

AN INSIGHT INTO THE CHANGING SCENARIO OF AGRICULTURE IN PUNJAB

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ABSTRACT

The seed, fertilizer, irrigation package of green revolution transformed subsistence agriculture in Punjab to a commercial and market oriented activity. The force behind commercialization is so strong that it swept away not only the big landlords but also small and marginal farmers towards market oriented agriculture. The supporters of the new strategy considered the intensive approach as the only means of making a breakthrough in Punjab agriculture in the shortest possible time. The radical shift of agriculture has made Punjab agriculture to cross many boundaries to be in present scenario.

KEYWORDS: Agriculture, Green Revolution, Subsistence, Commercial, Transformation

INTRODUCTION

Since the mid nineteen sixties the traditional agricultural practices are gradually being replaced by modern technology and farm practices. Traditional agriculture relies heavily on indigenous inputs such as the use of organic manures, seeds, simple ploughs and other primitive agricultural tools. However, the new agricultural strategy is extensively using the chemical fertilizers, pesticides, improved varieties of seeds including hybrid seeds, agricultural machinery, irrigation, diesel and electric power etc. Agriculture in Punjab is exploring new dimensions. Once the means of subsistence, it has now become a commercial activity. The transmission of agriculture in Punjab in the past few decades is a saga of scientific discoveries in agriculture and their adoption by the farmers of the state. Agriculture in Punjab has crossed many boundaries to be in present scenario. Following are the various changes that have marked their presence felt in the present structure of Punjab agriculture:

SUBSISTANCE TO COMMERCIAL FARMING

Punjab agriculture has undergone significant changes since the inception of green revolution in the mid sixties. Traditional agriculture has progressively given way to modern and commercial agriculture. This happened because of adoption of dwarf wheat varieties in the mid sixties and the rice varieties in the early seventies. This has completely transformed the agricultural scenario in Punjab. Agriculture has now become from the means of subsistence to the source of earning. Use of chemical fertilizers, capital formation in agricultural sector, rapid mechanization, use of chemical fertilizers, change in production pattern etc. are the few agents of this changed scenario. The force behind commercialization is so strong that it led the farmers not only the big landlords but also small and marginal to shift towards market oriented agriculture by producing commercial crops like paddy, wheat and cotton.

Diversified To Mono-Culture

Earlier when agriculture was a means of subsistence, farmers used to produce each and every crop they required without giving any thought to their marketability and price element. But today farmers produce a crop by keeping an eye

on the market. Diversified agriculture has given way to the wheat paddy mono-culture with which farmers feel most comfortable and secure. They don't feel shy in shifting crop area from pulses, cereals, oil seeds etc. to these two crops. The transformation of agriculture from subsistence to market oriented is one of the many reasons of emergence of this phenomenon. From the following table it can be clearly observed that there is radical shift of area in favor of wheat and rice giving way to mono-culture:

Table 1: Area under Various Crops (Thousand Hectares)

Crop	1980-81	1990-91	2000-01	2011-12
Rice	1183	2015	2612	2818
Wheat	2812	3273	3408	3528
Grams	258	60	8	1.8
Maize	382	188	165	126
Pulses	325	90	49	20
Oilseeds	225	141	83	56

Source: Statistical abstracts, Punjab

Labour Intensive to Capital Intensive Farming

Punjab being dominantly agricultural state provides larger employment to its workforce. Earlier agriculture was done on a very basic level being more labor intensive. But with the advent of green revolution which is a big supporter of mechanization the phase of capital intensive farming has emerged. In 2000-2001 53.4% of its population was earning its livelihood in agriculture. But high intensity of land use and timeliness of agricultural operations have forced the farmers to depend on mechanized farm operations. The key element of the process of green revolution was the injection of large capital and technological inputs in the agriculture sector. Use of HVY seeds, chemical fertilizers, larger irrigation potential, plant protection etc. need larger capital. Earlier farmers used to do farming using things readily available like manures, compost, cow dung, ploughs and very basic tools, thus putting less financial burden on farmers. Following table shows the growth drivers in Punjab agriculture:

Table 2: Agents of Growth in Punjab Agriculture

INDICATORS	2007-08	2008-09	2009-10	2010-11
Tractors (Nos)	485781	492220	498517	504310
Tubewells (lakhs)	12.46	12.76	13.76	13.82
Consp. Of Chemical Fertilizers (Kg/ha)	213	223	226	243
Consp. Of Insecticides/Pesticides (technical grade M.T)	5900	5760	5745	5600

Source: Statistical Abstract, Punjab

Nature Oriented To Protected Farming

Farming in Punjab has been converted from farming in natural ways to protected farming. In natural ways farming was done by making use of all the natural ingredients. There was not much of the consideration of high productivity or larger production. Artificial means to increase production were not in much use. Agriculture was mostly rain fed and was done as far as keeping it close to nature. Farmers used to use grains preserved from their production from previous years as seeds, cattle dung and compost were used as manures and farming was done by making use of very basic, simple tools thus putting less pressure on the environment. But in current scenario farming is done in more protective ways. Making use of chemical fertilizers to enhance the productivity of soil, use of pesticides to save the crops, relying on various sources of irrigation to save farming from any shortage of rain, use of green houses and poly houses to grow houses in more controlled environment are the few things that farmers do to get larger crops is market dominated agriculture.

Value Additive Farming

In Punjab the food processing sector has become the focus area of investment. The term food processing is mainly defined as a process of value addition to the agricultural or horticultural produce by various methods like grading, sorting and packaging. In other words its is a technique of manufacturing and preserving food substances in an effective manner with a view to enhance their shelf life, improve quality as well as make them functionally more useful. As per the state government data 33 mega agro processing projects with total investment of about Rs. 2762 crores have been approved and are under various stages of implementation. Additionally about 28 mega projects in agro and allied sectors such as grain based distilleries, baby food, health food etc. with total investment of Rs. 2680 crores are also under various stages of implementation and some of them have also started commercial operations. Various agro food parks have also been developed in the state.

CONCLUSIONS

Punjab agriculture adopted technology led growth strategy that bore good fruits to the farmers in particular and the state economy in general. There is a radical shift of nature of agriculture from subsistence to commercial, from natural to protective and labor intensive to capital intensive and so on. But the most strategic changes that are most visible are the emergence of mono-culture which has rapidly come to dominate the state's agriculture. This changing scenario of Punjab's agriculture has paid rich dividends earlier but now it has reached the saturation point where farmers and the government need to thing the ways to curb the downfall of agriculture sector to save the economy from sliding down to the new lows.

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