6.	All India Pingalwara Charitable Society (Regd.), Amritsar.	ICICI Bank Ltd., The Mall, Amritsar.	006601012522	ICIC0000066
7.	All India Pingalwara Charitable Society (Regd.), Amritsar.	HDFC Bank Ltd., Mall Road, Amritsar.	01151000246510	HDFC0000115
8.	All India Pingalwara Charitable Society (Regd.), Amritsar.	HDFC Bank Ltd., Ghanta Ghar, Golden Temple, Amritsar.	13131000082013	HDFC0001313

9.	All India Pingalwara Charitable Society (Regd.), Amritsar.	Punjab & Sind Bank, Hall Bazar, Amritsar.	00011000096048	PSIB000A001
10.	All India Pingalwara Charitable Society (Regd.), Amritsar.	Bank of Baroda, Town Hall, Amritsar.	01010100015572	BARBOAMRITS
11.	All India Pingalwara Charitable Society (Regd.), Amritsar.	Punjab National Bank, Sec-47 C, Chandigarh.	12332011000560	PUNB 0123310
12.	All India Pingalwara Charitable Society (Regd.), Amritsar.	Punjab & Sind Bank, Sangrur.	00671000012150	PSIB0000067
13.	All India Pingalwara Charitable Society (Regd.), Amritsar.	State Bank of India, Patiala Gate, Sangrur.	33530846863	SBIN0001759
14.	All India Pingalwara Charitable Society (Regd.), Amritsar.	Punjab & Sind Bank, Gole Market, New Delhi.	07621000007388	PSIB0000762

Pingalwara Charitable Society UK **(UK Charity No. 1178004)** 756 Bath Road, Cranford, Hounslow, Middlesex TW5 9TY UK Ph. (+44) 203 439 4440 Email: info@pingalwara.org.uk Web:www.pingalwara.org.uk Bank: Punjab National Bank International Ltd. Account No. 13000944 Sort Code : 60 95 00 Swift Code: PUNBGB 22 IBAN No. GB54PUNB60950013000944	**(IN CANADA)** **BIBI ABNASH KAUR KANG** **(Pingalwara Soceity of Ontario (Regd.)** **124 Blackmere Cir,** **Brampton, ONT., L6W 4CI,** **Canada** **Ph: 905-450-9664, 416-674-3341** **Email-abnash6@yahoo.com**	**(IN USA)** **JASWANT SAWHNEY CHARITABLE TRUST** **In Association with** **All India Pingawara Charitable Society (Regd.)** **7713 Toburk CT,** **HANOVER, MD 21076-1643 U.S.A.** **BIBI JATINDER KAUR DUSAJ** **Ph. 410-551-8010** **E-mail-kaurg 2004@yahoo.com**