Demographic environment essay sample

The phrase demographic environment is composed of two words, demographic which in turn comes from demography and environment. Demography is the study of the human population living in an area, their age, jobs, income, spending habits, ethnicity, and gender and so on. In terms of marketing and business, this study of human population actually leads to an identification of the potential customers.

Businesses employ quite a few methods to identify potential customers for their products and services. Demographic segmentation is one such way. Based on age, gender, ethnicity, income group and several other parameters, businesses segment the market and identify the target group that are most likely to become their customers. These parameters taken together is known as the demographic environment.

A study of the demographic environment is one of the most used methods to identify and reach out to potential customers. A marketer is, however, required to keep in mind the dynamic attributes of such an environment and keep updating the data that is collected on a continuous basis.

Let's say, an enterprise engaged in the business of teaching English language is trying to find potential customers. Who do you think from among the following three demographic segments are likely to avail of their services? –

a) 40-60, male, unemployed and native English speaking

b) 20-40 both male and female, employed, native English speaking

c) 20-30 both male and female, employed as well as looking for jobs, immigrants from non-English speaking countries

It is a no-brainer that segment C is the most suitable demographic for the business to reach out to. This is but a few of the hundreds and thousands of potential demographic parameters that can be used by a business to identify their customers from a demographic environment.

Advantages of Demographic Environment Analysis
It analyses the different parameters that control the demographic environment and modifies marketing approach to cater to the ones that are promising. Age, e. g., is an important consideration for marketers. Age allows marketers to target products that are relevant to a specific age to the desired demographic. Data is "collected from a variety of points and the analysed. In the long run marketers are able to design their marketing campaigns according to the target age.

Disadvantages of Demographic Environment Analysis
A large chunk of a marketers efforts are based on assumption, which, in turn is dependent on the analysed data that is collected from various source points in the market. Resultantly, even though the data part is correct, the assumption part can sometimes be wrong. This is because human desire and the resultant trend is not always linear. When assumptions and reality don't match up marketers find it difficult to adapt to the changes in the market environment. Demographic Cycle

A nation's population passes through 5 phases during it's development. They are:

1. High stationary

📽 Birth rate and death rates are high and cancel each other 📽 Population

size remains stationary

📽 India was in this phase till 1920

2. Early expanding

📽 The death rate starts declining

📽 Birth rate remains high

📽 Birth rates may even increase due to improved health conditions and

decreased period of breast feeding

📽 Many countries in South Asia and Africa are in this stage 3. Late

expanding

📽 Death rate continues to fall

📽 Birth rate also starts falling

📽 India is currently in this stage

4. Low stationary

Both birth rate and death rate are low and almost equal

Population size remains constant

Austria recorded a zero population growth in 1980-85

Most industrialized nations are in this phase

5. Declining

📽 The birth rate falls below death rate

📽 The population size starts falling

📽 Some of east European countries like Germany and Hungary are in this

phase

Size of Population

Population size and growth continue to be the paramount issues regarding sustainable development in India, notwithstanding the fact that the Indian economy has grown by a little over 5 percent during the last two decades compared to the population growth of about 2 per cent during the same period. The reason is that the Malthusian concern has been the core of Indian policy planning thinking. This has while perpetuated the belief that population growth is the immediate culprit of high poverty and environmental degradation, demographic issues such as distribution of Population, age composition, migration and urbanization are being neglected in the planning for sustainable development.

During the last one decade, it has been increasingly realized that relationship between population, environment and development is a complex issue. Any attempt in Neo-Malthusian framework of simply dividing the volume of resources by the number of people on the globe will into suffice (Srivastava 1992). But the Malthusian thinking has been very pervasive. In the context of India the Malthusian ideology has a deep root, closely linked with history of Great Britain where from ideology of Malthus grew and spread elsewhere (Caldwell 1998). We here attempt to assess the nature of evolution of population policy and its content historically, and highlight that the issue of population revolves around size. The other important aspects of population such as distribution and composition of population, and urbanisation closely associated with sustainable development are most neglected aspect in population related policies in India. Other areas, which did not receive adequate attention in the policy circle, are the migration and

concern for aging. There is a lack of integration of comprehensive demographic knowledge with sustainable development planning in India.

The 1991 final census count gave India a total population of 846, 302, 688. However, estimates of India's population vary widely. According to the Population Division of the United Nations Department of International Economic and Social Affairs, the population had already reached 866 million in "1991. The Population Division of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) projected 896. 5 million by mid-1993 with a 1. 9 percent annual growth rate. The United States Bureau of the Census, assuming an annual population growth rate of 1. 8 percent, put India's population in July 1995 at 936, 545, 814.

These higher projections merit attention in light of the fact that the Planning Commission had estimated a figure of 844 million for 1991 while preparing the Eighth Five-Year Plan (FY 1992-96). India accounts for some 2. 4 percent of the world's landmass but is home to about 16 percent of the global population. The magnitude of the annual increase in population can be seen in the fact that India adds almost the total population of Australia or Sri Lanka every year. A 1992 study of India's population notes that India has more people than all of Africa and also more than North America and South America together. Between 1947 and 1991, India's population more than doubled.

Throughout the twentieth century, India has been in the midst of a demographic transition. At the beginning of the century, endemic disease, periodic epidemics, and famines kept the death rate high enough to balance

out the high birth rate. Between 1911 and 1920, the birth and death rates were virtually equal–about forty-eight births and forty-eight deaths per 1, 000 population. The increasing impact of curative and preventive medicine (especially mass inoculations) brought a steady decline in the death rate. By the mid-1990s, the estimated birth rate had fallen to twenty-eight per 1, 000, and the estimated death rate had fallen to ten per 1, 000. Clearly, the future configuration of India's population (indeed the future of India itself) depends on what happens to the birth rate. Even the most optimistic projections do not suggest that the birth rate could drop below twenty per 1, 000 before the year 2000. India's population is likely to exceed the 1 billion mark before the 2001 census.

The upward population spiral began in the 1920s and is reflected in inter censual growth increments. South Asia's population increased roughly 5 percent between 1901 and 1911 and actually declined slightly in the next decade. Population increased some 10 percent in the period from 1921 to 1931 and 13 to 14 percent in the 1930s and 1940s. Between 1951 and 1961, the population rose 21. 5 percent. Between 1961 and 1971, the country's population increased by 24. 8 percent. Thereafter a slight slowing of the increase was experienced: from 1971 to 1981, the population increased by 24. 7 percent, and from 1981 to 1991, by 23. 9 percent.

Population density has risen concomitantly with the massive increases in population. In 1901 India counted some seventy-seven persons per square "kilometre; in 1981 there were 216 persons per square kilometre; by 1991 there were 267 persons per square kilometre–up almost 25 percent from the 1981 population density (see table 4, Appendix). India's average

population density is higher than that of any other nation of comparable size. The highest densities are not only in heavily urbanized regions but also in areas that are mostly agricultural.

Population growth in the years between 1950 and 1970 centred on areas of new irrigation projects, areas subject to refugee resettlement, and regions of urban expansion. Areas where population did not increase at a rate approaching the national average were those facing the most severe economic hardships, overpopulated rural areas, and regions with low levels of urbanization. The 1991 census, which was carried out under the direction of the Registrar General and Census Commissioner of India (part of the Ministry of Home Affairs), in keeping with the previous two censuses, used the term urban agglomerations. An urban agglomeration forms a continuous urban spread and consists of a city or town and its urban outgrowth outside the statutory limits.

Or, an urban agglomerate may be two or more adjoining cities or towns and their outgrowths. A university campus or military base located on the outskirts of a city or town, which often increases the actual urban area of that city or town, is an example of an urban agglomeration. In India urban agglomerations with a population of 1 million or more–there were twenty-four in 1991–are referred to as metropolitan areas. Places with a population of 100, 000 or more are termed " cities" as compared with " towns," which have a population of less than 100, 000. Including the metropolitan areas, there were 299 urban agglomerations with more than 100, 000 population in 1991. These large urban agglomerations are designated as Class I urban units. There were five other classes of urban agglomerations, towns, and

villages based on the size of their populations: Class II (50, 000 to 99, 999), Class III (20, 000 to 49, 999), Class IV (10, 000 to 19, 999), Class V (5, 000 to 9, 999), and Class VI (villages of less than 5, 000).

The results of the 1991 census revealed that around 221 million, or 26. 1 percent, of Indian's population lived in urban areas. Of this total, about 138 million people, or 16 percent, lived in the 299 urban agglomerations. In 1991 the twenty-four metropolitan cities accounted for 51 percent of India's total population living in Class I urban centres, with Bombay and Calcutta the largest at 12. 6 million and 10. 9 million, respectively.

In the early 1990s, growth was the most dramatic in the cities of central and southern India. About twenty cities in those two regions experienced a growth "rate of more than 100 percent between 1981 and 1991. Areas subject to an influx of refugees also experienced noticeable demographic changes. Refugees from Bangladesh, Burma, and Sri Lanka contributed substantially to population growth in the regions in which they settled. Less dramatic population increases occurred in areas where Tibetan refugee settlements were founded after the Chinese annexation of Tibet in the 1950s.

The majority of districts had urban populations ranging on average from 15 to 40 percent in 1991. According to the 1991 census, urban clusters predominated in the upper part of the Indo-Gangetic Plain; in the Punjab and Haryana plains, and in part of western Uttar Pradesh. The lower part of the Indo-Gangetic Plain in south-eastern Bihar, southern West Bengal, and northern Orissa also experienced increased urbanization. Similar increases

occurred in the western coastal state of Gujarat and the union territory of Daman and Diu. In the Central Highlands in Madhya Pradesh and Maharashtra, urbanization was most noticeable in the river basins and adjacent plateau regions of the Mahanadi, Narmada, and Tapti rivers. The coastal plains and river deltas of the east and west coasts also showed increased levels of urbanization.

The hilly, inaccessible regions of the Peninsular Plateau, the northeast, and the Himalayas remain sparsely settled. As a general rule, the lower the population density and the more remote the region, the more likely it is to count a substantial portion of tribal people among its population. Urbanization in some sparsely settled regions is more developed than would seem warranted at first glance at their limited natural resources. Areas of western India that were formerly princely states (in Gujarat and the desert regions of Rajasthan) have substantial urban centres that originated as political-administrative centres and since independence have continued to exercise hegemony over their hinterlands.

The vast majority of Indians, nearly 625 million, or 73. 9 percent, in 1991 lived in what are called villages of less than 5, 000 people or in scattered hamlets and other rural settlements. The states with proportionately the greatest rural populations in 1991 were the states of Assam (88. 9 percent), Sikkim (90. 9 percent) and Himachal Pradesh (91. 3 percent), and the tiny union territory of Dadra and Nagar Haveli (91. 5 percent). Those with the smallest rural populations proportionately were the states of Gujarat (65. 5 percent), Maharashtra (61. 3 percent), Goa (58. 9 percent), and Mizoram

(53. 9 percent). Most of the other states and the union territory of the Andaman and Nicobar Islands were near the national average.

Two other categories of population that are closely scrutinized by the national census are the Scheduled Castes (see Glossary) and Scheduled Tribes (see Glossary). The greatest concentrations of Scheduled Caste members in 1991 lived in the states of Andhra Pradesh (10. 5 million, or nearly 16 percent of the state's population), Tamil Nadu (10. 7 million, or 19 percent), Bihar (12. 5 million, or 14 percent), West Bengal (16 million, or 24 percent), and Uttar Pradesh (29. 3 million, or 21 percent). Together, these and other Scheduled Caste members comprised about 139 million people, or more than 16 percent of the total population of India. Scheduled Tribe members represented only 8 percent of the total population (about 68 million).

They were found in 1991 in the greatest numbers in Orissa (7 million, or 23 percent of the state's population), Maharashtra (7. 3 million, or 9 percent), and Madhya Pradesh (15. 3 million, or 23 percent). In proportion, however, the populations of states in the northeast had the greatest concentrations of Scheduled Tribe members. For example, 31 percent of the population of Tripura, 34 percent of Manipur, 64 percent of Arunachal Pradesh, 86 percent of Meghalaya, 88 percent of Nagaland, and 95 percent of Mizoram were Scheduled Tribe members. Other heavy concentrations were found in Dadra and Nagar Haveli, 79 percent of which was composed of Scheduled Tribe members, and Lakshadweep, with 94 percent of its population being Scheduled Tribe members.

Age Structure

Age 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 structure of the population. The usefulness of age data is more noticeable when it is cross classified by variables like marital status, literacy educational attainment, economic activity which vary with age in different patterns.

Apart from purely demographic concerns, the age 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. 3% of the population of the country has been in the age group 0-14 years at the Census 2001. 41% of the population account for less than 18 years of age.

The median age of India in 2011 was a young 24 years, with the median age ranging from 19 years in Meghalaya, 20 in Bihar and UP to 31 years in Kerala. This is good news for India as even it's most aged state is still younger than China or the United States. Below is a map of median ages of individual states.

What the above spread of values also shows is that India's youngest states could be as much as 25 years behind its most aged states in terms of their demographic profiles. In theory, this gives states a good amount of time to

learn from each other's employment and economic policies to do their best in taking advantage of the upcoming ' demographic dividend'.

Plenty has been said about the idea of a demographic dividend that India needs to take advantage of. Excerpts from an article by Kaushik Basu, BBC, on the subject:

In the year 2004 India had a population of 1, 080 million, of whom 672 million people were in the age-group 15 to 64 years. This is usually treated as the " working age population". Since outside of this age group very few people work, it is reasonable to think of the remainder, that is, 408 million people, as the " dependent population".

A nation's " dependency ratio" is the ratio of the dependent population to the working-age population. In the case of India this turns out to be 0. 6 What is different about India is the prediction that it will see a sharp decline in this ratio over the next 30 years or so. This is what constitutes the demographic dividend for India. [Kaushik Basu, BBC]

If we plot the working age population (anyone between the ages of 15 and 64) versus the median age, what we get is a tight correlation between the two. This implies that most Indian states are yet to reach their maximum working age population ratios.

The age structure profiles of Bihar, India and Kerala also illustrate the different stages of demographic development India's states are: from a very young, bulging child population in Bihar to a more youth/young-adult heavy national population, to a far older population in Kerala.

If you were wondering what those spikes in the above graphs were, it pays to remember that the Census records reported ages and not actual ages. Ordinarily, such age structures must be quite smooth if accurate – there is no cause for spikes unless for some strange reason people decided to have a lot more kids in a particular year. Usually one member of a household (who is at home) is asked to provide the age of everyone in that household – and predictably, certain numbers get rounded up.

The graph below shows you that people round up ages to numbers 10, 12, 18, 20 and every subsequent multiple of five. Curiously enough, the mis-reporting of ages is much lower in Kerala than the rest – showing that the state's higher literacy has at least resulted in people knowing the age of their immediate relatives a lot better.

Demographic Trends in India

India, as it is made clear, is the second most populous country in the world. Its total population crossed the mark of 121. 2 crore by March 2011. Its population is currently increasing at the rate of 18. 15 million per year. The average annual exponential growth rate of India's population is 1. 76% in 2011. The salient demographic features or trends of India's population may be noted below. 1. Growth Rate of Population:

The population of India grew at a slow rate prior to 1921. But its population has started growing at a fantastic rate of speed particularly after 1931. The average annual growth rate of India's population was 0. 56% in 1911 and it reached the record height of 2. 22% in 1981. However, it has come down to 1. 9% in 2001 and further to 1. 76% in 2011.

2. Uneven Distribution of Population:

Population of India is not equally distributed among all the states. On the contrary, we find heavy concentration of people in some states rather than in others. It shows the ten most populous states in the country by rank. As per 2011 Census, the state of Uttar Pradesh comes first with about 200 million people followed by Maharashtra with 112 million, Bihar with 103 million and so on. It is significant to note that these 10 states account for about 76. 34% of the total population of India.

3. Age Composition:

As per 2011 Census, the population of children [0-to-6 years] has declined by 5 million over the 2001 Census. In general, the proportion of population below 15 years is showing decline, whereas the proportion of elderly people in the country is increasing. This trend may continue in the time to come. The increase in the elderly population will impose a greater burden on the already outstretched health services in the country.

The age composition of people in any country is very much related to components of population change like fertility, mortality, age at marriage, migration, etc. Its distribution also has its important socio-economic effects.

A large number of people under the age group of 0. 14, that is, 37. 3% in 2001 would lead to certain effects such as – allocation of large amount of fund to provide for health, medical and educational needs for children; more dependents on working people and low productivity of labour. 4. Sex Composition:

Sex ratio is one of the characteristics of the population. It has an important bearing upon marriage rate, death rate, birth rate and even migration rate. The sex ratio is defined as " the number of females per 1, 000 males." In any study of population, analysis of the sex composition or sex ratio plays a vital role. The major trends in the sex ratio in the country from 1901 onwards are represented. According to the 2001 census figures, there are 933 females per 1000 males in India. This sex ratio recorded a slight increase from 933 in 2001 to 940 in 2011.

There are various reasons for this imbalance in the sex ratio. Factors such as female infanticide, neglect of female infants, early marriage, bad treatment and hard work of women, craving for male children, practice of dowry, dominant patriarchal values, etc. have been instrumental in reducing the number of females in India.

It is also significant to note that the sex ratio is higher in the urban areas and among the educated, than in the rural areas and among the uneducated. It is also observed that there are 13 States with sex ratio above the national level and 12 States with sex ratio lower than the national level. Kerala and Pandichery the only states wherein women outnumber men, and there are 1084 and 1038 women per 1000 men in 2011 in these states respectively.

5. Density of Population:

Density is also a major factor in the study of population. In the Indian context, density is defined as the average number of persons living per square kilometre. The trends of the density of population in the country from 1901 onwards are shown.

The density of population was found to be 77 in 1901 and 324 in 2001and it increased to the record mark of 382 in 2011. Delhi with 11297 persons per sq. km in 2011 is the most densely populated state in India.

Arunachal Pradesh with just 17 persons per sq. Km is the least densely populated state. Comparatively, China has a density of population of 135 persons, whereas Canada, Australia and America have 3, 2, and 31 persons respectively. 6. Life Expectancy:

Life expectancy or expectation of life at a given age is the average number of years which a person of that age may expect to live, according to the mortality pattern prevalent in that country. Demographers consider it as one of the best indicators of a country's level of development and the overall health status of its population.

As far as India is concerned, in the year 1901, the life expectancy of males and females at birth was found to be 23. 63 years and 23. 93 years, respectively. These figures have increased respectively to 62. 80 years and 63. 80 years in 2000.

Trends in life expectancy show that people are living longer, and they have a right to a long life in good health, rather than one of pain and disability. Health policy makers need to recognise this changing demographic pattern, and plan for prevention and control of diseases associated with old age. 7. Dependency Ratio:

The proportion of persons above 65 years of age and children below 15 years of age are considered to be dependent on the economically productive age

group [15 – 64 years]. ' The ratio of the combined age groups 0 -14 years plus 65 years and above to the 15 – 65 years age group – is referred to as the total dependency ratio. The dependency ratio reflects the need for a society to provide for their younger and older population groups.

In terms of dependency ratio, we can also speak of young age dependency ratio [0-14 years]; and old age dependency ratio [65 years and more]. These ratios are, however, relatively crude, since they do not take into consideration elderly or young persons who are employed or working age persons who are unemployed. It shows the trends of dependency ratio in India. 8. Population and Urbanisation:

Growth of population in most of the developing countries is closely associated with growing urbanisation. Urbanisation is taking place at a relatively greater speed in India. The proportion of urban population in India increased from 10. 84% in 1901 to 17. 3% in 1951, to 25. 7% in 1991, and to 27. 8% in 2001 and

was projected to be 32% in the year 2011. In absolute terms, the urban population in India was 285 million in 2001 compared to 217. 17 million in 1991. The percentage of population residing in urban areas has increased marginally. The number of urban areas and towns increased from 3, 378 in 1981 to 3, 768 in 1991. In 2001, three major cities of India – Mumbai, Kolkata and Delhi – attained the status of mega-cities each with a population of more than 10-million. The pace of urbanisation is relatively due to predominance of agriculture, slow rate of industrialisation, low rate of literacy, slow growth

of towns and cities, slow rate of social and occupational mobility, shortage of capital, etc. 9. Birth and Death Rates:

The birth rate in India was 26. 1 per thousand in 2001 and the death rate was 8. 7 per thousand for the same period. This widened the gap between the birth rate and the death rate. As a result, the net rate of increase of population in the country is 1. 9%. This is the most significant factor behind the population explosion in India.

India like many other developing countries is faced with the problem of a high birth rate and a declining death rate.
The causes of high birth rate are –

universality of marriage

early marriage

early puberty

low standard of living

low level of literacy

traditional customs and habits

absence of family planning habit, etc.

Declining death rate has been attributed to:

mass control of diseases such as smallpox, plague, cholera, malaria, etc.

better health facilities,

impact of national health programmes,

absence of natural checks as found in the instances of famines, floods, large scale epidemics, etc.,

📽 improvements in food supply,

📽 international aid in different ways,

📽 development of social consciousness among the masses.

The demographers are of the opinion that in future rapid decline in India's death rate may not be continued.

10. Literacy Structure:

As far as the literacy structure of the country is concerned, in 2011, on an average, around 74. 04% people are found to be literate [82. 14% males and 65. 46% females]. Kerala is a state wherein we find the highest literacy rate, that is 93. 91% and Bihar has the lowest one, that is, 63. 82%.

Of the total literate people in India in 1991 [846. 3 million], 56. 7% had less than 3 years education, 23. 8% 3-6 years education, 11% 7-1 years education, 6. 8% 12-14 years education and 1. 7% more than 14 years education. It is evident that we find a very limited number of people with college education. While the literacy rate for males rose from 75. 26 to 82. 14% marking a rise of 6. 9% it increased by 11. 8% for females to go from 53. 67 to 65. 46 percent. If we look at the State-wise break-up of the literacy rate, we find that Kerala continues to occupy the top rank in the country with about 93. 91 % literates (2011). Ten states and union territories, including - Kerala, Lakshadweep, Mizoram, Tripura, Goa, Damun and Diu, Puduchery, Chandigarh, Delhi, Andaman and Nicobar Inlands – have attained a literacy rate of above 85%, one target set by the planning commission to be achieved by 2011-12.

Population Control Policy

Population growth has long been a concern of the government, and India has a lengthy history of explicit population policy. In the 1950s, the government began, in a modest way, one of the earliest national, government-sponsored family planning efforts in the developing world. The annual population growth rate in the previous decade (1941 to 1951) had been below 1. 3 percent, and government planners optimistically believed that the population would continue to grow at roughly the same rate.

Implicitly, the government believed that India could repeat the experience of the developed nations where industrialization and a rise in the standard of living had been accompanied by a drop in the population growth rate. In the 1950s, existing hospitals and health care facilities made birth control information available, but there was no aggressive effort to encourage the use of contraceptives and limitation of family size. By the late 1960s, many policy makers believed that the high rate of population growth was the greatest obstacle to economic development. The government began a massive program to lower the birth rate from forty-one per 1, 000 to a target of twenty to twenty-

five per 1, 000 by the mid-1970s. The National Population Policy adopted in 1976 reflected the growing consensus among policy makers that family planning would enjoy only limited success unless it was part of an integrated program aimed at improving the general welfare of the population. The policy makers assumed that excessive family size was part and parcel of poverty and had to be dealt with as integral to a general development strategy. Education about the population problem became part of school

curriculum under the Fifth Five-Year Plan (FY 1974-78). Cases of government-enforced sterilization made many question the propriety of state-sponsored birth control measures, however. During the 1980s, an increased number of family planning programs were implemented through the state governments with financial assistance from the central government.

In rural areas, the programs were further extended through a network of primary health centres and sub centres. By 1991, India had more than 150, 000 public health facilities through which family planning programs were offered. Four special family planning projects were implemented under the Seventh Five-Year Plan (FY 1985-89). One was the All-India Hospitals Postpartum Programme at district- and sub district-level hospitals. Another program involved the reorganization of primary health care facilities in urban slum areas, while another project reserved a specified number of hospital beds for tubal ligature operations. The final program called for the renovation or remodelling of intrauterine device (IUD) rooms in rural family welfare centres attached to primary health care facilities.

Despite these developments in promoting family planning, the 1991 census results showed that India continued to have one of the most rapidly growing populations in the world. Between 1981 and 1991, the annual rate of population growth was estimated at about 2 percent. The crude birth rate in 1992 was thirty per 1, 000, only a small change over the 1981 level of thirty-four per 1, 000. However, some demographers credit this slight lowering of the 1981-91 population growth rate to moderate successes of the family planning program. In FY 1986, the number of reproductive-age couples was

132. 6 million, of whom only 37. 5 percent were estimated to be protected effectively by some form of contraception. A goal of the seventh plan was to achieve an effective couple protection rate of 42 percent, requiring an annual increase of 2 percent in effective use of contraceptives.

The heavy centralization of India's family planning programs often prevents due consideration from being given to regional differences. Centralization is encouraged to a large extent by reliance on central government funding. As a result, many of the goals and assumptions of national population control programs do not correspond exactly with local attitudes toward birth control. At "the Jamkhed Project in Maharashtra, which has been in operation since the late 1970s and covers approximately 175 villages, the local project directors noted that it required three to four years of education through direct contact with a couple for the idea of family planning to gain acceptance. Such a timetable was not compatible with targets. However, much was learned about policy and practice from the Jamkhed Project. The successful use of women's clubs as a means of involving women in community-wide family planning activities impressed the state government to the degree that it set about organizing such clubs in every village in the state.

The project also serves as a pilot to test ideas that the government wants to incorporate into its programs. Government medical staff members have been sent to Jamkhed for training, and the government has proposed that the project assume the task of selecting and training government health workers for an area of 2. 5 million people. Another important family planning program is the Project for Community Action in Family Planning. Located in Karnataka,

the project operates in 154 project villages and 255 control villages. All project villages are of sufficient size to have a health sub centre, although this advantage is offset by the fact that those villages are the most distant from the area's primary health centres.

As at Jamkhed, the project is much assisted by local voluntary groups, such as the women's clubs. The local voluntary groups either provide or secure sites suitable as distribution depots for condoms and birth control pills and also make arrangements for the operation of sterilization camps. Data provided by the Project for Community Action in Family Planning show that important achievements have been realized in the field of population control. By the mid1980s, for example, 43 percent of couples were using family planning, a full 14 percent above the state average. The project has significantly improved the status of women, involving them and empowering them to bring about change in their communities. This contribution is important because of the way in which the deeply entrenched inferior status of women in many communities in India negates official efforts to decrease the fertility rate.

Studies have found that most couples in fact regard family planning positively. However, the common fertility pattern in India diverges from the two-child family that policy makers hold as ideal. Women continue to marry young; in the mid-1990s, they average just over eighteen years of age at marriage. When women choose to be sterilized, financial inducements, although helpful, are not the principal incentives. On average, those accepting sterilization already have four living children, of whom two are sons.

The strong preference for sons is a deeply held cultural ideal based on economic roots. Sons not only assist with farm labour as they are growing up (as do "daughters) but they provide labour in times of illness and unemployment and serve as their parents' only security in old age. Surveys done by the New Delhi Operations Research Group in 1991 indicated that as many as 72 percent of rural parents continue to have children until at least two sons are born; the preference for more than one son among urban parents was tabulated at 53 percent. Once these goals have been achieved, birth control may be used or, especially in agricultural areas, it may not if additional child labour, later adult labour for the family, is deemed desirable.

A significant result of this eagerness for sons is that the Indian population has a deficiency of females. Slightly higher female infant mortality rates (seventy-nine per 1, 000 versus seventy-eight per 1, 000 for males) can be attributed to poor health care, abortions of female foetuses, and female infanticide. Human rights activists have estimated that there are at least 10, 000 cases of female infanticide annually throughout India. The cost of theoretically illegal dowries and the loss of daughters to their in-laws' families are further disincentives for some parents to have daughters. Sons, of course continue to carry on the family line. The 1991 census revealed that the national sex ratio had declined from 934 females to 1, 000 males in 1981 to 927 to 1, 000 in 1991. In only one state–Kerala, a state with low fertility and mortality rates and the nation's highest literacy–did females exceed males. The census found, however, that female life expectancy at birth had for the first time exceeded that for males.

India's high infant mortality and elevated mortality in early childhood remain significant stumbling blocks to population control. India's fertility rate is decreasing, however, and, at 3. 4 in 1994, it is lower than those of its immediate neighbours (Bangladesh had a rate of 4. 5 and Pakistan had 6. 7). The rate is projected to decrease to 3. 0 by 2000, 2. 6 by 2010, and 2. 3 by 2020. During the 1960s, 1970s, and 1980s, the growth rate had formed a sort of plateau. Some states, such as Kerala, Tamil Nadu, and, to a lesser extent, Punjab, Maharashtra, and Karnataka, had made progress in lowering their growth rates, but most did not. Under such conditions, India's population may not stabilize until 2060.

Demography and Human Development:

Demography is a scientific discipline which studies the size, composition, and territorial distribution of individuals and families (micro-demography) and populations of areas (macro-demography of neighbourhoods, cities, states, rural-urban areas, etc.), and the dynamic processes which explain individual/family and area population change – fertility, health and mortality,

internal and international migrations, family transitions, population aging, and social mobility.

There are several fields of study in Human Development and Family Studies in which demographic science can add value to individual development and family processes scholarship. Examples include:

☛ Life course developmental literature and research agendas can be articulated with the family transition literature and population eventhistory methodology and modelling in demography. ☛ The impacts of neighbourhood, community, county/city, rural-urban, etc. population

composition and institutional characteristic contextual effects on individual development and family processes research often involves population science scholarship and multi-level population modelling and spatial demography analysis.

🎬 Family policy issues and research usually involve the analysis of large, nationally representative population data sets to permit the generalization of family research results to identifiable policy target population groups.

🎬 Key demographic processes such as changing childbearing, immigration, health and mortality, and employment/poverty events are highly salient predictors of inequalities in patterns of individual development and family processes.

🎬 Comparative national (e. g. India vs. other developed or developing countries) studies of work-family or aging impacts on individual development trajectories and family processes involve population composition arguments and analysis strategies.

Human development can best be studied with models that have human beings rather than monetary or other units at the core of their analysis. Demography, which can also be defined as the mathematics of people, specifies all of its models strictly in terms of human beings according to different relevant characteristics. Hence, it offers a most appropriate approach to the study of human development across the world. Traditionally, demographic analysis has mostly focused on the changing composition of populations by age and gender. But human beings have many observable and measurable characteristics that distinguish one individual from another

and that can be considered highly relevant for human development; these characteristics can also be assessed in aggregate and used to distinguish one sub-group of a population from another.

Demographic Dividend of Human Development in India:

Around 60% of the country's population will be in the working age group by 2020. This can reap a rich demographic dividend, but without a clear road map, it could turn horribly wrong. A clear vision is a key first step and, so, the government's target to skill and employ 500 million people by 2022 is a step in the right direction.

Both the central and state governments need to work in tandem. The former has sponsored the National Skills Development Corporation (NSDC), which has made significant progress at a pan-India level by promoting, sponsoring and financing skill development programme implementation agencies, and facilitating the creation of nearly 30 industry-led Sector Skills Councils (SSCs) that are laying down sector-specific national occupational standards. The NSDC provides a robust framework for states to take the work forward. The states are keen to meet the aspirational targets, but few are geared to succeed. So, first, governments need professional and technical assistance to develop a comprehensive end-toend institutional and operational delivery model, and then to monitor and evaluate the rapidly scaling programmes at the district and block levels.

Second, given the limited capacity in government institutions, private entities need to be encouraged to take up vocational training and skilling activities. The incentives for such partners have to be carefully structured

and should be linked to assessment and employment outcomes with sound monitoring and evaluation mechanisms.

Employment and skill development institutions of state governments have to actively assist partnering implementation agencies to achieve targets by ensuring infrastructure availability, social mobilisation of trainees, day-to-day support and assistance in assessment and employment linkages. Madhya Pradesh has launched a programme, for instance, where private sector agencies have been entrusted with zonal assessment and placement assistance for students passing out of its ITIs.

Third, employment exchanges in districts need to be overhauled and transformed on a public-private partnership mode. Odisha's skill development programme is a fine example of this approach. The state has been among the early few to attempt converting district employment exchanges into Career Development Centres (CDCs) through the PPP route. The CDCs will not only screen candidates for their aptitude and skills but will also counsel and assist "them in selecting the most suitable skill development programme being offered by the private sector training providers.

Fourth, it is imperative that states align with the rapidly evolving national skill development ecosystem being shaped by the emergence of the National Skills Qualification Framework (NSQF). The NSQF aims at a common lingua franca for course curriculum, skill assessment and recognition through National Occupational Standards (NOS) and Qualification Packs that are essentially common job roles. Critically, this is formulated by an industry

body, the Sector Skills Councils (SSC), and, therefore, endorsed by the industry. Kerala stands out for its skill development delivery model whereby it has integrated vocational skills training into the state's higher secondary and undergraduate curriculum via a programme called Advanced Skills Acquisition Programme (ASAP).

While state governments will continue to work on the skilling agenda, there are sound initiatives, such as the one by the ministry of MSME, central government's initiative to design and establish Technology Centres (TC) across the country. These TCs are designed to improve access to technology, provide skill up gradation and advocacy support to specific industry clusters with high growth potential.

It is important to comprehend the magnitude of effort required if one appreciates that states like UP and Bihar have a skilling target over 15-20 times the number of people actually skilled in the recent past in these states. There is hope and India can still achieve the rich demographic dividend, but all stakeholders must come together and work in a holistic way.