

Assessment of Pros & Cons of three Agri Bills 2020 of India

S. Jeevananda Reddy

Former Chief Technical Advisor – WMO/UN & Expert – FAO/UN Fellow, Telangana Academy of Sciences Convenor, Forum for a Sustainable Environment Hyderabad, TS, India.

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***Corresponding author:** S.Jeevananda Reddy, Former Chief Technical Advisor – WMO/UN & Expert – FAO/UN Fellow, Telangana Academy of Sciences Convenor, Forum for a Sustainable Environment Hyderabad, TS, India

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Abstract

On 20th September 2020 central government brought out three Agri Bills. Though Parliament passed the bills with brute majority but truly speaking in Rajya Sabha the bills was not approved in true sense as they lack the majority. On 27th September President of India gave his assent to such bills. It is the “Dark Day” in the annals of Indian Agriculture History. It is a greatest cruel joke on Indian farmers. Farmers are demanding to provide legal protection to MSP mechanism and scrapping of the three Agri Bills. The Prime Minister (PM) of India asserted that “the system of MSP will remain & government procurement will continue. The Agriculture Minister said the bills are not going to override the MSP mechanism. PM said in Rajya Sabha that MSP was there, is there and will remain in the future. In real terms all these have “zero” impact under contract farming & hoardings Systems. PM said that new farm laws optional, don’t take away provisions that existed prior to their being legislated. If that is the case, why we need Agri Bills & metering of Agri pump sets??? PM pronounced that the three Agri bills benefit small and marginal farmers. However, these farmers get benefitted under cooperative farming and not under contract farming wherein individual farmers have low bargaining capacity and thus need middlemen’s assistance. According to PM, technology means Genetically Modified [GM] crops. With the GM crops entry Indian economy will be in doldrums. However, the new Agri Bills of 2020 fit in to BJP national policy of “privatization and corporatization” of India wherein poor have no right to live. PM’s and as well “Dr. M.S.Swaminathan’s report “One market and one nation on paper it is impressive but in reality it is false propaganda item only”. The states must come up with their own policies based on local conditions that help in improving socio-economic conditions of farming community and food & nutrition security to all. Without this, simply by framing Laws or Acts to help business houses is bad. Pros & cons of all these issues are discussed in this article.

Key words: : Agri Bills, MSP, Farmers, Climate, Soil, GM crops, etc

1. Introduction:

The article is based on the report submitted to Supreme Court of India appointed Committee with some additions and deletions with the following covering letter: “Please see the given below viewpoints of mine on three Agri Bills of 2020 and other related issues for your kind consideration while presenting your opinion to Supreme Court of India.

Past Congress Rulers built empires of Public Sector Institutions that not only generated employment to Indian citizens and provided income to government. The BJP rulers of the past and present have been destroying these institutions under the disguise of running under losses. Niti Aayog CEO Amitabh Kant says “Government to privatise most PSUs – PM announced on 24th February 2021 that government is closing 100 PSUs that will fetch around 2.5 lakh crores” – same was highlighted by the Finance Minister (FM) in her budget. All these institutions are being handed over to Gujarat business houses! Even the so-called Agri Tech [GM seeds] was illegally brought into India by Gujarat to create empires to MNCs of the West. Take for example a simple case: “During Covid-19 RIL lost lakhs of crores in share market and within no time FM raised the cap on FDIs. With these



thousands of crores flooded in to RIL and at the same time trashed accounts of Indians emptied in foreign banks. And Ambani became the 4th richest person in the world within few days”. The same formula could have been used in the Public Sector Institutions running under losses due to government’s apathy and saved them. Spending hundreds of crores-built Sardar Vallabhabai Patel Statue, to get visitors planned to spend thousands of crores to build train services from all parts of the country, lakhs of crores infra projects planned to build in Gujarat state. The Sardar Patel Stadium, Ahmedabad Motera, closed for renovation in 2015 and reopened on 24th February 2021 as the largest cricket stadium in the world but under a new name — the Narendra Modi Stadium.

States and Central Governments haven’t formulated agriculture policies based on the existing conditions in a given state and in India in general except that they look at how to get political mileage to get elected subsequent elections. BJP central rulers, in addition, are looking at benefitting business houses in India and multinational companies of the West [MNCs] as BJP is pro-business houses party. In this processes centre using arm twisting policy by pressurising states to follow their footsteps. This is the case with Telangana and Andhra Pradesh states wherein Centre gave an ultimatum to these states, as they provide free power to farm pump sets, to implement central order on metering agri pump sets, etc.

On September 27, 2020, the president of India Mr. Ram Nath Kovind gave his assent to the three Agri bills that were passed in the dark in the Rajya Sabha. They are:

- The Farmers’ Produce, Trade and Commerce (Promotion and Facilitation) Bill, 2020.
- The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Bill, 2020.
- The Essential Commodities (Amendment) Bill, 2020.

Fallacies in Agri component in 2021-22 Union Budget:

The three Agri Bills of 2020 fits in to the BJP’s concept of “Privatize and Corporatize” India. 2021-22 Union Budget highlights this concept openly. The removal of limits on stockpiling of food grains, pulses, onion, potato and oilseeds, will lead to hoarding that affect common man on the one hand and on the other procurement for PDS and thus farmers getting MSP. That means common man has to spend more money for groceries and at the same time income from bank interest have been drastically reduced day by day as FM favour business houses by lowering the interest rates. Thus, assessing clause by clause of Agri bills have no meaning as they have “interactive impact”.

Hon’ble Finance Minister of India, Smt. Nirmala Sitharaman presented the Budget-2021-22 on 1st February 2021. It is claimed as lifetime budget basically because the budget created “One World - One Market” similar to Agri Bills concept of “One Nation - One Agricultural Market” Dr. M. S. Swaminathan Committee also used this term. The Indian Government by this way putting all infra into few Multinational Companies [MNCs] hands.

Let us see few fallacies: Crop insurance covers few farmers based on age and acreage. A report released by the central government present farmers’ contribution plus government contribution for 2016-17 [Kharif & Rabi Seasons] was Rs. 22,279 crores and of which the companies paid Rs. 16,279 crores. The balance Rs. 6,066 crores are the profit gained by the companies. In 2017-18

Kharif, they are respectively, Rs. 19,767, 16,967 & 2,799. For all the three seasons they are Rs. 42,112, 33,247, & 8,865 crores. However, the profit levels zoomed in the state of Andhra Pradesh:

- 2013-14/ paid 137.60 crores for 8.52 lakh farmers; received 56.39 crores by 1.18 lakh farmers;
- 2014-15/ paid 145.97 crores for 10.0 lakh farmers; received 78.86 crores by 1.80 lakh farmers;
- 2015-16/ paid 145.71 crores by 7.73 lakh farmers; received 44.00 crores by 1.79 lakh farmers;
- 2016-17/ paid 294.29 crores by 9.75 lakh farmers; received 178.49 crores by 2.35 lakh farmers;

The budget presented some figures on subsidies, but reality is “how much farmers have got and how much has gone into black market” is a big question. In 2017 February PM informed to parliament that government saved the subsidy component by 49,500 crores by direct transfer of subsidy to beneficiaries as proposed by UPA government. These are not accounted in the budget when presenting figures or subsidy component paying to industry – however this scheme has not been extended to all India yet even after six years of BJP rule. Agriculture credit target is fixed at Rs. 16.5 lakh crores for 2021-22. Here nobody knows how much is going for real activity and how much is going into black-market. Same is the case with food subsidy component. Government of India must resolve these wasteful expenditures before telling the public so much we are spending on agriculture. Every now and then states and central governments bringing out loan waiver schemes as vote bank politics. Only few farmers who took loans from Banks are only eligible for loan waiver. This runs in to thousands of crores. TS government has been giving Rythu Bandu for all farmers [not tenant farmers] Rs. 10,000 per acre, which is less than that of loan waiver. Central government has been giving Rs. 6,000 per acre in three instalments but only for few farmers with stipulated criteria. In the loan schemes bank employees, politicians and middlemen minting money through bribes from farmers who get loans. Such bad policies are umpteen in Agriculture but rarely governments like to streamline them and instead harping on Agri Bills to favour corporate houses. BJP government introduced GST depriving the states from their income and now introduced another such system “Agri Cess”. Common man is paying these. To protect GM cotton-based business houses, the government imposed 10% tax on import on cotton/cotton-based products wherein the major beneficiaries will be Gujarat cotton farmers & business houses. Large part of budget allocations has gone towards arrears payment in 2020-21; and this is same with the 2021-22; also, under food and input subsidies. Farmers started protests against these bills in “severe winter cold”. Unequivocally the farmers groups said they won’t stop their protests until they achieved the twin goals: “Scrapping of the three Agri Bills and getting the legal status to MSP”. To outplay the farmers and to achieve their goals government has been playing several games. For example: ruling party decided to start propaganda in support of the three Agri Bills in around 700 districts and 100 Press meets along with advertisements running in to hundreds of crores of public money. Also, PM brought out a book “Putting Farmers First” of 106 pages. Also, the battle reached the Supreme Court [SC] of India. Farmers groups boycotted the proceedings. Supreme Court headed by Chief Justice and two other Judges bench on 12th January 2021 suspended the implementation of three Agri Bills and set up



a four member expert Committee [already one member excused from the committee] to examine the Agri Bills in detail for determining which provisions passed muster on the count of farmers' welfare and give a report to the court in two months". However, the four members of the panel are pro-Agri Bills and Pro-government. However, farmers carried out their planned rally on the Republic Day on 26th January in Delhi. At the same time government-initiated discussions with the farmers groups and at 10th round government offered to keep the bills in abeyance for 18 months. The government used this type of tactics to weaken the protests. However, even at 11th round farmers were firm on their two points. The protest march on 26th January 2020 marred with some incidents with pro-government infiltrators. With this, two farmers groups withdrew from the protest. This way government was successful in its objective of dividing the protesting groups. On 29th January 2021 government comes up with another committee with six months mandate. Government tried to force the farmers to leave but this made more farmers joining them.

Before we go into the issues pertaining to the three Agri Bills of government of India, we must understand the salient features of Indian agriculture. Let us see some of these:

- (a) India's total geographical area is 329 million hectares (Mha) of which 195 Mha is gross cropped area and 141 Mha is net cropped area. That means, only 54 Mha more than once crops are cultivated in a crop year on the same piece of land. In the net cropped area, the net irrigated area is only 65.3 Mha and the rest of the cropped area [75.7 Mha] is at the mercy of "Rain God";
- (b) In India small and marginal farmers with less than 2.0 ha [5 acres] of land account for 82.6% [126 million farmers] of all farmers but just own 47.3% [74.4 Mha] of the crop area in 2015-16; just 13.2% of farmers with 2.0 to 10.0 ha constituted 43.6% of the crop area. Average size of operational holdings varied from 2.28 ha in 1970-71 to 1.55 ha in 1990-91 to 1.08 ha in 2015-16. That shows a steady decline in the average operational holding size with increasing population. Thus, this may come down with the time;
- (c) At the same time the population changed from 1950 to 2014 in China and India respectively was 543 million to 1.39 billion and 376 million to 1.27 billion. In 2017 urban population in China and India respectively were 57.9% and 33.5%. A total of 42.6 million people was living in 8.3 million households of 640 slums in cities/towns across 26 states & union territories in India. That means less than 66.5% population lived in rural India; while this is less than 42.1% in China. Though in terms of geographical area China is around three times to India but population and area under irrigation are more or less the same. Area under agriculture in China and India respectively are 54.7% and 60.5%. At global level, Indian population constituted around 18% of global population occupying 2.7% of the land area and uses only 4% of world's fresh water but uses 25% of global groundwater.
- (d) India had 36 million agricultural landholdings in 1971. It increased to over 100 million in 2016. In 2016 agriculture and allied sectors like animal husbandry, forestry & fisheries accounted 15.4% of gross domestic product (GDP) with about 41.4% of the workforce in 2020. Any change in Agri sector severely affects workforce in this sector. India ranks first in the world with highest net cropped area followed by US & China. Thus, agriculture sector is playing significant role in the overall socio-economic fabrics of India.
- (e) in the past decade; India has emerged as a major agricultural exporter, with exports climbing from just over \$5 billion in 2003 to a record of more than \$39.3 billion in 2013. India became the world's seventh-largest exporter of agricultural products in 2013. India has become a very important player on the global market, especially for rice (\$7.1 billion), cotton (\$3.8 billion), sugar, and beef (buffalo). In addition to these products, India has also become a sizeable exporter of soybean meal, guar gum, corn, and wheat, as well as a diverse range of other products (\$17.1 billion).

2. Rulers opinions-statements on three Agri Bills of 2020

2.1 Aftermath of Bharat Bandh:

Public statements have been made by ruling party leaders & union ministers including PM aftermath of the Bharat Bandh on the three Agri Bills. On 8th December 2020 PM said that reforms are needed for development. The basic question anybody can ask him is, for whose development? Is it for the development of farmers or for the development of corporate business houses? PM also said that the next century cannot be built with laws of the previous century. "Some laws from the past century have become burden now". Unfortunately, the so-called new idea appears to be not new, but it was part of BJP rule prior to 2004 – even economic survey report mentioned that for 20 years trying these. Also, we know the fact that traditional agriculture is far superior over new tech agriculture entered into India after 1960.

PM said that the impact of the government's reforms can be seen in the recent election results and those reforms should be a continuous process. PM says that "in the recent years the poor and the middle class have showered their "unprecedented blessings" on the efforts of the government" and "This support gives me the courage to do new things and take new initiatives?" Dismantling the elected bodies through backdoor methods will not form the "peoples' support". Also, elections are fought on different footing – religion, caste, money bags, etc. -- and they don't form part of Agri Bills referendum. PM said at the annual meeting of the Federation of Indian Chambers of Commerce and Industry in New Delhi that "Reforms will help draw investment in agriculture and benefit farmers," The fact is, it helps only the corporate business houses. One lakh crore infra-fund announced by the government goes to them only. This may help in the coming West Bengal & Tamil Nadu Assembly elections. PM said that at least 30 farmer unions are actively protesting against the new laws. The two Telugu states had a total bundh against the three Agri Bills. Also, thousands of members of the Indian diaspora held rallies in London against the new laws while over 15 Indian opposition parties supported the protest. PM thinks "India is Gujarat or Gujarat is India" as is misused the words like "Climate change is global warming or global warming is climate change".

National Agricultural Policy (NAP) of Government of India announced in 2000 envisaged that "Private sector participation in agriculture shall be promoted through contract farming and land leasing arrangement (corporate farming – TDP a partner of BJP proposed under vision 2020) to allow accelerated technology transfer, capital flow and assured markets for crop production. This was formalised by NITI Aayog – A BJP's spokes Person --



with draft model contract farming law titled Agricultural Produce and Livestock Contract Farming (Promotion and Facilitation) Act, 2018. PM announced, “With this farmers income will double”. Where is the Congress role in these bills? Previous UPA government proposed in its 2011 budget to establish go-downs & food processing units at local level. These not only provide employment to locals but also help farmers to participate in this. It is not Contract farming. They presented higher year-wise steps in MSP and fertilizer supply by increasing the subsidy component. Anybody can see this from Agricultural Statistics. The Essential Commodities (Amendment) Bill, 2020, seeks to remove commodities like cereals, pulses, oilseeds, edible oils, onion and potatoes from the list of essential commodities. This will end the imposition of stock-holding limits except under extraordinary circumstances. – This is businessmen friendly amendment. The bill on Agri market seeks to allow farmers to sell their produce outside APMC 'mandis' to whoever they want. Farmers will get better prices through competition and cost-cutting on transportation. However, this Bill could mean states will lose 'commissions' and 'mandi fees. – This is worse than the existing system wherein the middlemen play the crucial role. PM said that “Our agriculture sector is in desperate need of latest technology that assists the industrious farmers. Now, with the passage of the bills, our farmers will have easier access to futuristic technology that will boost production and yield better results. This is a welcome step.” More than 80% of farmers come under small and marginal, how it is going to help them? It is only hypothetical statements to achieve their stated goal of “privatise and corporatize agriculture”. Farmers need government support. Otherwise it turns into Corporate Agriculture as proposed by TDP prior to 2004. -- Here, it means government based research will be killed – then why we need ICAR and instead BJP government can hire World Bank to serve their vested interest -- and it is going to be put in to the hands of multinational companies like Monsanto. That means conversion of India into Genetically Modified Agriculture. This affects Indian economy severely. We have seen the green revolution technology entry increased the cost of production – by 1983-84 the yields reached a plateau. This technology caused severe water pollution that results polluted food – health hazards.

2.2. Putting Farmers First:

2.2.1. Introduction:

Prime Minister of India circulated his book entitled “Putting Farmers First” of 106 pages. It appears the entire foundation to this book is the text presented in page 10 under “Gujarat’s Agrarian Miracle Catapults Modi to National Stage”. All those items present “MYTH”. Why I said “myth” can be seen from the below presented discussion on few major issues presented in Page 10 of the book. I discussed some of these issues in my books starting from 2000 [see Reference section], which was prepared after my return to India from assignments with UN Organizations [FAO & WMO].

2.2.2. Doubling of farmers’ income by 2022:

Doubling of farmers’ income -- even Finance Minister in her 2020-21 budget presentation said on doubling of farmers’ income -- is not possible even by 2050 or by 2100 basically because of:

The Green Revolution Technology [GRT] was introduced around 1960. Animal Husbandry played vital role in farmers’ economic security and household food & nutrient security in rural India under traditional agriculture with no government subsidies. This system was disturbed with the poor quality fodder under mono-crop system of GRT under high subsidies – with the curtesy of Dr. M. S. Swaminathan who minted money under the disguise of awards/rewards for this; and similarly Al Gore, the former Vice-President of USA with global warming. The yields reached a plateau by around 1983-84 but introduced severe air & water pollution, polluted food & thus created health hazards. Unfortunately, we always look at positive aspects but rarely look at disastrous negative aspects. Figure 1 presents the Indian Agriculture – inputs & outputs (Reddy, 2003 & 2019b). The yield increases after 1983-84 were not consummate with increase in area under irrigation and chemical fertilizers. Figures 2 presents the chemical fertilizer impact on crops yields in Andhra Pradesh. Chemical fertilizers were consumed principally in paddy cultivation. After 1983-84 increase in paddy yields were not consummate with increase in area under irrigation and chemical fertilizers.

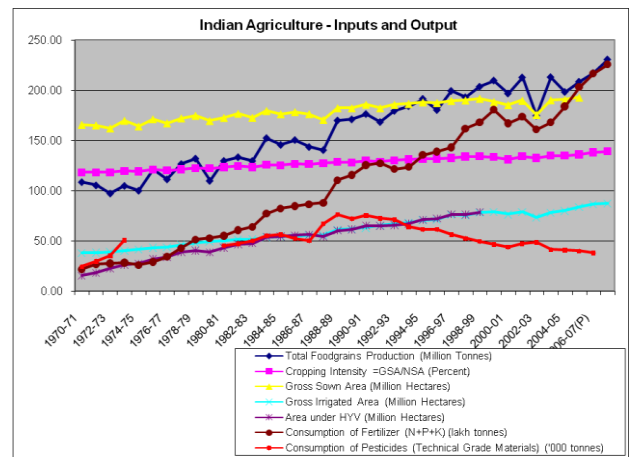


Figure 1: Indian Agriculture – Inputs and output

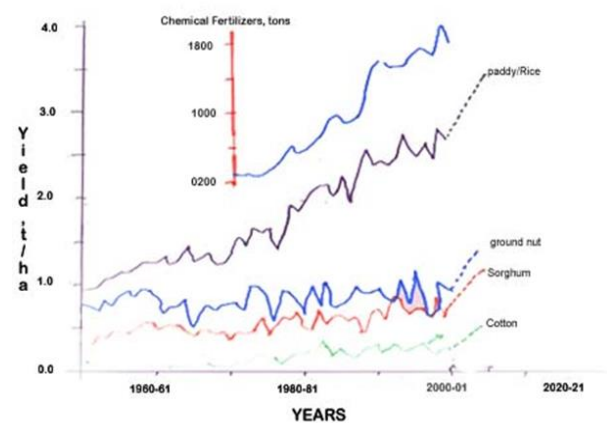


Figure 2: Impact of chemical fertilizer use in Andhra Pradesh on Crops yields with years

Figure 3 presents the impact of GRT on crops area & Figure 4 presents the year-wise and source-wise irrigation in ha in Andhra Pradesh. With GRT sorghum showed a sharp fall in area while



there is a sharp rise in area under bore-well irrigation.

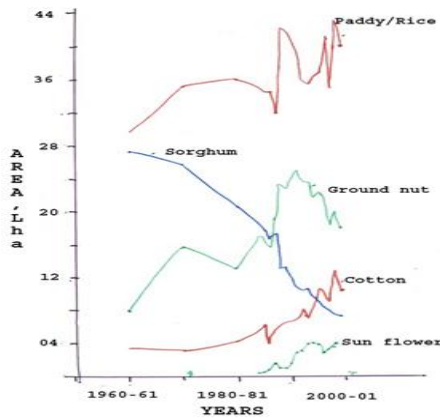


Figure 3: Impact of GRT on crop areas with the years

this now brought in BG-II & BG-III, internationally prohibited seed, including UN, illegally and cultivated in India illegally – known as terminator technology which acts like scratching the head with fire.

In fact, Indian private seed companies developed excellent varieties but under the Monsanto monopolizing cotton seed, all those were converted into GM seeds, which fetched higher price. GM technology has no capacity in increasing the yield over the non-GM parents. Though they say it protects from pests/diseases but unfortunately, they introduced new pests/diseases [like pink bollworms] that are affecting even neighbouring farmers crop lands. The yields of non-GM are better than GM – however, GM seed cartels banned the non-GM seeds sale in the market. Adulterated seeds have been thriving. The farmer’s suicides increased in the five states where it is grown. With these costs of inputs has gone up over GRT.

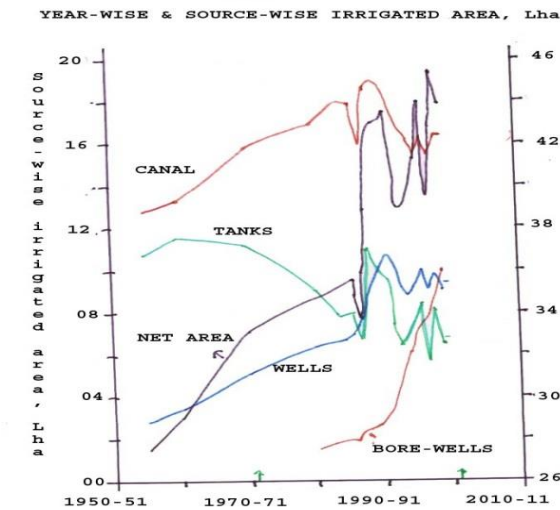


Figure 4: Year-wise and source-wise irrigated area in Andhra Pradesh

2.2.3. Factors contributed for its success:

It observed that several factors have contributed to its success; from technological success of Bt-cotton to check dams recharging groundwater, to Narmada. It is a false claim basically because: (a) Gujarat is notorious in growing Bt-cotton (Reddy, 2019b) seeds illegally brought into India. Such seeds of groundnut were cultivated but developed severe dangerous virus. After getting the information, government officials burnt the entire crop. This seed reached Anantapur, a groundnut zone in AP was also burnt. Here the profit is the motive with no respect for environment or human beings or food security. In the case of Bt-cotton the seed entered India illegally and seeds were also produced & cultivated illegally. We filed a PIL on this in AP High Court in 2002/03. In the middle of the case our Advocate shifted his loyalty to seed companies. However, this seed has poor stability. The only difference between GRT and GM Technology is that GM seed is replaced with GRT seeds – both the seeds have been tailored to chemical fertilizers. It also suffered similar to GRT by reaching plateau in productivity within 7 years (Table 1). The seeds with poor stability were modified three times in around 7 years. With

Year	Cotton area and production					
	Andhra Pradesh			India		
Area (Lha)	Yield (kg/ha)		Yield		Pesticide	
	Bt	non-Bt	(Mha)	(Mha)	(kg/ha)	(crore)
2002-03	212.5/0.04	229.1/0.803	7.66	13.6	302	2622
2003-04	408.0/0.05	383.9/0.832	7.63	17.9	399	3147
2004-05	318.7/0.40	315.8/1.34	8.78	24.3	470	3581
2005-06	347.3/0.324	346.7/0.709	8.67	24.4	478	2439
2006-07	381.1/0.657	380.5/0.315	9.14	28.0	521	3396
2007-08	525.0/0.33	525.0/0.101	9.41	30.7	554	4697
2008-09	434.0/1.43	434.0/0.255	9.40	29.0	524	5293
2009-10	376.5/1.430	213.8/0.66	10.3	29.5	486	6999
2010-11	545.7/1.795	919.5/0.22	11.1	31.2	475	7683

Lha = lakh hectares, Mha = million hectares, Mb = million bales, kg/ha = kilograms per hectare



Table 1: Cotton area and production in AP & India

Table 2 Presents for Gujarat state the average cotton of three years [2007-08 to 2009-10] in terms of area, production & yield under irrigation, under rain-fed; and yield for three years. Irrigation contributed for doubling of the yield in Gujarat and not the technology.

Typ e	Ar ea (L ha)	Pr od. (L mt)	Yi eld Kg /ha	Av e.	1	2	3
Irrig ated	15.616	63.269	689	770	663	627	637
Rai nfed	8.517	12.367	247	282	247	198	198
Tota l	24.133	76.636	533	58	580	506	506

*1=2007-08, 2=2008-09, 3=2009-10

Table 2: Area, production and yield in Gujarat state for cotton

Figure 5 presents time series of cotton productivity for different countries. India presents dismally low yields; that means GM is not suitable under tropical warm countries like India.

Cotton productivity in India is low compared to other countries

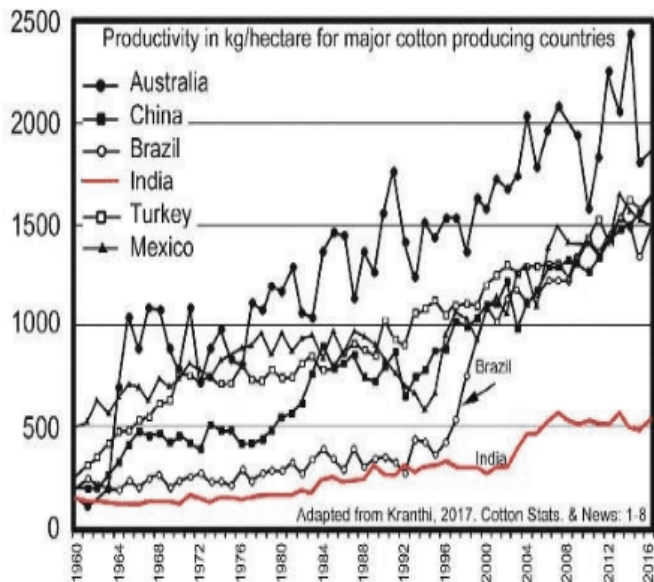


Figure 5: Cotton productivity in in different countries [kg/ha]

(b) GM food crops:

Seeds of GM food crops entered India illegally and now the

government made it legal. Internationally several countries banned GM food entry into their countries. As a result, India loses the opportunity to export food as it comes under “food contaminated with GM”. So, our exports loss is gain to GM food imports. That means with lopsided policies seed industry is expected to go into the hands of multinational seed giants and exports and food processing will be affected severely and thus employment to youth and other small-scale business houses, etc. also will be affected. Also, India becomes dumping ground for GM food as no controls like GM Food Label – internationally fighting on this -- and Indian people can be used as Guinea Pigs. It is important to note that excellent AP seed Corporation that used to supply seeds even to other states was killed by BJP-TDP regime prior to 2004 and encouraged private seed companies. Also, extension services were weakened. AP state Agri minister was side-lined for getting a report on Bt-Cotton; and Central Health Minister made observations against GM food in Hyderabad and by the time he reached Delhi, he lost his job.

(c) Check-damps-Narmada dam:

A national TV channel telecasted discussion on watersheds versus Narmada Dam. Minister from Gujarat challenged NBA representative to show where the watershed technology was successful in Gujarat. Narmada Dam was not Gujarat or BJP Dam!!! In my first referred book I presented data on watersheds/check-dams in AP. In the case of Yerracheruvu watershed near Anantapur, the groundnut yields varied between 3.23q/ha during 1989-90 and 18.40q/ha during 1986-87 with base yields of 8.90q/ha during 1983-84. The life of the Check-dams was short -- around three years. However, the watersheds programme helped politicians mint money and the watersheds disappeared in no time.

2.2.4. UPA Government promised subsidised fertilizers – failed?

They [UPA Government] promised subsidized fertilizers but it used to get routed to black markets rather than reaching farmers. This is not so, let us see the facts:

(a) Two IIM Professors from Ahmadabad in Gujarat brought out a report “Fertilizer Subsidy in India: Who are the beneficiaries?” in 2009; and the same was submitted to Prime Minister of India Dr. Manmohan Singh [W.P. No. 2009-07-01]. They argued that the subsidies must be given to industry only. On this I sent my response [2010] with a copy to PM wherein I proposed that the subsidies must be given to farmers directly. In fact, this was part of my submissions to “Approach Paper to the 12th 5-year Plan” – to the Director, Plan Coordination Division of Planning Commission with copies to Hon’ble Prime Minister & UPA Chairperson. I said that “Nearly 25 to 30% of fertilizers supposed to be distributed to farmers’ changes hands illegally through official-political-industry channels, etc., etc.” I also presented this in my talk on All-India Radio [from Delhi]. Later the Union Finance Minister in his budget presentation on February 28, 2011 proposed that “A task force has been set up to work out the modalities for the proposed system of direct transfer of subsidy for kerosene, LPG and fertilizers.” After this, political groups submitted a memorandum to PM asking him to give cash transfer directly to retailers. On this I sent again a mail to PM saying that



fertilizer subsidy must be given to farmers only and not to either industry or retailers. On this received a letter from the Ministry of chemicals and fertilizers, Department of fertilizers dated 28-12-2011 with reference to my mail to PM dated 23-05-2011 confirmed direct subsidy transfer to beneficiaries only and not to retailers or industry. PM stated on 7th February 2017 that government saved Rs. 49,500 crores going to middlemen. However, this scheme has not been extended to entire country so far. Why??? Unfortunately to date farmers are not getting their quota and sometimes getting adulterated fertilizers.

(b) From the IIM professors report it is clear that there was a large gap between production and consumption during 2003-04 to 2007-08. The report also presents a steep rise in fertilizer subsidy component after 2007-08 while the fertilizer as percent of total subsidies fall steeply during 2000 to 2003 as imports were bottom low though prices were low; and there onwards started steep increase.

(c) As net irrigated area is around 46.3% of net cropped area only and that too it is unequally distributed in different states and thus fertilizer consumption changes accordingly. The major shares of fertilizers are consumed by paddy, wheat, sugarcane & cotton. That means, agriculture policies must be developed by individual states as per existing conditions in that state. Centre should stop imposing of lump sum rules like three Agri Bills of 2020 on states.

2.2.5. Weather & Climate:

Earth’s climate is dynamic, and it is always changing through the natural cycles. What we are experiencing now is part of this system only. It is beyond human control. We need to adapt to them. As part of the natural cycles in rainfall, droughts and floods are common to India. The water availability in rivers followed these cycles. They played crucial role on agriculture productivity (Reddy, 2019a & c).

Prabhava is below the average part of the cycle – a dry period similar to the tree ring part. Also 1830-60 tree ring part of dry period fall under below the average 30-year period [1835-66]. The yearly water availability in Godavari River (Figure 7) and high magnitude floods in NW Indian Rivers (Table 3) followed the all-India annual rainfall 60-year cycle. The current dry period of 30 years started from 2017-18.

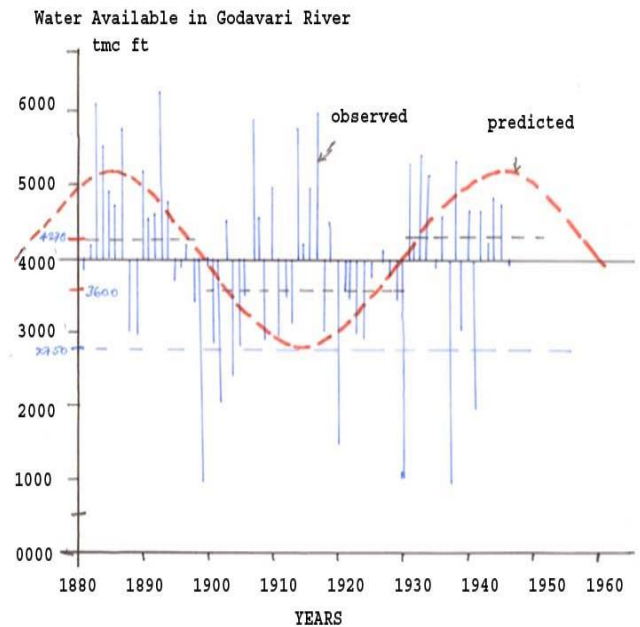


Figure 7: Annual march of Godavari River water flows [60-year cycle]

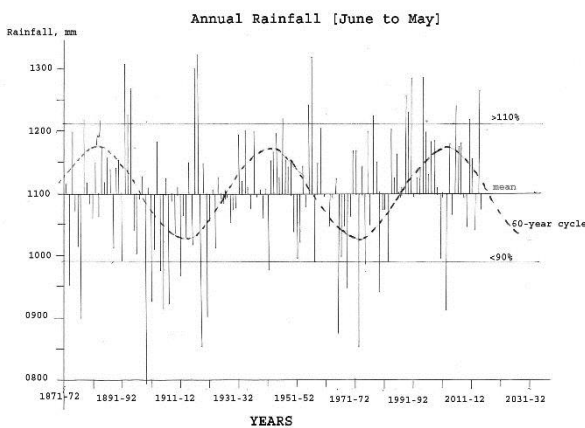


Figure 6: Annual march of all-India annual rainfall [60-year cycle]

All-India annual rainfall presents a 60-year cycle (Figure 6). This is similar to Indian Astrological calendar wherein Prabhava started in 1987/88 & it lags by three years to Chinese Astrological 60-year cycle. 7 centuries [1309 to 2004] tree rings analysis showed a relationship with water flows in River Brahmaputra. The 30-year period from Prabhava is above the average part of the cycle – a wet period similar to tree ring part; 30-year period before

Frequency of high magnitude floods*			
River	Period	Frequency	Climatic cycle
Chenab	1962-1990	1 in 9 years	(a) below the average
	1990-1998	1 in 3 years	(b) above the average
Ravi	1963-1990	1 in 14 years (a)	
	1990-1998	1 in 3 years	(b)
Beas	1941-1990	1 in 8 years	(a)
	1990-1995	1 in 2 years	(b)

Table 3: Frequency of high magnitude floods in NW Rivers around 1 in 3 years in (b) and 1 in 10 years in (a)
*State of Environment Report, India – 2009, MoEF/GoI

Figure 8 presents (a) the annual rainfall of Andhra Pradesh and (b) the Krishna River annual water flows. They follow 132-year cycle. The current dry period part of 66 years started from 2001-02.

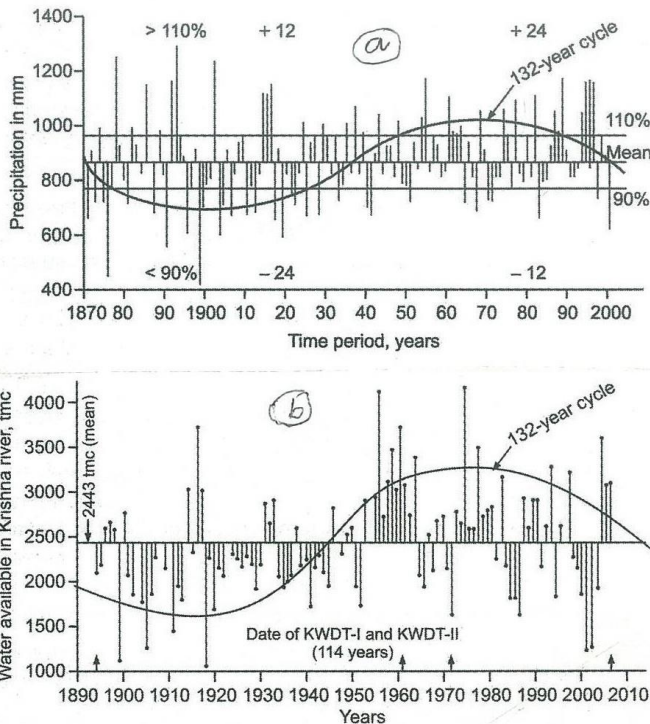


Figure 8: Annual march of (a) Andhra Pradesh annual rainfall & (b) Water availability in Krishna River

Unfortunately Indian government is more interested in pseudo global warming even though we grow crops in the three seasons by selecting seeds that are tolerant to that season and soil types – as the temperature regimes are different under different soil types: example: Anantapur, Kadapa & Kurnool (Reddy, et al., 1984 & Reddy, 2020). Adjusted Global average annual temperature time series of 1880 to 2010: Natural variability presented 60-year cycle varying between -0.3 to $+0.3^{\circ}\text{C}$; Trend presented 0.6°C per century – in this greenhouse effect part is more than half; in this major component is global warming – if we take it as 50% of the total trend then global warming is 0.45°C for 1951 to 2100 – under linear trend, in reality it is not linear. With sparse met network in rural areas, the data series underestimates the rural cold-island effect. Thus, the global warming by 2100 is far less than 0.45°C (Reddy, 2020).

Vote Bank politics in inter-linking of Rivers Water leads to water wars with lopsided water assessments & decisions:

We have seen from Figures 6 & 8 that rainfall is highly variable from region to region. Inter-linking of rivers though this is a good concept, now political parties are misusing to get political mileage – vote bank politics -- and destroying the very basic foundations of the concept. With Tamil Nadu elections are around the corner, central government is in a hurry to push the issue of interlinking of Godavari with Kaveri via Krishna. In my earlier letters to state & central governments said that water is not available to inter-linking of Godavari with Kaveri and suggested instead initiate Ganga-Kaveri. However, Jal Sakha ministry appears to be contemplating to reduce the height of Polavaram [while Almatti Dam height is being raised illegally] under the disguise of cost. Who was responsible for the delay in completion of the project? It is CWC. Who was responsible for cost escalation? It was CWC

with the fictitious proposal of 50 lakh cusecs instead of 38.2 lakh cusecs maximum flood water. In the starting of March, Godavari River at Badrachalam temple is nearly dry even with good rains in 2020.

Central Water Commission (CWC) says plenty of water available in Krishna and Godavari. In the case of CWC, they used poor model on one hand and on the other the estimates under Godavari refers to high rainfall 30-year period of 60-year cycle and fortunately 30-year period of Krishna River water covers both below and above the average periods. Godavari River water used by the Bachawat Tribunal followed the 60-year rainfall cycle and Krishna River water followed 132-year cycle. According to these data series, water availability in Krishna and Godavari Rivers varied between 1000 to 4500 with a mean of about 2400 tmc ft and 1000 to 6000 with a mean of about 4000 tmc ft, respectively. The coming periods are under below the average system only in both the rivers. While assessing the water availability, 60-year cycle must be taken into account in the case of Godavari River water flows. Here we must remember the fact that 100% to 75% of probability level we experience deficit towards 1000 tmc ft with few tmc ft going in to the Sea; and from 25% to 1% of probability level we experience excess towards 6000 tmc ft that help more water going in to the Sea. 75% to 25% probability levels are the water available for the riparian states. In this range rarely surplus water is available.

The idea of inter-linking of rivers is not new. It was on going issue in India. Bachawat Tribunal while clearing the Polavaram Project cleared the inter-linking of Godavari River with Krishna River. Here, knowingly or unknowing the period of data on water flow in Godavari River used refers to one full 60-year cycle of All-India Annual Rainfall period. More or less the same was the case with Krishna River. All the three riparian states agreed on Bachawat Tribunal data series. However, the 2nd Tribunal bulldozed the opposition on the data series. He used high rainfall period and as well followed CWC to favour Karnataka.

According to Jal Sakti ministry “The draft Detailed Project Report (DPR) of Godavari (Inchampalli/Janampet) – Kaveri (Grand Anicut) link project consisting of 3 links viz., Godavari (Inchampalli/ Janampet) - Krishna (Nagarjunasagar), Krishna (Nagarjunasagar) - Pennar (Somasila) and Pennar (Somasila) – Kaveri (Grand Anicut) link projects has been completed by National Water Development Agency (NWDA) and sent to party States in March 2019. Godavari River to Nagarjunsagar dam (through lifting) and further south for meeting the demands of Krishna, Pennar and Kaveri basins. Earlier, Nitin Gadkari, the then Water Resources Minister had said that Godavari-Kaveri River linking project would resolve the water disputes of Andhra Pradesh, Telangana, Karnataka and Tamil Nadu. The project will make use of 1,100 tmc ft water of Godavari which is currently being wasted by going directly into. It is far from the truth. Draft DPR says that 247 tmc ft of water can be diverted from Godavari River to Nagarjunasagar.

The basic question is while preparing DPR committee used CWC estimates or observed data series taking in to account the rainfall cycles – natural variability part of climate change. If the DPR is based on CWC data series may lead to “Water Wars in future” among the riparian states that come under inter-linking. I don’t know whether the Central Government appointed task force under the Chairmanship of Sriram Vedire has taken this into account or not.

However, some basic issues need an answer in view of the



existing illegal water use in both the river basins by riparian states, namely: (a) Is 247 tmc ft of water will be available every year? If not for how many years, it is available? If more than two consecutive years not available, then what is the solution? In all these who will decide, and will all the riparian states abide by that decision? (b) Who will bear the cost of lifting 247 tmc ft of water or if not how to share it? Will all the riparian states agree for that?; (c) On its way how much water is going as pilferage --- using motors -- or leakages due to poor workmanship?; (d) What will be the impact of Karnataka & Maharashtra water use pattern from the Krishna & Godavari Rivers on linking of rivers?; & (e) What will be the reaction of Tamil Nadu during low water availability years? Will TS & AP agree to share the water with Tamil Nadu in such a scenario?

Finally, I have two basic questions to Sriram Vedire, Chairman, Task Force Committee on inter-linking of rivers in India: (a) why the committee is in a hurry in taking up Godavari-Kaveri linking with umpteen disputes among riparian states instead of Ganga-Kaveri linking? It appears that the plan of Polavaram dam height reduction is part of this great game! (b) Who will be the “gaining state” and who will be the “loosing state” with the proposed scheme of Godavari-Nagarjunasagar? & (c) By reducing Polavaram dam height, flood water is not going to affect???

3. Three Agri Bills of 2020: Pros & Cons:

3.1. Agri Bills versus MSSC Report:

On December 9, 2020 Yaman Garg presented an analysis of the three controversial Agri Bills of 2020 with reference to M. S. Swaminathan Commission [MSSC] recommendations on agriculture in 2004. MSSC was constituted in 2004. It submitted five reports, with recommendations on alleviating distress of farmers and provided a framework for a sustainable and profitable agricultural system. The fifth and the final report discussed numerous issues including land reforms, irrigation reforms, production growth, food security, credit and insurance facilities and prevention of farmers' suicides and ran into almost 300 pages. The MSSC had recognised the problem of cartelisation among traders in a particular Agricultural Produce & Livestock Market Committee (APMC) and thus recommended the establishment of “One Nation-One Market”. The report vouched for “development of domestic and international markets for local produce and move towards a Single Indian Market.” To achieve the same, it suggested simplification in the movement of goods by abolishing road tax and local taxes and introduced a National Permit for plying commercial vehicles anywhere in India. These measures, as suggested by the commission, would help in enlarging small regional markets into a large national market, reduce transportation cost and improve the competitiveness of our agriculture. – However, MSSC failed to mention the impact of Genetically Modified [GM] crops on these issues. GM seeds have already been monopolised by Monsanto not only Indian market but also global markets.

Although the objective of One Market was conceived both by MSSC & Agri Bills, the latter diverts from the means suggested by the former to achieve the end. Establishing a somewhat different ‘One Nation-One Agriculture Market’ from the one envisaged by MSSC, the Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 creates space for barrier and tax-free inter-state and intra-state autonomous agricultural

trade – here MSSC failed to look at the middlemen role under small & marginal farming. BJP governments imposing several types of taxes that directly or indirectly effect it, like GST and now the present [2021-22] budget proposed Agriculture cess/taxes.

State governments are forbidden from levying any market tax, cess or levy outside APMC zones. Thus, farmers would be able to enter into direct contact with the consumers or food processing companies without going through any middlemen or licenced traders. All traders in every place of production and collection of farmer’s produces (except APMCs), will have access and foster competitiveness and thereby ensuring better prices to the farmers. The Act does not actually abolish the current APMC regulations but restricts the enforcement of APMCs to the physical boundaries of the markets. The act may, according to the government, result in higher competitiveness, which may also make APMCs more productive in delivering cost-effective marketing services. This too was recommended by MSSC. Furthermore, it is expected by the government that the prevalent prices in the APMC markets will act as a baseline price for farmers selling their goods outside the APMC markets, allowing farmers to find better prices. – It is theoretically true but practically it is far from truth and the middlemen plays the major role. We must remember the fact that GST & Agri-Cess indirectly impact most of them.

The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020 provides a framework for contract farming. Additionally, the Essential Commodities (Amendment) Act, 2020 has provided exempt middlemen from stock limitations for contract farming, offering encouragement for major companies to indulge in contract farming. MSSC too vouched for the facilitation of direct farmer-consumer link and suggested value addition and marketing, for leveraging institutional support. – this is not happening always, for example subsidized rice under PDS is entering more than 30% into black market effecting the MSP to paddy as millers have been recycling them and thus affecting purchases from farmers. I brought to the notice of PM who deputed Dy. Agri Minister to undivided AP to advice the CM to pay in Checks the MSP price. But nothing happened. This is reality. Even under contract farming of tobacco in AP farmers are not getting the uniformly the same price. It all depends up on the byer fixing the price. --Table 4 presents the allocations towards MSP for wheat, paddy & pulses in three years. Here FM tried to show the difference between Congress and BJP governments’ allocations towards MSP. FM should have given one year during prior to 2004 BJP rule. FM [in 2021-22 Budget] did not mention really how much was paid to farmers and how much to middlemen and how much unpaid. The reality of this is clearly evident from a report dated 25th January 2021 “Telangana farmers lose as traders by cheap paddy from other states for export”. If the MSP is Rs. 1,885 per quintal in Telangana and Andhra Pradesh, it is around Rs. 1,650 in other states. The difference in price gives a huge advantage to exporters as well as consumers abroad. Paddy is exported from India to 170 countries. This clearly shows the fundamental fallacy of “One Nation - One Agriculture Market” in three Agri Bills of 2020. Here the issue is who is exporting?



Year	MSP in Crores of Rupees		
	Wheat	Paddy	Pulses
2013-14	33,874	0,63,9128	00,236
2019-20	62,802	1,41,930	08,285
2020-21	75,000	1,72,752	10,530

Table 4: MSP growth for wheat, paddy & pulses

Framers' Concerns:

The farmers' unions and organizations have concerns about two main issues. First, since MSP is not specified in any of the three Agri Acts, they fear that they might lose the secured option of selling to the APMC Mandis and that this will result in corporate exploitation. Second, in the absence of any legislation, they fear total corporatisation of agriculture, as agribusiness firms might dictate both the market trend and price levels and the terms of contract farming as local and poor farmers do not have the same bargaining leverage. However, the legislations do not mention any such special protections as were recommended by MSSC. And this is where another recommendation of MSSC becomes significant. While espousing for contract farming, the committee also highlighted the importance of developing a comprehensive model agreement which cannot be used against the farmers. While referring to contract farming, it observed- "The need is to develop a comprehensive, clean, equitable and farmer-centric model agreement, which cannot be abused against the farmers. Special care needs to be taken regarding clauses dealing with quality standards, withdrawal conditions, pricing standards, paying arrangements, natural calamities, and arbitration mechanisms." However, in reality they don't work under individual farmer level. This is possible only under cooperative farming at village or villages' levels.

However, the Agri Bills do not mention any such special protections as were recommended by MSSC. Though Article 3 clause 4 of The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020 does prescribe the central government to issue necessary guidelines and model farming agreement, it does not mandate it. Plus, there are no standards or requirements that have been laid down to ensure that the rules made are not arbitrary in nature and do not work against the welfare of the farmers. Most crucially, no institutional support mechanisms have been established to protect small farmers. In case of any discrepancies, there is no institutional leverage or support provided to the farmers, other than the dispute resolution mechanism, as against the big corporates who already possess extra thin leverage on their side thus leaving the farmers exposed to their exploitation.

MSSC at many places noted the need of enforcement of MSP throughout the country is essential for imparting dynamism to agriculture. It recommends this safety net to safeguard the interests of the crops, people and regions which are likely to be affected in the process of globalization. Most crucially, no institutional support mechanisms have been established to protect small farmers. While the new laws do not explicitly state that MSP will be discontinued or that the Mandis of the Agricultural

Produce Market Committee where most of the commodity is sold under the MSP regime will be abolished, this seems to be the underlying intent. There has been a constant fear among the protesting farmers that the government, through Agri Bills, would do away with MSP for crops. – This is obvious from the above discussions relating to contract farming.

According to Agri Bills, if a farmer sells their produce outside Mandis he is exempted from the Mandis tax and is thus encouraged to sell outside. As more and more farmers sell outside, Mandis will not earn regular revenue and will die out. If corporations push out the Mandis markets, there would be no one left to purchase the farmers' surplus, except for the corporations and prices would collapse as supply would exceed the demand. Agri Bills encouraging hoarding, but the existing system is against the hoarding. This will rob farmers of whatever bargaining leverage they now have, thus incentivizing companies to drag APMC Mandis, their rivals, out of business. The legislations exercise a 'colourable approach' to achieve indirectly what it cannot realize in a direct manner. We killed state seed corporations and put seed business into the hands of private players wherein adulteration is rampant, and market is filled with monopolized seeds – GM seeds sale companies practically killed non-GM seed market.

Every year, Punjab and Haryana receive an MSP of more than Rs 80,000 crore. Apart from the farmers and their families, the livelihood of the traders, shopkeepers and other beneficiaries are also dependent on this. Therefore, the potential elimination of the protective cover of the MSP is perceived as an act of cruelty here. Agri Bills exercise a 'colourable approach' to achieve indirectly what it cannot realize in a direct manner. With no guidelines as to the sale of surplus and the lack of assurance on MSP, the legislations strike at the heart of the commission's report and thus ran afoul of the report's recommendations.

Thus, the three Agri Bills severely effect employment in Agri Sector. Also, government says existing agriculture systems continue. If the existing agriculture system continues then where is the need to have parallel system with three Agri Bills & metering of Agri pump sets??? As long as farmers individually deal, middlemen will reap riches. The system that overcomes all those issues is through cooperative farming wherein farmers from a village or group of villages come together and cultivate. This help better utilization of natural resources, government subsidies-incentives, storage link with food processing and bargain for MSP, etc. can be achieved. In this animal husbandry & organic farming can be integrated. By controlling black marketing in agri inputs could be easily streamlined MSP. Now government proposed to loot the people through Agri Cess – earlier with GST. By controlling wastage of food by around 40%, can easily help build infrastructure needed for agriculture.

3.2. Some issues of Indian Agriculture:

Availability of nutritious food in India:

AP government announced on nutritious food supply issues – 2020-21 budget also spoke on this. In fact, it already exists. UPA government brought out "National Food Security & Nutrition Act [NFSA], 2013 issued on 5th July 2013. This act integrated all activities related to food security & nutrition issues to poor, women, children, old people, etc. Also, it proposed to issue PDS card on the elder women name in the household. Unfortunately,



the state governments failed to implement it. The bill also included in PDS: pearl millet, sorghum, Finger Millet at Rs. 1 [rice at Rs. 3 & wheat at Rs. 2] -- 7 kg per person.

In 2018, Ministry of Women and Child Development launched the Poshan Abhiyan with the set goals to reduce child under-nutrition (stunting and underweight) and low birth weight by 2% a year and anaemia across age groups by 3%, and create a mass movement for good nutrition in the country. The target of the Abhiyan is to achieve a malnutrition-free India by 2022. To meet the targets and create a discussion around nutrition in the country, along with the National Nutrition Week, the entire month of September in the country is marked as Poshan Maah or Nutrition Month. Prime Minister Narendra Modi in Mann ki Baat [30th August 2020]: September would be celebrated as the nutrition month and schools should have not just report cards but also nutrition cards and nutrition monitors along with class monitors. Government is confusing people with too many schemes as part of vote bank. However, it is not new, but it is part of the 2013 NFCA Act only. Unfortunately, governments are not implementing them except talk on this every now and then. Also, these are routine slogans of international bodies like World Bank, UN Agencies, etc.

India has been producing food in excess – around 40% is going as waste [according to FAO it is around 30% for the globe]; and thus, natural resources used to produce that also has been going as waste – and exporting lot of food items. India achieved “White Revolution” & “Blue Revolution”. However India with 18% of global population: Nobody knows whether the food, milk, meat, etc. produced with highly contaminated water or not; None has the knowledge on whether they are eating polluted-adulterated food or not; None has the knowledge on whether they are drinking/eating polluted-adulterated milk/milk based food items or not; None has the knowledge on whether they are eating polluted-adulterated sea/river/lake food-meat, etc. or not; But they all talk of hypothetical-time pass “global warming and climate crisis” – that is creating global warming hysteria.

FAO on 7th December 2018 approved India’s proposal to observe an International Year of Millets. FAO proposed Year 2023 as an International year of Millets. Millets consists of Sorghum, Pearl Millet, Finger Millet, and minor millets together termed as nutria-Cereals. Yet governments encouraging polluted foods of rice & wheat – including GM Foods.

According to Global Hunger Index 2019, India stand at 102 out of 117 countries falls below Nepal, Bangladesh & Pakistan. Table 5 presents India’s performance over 2014-2019. Since 2014 India’s performance under global hunger Index, we can say it is dismal even with excess production. In India, only 9.6% of all children between 6 to 23 months of age are given a minimum acceptable diet. The child stunting rate is 37.9% in India. To counter this though in 2013 government brought out Food Security & Nutrient Bill, the progress in implementation is tardy as the governments are more interested in populistic schemes that fetch them votes.

it is not so where around 65% of rural population depending on agriculture [either directly or indirectly] but contract farming effect this severely and thus increase the migration from rural to urban, which is bad for nation/environment. Crop specific contracts affect severely the basic food needs [food security & nutritious] and thus food cost goes up steeply that affect common man.

India’s Performance over the years since 2014		
Year	Ranking	Total countries
2014	55	076
2015	080	117
2016	097	118
2017	100	119
2018	103	119
2019	102	117

Table 5: India’s performance under global hunger index during 2014-2019

AP2007:

BJP/NDA leaders have been voicing that AP has announced contract farming in 2007 (AP2007) – In February 2001, Dr. YSR as CLP leader sent DS, Congress President [Father of present BJP MP from Nizamabad] & Chinna Reddy, convenor Agri sector in CLP” asking me to prepare “black paper” to counter White Paper released by TDP government on agriculture – vision 2020 –; and prepared & released in press gallery in Assembly premises on 15th February 2001. On 16th February 2001 all print media highlighted this. Newstoday put the heading “Cong advocates cooperative farming” -- --- farmers were constrained to depend on private money lenders for the rest of financial assistance and at higher interest rate, thus entangled in debt trap, some of the farmers could find remedy by committing suicide --- the steep hike in the power tariff and erratic power supply also contributed to the farmers misfortunes --- In this backdrop, the solution lay not in corporate agriculture, but cooperative farming need the government to encourage the latter approach and ensure remunerative prices for agriculture produce. --- Dr. YSR after becoming CM in 2004 asked a consultant to prepare the working paper on cooperative farming to introduce in AP. The consultant prepared the document with the heading cooperative farming but inside the text dealing on corporate/contract agriculture. Farmers opposed this. I wrote to Dr. YSR on this [Saakshi published my letter] and Dr. YSR got the report “stopped” and said he will get it revised appropriately. Just at that time he was killed. Dr. YSR put more emphasis on irrigation projects, known as jalayagnam.

Youth engagement and employment:

“A food system includes all processes and infrastructure involved in feeding a population: growing, processing, packaging, transporting, marketing, consumption, and disposal of food and food-related items. It also includes the input needed and output generated at each of these steps.” Theoretical exercises lead nowhere in answering issues affecting youth engagement and employment in Agriculture and Food Systems (AFS). This needs to take in to account practical issues such as: Existing and changing AFS scenarios of states and central governments; Issues pertaining to interactions of multinational companies/local business houses with governments with reference to AFS; Issues related to interactions of black-marketers in AFS with governments; Issues pertaining to governments policies of imports and exports; Issues of local food processing sector versus role of governments; Issues on storage & transport facilities; etc. versus role of governments & private bodies;



Local/regional/national weather and climate scenarios in terms AFS;

4. Few Other Issues

Farmers opposed the draft Electricity Act (Amendment) Bill, 2020:

Electricity is a very important input for agriculture for a large number of farmers in the country. Amendments to electricity Acts is directed as a prelude to privatizing electricity sector only. This affects farmers who are hitherto getting free power under bore-well agriculture.

Government of AP tried to defend fixing meters to Agriculture Pump sets. In fact, the same could be achieved by fixing meters at transformer level or at sub-divisional level and then linking them online to APTransco head-office. Then government can pay the money to APTransco directly based on that. This also facilitates to understand power problems/illegal uses if any [like low voltage, etc.] and solve/correct the problem. Now the Central Government issued directions to states saying, “fix meters at transformer level”. Fixing meters to individual agriculture pump-sets – a bad policy & wasteful expenditure. During TDP rule [prior to 2004], Andhra Pradesh Electricity Regulatory Commission [APERC] asked APTransco to survey the electricity use in agriculture. APTransco appointed AP Productivity Council. They selected one district in each of the four distribution companies -- Nalgonda in Central Discum, Nizambad in Northern Discum, and Chittoor in Southern Discum and West Godavari in Eastern Discum. They fixed meters at 6,367 transformers. Observations were carried out for one month [day & night] – this is 5 to 7% of total pump sets of 19.5 lakhs. Final results: Total survey was conducted on 6367 transformers with HP connected load of 491332 used 50.38 million units with 4.59 hours/day. Thus, total power used in agriculture was 4,751 MU against the government [APTransco] figure of 10,000 MU. Based on this, for 9 hours free power, Dr. YSR government fixed budget allocations and executed without any hurdle. Once agriculture pump sets are fixed with meters, it is easy for Central Government to privatize the power distribution in India – BJP wants to privatize everything to help its business houses.

The move to take away the subsidy for agricultural connections in the interests of private corporations is a massive injustice against crores of farmers in the country. Mandating Reduction in cross subsidies: As per Section 42, sub-section 2, “such surcharge and cross subsidies shall be progressively reduced by the State Commission in the manner as may be provided in the Tariff Policy.” Therefore, the State governments are being forced to reduce and end cross-subsidies to farmers and poor consumers, thus benefiting the corporate consumers with reduced bills, while increasing the bills of poorer consumers who now benefit from a slab system.

Air Pollution and regulation/criminalization of Farmers:

Farmers are also asking for an exclusion from the regulatory and penal provisions of the Ordinance passed by the Government of India that seeks to set up a Commission for air quality in Delhi and adjoining areas. They are pointing out that straw-burning in agriculture is not just a matter of air pollution in Delhi, but also a serious resource degradation that affects farm livelihoods

themselves. However, the approach of the government should not be to criminalise farmers and penalise them, but to support and incentivise farmers to move to sustainable practices and cropping. I sent an open letter to PM on 14th November 2020 on wastage of public money running in to lakhs of crores in few months. In this regard I voiced that “India’s National Capital Delhi facing severe pollution, which is acknowledged by even international agencies, particularly in winter with the favourable weather. Delhi pollution is amplified with pollution from the three neighbouring states [UP, Haryana & Punjab] through burning of stubbles in this time, with highest contribution coming from Punjab. This year the pollution has gone up by 240%, yet **Sir**, your government failed to contain this problem by providing necessary assistance to farmers. Though just before elections, Sir, your government is dumping thousands of crores [nobody knows where that money going] – even in 2021-22 budget allocated lakhs of crores to three states that are going for election -- but at the same time, Sir, your government giving step-motherly treatment in eradicating stubble burning. Please do something by forgetting the fact that Punjab & Delhi are ruled by opposition parties!!!”

2021-22 Union Budget allocated fund for air pollution control. In fact, we proposed at a stakeholder meet in Hyderabad in 2000 by AP Government. Later in 2003 the same were submitted to Supreme Court on its order relating to action plan but nothing happened to date. Government introduced Vehicle Technology & Fuel Technology to bring down pollution levels. With this the cost of vehicles & fuels zoomed to unbelievable heights. Now government is talking of electric vehicles. Who are the beneficiaries from all these are a big question? The fact is the losers are people and environment.

Legally Guaranteed Remunerative MSP for all Produce:

An important and key demand of farmers is around a legal regime for guaranteeing realisation of a remunerative MSP for all farmers and all produce, through a basket of measures. They are asking the government to enact a new law that will create this entitlement for all Indian farmers. It is to be understood that this is vastly different from the government offering to give it in writing that the current MSP and procurement regime will continue. The current regime has several deficiencies including benefiting only a few farmers (of rice and wheat mainly, in some states mainly, and of some landholding classes mainly, whereas the most marginal farmers including rainfed women, Adivasi and tenant farmers are out of the ambit of this regime) and not having a legal framework in which the regime is embedded in. The current proposal from the government does not provide any entitlements to farmers, whereas that is what farmers are seeking. The statutory framework that farmers are demanding “ensures economic viability, social equity as well as environmental sustainability when all agricultural commodities are assured of a remunerative MSP when any farmer interfaces with the market for their sale”.

Forum for Good Governance [FFGG]:

On 19th February 2021 Forum For Good Governance [FFGG] sent a letter to Telangana State [TS] Government wherein it states that the central government is paying six thousands to farmers with ≤ 5 acres with given eligibility criteria; and suggested TS to follow the same with Rythu Bandu assistance to farmers wherein this scheme applicable to all farmers who owns the land but not



tenants -- as we all know the fact that tenant has an agreement with the farmer like house renting. Even in majority of the cases farmers cultivate with the help of labour or assistant(s). Unlike fertilizer subsidy, why the centre chooses farmers with ≤ 5 acres & why the scheme at all? There are some basic questions:

On what basis limit of 5 acres were chosen by the BJP government at the Centre or FFGG? Is 5 acres under rainfed the same as irrigated? I published few articles demanding free power; included the same in Agriculture Black Paper released by CLP in 2001; in 2003 Dr. YSR presented to Congress High Command and convinced them; as CM signed the first file on free power. In TS since 2004 farmers are getting free power for 9 hours for borewells and now TS government is giving for 24 hours. By spending thousands of crores lakhs of acres were brought under canal irrigation – large share through pumping at huge cost for power. Let us see few issues:

If a large farmer keeps the land fallow, he won't use major part of subsidies/incentives, insurance/loans won't use; and during disasters, he won't receive compensation. Generally, trees grow in those lands. Here they won't contribute to produce wastage and use of inputs to that extent. All farmers are not eligible for insurance cover [government and farmer pay the premium]? Niti Aayog says Insurance Companies [mostly private] minting money with this scheme. Every year Union Finance Ministry allocates lakhs of crores towards agriculture loans. Here all farmers are not taking loans from banks. However, nobody knows where this money really is going? Is it for agriculture or for non-agriculture? How much is coming back? Through Loan Waiver mechanism how much government is losing? Fertilizer Subsidy component vary with state, farm size, crop, irrigated or non-irrigated, etc. Punjab, Andhra Pradesh [undivided], Haryana, Tamil Nadu, West Bengal and Uttar Pradesh are the main beneficiaries of fertilizer subsidy on per hectare basis. In these states fertilizer consumption per hectare is significantly higher than the national average. For example, per hectare subsidy in Punjab was around Rs. 3924 and the same for Rajasthan was Rs. 894. An inverse relationship between farm size and proportion of fertilized area to gross cropped area was witnessed during all the years. The intensity of fertilizer use was significantly higher on small and marginal farms compared to large farms. The average fertilizer consumption per hectare of gross cropped area was the highest (126.2 kg) on marginal holdings and the lowest on large farms (55.9 kg) in 2001-02. The average subsidy was the highest (Rs. 916.2/ha) on marginal farms and the lowest on large farms (Rs. 405.8/ha). In un-irrigated area treated with fertilizers is 53.5% while this share for irrigated area was 91.6% in 2001-02. The share of fertilizer consumption in un-irrigated area was 30.7% in 2001-02. Net area sown is 140 Mha [42.57% of the country] & Net irrigated area is 64.7 Mha. That is 46.2% of the net sown area is under irrigation. Rice and wheat were the major users of fertilizer subsidy accounting for over half of the total subsidy in 2001-02. The other major fertilizer consuming crops are sugarcane and cotton. With the GM cotton entry, it jumped in area and thus consumption. Around one-third of the subsidies on fertilizers, CNG, Kerosene are going into black market. To avoid this, UPA government introduced [my suggestion] direct transfer of subsidy to beneficiaries – by creating Aadhaar and linking it. PM Narendra Modi in his address to Parliament on 7th February 2017 said government saved Rs. 49,500 crores. However, this scheme of fertilizer was not extended to all states as yet.

In addition to all these, there are umpteen subsidised schemes.

With all these, farmers have no infrastructure to minimise post-harvest losses from extreme weather events. Around 40% of the produce is going as waste and thus to that extent wasting inputs/subsidies, etc. In these circumstances' farmers wanted receive MSP for his produce. However, to streamline all the subsidies/incentives, we need to implement cooperative farming as proposed in the above cited black paper in 2001. The major problem that the farmers are facing is getting minimum support price [MSP] for his produce irrespective of farm size/holdings as MSP has no legal standing. In fact, on my proposal UPA Government advised the AP government to pay in Cheques. But nobody cared on this as they want to buy at lower price and export lakhs of tons and mint money. Also, in the case of paddy/rice the PDS rice is entering into black market. On 18th February 2021 government of India asked the Punjab & Haryana governments to ensure online payment for crops procured at MSP directly to farmers from next procurement season. The farmers are asking a legal status to MSP to overcome these hurdles.

Match Fixing between Anna Hazare & BJP:

Activist Anna Hazare Cancels "Fast in Support of Farmers" Hours After Announcing. On Friday, 29th January 2021 said he won't be preceding with his planned indefinite fast against the new farm laws after the BJP leader, former Maharashtra CM, Devendra Fadnavis and Minister of State Agriculture Kailash Chaudhary met him at his hometown Ralegan Siddhi. Both sides decided that a committee comprising members from Agriculture Ministry, Niti Aayog and some members recommended by Anna Hazare will make a proposal in the next "six months" to implement/fulfil Hazare's demands. This clearly reflected a match fixing between Hazare and BJP to create confusion among farmers protesting against these three Agri Bills. This is basically because: at the same time, Respected President of India on 29th January 2021 in his address to both houses of parliament defends farm laws. We have seen economic survey report presented to both houses of parliament on the three Agri Bills on 29th January 2021, wherein it says, "Government farm laws are a remedy, not a malady". They are false claims not based on facts.

Anna Hazare talks of Dr. M. S. Swaminathan committee bla-bla. The crisis in agriculture was created by him with the so-called green revolution technology that helped MNCs of chemical fertilizer manufacturers to mint lakhs of crores since 1960. This destroyed water resources and soil on one hand government spent lakhs of crores on fertilizer subsidy. The chemical fertilizers work under irrigation & chemical fertilizer tailored seeds. With all this we only doubled the production and within few years the yields stagnated. The new technology as PM envisaged, known as genetically modified seed, that replaces the seeds of the so-called green revolution technology also showed stagnation in yields in around 7 years but benefitted the GM seeds MNCs. This severely affects the food exports from India. In USA Mississippi River carry runoff water from agriculture farms contaminated by chemical inputs created dead zone in Gulf of Mexico. This is the case with Indian rivers. Government is spending thousands and thousands of crores to rejuvenate them. This is the reality of Dr. M. S. Swaminathan's technologies.

Past Scenario:

The first Prime Minister of India, Late Pundit Jawaharlal Nehru



observed that “dams are the modern temples” and with this spirit encouraged building of dams. This helped India to achieve self-sufficiency in food production; and helped India to reach from begging bowl scenario to exporting scenario. The major beneficiaries were Punjab, Haryana, Andhra Pradesh and few other states. However, even after 75 years of Independence, the progress in irrigation projects are moving three steps forward and six steps backward with the changing political priorities of elected ruling parties. Thus, still to date around 60% of the net cultivated area in India is at the mercy of “Rain God”. To add to the woes, Western funded NGOs became major hurdle in the progress of irrigation projects. BJP regime prior to 2004 shifted to watersheds – Anna Hazare became an advisor to watersheds programme. The watersheds did not rescue the farmers of Rajasthan, Gujarat and Andhra Pradesh during 1999 drought.

World Bank was against dams in developing countries including India. A group of activists worked for World Bank and prepared a report against dams and in support of watersheds. The government rejected this report. But these activists go around the country to get support for their report. In Hyderabad, when the main architect of the report was speaking on this, I asked her, why you are worried on government rejection of your report? She stopped her talk and left the venue.

Now these very same groups are talking of Agri Bills and MSP with the very same government.

Economic Survey Presented to Parliament on 29th by FM:

The survey noted that these reforms were, in fact, recommended many times in the past 20 years but could not see the light of the day till September last year. “The three agricultural reforms legislation are designed and intended primarily for the benefit of small and marginal farmers which constitute around 85% of the total number of farmers and are the biggest sufferers of the regressive APMC regulated market regime. This is absolutely a false propaganda by the government for contract farming.

It also says 17% jump seen in FDI in April-September 2020. This did not tell us who benefitted from raising the cap on FDI and sudden disappearance of Foreign Banks stash accounts of Indians. This did not mention on the loss incurred by senior citizens and low-middle class on FDs by bringing down the bank interest rates in favour of business houses during the last six years.

Union Finance Minister in his budget presentation on February 28, 2011 proposed that “A task force has been set up to work out the modalities for the proposed system of direct transfer of subsidy for kerosene, LPG and fertilizers.” PM Narendra Modi announced in Parliament in 2017 that government saved Rs. 49,500 crore that has been going to middlemen. However, this scheme has not extended to entire country so far. Unfortunately to date farmers are not getting their quota and sometimes getting adulterated. However, I saw an article in Sakshi daily newspaper dated 30th January 2021 on the mess on fertilizer subsidy. When the government could not do what they are supposed to do but talking on Agri reforms!!! Here the authors of the article referred the deficiency in payment of subsidy to industry but not mentioned on the diversion of subsidized fertilizer to black market.

5. Summary, Conclusions & Suggestions:

Summary:

Under the disguise of doubling the farmers’ income government of India introduced three Agri Bills without taking in to account the factors that severely have been affecting Indian Agriculture System including nutritious food availability, youth engagement and employment in agri sector, food security aspects, weather & climate impact, etc. Farmers are asking for a complete repeal of these 3 Acts and withdrawal of the draft Electricity (Amendment) Bill. Farmers are also asking for a legislation that guarantees realisation of a remunerative MSP to all farmers for all their produce, whatever might be the marketing channel.

For increasing the yield in 1960s introduced chemical fertilizer tailored seeds. This reached a plateau within no time. This system caused severe air and water pollution. Now GM seed was brought into India illegally and later legalised to serve the vested interests forgetting the fact of severe negative impacts on Indian Agriculture & economy, but these seeds are also tailored to chemical fertilizers. This also reached plateau in very short time but creating new pests/diseases. Both work under irrigation. Still more than 50% of net cultivated area is at the mercy of “Rain God”. In India, weather plays crucial role on yields achieved and on food wastage [post-harvest losses].

Under such scenarios income doubling is far cry with the three Agri Bills but India needs an agriculture system.

Conclusion:

Agri Bills of 2020 were built on “FAULT” to build castles for the business houses at the cost of poor farmers. The government argues that the old existing agriculture policies will stay. If that is the case, then why the government is insisting on the implementation of the three Agri Bills of 2020? Why the Agri pump sets need to fix meters? Why promise to keep the bills in abeyance for 18 months? It is something fishy!!! The answer is “reduce drastically the rural population depending up on agriculture and thereby reduce the central government’s role in agriculture”; which means, “Corporatization – Privatization of Indian Agriculture”. BJP governments prior to 2004 and after 2014 patronized powerful business houses like Ambani’s, Adani’s, etc. from India and multinational seed giants from the west like Monsanto who controls the major share of global GM seed business. Here we must remember the fact that BJP government allowed growing of GM food crops when the entire world is fighting against them.

With the new Agri policies MSP will become a scapegoat as contract farming and MSP won’t go together. However, contract farming and hoarding go together. Thus, middlemen will reap the riches. Seed industry will be put into the hands of multinational seed giants. Severely affect employment in agri sector. Agri subsidies & PDS [with question on procurement] disappear!!!

With the GM food crops entry exports will be severely affected, farmers suicides will increase, it effects rural employment, seed industry will be monopolized and prevent other cost effect agriculture systems in India – this is already seen in Uttarkhand, an organic farming state, wherein government is giving chemical input kits “free” to create addiction and move away from organic farming -- effect food security and nutrition security, it also effect milk & milk products & aqua farming, with the new diseases entry health will be the major casualty; and thus increase the pollution, etc., middlemen rules the roots of agriculture markets, MSP becomes a rare commodity, etc.



Prior to GRT we used to have excellent system of agriculture that used to provide economic security to farmer, healthy & nutrient diet to all. Advisors with vested interest killed such a system to help MNCs of chemical fertilizers. Now another MNC system, known as GM seeds, entered into agriculture through monopolizing seeds industry. In fact, these two groups are controlling agriculture ministry at the centre – in these seeds are tailored to chemical fertilizers that work under irrigation. With the Agri Bills markets will be fragmented and weakens farmers' collective bargaining power; food security of consumers will be jeopardised; and hoarding of food legalized.

Suggestions:

Scrap the three Agri Bills and provide legal status to Minimum Support Price [MSP]. In the case of seeds, encourage crop varieties that farmers can produce seeds and use them and/or encourage state seed corporations.

Make the farmers united at village or villages' level, which is possible through cooperative farming, which facilitate to integrate animal husbandry in agriculture system, help in better utilization of natural resources and input and other subsidies through unified system, help in creating a link with food processing units, etc. This system helps nation/states to save lakhs of crores that have been going in to blackmarket. Encourage non-chemical fertilizers like vermicomposting. Streamline the labour cost and cultivation costs and insecticide/pesticide applications. Create storage facilities at village level. Create food processing units based on local crops at village/mandal level. Take appropriate measures to reduce food wastage through several means. Make India free from Chemical fertilizers and GM crops. This is essential to bring down air & water pollution, food & nutrient Pollution and thus health hazards & healthcare burden on common man – "Health is Wealth".

Develop "crop-based boards" that link with extension services with seed production/development systems. Encourage multi-crop system of agriculture with organic inputs and animal husbandry. At present we have such boards for few crops.

References:

1. Reddy S.J., Maite, R.K. & Seetharama, N. (1984). An iterative regression approach for prediction of sorghum (sorghum bicolor) phenology in the semi-arid tropics. *Agric. For. Meteorol.*, 32:323-338.
2. Reddy. S.J. (2000). *Andhra Pradesh Agriculture: Scenario of the last four decades*, Hyderabad, India,
3. Reddy. S.J. (2003). *Evolution of seed technology, biotechnology*, B. B. S. Kapoor, et al. (Ed.), (2003): *Current Environmental Issues*, Madhu Publications, Bikaner, India, pp. 139-158.
4. Reddy S.J. (2019a). *Agroclimatic/Agrometeorological Techniques: As applicable to Dry-land Agriculture in Developing Countries* [2nd Edition]. Brillion Publishing, New Delhi, 372p (1993).
5. Reddy S.J. (2019b). *Workable Green Revolution: Agriculture in the perspective of Climate Change*. Brillion Publishing, New Delhi, 221p (2011).
6. Reddy S.J. (2019c). *Water Resources Availability over India*. Brillion Publishing, New Delhi, 224p.
7. Reddy S.J. (2020). *Indian Temperature Scenario: "No Global Warming Trend"*. *Op Acc J Bio Sci V& Res* 1(1).

Frontier: An Independent weekly since 1968:

8. Open letter to Prime Minister of India - Putting Farmers First: A Report of "Myth", 20th January 2021
9. BJP leaders are telling false statements on the three Agri Bills, 27th December 2020
10. Open letter to the Prime Minister of India, 17th November 2020
11. Is FFGG Working for BJP? 21st February 2021
12. Letter to the Hon'ble Minister of Jal Shakti "Observations on Regarding inter-linking of Godavari-Kaveri via Kjrishna", February 28, 2021

Newsmeter:

13. Opinion: Is it a match-fixing between Anna Hazare and BJP, 8th February 2021
14. Opinion: Observations on PM's 'Misleading Statement' on 'Agri Bills, Public Sector and Climate Change', 15th February 2021