JOURNAL OF AGRICULTURE & SOCIAL SCIENCES
1813–2235/2005/01–2–180–186
http://www.ijabjass.org

Review

Population Profiles, Human Capital Formation and Economic Development of Pakistan (1951-1998)

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ABSTRACT

This paper reviews the relation of population, human capital formation and economic development of Pakistan from 1951 to 1998. It also examines that how developing countries like Pakistan can utilize their increasing population for the economic growth of the country. Demography variables suggest that rapid population growth would put more strain on limited national resources. This will adversely affect the economic growth and employment. Expansion policies are needed to provide productive employment to the growing labour force and human capital formation is necessary for the economic development of Pakistan. Further policy guideline is provided for sustainable economic development. Forecasting pertaining to important variable has been provided for future planning on the topic. It may provide a good guideline for research and a strong base for future manpower planning and human capital formation in Pakistan.

Key Words: Population; Human Capital; Economic Development; Pakistan

INTRODUCTION

Pakistan inherited a semi-subsistence agrarian economy when she became independent in August 1947. At that time more than 85% of the total population lived in the rural areas. According to the first population census of 1951 of Pakistan nearly 66% of the labour force was engaged in agricultural activities, while 12% was serving the industrial sector. In 1949-50 the share of the manufacturing sector in gross domestic product (GDP) was about 8% as compared to the 55% contribution of the agricultural sector. The foundation of economic development in Pakistan was laid on the existing fragile of economic structure with the establishment of the Development Board in 1948. The Board was responsible for the co-ordination, evaluation and submission of periodic reports to the cabinet on the progress of development projects. Since then; Pakistan has striven hard to attain a responsible standard of living by utilizing her manpower and natural resources.

Inspite of considerable economic growth in the country, the fate of the masses remained almost unchanged. The economy failed to absorb the expanding labour force because human development was one of the neglected areas of economic development (Haq, 1973). In the recent past, the planning strategy has been changed from merely growth oriented to concentrating on distributive justice. To achieve this objective, manpower planning has been accorded high priority by the Government of Pakistan. But planning without a sound statistics is seldom fruitful. The study therefore, on HCF was undertaken to bridge this gap in the process of economic planning in Pakistan. A quantitative and qualitative evaluation of the present human resources of Pakistan as well as the projections of the future labour force for human capital formation was conducted which would be useful for the planners, policy makers, demographers, economists and other data users. The study revealed that our growing population could be used as a capital generating instrument for the economic development of Pakistan provided that labour force is trained in accordance with the socio-economic requirements.

SOURCES AND DATA ANALYSIS

The decennial population censuses since 1951 are the major sources of the data on the size, growth and composition of the labour force, except for the 1992 census, which did not collect data on the economic characteristics of the people of Pakistan. This gap was filled with the Housing, Economic and Demographic (HED) survey, 1973, held during August, November 1973. The HED study is one of the pertinent surveys on the human resources of Pakistan because it provides labour force estimates up to provincial level since the separation of the Eastern wing (now Bangladesh) in December 1971. Other important surveys on the subject have been regularly conducted since 1963 by the Federal Bureau of Statistics, Statistics Division from 1972 to November 1981. The labour force surveys of 1974-75 and 1978-79 need special mention because of their significance and importance in socio-economic planning after 1971. Moreover the annual Pakistan Economic surveys upto 1999-2000, the statistical year books, upto 1998-99, the five year plans (1955-2003). Pakistan Development Reviews, the Reports of National Manpower Commission of Pakistan (1998), publications of Pakistan Manpower Institute, National Institute of Population Studies and the Agricultural Census Reports also publish an important data on the subject. World development reports, ILO Publications upto 2000 and publications of National and Foreign writers play an important role in this respect.

Finally the most important current source of recent labour force statistics is the fourth decennial population census, which was held from 15 March, 1981. Fifth decennial census was due in 1991, but was postponed due to some socio political problems and it was held in December 1998 and it has its own significance. Various research institutions and university's publications are also much more important in this respect. Data taken from the above mention resources and analyzed with SPSS and DEMPROJ Programmes.

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Development planner no longer can ignore human resources and employment issues. Development economists have realized the importance of the relationship of the following demographic determinants, socio-economic and cultural factors in integrated economic development. By means of these determinants population can be converted into human capital according to the coming socio economic needs. Hence population is the one main factor for the economic development.

Private and Social Rate of Return on the Basis of Economic, Social and Demographic Determinants

Pascharapoulos (1994) provides a comprehensive update of the estimating rates of the returns to education at a global scale. He observed high social and private profitability of primary education (18 and 9%, respectively) in all regions of the world. The private rates of return at this level were found highest in Asia (39%) as compared to other regions. He also noted the considerable increase in total earnings by an additional year of education in all region of world; 13% in sub-Saharan Africa; 10% in Asia, 10% in Europe/ Middle East /North Africa and 12% in Latin America /Caribbean.

Pakistani graduates eventually enjoy a higher private rate of return of their education than any other educational category at home or than graduates in low-income countries as a whole (Table I). Education is considered to be the major form of investment in human capital and serves as a key input in human capital formation. It only raises the productivity and efficiency of individuals but also improves the quality of their life by increasing earnings. Getting more education not only ensures higher paying jobs but also creates awareness about health, hygiene and nutrition. There is evidence to suggest that it also leads to small family size and greater female labour force participation.

In recent years the government of Pakistan has started nation-wide survey, Pakistan Integrated Household Survey (PIHS), to address the imbalances in the social sector. This study uses the data of PIHS to examine the returns to education by using Mincerian earning (Mincer-1974) function and thus aims to fill the vacuum that, due to the lack of appropriate data, exists in the literature on return to education in Pakistan.

Based on available data in Pakistan, most of the studies for example, Haq (1977), Hamdani (1977), Guisinger *et al*. (1984), Khan and Irfan (1985), Ahmad *et al*.

Table I. Rates of return to school, Pakistan compared with all low-income countries

Country	Primary	Secondary	Tertiary
	All low-income countries		
Private	35.2%	9.3%	23.5%
Social	23. 4%	15.2%	10.6%
	Pakistan		
Private	20.0%	11.0%	27.0%
Social	13.0%	9.0%	8.0%

Sources: Hussain.I (1999); Govt. of Pakistan (2001-2011)

Table II. Important demographic variables

Year	Source	CBR per 1000 population	TFR per woman	IMR per 1000 live birth	CDR per 1000 population
1951	Census	62.4	-	-	-
1961	Census	51.0	-	-	-
1971	PGE	36.9	6.3	106	10.6
1972	Census	52.2	-	-	-
1981	Census	37.1	6.5	-	-
1884	PDS	43.3	6.9	126.7	11.8
1991	PDS	39.5	6.0	102.4	9.8
1993	PDS	38.9	6.2	101.8	10.0
1998	Census	140.00	6.7	85	9.1

50 years of Pakistan's economy; PGE=Population Growth Estimation; PGS = Population Growth Survey; PLM= Population Labour force & Migration; PFS = Pakistan Fertility Survey; PDS = Pakistan Demographic Survey Source: Rafi (2000)

(1991) and Ashraf and Ashraf 1996 estimated the earning function by defining the dummy variables for different levels of education. These studies observe low rates of returns at different levels of education as compared to other developing countries. However a positive association between levels of education and earnings and an inverse relationship between the degree of income inequality and educational attainment has been noted. In order to examine the inter provincial differentials in returns to education, Shabbir and Khan (1991), estimated the earning function on the extended sample of the same data set. These studies found 7 to 8% increase in earning with an additional year of schooling (PIDE, 2000).

Although the results are consistent with those of comparable Lower Developing Countries (LDC's) but may not reflect the recent development in Pakistan's economy as these studies are based on the data late 1980s. For example, the literacy rate has increased from 26 to 45% and enrolment at primary level has increased by 67%. Public and household expenditures on education have also increased (Govt. of Pakistan, 2003). Moreover, due to the fiscal constraints, the employment opportunities in the public sector have started shrinking and the economy is moving towards more openness with stronger role of private sector in recent years. In this scenario, it becomes imperative to re-test the role of human capital as both private and public sectors are moving towards more efficiency and productivity.

It has been argued in the literature that different school years impart different skills and hence affect earnings differently. Therefore, it is misleading to assume a uniform rate of return for all educational levels. In order to examine the effect of school years at different levels of education, Van der Gaag and Vijverberg (1989) divided the years of

schooling according to the school systems of cote. Similarly Khandker (1990) also used years of primary, secondary and post secondary schooling in wage function for Peru. Both studies found significant differences in returns to education at different levels of education (PIDE, 2000).

In addition to education and experience, various other factors, such as quality of schooling, technical training and year of schooling have significant impact on earning. It has been argued that because of the market-oriented approach adopted by the private schools, the graduate of these schools earn more as compared to the graduate of public schools. According to PIDE (2000), the quality of education has positive, significant and substantial impact on cognitive achievements and hence on post school productivity, measured by earnings. This study observed higher earnings of the graduates of high quality school than those who attended a low quality school. The effect of post-school training on earning has been found positive and substantial in many developing countries (see Van der Gaag & Vijverberg, 1989; Khunkar, 1990).

Vast gender gap has been observed in returns to education where males earn more than the female worker (Ashraf & Ashraf, 1996). The positive role of education in each year of education brings approximately 7% returns for wage earners. Not only every additional year of schooling causes a significant rise in earnings but also higher earnings are found to be associated with higher levels of education. The impact of technical training and private schools is found to be positive and significant. An additional year of technical training causes 2.4% increase in earnings, and more than three years training adds 4% premium in earnings-A graduate of private school earns 30% higher income as compared to the graduate of public school. These results suggest that workers get the reward of those trades, which enhance their productivity (PIDE, 1999).

Indeed, Pakistan's critical development needs are extensive and varied given its transformation to a more market-oriented economy. An essential input needed to speed up this transition is the quality of the labour force and manpower, especially for the private sector. While Pakistan's record of economic growth has been reasonably impressive during the past decades, the development in the social sectors has lagged much behind. The investment that laid the foundation for future growth has been inadequate in the social sectors. The persistence of high population growth in conjunction worth serious fiscal external and financial imbalances throughout the eighties and to date led to the worsening of the infrastructure in the social sectors. The challenge for Pakistan therefore is to produce a well-trained and educated workforce while ensuring cost-efficient delivery of human resource services like education, Health Training, Information and migration.

Salient Features of the Population

1. The education statistics indicate literacy rate to be as 45% in 1998, 56.5% for males and 32.6% for females. This is at the lower and in comparison with other Asian countries. According to Govt. of Pakistan (1999) although the number of educational institutions and enrolment has increased significantly since the year 1990, a large number of school age children, especially girls in rural areas remain out of school. The participation rate at primary level is 85% for boys and 63% for girls in 1997-98, indicating a formidable task to achieve the target of universal primary education by the end of third perspective plan (Govt. of Pakistan, 2001-2011).
2. In the past, development planning in Pakistan mostly emphasized physical capital accumulation. Thus, human capital accumulation remained sadly neglected. The full impact of this neglect has, how ever, not been felt as yet.
3. Pakistan's economic growth record to this point of time has been quite reasonable; per capita income has more than doubled over the past three decades. Things could have been even better.
4. There is considerable evidence to suggest that the lack of educated manpower and the poor quality of the work force has prevented the economy from attaining its true potential (Haq, 1998). The poor quality of the work force is the results of rapidly increasing population and the low priority accorded to social sectors such as education and health. The poor standard of the social sector also determines the overall quality of life of the people of country, improving, which is the goal of development. The performance of the social sectors in Pakistan has been highly unsatisfactory. This evident from the low literacy rates, lack of access to safe drinking water and sanitation facilities, high levels of malnutrition amongst vulnerable groups, low levels of labour productivity, and high incidence of poverty. Driving all these, of course, the high rates of population growth.
5. The gender and regional imbalances in the provision of limited available social services and the low allocation of public funds to education, health and population welfare, places Pakistan in an unfavorable position even among the low-income countries of the world.
6. To focus on human resource development in Pakistan since 1947, human resources issues are examined in terms of the demographic trends affecting its burgeoning population. Human resource utilization is evaluated in terms of the productive employment of the available manpower in the country. The performance of key social sectors such as education, health and the equally important issues of nutrition are examined. International comparisons are made to high light the shortfall in Pakistan's performance. The nature of the analysis is purely descriptive. Imbalances are high-lighted and implications noted. No attempt is made to present remedial strategies apart from those that should be obvious from the presentation of the data.
7. Pakistan covers only 0.67% of the world's land but contains 2% of world's population. At the time of independence, Pakistan's population was 32.5 million. This means during the fifty years of its existence Pakistan's population has increased about four-fold). The annual

growth rate of population was 1.8% per annum in 1947. This increased to 3.2% in 1981 and 3.5% in rest of the eighties, which is one of the highest rates in the world. This high population growth rate is brought about by the high fertility rate and the low mortality rate (Govt. of Pakistan, 2000).

8. Fertility and mortality rates are the two crucial factors affecting population growth. The mortality rate in Pakistan has declined significantly during recent years due to expansion of preventive medicines and public health services and the provision of safe drinking water and sanitation facilities.

9. Significant differences in the rural and urban areas have been observed in the population growth patterns and other demographic indicators. According to the 1998 census, the inter censual annual average population growth rate was 2.61% per annum; 2.58% for rural area and 4.38% for urban areas. The Crude Birth Rate (CBR), Crude Death Rate (CDR) and infant mortality rates (IMR) are all higher in the rural areas. The high rates reflect the neglect of rural areas where a large proportion of the population is deprived of basic services and amenities (Govt. of Pakistan, 2000).

10. Life expectancy at birth is regarded as a best indicator of mortality. It is also good poxy for the prevailing health and nutrition conditions in the country. In Pakistan, this rate has increased since 1947. Life expectancy at birth in 1951 was only 33.80 years and it increased to 63 years in 1998. High life expectancy contributes significantly to the achievement of a high rank on the human development index developed by the United Nation (Govt. of Pakistan, 2000) as shown in Table II.

11. A high dependency ratio not only puts on extra burden on the working age population but also leads to the slowing down of the process of economic growth. The share of working age population (15 to 64 years) of the total population is around 52% among them. According to Govt. of Pakistan 1998 census, the youth dependency ratio in Pakistan is amongst the highest in the developing countries. The over all dependency ratio has increased from 89% in 1951 to 95% in 1998. This indicates that each person of working age has almost one dependent person to take care of (Govt. of Pakistan, 2000).

12. Urban settlements occupy less than 0.75% of Pakistan's land and contain 30% of its population. The (Govt. of Pakistan 1998 census) imply that the growth rate of urban population 4.38% is higher than that of the rural population (2.58%). In addition to high fertility rate (6.7) and slow mortality rates (85.9), large scale migration from rural to urban areas also contributes significantly to this high growth rate. The urban population was estimated six million in 1947 and 42 million in 1998; about a seven fold increase in 41 years. The share of urban population in total population has more than doubled. The number of cities and towns has more than doubled since 1951. Most of the growth occurred in the major cities. Thus, more than half of the urban population lives in the eight major cities (Govt. of Pakistan, 1998).

13. Full utilization of human resources is based on effective and gainful employment. Employment and manpower planning are essential for adequate human resource development in Pakistan. The labour force is divided into self-employed persons, employers and employees and unpaid family helpers. Housewives are not part of the labour force because they do not receive a wage and presumably do not engage in 'productive work'. The low rate of employment generation coupled with the fast growth of the potential labour force has resulted in high incidence of unemployment and under employment. Participation rate for females in the labour force is abysmally low in Pakistan even in comparison with other Islamic countries. The human development report (UNO, 1999) notes that the economic activity rate among woman in Pakistan during 1998 was only 14.5%; while in India it was 28%, in Sri Lanka 29%, in Iran 19% and in Bangladesh 6. Details of unemployment/employment are given in Table III and IV.

14. The employment rate in the rural areas increases with the improvement in the educational level. It is also interesting that female participation in higher education is relatively greater than that of males in both the urban and rural areas.

15. Labour absorption has declined in many sectors due to the increasing reliance on capital intensive techniques. The formal sector increasingly demands educated and skilled manpower. A large proportion of the population consisting of the uneducated and the unskilled labour force, seeks jobs in the informal sector in Pakistan, this sector accounted for 72.7% of the urban employment in 1985-86 (Burki, 1988). The informal sector (Industrial establishment with less than ten and non industrial not more than twenty workers) serves an important source of employment and income generating for less educated and unskilled and semi-skilled labour force. Kamal and Mehmood (1993) estimated that the informal sector can create fourteen times the number of jobs that the rest of the economy can with the same level of investment. All the studies have consistently found lower wages prevailing in the informal sector as compared to the formal sector.

16. Education is considered to be the major form of investment in human capital and serves as key input in human capital formation. It not only raises the productivity and efficiency of individuals but also improves the quality of their life by increasing earnings. Getting more education not only ensures higher paying jobs but also creates awareness about health, hygiene and nutrition. There is evidence to suggest that it also leads to small family size and greater female labour force participation.

17. Pascharapoulos (1994) has reported the social and private rates of return for education in many countries. In the case of Pakistan he observes that the social rates of return at primary level are higher than those at secondary and higher levels. The private rate of returns is, however,

Table III. Labour force participation: Unemployment and underemployment rates

Year	Labour force (Millions)	Employed labour force (million)	Labour force Participation rate (%)	Unemployment rate (%)	Under Employment rate (%)
1963-4	15.40	16.24	32.59	0.97	
1964-5	16.40	16.47	32.17	1.08	
1969-70	18.11	17.75	30.33	1.99	13.98
1970-71	18.70	18.37	30.41	1.76	8.31
1971-2	18.94	18.55	29.90	2.08	7.16
1972-3	19.61	19.29	29.76	1.88	
1973-4	20.12	19.76	29.63	1.79	
1974-5	20.64	20.30	29.49	1.65	8.39
1975-6	21.54	21.08	29.86	2.14	
1976-7	22.48	21.89	30.24	2.65	
1977-8	23.46	22.73	30.63	3.11	
1978-9	24.49	23.62	31.02	3.55	4.79
1979-80	25.07	24.15	30.81	3.67	
1980-81	25.65	24.70	30.59	3.70	
1981-2	26.27	25.27	30.39	3.81	
1982-3	26.91	25.85	30.19	3.94	13.00
1983-4	27.45	26.40	29.92	3.83	
1984-5	28.00	26.96	28.67	3.71	13.96
1985-6	28.05	27.02	27.86	3.64	9.56
1986-7	29.60	28.70	29.40	3.05	9.75
1987-8	29.93	28.99	28.51	3.14	10.43
1988-9	30.87	29.90	28.83	3.14	
1989-90	31.82	30.82	28.30	3.14	
1990-91	31.83	29.83	27.97	6.28	11.01
1991-2	32.97	31.04	28.11	5.85	
1992-3	33.97	32.08	27.87	4.71	
1993-4	34.70	33.02	27.88	4.84	
1994-5(E)	35.69	33.96	27.88	4.85	
1997-98(E)	36.70	34.92	27.88	4.85	

Sources: Economic Survey various issues Govt. of Pakistan (1951-99)

Table IV. Population growth in Pakistan 1951-98

Census/Survey Year	Population (In Thousands	Growth over Preceding Census/ Survey Year (In Thousands)	%	Growth Rate (Per Annum)
1951	33,740	-	-	-
1961	42,880	9,140	27.1	2.4
1972	65,309	12429	52.3	3.6
1981*	84,254	18,945	29.0	3.1
1951-81	-	50,514	149.7	3.1
1981-92	12,0000	35746	147.6	3.2
1998	13,15100	101500	55.0	2.61

Sources: Censuses, various issues (Govt. of Pakistan, 1971-1998)

found to be highest at the tertiary level. Though these rates are lower than in other developing countries, they suggest that investment in education, especially at the primary level is highly attractive from the social point of view. The pupil's teacher ratio is 43 at primary and 19 at secondary levels. The (UNO, 1999, which presents the Human Development Index for 174 countries, indicates that Pakistan falls in the category of 'Low Human Development Countries'. A number of countries in this category have per capita GDP lower than that of Pakistan, but significantly higher literacy rates as compared to Pakistan. According to the Human Development Report, there are only seventeen countries with literacy rates of 37% or lower, and Pakistan is one of them. The HDI for Pakistan 0.445, which ranks it at 139 among the 175 countries in this list.

18. This low rank indicates the unsatisfactory performance of the social sectors of Pakistan. Pakistan's economy has been growing at the rate of 6.5% per annum, (UNO, 1994-1996), which is higher than the other high HDI rank countries as shown in the Table IV and V. The low expenditure on health and education produced a low quality labour force.

Table V. Population Growth and Area Shares, 1981 and 1998 Census

Area	Population (000)		Annual Growth Rate		Population Proportion	
	1981	1998	1981	1998	1981	1998
Pakistan	84254	1305880	3.1	2.6	100.0	100.0
NWFP	11061	175555	3.3	2.8	13.1	13.4
FATA	2199	3138	1.5	2.1	2.6	2.4
Punjab	47292	72585	2.7	2.6	56.2	55.6
Sindh	19029	29991	3.6	2.7	22.6	23.0
Balochistan	4332	6511	7.1	2.4	5.1	5.0
Islamabad (Capital Territory)	340	799	4.3	5.2	0.4	0.6

Source: Population Census Report (Govt. of Pakistan, 1981-1998)

The vicious circle of poverty, unemployment and high population growth, coupled with the extremely in equitable distribution of assets and opportunities, has prevented the fruits of the high GNP growth rate from reaching the majority of the people.

Size, Growth and Composition of the Population

The population of Pakistan has shown a continuously increasing inter censual growth rate. According to the first population (Govt of Pakistan 1951) census report, the population was 33,740,000 and increased to 42,880,000 in 1961. This was an increase of 2.7% with an annual average growth rate of 2.4% as Compared to 1.8% during 1941-51. The annual average growth rate climbed to 3.6% between 1961-72. The population growth rate also remained 3.6% per annum, during 1972-81 but it decelerated to 2.6% during 1981-98 showing an overall increase of about 55% over the last census held in 1981 (Govt. of Pakistan 1981) census. There is a welcome decline in the population growth of all areas. The growth rates since 1951 to 1998 are given in Table IV.

Pakistan stands 7th amongst the 10th most populous countries in the world, (Rafi, 2000), among the Asian countries it is at fourth position. It has second highest annual population growth rate of 2.61% among these ten countries. With this annual growth rate, the population of the country would be doubled in the next 25 years. This situation is very alarming on the average about 3.8 million people are being added annually to the country's population and the demographic changes in Pakistan since independence are common to most developing countries.

The level mortality has declined more than half while the decline in fertility is comparatively very slight. The crude death rate (CDR) has decreased from 30 deaths per thousand populations in 1950 to 9.7 in 1998. On the other hand, the crude birth rate (CBR) had declined from about 50 live births per thousand people in 1961 but still remains high at an estimated value of 41 in 1981 and 32.5 per thousands and during 1981-98 for all areas (Govt. of Pakistan, 1998).

As a result thereof population growth rate of about

2%, Govt. of Pakistan, 1999 is estimated in the future and the population of Pakistan would double within less than 25 years. But by the terminal year, 2003 of the 9th five-year plan (1998-2003), the population growth is projected to slow down to 2.0% (Govt. of Pakistan, 1998).

CONCLUSIONS AND SUGGESTIONS

1. Human capital formation is not only a means but also an end of economic development in a human society. It is obvious from the historical experience of industrialized countries that development of human capability is essential for a self-reliant and self sustaining pattern of Growth. Although the importance of education and literacy for political, social and economic growth has been obvious, yet there has not been much emphasis on the development of human resources in Pakistan. Most economic policy making in Pakistan was borrowed from the west without adapting it to local conditions. As a result, Pakistan's economy became critically dependent on foreign aid and investment. This has led to a transfer of resources from small scale to large scale industry and from rural to urban areas. Our economic polices have led us to a situation in which our individual in interests are in conflict with our national interest. That is why self sustained and self reliant growth can only be achieved in Pakistan through the development of human resources.

2. Several aspects of human resources have been analyzed. Present conditions of human resources, comparative quality and facilities for their development, functioning and need for improvement in the labour market, neglect of female resource development. mass unemployment; occupational, sectoral and educational level, macroeconomic imbalances of human resources, disequilibrium in the supply of demand of labour force and non correlation between educational planning, policies and market demand, under employment and waste of human resources, poverty and income distribution, problems, of migrants in income flows, problems of labour information and management system and problems of health, nutrition clean drinking water, food intake and hygienic conditions are the major aspects concerning human development which have been discussed and their situation also pointed out by using different techniques. The severity of these issues was hardly properly focused in existing literature.

3. The analysis pertaining to the development and conditions of human resources clearly showed that neither the conditions for their development were satisfactory, nor the efforts made by the public sectors were adequate. Education health and human resource development were neglected sectors. High population growth, existence of malnutrition, poor basic facilities, especially in the rural areas, lack of provision of even portable water, hardly any hospital in the rural areas and very low quality of female education and related facilities have led to an increase in gender differences in Pakistan. The above cited factors, no doubt, led to the categorization of Pakistan as 134th country in the world, in the provision of the quality of human related factors (Chaudhary & Hamid, 1999). The lack of above cited facilities have led to not only to waste of human resources but also to lag in efforts for development. The partial efforts made so far, in this regard hardly provided any answer to these issues. The situation calls for an integrated approach to simultaneously all basic facilities needed for human development. Without the provision of needed food (nutrition), portable water and healthy environment for growth, facilities like basic health units will not improve the conditions. Similarly primary education without skill development approach will not help much either to raise income or to reduce poverty and ultimately to improve human life. Therefore more efforts, public and social, are needed to find any answer to these problems.

4. Human resources play a pivotal role in the development of an economy. The rapid development of several countries can be attributed to the quality of their human capital which are properly groomed and efficiently utilized in these economics. However, unfortunately this factor has not performed its proper role in developing countries and also in Pakistan. In most of the under developing countries like Pakistan human (Chaudhary & Hamid, 1999) capital is wasted rather than being engine of growth.

5. In Pakistan, the most challenging issue today is the high growth rate of population and low quality of labour which is an obstacle rather than being a major source of development of the country.

6. The current problem of unemployment is becoming serious and is deeply rooted in the economic, social and political conditions of the economy. Majority of labour force is illiterate and those who are literate are having only formal education which is not very productive and also does not match with the requirements. A comprehensive analysis of the current conditions and future prospects of human resources under various possible scenarios was carried out. However, in this study an attempt has been made a simultaneous combination of low population growth rate and a high GDP growth rate seems to solve the problem of unemployment.

7. As technical change and efficiency are the factors crucial to growth, due attention should be given to technology, training and proper education of human resources. Technology should be developed according to the needs of the economy and since it saves labour, alternative steps should be taken to generate new opportunities for employment so that waste (in the form of unemployment) of precious human capital is averted.

8. The simple truth of the matter is that an economy whose population and labour force are growing at over 2.9% per annum, has literacy of less than 45% possesses an insignificant base for the production of high level scientific and middle level technical manpower, and whose quality of education has seriously deteriorated in recent years, can only be developed by effective manpower planning and

human capital formation.

9. Up to 1998 with a growth rate of the labour force of 2.9% per annum, the economy is facing with formidable task of creating 1.25 million jobs annually (Chaudhary & Hamid, 1999).

10. Open unemployment at about 6.1% of the labour force and over one million people are unemployed and if we include underemployed workers, the total number may be as high as 5 million.

11. The labour absorptive capacity of the economy has declined in recent years. If this trend continues we estimate that about 4,00,000 new entrants to the job market every year would face difficulty in finding productive employment with a growth rate of GDP of around 6% per-annum (Govt. of Pakistan 1988).

The problem of miss-match between supply and demand of educated peoples, majority of the population i.e., 55% (Govt. of Pakistan 1988) is illiterate, overseas migration will no longer provide a safety valve for the increasing pressures on the domestic employment situation, women are our most neglected human resource, the scientific manpower base in Pakistan is quite below, the existing machinery for Human Resource development (HRD) planning and implementation has failed to promote HRD issue in our national development planning. A well defined strategy is required.

12. Technological advancement cannot be attained by setting up a few high level institutes in isolation. It is essential to visualize, the need for vocational and Technical Training as not meeting market demand, but as responding to the need for a long term change in the technological level of the society. The private sector should take the lead in vocational and technical training with government playing to active support role in developing a coordinated national system of vocational training. Thrust of policies in vocational and technical training to break away from the low technical competence trap should be as follows.

The vocational institutes set up under the World Bank should be fully used.

The present system of apprenticeship training needs to be drastically revised. The system should combine on-the-job with class room training with initial target of 10,000 a year. The government should strongly encourage the private sector to organize intensive in plant training. A special fund should be placed at the disposal of the N.T.B. to provide matching grant for any vocational training institute setup by the chamber of commerce and industry or trade association like APTMA or other NGO.

The government would have to play an active part to produce skilled manpower for assimilation and spread of new modern technologies especially in the application of electronic, computer and modern productive system. The informal training system "Ustad-Shagird" has been the mainstay in meeting national requirements for skilled manpower. Innovative training programme to up grade skill levels of this extremely important segment of our work force need to be initiated. This could include mobile training units and Trade Tests (Through the National Training Board skills standard and certification system) for those who possess the necessary skills. Last but not least there is need to shift focus of vocational training in to rural areas, mobile training units (used successfully by the Pak-Holland in NWFP and the UNCHER/ILO in Baluchistan) are recommended as a means of imparting skills to rural areas in a cost-effective manner.

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(Received 10 January 2005; Accepted 25 March 2005)