

AGRARIAN CRISIS: A REVIEW PAPER ON CAUSES OF FARMER'S DISTRESS

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ABSTRACT

Punjab agriculture has undergone significant structural changes since the advent of green revolution in the mid sixties. Traditional agriculture has progressively given way to modern and commercial agriculture. Agriculture in Punjab has changed its face from the means of subsistence to the source of earning. Commercialization of Punjab agriculture is the outcome of rapid mechanization, use of chemical fertilizers, greater capital formation in agricultural sector and change in the production pattern etc. All this has increased the cost of production and thus making agriculture non-profitable venture. Punjab agriculture is on the crossroads and mounting agrarian crisis has reached alarming heights.

KEYWORDS: Agriculture, Structural Changes, Green Revolution, Commercialization, Agrarian Crisis

INTRODUCTION

The decade of 1970's and 1980's formed the base for the structural transformation in the agrarian context in Punjab. The green revolution catalyzed agrarian productivity after witnessing a phenomenal rise entered into a phase of stagnation during the eighties. The gradual withdrawal of the subsidies to agricultural package as part of the green revolution strategy has made agriculture no longer an easy option as an occupation. The economic reform process and trade liberalization made agriculture unviable, let alone an attractive option as the state support in terms of infrastructure, investments, costs and prices decisively became a thing of the past. On the other hand the market liberalization has exposed Indian agriculture to global forces and also opened up other opportunities. Since the introduction of the green revolution, the agrarian structure of Punjab has witnessed interesting changes. In the first phase extending up to 1980-81 the number of marginal and small holdings declined sharply, while those in the higher size categories showed a modest increase. There are many structural and technical changes that find their place in Punjab agriculture and were giving good results also but over the years this has given way to comparatively slower growth. No doubt statistics have shown that agricultural production in some plan periods was satisfactory, but now to get this production, higher doses of chemical fertilizers are needed to be put in, thus increasing the cost of production. Green revolution has started the trend of capitalistic farming in the country. It needs higher investment in agriculture which is beyond the reach of small and marginal farmers. Its gains are restricted to big farmers having big land holdings. The impact of green revolution is limited to a few food crops like wheat, rice, maize and bajra only leaving out pulses, oil seeds, cash crops and fodder crops. The exhilaration of green revolution has given way to despair. The state which reaped the benefits of the green revolution in the 1980's has come to fight a failing battle with farmer's suicides. Green revolution has taken a heavy toll of the food bowl. The fertile lands have now turned poisonous, water bodies have run dry, food is rich in pesticides, air loaded with smoke of burnt straws and so on. Over the years farmers have slipped into heavy debts and the farm income have reduced. No wonder farm suicide rate remains high. The distress is all visible. Tasked with producing 20% of the country's wheat, 12% of rice and 13% of

cotton, Punjab is at the crossroads. A Punjab government's census survey conducted by three universities of the state exhibited that the total number of suicide cases in the state during the period of 2000 to 2010 were 6926 of which 3954 (57.1%) were farmers and 2972 (42.9%) were agricultural labour. In this article various dimensions of agrarian crisis will be discussed to give the readers a bird's eye view of the causes behind the fall of Punjab Agriculture in the traps of Agrarian Crisis.

CAUSES OF EMERGENCE OF AGRARIAN CRISIS

Agrarian crisis is a consequence of deep rooted agrarian distress and five important factors are as under:

- Natural
- Technological
- Economic
- Social
- Political

Punjab a rather small state occupying less than 2% of the total geographical area and little more than 2% of the total population of the country, has earned the title of "India's Bread Basket". The state was viewed as the most dynamic and progressive state of the country, particularly on account of its success in the agricultural sector during the green revolution. Of all the states of India, Punjab's agricultural growth rate was the highest during the nineteen sixties to the middle of the nineteen eighties, which was the first phase of green revolution. However this trend did not last for very long. After two decades of growth the green revolution began to lose its magic and was followed by the series of crisis. Beginning with the early 1980's the word crisis became the dominant mode of representing Punjab. From politics and economics to culture and ecology, everything seemed to be in a state of crisis in Punjab. At present, the state of Punjab, earlier regarded as an agriculturally developed region of India has been passing through a severe economic crisis. The paradoxical situation of rise of cost of cultivation, stagnant productivity, lesser minimum support price, uncertainty of weather, dependence on borrowed money etc. are the few reasons behind the emergence of this critical situation of Punjab agriculture. The situation has worsened to the extent that young farmers have become the victims of suicide. Following are the various causes that lead to farmer's distress in Punjab.

Natural Causes

Agriculture being highly dependent on natural factors, its success and failure depend much on favorable weather conditions and natural environment.

- **Uncertain Weather Conditions**

It is well stated that Indian agriculture is gamble of monsoons being only 44 percent of total cultivatable area is under irrigation, it is mostly dependent on good rainfall. Punjab is good in statistics as far as area under irrigation is concerned. The excellent network of irrigation facilities is serving the Punjab agriculture. Irrigation coverage which was about 76% of net sown area in 1972-73 has increased to the level of about 97% in the year 2006-2007, but the extensive use of canal irrigation and reckless use of ground water through tube wells have caused water logging in some areas and

lowering of the ground water table in other areas. Rainfall has ever remained unpredictable adding to the woes of the farmers and thus putting extra pressure on ground water sources. The effects of weather on agriculture are far reaching, affecting the crop plants right from germination till maturity. Owing to various environmental changes Punjab is facing drought like conditions. In the current year (2015) rainfall is 31% below normal in Punjab (Chandigarh Metrological Centre, 2015).

- **Attack of Insects and Pests**

The Pest problem accentuated with the introduction of high yielding varieties of crops, intensive use of inputs and developing of new cropping pattern. Crops like cotton, sugarcane, paddy, oilseeds and vegetables have shown greater reliance on pesticides. Excessive and indiscriminate use of pesticides and weedicides has lead to several new problems, such as development of pest resistance, pest resurgence and outbreaks. Development of resistance in the American Boll Worm, because of abuse and misuse of pesticide in cotton, accounts for the inability to control the cotton pests in the cotton belt of the state. In the current year (2015) 60% of the cotton crop in the Malwa region has been lost because of white fly attack (The Tribune, September 2015). In case of paddy bacterial leaf blight and brown spot are prevalent. Amongst the insects/pests, leaf folder, aphid, stem bores and rice root weevil are prevalent.

- **Deteriorating Soil Health**

Deteriorating soil health conditions are one of the reasons for the stagnant productivity of various crops thus reducing the farmer's income. The soils have great potential for agricultural production in view of their high reserves of minerals. With present state of intensive agriculture, surface crust, sub-soil compaction, soil erosion, water logging, development of fine textured sodic soils, salinity and pollution from agro chemicals, sewerage and industrial effluents, depletion of organic matter and multi nutrient deficiencies are the major problems faced by the Punjab Soils. As per expert views, the high nutritional requirements of paddy and wheat had exhausted the Punjab soils of vital nutrients. Low fertility status implies that the amount of plant nutrient that the soil itself is capable of making available to the growing crop is far less than that needed for getting high yield. Micro nutrient deficiencies in large areas have also been noticed adversely effecting crop yield.

Technological Causes

There are so many important changes happening in Punjab economy that has changed the technical nature of Agriculture. Extensive Mechanization and highly investment oriented agriculture of present era has transformed the subsistence of yester years into commercial activity. There are important reasons which earlier yielded good results have now made the agriculture a non-profitable affair for many farmers. Following are the various technical reasons which are adding to the agrarian crisis that has engulfed the Punjab Agriculture.

- **Shifting of Subsistence to Commerical Farming**

Punjab's agriculture has undergone significant structural changes since the advent of green revolution in the mid sixties. Traditional agriculture has given way to modern and commercial agriculture. Under commercial agriculture, farming is done by keeping an eye on the market. The force behind commercialization was so strong that it led the farmers, not only big landlords but also small and marginal to shift towards market oriented agriculture. The commercialization of agriculture has come in force, as the Punjab state taking a leap forward in terms of irrigation, use of chemical fertilizers,

pesticides, HYV seeds, mechanization etc. making agriculture an expensive affair. This transformation in agriculture resulted into the emergence of a new set of problems in the state.

- **Increased Mechanisation**

In Punjab the high rate of production is the result of high levels of adoption of technological innovations such as Tube wells, diesel pump sets and tractors etc. Farm mechanization, no doubt has been beneficial for the intensive use of land and in overcoming the risks of unfavorable effects of weather in maturing crops. In Punjab with crop intensification, agriculture has become highly machinery dependent. As per estimates of Punjab State Farmers Commission, the state has double the number of tractors it requires. The average use of tractors per annum in the state is barely 450 hours which is much below the minimum 1000 hours of productive use in agriculture. The over capitalization in farm mechanization and its under utilization leads to higher cost of production and lower net income to farmers, making it economically unviable.

- **Capital Intensive Farming**

There is no doubt that Punjab farming is highly capital intensive with highest tractor density (68 tractors per 1000 NSA) and every third farming household in some part of the cotton belt of the state is owning a tractor. There is overcapitalization in the agriculture sector of the state. The capital assets are seriously underutilized due to low and decreasing farm size. This has resulted in increased cost of production and lower profitability. Over capitalization has made the Punjab agriculture slave of only rich and affluent. Small and marginal farmers find it hard to manage funds required for buying capital equipments and thus fall in the quagmire of indebtedness.

Economic Causes

The agrarian distress reached a high climax by early 2000 when the Government of India sponsored an all India independent NSSO study (2003) which reported that 40% of the Indian farmers and 37% of Punjab farmers have expressed their desire to leave farming, it being not a profitable occupation (NSSO, 2005). Adoption of modern farming equipments and reducing farm size holdings has made the farming in Punjab unviable for small and marginal farmers. Increasing cost of production and almost frozen MSP has made the agriculture less profitable. It has become almost a compulsion to make use of HYV seeds, Chemical fertilizers and irrigation facilities etc. to get good yield, thus dragging the farmers deep in debt, which they almost find unable to get out of it. Below are the various economic causes for increasing agrarian crisis in Punjab.

- **High Cost of Production**

The progress made by agriculture in Punjab State is unparalleled in the history of world agriculture. The state which was deficit in food at the time of independence has made rapid strides in agricultural development. The remarkable progress of Punjab agriculture is credited to the use of inputs like fertilizers, improved seeds, irrigation, plant protection chemicals, machinery and technology backup. Thus what has happened in the post-green revolution and post-liberalization phase is the integration of the farming sector into the market network and its increasing assumption of capital intensive character. The liberal use of these modern inputs has increased the cost of production.

- **Indebtedness**

Commercialization of agriculture needs more money to invest and in the agricultural setup borrowing is a

necessity. Farming demands regular outflow of cash to acquire various agricultural inputs but the inflow is not continuous due to seasonal nature of agriculture. The gap so created is plugged in by borrowed funds from either institutional or non-institutional sources (Sukhpal Singh et.al 2014). The total debt of the Punjab farmers during the mid 1990's was Rs. 5700 crores with an average of Rs.51,029/- per farm household (Shergill, 1998). Further in 2002-03 the debt burden of Punjab farmers surged at Rs. 9886 crores and the average debt per farm household was to the tune of Rs. 92,394/-. (Singh,2005). The national sample survey organization found that Punjab farmers were the most heavily indebted (65.4%) as the average debt per farm household was the highest amongst all the states of the country (NSSO, 2005). The estimate of debt on the total number of agricultural households in Punjab which were 10.52 lakh in numbers during the year 2012-13 was estimated to be Rs. 22943 crores (Sukhpal Singh, 2014). Increased cost of production, low price of the produce and thus low profit margins due to stagnant crop productivity or crop failure are the main reasons for indebtedness of farmers.

- **Insufficient MSP**

The green revolution which brought a phenomenal growth in the agricultural sector and improved the economic conditions of the farming community during 1970's and 1980's have grown dim with the passage of time. Over the past decade the state has experienced deceleration of its economy and has slipped in the ranking of the prosperous states of the country. The crisis in the agriculture is attributed to rising cost of production and non-remunerative prices. Farming has become a non-profitable venture. Due to depleting water resources and deterioration of soil health, farmers have to use extra doses of chemical fertilizers and extensive mechanization to get increased yield year after year, thus increasing the cost of production. Because of this farmers never feel satisfied with the MSP and the gap between the income and expenditure is widening leading to farmer's distress.

- **Limited Benefit of Subsidies**

The state of Indian agrarian sector was pathetic at the time of Independence. After independence tremendous efforts were made to boost the economy through development of agriculture. Story of Punjab was no different. Various integrated programs were formulated that bore fruits in the form of green revolution. On the recommendations of Food Grain Price Commission (Jha Committee) the Government of India started the scheme of subsidies on purchase of various agricultural inputs to facilitate the farmers. At present, Centre as well as State governments are providing subsidies on fertilizers, irrigation, electricity and other subsidies to the marginal farmers in the form of seeds and crop insurance schemes. Though despite of poor fiscal health, Punjab Government is distributing bounties in the form of subsidies, yet they are of little help for those who actually deserve them. A survey commissioned by NABARD and undertaken by Punjab Agricultural University has confirmed that 94% of the Government Subsidies are being availed by big and medium farmers, leaving the smaller farmers for whom subsidies are actually meant sidelined. The survey has also indicated that the subsidies are not being given based on needs but on political considerations.

- **Absence of Proper Marketing and Warehousing Facilities**

Besides advancement in farm technology agriculture development also depends upon the improvement in market infrastructure through ensuring better returns to farmers. It may be stated that about 53% of wheat production and 76% of rice production of Punjab had been going to the central pool for the past four decades (Ghuman et.al 2009). Due to fast mechanization of agriculture, particularly with the introduction of harvesting and threshing of wheat and paddy with

combine harvesters during the nineteen eighties in the state, the post harvest period of market arrival of these two crops has squeezed, resulting in congestion in the grain market. Sometimes it becomes difficult even for the Public Procurement agencies to lift the farm produce from the markets in time. The farmers with their produce camp in the markets waiting for their produce to be lifted bearing all the vagaries of nature. Sometimes because of delay in lifting and bad weather conditions their produce gets affected and fetches far lower price than expected. Small and marginal farmers sometimes do distressed sale, as their holding capacity is far low. Because of no access to storage facility and lack of proper transportation they prefer to sell their produce in the village itself to the commission agents at much lower prices instead of going to the regulated market.

Social Causes

Once considered a model state Punjab has now turned into a laggard state and lost its place amongst the five top states. The average annual growth rate of net domestic product of Punjab economy during the last five years (2006-11) is 5.5% and in the year 2011-12 it has registered the growth of 5.8% which is lower than India's GDP growth of 6.5% in the same year (Times of India, 2012). Other than economic and natural reasons there are certain social causes that are responsible for this agrarian crisis that has engulfed the state of Punjab. These causes are listed as below:

- **Higher Spending and Lower Saving**

With the advent of Green Revolution there was whole lot of transformation in the ways agriculture was carried on. With the larger incomes in the hands of the farmers because of commercial farming, the expenditure on social ceremonies and domestic consumption has increased. Instead of saving, they started spending on the comforts and luxuries of life. Owning tractor and other farm equipment is now considered as a status symbol. But with the increasing cost and decreasing productivity and thus lower income level farmers find it hard to make compromises with the consumption pattern they are used to and thus take the debt route. In a study (Sukhpal Singh et.al 2014) it is revealed that 43% of the credit is for non-productive purposes. Increasing consumerism amongst the farmers is the reason behind the sorry state of affairs. During the era of high growth, the farmers attained high living standards, which led to their social obligations being more expensive.

- **Low Interest in Agriculture**

Farming as a profession is not attractive enough for young people in Punjab where unemployment is becoming a problem (Sidhu, 2002). Like many farming communities, Punjab is characterized by an ageing farmer population, with fewer young entrants. This phenomenon may limit the scope of innovations and adoption of modern methods of sustainable agriculture. Aged farmers although experienced, are often less educated and are often resistant to changes. Most of the time big zamindars leave the farming in the hands of the tenants. With the exit of the dominant cast peasantry from farming, the vacuum thus created is seen as an opportunity and sought to be occupied by the small peasantry, agricultural labor and service class people through tenancy, share cropping and purchase of lands.

- **Problem of Drug Abuse**

The success story of Punjab's economy has seemingly come to an end. Once, the torch bearer of green revolution and known for its hard working people Punjab is in news for drug epidemic that has swept across the state, accompanying the decline in economic growth. The extent to which the problem is specific to the state can be seen from the fact that

roughly sixty percent of all illicit drugs confiscated in India are seized in Punjab (Yardley, 2012). Drug abuse has increased at an alarming rate. Youth from the affluent families, especially of rich farmers have easy access to highly priced narcotics, thus giving less attention to their farming and leaving it to their tenants. The youth from lower income class take up drugs to get some relief from the tensions caused by slower growth of income and increasing unemployment. To get their quota of drugs they do not shy away to sell their belongings and taking up of loans.

- **Increasing Unemployment**

Punjab farming has largely become capital driven. The introduction of tractors, threshers, combines i.e. the mechanical power for tilling and harvesting operations have rendered labor of Punjab jobless. The manual operations have been almost eliminated and the remaining tasks are being done by the migrant work force available at low level of wages. Increased unemployment further aggravates the already glaring problem of agrarian crisis.

Political Causes

The state of Punjab has been showcased as an Indian Agricultural success story since the green revolution. The political economy of agricultural development showed that the national food security issue was the big driving force behind the adoption of green revolution or to be more precise behind the adoption of rice-wheat system of production. It was political will of the Central Government that has put Punjab in the rice-wheat monoculture. The output pricing policies in terms of minimum support price, the input subsidies, and technological policies favoring these crops are the major driving forces. Government makes use of MSP to encourage the Punjab farmers for rice and wheat cultivation. Increase of MSP and various subsidies is a political gimmick to create the vote bank. The Political will of the State governments in the favor of Paddy and wheat can be ascertained from the very fact that even the state agricultural research system favored it. All the resources of the state were directed to meet higher and higher targets of food production allocated to the state at the cost of other crops. (World Bank Report, 2003). All these political favors have changed the structure of Punjab farming where farmers began producing the water intensive, non-traditional rice crop in large quantities, even though Punjab was and continued to be a primarily wheat eating state. In the present scenario even if farmers try to switch over from wheat and paddy to some other crops, the lesser opportunities and political favors and even lower market assistance resist them to do so. Because of lack of political will and any other alternative source of employment small and marginal farmers of Punjab continue to pursue the environmentally and economically unsustainable agrarian practices of the green revolution, while accumulating high agrarian debt. (Mallika Kaur, 2010).

CONCLUSIONS

The seed, fertilizer, irrigation package of green revolution has transformed agrarian Punjab into a vibrant growing economy. But the very forces which resulted in the rapid agricultural production have become traps in which Punjab's agriculture finds itself embroiled. Punjab paid the price of green revolution in form of depleting water resources, environmental degradation, class struggle, depeasantisation and the worst is farmer's distress. The dwindling income and increasing cost have made the farming non-profitable. Therefore, there is an urgent need on the part of the Central as well as State governments to address the various issues confronting the Punjab agriculture and should come up with the right mix of State policy, private initiative, infrastructural developments, technical changes and to the top of it a political will.

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