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TEMPORAL CHANGES IN ECONOMIC STRUCTURE OF POPULATION AND ECONOMY DRIVING ACTIVITIES IN PUNJAB, PAKISTAN

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ABSTRACT

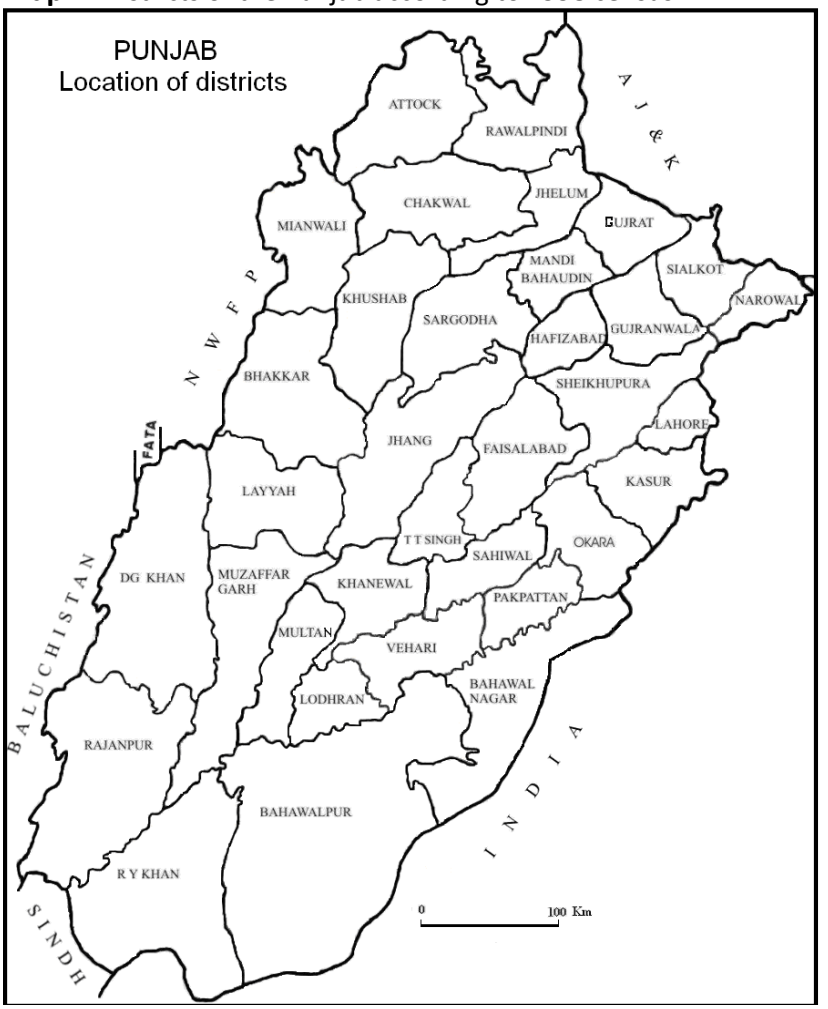
Economy of Punjab is based upon three major components; economic structure of population and availability of man power, agriculture, and manufacturing. Any change in any of these components may affect the economic structure of the region. Economic structure of a population refers to economically active, not economically active, employment ratio and labour force participation rate. It is concerned to various aspects of earning livelihood, standard of living and welfare level. Study of economic structure can be helpful in understanding economic conditions of the population. Punjab is a big province, even bigger than a number of countries, having lion share in the population of country. The economic structure of its population, therefore, largely determines the economic structure of the population of country. An understanding of the temporal changes in basic components of its economic structure in quantitative terms can be useful for the future panning of economic development as well as for effectively reaching the targets of plans. The information regarding economic structure of population specifically about economically active population is important for policy planning and devising group specific policies. Current study attempts to look at some basic elements of economic structure of the population and economy driving activities of Punjab. The aspects like proportion of economically active population, employment ratio, labor force participation rate, population engaged in agriculture, agricultural land holdings, major sectors of economy and their share in GDP have been taken into account. Most of the data have been taped from population censuses, economic surveys, agricultural and manufacturing censuses of Pakistan. Analysis revealed that economic composition of population and economy driving activities in Punjab are under the influence of incessant change. The change, however, is not too pleasing in aspects like share of economically active population, employment ratio, and labour force participation rates.

KEY WORDS: Punjab, Temporal changes, Economic structure, Economy driving activities

INTRODUCTION

With regard to the number of districts (map 1) and size of population, Punjab is the biggest province of Pakistan containing about 56% of the country's inhabitants. Most of its districts are heavily populated (map 2). Having about 90 million inhabitants it is a very significant region (entire Punjab province) of South Asia as well as of the world. Since several past decades its population is growing rapidly. The impact of unprecedented population growth is manifold. Besides directly putting tremendous stress on food and other resources, it is creating numerous socio-economic and administrative problems as well. Rapid increment in the number of individuals is causing change in population structure also which is indirectly giving birth to unmanageable socio-economic and other problems. Specifically change in the economic structure call for special attention of the planners and policy makers. At the outset, rapid population growth can be seen as threatening for the resources. In the past there has been no match between population increment and development of resources. To achieve the state of balance between population and resources it is imperative to understand the economic structure of population in addition to identifying the resource base

Map 1: Districts of the Punjab according to 1998 census

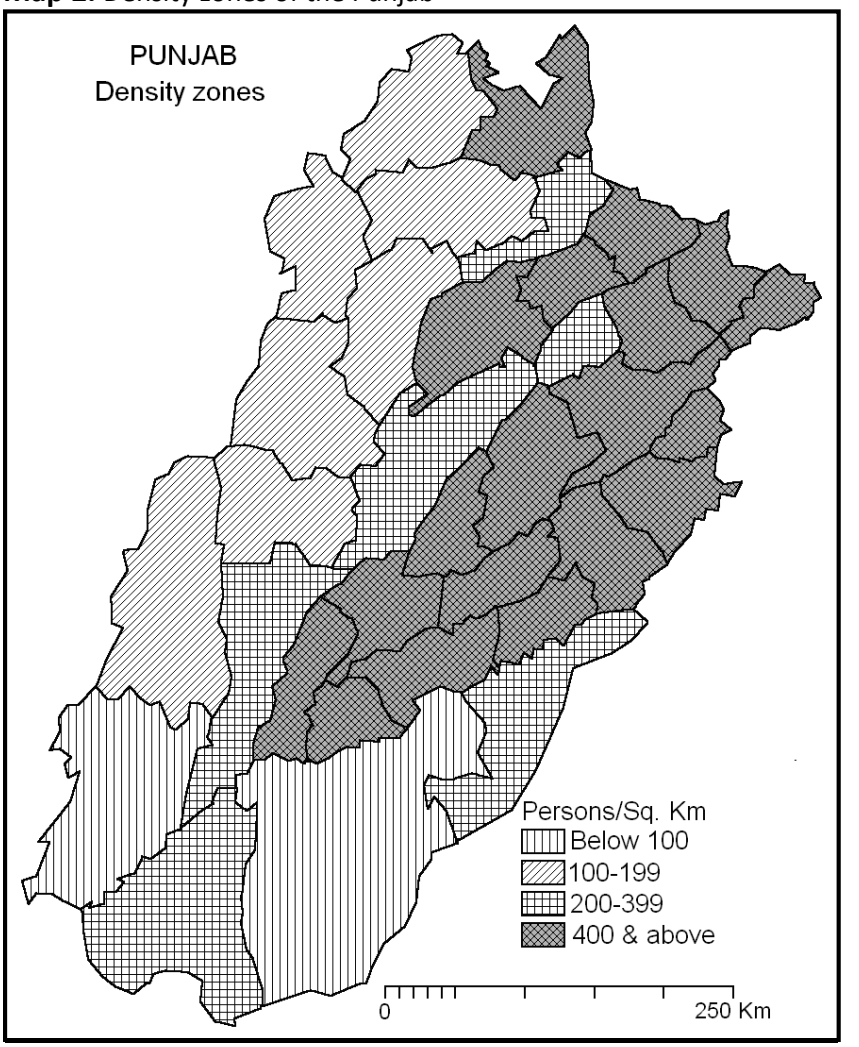


Source: Map processed from 1998 provincial census report of Punjab.

Population of any part of the world consists of young, working age, and old groups. However, their proportion varies appreciably from region to region. In less developed regions of the world like Punjab proportion of young population is usually high due to high rate of fertility. Consequently, age dependency ratio is high and working age population had to bear lot of burden of young and aged population. On the other hand, in many respects development and prosperity of a region is based on the availability of manpower. This section of population consists of only those people who can participate in economic activities if there is a demand for them to do so. It is the productive section of population which can produce goods and services if there is demand for their labour and they desire to participate in economic activities. Thus, by analyzing population economic structure,

availability of manpower, intensity of burden on working age population and many other aspects important for effective planning can be understood.

Map 2. Density zones of the Punjab



Data source: 1998 population census of Pakistan

ECONOMIC STRUCTURE OF POPULATION

Economic structure of population refers to the economically active, not economically active, employment ratio and labour force participation rate etc. The proportion of population involved in various productive activities, in effect, depicts economic conditions of the region which in turn determine the mode of life of the people, their standard of living and population growth pattern. Rapidly growing population of Punjab has resulted

in low labor force participation rate, low level of human development, low per capita income, little savings and low investments, so it may be grouped with the low-income areas. In any area a high proportion of population engaged in diversified economic activities usually causes rapid economic growth that is likely to lower the rate of population growth. The experience of less developed countries (LDCs) suggests that downturn in population growth rate has been accompanied by higher levels of productivity and faster economic development (Kemal, 2003). Furthermore, the fall in population growth rate at micro level translates within a generation into potential economic growth at macro level because the share of working age population increases relative to the younger and older dependents (Obaid, 2002; Seetharam, 2002; and Gubhaju et al, 2001).

Based on the involvement in productive activities, population of the Punjab can be divided into economically active and not economically active groups. According to 1998 census economically active population (EAP) includes the persons of either sex aged 10 years and above who are engaged in some work for pay or profit, looking for work, laid off, and unpaid family helpers. People in this group of the working age population are either actively engaged in gainful employment or seeking for employment and available to work. Their prime function is to produce economic goods and services to satisfy the needs of population. The not economically active population includes children below 10 years of age, students, domestic workers and others such as land lords, property owners, retired persons, disables etc. As the size EAP is closely related to the region's population size, therefore, the changes in population size and composition directly influence the demographic composition of EAP. In turn, the size and distribution of EAP and employment opportunities influence various other aspects of population like fertility and migration pattern (ILO, 1975).

At national and provincial level, data about labour force is available either from 'Population Census' or 'Labour Force Survey'. The census data tells that in terms of absolute number the labour force in Punjab has increased from 13,167,518 in 1981 to 16,602,907 in 1998 (Provincial Census Reports of Punjab, 1981 & 1998) while its proportion in total population has dropped. According to 1998 census the crude activity rate (the proportion of EAP in the total population) of Punjab was 22.6%, while the refined activity rate (the labor force participation rate which represents the proportion of EAP in the total population aged 10 years and above) was almost equal to the national level of 32% as against 39.9% in 1981 (1981 Census Report of Punjab Province, p. 22.). The remaining huge proportion of population accounted for not economically active. Rural-urban differentials were minor whereas gender differentials were considerable. In 1998, 42.2% of the total male population was economically active compared to 50.8% in 1981. In contrast, only about 1.4% of the total female population in 1998 and 2.4% in 1981 was economically active and their huge proportion was grouped as economically inactive (table 1).

Table 1. Proportion of 1-Economically active (EA) and 2-Not economically active (NEA)

population by sex & rural-urban areas

Economic groups			1-EA	Employed and unpaid family helpers	Unemployed (looking for work and laid off)	2-NEA	Children under age 10	Students	DW	Others
1998	All areas	Both	22.6	18.3	4.3	77.4	29.5	7.9	33.7	6.3
		Male	42.2	33.9	8.3	57.8	29.3	14.4	1.9	12.2
		Female	1.4	0.6	0.8	98.6	29.7	0.8	67.8	0.3
	Rural	Both	22.3	18.2	4.1	77.7	30.7	6.9	33.6	6.5
		Male	42.0	34.0	8.0	58.0	30.8	12.7	2.1	12.4
		Female	1.3	1.2	0.1	98.7	30.7	0.7	67.0	0.3
	Urban	Both	23.2	18.5	4.7	76.8	26.7	10.0	33.8	6.3
		Male	42.6	33.8	8.8	57.4	26.2	18.0	1.5	11.7
		Female	1.7	1.6	0.1	98.3	27.4	1.1	65.5	4.3
1981	All areas	Both	27.8	26.9	0.9	72.2	30.2	5.5	30.0	6.5
		Male	50.8	49.3	1.5	49.2	29.6	7.2	0.0	12.4
		Female	2.4	1.5	0.9	97.6	30.9	3.5	63.2	0.0
	Rural	Both	28.7	28.0	0.7	71.3	30.4	3.9	31.0	6.0
		Male	52.8	51.6	1.2	47.2	29.9	5.9	0.0	11.4
		Female	2.3	2.1	0.2	97.7	30.9	1.7	65.1	0.0
	Urban	Both	25.5	24.2	1.3	74.5	29.8	9.5	27.2	7.9
		Male	45.8	43.6	2.2	54.2	28.8	10.5	0.0	14.9
		Female	2.4	2.2	0.2	97.6	31.0	8.4	58.2	0.0

Source: 1981 and 1998 PCRs of Punjab. **Note:** DW = Domestic workers.

The overall high proportion of not economically active population indicates a severe burden of dependents on working population and slow economic development. On comparing the labor force participation rate of Punjab with other countries like USA, UK, Australia, Nepal, Sri Lanka where it is 67.1, 62.6, 62.2, 71.3 and 59.1 respectively, a disappointing picture appears. The female participation rates in these countries are 59.8, 53.9, 52.7, 56.6 and 41.2 respectively (Nasir, 2003: 294). Compared to these rates, female participation rate in Punjab is extremely low. Such a situation is likely to keep the population under a lot of economic pressure specifically by appreciating fertility and keeping growth rate high.

Among the EAP, growth of province's economy, in effect, is based upon employed population. In 1981 total employed population was 12,751,311 consisting of 96.2% males and 3.8% females, which steadily increased to 13,428,026 in 1998 consisting of 96.4% males and 3.6% females showing minor change in gender proportion (Provincial Census Reports of Punjab, 1981 & 1998). The distribution of employed population by broader age groups indicates its highest proportion in 25-59 years and lowest in 60 years and above age group (table 2). Only 49.1% of the employed population was literate. Of the total literate employed population 64.2% were below matric, 28.7% were matric but below degree, 6.1% were holding degree and above and about 1% were others (1998 Provincial Census Report of Punjab, 2001). This indicates low level of skills development of employed population.

Table 2: Age distribution of employed population (10 years and above)

Age groups	1998			1981		
	Both sexes	Male	Female	Both sexes	Male	Female
< 25 Years	25.09	24.66	36.54	31.8	31.2	47.0
25-59	66.52	66.83	58.43	55.6	56.0	46.7
60+	8.39	8.51	5.03	12.6	12.8	6.3

Source: 1998 and 1981 PCRs of Punjab.

Furthermore, employed population has been examined by occupational structure, industrial groups and employment status. As regards occupational structure, a major proportion, 37.1% of the employed population was engaged in elementary occupations (according to 1998 population census of Pakistan include sales and services; agricultural, fishery and related labourers; labourers in mining, construction, manufacturing and transport), 33.4% were skilled agricultural and fishery workers and 9.8% were service, shop and market sales workers, while the remaining employed population was engaged in other occupations.

Table 3. Proportion of employed population by occupation & rural-urban areas

	1 9 9 8			
Code	Occupational group	All areas	Rural	Urban
1	Legislators, senior officials and managers	0.2	0.1	0.4
2	Professional	4.0	2.4	7.4
3	Technicians and associate professionals	2.4	1.8	3.8
4	Clerks	1.5	0.9	2.7
5	Service workers and shop and sales workers	9.8	6.0	18.2
6	Skilled agricultural and fishery workers	33.4	45.9	6.4
7	Craft and related trades workers	5.4	4.0	8.4
8	Plant and machine operators and assemblers	3.0	2.5	4.0
9	Elementary occupations	37.1	35.8	39.8
0	Armed forces	3.2	0.6	8.9
	1 9 8 1			
1	Professional, technical and related workers	3.6	2.8	6.2
2	Administrative and managerial workers	0.9	0.5	2.0
3	Clerical and related workers	3.0	1.6	7.0
4	Sale workers	8.6	4.8	19.9
5	Service workers	4.3	3.2	7.5
6	Agricultural, animal husbandry and forestry workers, fishermen and hunters	47.2	60.7	7.3
7, 8, 9	Production and related workers, transport equipment operators and labourers	28.6	23.6	43.2
0	Workers not classified by occupation	3.8	2.8	6.9

Source: 1998 and 1981 PCRs of Punjab.

Rural-urban differentials were also noticeable. In rural areas, skilled agricultural and fishery workers dominate and elementary occupations rank second while in urban areas elementary occupations dominate, and service, shop and market sales workers rank second (table 3). However, the proportionate share of various occupations is dynamic and has been subjected to considerable changes over time. Comparing 1981 and 1998 data can clearly explain this. For example, the share of professionals and technicians has

increased whereas the share of skilled agricultural and fishery workers has decreased during this period. However, the high proportion of employed population in primary economic activities is an indication of the dominance of rural society over urban society and low level of economic development of the region. The distribution of employed population by industry groups (table 4) also supports this notion. In such conditions fertility usually remains high as parents desire more earning hands rather than rising standard of life by limiting their family size. Thus, population may tend to grow rapidly keeping resources under stress and slowing down economic development process.

Table 4. Distribution of employed population by industry groups & rural-urban

Code	Industrial group	% in 1998			% in 1981		
		All areas	Rural	Urban	All areas	Rural	Urban
1	Agriculture, forestry, hunting and fishing	37.1	50.8	7.6	49.1	62.7	7.8
2	Mining and quarrying	0.3	0.3	0.1	0.3	0.3	0.3
3	Manufacturing	5.7	4.2	9.0	11.7	8.7	21.0
4	Electricity, gas and water	0.3	0.2	0.3	0.6	0.4	1.2
5	Construction	26.1	25.5	27.5	4.6	4.0	6.4
6	Whole sale and retail trade, restaurants and hotels	8.6	5.0	16.5	9.9	5.6	22.9
7	Transport, storage and communication	3.0	2.3	4.4	4.2	2.9	8.0
8	Financing, insurance, real estate and business services	1.2	0.5	2.8	0.7	0.3	1.9
9	Community, social and personal services	14.1	9.1	25.0	14.7	10.8	26.7
10	Activities not adequately defined	3.6	2.1	6.8	4.2	4.3	3.8

Source: 1998 and 1981 PCRs of Punjab.

Although, the proportion of employed persons in various industry groups has been changing over time but agriculture, forestry, hunting and fishing group still consumes majority (37.1%) of the employed population. In case of rural areas, the proportion of employed persons in this group in 1981 was 62.7% which has declined to 50.8% in 1998 showing a downward change of 11.9 percentage points. In 1998, about 80.9% of the total EAP was employed as against 96.8% in 1981. This indicates 15.9 percentage points increase in unemployment ratio. Employment status statistics presents that self-employed group dominates over other groups. Its proportion has increased from 57.1% in 1981 to 63.9% in 1998 showing an addition of 6.8 percentage points. The proportion of employees has also increased from 25.9% to 29.6% whereas the proportion of employers and unpaid family helpers has decrease from 1.9% and 15.1% in1981 to 1.3% and 5.2% respectively in 1998. Moreover, the rural-urban and gender differentials in the proportion of employed population by employment status are also significant. In rural areas the proportion of self-employed workers dominates which has increased from 61.2 % in 1981 to 69.5% in 1998, while in urban areas their proportion has increased from 45.8% in 1981 to 52% in 1998. In 1981 in the urban areas of Punjab the proportion of

employees (45.7%) was almost equal to the proportion of self employed workers but in 1998 it has decreased to 43.9%. As regards gender differentials, most of the working men both in rural as well as in urban areas were self-employed. Most of the working women in rural areas belonged to self-employed and in urban areas to employees group. Almost similar trends were observed in 1981 too (table 5).

Table 5: Employment status of the employed population by sex & rural-urban

	Employment status		Self employed	Government, autonomous bodies and private employees	Employers	Unpaid family helpers
1998	All areas	Both	63.9	29.6	1.3	5.2
		Male	65.1	29.0	1.3	4.6
		Female	31.5	44.6	1.4	22.5
	Rural	Both	69.5	22.8	1.2	6.5
		Male	70.6	22.5	1.2	5.7
		Female	36.4	33.0	1.5	29.1
	Urban	Both	52.0	43.9	1.6	2.5
		Male	53.2	43.0	1.7	2.1
		Female	23.3	63.9	1.4	11.4
1981	All areas	Both	57.1	25.9	1.9	15.1
		Male	58.1	25.4	2.0	14.5
		Female	31.7	36.5	1.0	30.8
	Rural	Both	61.2	19.0	1.6	18.2
		Male	62.2	18.8	1.7	17.3
		Female	34.4	24.9	1.0	39.7
	Urban	Both	44.9	46.6	2.8	5.7
		Male	45.8	45.7	2.9	5.6
		Female	24.7	67.1	0.8	7.4

Source: 1981 and 1998 PCR of Punjab.

More to the point, the size of EAP is just an approximation of the quantity of the labor force and not its quality. Therefore, the measurement of the effective supply of labor depends on the relative skills and educational attainment of the EAP. The effective estimation of labor supply takes into account the number of workers, hours of work, seasonal employment, holidays, health status of the workers, the number of disables etc. However, the study of labor force with all such details is beyond the scope of this study and requires a separate inquiry.

As regards employment ratio and labour force participation rate (LFPR), these also vary markedly throughout all the districts of Punjab (table 6). According to 1998 census the overall employment ratio in Punjab was just 35.57 which cannot be regarded as too satisfactory. Chakwal showed lowest (20.39) and Rajanpur showed highest (43.67) employment ratio. Chakwal is a plateau district where most of the work force is employed in government jobs and army whereas Rajanpur is an agricultural district and most of the people are engaged in agriculture and related activities showing themselves employed persons. Furthermore, the districts have been divided into three groups on the basis of employment ratio. Table 7 shows that the lowest number (04) of districts fall into the group of low and highest number (22) fall into the group of medium employment ratio

whereas the remaining eight districts belong to the group of relatively high employment ratio. This unveils the veracity that Punjab is passing through a transition of economic development where most of the districts are at intermediate stage.

Table 6. District wise employment ratio, (LFPR) of population age 10 years and above, and proportion of employed labor force in agriculture

Districts	Employment ratio	LFPR	Male LFPR	Female LFPR	% of employed labour force in agriculture
Hafizabad	41.42	35.0	64.7	2.4	36.2
Khushab	30.09	28.2	55.6	1.8	45.2
Jhelum	25.98	27.3	53.5	1.8	27.2
Bhakkar	36.49	32.4	60.8	2.0	53.7
Mianwali	25.56	26.7	51.5	2.2	35.1
Chakwal	20.39	23.6	48.0	2.3	42.4
Rajanpur	43.67	42.3	78.4	1.3	76.7
Layyah	22.04	21.6	40.6	1.2	52.2
Mandi Bahauddin	36.87	30.7	59.0	1.3	40.3
Lodhran	40.69	37.8	71.6	1.0	61.8
Narowal	36.34	30.2	55.5	5.0	40.3
Attock	33.75	31.2	60.7	2.3	32.3
Pakpattan	42.21	38.1	71.4	1.8	60.6
T. T. Singh	35.87	32.8	60.7	2.5	36.2
D. G. Khan	39.19	39.0	73.5	1.4	67.4
Sahiwal	39.54	39.0	73.7	1.4	56.7
Gujrat	30.29	28.0	54.4	2.0	29.5
Bahawalnagar	37.74	36.8	69.2	2.0	59.0
Khenewal	40.70	37.8	71.0	1.8	51.1
Vehari	40.65	36.8	69.0	2.2	51.7
Okara	35.65	32.3	60.1	1.3	34.0
Kasur	35.66	31.3	57.7	1.8	32.0
Bahawalpur	41.97	40.2	74.7	1.4	58.7
Muzaffargarh	37.01	38.8	72.4	2.8	49.8
Sargodha	33.08	30.7	58.5	1.4	31.0
Sialkot	33.80	30.5	57.6	2.0	20.3
Jhang	40.31	35.0	65.4	1.8	44.4
Multan	37.69	36.4	67.1	2.0	33.6
R. Y. Khan	39.44	37.2	62.3	2.2	56.3
Sheikhupura	36.25	32.5	59.0	3.3	29.6
Rawalpindi	31.06	29.9	56.5	1.9	8.4
Gujranwala	33.01	33.4	62.0	1.7	17.0
Faisalabad	35.66	32.3	59.1	3.0	25.2
Lahore	31.80	29.9	54.2	2.2	5.7
Punjab	35.57	33.1	61.8	2.1	37.1

Source: 1998 PCR & DCRs of the Punjab; and NIPS, Pakistan population data sheet 2001.

According to the estimates of NIPS (2001), the overall labour force participation rate in the province was 33.1% which varied significantly among both the sexes and throughout all the districts. The district Rajanpur is marked with the highest (42.3) and Layyah (21.6) with lowest participation rate (table 6). The female participation rate in all the districts is much lower than the male participation rate. District Rajanpur showed the highest participation rate for males and Narowal for females, whereas Layyah showed the lowest participation rate for males and Lodhran for females (table 6).

Table 7. Grouping of districts by employment ratio

Groups	Employment ratio	No. of districts	Names of districts
Low	20-29	04	Jhelum, Mianwal, Chakwal & Layyah
Medium	30-40	22	Khushab, Attock, Gujrat, Sargodha, Sialkot, Lahore, Rawalpindi, Bhakkar, Narowal, Mandi Bahauddin, T. T. Singh, Okara, D. G. Khan, Sahiwal, Bahawalnagar, Kasur, Muzaffargarh, Multan, R. Y. Khan, Gujranwala, Sheikhupura & Faisalabad
High	Above 40	08	Jhang, Rajanpur, Lodhran, Pakpattan, Khenewal, Vehari, Bahawalpur & Hafizabad

The low labor force participation rate in the province and in the districts stems mainly from low female participation rate. The much lower female participation rate than male is most probably due to classification problem where females are commonly masked under the category of housekeeping. The male participation rate on the other hand compares favorably with other countries (Main Findings of 1998 Population and Housing Census, 2003). Though, labor force participation rates are mainly influenced by the level of agricultural and industrial progress, educational attainment and socio-economic norms but in case of Punjab, besides these factors, participation rates can be increased if females are made economically active.

AGRICULTURE

Next to the man power is agricultural sector that provides base for economic development in Punjab. Agriculture is its foremost distinctive feature and from centuries it is branded as an agrarian region. The vast majority of its rural population is involved in inherited agricultural pursuits. Currently its economy can be called 'a transitional agricultural economy' that is gradually shifting to a more complex food and fiber system (the total of agricultural business and farming industries and their coordinated activities) and a larger industrial sector. No body exactly knows that when agriculture begun in this region, however, its history dates back to Neolithic (pre-metallic) age. The region inherited an agricultural economy and its cultivated land was regarded as the bread basket (or granary) of the subcontinent centuries ago before independence. Since primitive stone implements to modern machines, it has always been an integral part of

human life in the region and now is the largest private sector and mainstay of economy. Due to its historic origin as the basis of economy, agriculture has played a significant role in transforming the socio-economic conditions of the people. Although, its relative importance and share in GDP has decreased, and proportion of EAP employed in it has dropped from 49.1% in 1981 to 37.1% in 1998 (table 8), yet it is the largest contributor to the province's economy and its overall production has registered a steady increase. This sector serves as backbone of the province's economy by providing employment to a largest proportion of labour force and contributing highest to the GDP. It is the source of labour for other industrial sectors, capital for new business, revenue for the government, and exports that balance the imports required by other developing sectors. These key functions make the food and fiber system the main driving force of the economy. Thus, the economy of Punjab still to a large extent can be characterized as an agricultural based economy. Since the province has to feed a huge population so the emphasis is largely on to the production of food grains like wheat, rice, maize, millet, sorghum and barley. Cash crops, oil seeds and pulses are also grown on large scale. However, the wellbeing of the province's economy depends specifically on the production, processing and distribution of major crops like wheat, cotton, rice, sugar cane, oil seeds etc. There are two principal crop seasons in the province, namely Rabi (autumn) and Kharif (spring). In both these seasons crops are grown in canal irrigated as well as in rain fed areas. The major wheat region is located in canal colonies extending from Sialkot district in the north to Rahim Yar Khan district in the south. The minor region comprises northern and eastern districts. The area under wheat cultivation is 5935 thousand hectares (Agricultural Statistics of Pakistan, 1997-98). The main cotton belt lies in south eastern Punjab. Rice is produced on an area of about 1410 thousand hectares located mainly in north eastern Punjab which has an additional advantage of receiving lot of monsoon rains (Agricultural Statistics of Pakistan, 1997-98). Sugar cane is mainly produced in east central Punjab. The province shares about two-third of the country's total cropped area, three-fourths of the total wheat and cotton production, and about one half of the rice (Agricultural Statistics of Pakistan, 2000-01). However, most of the cereal output is engulfed locally and only cash crops are left to boost the economy. In the longer run, the agricultural economy (farming and agricultural business) looks to be producing an increasing marketable surplus that will be supporting sustained economic growth and a transition to a more market oriented economy. Furthermore, besides meeting growing food demands, agriculture supports economic growth and development of other sectors too. In addition to feeding domestic markets, it supplies products to exports markets for foreign exchange earnings and balance the imports required by other developing sectors. These key functions make the food and fiber system the main driving force of the region's economy. In the region, agricultural economy and the rest of the economy are thus mutually dependent with the agricultural economy providing resources to the rest of the economy as both sectors continue to develop. Meanwhile, the agricultural economy makes up a declining portion

of the total economy as smaller portions of the consumer budget are required for food and fiber (Mahmood and Walter, 1990: 3).

Table 8. Percentage of EAP Engaged in Agricultural and Non-Agricultural Sectors

Areas	1998		1981	
	Agriculture	Non-Agriculture	Agriculture	Non-Agriculture
All	37.1	62.9	49.1	50.9
Rural	50.8	49.2	62.7	37.3
Urban	7.6	92.4	7.8	92.2

Source: PCR's of Punjab, 1981 & 1998.

Nevertheless, currently the agricultural economy of Punjab is a dominant force driving the growth and development of national economy also. Roughly half of the GDP is produced by farming and agricultural business. Agricultural economy accounts for more than 50% of household consumption, two-thirds of employment and three-fourths of exports. It also uses about 50% of all imports and energy consumed and one-third of all investments (Mahmood and Walter, 1990: 4) of the country in which the main contributor is Punjab. In general, the rest of the economy has a smaller multiplier effect than agriculture. One unit increase in agricultural economy stimulates two units increase in overall business activity. In the chain of purchases the agricultural economy purchases about 85% of its purchases internally and about 15% from rest of the economy (Mahmood and Walter, 1990: 4). About 69.7% of the province's population is inhabited in rural areas and either directly or indirectly is linked with agriculture for livelihood. Therefore, any improvement in agriculture will not only help economic growth but also will benefit a large segment of population. Though, proportion of EAP engaged in agriculture varies significantly from district to district, but except Lahore and Rawalpindi it is considerably high with highest in DG Khan (table 6).

Table 9. Major Sectors of Economy and Their Share in Country's GDP

Percent Share of Commodity Sector		Percent Share of Services Sector	
Agriculture	32.7	Wholesale & Retail Trade	15.5
Manufacturing	18.4	Transport, Communication & Storage	9.9
Construction	3.3	Public Administration	6.6
Electricity & Gas	3.4	Ownership of Dwellings	6.2
Mining & Quarrying	0.5	Finance & Insurance	2.4
-	-	Other Services	10.1
Total Share of Commodity Sector	49.3	Total Share of Services Sector	50.7

Source: Pakistan Investment Guide, 2004, Ministry of Information and Production, Islamabad, p.12.

If we divide the economy into two major groups, i. e. the commodity sector and services sector, and take into account their share in GDP then agriculture clearly shows the dominating role. Table 9 presents the picture for entire country in which Punjab plays dominating role. Among the commodities, agriculture alone (excluding agricultural

business) contributes about one-fourth to the GDP and employs nearly half (48.4%) of the total work force. It also serves as a major supplier of raw materials to the industry as well as market for the industrial products (Economic Survey of Pakistan, 2002-03).

Table 10. Private Arable Land Holdings in Punjab

Size of Area Owned in Acres	No. of Holdings	Percentage	Area in Acres	Percentage
Under 1	476,216	12.3	215,072	0.8
1 to under 2.5	1,045,246	27.0	1,606,136	5.9
2.5 to under 5	850,519	22.0	2,879,578	10.7
5 to under 7.5	549,879	14.2	3,174,460	11.8
7.5 to under 12.5	459,297	11.9	4,393,922	16.3
12.5 to under 25	300,022	7.8	4,853,432	18.0
25 to under 50	131,631	3.4	4,029,244	14.9
50 to under 100	38,703	1.0	2,414,024	8.9
100 to under 150	7,506	0.2	846,655	3.1
150 & above	7,373	0.2	2,538,325	9.4
All	3,866,392	100	26,950,848	100

Source: Pakistan Agricultural Census 2000, p. 340 and Agricultural Census 2000: Procedure and Data , Tables, Punjab, p. 1220.

In 2000 there were about 3.86 million private agricultural landholdings in Punjab that covered an area of over 26.95 million acres. (Pakistan Agricultural Census 2000, table 1). Based on size, the private landholdings of Punjab have been divided into various categories (table 10). The percentage of landholdings tends to become lower and lower as their size increases. The highest percentage has been found in the category of 1 to less than 2.5 acres size. The total number of farms (landholdings) in Pakistan has been reported 6.62 million, out of which 58% are in Punjab that constitute 55% of the country's farm area (Pakistan Agricultural Census 2000, table 1). Land use intensity which is the cultivated area X 100 / total cultivable area and cropping intensity which is the total cropped area X 100 / total cultivated area are also highest (96 and 154 respectively) in Punjab as compared to national levels and other provinces. In Pakistan, NWFP, Sindh and Balochistan land use intensity is 85, 83, 77 and 53, and cropping intensity is 142, 142, 130 and 78 respectively (Pakistan Agricultural Census, 2000, tables 5 & 6.). This indicates that pressure on the farm land of Punjab is highest than any other province and even the whole country as well.

Five years (1995-99) average and for the year 2001-02 area, production and per hectare yield of major crops is given in table 11. Wheat, rice and maize are the main cereal and

cotton and sugarcane are the main cash crops of the province, which occupy a major proportion of the cropped area. The area occupied by all other crops even jointly doesn't equal to the area occupied by these crops in the province.

Table 11. Area in Thousand Hectares, Production in Thousand Tones and Per Hectare Yield (in Kilograms) of Major Crops

Crops	Five Years (1995-99) Average			2001-02		
	Area	Production	Yield	Area	Production	Yield
Wheat	5,973	13,660	2,284	6,102	14,594	2,392
Rice	1,439	2,055	1,423	1,476	2,266	1,535
Maize	397	698	1,857	393	742	1,890
Barley	39	38	981	35	34	957
Sugarcane	669	28,693	42.8*	657	31,803	48.4*
Cotton	2,393	7,614**	542	2,526	8,546**	542
Tobacco	52	98	1,851	46	86	1,861
Rap Seeds & Mustard	173	169	979	135	136	967
Potato	82	1,221	14.6*	92	1,549	16.9*
Onions	21	227	10.7*	24	225	9.4*
Gram	882	540	611	816	304	373
Pulses	259	125	526	294	144	530

Source: Agricultural Prices Commission of Pakistan, Islamabad, 2003.
** Thousand bales and * tons per hectare.

From the point of view of growing food demands of expanding population, cereal crops are by far the most important than other crops and among them wheat occupy prime position. Table 12 compares the production of cereal crops of Punjab with national figures which clearly indicates that nearly three-fourth of the country's wheat and about one half of the rice is produced in this province. However most of the cereal output is engulfed locally and only cash crops are left to boost the economy.

Table 12. Cereal Production of Pakistan and Punjab in Thousand Tones, Five Years (1995-99) Average Compared to 2000-01

Cereal	Pakistan		Punjab	
	Average	2000-01	Average	2000-01
Wheat	18,238	18,735	13,660	15,500
Rice	4,487	3,900	2,055	1,785
Maize	1,565	1,489	698	700
Others	559	457	313	290
All	24,849	24,581	16,726	18,275
% Share	100	100	67.3	74.3
% Change 2000-01 to Average		-1		+9

Source: Agricultural Statistics of Pakistan 2000-01.

Moreover, the territory of Punjab is also famous for livestock rearing which is a centuries old profession of many Punjabis and regard as as a part of agriculture. It has been playing an important role in agricultural economy and in improving the socio-economic conditions of the people. Currently it is considered an important sub-sector of agriculture and contributes about one-third of the agricultural share in GDP (1998 PCR of Punjab, 2001:83). Due to supply of feed its production is closely related with crop production and it has flourished side by side with the developments in agriculture. Southern Punjab is fairly rich in livestock but it has no specific breed of its own. Besides other rain-fed areas of the province, Cholistan is a principal supplier of animals and their products. According to livestock census of 1996, in addition to more than 24.9 million domestic poultry population the total livestock population in Punjab was about 44.3 million. It consisted on 15.3 million goats, 13.1 million buffalos, 9.4 million cattle, 6.1 million sheep, 2.0 million asses, 0.2 million camels and same number of horses, and 0.1 million mules.

MANUFACTURING INDUSTRY

The third most important component of the economic structure of Punjab is manufacturing. Punjab started with a weak industrial base, but after agriculture it is the largest sector of economy now and comprises of large-scale as well as small and medium-scale manufacturing. Since 1987-88 the best performance of this important sector of economy in general and large-scale manufacturing in particular has been recorded in the year 2002-03 (Economic Survey of Pakistan, 2002-03: 3). Its role in the economic wellbeing of the people is gradually increasing. About 52.8% of the Pakistan's all industries are found in Punjab (Census of Manufacturing Industries 1995-96, 2001). Lahore, Faisalabad, Gujranwala, Sialkot, Gujrat, Multan and Rawalpindi are the most significant industrial centers. Textile, fertilizer, sugar, vegetable ghee, cement, electrical goods, automobile industries etc. are currently the main contributors to the economy. Besides, Punjab also has 248 soft-where houses, 188 in Lahore, 38 in Rawalpindi, 7 in Faisalabad, 6 in Multan, 5 in Sialkot, 2 in Gujrat and one each in Vehari and Wah Cantt (Census of Soft-where Industry and Related Services of Pakistan, 2002: 4). Various groups of industries of Punjab, their proportion in Pakistan, value of output and contribution to GDP have been given in table 13.

Table 13. Industries of Punjab, their Proportion in Pakistan, Value of Production and Contribution to GDP during 1995-96

Industries	No. in Pakistan	No. in Punjab	% of Pakistan	Value of Production in Rupees	Contribution to GDP
Food, Beverages & Tobacco	984	379	38.5	76,797,339	21,340,039
Textile, Apparel & Leather	1589	960	60.4	158,497,498	24,380,699
Wood, Wood Products & Furniture	81	34	42.0	567,289	174,974
Paper, Printing & Publishing	171	70	40.9	7,600,537	2,506,567
Chemicals, Rubber & Plastics	551	217	39.4	39,606,918	14,681,500
Nonmetallic Mineral Products	146	64	43.8	12,222,669	5,451,019
Basic Metal Industries	148	94	63.5	4,948,126	634,574
Metal Products, Machinery & Equipments	731	496	67.8	24,772,120	5,527,726
Handicrafts, Sports & Other Manufacturing	73	50	68.5	4,418,542	513,608
All Industries	4474	2364	52.8	329,431,038	75,210,706

Source: Census of Manufacturing Industries, 1995-96.

By number Punjab contributed about 53% of the all industries of Pakistan that produced the commodities of worth 3.3 billion rupees (table 13).

To sum up, the previous discussion and the facts mentioned in the study are largely based on census and surveys data. It revealed that population of Punjab has grown at an alarming rate but the process of economic growth remained comparatively slower. The present situation of the three major components of the economy of Punjab (economic structure of population, agriculture and manufacturing) in general and of the economically active population, employment ratio and labour force participation rate is not much reasonable. Such kind of situation can be a big challenge for planners and policy makers in the days to come.

CONCLUSION

Undoubtedly, economic structure of population and availability of man power, agriculture and manufacturing activities are the main driving forces for the economy of Punjab. These forces, in one way or another, are highly influential for economic development process in the region. It revealed from the study that throughout their previous census history, these forces remained under the mammoth influence of the process of continuous change. The comparison of1998 census data with 1981 indicates decline in participation rates. Economically active population as a share of total population is also declining. The

unemployment rates went up pointing towards rapid population growth and slow economic development process. Non availability of jobs can be a main cause of the increase in unemployment in the region that also indicates slowness of economic development process compared to the rate of population growth. The comparison of industrial and occupational structures of 1998 and 1981 provides information about structural transformation of the economy of region. This transition is clearly visible when share of agriculture is compared with other sectors. On the basis of such findings study suggests that if our planners want to put the region on to the concrete path of factual prosperity, they need to focus aptly the three major components of the economy of Punjab, man power, agriculture, and manufacturing. The results obtained by comparing 1998 and 1981 census, specifically regarding economic composition of population are not much satisfactory. Therefore, timely control of maladies is decisive need for the future prosperity of the region.

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