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Extent of Commercialisation of Agriculture in Punjab in Different Decades

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Abstract – Green revolution in Punjab initiated the process of commercialization of agriculture leading to wide increase in agricultural productivity and profits to farmers.It resulted in enormous growth oppurtunities and rise in standard of living .It put Punjab on top indexes in terms of GDP in India. The mammoth size of growth concluded in some unwanted consequences in terms of unsustainable ecology. The present paper focuses on measuring the extent of commercialization of agriculture in different decades since 1971 and variations in different districts of Punjab with the help of percentages.

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INTRODUCTION

Punjab faced chronic food shortages in 1950s and early 1960s. In the partitioned Punjab irrigation facilities were inadequate, livestock was of poor quality, literacy was low and population lived mostly in rural areas. Over time, the situation changed from a food deficit area, to a surplus producing state not only in food grains like wheat and rice but also in cotton and sugarcane. In addition, thousands of small and big manufacturing units across the state have led to fairly high income levels. Green revolution transformed Punjab from only wheat growing state to rice and wheat yielding state Punjab agriculture is now on the peak of commercialization and its farmers are trying to harvest enormous profits out of it. The journey of Punjab subsistence agriculture to modern commercial agriculture is very interesting and full of slacks and boom. Commercialization of agriculture is that phenomenon in which traditional self sufficiency goals are shifted towards profit and income oriented decision making (Sable, 1994). Mahaliyanaarachchi and Bandara (2006) defined commercialization of agricultural production as the phenomenon in which farmers' production is aimed at sales only. In commercial agriculture, number of farmers should be decreased but the size of the farms should be increased. Vardarajan and Elangovan (1995) stated that commercialization of agriculture constitutes modernization, monetization and integration. According to them commercialization of agriculture manifests itself in more area under cash crops, less subsistence oriented production, favorable markets, high income and investment cycles and credit rationing. Quan (2009) explained commercialization of agriculture as not only an increase of traded inputs and outputs but also relates to change in agricultural production system, institutions, scale of activity, opportunity for choice in decision making and in exchange mechanism Khurana (2010) asserted that in commercial agriculture the entire farm is adopted to one chief market product. He asserted commercialization of agriculture as the penetration of capital into agriculture .In this paper focus is laid **on to** know the extent of commercialization of agriculture. Different scholars have taken various indicators like marketable surpluses, area under cash crops, level of production, income, expenditure, consumption level and health status etc.**Vardarajan and Elangovan (1995)** stated that the extent of commercialization can be measured 1) by generation of more marketable surplus in subsistence oriented food grain crops, 2) by increasing production of market oriented cash crops and other products (collectively known as high value adding enterprises) and 3) both **Kennedy and Cogill (1987)** evaluated the extent of commercialization in terms of agricultural production, income, expenditure, consumption and health and nutritional status **Gebreselassie and Sharp (2008)** conducted their study with the objectives (1) to assess the scale of commercialization and farm characteristics The research stated that higher the level of production, the higher will be the farmer's tendency to engage in commercialized agriculture. It was concluded in the study that , as the volume of marketed output increases the volume of output consumed on the farm also increases but by a higher proportion, so that the degree of commercialization (measured in terms of proportion of output sold actually falls.**Satyasai and Vishwavnathan (1997)** The study measured the extent of commercialization with the parameters of cropping pattern, value of gross produce per unit of land, distribution of holdings, land rent paid in cash and kind, wages paid in cash and kind, borrowings etc.**Vardarajan and Elangovan (1995)** highlighted that area under cash crop, credit rationing, favorable market, high investment cycles, alternate crop patterns, group

/co–operative farming are the important factors effecting commercialization **Martey, Ramatu, Hassan and Kuwornu (2012)** described marketing, agricultural finance, farm size, infrastructural facilities as the important factors influencing the level of commercialization **Jayne, Yamano and Weber (2003)** emphasized on land holdings for higher levels of commercialization. **Lerman (2004)** in his paper has given great importance to land size in the commercialization of agriculture. **Olwande and Mathenge (2010)** in their paper gave profound significance to farm size. Their study stated that farm size had indirect positive impact on market participation by enticing farmer class to generate more production surpluses

OBJECTIVE

The present paper aims to achieve the following objectives:

1. To find the extent of commercialization of agriculture in different decades.

2. To find district wise disparity in area sown more than once.

3. To find zonal disparity in area sown more than once.

DATA AND METHODOLOGY

Inter district and inter regional variations are analyzed separately to have a clear and comparative view of the extent of commercialization. Punjab originally had 11 districts in 1970's. During 1972, Faridkot district came into being by taking some parts from Ferozepur and some from Bathinda. In the year, 1992-93, Mansa was carved out from Bathinda and Fatehgarh Sahib was formed from three districts namely Patiala, Ludhiana and Sangrur. During 1995, Nawan Shehar was formed from two districts namely Jalandhar and Hoshiarpur. In the same year, Muktsar and Moga were carved out from Faridkot district. Again in the year 2006, four new districts were created. Tarn Taran was created from Amritsar and in the same way Barnala was formed out of Sangrur. Mohali was formed out from the districts namely Roopnagar and Patiala. Various abstracts and reports scrutinized for data collection and analysis thereof represented the new districts which came into being with changing scenarios. Figures for the various periods went on changing along with the change of districts. Parent district were kept aloof. Merger of data into parent district was not possible in case of districts which were formed from more than one district. Another reason for the non merger was the non-availability of data at village/block/tehsil level. Hence, in this chapter it has been tried to find out the inter-district variations at particular period of time and the extent of commercialization in Punjab has been analyzed at various points of time.

The area of Punjab has also been divided into agro-climatic zones considering their cropping pattern, soil quality, soil texture, underground water table, underground water quality, rainfall, humidity, temperature etc. These zones may be broadly categorized into three zones namely central plain zone, undulating zone (including sub-mountain undulating zone & undulating plain zone) and western zone (including western plain zone and western zone). Central plain zone includes eight districts named as Amritsar, Tarn Taran, Kapurthala, Jalandhar, Shahid Bhagat Singh Nagar, Ludhiana, Patiala and Fatehgarh Sahib. Undulating zone includes four districts named as Gurdaspur, Hoshiarpur, Roopnagar and Sahibjada Ajit Singh Nagar. Western zone includes eight districts named as Ferozepur, Faridkot, Sri Mukatsar Sahib, Moga, Bathinda, Mansa, Sangrur and Barnala. The different comparisons are done on the basis of percentages. Area sown more than once is obtained by deducting the net area sown from total cropped area.

RESULT AND ANALYSIS

We tried to find the extent and change of commercialization of agriculture in Punjab. District wise and zone wise variations have been found out by taking different aspects those directly/ indirectly related to affect the commercialization of agriculture.

AREA SOWN MORE THAN ONCE

Area is the major economic factor in the growth and progress of any country. Land is increasingly being used for domestic, industrial and agricultural purpose. Being a limited factor it is supposed to be used in the most efficient way. According to Statistical Abstract of Punjab, Area sown more than once is the area covered with crops during the year. In case different crops are raised on the same land during the year, the same area is counted more than once. This is obtained by deducting net area sown from total cropped area. The percentage of Area sown more than once to net cropped area shows the multiple efficiency of any area to use a particular plot of land.

Table1 analyses the area sown more than once percentage to net cropped area for the whole Punjab as well as for each of its districts for the period 1971 to 2011. The table analyses the extent, change and the inter-district variations in the commercialization of agriculture in Punjab.

Table 1

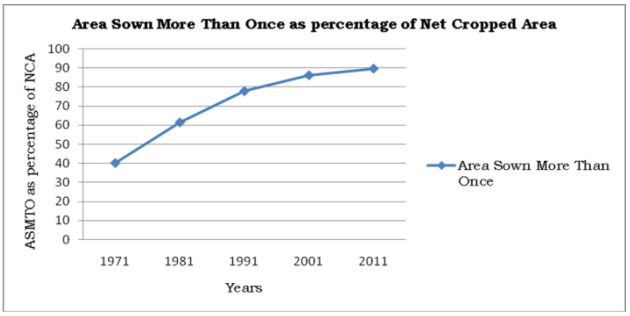
Area Sown More Than Once as percentage of Net Cropped Area

Districts /Year	1971	1981	1991	2001	2011
Gurdaspur	40.7	66.7 (26.0)	56.2 (-10.5)	68.8 (12.6)	75.9 (7.1)
Amritsar	51.0	66.2 (15.2)	78.0 (11.8)	84.1 (6.1)	95.4 (11.3)
Tarn Taran	*	*	*	*	81.7
Kapurthala	17.4	42.9 (25.5)	77.3 (34.4)	94.1 (16.8)	101.5 (7.4)
Jalandhar	38.7	60.9 (22.2)	77.5 (16.6)	73.9 (-3.6)	72.5 (-1.4)
S.B.S. Nagar	*	*	*	71.3	88.7 (17.4)
Hoshiarpur	42.2	51.0 (8.8)	60.3 (9.3)	67.9 (7.6)	78.5 (10.6)
Roopnagar	65.8	54.3 (-11.5)	78.6 (24.3)	66.7 (-11.9)	84.8 (18.1)
S.A.S. Nagar	*	*	*	*	62.8
Ludhiana	55.7	73.8 (18.1)	84.9 (11.1)	98.7 (13.8)	99.0 (0.3)
Ferozepur	30.9	58.4 (27.5)	82.8 (24.4)	90.1 (7.3)	87.7 (-2.4)
Faridkot	*	55.5	76.0 (20.5)	87.1 (11.1)	100.0 (12.9)
Sri Muktsar Sahib	*	*	*	84.2	92.9 (8.7)
Moga	*	*	*	98.0	93.4 (-4.6)
Bathinda	34.8	56.0 (21.2)	70.7 (14.7)	88.0 (17.3)	87.8 (-0.2)
Mansa	*	*	*	80.8	92.6 (11.8)
Sangrur	41.4	66.7 (25.3)	93.5 (26.8)	97.6 (4.1)	98.1 (0.5)
Barnala	*	*	*	*	110.5
Patiala	42.4	70.7 (28.3)	86.2 (15.5)	95.7 (9.5)	97.3 (1.6)
Fatehgarh Sahib	*	*	*	88.3	83.3 (-5.0)
Whole Punjab	40.1	61.4 (21.3)	77.8 (16.4)	86.1 (8.3)	89.6 (3.5)

* indicates the district was not in existence at that time.
Note: The figures in parenthesis show the changes.
Source: Director, Land records Punjab.
: Computed from Various issues of Statistical Abstract of Punjab.

Table 1 reveals that the area sown more than once percentage to net cropped area in Punjab has increased dynamically from 40.1% in 1971 to 89.6% in year 2011.

Figure 1.1



The figure 1.1 also clearly depicts that the extent of commercialization of agriculture in Punjab increased from 1971 to 2011 as measured from the point of view of area sown more than once to percentage of net cropped area. The continuous increase in use of land twice or more shows the increasing use of fertilizers and machines to improve the capability of soil to be ploughed again and again. The frequency of using the same land increased dynamically.

Regarding the change in the level of commercialization of agriculture in Punjab table 1 shows that in the year 1981 when Punjab as a whole has witnessed an increase of 21.3 as compared to 1971 in the percentage of area sown more than once to net cropped area, districts like Patiala, Ferozepur and Sangrur had greater and Roopnagar, Amritsar and Hoshiarpur had lesser change than the overall state. This kind of change in frequency approves of the change in the commercialization of agriculture to a great extent. The rate of change came down to the figure of 16.4 for 1991 compared to 1981. Districts like Kapurthala, Ferozepur and Sangrur were leading and Gurdaspur, Hoshiarpur and Ludhiana were lagging behind the overall state. Again the rate of change came down to the figure of 8.3 for 2001 compared to 1991. Districts like Bathinda, Ludhiana and Kapurthala were ahead of this rate and Roopnagar, Jalandhar and Sangrur lagged behind than the overall state. Comparing the rate of change in 2011 with 2001, it has been found that the overall state stood at 3.5. Districts like S.B.S. Nagar, Roopnagar and Faridkot were ahead and districts like Fatehgarh Sahib, Moga and Ferozepur showed lesser change than the overall state.

Regarding the inter district variations the table number 1 depicts that in the year 1971, Roopnagar had maximum area which was sown more than once 65.8% area of this district was cropped more than one time. Ludhiana and Amritsar had more than 50% of their area sown more than once. Rest of the districts had more than 40% of area sown more than once except Kapurthala which has just 17.4% as area sown more than once. In this year Kapurthala has shown least efficiency in using land again and again. In the year 1981, Ludhiana with 73.8% area sown more than once has shown maximum efficiency followed by Patiala. Rest of the districts like Sangrur, Gurdaspur, Amritsar and Jalandhar had more than 60% area as sown more than once. The districts namely Ferozepur, Bathinda, Faridkot, Roopnagar and Hoshiarpur had more than 50% efficiency level. Kapurthala (42.9%) has again shown least efficiency in this aspect.

In the year 1991, Sangrur topped the list with 93.5% of its area as sown more than once. The district namely Patiala, Ludhiana, Ferozepur had more than 80% of their area sown more than once but the districts like Roopnagar, Amritsar, Jalandhar, Kapurthala, Faridkot and Bathinda had efficiency level of more than 70%. In this year, Gurdaspur had least portion of area sown more than once. In the year 2001, Ludhiana with 98.7% of its area sown more than once topped the list followed by Moga, Sangrur, Patiala, Kapurthala and Ferozepur which had more than 90% of their area sown more than once. Rest of the districts like Fatehgarh Sahib, Bathinda, Faridkot, Sri Muktsar Sahib, Amritsar and Mansa had more than 80% area sown more than once. Among other districts Gurdaspur and Hoshiarpur had just more than 60% area sown more than once. Roopnagar had the least (66.7%) area sown more than once. In the year 2011, Barnala came forth with 110.5% of its area sown more than once followed by Kapurthala and Faridkot. Among other districts, Ludhiana, Sangrur, Patiala, Amritsar, Moga, Sri Muktsar Sahib and Mansa had more than 90% of area sown more than once. Districts like S.B.S. Nagar, Bathinda, Ferozepur, Roopnagar, Fatehgarh Sahib and Tarn Taran had more than 80% of area sown more than

once. S.A.S. Nagar has shown least efficiency with just 62.8% of area sown more than once.

The trend went on changing in all the years. Not even single district shown stability in different years. In 1971, 1991 and 2011 Roopnagar, Sangrur and Barnala had maximum area sown more than once respectively. Ludhiana had the maximum area sown more than once in 1981 and 2001.On the other hand, Kapurthala lagged behind in 1971 and 1981 but went on progress afterwards. In the next years, that is, 1991, 2001 and 2011 Gurdaspur, Roopnagar and S.A.S. Nagar showed the least area sown more than once respectively.

Table 2

Zone Wise Area Sown More than Once as percentage of Net Cropped Area

Zone /Year	1971	1981	1991	2001	2011
Central Plain	44.5	65.7	81.3	87.8	90.4
Undulating Zone	46.1	58.0	61.6	68.1	76.2
Western Zone	34.7	59.0	80.5	90.4	93.3
Total	40.1	61.4	77.8	86.1	89.6

Source: Director, Land records Punjab.
: Computed from Various issues of Statistical Abstract of Punjab.

The table number 2 analyses the zone wise percentage of area sown more than once to net cropped area. In the year 1971, undulating zone had maximum proportion of area sown more than once to net cropped area followed by central plain and western zone. In the 1981 and 1991, central plain had maximum area sown more than once at 65.7% and 81.3% respectively followed by western zone having 59.0% and 80.5% area sown more than once in the year 1981 and 1991. In these years undulating zone kept least area for cropping. In the years 2001 and 2011, trends again changed and now western zone had maximum area, that is, 90.4% and 93.3% area sown more than once, followed by Central plains and Undulating zone.

CONCLUSIONS

The analysis of area sown more than once reveals that kept on increasing except some fluctuations in certain districts. It happened primarily because of increasing commercialization of agriculture in Punjab in different decades since 1971 to 2011.The enormous rise in commercialization of agriculture has given rise to increase in income and profits to farmers. It has resulted in improving the standard of living of farmers but it has further caused a decline in natural fertility of soil and created demand of increased use of fertilizers and pesticides. The allurement of profits has urged the farmers to go for chemical fertilizers and pesticides which gave them quick bonanzas and has put Punjab agriculture on unsustainable growth path.

REFERNCES

Sable, R. (1994). *Commercialization of Agriculture in Maharashtra. Thane:* Vishwakarma Publications.

Mahaliyanaarachchi, R.P. and Bandara, R. (2006). Commercialization of Agriculture and Role of Agriculture Extension. *Subargamuwa University Journal*, Volume 6, no.1, pp 13-22.

Quan, T.T. (2009). *Transition from Subsistence Farming to commercial Agriculture in Quang Binh Province*. Vietnam: Lincoln University.

Khurana, M. (2010). *Agriculture Development and Capital Relation: A Modern View.* Cyber Tech Publication.

Vardarajan, S. and Elangovan, S. (1995). *Scope of Commercialization of Small Farm Agriculture. Small Farm Diversification: Problems and Prospects.* New Delhi: NCAEPR Publication.

Gebreselassie, S. and Sharp, K. (2008). Commercialization of smallholder agriculture in Selected Tef-Growing Areas of Ethiopia. *Ethiopian Journal of Economics*, Volume XVI.

Satyasai, K.J.S. and Viswanathan, K.U. (1997). *Commercialization and Diversification of Indian Agriculture.* Occasional Paper-5, Mumbai: NABARD.

Martey, E., Ramatu, M., Hassan, A. and Kuwornu, J.K.M. (2012). Commercialization of smallholder agriculture in Ghana: A Tobit Regression Analysis. *African Journal of Agricultural Research*, Volume 7(14), pp. 2131-2141.

Olwande, J. and Mathenge, M. (2010). *Market Participation among the poor Rural households in Kenya.* Tegemeo Institute of Agricultural Policy and Development.

Jayne, T.S., Yamano, T., Weber, M.T., Tschirley, D., Benfica, R., Chapto, A. and Zulu, B. (2003). *Smallholder Income and Land Distribution in Africa: Implications for Poverty reduction strategies.* Food Policy, 28(3), pp. 253-275.

Lerman, Z. (2004). Policies and institutions for commercialization of subsistence farms in transition countries. *Journal of Asian Economics*, 15, pp. 461–479.

Kenedy, E.T. and Cogill, B. (1987). The commercialization of Agriculture in South

Western Kenya. *International Food Policy Research Institute*, Research Report No. 60.

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