AN ANALYSIS OF THE IMPACT OF GOVERNMENT POLICIES ON PRODUCTION AND PRODUCTIVITY OF FOODGRAIN PRODUCTION IN PUNJAB

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Abstract

Punjab, due to having good quality of soil, developed irrigation canal system, hard working people and above all due to the favorable policies, has become a leading agricultural state of the country. Being a leading agricultural state, the agricultural policies of central and state Governments (favorable as well as unfavorable) directly influence Punjab agriculture. Implementation of new agricultural technique, public investment, conducive Government policies and their effect in the form of establishment of institutions for agricultural development, played a major role in agricultural development, which could not be sustained for a long time due to the limitation of technique itself and reversal of Government policies. The results of new technique include monoculture of wheat and rice, which further contributed in ecological problems like degradation of soil, over exploitation of water. The reversal of Government policies has increased cost of cultivation. State has to respond to the global mandate. Therefore, instead of food security diversification of agriculture in favor of high value crops through corporate interference and contract farming is stressed through new agricultural policy.

Key words: Foodgrains, Government policy, impact, production, productivity

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Introduction: Punjab is a small but major agricultural state of India, dominated by small and medium farmers, having only 1.6 percent geographical area of the country, produces 11.09 per cent of rice and 19.5 per cent of wheat of the country (Agricultural Statistics at a glance 2010). It also contributes 78.3 per cent of rice and 69.5percent of wheat in the national pool (in year2006-07) and therefore is rightly called the food basket of India. Moreover, agriculture performance has always remained a major factor in growth in this state where 39 percent of work force is engaged in agriculture and contributes 30.08 per cent of state's GDP (in year 2006-07 at 1999-2000 prices).

It is observed in most of the studies that Punjab economy has shown excellent results in terms of production and productivity growth of agricultural output in general and production and productivity growth of wheat and paddy in particular. There are many policies and factors that are responsible for growth as well as deceleration in growth in agriculture sector and therefore in foodgrain production in Punjab. Different policies and factors responsible for deceleration in growth in agriculture sector are divided into four categories by many scholars. For instance, Behera and Mishra (2007) have divided these factors into economic, ecological, technological and institutional factors while Reddy and Gulab (2006) have divided these factors into technological, ecological, social-cultural and policy related factors.

Therefore, in the present study a humble attempt is made to analyze all these facts having the following objectives:

1. To analyze the policies and factors responsible for acceleration in productivity growth of foodgrain especially wheat and paddy, two major food crops of Punjab.
2. To analyze the policies and factors responsible for deceleration in productivity growth of agriculture in general and foodgrain productivity in particular.

Methodology: Present study is based on secondary data from 1961-62 to 2007-08, taken from different sources like Statistical Abstracts of Punjab for various years, Directorate of Economics & Statistics, Ministry of Agriculture. Few data have been taken from other studies given in reference. Various facts in data form have been presented to analyze changes in foodgrain productivity especially of wheat and paddy, the two major food crops of Punjab, and it's other determinants from 1961. Final figure of 2007-08 are taken as actual figures up 2007-08 are available.

To analyze said issues, based on given objectives, have been discussed in the present study by dividing these into four parts. In the first part various policies and factors responsible for growth especially in green revolution and post green revolution periods are discussed. In the second part various policies and factors responsible for deceleration in growth especially after liberalization are discussed and third part includes conclusions of the study.

Generally the performance of agriculture sector has been analyzed by many scholars including Murgai (1999), Chand and Raju (2008) by dividing it into mainly four periods namely first pre green revolution period (1951 to 1965) second, early green revolution period (1966 to 1980) third, late green revolution period (1981 to 1990) and fourth, post liberalization period (after 1991). Since the present Punjab came into existence in 1966, therefore only three phases are taken in the present study. Moreover, as has been said earlier, data from 1960-61 to 2007-08 has been analyzed to know the changes in every decade.

Section-II

Growth in Productivity of Foodgrain Production in Punjab:

Before analyzing productivity it is better to discuss the state of agriculture in the country which forced the central Government to adopt favorable agricultural policies. Present state of Punjab was reorganized in 1966; the year of adoption of new agricultural techniques, therefore, the growth in agriculture was the result of mainly new agricultural techniques and favourable Government policies, which were the need of the hour. This was the time when country was in the state of food insecurity. Huge amount of foreign exchanges were spent on food imports and dependence on USA to get food under PL420, which was not very sure for the coming years, was a big question before the country. Therefore, successfully adoption of new technology at any cost to fight the food insecurity of the country was the only ray of hope for the Government. Therefore, it was rightly observed in the second five year plan that agricultural programmes are intended to provide adequate food to support the increased population and the raw materials needed for a growing industrial economy and also to make available larger exportable surpluses of agricultural commodities. It is further observed that the main source of increase in agricultural production must be increased in yields from more intensive, more efficient and more profitable agriculture. Therefore, major elements of second five year plan include:

1) Production linking up of development programmes and Government assistance to production ;targets and the land use plan, including allocation of fertilizers etc. according to plan

2) An appropriate price policy.

Clearly, the development of agriculture was must as its development was very crucial for industrial development also especially in providing raw material and wage goods. Therefore, Government extended all the possible support whole heartedly and favorable policies for agricultural development were implemented.

Punjab had potential in adoption of new technology due to good quality soil, development of irrigation canal system and above all hard working people. In few years Punjab emerged as a leading agricultural state for the country (Sidhu, 2005). Punjab became a model for other states in agricultural development and due to its contribution in national development.

Due to change in policies and other determining factors, agriculture production in general and food production in particular has changed a lot during the last four decades. Moreover, being a leading agricultural state of India, the agricultural policies of Central Government (favorable as well as unfavorable) directly influence Punjab agriculture. Therefore, it is better to discuss these policies and factors responsible for these changes by dividing these developments into different phases.

Green revolution period: In green revolution period adoption of new agriculture technique based on intensive agriculture was the major growth driver explained differently by different scholars. Murgai (1999) has observed that over the time growth of area declined and intensive growth continued. Increment in area under foodgrain, especially under wheat and paddy, more coverage of area under HYVs, irrigation and fertilizers were the major reasons of growth.

Singh and Singh (2002) argued that growth in 1960s and afterwards was the result of public investment by Government. On the other side Chand (1999) gave credit to conducive Government policies. Therefore, favorable policies and their effect in the form of establishment of institutions for agricultural development, which played a major role in agricultural development, was the important factor, discussed in following paragraphs.

It is declared in the document of third five year plan that finance is being provided on a scale which is considered adequate, and the further assurance is given that if, for achieving the targets of production, additional resources are found necessary, those will be provided as the Plan proceeds. Supplies of fertilizers are also to be made available on a large scale. Supplies of credit

through cooperative agencies are being expanded, and the need for linking credit with production and marketing is emphasized. The major emphasis was 1) to bring about technological changes, specially the adoption of scientific agricultural practices and improved implements and other equipment 2) full utilization of manpower resources in rural areas and the organization of the maximum local effort.

To fulfill these promises Nation Co-operative Development Corporation was set up on a statutory basis in 1963. In the same year the Agricultural Refinance Corporation was also established. To undertake production of foundation and certified seeds The National Seed Corporation was established in 1963. For development in research The Indian Council of Agricultural Research was reorganized in 1965. Similarly, to provide fair price of agricultural product agricultural price commission, which is known as Commission for Agriculture Cost and Prices (CACP) in these days, was established in 1965. The commission was directed in 1971 to declare Minimum Support Price (MSP), based on cost of cultivation. For sure market and Effective price support operations for safeguarding the interests of the farmers Food Corporation of India (FCI) were established in 1964 as a central Government agency to procure unsold product. Favorable MSP, declared by CACP and surety of market due to FCI further motivated the farmers to produce more. More over at state level Markfed began its operations in 1954, Punjab State Agricultural Marketing Board with an objective to control and supervise the marketing network of sale, purchase, storage and processing of processed or non processed agricultural produce was established in 1961, The Punjab State Civil Supplies Corporation Limited, popularly known as PUNSUP, came into being in 1974, with the main motto to uplift the farming community on one hand by procuring their production on Minimum Support Price (MSP) fixed by the Government of India and on the others.

To adopt new agricultural techniques, money was the major problem for the farmers to buy agricultural machinery and for other investment. This requirement was also met as the major 14 commercial banks were nationalized in 1969 and agriculture sector was declared the priority sector. Banks were directed to provide subsidized loans to farmers to buy agricultural machinery. The establishment of NABARD in 1979 at national level an apex body for the arrangements for Institutional Credit for Agriculture and Rural Development further supported these arrangements. At the state level passing of co-operative societies act 1961, the development of agricultural cooperative societies and rural agricultural banks in the state even at village level

further supported the availability of credit to agriculture sector. This strengthened the mechanization of Punjab agriculture, which further contributed in increasing productivity. Verma (2008) has observed that mechanization has increased production and productivity by utilizing agriculture inputs in a better way. Due to mechanization, timely operations have become possible. The result of mechanization is better quality of operations and precision in the application of the inputs in agriculture sector.

For development of social infrastructure, Government extended the support through public investment. In the third five year plan 1089 crore rupees were spent in the country for agricultural and allied activities which was 12.7 percent of total plan expenditure. The amount was increased to 2320 crore rupees in fourth plan and 4865 crore for fifth plan which were 14.7 percent and 12.3 percent of total plan expenditure respectively. To improve research and development in agriculture, at state level, Punjab Agricultural University (PAU) was established in 1962. It contributed a lot as the contribution of research in the form of development of new varieties of seeds of rice and wheat and its diffusion in the entire state can not be ignored.

Table-I

Area Production and Productivity of Total Foodgrain, Wheat and Paddy

Year	1960-61	1970-71	1980-81	1990-91	2000-01	2007-08
Total Foodgrain						
Area (000 Hectares)	7226	3928	4857 (2.37)	5679 (1.69)	6281 (1.06)	6303 (0.05)
Production (000 Tones)	6156	7306 (1.87)	11921 (6.32)	19248 (6.15)	25324 (3.16)	26815 (0.84)
Yield (kg per Hectare)	852	1860 (11.83)	2456 (3.2)	3391 (3.81)	4033 (1.89)	4255 (0.79)
Wheat						
Area (000 Hectares)	2168	2299	2827 (2.3)	3272 (1.57)	3408 (0.42)	3488 (0.34)
Production (000 Tones)	2540	5145 (10.26)	7700 (4.97)	12155 (5.79)	15551 (2.79)	15720 (0.16)
Yield (kg per Hectare)	1171	2238 (9.11)	2730 (2.2)	3715 (3.61)	4563 (2.28)	4507 (-0.18)
Paddy						
Area (000 Hectares)	446	390	1178 (20.21)	2024 (7.18)	2611 (2.9)	2610 (-0.01)
Production	434	688	3223	6535	9194	10489

(000 Tones)		(5.85)	(36.84)	(10.28)	(4.07)	(2.01)
Yield (kg per Hectare)	973	1765 (8.14)	2733 (5.48)	3229 (1.81)	3506 (0.86)	4019 (2.09)

Source: Directorate of Economics & Statistics, Ministry of Agriculture

Figures in bracts are average annual growth rates in percentage

In nutshell, due to all these favorable Government policies (as is clear from Table-I) area production and productivity of foodgrain especially wheat and paddy increased in 1970s and 1980s. But the area under other crops like pulses, oilseeds and sugarcane, decreased (Table-II). In 1970-71 the area under pulses, oilseeds and sugarcane was 7.29 percent, 5.20 percent and 2.25 percent respectively which declined to 5.04 percent, 3.52 percent and 1.05 percent respectively in 1980-81. The area under almost all the crops declined. Clearly the increase in area under food crops especially wheat and paddy was at the cost of other major crops like pulses, sugarcane, oilseeds etc.

Table-II

Cropping Pattern (Area in percentage)

YEAR	FOODGRAIN	CEREALS	WHEAT	PADDY	COTTON	OILSEEDS	SUGGATCANE	PULSES
1960-61	64.33	45.65	29.59	4.80	9.45	3.91	2.81	19.08
1970-71	69.18	61.89	40.49	6.87	6.99	5.20	2.25	7.29
1980-81	77.77	66.76	41.57	17.49	9.60	3.52	1.05	5.04
1990-91	75.55	73.65	43.63	26.86	9.34	1.39	1.35	1.91
2000-01	79.67	78.90	43.18	33.18	6.07	1.25	1.38	0.78

Source: Sucha Sing Gill (2005)

Table-III

Indicators of Development

Indicators/Years	1970-71	1980-81	1990-91	2000-01	2007-08
Gross Cropped Area (Million Hr.)	5.7	6.8	7.5	7.9	7.9
Net Cropped Area (Million Hr.)	4.0	4.2	4.2	4.3	4.2
Gross Cropped					

Area(Percentage)	71	81	94	94	97.7
Cropping Intensity	140	161	178	186	187.9
Nutrient (NPK) Use (Kg/Hr.)	38	113	163	179	216
No of Tube wells (000)	192	600	800	1073	981.2
No of Tractors (000)	30	119	265	435	

Source: As presented by H.S. Sidhu (2005) and Statistical Abstract of Punjab for Different Years

Post green revolution period: In this period, all polices, adopted in early green revolution period started to spread their impact. Number of beneficiaries increased and the programs had reached to more number of areas as Bhalla and Singh (2009) observed that the 1980s represented a period of the spread of green revolution to larger areas and more crops. But in Punjab, the impact was observed in use of more inputs in more quantities and at more areas which changed the cropping pattern of Punjab in favor of food crops especially in favour of wheat and rice and Punjab agriculture become the monoculture of wheat and rice (Singh, 2004).

It is clear from Table-I that area under total foodgrain further increased to 5679 thousand hectares and production 19248 thousand tones in 1990-91. The area under wheat increased to 3272 thousand hectares with production 12155 thousand tones in 1990-91 In case of paddy these figures were 2024 thousand hectares with production 6535 thousand tones in 1990-91. The yield per hectare was 3391 kg in case of foodgrain, 3715kg in case of wheat and 3229kg in case of paddy in 1990-91. Similarly it is clear from Table-IV that in 1990-91, area under HYVs increased to 3271 thousand hectares and 1906 thousand hectares in case of wheat and paddy respectively, which were 99.9 percent and 94.6 percent of gross cropped area. Moreover improvement can be noticed in increment of total number of tube wells, application of fertilizers (NPK) per hectare, total number of tube wells and tractors also increased and cropping intensity reached at178 (Table-III). Percentage gross irrigated area increased which was 96.09 percent and 99.2 percent respectively in case of wheat and paddy (Table-V).

Table -IV

Area under HYVs

	Wheat		Paddy	
Year	Gross Cropped Area	Area under HYVs	Gross Cropped Area	Area under HYVs
1970-71	2229	1589 (71.29)	390	130 (33.3)
1980-81	2812	2757 (98.04)	1183	1095 (92.6)
1990-91	3273	3271 (99.9)	2015	1906 (94.6)
2000-01	3408	3408 (100)	2612	2506 (95.9)
2007-08	3487		2609	

(Source: Statistical Abstract of Punjab for Different Years) Figures in brackets are percentage

Table -V

Irrigated Area under Wheat and Paddy

	Wheat		Paddy	
Year	Gross Cropped Area	Irrigated Area	Gross Cropped Area	Irrigated Area
1970-71	2229	1942 (87.12)	390	358 (91.8)
1980-81	2812	2567 (91.29)	1183	1157 (97.8)
1990-91	3273	3145 (96.09)	2015	1998 (99.2)
2000-01	3408	3333 (97.8)	2612	2590 (99.2)
2007-08	3487		2609	

(Source: Statistical Abstract of Punjab for Different Years)

The success of agriculture sector of Punjab can be guessed from the fact that more than 95 percent total area under wheat and paddy was irrigated and was under HYVs. The contribution of Punjab in central pool in case of wheat and rice which was 23.8 lakh tones and 5.3 lakh tones in 1970-71 which increased to 67.4 lakh tones and 48.2 lakh tones in 1990-91.

Therefore, it can be concluded that factors like application of HYVs, extension of irrigation facilities, more applications of fertilizers etc. due to Government policies and support in the form of credit, MSP, investment in R & D and social infrastructure are responsible for growth in agriculture in general and in foodgrain production in particular especially of wheat and paddy during green revolution and Post green revolution period. Moreover, the growth of area and productivity of foodgrain especially of wheat and paddy was continued and stable (Chand and Raju, 2008).

But it is interesting to note that at this point of time Government policy was to increase foodgrain production but at the same time Government policy was changing in favor of less developed and dry land areas instead of high growth areas like Punjab as it is stressed in the policy document of seventh five year plan that broadening the base of agricultural growth and modernization through infrastructure development, e.g., irrigation, drainage, roads, markets and credit institutions in the less developed regions, extension of new technology, particularly breakthrough in dry land farming. This is how agriculture can contribute more effectively to the fulfillment of the national objectives of self-reliance, removal of poverty, increase in productivity and eco-preservation. Moreover, during 1980s country had to import edible oils, therefore, central Government launched many programs during 1980s like technology mission on oilseeds (1986), oilseeds production thrust program (1987) etc. Clearly the priorities also changed from food crops like wheat and paddy to other crops like oilseeds. Therefore, during 1980s the change of concentration towards less developed regions and change in priorities towards crops other than wheat and paddy, had implications for Punjab agriculture.

Section-III

Deceleration of Growth in Productivity of Foodgrain Production in Punjab:

The growth of agriculture in Punjab was achieved through productivity advances associated with technological innovations, rather than just the increased use of inputs. However, this growth could not be sustained for long time as there are number of studies (Bhatia, 2006, Chand and Raju, 2008) which show that the productivity growth of agriculture in Punjab has shown deceleration especially after liberalization.

There are mainly three sources of accelerating growth in agriculture .The first source is improvement in yields, secondly, improvement in cropping intensity and thirdly the input use efficiency (Subrahmanyam and Sekhar, 2003). All these sources which contributed in growth of productivity in green revolution period and post green revolution period have shown less growth trends in post liberalization period. Bhalla and Singh (2009) observed, before liberalization, growth in agricultural output, input used, and yield of output was more as compared to post liberalization period. It is further argued that decline in public investment in irrigation; water management and R & D are found to be the major factors responsible for sharp deceleration of agricultural growth in post liberalisation period. There are many facts which show that growth rate in Punjab economy especially in agriculture sector has decelerated. The picture becomes

clearer after analyzing Table –I and Table-III that growth rates of area, production and productivity declined after 1991.

Moreover, planning expenditure of the Government on agriculture and allied activities declined in percentage terms after 1991. The expenditure which was 13.9 percent of total plan expenditure in sixth plan decreased to 4 percent in ninth plan and further decreased to 3.8 percent in tenth plan. Not only was the plan expenditure, even capital formation of public sector in agricultural sector noted to be very small after liberalization. For most of the years it remained at nearly 2 percent of agricultural GDP at constant prices.

Singh (2010) observed, per capita income and its growth has declined, the share of agriculture to NSDP has declined. The ratio of investment to NSDP, credit deposit ration of the state are at very low position as compared to other states. Health and education sector has deteriorated. Not only the agriculture sector but other sectors like manufacturing sector, electricity, real estate, etc. have also registered less growth, developmental investment has declined and non- development investment has increased in post liberalization period.

The growth rates of most of the determinants of productivity noted to be very slow generally after liberalization. Moreover, productivity has reached at its saturation point as 100 percent area of wheat and paddy is irrigated and under HYVs. Due to 13.15 lakh tube wells working in Punjab, 97.7 percent of total gross area sown is irrigated and cropping intensity has reached at 190 (Economic Survey of Punjab, 2010-11).

No doubt, there are many factors that are responsible for deceleration in growth in productivity of foodgrain vis-à-vis productivity of agriculture sector. All these are analyzed here by dividing these into four categories named technological, ecological, social, and economic and policy related. Although up to some extent, all these are overlapping.

Technology which played a major role in the growth itself is responsible for deceleration as is observed that recently in all these states productivity growth of foodgrain production has stagnated due to the limitations of modern technology. The problem was noted in 1980 but the policy makers had to ignore as it could pose a threat to food security of the country (Dhillon, Kataria and Dhillon, 2010). Different scholars have explained the deceleration in growth and its reasons differently. Singh and Singh (2002) observed, monoculture of wheat and rice, over mechanization of Punjab agriculture, increasing in cost of production are some of the major causes for decelerating Punjab agriculture which was the result of adoption of new technology.

All these problems further contributed in ecological problems like degradation of soil, over exploitation of water. More over this policy based on costly inputs is held responsible for rural indebtedness. Sidhu (2002) has explained that the two crucial resources land and water have sharply deteriorated. Cultivation cost has increased and profit margins have declined sharply. Common farmer of Punjab is finding it difficult to repay his dues. The machinery purchased by taking loans is partially used.

But Government policies like free water and electricity, highly subsidized loan etc are also responsible for under utilization of economic resources. Behra and Mishra (2007) argued that absence of institutional control in input markets and non existence of local level institutions to motivate farmers for the judicious use of subsidized inputs was responsible for ecological problems.

Under the liberalization policies, central Government seems to reverse the supportive agricultural policies as instead of food security diversification of agriculture in favor of high value crops through corporate interference and contract farming is stressed. Laws are being passed in favor of these policies. Phosphate (P) and Potash (K) have been decontrolled. Credit support has also been declined as Narasimham Committee (1991) has recommended that banks should be treated as commercial establishments and due liberty should be provided to banks to earn profit. Bihari and Rajasekhar (2005) in their study observed that the average annual growth rate of bank branches which was 6.05 percent during 1981-91 turned negative by 1.13 percent during 1992-2000. Central Government schemes are declining as is explained in the tenth five year plan document that the number of schemes of the Department of Agriculture and Cooperation has been reduced from 147 to 81 in the Ninth Plan and to 30 in the beginning of the Tenth Plan.

Now the Government policy of agriculture has changed. The new agricultural policy-2000 emphasizes on growth which is sustainable technologically, environmentally and economically. Therefore, efficient use of resources to fulfill the motive of demand driven growth which should be able to challenges arising from liberlisation and globalization is stressed.

It is also a fact that we are living in a globalised world and therefore, binding with the international rules. Naturally, changes at global level must affect our economy directly. It is observed in Economic survey of Punjab 2010-11(page 73), 'As Punjab's agriculture was structured to produce food in response to the national requirements, to increase production of

food grains particularly wheat and rice, resulted in over use of natural resources. Now 'the Agreement on Agriculture (AOA)' with the establishment of WTO will put up constraints on economy of India in general and Punjab in particular. The State has to respond to the global mandate to be competitive. A concrete programme of diversification and raising value addition in each agro-climatic region of Punjab depending on the health of soil and water availability has to be developed'.

After implementing of new policies under WTO regime, central Government had to change their policies. Indian agricultural sector has been opened for imports as quantitative restrictions have been removed. Rao (2003) argues that the slowing down of agricultural growth in post reform period, despite favorable macroeconomic environment is to neglect of properly implication of reformed policies. It is further argued that Essential Commodities Act, Agricultural Produce Marketing Act etc. should be reviewed. But Vaidynathan (2000) gives view that the quality of Indian products can not get international prices. Moreover, world market prices are of fluctuating nature. Therefore, Indian farmers have to face the situation of much more unstable prices. On one side Ramakumar has observed that changes in international markets have declined domestic prices on the other side Raghavan has observed that Government policies like decline in subsidies and social investment have increased cultivation cost and has decline in productivity. Therefore, Sergill (2005) rightly argues, the new policies under WTO regime are confusing people.

There are many economic and social factors responsible for deceleration in growth. Among economic factors, price of the product, farm income and increasing cost of cultivation are predominant. Among social factors, high cost of social obligations, thinking of the youth regarding agriculture etc. are major determinants. To work for others in lieu of wage is considered to be low social status; young educated men think it against their status to work in fields. They are interested in white collar jobs. Therefore, agriculture and manual jobs are not preferred in Punjab and non Punjabis are getting jobs in Punjab and youth of Punjab is unemployed (Sidhu, 2002).

Therefore, all these factors i.e. technological, ecological, social, and economic and policy related are collectively responsible for deceleration in growth rate in Punjab agriculture and therefore in foodgrain productivity especially of wheat and paddy.

Conclusions: No, doubt that Punjab has contributed a lot in the food security of the country. It had also become the leading agricultural state of India. But the growth experienced in green revolution period and post green revolution period due to adoption of new agricultural techniques could not be sustained in post liberalization period. Natural resources are over exploited; productivity growth is declining continuously after 1980s. To increase production by utilization of more area is not possible as maximum area has been utilized. Moreover, to increase productivity, further increase in inputs is not more helpful as the entire area under food crops especially under wheat and paddy is irrigated and under HYVs. Productivity has reached at saturation point as 97.7 percent of total gross area sown is irrigated and cropping intensity has reached at 190. Punjab agriculture is over mechanized and more intensive inputs than recommended are being applied. Therefore, present agriculture techniques are not sufficient to increase further productivity.

On the other side the Government policies of liberalization and globalization especially under WTO regime, are responsible for declining agriculture subsidies and internal prices of agricultural output. Moreover, in the new agricultural policy (2000), emphases are on the non foodgrain crops especially high valued crops. Therefore, these policies are responsible to decrease in price of foodgrain in the form of less increment of MSP and to increase the inputs price and ultimately the cost of cultivation.

Therefore, the limitation of the agriculture technique itself and unfavorable policies of the Government are responsible for slow growth in production and productivity of foodgrains especially of wheat and paddy in Punjab.

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