

Population Profile, Human Capital Formation and Economic Development of Madhya Pradesh (1951-2011)

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Abstract-This paper reviews the relation of population, human capital formation and economic development of Madhya Pradesh from 1951 to 2011. It also examines that how developing countries like India 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 state. further policy guideline is provided for sustainable economic development The impossible trinity of cost, quality and scale in employability arises from a market failure in skills; employers are willing to pay for trained candidates and students are not willing to pay for trained candidates training but for jobs. Innovation lies at the intersection of jobs and training. A bigger problem is figuring out how to use government money for private and public delivery honestly, sustainable and at scale. Fixing skills also means fixing school education because employers know that you cannot teach somebody in six months what they should have learnt in 12 years. Making NREG an apprenticeship programme and converting employment exchanges to career centre's would help in making people employable before they migrate because in the short run we cannot take jobs to people but need to take people to jobs.

School and higher education need a massive dose of deregulation, competition and innovation. This need acknowledging that (a) quantity leads to quality, (b) the most expensive school is no school (c) a bad school is better than no school and, (d) what matters is whether a school is private or government but good or bad. The current license raj in education creates an adverse selection amongst education entrepreneurs. Harnessing India's demographic advantage does not lie in poetry but in plumbing. Not in strategy but in execution. Not in legislating rights but in creating opportunity. Our demographic dividend depends on a radical overhaul of our education, employability and employment ecosystem. 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 India.

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

I. INTRODUCTION

India 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 India nearly 70% 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 India was laid on the existing fragile of economic structure with the establishment of the Planning Commission. Presently it reversed and contribution of agriculture in GDP reduced and became 14%, service sector dominated in GDP growth with 55% contribution. The contribution industries became 24% in GDP growth.

In spite 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. 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 India. 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 India. A quantitative and qualitative

evaluation of the present human resources of India 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 India provided that labour force is trained in accordance with the socio-economic requirements.

A demographic advantage does not mean more people; it means more prosperous and productive people. What is happening in India demographically is not once a decade or ones in millennium but once in lifetime of a country; 25% of the worlds new workers in the next decade will be Indian because 10 lakh new Indians will join the labour force every month. But an unemployed, uneducated or unskilled Indian is not a free Indian-and usually a poor I Indian. Sources of poverty are complex but three labour market mismatches do not help; geographic (jobs are in different areas from different people), sector (workers are low productivity areas of the economy) and skills (job seekers do not have what employers want).Raising productivity-leveraging our demographic dividend-depends on executing our unfinished reform agenda in our 3Es (education, employability and employment).

Fixing our employment ecosystem needs changing three labour market indicators that are where they were in 1991; the share of workers in organized sector (8%), manufacturing (12%) and agriculture (56%). India's missing middle – the lack of organized manufacturing- has a rare opportunity to make up lost time in the next decade as china runs out of cheap rural labour. All 31chinese provinces are raising minimum wages this year despite a 40% salary increases last year. Our labour laws not only sabotage manufacturing but have insured that 100% of net job creation since 1991 has happened in the unorganized sector. We need to end this minority rule of trade unions because job preservation is not a form of job creation. All labour markets are local and making labour a state subject would allow chief ministers to craft fertile habitats for job creation.

II. 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. Reports of Sample survey of India. Different .India Vision 2020, the Report of Planning Commission, Government of India.UNDP Human Development Report 2009/2010. Planning Commission (2007), Eleventh Five Year Plan (2007-12), Volume I, II and III has been taken as sources of information. Analysis is made on descriptive manner.

III. SIZE AND GROWTH RATE OF POPULATION

Population is a dynamic phenomenon. The numbers, distribution and composition of the population are constantly changing. This is the influence of the interaction of the three processes, namely-births, deaths and migrations. Growth of population refers to the change in the number of inhabitants of a country/territory during a specific period of time, say during the last ten years. Such a change can be expressed in two ways: in terms of absolute numbers and in terms of percentage change per year. The absolute numbers added each year or decade is the magnitude of increase.It is obtained by simply subtracting the earlier population (e.g. that of 1991) from the later population (e.g. that of 2001). It is referred to as the absolute increase. The rate or the pace of population increase is the other important aspect. It is studied in per cent per annum, e.g. a rate of increase of 2 per cent per annum means that in a given year, there was an increase of two persons for every 100 persons in the base population. This is referred to as the annual growth rate. India's population has been steadily increasing from 361 million in 1951 to 1028 million in 2001.According to census2011 Indian population became 1210 millions in 2011.

Table 1.1 shows the Indian population from 1951 to 2011. The annual rate of population growth was steadily increasing; which explains the rapid increase in population from 361 million in 1951 to 683 million in1981.Since 1981, however, the rate of growth started declining gradually. During this period, birth rates declined rapidly. Still 182 million people were added to the total population in the 1990s alone (an annual addition larger than ever before). It is essential to realize that India has a very large population. When a low annual rate is applied to a very large population, it yields a large absolute increase. When more than a billion people increase even at a lower rate, the total numbers being added becomes very large. India's current annual increase in population of 15.5 million is large enough to neutralize efforts to conserve the resource endowment and environment. The declining trend of the

growth rate is indeed a positive indicator of the efforts of birth control. Despite that, the total additions to the population base continue to grow, and India may overtake China in 2045 to become the most populous country in the world. In the same manner Madhya Pradesh population is increasing rapidly. The annual growth rate of population in MP is always higher than the national growth of population the absolute increase in 1990s were 11.75 million. The percentage increase in population is 2.42%. The pace at which the population has been growing can be gauged by the fact that the state's population doubled during the period of 30 years, between 1951 and 1981 from 26 to 52 million. In Census 2011 Population of Madhya Pradesh is 7,25,97,565 comprising 3,76,12,920 males and 3,49,84,645 females, contributing 6 percent to India's total population. In terms of population size, the state has moved up to 6th rank in this census from its 7th position in Census 2001. Chart 4.1 shows the magnitude and rate of India's and M.P.'s population growth.

The Magnitude and Rate of India's & M.P.'s Population Growth

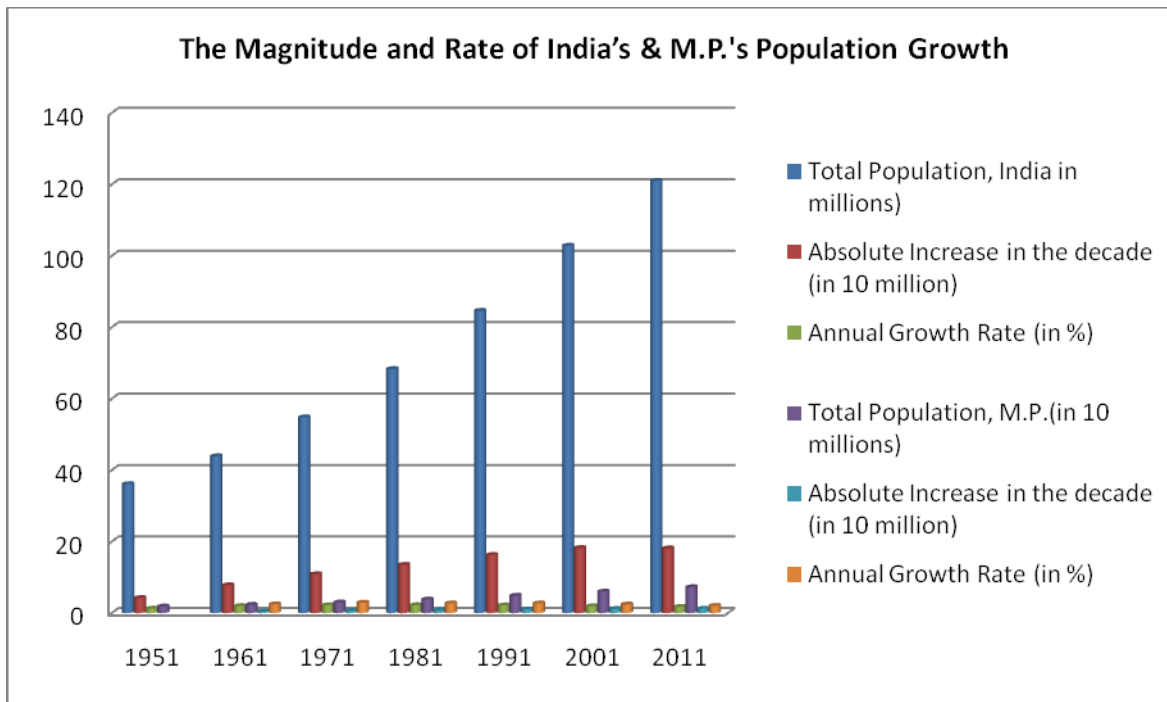
Table 1.1

Year	Total Population, India (in millions)	Absolute Increase in the decade (in millions)	Annual Growth Rate (in %)	Total Population, M.P.(in millions)	Absolute Increase in the decade (in Millions)	Annual Growth Rate (In %)
1951	361.0	42.43	1.25	18.62	-	-
1961	439.2	78.15	1.96	23.22	4.60	2.47
1971	548.2	108.92	2.20	30.02	6.80	2.92
1981	683.3	135.17	2.22	38.17	8.15	2.71
1991	846.4	163.09	2.14	48.60	10.43	2.72
2001	1028.7	182.32	1.93	60.35	11.75	2.42
2011	1210	181.31	1.76	72.59	12.24	2.03

Source: Census of India 1951 -2011.

In Census 2011, India's population has increased by 408 percent since 1901 and in case of Madhya Pradesh this increase is 473 percent, slightly higher in percentage points as compared to the all India figure. India is the second most populated country in the world next only to China. Population of the third most populated country USA is almost one-fourth that of India. While comparing the population figures of the state of Madhya Pradesh with other countries, it is observed that the state's population is more than that of many countries in the world like Thailand, France, United Kingdom, Italy, Myanmar and South Africa. Whereas, its population is slightly lower than that of countries like Iran, Turkey and Germany. Only seventeen countries in the world have population more than that of Madhya Pradesh. Madhya Pradesh is surrounded by five states namely Uttar Pradesh, Maharashtra, Rajasthan, Gujarat and Chhattisgarh. Uttar Pradesh and Maharashtra have higher population while Rajasthan, Gujarat and Chhattisgarh have lower population than Madhya Pradesh. state population has increased in absolute number by 1,22,49,542 during the decade 2001-11 compared to 1,17,81,781 in decade 1991- 01. In Census 2011, India has registered a decadal growth of 17.6 percent and Madhya Pradesh that of 20.3 percent, over the Census 2011 figures. Thus, the growth rate in the state is higher by 2.7 percentage points compared to national average. While comparing population of the state since 1901, we find that there has been comparatively lesser growth of population during the first half of the last century 1901 to 1951.

Chart 1.1



Thereafter, there was steady growth of population during 1951 to 1971. The decadal growth rate in 1951-61 was 24.7 percent and in 1961-71 was 29.3 percent. The declining trend in population started from Census 1971, a decline from 29.3 percent in 1961-71 to 27.2 percent in 1971-81 and 1981-91, 24.3 percent in 1991-01 and 20.3 percent in 2001-11. Bihar has registered highest growth rate of 25.1 percent whereas Orissa has registered the lowest growth rate of 14.0 percent among EAG states. Madhya Pradesh (20.3%) is placed at fifth number among 8 EAG states while national growth rate is 17.6 percent in 2001-11. Density of population is expressed in terms of total number of persons per sq. Km. China with largest population of the world has density of 141 persons per sq. k.m. U.S.A which is the third most populated country of the world has density of 33 persons per sq. k.m. In case of India, the density is 382 while neighboring countries, namely, Pakistan, Bangladesh, Nepal and Sri Lanka have density of 232, 1142, 203 and 311 persons per square kilometer respectively. Comparing the density of Madhya Pradesh with other countries of the world with similar population size, we find that except United Kingdom, other countries have lower density of population than Madhya Pradesh. Among EAG states, Bihar is the most densely populated state whereas; Uttarakhand and Chhattisgarh with density of 189 each are the least densely populated states. Madhya Pradesh is fifth among 8 EAG states with moderate density.

Gender Composition of Population

Sex ratio of total population and child population in the age group 0-6 and 7+

Table 1.2

Source: Census of India 1991, 2001 and 2011.

Population enumeration by gender composition is one of the basic demographic characteristics and provides meaningful demographic analysis. Indian census has the tradition of bringing out information by gender composition on various aspects of the population. Changes in gender composition largely reflect the underlying social, economic and cultural patterns of the society in different ways. Sex ratio is defined as the number of females per 1000 males in

	Sex ratio (females per 1,000 males)								
	Total population			Child population in the age group 0 -6			Population aged 7 and Above		
Year	1991	2001	2011	1991	2001	2011	1991	2001	2011
India	927	933	940	945	927	914	923	935	944
Madhya Pradesh	912	920	930	941	932	912	905	916	933

the population and is an important social indicator to measure the extent of prevailing equity between males and females in a society at a given point of time. It may be noted that the sex ratio is expected to be almost at parity in nature. According to experts sex differential in mortality, sex selective outmigration, skewed sex ratio at birth are the major contributory factors that influence changes in sex ratio. In India, sex ratio is skewed in favour of males and has continued to rise and expand in various forms. This has drawn wide attention of policy makers and planners to reverse the trend to bring it back to parity.

Chart 1.2

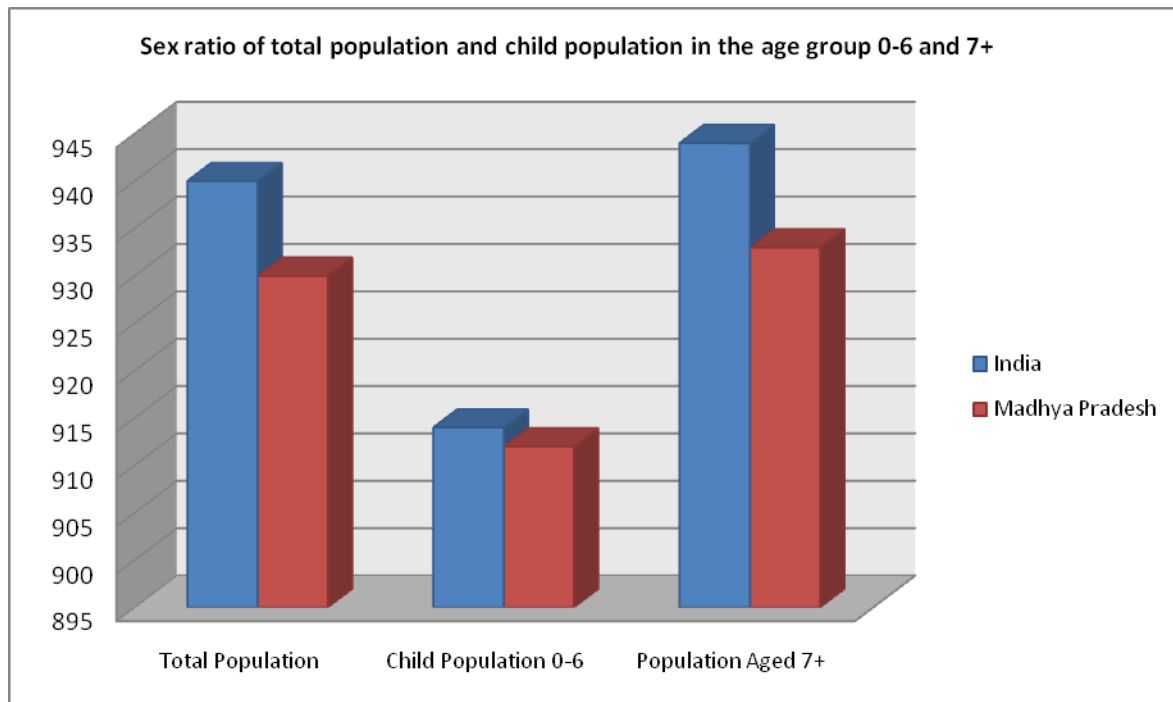


Table 1.2 and chart 1.2 shows the sex ratio of the total population of India & M.P. in the age group 0-6 and sex ratio of population aged 7 and above for 1991, 2001 and 2011. The gender ratio of the MP has improved in 2001 (920) since the last decade (912), for the second time since 1901. The gender ratio of new Madhya Pradesh is well below the national average of 933. Although there has been an improvement in the overall gender ratio in 2001. As per the provisional results of Census 2011, total population of India is 1,21,01,93,422 which comprises 62,37,24,248 males

and 58, 64, 69,174 females with the sex ratio of 940 females per 1000 males. Madhya Pradesh has a total population of 7, 25, 97,565 with 3, 76, 12,920 males and 3, 49, 84,645 females with sex ratio of 930. Child sex ratio in the country as well as in Madhya Pradesh has shown a declining trend since Census 1991. Child sex ratio (0-6 years) at country level was 945 in 1991, 927 in 2001 and has now declined to 914 in Census 2011. In case of Madhya Pradesh, it was 941 in 1991, 932 in 2001 and now stands at 912 in 2011. Child sex ratio (0-6 years) at country level has declined by 13 points and in the state by 20 points during the period 2001-2011. It is seen that sex ratio of India and Madhya Pradesh exceeded during the decade 2001-2011. Sex ratio of the total population in M.P was 912 in 1991, 920 in 2001 and is now recorded as 930 in 2011. Similarly, sex ratio of 7+ populations also shows an increasing trend. Sex ratio of 7+ populations was 905 in 1991 and 916 in 2001 which has now increased to 933 in 2011.

Vital rates among males and females indicates that the Infant Mortality Rate (IMR) among female child is 68 which is higher compared to 66 in male child and the death rate among the male population is 8.5, higher compared to 8.4 in female population, which indicates that survival rate among the female population in higher age groups is slightly better compared to male population in the same age group. These variations in rates may have an impact on sex ratio both for total population as well as child population in the age (0-6 years).¹

Sex ratio of India and Madhya Pradesh is slightly better compared to China, the most populated country. However, the sex ratio in the European, African and American countries are comparatively better than India (940) and Madhya Pradesh (930).

Age Composition of Population

The age composition of a population refers to the number of people in different age groups in a country. It is one of the most basic characteristics of a population. To an important degree, a person's age influences what he need, buys, does and his capacity to perform. Consequently, the number and percentage of a population found within the children, working age and aged groups are notable determinants of the population's social and economic structure. The population of a nation is generally grouped into three broad categories:

Children (generally below 15 years)

They are economically unproductive and need to be provided with food, clothing, education and medical care.

Working Age (15-59 years)

They are economically productive biologically reproductive. They comprise the working population. The most significant feature of the Indian population is the size of its adolescent population. It constitutes one-fifth of the total population of India. Adolescents are generally grouped in the age-group of 10 to 19 years. They are the most important resource for the future. India is a nation of young people. Out of a population of above 1.21 billion, 700 million people are in the age group 15 to 59 years, which is usually treated as the 'working age population'. It is predicted that India will see a sharp decline in the dependency ratio over the next 30 years, which will constitute a major 'demographic dividend' for India. But this advantage can only be realized if it is supplemented with skill enhancement of the young through the medium of education. In the year 2011, 12 per cent of the population of the country is in age group 18-24 years. This young population should be considered as a valuable asset which, if well equipped with education and skills, can contribute effectively to the development of the national as well as global economy.

Aged (Above 59 years)

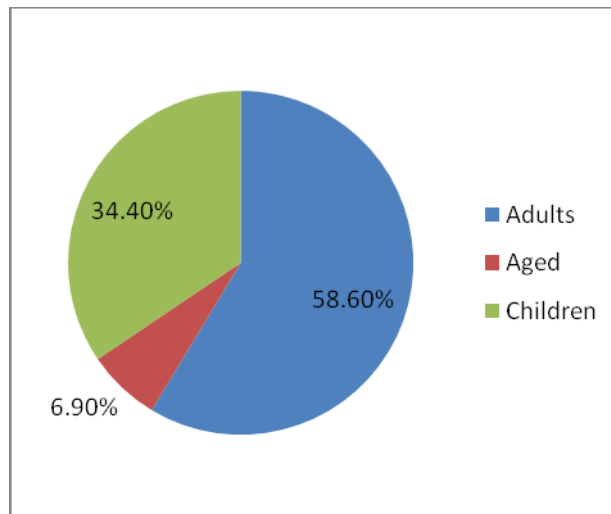
¹ Reference Sample Registration System, RGI bulletin volume 45, No.1, January 2011

They can be economically productive though they may have retired. They may be working voluntarily but they are not available for employment through recruitment. The percentage of children and the aged affect the dependency ratio because these groups are not producers.

The proportion of the three groups in India's population is already presented in figure.

Age Composition of the population

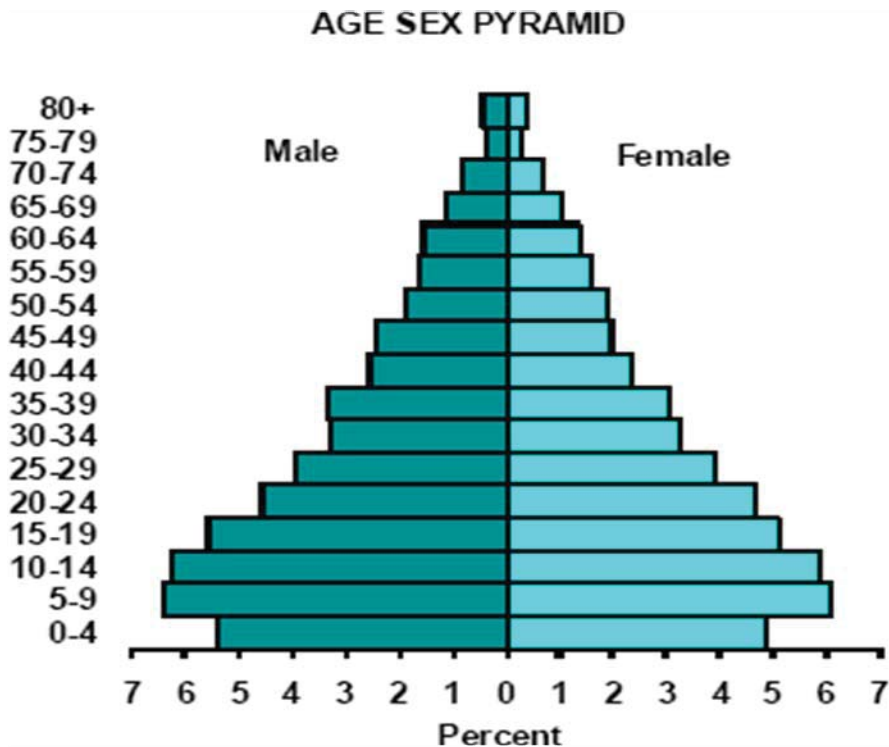
Chart 1.3



Age- sex structure is one of the most important characteristics of population composition. Almost all population characteristics vary significantly with age. Age statistics form an important component of population analysis, as most of the analysis is based on age-sex structure of the population. Apart from purely demographic concerns, the age- sex data structure is required for age specific analysis of data for planning, scientific, technical and commercial purposes. The dependency ratio, which is the ratio of economically active to economically inactive persons, is dependent on age composition.

India has one of the largest proportions of population in the younger age groups in the world. 35.2% of the population of the country has been in the age group 0-14 years at the Census 2011. 40% of the population account for less than 18 years of age. The median age of the population is 25 years. Which show that India has youngest population in the world?

Chart 1.4



Census 2001 data on marital status of persons show that out of over a billion population of the country, 513 million (49.8%) have reported as 'Not married', mainly due to high proportion of young people. The 'Married' constitute about 45.6% of the total population.

IV. QUALITY/STOCK OF POPULATION

The quality of population depends upon the literacy rate, health of a person indicated by life expectancy and skill formation acquired by the people of the country. The quality of the population ultimately decides the growth rate of the country. Illiterate and unhealthy populations are a liability for the economy. Literate and healthy populations are an asset. Since economic reforms were initiated in 1991, India's economic growth rate has averaged at 6 per cent, accelerated to over 8 per cent since 2010. There is optimism among most economists and organizations that India will do better in the coming decades. One of the reasons for this is the 'demographic dividend'. The labor force in the next few decades is expected to grow at a faster rate than its competitors and is expected to generate surplus resources for the purpose of investment. This argument of course, assumes that labor is employable. It is therefore of interest to know what is the quality of workforce in India.

V. DEMOGRAPHIC DIVIDEND

Traditionally, the population of the country has been considered as a liability on the natural resources, but if we look it from different perspective, population becomes as an asset. For this purpose, it would be desirable to consider the changes in the structure of population.

While studying the population, it is customary to classify the population into three groups. Population in the age group below 15 years is considered as child population. The working age pertains to 15-64 years – productive age group. 65 & above comprises of old persons. Both the child population and old population are dependent on the productive age group for their maintenance and sustenance.

When birth rates are high, the share of children in total population is also quite high. As a result of family welfare measures, the educational levels of the society and control of infant mortality, birth rates begin to fall. In the early stage of demographic transition, death rates fall at a faster rate than birth rates. But since death rates cannot fall beyond the level of 6-7 per thousand, fall in birth rate have a decisive influence on the structure of population begins to decline. But as a consequence of development, extension of medical facilities, control of epidemics and better nourishment, the share of old population (65 and above age group) starts increasing. Consequently, there is a decline in the dependency load of the population and increase in the share of the productive age group. According to the technical group on population projections constituted by the national population commission, annual growth rate of population is expected to gradually decline from 1.6 percent in 2001 to 0.9 percent in 2026. Consequently, India's population which was 1,029 million in 2001 as per unit the 2001 census is expected to increase to 1,400 million by 2026.

But there is a structural change expected in the population. About 60 percent of the population was in the working age group in 2001; this is expected to increase gradually and will be 68.4 percent in 2026. Demographic dividend is likely to manifest in the gradual increase in the working age group of 15-64 years. Consequently, the capacity of the economy to harness the growing working age population in productive activities will determine the actual realization of the demographic dividend. Since the production structure of the Indian economy is also undergoing, there would be a strong need to develop new skills so that the economy can absorb the growing working age group population in newly emerging areas of development.

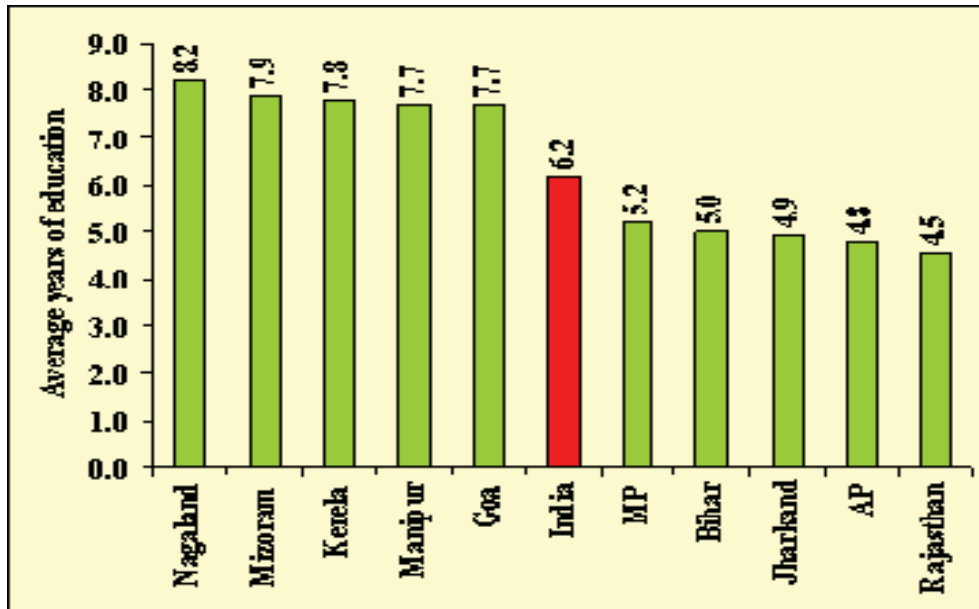
The actual size of the working population, however, may be different from the projected population. This may be affected by child labor below 15 years of age who are engaged in some economic activity. Similarly, quite a good number of students in the age group 15- 24 may be studying in schools, colleges, universities, management training, ITI s. the extent of population in the age group 15-24 group engaged in educational and training will have to be deducted from the total youth population in 15-24 age. With the gradual reduction of child labor, the actual number of dependents among children will increase. Taking account of these factors, it can be stated that the working age group population broadly indicates the number of persons who need to be employed in productive economic activities.

VI. AVERAGE YEAR OF EDUCATION:

Average years of schooling have commonly been used as a proxy for educational attainment. While this may not exactly reflect the quality of human capital, it is a better measure than the enrollment ratio which measures growth in the stock of human capital. The average years of education have been estimated for the economically active population (those in the age group 15-64 years), using the data from the 62nd Round of all India household survey conducted by NSSO. The survey, which covers over one lakh households from 28 states and 7 Union Territories, provides information mainly on the consumption patterns however it also includes demographic and socio-economic characteristics like age and education level. The average year of schooling for India as a whole is 6.2 years. Sixteen of the twenty seven states have an average that is lower than the national average. As is expected, poorer states have a population with low educational attainment. Madhya Pradesh average year of schooling is lower than the National average. Among the southern states Andhra Pradesh is doing very poorly. The states in the North Eastern region are the relatively better performers. The graph shows five of the best and worst performers.

Average year of education

Chart 1.5



The estimates presented above tell us that we have been moderately successful in providing only the basic education. However a number of studies have consistently demonstrated that returns on secondary education are much higher than on primary education. Therefore the surplus required for investment purposes may be difficult to generate. It also seems that India has decided to take a path where its economic growth will be dependent upon the services sector, technology and skill levels. Given the quality of existing human capital stock, unless drastic measures are taken to enhance the education levels, economic growth will not be sustained as skill shortage will become a severe constraint. And the demographic dividend we are so happily talking about may become a liability. According to NSSO report the average years of education in India is 6.2 years which is very low in comparison of world average age of education. Madhya Pradesh is one of the worst performer states in the country. Its average age of education is 5.2 years which is less than the national average. South-West Madhya Pradesh is the mainly area in which SCs and STs constituting more than 35% of the population, account for the majority of the poor. This region has less than the average age of education in comparison with national and state average.

VII. LITERACY IN INDIA AND MADHYA PRADESH

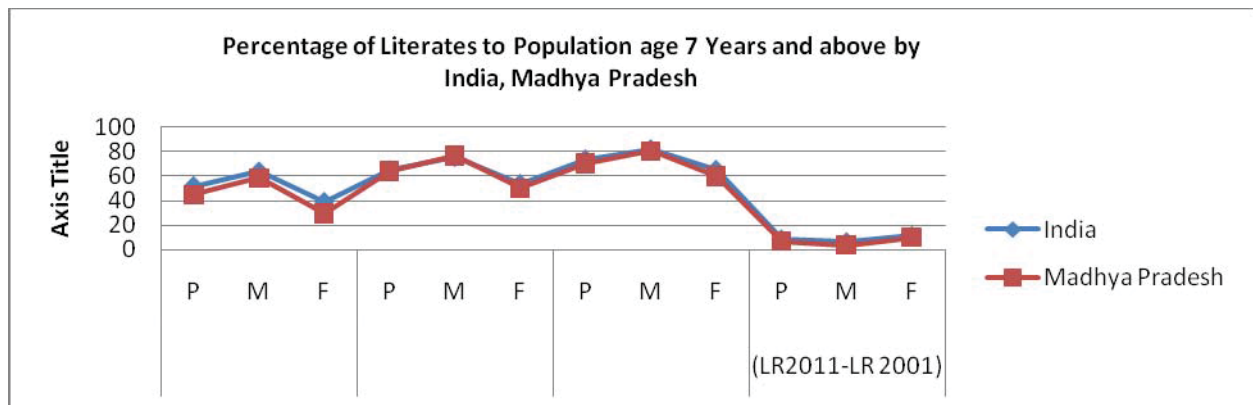
Percentage of Literates to Population age 7 Years and above by India, Madhya Pradesh

Table 1.3

	1991			2001			2011			Gains in literacy rates (LR2011-LR 2001)		
	P	M	F	P	M	F	P	M	F	P	M	F
India	52.2	64.1	39.3	65.2	75.6	54.0	74.04	82.14	65.46	8.84	6.54	11.46
Madhya Pradesh	44.7	58.5	29.4	64.1	76.8	50.3	70.6	80.5	60.0	6.5	3.7	9.7

Source: (1) RGCCI 2001 (2001a: 123-27), (2) Census 2011

Chart 1.6



The progress in literacy has been very satisfactory in Madhya Pradesh before last decades. From 1991 to 2001, as per the census 2001, Madhya Pradesh total literacy rate has gone up from 44.7% (1991) to 64.11% (2001) which was close to the national level (65.35 %). This means that there had been remarkable growth of 19.44% over the decade. Similarly, the male literacy has gone up from 58.5% to 76.8% and the female literacy has gone up from 29% to 50.31%. This means that there had been a growth of 18.3% in male literacy and 20.9% in female Literacy over the decade. Census 2011 has also indicated improvement in literacy; there is increase of 6.5% in total literacy of M.P. it has gone 64.1% to 70.6%.The improvement in male literacy is 3.7% which is slower than the female literacy growth 9.7%. In spite of this growth, one-third of the female Population is illiterate. The female literacy would be specially stressed. The target proposed for total literacy is 84% during 11th plan period in the state with the gender gap in literacy to be reduced to 14% during 11th five year plan. Presently this gap is 20.5%. The general enrolment numbers show that at the primary level, almost all children are now enrolled across the state, and this is as truer for girls as boys. There has also been a reduction in the male- female gap in literacy, improvement in the Gross Enrolment Ratio (GER), and other education parameters. The increase in literacy between 1991 and 2001 has been much faster than the previous decades as well as 2011. While these achievements would set the state up for a leap in education, there are still many gaps and challenges before the state. It is depicted in table 5.3 and chart 5.3.

VIII. STATUS OF HEALTH IN INDIA AND MADHYA PRADESH

Achievement during the year 1951-2010

Table 1.4

Indicator	1951	1981	2000	2010
Life expectancy	36.7	54	64.6 (RGI)	69.89(CIA)
Crude birth rate	40.8	33.9(SRS)	26.1(99SRS)	21.76(CIA)
Crude death rate	25	12.5(SRS)	8.7 (99SRS)	6.23(CIA)
IMR	146	110	70 (99SRS)	30.15(CIA)

Source: (a) National Health policy, 2002. (b) Ministry of Health & family Welfare. (c)Sample Registration Survey.

(d) Abridged Life Table 2002-06. (e) RGI India. (f) CIA World fact book 2010.

Chart 1.7

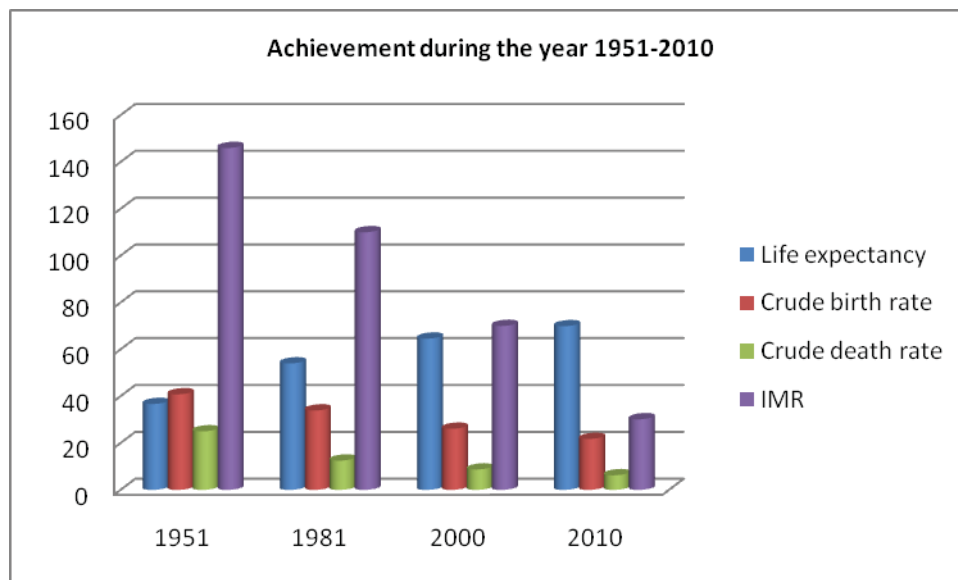


Table 1.4 and chart 1.7 indicates that there is improvement in health indicators in the country. It shows that in 1951 life expectancy was 36.7 years which improved and presently it is 69.89 years according to CIA World fact book. Similarly there is improvement in crude birth rate which come down 40.8 births per thousand in 1951 to 21.76 in 2010. Crude death has reduced from 25 per thousand in 1951 to 6.23 in 2010. According to CIA World fact book infant mortality rate in the country also declined from 146 to 30.15 per thousand.

IX. 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 Madhya Pradesh. Most economic policy making in India was borrowed from the west without adapting it to local conditions. This has led to a transfer of resources from small scale to large scale industry and from rural to urban areas. Our economic policies have led us to a situation in which our individual in

interests is in conflict with our national interest. That is why self sustained and self reliant growth can only be achieved in India 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, Poor hospital facilities in the rural areas and low quality of female education and related facilities have led to an increase in gender differences in India. The above cited factors, no doubt, led to the categorization of India as 117th country in the world, in the provision of the quality of human related factors (UNDP report 2010). 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 India. In most of the under developing countries like India human capital is wasted rather than being engine of growth.

5. In Madhya Pradesh, 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 1.7% per annum, has low literacy 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. The labour absorptive capacity of the economy has declined in recent years. If this trend continues we estimate that about 20, 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.

10. The problem of miss-match between supply and demand of educated peoples, women are our neglected human resource, the scientific manpower base in India is improving slowly, the existing machinery for Human Resource development (HRD) planning and implementation has got low success to promote HRD issue in our national development planning. A well defined strategy is required.

11. 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.

12. 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, 00 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.

13. 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 has been the mainstay in meeting national requirements for skilled manpower. Innovative training programme to upgrade 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, imparting skills to rural areas in a cost-effective manner.

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