AGRICULTURE SUBSIDIES IN PUNJAB:
AN ANALYSIS

ABSTRACT

The socio-economic structure, which prevailed prior to the British rule in the country, resulted in the organization of self-sufficient villages. It had been maintaining some kind of static equilibrium. The Indian peasant, though not properly educated, had adequate experience of farming systems and he has been dependent on it for the means of living. The Royal commission in Agriculture in India observed that both the methods of cultivation and social organization exhibit that settled order which is characteristic of all countries in which the cultivating peasant has long lived in and closely adapted himself to the conditions of a particular environment.

After independence tremendous efforts are made to boost the economy through agriculture as one of the tools for development. Specific programmes like new agriculture technology are introduced to convert agriculture into a successful and prosperous business, to bring more land under cultivation and to raise agriculture production. In India, the adoption of new agricultural technique is costly than that of traditional method of cultivation. In traditional method, inputs are least expensive, on the other hand, inputs in modern technology like high yielding varieties of seeds, fertilizers, farm mechanization and irrigation are very costly and Indian farmers being poor are not in a position to buy these expensive inputs. Then on the recommendations of food grain price committee (Jha Committee), the Government of India started the scheme of subsidies on purchase of various agriculture inputs to facilitate the farmers (Singh, 1994).

Now, agriculture subsidies have become a debatable issue in India. All of these subsidies by reducing the prices of the inputs, served in the initial stages of green revolution, as incentives to the farmers for adopting the newly introduced seed-cum-fertilizer technology. These helped in raising the agricultural output, after some time, the amount paid on these subsidies began to rise (Gulati and Narayanan, 2003).

Subsidies are often criticized for their financial burden. Some researchers assert to the extent that these should be withdrawn in a phased manner, such a step will reduce the fiscal deficit, improve the efficiency of resources use, funds for public investment in
agriculture. On the other hand, there is a fear that agriculture production and income of farmers would decline if subsidies are curtailed. These are very important issues and need serious investigation. It is particularly important to know the economically and socially impact of agriculture subsidies on farmers of Punjab.

The objectives of the present study are: to study the growth and distribution of agricultural subsidies in India, to study the growth and distribution of agricultural subsidies in Punjab State, to study the impact of agricultural subsidies in Punjab and to suggest ways and means for giving agricultural subsidies to farmers of Punjab.

The present study is related to agriculture subsidies in India as well as Punjab from 1980-81 to 2008-09. In this study agriculture subsidies of fertilizers, electricity, irrigation, seeds, machinery etc. are discussed during pre-liberalisation period (1980-81 to 1985-86), first phase of liberalisation period (1990-91 to 1996-97) as well as during second phase of liberalisation period (2000-01 to 2008-09). For analysing the growth and distribution pattern of agriculture subsidies, five zones south, west, east, north and north-east (twenty eight states) as well as twenty districts of Punjab state have been taken.

The present study is based on primary as well as secondary data. The districts of Punjab have been divided into three regions on the basis of levels of agricultural productivity. Average productivity is estimated by aggregation of the output of ten major crops of the state for the year 2006-07. Keeping in view the differences in agro-climate conditions and to avoid the geographical contiguity of sampled districts, it is deemed fit to select Ludhiana from high productivity zone, Bathinda from medium productivity zone and Rupnagar from low productivity zone. There are six tehsils of Ludhiana, three tehsils of Bathinda and Rupnagar each. Following random sampling, three villages from each tehsil are selected, thus thirty six villages are selected from three districts. Sampled farmers have been divided into three categories on the basis of their farm size, small farmers are those who own land up to five acres, medium farmers own land between five to ten acres and large farmers own land above ten acres. A detailed questionnaire is prepared for collecting information about the agriculture subsidies. Standard statistical tools like mean values, percentages have been used while carrying out tabular analysis.

The present study has been divided into seven chapters. The first chapter provides an introduction to the concept of agriculture subsidies. The second chapter is related to the different views of the analysts. The third chapter deals with the gross cropped area, fertilizers
subsidies, electricity subsidies and irrigation subsidies in India. The fourth chapter shows district-wise gross cropped area, subsidies of fertilizers, electricity and irrigation in Punjab state. The fifth chapter supplements the issues relating to the productivity of crops and total subsidies in India as well as in Punjab. The sixth chapter shows the impact of agriculture subsidies in Punjab state. The last chapter presents the summary, conclusions and suggestions.

The main findings show that in India, gross cropped area (GCA) has increased during pre-liberalisation as well as in first phase of liberalisation periods, whereas in second phase of liberalisation period, it has declined. During pre-liberalization period, the GCA in all the five (south, west, north, east and north-east) zones has increased, whereas during first phase of liberalisation period, GCA also increased in all the zones except in east zone.

State-wise analysis reveals that during pre-liberalisation period, the GCA in all the states of India increased in all the states except in Andhra Pradesh, Pondicherry, Gujarat, Delhi, Bihar, Manipur, Meghalaya and Mizoram, whereas during first phase of liberalisation period it declined in Tamil Nadu, Pondicherry, Andaman and Nicobar Islands, Maharashtra, Goa, Deman and Diu, Dadra Nagar Haveli, Delhi, Himachal Pradesh, Bihar, Orissa, Manipur and Sikkim.

The national as well as all zone level subsidies of fertilizers increased during pre-liberalisation and post liberalisation periods. In case of fertilizers subsidies (In Rs. /Hectare), north zone enjoyed major portion of fertilizers subsidies at national level during pre as well as post-liberalisation periods of the study, whereas its percentage share declined in all the years except 1996-97 and 2006-07. The share of south zone declined during pre-liberalisation period on the other hand it is increased during post liberalization period except in 20056-07, whereas the share of west zone declined throughout the study period except the years 1990-91 and 2006-07. The percentage share of east zone increased during the pre-liberalisation and second phase of liberalisation periods, whereas declined in the first phase of liberalisation period.

Data related to electricity subsidies (In Rs. Crores) indicate that at national level these have increased throughout the study period except in 2008-09. At zone level, subsidies of electricity increased in all zones during 1980-81 to 2000-01, whereas in 2008-09 these have declined in south and east zones. Data indicate that north zone occupied first rank by getting maximum amount of 47.34 per cent and 31.91 per cent of electricity subsidies in
1980-81 and 1985-86 respectively. West zone got first rank after liberalisation period except 2008-09. East and north-east zone achieved fourth and fifth rank throughout the study period.

State-wise analysis shows that Uttar Pradesh is ahead among all the states before liberalisation as well as first phase of liberalisation period by getting major part of electricity subsidies (In Rs. Crores). At India level, electricity subsidies (In Rs. /Hectare) are Rs. 343.26 per hectare, out of which north zone got 44.39 per cent followed by south (34.16 per cent), west (15.61 per cent), east (5.57 per cent) and north-east (0.26 per cent) zones in 1980-81. In 1990-91, these subsidies are Rs. 4083.80 per hectare in India, out of which most of share has gone to north zone (36.57 per cent) followed by south, west, east and north-east zones.

Data reveal that in all the states of India, electricity subsidies (In Rs. /Hectare) have increased in all the states except in Madhya Pradesh, Maharashtra and Himachal Pradesh during 1980-81 to 2000-01. At national level as well as zone level, irrigation subsidies (In Rs. Crores) increased during pre and post liberalisation periods. Out of five zones of India, west zone is ahead among all the other states throughout the study period except 1980-81 and 2006-07 (In these two years south zone got first rank). North zone occupied second rank during the study period except in 1990-91. The percentage share of east zone has increased before liberalisation as well as second phase of liberalisation period (except 2006-07) whereas it has declined during the first phase of liberalisation period. North-east zone has occupied last rank during 1980-81 to 2006-07, its share declined before liberalisation period, increased in 1990-91 and remained constant during 1996-97 to 2000-01 and again has shown increase of 0.88 per cent in 2006-07.

Data related to irrigation subsidies in Rs. /Hectare show that at India level as well as zone level these subsidies have risen up throughout the study period. South zone is ahead in setting maximum subsidies 33.63 per cent in 1980-81, north zone got 25.52 per cent in 1985-86 and 22.54 per cent in 1990-91, whereas west zone is leading the other zones by obtaining 32.09 per cent in 1996-97 and 39.62 per cent in 2000-01.

District wise analysis of Punjab state shows that before liberalisation period gross cropped area (GCA) under all the districts has increased except in district Rupnagar, whereas after liberalisation period GCA has declined in Amritsar, Kapurthala, Jalandhar, Hoshiarpur, Rupnagar, Ludhiana, Firozpur, Faridkot, Moga, Bathinda, Sangrur and Patiala districts.
Fertilizers subsidies (In Rs. /Hectare) have increased during pre-liberalisation as well as first phase of liberalisation periods, in all the districts of Punjab whereas in second phase of liberalisation period, these have declined in Faridkot. In 1980-81, Kapurthala has got maximum share (13.15 per cent) of fertilizers subsidies whereas it has lost its first rank during 1985-86 to 2009-10. Ludhiana is ahead among all the other districts during 1985-86 to 1990-91. In 1996-97, Faridkot has got the maximum share (8.63 per cent) followed by Ludhiana, Firozpur, Faridkot, Moga, Gurdaspur, Rupnagar, Kapurthala, S.B.S., Amritsar and Bathinda. Jalandhar has got topmost position in 2009-10 followed by Moga and Ludhiana etc.

Bathinda has got topmost position in case of electricity subsidies per hectare during 1980-81 to 1990-91 whereas it has lost its first position during 1996-97 to 2009-10. During 1996-97 to 2009-10, Muktsar occupied topmost position by receiving 21.10 per cent, 20.01 per cent and 12.66 per cent in 1996-97, 2000-01 and 2009-10 respectively.

A lot of variations is seen when total subsidies (In Rs. /Hectare) are compared with productivity of crops (In Kg./ Hectare) throughout the study period. It is found that total subsidies (In Rs. /Hectare) in all the districts (except Faridkot, Bathinda) have been increased during pre-liberalisation period, whereas productivity (In Kg./ Hectare) declined in the most of the districts like Gurdaspur, Amritsar, Kapurthala, Jalandhar, Hoshiarpur, Rupnagar, Ludhiana, Firozpur, Bathinda, Sangrur, Patiala in 1985-86. After liberalisation period, total subsidies have declined in Faridkot (2009-10), whereas productivity declined in Hoshiarpur (2000-01), Rupnagar (1996-97 to 2000-01), Ludhiana (2000-01), Faridkot (1996-97), Bathinda (2000-01) and Mansa (2000-01) districts.

Secondary data show that centre as well as state governments fiscal deficit has increased throughout the study period. Secondary data indicate that the fiscal deficit of Punjab state government has increased throughout the study period except in 1995-96 and during 2004-05 to 2005-06. It is observed that the percentage share of electricity subsidies in state’s fiscal deficit is high as compared to canal subsidies throughout the study period. In 1992-93, the percentage share of electricity subsidies in fiscal deficit is 54.88, whereas canal subsidies is 22.23. In 2003-04, the share of electricity subsidies is 16.15 per cent in fiscal deficit on the other hand share of canal water is 8.89, which is twice approximate. The provision of subsidy on electricity has had a negative impact on the sustainability of agriculture as it has implications for depletion of underground water. It is seen that the
income from agriculture depends upon the size of land. Regarding the education level, it is observed that majority (40.13 per cent) of the total farmers are educated up to matriculate level out of which most of farmers are belonged to small-size category of farmers.

Data from field survey show that all the farmers are in favour of agriculture subsidies, the most (72.81 per cent) of total farmers are in favour of fertilizers, electricity as well as canal water subsidies on the other hand 27.39 per cent of total farmers are in favour of fertilizers and electricity. Money is required for the productive as well as unproductive purposes. The farmers take loans from institutional and non-institutional sources.

Data reveal that there is a positive impact of agriculture subsidies on the income of farmers. It is observed that the cost of production is declined as they have to pay less amount on purchase of fertilizers where as they are getting electricity and canal water free of cost. During survey it is found that maximum number of farmers is using diesel pump sets for irrigating the crops. Large farmers are spending on diesel pump sets as compared to small and medium farmers. The main reason behind it is poor supply of electricity. Comparing the diesel cost with the electricity charges even if the subsidy is withdrawn by Punjab Government, it is found that the diesel cost is higher than electricity charges (flat rate). The farmers are ready to pay the bills for electricity at the condition, supply of electricity should regular.

Most of the studies either supported distributing subsidies or withdrawal of subsidies. However, the present study reveals that some subsidies should be given and some others can be withdrawn without harming the farmers. Withdrawal of subsidies should be carried out in phased manner. Following are the some suggestions emerging out of the present study:- The centre government should adopt some criteria to give away subsidies to state either on the basis of gross cropped area or productivity. From the study it has been noted that subsidies which have direct relationship on productivity and income like seeds, fertilizers should be given to farmers, on the other hand subsidies on electricity can be withdrawn as supply of electricity in Punjab is irregular moreover farmers prefer regular supply of power even if they have to pay for it. If implemented, it will reduce state electricity board’s burden and this amount can be used for production of more electricity, reducing the need of purchasing electricity at very high prices, which adds to the deficit of state finance.