

Farmers Concerned About Food Security, Farming Practices and Government Policies— An Overview

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Abstract

The ongoing farmer's agitations foremost demand is "the written assurance from the Indian government that it will not scrap the minimum support price (MSP) regime and will continue to procure rice and wheat from them. The farmers biggest worry is that the law would lead to inadequate demand for their produce in the local markets. This is largely because they have survived on the selling of wheat and paddy on MSP procured by the union government for the central pool."

Paddy is being sown in the season when pulses and other high value crops can also be sown. The problem currently is that farmers need the assurance of an MSP. They feel they would be left in the lurch if they agreed to grow for alternate crops a would loose the security of the already prevalent crop cycle of wheat and paddy even through it was providing to be a loos making proposition.

It is lamentable that the "state lacks a successful procurement model for crops other than wheat and paddy for instance, the Maize crop. Farmers sowing maize in February and March had to sell their produce between Rs. 800 and 900 per quintal, which was reportedly far below the declared Minimum Support Price (MSP) of Rs 1,850 per quintal. In Rajpura Mandi of Patiala maize was sold at a price as low as Rs 600 per quintal. The Sunflower crop also met with the same fate as farmers in Patiala and nearby districts got Rs 3,500-4,000 per quintal for their crop, which was far below the promised MSP of Rs 5,885 promised MSP."

Key Words: procurement, diversification, minimum support Price (MSP), farm produce, model, analysis

Introduction

The situational analysis shows that the agriculture sector in Punjab is stagnating largely because Punjab missed participating effectively in the industrial and IT sector development. The State remained focused on grain production alone. Generations were involved in the process. The youth did not prepare themselves for gaining any skills that could prepare them for taking up livelihoods

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in sectors other than agriculture. Thus, it can be concluded that the situation of food security in Punjab has reached alarming proportions and it is high time that ameliorative steps be taken.

Sustainability for farmers and the farm sector in Punjab has been transcribed in the shifting trajectories of agriculture experienced by the State over the last seven decades. The entire crises of agriculture in Punjab, once considered the granary of India is connected deeply with the origins of the agricultural prosperity of Punjab.

“The value of Punjab’s agriculture lies in the fact that a significant proportion of the urban trade and industry are allied to it as agriculture continues to be a valued activity in Punjab probably because the state has the best infrastructure available which is required for agriculture. About two-thirds of the operational holdings in Punjab are larger than two hectares where across India the number is only 14%. Punjab ranks fourth in terms of the number of agro-processing units in the country, after Andhra Pradesh, Tamil Nadu, and Telangana. Punjab continues to be ahead of other states in terms of productivity of wheat and rice and the surpluses it generates. During 2017-18, the average per-hectare yield of cereals in Punjab was 4,733 kg against the national average of 2,661 kg.”

This does not, however, seem to be translating into a sustainable life for the farmer of Punjab. “It is an acknowledged fact that Agriculture in Punjab has been under severe stress since the early 1990s. Declining returns and rising costs have strained the functioning of the farming community of Punjab. The growing incidence of deaths by suicide (Singh et.al, 2016) and increasing desperation to emigrate for a better future among the rural Punjab youth are prominently indicative of the severe stress that the cultivating households were currently experiencing.”

Historical Perspective

In the early 90s, Punjab had been India's third-richest state in terms of per capita income after Maharashtra and Haryana and yet it has now slipped to the 10th position. Punjab’s agricultural growth slipped and rested at 3% from 1990-2000 and then declined to two per cent and less between 2010-2020.

Punjab's high agricultural growth model had been the outcome of an extreme food-crisis during the 1960s. Food Grains were being sourced from abroad under the food aid programme of the USA (under PL-480). It was a difficult time for the nation challenges.

- (i) “War with China (1962)”
- (ii) “War with Pakistan (1965)”
- (iii) “Two severe consecutive droughts (1964-65 and 1965-66)”.

Thus, “in 1965-66, India could produce only 72 million tonnes of food grains against the demand of 90 million tonnes. Food imports more than doubled literally from 3.5 to 10.36 million tonne in just five years (1961-1966).”

“The Punjab State Farmers’ policy drafted in 2018 has stated that Punjab, which had opted for paddy and wheat cultivation as compelled by the Centre’s policies, has currently reached a stage where substantial increase in production has become totally uneconomical and unsustainable. This has been particularly pointed out for these crops. States like Madhya Pradesh that are three to four times larger in area than Punjab, have increased their area under agriculture as well as their productivity, setting newer national trends.”

For the first time in 2020, “Punjab was no longer the largest wheat contributor to the central pool as MP delivered the highest quantity for a single season by any State” (Table 1).

Table 1: Crop Output in Punjab and Madhya Pradesh

Sr. No.	Crop Year	Punjab (in metric tonnes)	Madhya Pradesh
1	2011-12	128.32	84.93
2	2012-13	108.97	63.55
3	2013-14	116.41	70.94
4	2014-15	103.44	73.09
5	2015-16	106.49	39.92
6	2016-17	117.06	67.25
7	2017-18	126.92	73.13
8	2018-19	129.12	67.25
9	2019-20	127.12	129.28

Source: Vivek Gupta (16 June, 2020) Punjab's Shrinking Agricultural Output Is an Opportunity for the State to Branch Out. The Hindustan Times.

“Agriculture economist S.S. Gill believes that a major implication of this development would be that Punjab will no longer be able to boast of its long revered status as the food bowl of India. However, Gill was also quick to raise a pertinent issue that the state had been struggling with for the past several years”. “Punjab should not worry about producing food crops now as there are several other states taking care of the country’s food security needs. It should rather switch over to high valued crops and make it viable for the farmers and ecology,” he said. “Numerous agriculture studies, especially the Johal Committee Reports of 1986 and 2002” (Sehgal and Rai (2020), recommended that “Punjab switch over to pulses, oilseeds, fruits and vegetables in place of the traditional wheat-paddy cycle that is no longer remunerative for farmers and has also dried up the state’s groundwater resources.”

The Rice-Wheat Conundrum

“While continuing to be the major rice contributor to the central pool, Punjab can see this as an opportunity to de-stress itself from the national food security burden and move towards an alternative cropping pattern especially regarding farm distress and ecological crisis –both of which have Punjab’s farm economy severely in their grip.”

According to a 2017 “study sponsored by the Delhi-based Indian Council of Social Science Research (ICSSR), 85.9% of the farming households in Punjab are under the burden of debt, showing that the traditional crops are not earning these households enough money. Several surveys have highlighted the sad fact that over 16,000 farmers and rural labourers have died by suicide in Punjab between 2000 and 2015.”

The ecological repercussions of the continued rice and wheat crop cycle are also very greater. “The water-guzzling paddy crops that consume 5377 litres to grow a kilogram as compared to wheat’s 1500 litres, the State continues to over-exploit its groundwater resources through 14 lakh tube wells operational for taking care of just about two-thirds of the State’s otalcultivated area.”

According to the Central Ground Water Board (CGWB)’s report released in July 2019 “the annual groundwater withdrawal in Punjab has reached 165% of its annual extractable groundwater resources. It is the highest in the country. In many instances water from the lower aquifers has been found to be unfit for human consumption or irrigation due to increasing concentration of heavy metals” (Sehgal and Rai (2020).

Table 2: Top districts in Punjab with high withdrawal of groundwater (Figures in billion cubic meters (bcm))

Sr. No.	District	Annual extractable groundwater recharge	Annual groundwater withdrawal
1	“Sangrur”	“1.44”	“3.74 (260%)”
2	“Jalandhar”	“1.17”	“2.80 (239%)”
3	“Moga”	“1.07”	“2.47 (230%)”
4	“Kapurthala”	“0.70”	“1.56 (223%)”
5	“Patiala”	“1.37”	“2.97 (217%)”
6	“Barnala”	“0.58”	“1.22 (210%)”
7	“Fatehgarh Sahib”	“0.55”	“1.15 (209%)”
8	“Ludhiana”	“1.94”	“3.54 (182%)”
9	“Overall”	“21.58”	“35.78 (165%)*”

* (“Out of total withdrawal of 35.78 bcm, 34.56 bcm is used for irrigation and remaining for Industrial (0.20 bcm) and domestic (1.01 bcm). One cubic meter has 1000 litres”)

Source: “Central Ground Water Board (2019). News Bulletin: Vol. 6 July-Sept. 2019”

“It is lamentable that the State lacks a successful procurement model for crops other than wheat and paddy for instance, the Maize crop. Farmers sowing maize in February and March had to sell their produce between Rs 800 and 900 per quintal, which was reportedly far below the declared Minimum Support Price (MSP) of Rs 1,850 per quintal. In Rajpura Mandi of Patiala maize was sold at a price as low as Rs 600 per quintal. The Sunflower crop also met with the same fate as farmers in Patiala and nearby districts got Rs 3,500-4,000 per quintal for their crop, which was far below the promised MSP of Rs 5,885 promised MSP.”

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While farmers are advised to diversify and opt for alternate crops “there is the absence of a formalized blueprint by the state or central government assuring adequate returns for crops other than wheat and paddy. “Farmers have been trapped into sowing potatoes or other crops which they literally had to scarp due to lack of adequate returns for their produce.”

Farmer Needs and Government Policy

The farmers have suggested that guaranteed MSP is needed for their alternate crops. “Dr. Sutantar Kumar Airi, Director, Agriculture reported (Sehgal and Rai (2020), that the area under the direct paddy sowing method consumes 20% less groundwater than manual paddy transplantation which increased from 50,000 hectares last year to almost 9 times at 4.5 lakh hectares.”

The area under cotton also increased to 5 lakh hectares from 3.92 lakh hectares in 2019. “The area under maize which had been 1.6 lakh hectares in 2019 will probably increase to over a lakh hectares currently. It is estimated that about two lakh hectares of Punjab’s total cultivated area has been shifted from paddy in the season”.

“Several farmers were induced to grow maize for the first time. This was done under the planned move to veer away from the wheat-paddy cycle and promote other crops to ensure that pressure on the State’s groundwater resources is subsequently reduced.”

According to the agriculture scientist, Sardara Singh Johal the “farmers do not intend permanently moving away from the wheat-paddy cycle until a guaranteed MSP for their alternate crop produce is obtained” (Sehgal and Rai (2020). Johal also explained that “the MSP had no value until the produce was procured. The MSP, was the government’s assurance to the producers before the sowing season that they will procure their produce at least at the specified price. But when the government does bit take this responsibility, the farmers see the move as betrayal which they experienced in the case of the maize crop”.

Analyzing the success of the wheat paddy cycle in Punjab, the economist, R.S. Ghuman said that “it had been possible because of the availability of high yield varieties as also a subsidized supply of power for irrigation and fertilizers as well as an assured MSP purchase from central and state agencies”. If such a hamper of foodies is presented to the farmer only then will the diversification take place in Punjab.

Genesis of Paddy and the Green Revolution in Punjab

Table 3 obtained from the State agriculture department shows that “the area under wheat had been a mere 14 lakh hectares when paddy came to Punjab in 1960-61. In 1970-71, the wheat was cultivated over 22 lakh hectares and 3.90 lakh hectares were under paddy. Even since then the area under paddy has grown exponentially while wheat reached a saturation point in the 90s in Punjab.”

Table 3: “How wheat and paddy grew in Punjab since the beginning of the green revolution” (figures in lakh hectare)

Sr. No.	Year	Paddy Area	Wheat Area
1	1960-61	2.27	14
2	1970-71	3.90	22.99
3	1980-81	11.83	28.12
4	1990-91	20.15	32.73
5	2000-01	26.12	34.08
6	2010-11	28.30	35.10
7	2015-16	29.70	35.06
8	2019-20	29.20	35.08
9	2020-21	27-28 (Est)	Yet to be sown

Source: “Punjab Agriculture Department and Punjab State Farmers’ policy, 2018”

Paddy is being sown in the season when pulses and other high value crops can also be sown. The problem currently is that farmers need the assurance of an MSP. They feel they would be left in the lurch if they agreed to grow for alternate crops a would loose the security of the already prevalent crop cycle of wheat and paddy even through it was providing to be a loos making proposition.

A Professor of Economics at Punjabi University in Patiala, Kesar Singh Bhangoo pointed out that “there is no need to diversify from the wheat crop as it is Punjab’s natural crop like the apple crop of Jammu and Kashmir. It consumes much less water than paddy and has no ecological side-effects. There is an urgent need, to diversify the paddy crop that has been imposed upon the State apparently” (Sehgal and Rai (2020).

Political Will and Vote Bank Polices

Considering the reasons why Punjab had failed to break the wheat-paddy cycle, Johal blamed the vote bank policies. “Popular measures like free electricity and other forms of subsidies diverted the focus from long term agriculture policies. Johal reiterated the warning that Punjab’s groundwater resources could only be saved if the cultivation of paddy is stopped.” Groundwater scarcity is the biggest threat to Punjab’s food security. Soon Punjab’s farmers will grow whatever grows in the absence of water as very soon all the water will finish.

The Chairman of the Delhi based Bharat Krishak Samaj, Ajay Vir Jakhar, said that “diversification in crops could not be considered in a state of isolation – it had to be a pan-India movement. Diversification of crops in Punjab is dependant upon the economic prosperity of the nation as manipulated by the Union Finance Minister”. According to Thakar, “if the economy improves, the nutrition per capita intake would increase” generating greater demand for more protein, poultry, meat, fruit and vegetables to which the farmers would respond and diversify as currently India’s nutrition intake is among the lowest in the world. The Centre’s policies need to be favourable for diversification, for which State-specific solutions need to be worked out.

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Economist S.S. Gill gave the example of Himachal Pradesh, saying that “State agencies fix the minimum purchase price for apples and then sell it in the market in the form of various by-products”. He suggested that “Similar solutions can be explored in Punjab. If the state buys crops other than wheat or paddy at MSP, deploys its own State bodies or aligns with private agencies to make products, change is possible,” he said.

The Punjab State Farmer’s Policy Draft report raised the concern over “the quality use of farm credit stating that there are around 26 lakh farmers in the state but all banks together had issued over 40 lakh Kisan Credit Cards. Another glaring aspect is that in the 11 years (2004-05 to 2015-16), the credit increased by around 8 times but the production by only 1.11 times.” Also policy recommendations remain non-implemented because they were perceived to be politically contentious (Sehgal and Rai (2020)).

Protest Against Government Ordinance

It is probably the mismatch of mindsets and non-comprehension of the deeper socio-cultural ramification of the agricultural nexus in Punjab that the Farmer’s Agitation has gained such momentum. “The Centre Government on June 5, 2020 promulgated the Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Ordinance, 2020 (Sehgal and Rai (2020)). The ordinance reiterates the concept of ‘One Nation, One agriculture Market’ by creating barrier-free intra-state and inter-state trade. The buyer would be enabled to purchase goods directly from the farmer, without going to the state level Agricultural Market Produce Committees (APMCs) and mandis (wholesale markets). All stakeholders like farmer bodies, political parties and agriculture scientists in Punjab have rejected it as an anti-farmer move”.

Most people see the ordinances as contrary to the interests of the farmers of Punjab. “They felt the ordinance had been issued to dismantle the ‘mandi’ system in Punjab and handing over the entire agriculture to the corporate sector. They were apprehensive that in the absence of government purchase, the farmers would be exploited and forced to sell their produce at much lesser prices. A similar development had occurred in Bihar where, after the APMC regime was removed in 2006, several private players had overpowered the mandis”.

Professor Kesar Singh Bhangoo argued that “these ordinances would not facilitate crop diversification and would rather create overriding confusion and ire among the big corporate houses and farmers. The average size of land-holding in Punjab is meager and most farmers do not have enough resources to stock their produce and approach large corporate in Mumbai and abroad to sell their produce at a good price?” this would result in the creation of an exploitative layer of intermediaries who would take advantage of the already distressed farming community. State support is essential for agriculture to survive in Punjab.

Picture 1: Farmers Agitation Ongoing for almost a year at Delhi's Borders



Source: Sehgal Manjeet (2020), “News India, Explained! How Farming Has Become Less Lucrative in India”.

The ongoing farmers agitations’ “foremost demand is the written assurance from the Indian government that it will not scrap the minimum support price (MSP) regime and will continue to procure rice and wheat from them. The farmers biggest worry is that the law would lead to inadequate demand for their produce in the local markets. This is largely because they have survived on the selling of wheat and paddy on MSP procured by the union government for the central pool.”

Dr Varinder Sharma, Scientist, Development Studies, IDC said that “more than 10 per cent small and marginal farmers have given up agriculture during the past decade following a decline in profitability, stagnated yields, reduced public investment in agriculture and rising capital investment”. Initially “Farmer’s income registered a downward trend in the '80s which is continuing till today. Rising farmer suicides and farmer protests are the outcomes of agrarian distress.”

In the financial year 2020, “the average wheat price in Punjab was Rs 2,038 per quintal, higher than any of the other State like Haryana and Uttar Pradesh. But in the current financial year (FY-2021) the mandi prices have declined to Rs 1,894 as of September 2020. Dr. Varinderpal Singh, Chief Soil Chemist, Punjab Agricultural University, Ludhiana, refused to accept a Gold Medal following the farmer protests” and said, “Why blame the farmers for growing two crops only. Punjab’s farmers are growing more wheat and paddy because MSP is only available for two crops. Government is compelling them to grow only two crops. They should cover more crops under MSP. That’s why Punjab farmers are not able to increase their income,” (Sehgal and Rai (2020).

It must be highlighted that “the farmer protests are an outcome of the frustration generated by a decline in regular income of the farmers and an increasing dependency on loans and income. There is a huge gap existing between the returns, cost of production and cost of living in Punjab. For example the variable cost per quintal of rice (minus MSP) between 1991-2008 was 4.95 per cent whereas the returns were just 2.27 per cent. Similarly, the returns per quintal wheat (minus MSP) during the same period were just 3.84 per cent as compared to the variable cost of 5.60 per cent.”

The resultant scenario in Punjab’s agricultural fields in of dismay, despair and disillusionment as the main stay of the State’s economy stand challenged and the entire population is literally facing the brink of a great financial and occupational depression. There is a deep seated need to create mechanisms of indigenization with the involvement of the farming community in particular and the entire population in general.

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