

Challenges to Punjab Agriculture in A Globalizing World

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Introduction

The major question that faces Punjab agriculture is “Will Punjab be the “Kohinoor” of Indian states in 2010?” The answer is no if the business continues as usual. The answer could be yes if bold and wide-ranging policy reforms are undertaken. This paper is divided into three parts. The first part will take stock of what has been happening in Punjab agricultural sector over the past three decades. Part two will identify new challenges that are facing Punjab agriculture. Part three will identify new directions for future in order to have increased contribution of agricultural sector to economic growth in the state of Punjab.

What Ails Punjab Agriculture?

Agriculture has been in a state of disarray in Punjab for the past decade. The 1990s have been a decade of slumber in Punjab, particularly in Punjab agriculture. In the 1970s Punjab’s growth rate in net domestic product (NDP) at constant prices was 5.4 percent compared to the national average of 3.4 percent for India. In the 1980s the remaining states in India caught up with Punjab with a national average of 5.1 percent of growth in NDP while Punjab was still marginally ahead with 5.4 percent growth rate. However, in the 1990s Punjab has slid back with 4.3 percent growth of NDP while the rest of India has registered a growth rate of 6.1 percent. This downslide started in the mid 1990s and Punjab lost its position as the highest per capita income state, which it maintained over the past four decades to Maharashtra.

But the question is why did Punjab slid back? There are several reasons, but an important one is that agriculture still dominates the Punjab economy with about 40 percent of net state domestic product coming from the agriculture sector. Furthermore, agriculture in Punjab is not doing well in terms of its productivity. The share of agriculture in 1998-1999 was 40 percent in Punjab while that of Maharashtra is only 16

percent of net state domestic product. Within agriculture Punjab has also demonstrated a sluggish growth rate in the 1990s. In the 1990s the overall growth rate in agricultural net domestic product for Punjab was 2.3 percent while the rest of India registered 3.3 percent. This is a sharp decline from the 1980s when Punjab registered a 5.3 percent growth in agricultural income compared to the rest of India, which registered 3.08 percent. This brings us to the question what ails Punjab farms.

In Punjab the cropping system is dominated by wheat, rice, and cotton but the market for these commodities, including the foodgrains, is lacking. In the 1960s, 1970s, and to some extent in the 1980s the shortage of foodgrains in other parts of India was the major source of absorption of the surplus produced in Punjab. However, in the 1990s the deficit in other states, particularly in the northern and northeast states of India have reduced due to increased agricultural productivity in those areas and the market for excess supply of foodgrains from Punjab has declined. Another major reason for the state of Punjab agriculture is the stagnation of the wheat and rice yields which has resulted in raising capital costs and shrinking profit margins in agricultural production. The crops such as rice and wheat are irrigated and due to rising subsidies and falling public investments there has been an enormous waste of resources such as water and the farming system has become unsustainable. The policy of free electricity to farmers has resulted in excess mining of groundwater resources which has resulted in the lowering of the water table to the extent of 15 centimeters per year over the past 10-15 years.

The current challenge is to look for external markets for the surplus foodgrains from Punjab. But at the world level, when the external prices for foodgrain collapse farmers are not adequately prepared to face the challenges of globalization. This is where the negotiations in the international trade agreements become most important. The cost of procurement, storage, and distribution needs to be reduced in order to increase the production and distribution systems of foodgrains in Punjab. In order for Punjab agriculture to become competitive in foodgrain economy the loss due to huge transportation from farm to port needs to be addressed.

There has also been a demand shift away from cereals due to income increases in much of India. The demand for meat, milk, fruits, and vegetables have been increasing while consumers have been switching away from the consumption of cereal foodgrains. This requires diversification of Punjab agriculture to meet the changing demand in agricultural commodities.

What are the Challenges to Punjab Agriculture?

Globalization of world agriculture brings new challenge to Punjab. The key question is can Punjab penetrate the world markets? The world agriculture is changing quickly with new rules of the game and with the WTO Agreement on Agriculture. Market access, domestic support, and export subsidies have become three major pillars of the Agreement on Agriculture. Furthermore, sanitary and phytosanitary issues have come to play a major role in the Agreement on Agriculture. TRIPS have also played a major role in protecting intellectual property rights. There has been a growing presence of multinational corporations in developing countries, particularly in trading agricultural commodities. Increasing concentration and growing scale in food business in terms of processing, distribution, and retailing has been prevalent in developing countries. In world trade negotiations India has achieved reasonable tariff cover and has a larger room to play. Tariffs on sensitive items such as milk powder, maize, and rice have also been renegotiated.

Working against Punjab agriculture, however, is also the developed country agriculture, which is highly distorted due to producer subsidies. There is an argument in India among the policymakers that since developed countries provide subsidies to the farmers it justifies developing country farmers such as Indian farmers to have their own share of subsidies from their governments. But the argument does not recognize the affordability of such high subsidies given that the state finances in India are already in bad shape. The major question is then how do we compete in this distorted world. One answer lies in more engagement in the WTO negotiations and building effective and meaningful alliances with other negotiating partners such as Cairns Group, and China. It is also

important that we team up with trade experts around the globe to tackle the major distortions imposed by developed country agriculture.

What can Policymakers do to Punjab's Agricultural Economy?

In these circumstances what can policymakers in Punjab do in order to make headway in their agriculture? First, there is a need to examine closely at the global trends and explore the emerging opportunities. Second, taking advantage of the growing importance of fruits and vegetables, animal products, and fishery products in world agricultural trade and increasing the share of these commodities in our export. Third, the composition of trade is changing faster than that of production and this provides opportunities for spreading and diversifying our agricultural base. Finally, the policymakers need to recognize the growing importance of vertical coordination of agricultural markets, quality assurance, and the role of international market information.

For Punjab agriculture it is important that the policymakers reduce their dependency on the Food Corporation of India to sell their foodgrains and look for alternative agricultural commodities that can be sold in growing markets in and outside of India. There needs to be a shift from supply driven agriculture to demand driven agriculture and diversify the crop base to include poultry, dairy, fruits and vegetables, basmati rice, durum wheat, pulses, oil, and oilseeds. It is important to identify niche markets that can increase the income of the farmers. Focusing on high value and value addition of agricultural commodities is important given the high transport cost of shifting agricultural commodities from Punjab to the nearest port. Fostering private initiative in production, marketing, and distribution is essential to increase the efficiency of the food distribution system. Developing institutions to meet these new needs is also fundamental for making progress in the agricultural sector.

On the technology side it is important to push the production frontier further to increase crop yields. The seed replacement rate continues to be less than 10 percent in Punjab. This calls for increased investment by both the private and public sector in research and development in agriculture. It is also important that policymakers from Punjab look for

alternative technologies from international research centers. For example, super wheat from CIMMYT, hybrid and golden rice from IRRI, macdonia chick peas from western Australia, and dwarf pigeon pea from ICRISAT could be considered. Also, new advances in biotechnology such as Bt cotton provide opportunities for increasing productivity in the cotton sector. GM soybean and GM corn can give high yields thereby reducing the cost of production for Punjab farmers. For vegetables and fruits, new processable varieties should be identified and promoted rather than table varieties.

In Punjab there is a need to shift to a new production profile. Punjab farmers need to move away from common rice and wheat varieties and focus on high value crops such as basmati rice and durum wheat. Diversifying their crop base into crops like soybean and maize and increasing the production of livestock and poultry will help in reducing the pressure of land from foodgrain production. It is also important to integrate high yielding short duration legumes into the existing rice-wheat cropping system in order to have positive environmental benefits. Fruits and vegetables such as okra, eggplant, and potatoes can be produced for export in domestic markets. Developing dairy industries to produce milk and milk products for the urban centers of north India is another way of diversifying the crop base in Punjab. In addition, where water availability is not a problem, development of inland fisheries is also a possibility. More and more quality seeds for production in agriculture is becoming a serious need. Punjab farmers with their ability to maintain high quality production systems can become involved in producing seeds for the rest of the country. In summary, Punjab's nontraditional export needs to go up in line with the trend that is happening in the rest of India.

Value addition is an essential part of transforming Punjab agriculture. Hubs of processed wheat products around modernized private industries can be developed to produce dalia, atta, maida, suji, biscuits, pasta in place of whole wheat. Transporting processed wheat products is much more cost effective than transporting whole grains. The use of soyabean and maize for the livestock industry to produce high value livestock products should be a priority. Furthermore, producing soya products such as tofu, soya chops, and soya milk will also add value to soya production. Processing plants for processing

vegetables and fruits and for processing dairy and poultry are also an economically efficient way of diversifying the agricultural base. Expanding crop diversification and increasing agroindustrialization requires the building of a golden triangle with farmer, agroindustry, and the banker as the corners of the triangle.

Concluding Remarks

What can the policymakers, including the chief minister of Punjab do? The immediate need is to identify a legislative mechanism to promote contract farming and to ensure the enforceability of such contracts in producing high value crops. Freeing up of land lease markets and computerization of land records will help in easing land transactions among farmers. Ensuring that land tenancy laws are not a constraint to agroindustry development is also important. Market reforms related to rationalization of input subsidies and removal of all restrictions in terms of stocking limits, movements, and levies in transporting foodgrains should be implemented.

Institutional innovations such as warehouse receipt system, futures trading, and commodity exchanges should be established to tap international markets. Crop insurance programs that will help farmers to protect themselves from the volatility of international markets as well as from vagaries of monsoon should be implemented and the success of the programs such as on Kisan credit cards should be expanded. Developing institutions for certifying quality characteristics of agricultural produces will go a long way in enabling farmers to reach out to international markets. Institutional reforms, particularly in input supplying agencies and in irrigation systems should be undertaken. Finally, encouraging farmers' associations and cooperatives to build collective bargaining power and to enter into contracts with agroprocessors and supermarkets is essential for adding value to the products produced by farmers.

In conclusion, it is important that the Punjab policymakers bring the brains together, both domestic and international to bear on the future development strategies of Punjab.

Getting the bankers, entrepreneurs, and farmer leaders on the same table and meeting

their needs in order to make progress will be essential in the near future. Last and not least, getting the legislation cleaned up for all the controls that are pulling down the agricultural economy will be important. The rest will follow.