DEMOGRAPHIC TRANSITION IN INDIA: A HISTORICAL ANALYSIS

DISSERTATION SUBMITTED TO THE JAWAHARLAL NEHRU UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF PHILOSOPHY

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CHAPTER 1

Introduction

1.1 Introductory Statement:

Perhaps, no analysis of social processes can be complete, unless it is studied in the context of paradigms or theoretical framework, which tries to seek patterns and uniformities in social dynamics¹. In this respect, the process of demographic evolution in India could be considered in the context of the framework represented by the theory of demographic transition, which has been used to interpret the demographic trends and situations in several countries.

1.2 Demographic Transition as a Theory or Model:

The idea of demographic transition has provided students of changing fertility throughout the post war² era with the dominant collective definition of the phenomenon they are seeking to understand and explain. "Demographic transition", which has been confusingly invoked at different times by different authors or by the same author at the same time - as theory, historical model, predictive model, or mere descriptive term³. It is a remarkable paradox that although there has been an accumulation of modern historical evidence that would seem to have comprehensively discredited the accuracy and validity of demographic transition as either a theory or a general historical description, this model of demographic change remains a central pre occupation in contemporary population studies.

¹ Premi, M.K and Tyagi, R.P (1982), Distribution and the Growth of Population in Economic and Social Commission for Asia and the Pacific, Bangkok, Thailand. Country Monograph Series No 10: India ,U.N, New York. p.25.

² Second World War

³ Szreter, Simon (1993): "The Idea of Demographic Transition and the study of Fertility Change: A Critical Intellectual History"; Population and Development Review, vol 19, no 4, December, 1993, p 659.

As early as the 1950s demographers became aware of modern European historical evidence seriously at variance with the transition model of change⁴. The concept of 'demographic transition' has its origin in the works of some of the early demographers like Landry and Thompson, who, in the beginning of the 20th century, in their separate works had attempted to categories the countries of the world in different groups on the basis of vital rates⁵. However, the credit for the development of 'demographic transition theory' goes to Frank W.Notestein. in 1945, Notestein presented the theory in the present form along with the explanation to the changes in the vital rates. It was mainly through his works that the groups came to be known as different stages of transition, also known as 'vital revolution' the model is based on the actual demographic experience of Western countries, particularly in Europe⁶. Demographic transition theory explains the transition on the demographic conditions from a stage of high birth and death rates to stage of low birth and death rates.

It has been suggested that the European countries have undergone four stages of transition in the demographic behavior. Prior to 1750, European countries were marked with very high birth and death rates - the latter usually fluctuated in response to the harvests and incidence of wars and epidemics. Thus, the period saw occasional shrink in the size of population whenever death rates exceeded birth rates. However, in terms of its long term effects, the population size remained more or less stationary. This is the first stage in the model of demographic transition and is called as 'high stationary stage' or 'pre-transitional

⁴ Coale J.Ansley., and Susan Cotts Watkins (1986) (eds.), "The Decline of Fertility in Europe" (Princeton: Princeton University Press).

⁵ Bhende A.Asha and Tara, Kanitkar (1991), "Principles of Population Studies", Himalayan Publishing House, Bombay. p.124.

⁶ Premi, M.K and Tyagi, R.P (1982), Distribution and the Growth of Population in Economic and Social Commission for Asia and the Pacific, Bangkok, Thailand. Country monograph series No 10: India, U.N, New York. P.27

stage'. From the middle of the 18th century onwards, European countries witnessed a revolutionary change in the socio and economic conditions. With improvements in food supply and increase in political stability, death rate started declining. Since birth rate continued at high level, reduction in death rate brought about sudden expansion in population. These countries, thus moved from the first stage of transition to the second stage? i.e., the 'early expanding stage'. Decline in death rate was further strengthened with improvement in sanitation, personal hygiene and increased medical knowledge. The birth rates started declining dramatically from some time in the middle of the 19th century, and with this the European population entered the 'late expanding stage'. Finally, by 1950s, the European countries reached the final stage also known as 'post transitional stage', where both birth and death rates became stable at low level. Growth in population once again became very slow. This stage is called the 'low stationary stage'. Currently, some of the European countries are experiencing decline in the size of the population with rise in the death rates due to the typical age structure⁸.

Transition theory in its classic form therefore entailed an unabashedly evolutionary and recaptulationist general theory of the process whereby any country successfully moved from a pre to post industrial state of demographic equilibrium⁹. Although there was nothing historically inevitable in the process, in order to industrialize and modernize a country must pass through the stages of demographic transition, with the appearance of fertility controlling behaviour marking the advent of the final stage, and the general spread of such behaviour

⁷ The Second Stage is further, sub-divided into 'early expanding', and 'late expanding stage'.

⁸ Hassan, Mohammad Izhar and Daspattnayak, Pritirekha (2004): "Demographic Transition in India: some policy recommendations for the Demographically vulnerable states", Indian Journal of Regional Science, Vol 36, no 2. p 84.

⁹ Gould J. Stephen, (1977): "Ontology and Phylogeny" (Cambridge, Mass.: Belknap).p.92.

confirming successful socio-cultural adjustment to the conditions of a modernized economically developed nation. Whether a country succeeded or not in negotiating the transition was a historically contingent matter.

1.3 Statement of the Problem:

The phenomenon of population explosion in India has its genesis in the widening gap between birth and death rates since 1921. An analysis of birth and death rates of the last 100 years, beginning with 1891, clearly indicates this fact. Both birth and death rates were high up to 1921, thereby, inadvertently keeping the rate of growth of population rather low, without any substantial human or state intervention in influencing either rate. The compound growth rate was only 0.19 percent per annum and India was in the first stage of demographic transition also known as "the pre transitional phase". The change began after 1921 with the intervention of new preventives and curatives and their mass applications, so the death rate fell from 44.4 in 1891-1901 to 27.4 percent in 1941-1950, increasing the growth rate from 0.19 percent in 1891-1921 to 1.22 percent per annum in 1921-1951. This was the second stage of demographic transition¹⁰ this stage is also known as "transitional phase".

After independence from the British, the death rate fell further with the expansion of medical services and facilities, especially pre and postnatal care, improvement in the supply of clean drinking water, spread of primary education, vast improvements in communication and the overall increase in gross domestic product and per capita income which improved

¹⁰ There are three stages of demographic transition. In the first stage, both birth rate and death rate are high and population remains more or less stable. In the second stage, birth rate remains high but death rate begins to decline rapidly, leading to high growth rate. In the third stage both birth and death rates are low and, therefore, low or no growth rate.

general nutrition and health care. The creation of the Food Corporation of India (FCI) and the formulation of the Public Distribution System (PDS) eliminated famines, frequent in British India. With the onset of decline in birth rate since early 1960s, the death rate further, continued to decline, and though a part of the decline was compensated for by declining birth rate, the annual rate of growth in the population further rose to 2.20 percent during 1961 – 71 and 2.26 percent during 1971 – 81. By the close of 1980s, the crude death rate in the country had reached a level very close to 11 per thousand persons. By then decline in birth rate had also gathered momentum. The annual rate of growth in population recorded a deceleration, albeit marginal, during 1980s, for the first time since independence. Some researchers took it as encouraging while others were still of the opinion that the decline is not real and the growth rate will continue to increase.

In fact, no country or society can continue for long in stage two of demographic transition. If a population fails to move to stage three by bringing the birth rate down, then nature is bound to strike a balance by increasing death rates¹¹. But the 2001 census results have confirmed the view that the birth rate has indeed begun a sharper decline as the annual growth rate has gone below 2 percent mark in the 1990s for the first time since many decades. The demographers are optimistic that India's population is closing towards the completion of second stage of demographic transition for the entry into the final stage with new balance between mortality and fertility at lower level. However, the timing and phase of

¹¹ Brown, Lester R., Gary Gardner and Brian Halweil,(1988). "Beyond Malthus: Sixteen Dimensions of Population Problem", World Watch Paper 143, September, Washington DC, p 68.

transition have not been uniform across the country¹². The states of Kerala, Tamil Nadu, Karnataka, Maharashtra, Orissa, West Bengal, Gujarat, Punjab, Himachal Pradesh and Assam have a crude birth rate lower than the national average. On the other hand, the states of Uttar Pradesh, Madhya Pradesh, Bihar, Rajasthan, Haryana and Jammu and Kashmir have a CBR higher than the national average. In fact, of the 90 districts, which have a higher CBR, 83 are in the states of Uttar Pradesh, Rajasthan, Madhya Pradesh and Bihar¹³. In fact different states in India are at different stages of transition as the timing and pace of transition has varied from one another. Such a regional diversity in population may lead to the serious repercussions in the socio-economic and political setup of the country.

The dynamics of the past, present and anticipated growth of population is so complex and related to diversified socio-economic environmental and demographic structure of the country that a simple generalization of this problem at the national level will not suffice the cause. Studies on population growth and components, such as fertility and mortality indicate significant regional variations¹⁴. Therefore, the present study is aimed at analyzing the applicability of the demographic transition theory in the context of India in comparison with the developed countries of the world. Further, causes for the delay in the demographic transition across the states of India will be analyzed keeping in view of the social, cultural, economic, political and demographic factors.

¹² Hassan, Mohammad Izhar and Daspattnayak, Pritirekha (2004): "Demographic Transition in India: some policy recommendations for the Demographically vulnerable States", Indian Journal of Regional Science, Vol 36, no 2. p 84.

¹³ Report of the Committee of National Development Council on Population, 1992. Pp130-131

¹⁴ Paul Gans and V.K. Tyagi, Patterns of Population Growth in India, In the demographic transition in the third world scenario, (ed) (1997), Aijazuddin Ahmed, Daniel Noin, H.N. Sharma, Rawat publishers, Jaipur and New Delhi . pp 109

1.4 Literature Review:

In the article, "The End of Demographic Transition: Relief or Concern" ¹⁵, the concept of changing demographic transition has been highlighted in the context of overpopulation and depopulation in developing and developed countries respectively, in the phases of demographic transition processes. The article gives us a detailed description of the paradigm shift of the demographic transition, across the world since it was first described in 1930s, which was labeled 'demographic transition' towards the end of World War II. The various essential aspects of fertility and mortality transition have been discussed at length focusing particularly on the European countries over time in comparison to the rest of the world. Along with this a comprehensive account of the consequences, with the end of the transition process has been outlined and critically assessed. The policy resolutions in general enhances the emphasis on the development of the poorest nations. The concerns of different age groups and to stabilize population size by striking a balance between the advancing nations and those, which are lagging behind.

Demographic convergence lies at the heart of demographic transition theory, is what has been discussed in the article, "On the Scale of Global Demographic Convergence, 1950-2000" ¹⁶. The article emphasizes on the data availability in the context of studying the demographic transition processes at the international level, specifically tracing the nature of data available throughout the ages, with a special emphasis on China and India. If demographic transition is considered in the light of broader modernization theory, it is clear

¹⁵ Vallin, Jacques (2002), 'The End of Demographic Transition: Relief or Concern?' Population and Development Review, vol 28, no1, March. p 105-120.

Wilson, Chris (2001), On the Scale of Global Convergence, 1950-2000'; Population and Development Review, vol 27, no 1, March . p155-171.

that social and demographic change has progressed far more rapidly than economic development.

Demographic transition has been confusingly invoked at different times by different authors or even by the same author at the same time-as the theory, historical model, predictive model, or more descriptive term. This article "The Idea of Demographic Transition and the study of Fertility Change: A Critical Intellectual History"¹⁷, aims to study fertility change through analyzing certain intellectual and institutional aspects of the field of study since World War II, the principle focus on the intellectual history of the idea of demographic transition theory, the article discusses the recent intellectual history and current practices in the scientific study of fertility change.

In the article, "Demographic Transition," Ansley J. Coale ¹⁸, asserted that Fertility transition is supposedly amore precise, more measurably a more easily studied subset of the demographic transition, referring only to the changes in fertility behavior from natural fertility to family limitations. But the idea and its approach are subject to the same methodological limitations as those of demographic transition. The process of change is again reduced merely to variation between classificatory types: The arbitrarily defined beginning and end states of natural and controlled fertility. Just as empirical research has shown that there is no single traditional demographic regime, so, it has found that no single form of natural fertility can be unequivocally distinguished from controlling fertility.

¹⁷ Szreter, Simon (1993), 'the Idea of Demographic Transition and Study of Fertility Change: A Critical Intellectual History', Population and Development Review, vol 19, no 4, December . P 659-701.

¹⁸. Coale J.Ansley (1973), 'The Demographic Transition', in International Population Liege, Vol. 1 (Liege: IUSSP).

In the article, "Demography as Social Science and Policy Science," Dennis Hodgson¹⁹, revealed that during the 1950s an intellectual orthodoxy concerning the importance of the relationship between national economic development and population growth solidified among social scientists, economic planners, and political leaders in the west and in those nations that looked predominantly to the liberal democracies of the west. Within this, this orthodoxy, the dominant line of thought has tended to emphasize the extent to which relatively rapid population growth can obstruct the potential for economic growth in less developed countries.

In the article, "The Demographic History of the Northern European Countries". Gille presents the remarkable statistics of the northern countries available for the greater part of the eighteenth century. Further, looking at the period as a whole, the range of population movement was rather narrow. The death rate for the Sweden was stationary or falling slightly from the 1740's to the 1780's. The fall then became rather more evident and this trend continued into the next century. The marriage rate fell during the second half of the eighteenth century, but at the end of the period and during the greater part of the next century the degree of fall was very limited and the marriage rate became almost stationary. The birth rate showed a downward trend from the middle of the eighteenth century (perhaps with the exception of Denmark, where the birth rate seems to have more nearly stationary) until about 1840. When it rose for some two decades before embarking on the long-term decline, which

Hodgson, Dennis (1983), Demography as Social Science and Policy science, Population and Development Review 9, No 1.

²⁰ Gille, H (1949): The Demographic History of Northern European countries in the Eighteenth century, Population Studies Vol.3, no 1, June.p.3-65.

extended into our present century. Finally, the rate of population growth looked at as whole was relatively constant over the whole period and continued so during the nineteenth century until the 1860's though there may have been a slight upward trend in Denmark and Norway.

In the article, The Demographic Transition in Europe: a Neoclassical Dynastic Approach, Xavier investigates the factors that have shaped the demographic transition in a number of European countries (Sweden, England, and France) since the mid 18th century. The analytical framework is a version of the neoclassical growth model with dynastic preferences calibrated to match the Swedish experience. This model is used to study the contributions of various factors to the explanation of the observed demographic patterns, both over time and across countries. The factors considered are mortality changes, technological progress, and the evolution of the cost of children. The analysis suggests that the contribution of observed mortality rates is limited. A substantial part of the demographic transition facts must be attributed to variations in the cost of children and or technological change, both over time and across countries²¹.

In the article, "Demographic Patterns in History", Josiah Cox Russel, presents the pattern of demographic factors which help to cause human physical type to persist in given localities, the study of the human efforts, in the form of social control, to maintain population within the limits of subsistence. Further, he explained how this population breaks away from such control, to produce either a decline or an increase without relation to subsistence.

²¹ Mateos-Planaa, Xavier (2002): the Demographic Transition in Europe: a Neoclassical Dynastic Approach, Review of Economic Dynamics, Vol 5. p 649.

Finally, showing the experiences of different countries assessed the possibility of the influence of population on historical development²².

In the article, "Trends of Population in the Indian Subcontinent 2001 B.C-2001 A.D."; Durgaprasad Bhattacharya²³; presents the results of researches for the three decades and historical trends of the population in the Indian subcontinent consisting of India, Pakistan and Bangladesh. By reconstructing the various historical sources on population, he pointed out that Indian population was almost the same in the beginning of the modern period (1650) as it was 2000 years ago (at the heights of the Magadhan Empire). In his view, population tended to grow slightly in the 'normal' times because the birth rate was slightly higher than the death rate. Invariable, however, catastrophe followed in the form of warfare, famine or epidemic and wiped out accumulated increase in population. Thus the long run trend are of virtually unchanging number.

In the article, Demographic Transition in India: 'Some Policy Recommendations for the Demographically Vulnerable States', Hassan and Pritirekha made an attempt to examine the process of demographic transition in India with particular reference to special dimension of the process. Further, it has been argued that if Orissa's experience of fertility transition (an examination of state level scenario shows that the state of Orissa, which ranks one of the lowest in the country in terms of the level of development, appears among some of the most

²² Russel, J.C (2001): Demographic Patterns in History, Population Studies, Vol.55.p 389-404.

²³ Bhattacharya, Durgaprasad (1989), 'Trends of Population in Indian Subcontinent': c2001 B.C- 2001 A.D., Population Transition in India, vol 2, Indian Association for the study of Population, (ed.) S.N Singh, M.K Premi, P.S Bhatia, Ashish Bose.

developed states with regard to the fertility levels achieved) is repeated in BIMARU states, the problem of rapid growth in population can be checked to a considerable extent²⁴.

Demographic Transition process in India can be analyzed in the backdrop of vast socio-economic and cultural changes in the country. Considering the changing scenario of fertility transition in India, the article "Demographic Transition and Policy Responses in India" ²⁵, enumerates the mortality and fertility trends over the century, while analyzing the determinants of fertility decline. However, the study shows some staggering complexities, against which fertility decline can be most attributed. Thus the appropriate policy responses, calls for various imaginative solutions and continued research for technical development in industrial and agricultural management.

"Transition in the Determinants of Fertility Decline in India". is an excerpt of the Presidential Address delivered in the 19th Annual Conference of Indian Association for the study of Population. This article highlights the 40-year period between 1956 and 1996 as the unique period in the history of demographic transitions in India. The evolution of demographical expertise to control the alarming implications of population in India has been quite slow, in comparison to the rest of the world. Thus this article gives us a detailed review

²⁴ Hassan, Mohammad Izhar and Daspattnayak, Pritirekha (2004): Demographic Transition in India: some policy recommendations for the Demographically vulnerable states, Indian Journal of Regional Science, Vol 36, no 2. p 84.

²⁵ Visaria, Pravin (1995), 'Demographic Transition and Policy Responses in India'; Demography India, vol 24, No 1. p 1-12.

²⁶ Zachariah, K.C (1995), 'Transitions in the Determinants of Fertility Decline in India'; Demography India, vol 24, No 2. p 147-161.

of the development of demographical advents throughout the history of demographic transitions in India.

A graying of the population is a long term and inevitable consequences of sharp reduction in fertility level. The 21st century will witness a gradual transition to an ageing society world over with countries like China and India leading in terms of absolute number of total populations, but in terms of absolute number of elderly population. Thus this article "Demographic Transition"²⁷, looks into one of the major consequence of demographic transition in India in the context of state level and district level estimates. The various aspects of economic development, urbanization and social status have been also examined in the context over time.

India as a whole presents a varied picture in case of demographic transition across states and regions. The article "Spatial Patterns of Fertility Transition in Indian Districts" seeks to reveal the demographic heterogeneity in context of fertility levels in India and examine the mechanisms behind regional variations. The article also gives a detailed mapping of fertility transition post Independence giving a distinctive picture between regions on the basis of which clusters have been identified.

Throughout the Indian states, there has been a variation in the stages of demographic transition. States like Goa, Kerala and Tamil Nadu shows advancement in fertility transition, than the rest of India. Even in situations where social and economic development in a

²⁷ Bose, Ashish (2000), 'Demographic Transition'; Seminar, April . p 35-39.

²⁸ Guilmoto and Rajan (1997), 'Spatial Patterns of Fertility Transition in Indian Districts'.

population is not of a level that can motivate a small family size and the use of modern methods of contraception as normal byproduct of modernization, it is possible to induce such an attitudes and the action by an effective combination of political will, bureaucratic efficiency and a well organized inter sectoral family planning programme²⁹. Historically speaking, the demographic transition, its structure and pattern vary across space and time. As the country shows a clear divide between the northern and southern states, the later advancing in the process of fertility transition, fertility levels, which began declining in sixties and seventies, show large variations across states and districts³⁰. Among the southern states, Kerala is the most advanced state; the cause is attributed to elements like educational transition, health transition, economic transition and family planning transition.

Thus the literature review indicates that India altogether has a chequered demographic history with wide regional variations, which gives a comparative picture of the country as a whole as well as across states in the process of demographic transition.

1.5 Objectives:

The main objectives of the study are as follows:

- To trace the history and concept of the Demographic Transitions in Europe and other developed countries in relation to India.
- To trace out the stages and the causes for the delay in the Demographic Transition across the states of India.

²⁹ Srinivasan, K (1995), 'Lessons from Goa, Kerala and Tamil Nadu: The Three Successful Fertility Transition States in India'; Demography India, vol 24, No 2. p 163-194.

Rayappa and Lingaraju (1996), 'Demographic Transition in the South: a Regional Perspective'; Demography India, vol 25, No 2. p 155-176.

 To make a critical review of the policy initiatives regarding demographic transition in India.

1.6 Research Questions:

The following are the research Questions that are sought to be answers through this research:

- What is the experience of demographic transition in India visa-vi Developed countries?
- To compare demographic transition of developed and developing countries taking
 India as a case study.
- What are historical processes over different geographical settings involved in the demographic transition in India?
- How the historical processes involved in demographic transition varies over space?

CHAPTER 2

Area, Time Period, Data Base, Methodology, Limitations And Organisation Of Chapters.

2.1 Area chosen for the Study:

India is one of the oldest civilizations of the world with a kaleidoscopic variety and rich cultural heritage. This is because it is a vast country and a well-defined geographical entity³¹, it was called as subcontinent. From very early times it has been witnessing continuous changes brought out by interaction between people who had different experiences, and who some times came as conquerors and settled in India. In the Vedic period, India was divided into five regions according to Aitareya Brahmana they are: Eastern, Western, Northern, Central and Southern. During the Mauryan period, the empire was divided into four provinces, each under a viceroy, they were: Uttarapatha - Taxila, Avantinagara -Ujjain, Dakshinapatha – Suvarnagiri, and Kalinga – Tosali with their capitals respectively. It is interesting to note that during the Mauryan period Kautilya prescribed the collection of population figures as a measure of state policy for the purpose of taxation. During the Mughal period the empire was divided into different provinces or Subas. Their number was 15 at the time of Akbar, rose to 19 under Shahjahan and 21 under Aurangazeb³².

Further, prior to independence the subcontinent was divided into British India and Princely states. There were 11 Provinces and six Union Territories in British India, and there

³¹ India (2005): A Reference annual, Published by the Director, Publication Division, Ministry of Information and Broadcasting, Government of India, Patiala House, New Delhi. Pp.1

³² Majumdhar, R.C, Raychaudhuri, H.C and Dutta, Kalikinkar (1978), an Advanced History of India, Macmillan India press, Madras. Pp 26,95,547

were over 560 Princely states. On the eve of independence, the subcontinent was divided into India and Pakistan. In the truncated Indian union, a very large number of princely states were merged with the provinces and several of them maintained their identity at the time of the 1951 census. Because of this India was divided into 27 states classified into Part A, Part B and Part C states, and there were two Part D Territories. However, in 1956 there was a major reorganization of states in India³³, resulting in the present pattern of States and Union Territories. And which were extensively used in the successive census. For convenience of data availability, if not for any other reason, 15 major states of the Indian Union has been analyzed for the present study.

2.2 Time Period:

It is customary, for convenience of analysis and study, to divide the long history of mankind into suitable periods such as ancient, medieval and modern. However it is not possible to evolve a serialization that could uniformly be applied to all countries and for all purposes³⁴. Unfortunately social scientists engaged in the study of India's population have not given much consideration to this problem³⁵. Serialization for purposes of studying the growth of the Indian population one must consider the following: the availability of direct data on population; the availability of other evidence on the basis of which reasonable estimates can be made regarding populating size, in case direct data on population are not available; and the reliability of the direct data and of other relevant evidence. For the purpose

³³ States Reorganisation Act and Bihar and West Bengal (transfer of territories) act 1956.

³⁴ Pannikar, K.M, The Determinants of Indian history (Bombay, Baratiya Vidaya Bhavan, 1962), p.1.

For instance, Kingsley Davis did not discuss this problem in his comprehensive study of the Indian population. He routinely divided the Indian population history into three periods, viz., ancient from 1600-1870; and 1871-1941. Davis did not even define ancient history. See Kingsley Davis, the population of India and Pakistan (Princeton university press, 1951), chapter 4.

of the study demographic transition, the period considered is modern, as this period coincides with the period of modern comprehensive censuses starting in 1881. Since then, the count has been made regularly and with increasing effectiveness of 10 years interval. Comparable statistics are available for the census years 1901-2001. However, for the study, vital rates are considered for 2001 census, and further, compared them with the latest socio-economic indicators.

2.3 Database:

For purposes of studying the growth of the Indian population one must consider the following: the availability of direct data on population; the availability of other evidence on the basis of which reasonable estimates can be made regarding populating size, in case direct data on population are not available; and the reliability of the direct data and of other relevant evidence. Vital statistics in India are notoriously in accurate because no effective machinery exists for ensuring the reporting and recording of births and deaths. In the census report of 1931, the defect in vital statistics was estimated to be about 20 percent³⁶. Thus, the database for the present study will be based on a review of available literature throughout a comprehensive phase of Demographic Transition which includes the following:

Census of India (1901 onwards)

Sample Registration System (1970 onwards)

Apart from these certain estimates of fertility and mortality indicators can be taken from surveys conducted in different states of India in the Colonial and Post colonial periods.

³⁶ Chandrasekhar, S: India's Population: Facts, Problem, and Policy, Meenakshi Prakashan, Begum Bridge, Meerut. Pp.14

Reports from various population programmes and policies throughout the decades formulated by the Government Of India and International concerns shall provide necessary incentives and database.

2.4 Methodology:

The measures of fertility, mortality, are far from simple. Various indicators selected to show the aspects like birth rate and mortality indicators like crude death rate has to be compared with different socio-economic indicators like Infant mortality rate (IMR), Literacy³⁷, Couple protection rate (CPR)³⁸ and Percapita income of the major states in India. The methodology applied will be in the form of Birth rate, Death rate. The formulae for these are as follows:

	Number of Live Births during the year	
Crude Birth Rate =		×1000
	Mid year population	
	Number of Deaths during the year	
Crude Death Rate =		× 1000
	Mid year population	

³⁷ A Person who is 7 years and above and who is able to read and write with in any one language. ³⁸ Number of couples protected by different methods of Family Planning.

Number of infant deaths during the year

Infant Mortality Rate =

 $\times 1000$

Number of Live births during the year

Apart from these Carto-statistical methods like graphs and maps would be used to give a pictorial representation of data.

2.5 Limitations of the Study:

The present study attempts to analyze the processes involved in the Demographic transition by showing regional variations in India. Problems identified in the study are as follows:

First and foremost problem faced, was the availability of the data. Vital statistics in India are notoriously in accurate because no effective machinery exists for ensuring the reporting and recording of births and deaths. So, vital statistics are taken from the estimates given by the various scholars and from the census actuary's estimates. Secondly, the data available are not up to the mark. Most of the information collected was under registered. Thirdly, due to the constant changes in the administrative boundaries, proper mapping of the indicators is not possible. Fourthly, not much of the literature is available on the population problem during the British period to give the present study a strong base.

2.6 Organization of Chapters:

The study is planned in six chapters. These are as follows:

Chapter 1: Deals with the Introductory Statement, Origin and Meaning of Demographic Transition, Statement of the problem, Overview of the Literature, Objectives and the Research questions involved in the study.

Chapter 2: Explains the Area and Time period of the study followed by the Database, Methodology, Limitations and Organization of chapters.

Chapter 3: Deals with the Comparitive process of Demographic Transition in selected Developed countries and India.

Chapter 4: Focuses on the process of Demographic Transition across the states of India and further explains the causes for the delay in Demographic Transition.

Chapter 5: Gives a Historical Review of policy initiatives and responses in the light of the Demographic Transition and population explosion in India.

Chapter 6: Ends with summary of conclusions of the study.

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CHAPTER 3

Comparitive Experience Of The Process Of Demographic Transition In Selected Developed Countries And India

3.1 Demographic Transition in Europe:

Despite all the picturesque and speculative mythologies of great religions that date and explain the genesis of man and his kind, we know to-day, in more or less certain terms that the genus homo has lived on this earth for many hundred thousand years and the species sapiens for about 50,000 years. Man's early groping existence must have been precarious, for disease, starvation, violent death and other causes must have severely limited his numbers. Human numbers grew slowly; almost imperceptibly over a period centuries that the population remained almost stationary over a vast stretch of time³⁹. The most important landmark indicating the transition from the medieval to the modern age was the great intellectual revolution knows as 'renaissance'. It was revolution in the realm of thought and ideas. Some defined it as 'rebirth' or 'revival' of classical or Greco-Roman culture. It was the discovery of the 'man and the world'. In other words it includes all the intellectual changes that were in evidence at the close of the middle ages and the beginning of modern times. In fact it stands for an intellectual, literary, artistic and scientific movement, which widened the mental horizons of man⁴⁰.

There was relatively less progress during the Sixteenth century in the field of medicine, probably in part because there had been relatively greater progress during the

³⁹ Chandrasekhar, S (1954): 'Hungry People and Empty Lands: an Essay on Population Problems and International Tensions', George Allan and Unwin, NewYork, p.1

⁴⁰ Hayes, C.J.H (1998): 'Modern Europe upto 1870', Surject Publications, New Delhi . p 32

middle ages, and probably in part because the new learning appealed particularly to physicians and tended to make them rely too much on ancient Greek doctors. It was only after two centuries later that important discoveries are made in the field of medicine. Louis Pasture in 1873 advanced the germ theory of disease and proved the presence of bacteria in the air as the sole cause of disease and decay of the dead. In 1892, W.H.Haffkine developed a technique of inoculation against cholera, and by 1896, he developed anti – plague vaccination to protect individuals against plague. Edward Jenniers discovered vaccination against smallpox in 1794. The world diffusion of Jenner's method of vaccination in the beginning of Nineteenth century was followed by a decrease in the incidence of the disease and reduction in mortality rate through Western Europe and United States⁴¹.

Therefore, in European history, strong population growth initially occurred during industrialization because fertility remained uncontrolled and high while mortality declined, due to the improved food supplies and personal living standards generated by the combination of technical innovation summarized under the rubric "industrial revolution": improvements in agriculture, transport, manufacturing and finally, sanitary and medical advances. In short, the whole process of modernization in Europe and European overseas brought rising levels of living, new controls over diseases, and reduced mortality. Meanwhile, fertility was much less responsive to the process of modernization. Any society having to face the heavy mortality characteristic of the pre modern era must have fertility to survive in such societies religious doctrines, moral codes, laws, education, community

⁴¹ Jaggi, O.P (1979): 'Western Medicine in India: Epidemics and Other Tropical Diseases', vol 12; Delhi. Atma Ram and Sons, p169

customs, marriage habits, and family organizations are all focused towards maintaining high fertility. These change only gradually and in response to the strongest stimulation⁴².

The tremendous growth of population in Europe during the Eighteenth century was accompanied by the discovery of new lands, led to the great movements of population from Europe. For instance, the number of emigrants from Europe to the new continents from 1815 to 1914 has been estimated at more than sixty millions, twenty millions of whom came from the British Isles alone⁴³. In fact the role of the population variable in the process of economic growth from the mid-eighteenth century onwards has frequently been recognised as having been of crucial importance. According to Lorsch, 'changes in population are among the main causes of economic changes'⁴⁴, and the pattern of 'great waves' created by population growth has been compared in its effect to the impact of great wars. Certainy the overall magnitude of the increase in European population during the period under consideration cannot be doubted. Total population in Europe (including Russia) rose from 144 millions in 1750 to 274 millions in 1850, 423 millions in 1900 and to 506 millions by 1949⁴⁵.

⁴² Notestein W. Frank "Population – The long view," in Theodore W. Schultz (ed.) (1954), Food for the World (Chicago: University of Chicago Press), pp. 36

⁴³ Chandrasekhar, S: Hungry People and Empty Land's: (1954), An essay on Population Problems and International Tensions, George Allan and Unwin Newyork.pp.3

Lee, Robert. (1979), Population Growth, Economic Development and Social Change in Europe, 1750-1970, in European Demography and Economic Growth, (eds.) W. R. Lee. Croom Helm London.p.10.
 Mitchell, B.R., Statistical Appendix, in C.M. Cipolla (ed.) (1973), 'The Fontana Economic History of Europe', Vol. 4,2, London. p.747.

3.2 Demographic Transition in India vis-à-vis some of the Developed Countries: It may be noted that the theory of demographic transition was based on the historical experience of the countries of Northern and Western Europe since 1650 and was enumerated to explain the rapid population increase in many Western developed nations. However, the transition theorist asserts that this theory has universal application⁴⁶. Therefore, an attempt is made to study the transitional phases in some of the developed countries vis-à-vis India, in order to explain whether India's experience fits within the framework of the transition theory in respect of both the sequence and the tempo of change.

Demographic Transition in Sweden:

Sweden which occupies the eastern part of the Scandinavian Peninsula is the largest of the Nordic countries and in terms of area, the fourth largest in Europe. Mountains cover 25 percent of the country. A constitutional monarchy since 1434, Sweden is the world's first widely comprehensive welfare state. There is no doubt that Sweden has the best demographic material. Official population's statistics in the country were begun in the middle of the 18th century and still older material is available from other sources⁴⁷. The period 1760 to 1820, the birth rates and death rates are more than 30 per thousand. It was only after 1820 that Sweden entered the transitional phase which lasted for about more than 100 years. No doubt that the death rate started declining after 1820 but the birth rates were high around 30 per thousand till 1900.

⁴⁶ Premi, M.K and Tyagi, R.P, as cited in note 1. p.26

⁴⁷ Fridlizius (1979), 'Sweden, in European Demography and Economic Growth' (ed.) W. R. Lee, Croom Helm, London . p 340

TABLE: 3.1 Trends in Vital Rates in Sweden (1751-1930)

Time Period	CDR	CBR
1751-1760	27.2	35.7
1761-1770	27.6	34.2
1771-1780	28.9	33
1781-1790	27.9	32
1791-1800	25.4	33.3
1801-1810	28.2	30.9
1811-1820	25.8	33.3
1821-1830	23.6	34.6
1831-1840	22.8	31.5
1841-1850	20.6	31.1
1851-1860	21.7	32.8
1861-1870	20.2	31.4
1871-1880	18.3	30.5
1881-1890	16.9	29.1
1891-1900	16.4	27.1
1901-1910	14.9	25.8
1911-1920	14.3	22.1
1921-1930	12.1	17.5

Source: For the period 1751-1860, the figures are derived from Tebellkommission Folk Angels (Census and Mortality tables); For the period 1860-1930 from Bidreg till, Official statistic.

It was only after 1900 that birth rates began to decline at a faster phase and reached to 17.5 per thousand in 1930. The large decline in both fertility and mortality had acted in an epidemic fashion, in the course of the decline in both mortality and fertility are far from clear.

Demographic Transition in Italy:

The population of Italy, which amounted to 13.4 million people in 1700, rose to 15.5 millions (1750) and 18.1 millions (1800), with an average annual growth rate in the two fifty years period of 2.9 and 3.1 per thousand respectively. Within the European frame work of 18th century demographic development, however, this increase appears limited, given that the equivalent growth rates for Europe as a whole during the same two fifty year periods stood at 4.1 and 6.2 per 1000 respectively⁴⁸. Nevertheless, the pattern of Italian demographic development in the 18th century assumed a regularity significantly more pronounced than the previous periods. Improvements in the sanitary conditions resulted in a progressive decline of infectious diseases and particularly in the disappearance of the plague. The relative stabilization of mortality around more normal levels, although remained quite high, probably contributed to a sustained level of population growth. Other factors, however, both political and economic were important this context.

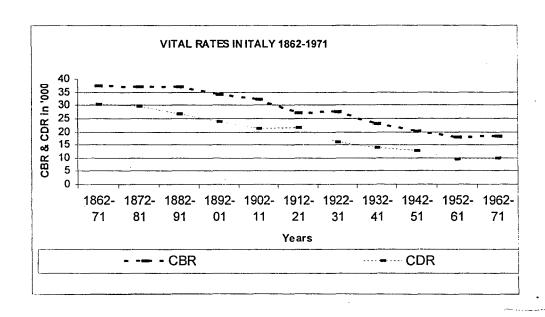
The vital rates till 1870 were very high, the CBR being 37.4 per thousand and CDR 30.3 per thousand. It was only after 1870 that Italy has entered the transitional stage of demographic transition where mortality declined gradually whereas the CBR was around 30 per thousand till 1921. After 1922 that fertility decline started gradually up to 1971 while the mortality was below 10 per thousand. Italy has completed its transitional phase for about 90 to 100 years.

⁴⁸ Panta, Lorenzo del, as cited in note 12. p.196

TABLE:3.2 Trends in Vital Rates in Italy (1862-1971)

Time	CBR	CDR
Period	} -	
1862-71	37.4	30.3
1872-81	36.9	29.6
1882-91	37.2	26.9
1892-01	34.2	23.7
1902-11	32.2	21.3
1912-21	27.2	21.8
1922-31	27.5	16.3
1932-41	23	13.9
1942-51	20.1	12.8
1952-61	18	9.6
1962-71	18.2	9.8

Source: M.Levi Bacci, A History of Italian fertility, Table 2.3, p.57



Demographic Transition in Japan:

Japan forms a curved chain of islands off the eastern coast of Asia stretching from latitude 45 degrees north to 30 degrees north 49. Japan is one of the few countries in the world which has demographic data available far back enough to study the whole course of demographic transition, a phenomena which was first experienced by the western developed countries. This demographic evolution from pre-transitional period to post transitional period can be analyzed on the basis of data obtained from the population census, vital registration and immigration and emigration records⁵⁰.

TABLE: 3.3 Trends in Vital Rates in Japan

TABLE. 5.5 Trends in Vital Rates in Japan		
Time Period	CBR	CDR
1878	24.5	16.9
1888	29.60	19
1898	31.3	20.4
1908	33.7	20.9
1918	32.2	26.8
1920	36.2	25.4
1930	32.4	18.2
1940	28.8	17.3
1950	28.1	10.9
1960	17.7	7.7
1970	14.4	6

Source: Ohbuchi, Hiroshi, in Economic and Social Commission for Asia and the Pacific, Bankok, Thailand. Country monograph series no11, population of Japan. UN (1984).

⁵⁰ Ohbuchi, Hiroshi, as cited in note 14. p.8

⁴⁹ Kurudo, Toshio, Economic and Social Commission For Asia and the Pacific, Bangkok, Thailand. country monograph series no 11, Population of Japan, U.N, New York 1982. p.1

Population in Japan up to 1920, considerably increased between 1872-1920 this rate was 36.2 per thousand which thereafter slowly declined. The death rate in Japan ranged between 20-27 per thousand. One reason for this high death rate was that in the country famine and disease engulfed many lives. After 1920, death rate came down to 20 per thousand and in 1950, it came down as low as 10. Today Japans death rate has come down so low, beyond that it cannot come down. It is because in Japan many medical facilities are made available and people love cleanliness. Japan entered the transitional stage of demographic transition after 1920 and by 1970. Japan completed the transitional phase within 50 years.

Demographic Transition in India:

However, while studying the India's population growth, in some respects, it could be argued that India's modern population growth fits in well within the frame work of the theory of demographic transition. The phenomenon of population explosion in British India has its genesis in the widening gap between birth and death rates since 1921. An analysis of birth and death rates of the last 100 years, beginning with 1891, clearly indicates this fact. Both birth and death rates were high up to 1921, thereby, inadvertently keeping the rate of growth of population rather low, without any substantial human or state intervention in influencing either rate. The compound growth rate was only 0.19percent per annum and India was in the first stage of demographic transition. The change began after 1921 with the intervention of new preventives and curatives and their mass applications, so the death rate fell from 44.4 in 1891-1901 to 27.4 in 1941-1950, increasing the growth rate from 0.19

percent in 1891-1921 to 1.22 percent per annum in 1921-1951. Thus from 1921 onwards India entered the transitional phase of demographic transition⁵¹.

Although several scholars were of the view that it would be very long before India enters, if at all the third phase of transition. However, after independence from the British, the death rate fell further with the expansion of medical services and facilities, especially pre and post -natal care, improvement in the supply of clean drinking water, spread of primary education, vast improvements in communication and the overall increase in gross domestic product and per capita income which improved general nutrition and health care. The creation of the Food Corporation of India (FCI) and the formulation of the public distribution system (PDS), eliminated famines, frequent in British India. In 1996 the death rate was 8.9 in comparison to 27.4 in 1941-50. The phenomenomenal success achieved in controlling the death rate, could not, however, is repeated when it came to arresting the growth rate of population. An effort to control the birth rate was made with the First five year plan itself. Although several scholars were of the view that it would be very long before India enters, if at all the third phase of transition⁵². However, there are clear indications that since the 1960's there have been a steady decline in the fertility of India. It would appear that attempts to fit the Indian case within the strait jacket of the transitional theory are rather naïve and simplistic. The logical flows as well as the dangers of applying this theory would become apparent on a closer examination of the specific details of the theory vis-à-vis the Indian

⁵¹ There are three stages of demographic transition. In the first stage, both birth rate and death rate are high and population remains more or less stable. In the second stage, birth rate remains high but death rate begins to decline rapidly, leading to high growth rate. In the third stage both birth and death rates are low and, therefore, low or no growth rate.

⁵² Davis, Kingsley, Population of India and Pakistan (Princeton University Press, 1951). P.84

situation. First, from the frame work of the transition theory in respect of both the sequence and tempo of change.

TABLE: 3.4 Trends in Vital Rates in India

Time	Crude	Crude death	Natural
period	birth rate	rate	growth rate
1901-1911	49.2	42.6	6.6
1911-1921	48.1	47.2	0.9
1921-1931	46.4	36.3	10.1
1931-1941	45.2	31.2	14
1941-1951	39.9	27.4	12.5
1951-1961	41.7	22.8	18.9
1961-1971	41.1	18.9	22.2
1971-1981	37.2	15	22.2
1981-1991	32.5	11.4	21.1
1991-2001	27.2	8.9	18.3

Source: For the period 1901-1941, Kingsley Davis, Population of India and Pakistan (Princeton University Press, 1951), p.85. For the period 1941-1971, Ministry of Health and Family Welfare, Pocket Book of Health Statistics of India, 1977, p.8. for the period, 1991-2001 Based on Sample Registration System Bulletin, October 2001.

According to the transition theory, pre 1921 India was characterized by the pretransitional stage, during which the population is supposed to be stationary. This was however, not strictly true. Even during the period 1871-1921 when both birth and death rates remained high, the population of India increased by nearly 20 percent, thus invalidating the zero growth hypotheses. This so called pre-transitional stage in India should have been followed by the early transitional stage during which the death rates decline while birth rates remained high or might have risen because of improved health of the child bearing population. Nothing of this kind is happened in India. While death rates indeed declined in the latter was relatively a smaller order. So it would appear that India jumped the historical sequence and entered the late transitional stage, skipping the early transitional stage⁵³. As regards the time component of the transition theory, it will be noted that in India, as in most developed countries around the world, the decline in mortality was achieved during a comparatively short time span. In the West, the whole process of declining mortality experienced since the industrial revolution was extended over a period of hundred years or more in case of France and Sweden. In case of Italy it took 90 years (with the exception of Japan among the developed countries), and was dependent in the early stages or the more or less direct effects of economic development. By contrast, in India the substantial decline in the death rate during the early part of the 20th century was accomplished within a decade or two and was the result of increasingly effective public health measures and improved medical knowledge.

TABLE: 3.5 Time Span of Demographic Transition in Selected Countries

Country	Beginning and End	Time
		span
Germany	1876-1965	90
Italy	1876-1965	90
USSR	1896-1965	70
France	1785-1970	185
China	1930-2000	70
Taiwan	1920-1990	70
Mexico	1920-2000	80

Source: J.C.Chesnais, laTransition Demographique, (PUF, Paris, 1986), p.301

⁵³ The Second Stage or the Transitional Stage is Sub divided into Early and Late Transitional phases.

Many scholars have pointed out that even among the Western countries there was no uniformity in the demographic trends. There cannot be any typical lengths of time which could trigger a fall in death or birth rates and usher in various phases of transition in a sequential fashion⁵⁴.

The main substantive and methodological reason why the theory of demographic transition cannot be applied to India and other developing countries is that while scientific truths and technology have universal validity, historical processes involving demographic, economic and cultural change cannot have an all-pervasive validity. There are essential differences between the conditions and the factors that determine the demographic experience of the West since the Industrial Revolution, and those conditions and factors that have and continue to influence the demographic changes in the developing world in modern times, especially after the Second World War. For instance, as noted earlier in the industrialized West, the decline in the death rates was protracted over a period of 100 years, and this decline took place during a period of continuous economic advance and did not depend during the early stages of progress in medical technology. By contrast, the substantial decline in the death rate in India was accompanied within a very short period and under the impact of modern preventive medicine. What is more, this decline in mortality was not dependent on any radical alteration in country's economic structure.

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⁵⁴ Hauser, P.M and Duncan, O.D, "Demography as a Body of Knowledge" in Hauser and Duncan ,eds., the study of population (The University of Chicago Press 1959). P.94

Similarly, quite different forces are likely to operate in the area of fertility reductions in developing countries like India. First the whole experience of the Western world in reducing fertility through family planning, late marriages etc., are available to India and other developing countries. Secondly, methods of contraception which were then unknown to the West, are being developed in India, and will be more acceptable to the people. Thirdly, quite novel and effective means of mass communication have brought to the people, both for urban elite and rural folk's, the necessary information and knowledge concerning family planning. Fourthly, Westernization has already exposed masses in the Third World to ideas which promote practices leading to fertility reduction (like late marriages and abortion etc.) finally government in most of the countries have evolved suitable policies designed to tackle their respective population problems. All these developments are likely to bring down the fertility levels more effectively and in less time than was experienced during the population cycles of Western countries⁵⁵.

In conclusion, it may be stated that the theory of demographic transition is of little help to those cultures and times where the causative factors influencing fertility and mortality are of a vastly different character. India has already surprised the world by reasserting its democratic values in the face of those who hold the theory that democracy cannot survive in an underdeveloped third world. India's future population trends may surprise on both the neo - Malthusian and the enthusiasts the theory of 'demographic transition'.

⁵⁵ Premi, M.K and Tyagi, R.P, as cited in note 1. p.27

CHAPTER 4

Demographic Transition Across The States Of India

4.1 Background:

The concept of 'demographic transition' has its origin in the works of some of the early demographers like Landry and Thompson, who, in the beginning of the 20th century, in their separate works had attempted to categories the countries of the world in different groups on the basis of vital rates⁵⁶. However, the credit for the development of 'demographic transition theory' goes to Frank W.Notestein. In 1945, Notestein presented the theory in the present form along with the explanation to the changes in the vital rates. It was mainly through his works that the groups came to be known as different stages of transition. Also known as 'vital revolution' the model is based on the actual demographic experience of Western countries, particularly in Europe⁵⁷. Demographic transition theory explains the transition on the demographic conditions from a stage of high birth and death rates to stage of low birth and death rates.

It has been suggested that the European countries have undergone four stages of transition in the demographic behavior. Prior to 1750, European countries were marked with very high birth and death rates (the latter usually fluctuated in response to the harvests and incidence of wars and epidemics. Thus, the period saw occasional shrink in the size of

⁵⁶ Bhende A.Asha and Tara, Kanitkar (1991), Principles of Population Studies, Himalayan Publishing House, Bombay. p.124.

⁵⁷ Premi, M.K and Tyagi, R.P (1982), Distribution and the Growth of Population in Economic and Social Commission for Asia and the Pacific, Bangkok, Thailand. Country monograph series No 10: India ,U.N, New York. p.27

population whenever death rates exceeded birth rates. However, in terms of its long term effects, the population size remained more or less stationary. This is the first stage in the model of demographic transition and is called as 'high stationary stage' or 'pre-transitional stage'. From the middle of the 18th century onwards, European countries witnessed a revolutionary change in the socio and economic conditions. With improvements in food supply and increase in political stability, death rate started declining. Since birth rate continued at high level, reduction in death rate brought about sudden expansion in population. These countries thus moved from the first stage of transition to the second stage⁵⁸ i.e., the 'early expanding stage'. Decline in death rate was further strengthened with improvement in sanitation, personal hygiene and increased medical knowledge. The birth rates started declining dramatically from some time in the middle of the 19th century, and with this the European population entered the 'late expanding stage'. Finally, by 1950s, the European countries reached the final stage also known as 'post transitional stage', where both birth and death rates became stable at low level. Growth in population once again became very slow. This stage is called the 'low stationary stage'. Currently, some of the European countries are experiencing decline in the size of the population with rise in the death rates due to the typical age structure⁵⁹.

The demographic transition first began in North West Europe, and from it gradually spread to the rest of Europe and North America. Australia and New Zeland, which have strong links with Europe in terms of the origin of its populating, also witnessed 'European type of transition'. In Asia, perhaps, the only countries which experienced a similar type of transition

58 The second stage is further, sub-divided into 'early expanding', and 'late expanding stage'.

⁵⁹ Hassan, Mohammad Izhar and Daspattnayak, Pritirekha (2004): Demographic Transition in India: some policy recommendations for the Demographically vulnerable states, Indian Journal of Regional Science, Vol 36, no 2. pp 84

are Japan and Singapore. The less developed parts of the world witnessed the onset of transition only in the middle of the 20th century.

4.2 Demographic Transition in India:

One striking similarity between Indian experience and those of other countries from the West, is the fact that mortality decline in the country has indeed preceded the fall in birth rate.

Table 4.1: Trends in vital rates in India (1901-2001)

	Crude	Crude death	Natural
year	birth rate	rate	growth rate
1901-1911	49.2	42.6	6.6
1911-1921	48.1	47.2	0.9
1921-1931	46.4	36.3	10.1
1931-1941	45.2	31.2	14
1941-1951	39.9	27.4	12.5
1951-1961	41.7	22.8	18.9
1961-1971	41.1	18.9	22.2
1971-1981	37.2	15	22.2
1981-1991	32.5	11.4	21.1
1991-2001	27.2	8.9	18.3

Source: For the period 1901-1941, Kingsley Davis, Population of India and Pakistan (Princeton University Press, 1951), p.85. For the period 1941-1971, Ministry of Health and Family Welfare, Pocket Book of Health Statistics of India, 1977, p.8. For the period, 1991-2001 Based on Sample Registration System Bulletin, October 2001.

However, as elsewhere in the less developed parts of the world, decline in the death rate in India was much faster than what had earlier happened in the West. Mortality rate in the country was very high until the second decade of the 20th century. The birth rate was also very high, and, as a result, the rate of growth in population remained very low. Death rate occasionally exceeded birth rate due to famine and epidemics, resulting in decline in population size. The decade 1911-1921, for instance, had witnessed a negative growth in population in India. Death rate started declining sometime in the late 1920s. With this, the Indian population entered the second stage of transition 'the early expanding stage', leading to the onset of moderately increasing growth rate in population. The decline in death rate was more rapid during the post independence period. Birth rate responded only after a time lag.

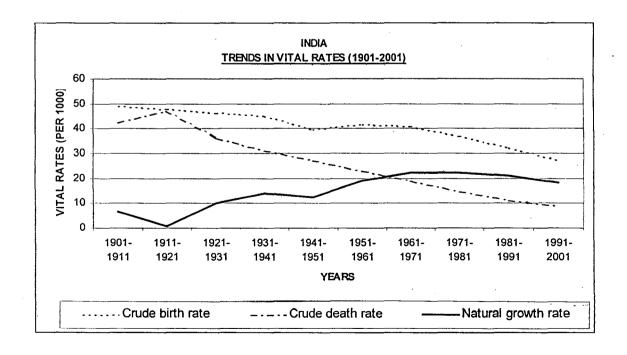


Table 4.2: Trends of Population Growth in India – 1901-2001

Census years	Populations in	Absolute	Percentage	Annual
	millions	Decadal change	Decadal change	exponential
				growth rate
1901	238.40	-	-	
1911	252.09	13.70	5.75	.56
1921	251.32	-0.77	-0.31	03
1931	278.98	27.66	11	1.04
1941	318.66	39.68	14.22	1.33
1951	361.09	42.42	13.31	1.25
1961	439.23	77.68	21.51	1.96
1971	548.16	108.92	24.80	2.20
1981	683.33	135.17	24.66	2.22
1991	846.30	162.97	23.85	2.14
2001	1027.01	180.71	21.35	1.93

Note: including Jammu and Kashmir.

Source: (1) census of India, series 1, general population tables, (2) Census of India, provisional population totals, 2001.

Trends in fertility levels in the country since 1901 show that there was only a marginal decline in birth rate upto 1951-61. A definite dent in the crude birth rate was noticed only after the close of 1950s. The annual rate of exponential growth in population, thus, increased from 1.04 percent during 1921-31 to 1.96 percent during 1951-1961. With the onset of decline in birth rate since early 1960s, India's population moved to the third stage-'the late expanding stage'. The death rate continued to decline, and though a part of the decline was compensated for by declining birth rate, the annual rate of growth in population further, rose to 2.20 percent during 1961-1971 and 2.26 percent during 1971-1981. By the close of the

1980s, the crude death rate in the country had reached level very close to 11 per thousand persons.

Table 4.3: Average Annual Exponential Growth rate for Major States 1981-2001

States	1981-1991	1991-2001	
Andhra Pradesh	1.73	1.30	
Assam	2.17	1.73	
Bihar	2.11	2.39	
Gujarat	1.92	2.03	
Haryana	2.42	2.47	
Karnataka	1.92	1.59	
Kerala	1.32	0.90	
Madhya Pradesh -	2.38	2.04	
Maharashtra	2.29	2.03	
Orissa	1.83	1.48	
Punjab	1.89	1.80	
Rajasthan	2.50	2.49	
Tamil Nadu	1.43	1.06	
Uttar Pradesh	2.27	2.27	
West Bengal	2.20	1.64	

Note: including Jammu and Kashmir

Source: (1) census of India, series 1, general population tables, Pt. 2- A (i)

(2) Census of India, provisional population totals, 2001.

By then decline in birth rate had also gathered momentum. The annual rate of growth in population recorded a deceleration, albeit marginal, during 1980s, for the first time since independence. Further, the 2001 census results have confirmed the view that the birth rate has

indeed begun a sharper decline as the annual growth rate has gone below 2 percent mark in the 1990s for the first time since many decades.

4.3 Regional Variations in the Process of Demographic Transition:

The national level scenario presented above, however, conceals, more than what it reveals. India is a vast country with a great amount of diversity from region to region in terms of its geography, history, social, economic and cultural attributes. On an average, the peninsular India has been far ahead of the rest of the country with respect to demographic transition. While the states like Kerala and Tamil Nadu appear to be on the verge of the completion of transition, the states of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh are still in the early expanding stage. The birth rates in these states are still over 30 per thousand persons, though death rates are not much different from those in other states. As a result of this, they continue to grow at annual rate of over 2 percent. Remarkably, when at the aggregate level India's population has revealed a deceleration for the second consecutive decade; these states hardly show any slackening in the pace of population growth.

Infact, different states in India are at different stages of demographic transition as the timing and pace of transition has varied from one to another. Though, there may be differences of opinion regarding the assignment of a particular stage to particular state, different states can be grouped under different categories on the basis of vital rates. In the present study, in order to examine the spatial dimension of the process of transition, 15 major states of India have been grouped under three categories roughly corresponding to three stages of demographic transition. These states taken together account for over 90 percent of India's population in the year 2001. The analysis is based on SRS data on vital rates

pertaining to the year 2001. As could be seen, there exists a very narrow range of interstate variation in the death rates. Consequently, the rate of natural increase among the states is primarily the function of the prevailing levels of fertility.

Table 4.4: Birth rates, Death rates and rate of Natural increase of major states in India (2001).

States	Birth rate	Death rate	Natural increase	
Group - 1				
Kerala	17.9	6.4	11.5	
Tamil Nadu	19.2	7.9	11.3	
Group-2				
Andhra Pradesh	21.3	8.2	13.1	
Assam	26.9	9.6	17.4	
Gujarat	25.2	7.5	17.7	
Haryana	26.9	7.5	19.4	
Karnataka	22.0	7.8	14.2	
Maharashtra	20.9	7.5	13.4	
Orissa	24.3	10.5	13.7	
Punjab	21.5	7.3	14.2	
West Bengal	20.6	7.0	13.6	
Group - 3				
Bihar	31.9	8.8	23.1	
Madhya Pradesh	31.2	10.2	21.0	
Rajasthan	31.2	8.4 22.8		
Uttar Pradesh	32.8	10.3	22.5	

Source: Based on Sample Registration System Bulletin, October 2001.

Therefore, the classification of the states is necessarily based on birth rates. So the Group-1 represents states with a crude birth rate of less then 20 per thousand persons, states figuring in Group-3, on the other hand, are characterized by birth rates of over 30 per thousand persons. Group-2 falls in between the two extremes. Interestingly, though interstate differences in death rates are very small, one can see a correspondence between mortality levels and the stage of transition attained. On an average, Group-3 states report the highest levels of death rates, while Group-1 is marked with the lowest death rates.

4.4 Causes for the Delay in Demographic Transition Across the States:

India is a vast country with a great amount of diversity from region to region in terms of its geography, history, social, economic and cultural attributes. It is, therefore, obvious that the demographic behavior will vary a great deal from one region to another. In the present study, in order to examine the spatial dimension of the process of transition, 15 major states of India have been grouped under three categories roughly corresponding to three stages of demographic transition. As could be seen, there exists a very narrow range of interstate variation in the death rates. Consequently, the rate of natural increase among the states is primarily the function of the prevailing levels of fertility. Therefore, the classification of the states is necessarily based on birth rates. So the Group-1 represents states with a crude birth rate of less then 20 per thousand persons, states figuring in Group-3, on the other hand, are characterized by birth rates of over 30 per thousand persons. Group-2 falls in between the two extremes. Further, in order to explain this disparity, birth rates of these major states have been compared with selected socio economic indicators.

The Southern states of Kerala and Tamil Nadu figure in Group-1. Accounting for a little less than 10 percent of India's population, these states have already reached the replacement level fertility, and the rate of natural growth in population is very close to 1.1 percent per annum. Further, in the state of Kerala we see that demographic transition can occur independent of economic development through 'social development'. As we can see that the important determinants of fertility transition in Kerala have been a very high rate of literacy. On the other hand, Group-3, represents the BIMARU states viz. Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh, is marked with a natural growth rate, which is twice as high as that in Group-1. With a population of over 35 percent of the Indian union, these states will continue to be the focus of attention for the planers and policy makers for quite some time in the future. As infant mortality rates are still very high among these states (higher than national average except Bihar), there is further scope for the decline in death rates in these states in coming years. This means that the rate of natural increase will continue to be around 2 percent if fertility levels do not show a sharper decline in coming future.

Further, these states fared badly in other socio economic indicators like Percapita income and couple protection rate. Though, knowledge of modern methods of contraception is nearly universal in all the states, the share of couple protection rate is very less. Madhya Pradesh and Rajasthan report a slightly better picture than Bihar and Uttar Pradesh. In Bihar it is hardly 25 percent and Uttar Pradesh the share is marginally ahead of Bihar. In literacy Bihar and Uttar Pradesh fared below 60 percent. Finally, Group-2, the largest in terms of its share in India's population, represents states with diverse social and economic background.

In this group, we have states like Punjab, Gujarat and Maharashtra, which rank very high in terms of the levels of development in the country.

Table 4.5: Socio-Economic Indicators Determining Birth Rates

STATES	BIRTH RATES	IMR	CPR	LITERACY	PCI	TFR
GROUP-1						
KERALA	17.9	14	39.6	90.92	10.63	1.8
TN	19.2	51	50.4	73.47	12.78	2.1
GROUP-2						
AP	21.3	65	52	61.11	10.06	2.8
ASSAM	26.9	75	15.2	64.28	6.16	3.3
GUJARAT	25.2	62	52.8	69.97	12.98	3.1
HARYANA	26.9	67	49.4	68.59	14.33	3.5
KARNATAKA	22	57	56.3	67.04	11.91	2.6
МН	20.9	48	49.3	77.21	14.34	2.8
ORISSA	24.3	96	37.6	63.31	5.19	3.1
PUNJAB	21.5	52	65.5	69.95	15.39	2.8
WB	20.6	51	32.2	69.22	9.78	
GROUP-3						
BIHAR	31.9	62	21.2	47.53	3.35	4.5
MP	31.2	87	45.9	64.11	7.20	4.1
RAJASTAN	31.2	79	36.1	61.03	7.93	4.2
UP	32.8	83	38	57.36	5.77	4.9

Source: Selected Socio Economic Indicators; Andhra Pradesh and other major states, 1990-91 and 2000-2001, Directorate of Economics and Statistics, Government of Andhra Pradesh, Hyderabad.

Further, they have moderately fared in other socio economic indicators. At the same time we also have Orissa and Assam, which occupy one of the lowest positions with regard to the levels of development. Further, while Maharashtra, West Bengal, Andhra Pradesh and Punjab are on the verge of moving into the next stage, Haryana and Gujarat appear to be still in the middle of the stage. Further, it is remarkable to note that Orissa, which ranks one of the lowest in the country with respect to the levels of development, appears at par with some of

the most developed states like Punjab, Maharashtra, Gujarat and Haryana in terms of fertility levels. Bose, a famous demographer has called these developed states except Haryana, as demographically progressive states. Remarkably, crude birth rate in Orissa is even lower than that of Gujarat and Haryana in spite of the fact that it ranks number one in infant mortality rate, even it did not fare well in other socio economic indicators like literacy and couple protection rate. The reason being that Orissa ranks very high in the country in terms of age at marriage for females⁶⁰. Orissa is yet another model of vital transition in the country.

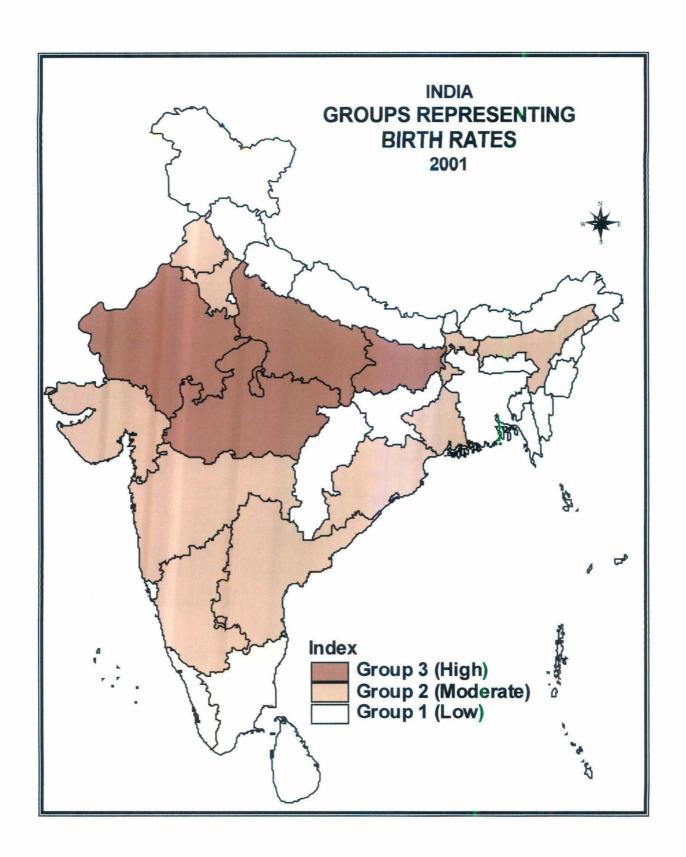
Though mortality rates are still high in the state, the state fares better than the BIMARU states in terms of various socio economic parameters that govern the fertility behavior. It may be noted here that the process of demographic transition in BIMARU states is taking place under vigorous governmental programmes in the absence of favorable social environment. Literacy rates are awfully low in these states. Infant mortality rates continue to be very high. Our experiences in Kerala and Tamil Nadu indicate that reduction in birth rates is mainly linked with the spread of literacy⁶¹. A low literacy rate means a low age at marriage, higher incidence of infant mortality, preference for a large family size and a very low demand for family planning measures.

The main substantive and methodological reason why the theory of demographic transition cannot be applied to India is that while scientific truths and technology have

⁶⁰ Hassan, Mohammad Izhar and Daspattnayak, Pritirekha (2004): Demographic Transition in India: some policy recommendations for the Demographically vulnerable states, Indian Journal of Regional Science, Vol 36, no 2. pp 88.

⁶¹ Bhat, P.N.M. and Irudaya, Rajan (1997): Demographic Transition Since Independence, in Zacharia, K. C. and Rajan, Irudaya (eds.), Demographic Transition and Consequences, Sage, New Delhi. p.71.

universal validity, historical processes involving demographic, economic and cultural change cannot have an all-pervasive validity. There are essential differences between the conditions and the factors that determine the demographic experience of the West since the Industrial Revolution, and those conditions and factors that have and continue to influence the demographic changes in the Developing World especially India with a wide demographic diversity. In conclusion, it may be stated that the theory of demographic transition is of little help to those cultures and times where the causative factors influencing fertility and mortality are of a vastly different character.



CHAPTER 5

Critical Review Of The Policy Initiatives And Responces With Regard To Demographic Transition And Population Explosion In India

While considering the population policy of India, it is necessary to concentrate on fertility as the single most important factors contributing to population change. Of the other two components of population change, mortality and migration, the latter does not contribute much in the context of the population policy of India⁶². Since India has the distinction of being the first country in the world to launch a world-wide family planning programme with full government support, it is of interest to study the historical evolution of her anti-natalist policy and to critically assess the programme undertaken in pursuance of this policy in the light of her achievement over the years. It is also necessary to take note of the shift in the approach and the emphasis, and to identify the gaps in the policy and the progress. Such an analysis of India's anti-natalist population policy has to be undertaken within the broads frame work of programmes for socio-economic development which India has undertaken from time to time.

5.1 Population Policy in India Prior to Independence:

Concerns about population growth in India began to be expressed late in the nineteenth century, ironically when there was little or no data to establish the fact of population growth. The 1891 Census Report, for example, invoked Malthus to contend that

⁶² Bhende A.Asha and Tara, Kanitkar, Principles of Population Studies, Himalayan Publishing House, Mumbai. p.453.

overpopulation was responsible for poverty in India ⁶³. This was then repeated in subsequent censuses also when, in the India subcontinent, population growth actually dates back to the 1920s and makes its appearance only on comparison of the censuses of 1921 and 1931.

Efforts towards an official policy and programme were first made in the early decades of the twentieth century. Close to the dawn of Independence, the Indian National Congress established the National Planning Committee (NPC) in 1938, under the chairmanship of Jawaharlal Nehru, to outline the shape of India's tryst with destiny and to contour it. One of the sub-committees, chaired by Col. Sokhey, was devoted to the question of health policy. The Sub-committee on Health also considered, quite naturally, the question of population and maternal and child health. At a time when no nation in the world sponsored a family-planning programme. Laksmibai Rajwade forcefully argued the case for the inclusion of 'birth control, provision of goods, instructions, demonstrations and consultations' in maternal and child health services⁶⁴.

The Sub-Committee also favored birth control in the interests of the development of the nation, thus linking individual and family behavior to national growth and indeed the teleology of progress and welfare. The nation state was conceived of as a body composed of physically and morally healthy citizens to which all must contribute⁶⁵. This could be achieved through reproductive prudence, harnessing bodies not just for the economy but for a sublime, and sublimating, nation state. Thus the Sub-Committee on Population, for example,

⁶³ Banerji, D. (1985), 'Health and Family planning Services in India: An Epidemiological, Socio-Cultural and Political Analysis and a Perspective, Lok Prakash, New Delhi. P.174.

⁶⁴ National Planning Committee (1948), Report of the sub-committee on national healt, Vora, Bombay.p.133

⁶⁵ Zachariah, Benjamin (2001), 'Uses of Scientific Argument: The case of "Development" in India. C.1930-1950', Economic and Political Weekly, 36:39.p.32.

which called for birth control on eugenic grounds and on the grounds of the health of women, called for 'self-control' along with birth control. It also recommended inter-caste and interfaith marriages 'for eugenic and other social reasons' 66.

The fact that ideas of birth control was accepted with such ease, testifies to the great influence, indeed the popularity of eugenic ideas among Indian elites. But the fact that in India, unlike in England, there were no legal proscriptions on birth control helped matters considerably. Indeed as the Census Commissioner, appreciating the work of the Neo-Malthusian League in Madras, wrote in 1932:

A definite movement towards artificial birth control appears to be taking place, perhaps less hampered by misplaced prudery than in some countries which claim to be more civilized; thus not only is artificial control publicly advocated by a number of medical writers, but Madras can boast of a Neo-Malthusian League, with two Maharajas, three High Court judges and four or five men very prominent in public life as its sponsors⁶⁷.

In the unanimity that prevailed about the need for population control, two remarkable men, however, stand out sharply—Mahatma Gandhi and Periyar. Gandhi was opposed to birth control because he believed that society would be enervated, weakened, by birth control. 'The sex urge', he wrote, 'is a fine and noble thing...but it is meant only for the act

⁶⁶ National Planning Committee (1948), Report of the sub-committee on population, Vora, Bombay.p.208

⁶⁷Srinivasan, K (1995), Regulating Reproduction in India's Population: Efforts, Results and Recommendations, Sage, New Delhi.p.16.

of creation. Any other use of it is a sin against God and humanity⁶⁸. He dismissed Margaret Sanger's arguments for contraception on the grounds that it increased self-indulgence. Thus he wrote:

It is certain that excessive indulgence increases the rate of infant mortality. People in the West limit births, not with any religious idea, to be sure, but for reasons of health and for fear of having to bring up too many children. For us such is not enough We in India lay great claim to being more religious in our lives than people in the West, and yet we ignore the restraints imposed by religion. Hence it is that many parents, regardless of both dharma and worldly considerations remain steeped in carnal pleasures and bring forth children regardless of circumstances. The result, whether we want them or not, diseased children are born and dies in their infancy⁶⁹.

Periyar's views were strikingly at variance. He rejected eugenic and neo-Malthusian arguments on entirely rational grounds, but equally strongly argued for birth control for women, to enable them to control their own lives, to break servitude to patriarchy, to caste, and indeed the family. Thus he wrote:

There is a fundamental difference between our reasons for the necessity of contraception and those of others. That is, we say contraception is essential for women to be free and autonomous. They say it is essential for women's health, national economy and to prevent fragmentation and destruction of family property. First of all, whether a woman needs birth

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⁶⁸ Ibid.p.18.

⁶⁹ Gandhi, M.K. (1920), The Collected Works of Mahatma Gandhi, Vol.16, Publications Division, New Delhi.p.469.

control or not should be entirely a woman's decision. Secondly, the objective of birth control is not to control the growing population or to advance the economy, but to create an environment for women to have rights and decision making power⁷⁰.

In other words, birth control is not posited as a woman's right as a citizen but as a means to either national development or the reduction of extraordinarily high maternal mortality rates. It is nevertheless important to note that women's right to contraception in India was not an outcome of protracted battles on the part of women as in the countries of the West. This was no doubt due to the fact that a neo-Malthusian concern with overpopulation as the cause of India's poverty was overwhelmingly accepted among influential sections of the population, as indeed they were by India's colonial masters.

5.3 Population Policy in India after Independence:

The First Five-Year Plan (1951-56)

The famous Health Survey and Development Committee, eponymous and commonly known as the Bhore Committee, was established in 1943 to provide a blueprint for the development of health services in the country. The perspective of the Committee could arguably be described as the forerunner of the 'Health for All' strategy that was to crystallize around the globe several decades later⁷¹. Health was recognized as a right of all citizens, irrespective of their ability to pay. The health structure recommended was to have a rural

Anandhi, S. (2000), 'Reproductive Bodies and Regulated Sexuality: Birth Control Debates in Early Twentieth Century Tamil Nadir', in Mary E. John and Janaki Nair (eds), A Question of Scilence? The Sexual Economies of Modern India, Kali for Women, New Delhi.p.15

⁷¹ Srinivasan, K (1995), Regulating Reproduction in India's Population: Efforts, Results and Recommendations, Sage, New Delhi.p.20

focus and a preventive bias, in keeping with epidemiological priorities. Finally, the Committee called for a health structure essentially dependent on paramedical personnel, guided and led by a 'social physician'.

These bold initiatives notwithstanding, the Bhore Committee trod no new ground when it came to family planning. Noting that declines in birth rates had not followed declines in death rates, the Committee concluded that India was indeed confronted with a population problem that could have grave consequences as 'uncontrolled growth of population would outstrip the productive capacity of the country, 72. The Committee recommended assistance by the state to the birth control movement, both on the grounds of the health of mothers and on economic grounds, in the interests of the individual and the community. Although the newly independent GOI accepted the recommendations of the Bhore Committee, this was not reflected in its commitments during the following years. Indeed allocation for health was far below that recommended by the Bhore committee and continued to decline over the years. Despite the Bhore Committee's recommendations to evolve a health structure with a rural focus, largely dependent on paramedical personnel, what emerged—indeed was assiduously created—in India was a doctor-based, urban biased health care system. These were of course not simply fortuitous developments, but reflected political decisions of priorities set and of funds allocated. These distortions commenced in the First Five-Year Plan itself. On the question of population, however, the First Plan was more thoughtful and cautious:

It is not possible to judge whether or not an increasing population is favorable or unfavorable to development. In the past, periods of rapid economic development have also

⁷² Government of India, (1946), Report of the Health Survey and Development Committee, Vol.2, GOI Press, New Delhi. P.483.

been periods of rapidly increasing population, but whether or not there is any causal relationship between the two or how it works, one cannot say with any certainty. In periods of rapid development and changing techniques, it is questionable whether the concept of 'optimum' population can have any precise meaning⁷³.

The official programme for family planning was launched in 1952 with a modest budget of Rs 6.5 millions. Thus India has the distinction of being the first country in the worked to have an official family planning policy and programme. The principal measures envisaged were:

- (a) the provision in government hospitals and health centers of providing advice on methods of family planning;
- (b) field experiments on different methods of family planning for determining their acceptability and effectiveness; and
- (c) the development of suitable procedures to educate the people on family-planning methods⁷⁴.

This Clinic Approach was largely passive, based on the presumption that there existed sufficient unmet demands for family-planning services. That the planners were not quite

⁷³ GOI ,(Planning Commission)(1952), First Five Year Plan, GOI Press, New Delhi. P.18.

⁷⁴ Bose, Ashish and P.B. Desai (eds) (1974), Studies in the Social Dynamics of Primary Health Care, Hindustan Publishing, Delhi.p.184-92.

convinced of the efficacy of this approach was also indicated by the fact that the programme was also meant to educate, not inform people on family-planning methods⁷⁵.

During the period of the First Plan, 21 rural and 126 urban family planning clinics were established. But India's family planning programme was already receiving international attention. Private international agencies rushed in with funds, consultants, and technical advice. The Ford Foundation granted \$9 million⁷⁶. The Ford Foundation's involvement, it is stated, 'firmly established the Foundation in India as an innovator working in the threshold of programme development in the population arena'. The Ford Foundation helped create two of India's major institutions involved in the family-planning programme, namely, the Central Family Planning Institute, later rechristened the National Institute of Family Planning (NIFP), and the National Institute for Health Administration and Education (NIHAE)⁷⁷.

It is not possible to understand the Indian family-planning programme without reference to the international actors who set the agenda, primarily in the United States (US). Indeed it has been argued that 'a small group of men and women' in the US, many of them bankrolled by the Rockefeller Foundation, gave shape to the global population movement. The post-war population control movement comprised a closely-knit group of public and private organizations including the Rockefeller Foundation, the Population Council, the Ford Foundation, and the USAID, along with its counterparts in other Western countries.

⁷⁵ Srinivasan, K (1995), Regulating Reproduction in India's Population: Efforts, Results and Recommendations, Sage, New Delhi.p.22.

⁷⁶ Mass, Bonnie (1974), An Historical Sketch of the American Population Control Movement, International Journal of Health Services, 4:4. p.651-72

⁷⁷ Minkler, Meredith (1977), Consultants or Colleagues: the Role of U.S Population Advisors in India, Population and Development Review, 3:4 (December). P.404.

Multilateral institutions, which followed the agenda set by these institutions at a later stage, included the United Nations Fund for Population Activities (UNFPA) and the World Bank⁷⁸. During this period was launched the very influential Khanna Study in Punjab, on which more later.

The Second Five-Year Plan (1956-60):

What seems amazing in hindsight is the utter confidence underlying many of the assumptions in the Plan, although it admitted that it would change, 'population pressure', never appropriately defined, would be brought down, incomes would increase and a brave new work would dawn with the adoption of birth control technologies. What is singularly curious is the complete dissociation from the determinants of population: health and survival, food, employment, incomes and so on. It was assumed that population was the major stumbling block to economic development; just as it was assumed that an irrational population simply did not know what was in its own interests⁷⁹. What was equally interesting is that another country, comparable to India, was also embarking upon development, including provision of health and family-planning services at this time. China attempted to do this through land reforms, provision of food security, universal health services, employment, and investment in human development⁸⁰.

Perusing these developments over the first two Plan periods, there appears to be a clear shift of perspective regarding the issue of the relationship between socio-economic and

⁷⁸ Srinivasan, K.(1995), as sited in note 13. p.24.

⁷⁹ Rao, Mohan(2004), From Population Control To Reproductive Health, Malthusian Arithmetic, Sage

publication, New Delhi.p.28.

80 Dreze, Jean and Amartya Sen (1989), Hunger and Public Action, Oxford University Press, New Delhi. P.45.

demographic changes. While the First Plan notes, quite correctly, that in the past there had been periods when population growth was accompanied by economic development, and that it was not always possible to determine the relationship between these phenomena, the perspective was evidently one that envisaged demographic changes as dependent variables, responding to wide-ranging shifts in social structural factors. It did not indicate, therefore, that attempts at control and manipulation of fertility alone would be either necessary or feasible. That is to say, there was recognition of the fact that the issue was complex and had wider determinants⁸¹. The Second Plan, on the other hand, appeared to indicate that population growth was an independent variable and economic development the dependent one, overturning a perspective that emerged out of years of demographic research.

The Third Five Year Plan (1961-65)

In order to access the progress that had been made since the Bhore committee, the GOI appointed the Heath Survey and Planning Committee, Popularly referred to as the Mudaliar Committee. The Report of the Committee, published by the Ministry of Health in 1961, observed that the recommendations of the Bhore Committee were 'Faltering and half-hearted' in relation to family planning. It recommended that 'if the family planning movement is to produce early and effective results, it has to be in the nature of a mass movement⁸². Further to ensure a fall in the birth rate of the country during the next five years, the committee suggested measures which include the following:

(a) graded tax penalties from the fourth confinement onwards;

⁸¹ Rao, Mohan(2004), From Population Control To Reproductive Health, Malthusian Arithmetic, Sage publication, New Delhi.p.30.

⁸² Government Of India (1961a), Report of the Health Survey and Planning Committee, GOI Press, New Delhi.p.405.

- (b) removal of income tax disadvantages for single persons;
 - (c) withdrawal of maternity benefits for those refusing to accept family limitation;
 - (d) limitation of certain government services such as free education, to three children per family;
 - (e) enlisting the participation of government employees in promoting family planning, and
 - (f) abortion for socio-economic reasons.

The Third plan document, reflecting the recommendations of the Mudaliar committee, accepted 'very high priority to family planning', The emphasis on the family-planning programme as the centre of planned development received impetus from the results of the 1961 census which showed a higher rate of population growth than expected. It resulted in the burgeoning of the programme. As against an outlay of Rs. 6.5 million in the First plan, in the third plan the programme was allotted Rs. 0.5 billion

The recognized programme was to emphasise extension education, greater availability of contraceptive supplies, and less dependence on the traditional clinical approach. The main programme goal was the reduction of the country's birth rate from more than 40 per 1000 to 25 per 1000, possibly by 1973. To achieve this, the operational goals were defined as achieving, for 90 per cent of the married adult population, three basis conditions, namely:

⁸³ Government Of India, (Planning Commission) (1961b), The Third Five-Year Plan, GOI Press New Delhi.p.675.

- (a) group acceptance of the small family size norm;
- (b) personal knowledge of specific birth control methods; and
- (c) easy availability of supplies and services⁸⁴.

The result was a massive expansion of the programme organization. This included the creation of the posts of Parivar Kalyan Sahayaks and Sahayikas, the addition of auxiliary nurse midwives (ANMs) and male family-planning field workers, and an additional women doctor, exclusively for family planning, a block extension educator at the primary health centre level. Full fledged family-planning bureaus were established at the state and at the centre were concurrently strengthened⁸⁵.

Further, steps were being initiated to implement the recognized programme, the UN Advisory Mission visited India in 1965 and suggested the launch of a 'reinforced programme' parallel to the former. Three courses of action were recommended under the reinforced programme, namely, an energetic loop (IUCD) programme, an intensified sterilization programmes, and the promotion of the use of condoms through wider availability via commercial channels. These recommendations shifted the focus from the reorganized programme with an extension education approach, to a forceful loop programme'. Further, with regard to this programme, the estimate committee of the

⁸⁴ Raina, B.L (1988), Population Policy, B.R Publishing, Delhi.p.60.

⁸⁵ Rao, Mohan(2004), From Population Control To Reproductive Health, Malthusian Arithmetic, Sage publication, New Delhi.p.33.

Loksabha in their Thirteenth Report on the Family Planning Programme (1971-72) observed:

The committee regrets to note that the IUCD programme was formulated and implemented on the advice of foreign advisers with out analyzing its pros and cons and without exercising an independent judgment on its suitability in Indian conditions and without establishing ay proper infrastructure for the same. The committee suggested that a critical evaluation of the foreign assistance rendered so far may be undertaken and that in the light of past experience foreign assistance be accepted only when necessary⁸⁶.

The Fourth Five Year Plan (1968-67)

The fourth five year plan document noted that the problem of population had, in fact, grown even more acute⁸⁷. The birth rate, it noted, 'appears to have remained unchanged around 41 per thousand during the grater part of the part two decades. The plan according held that the programme of family planning had assumed national importance warranting the highest priority. The fourth plan proposed to set up the target of sterilizations and IUCD insertions and to widen the acceptance of oral and injectable contraceptives. Further, for intensifying the family programme, new schemes like the post-partum programme, supply of surgical equipments to hospitals, intensive district and select area programmes, supply of vehicle at primary health centers have been included for implementation during the fourth plan⁸⁸.

⁸⁷Rao, Mohan(2004), as cited in note 24.p.38.

⁸⁶ Bose, Ashish (1988), From Population to People, Vol. 1, B.R Publishing, New Delhi p.42.

⁸⁸ Government Of India, (Planning Commission) (1969), The Fourth Five-Year Plan, GOI Press New Delhi.p.391.

Thus, the pace of the programme was thus substantially accelerated; a sterilization target of 14.9 million was fixed⁸⁹. Given the failure of the IUCD approach, vasectomy came to occupy, centre stage in the family planning programme several ingenious initiatives were undertaken.

Further, the Department of Health and Family Planning encouraged the camp approach, which proved to be success in Mumbai's Victoria Terminal and in the District of Ernakulam in Kerala. Thus, the state of Gujarat, and the associations such as Chamber of Commerce and the Rotary Club competed with each other to assist in organizing vasectomy camps. By 1972-73, most states were holding camps. At a camp is Gorakpur in Uttar Pradesh in 1972, 11 men who had undergone vasectomy died of tetanus. By 1974, despite statements in favour of suitably modified camp approach, the Department of Health and Family Planning had abandoned its emphasis on the camp approach. This was party a result of the disasters such as that which took place at Gorakhpur and the subsequent setback. It was also partly due to the problems experienced in sustaining the camp approach and the financial stringency of the period⁹⁰.

During the fourth plan, the Medical Termination of Pregnancy (MTP) Act was passed, the All-India Hospital Post-Partum programme was initiated and the GOI, in collaboration with the USAID launched the Intensive District programme. Thus, this period witnessed, very concerted efforts to consolidate the family planning programme.

⁸⁹ Raina, B.L (1988), Population Policy, B.R Publishing, Delhi.p.65.

⁹⁰ Rao, Mohan(2004), as cited in note 24.p.40.

Nevertheless, towards the end of this period, it was increasingly being realized that the approach hitherto adopted had not yielded commensurate returns, indeed that the programme had reached a cold dead end.

Further, at the World Population Conference in Bucharest in 1974, the Indian Minister of Health and Family Palming stated that development is the best contraceptive. Reflecting this new perspective, he observed:

we are quite clear that fertility levels can be effectively lowered only if family planning becomes an integral part of a broader strategy to deal with the problems of poverty and underdevelopment — population policy is thus one of the several vital instruments for securing comprehensive social development, and it cannot be effective unless certain concomitant economic policies and social programmes succeed in changing the basic determinants of fertility ⁹¹.

Fifth Five Year Plan (1975-80)

The fifth plan noted the inability to obtain the reduction in birth rate targeted in the fourth plan and aimed at the reduction of the birth rate by a more realistic five points by the end of the fifth plan period, that is, to a level of 30 per 1000 population. To this end, 'the programme for family welfare planning' was to 'continue to be accorded the same high

⁹¹ Singh, Karan (1974), Statement on World Population Conference, Bucharest, August !974, GOI Press New Delhi.p.1.

priority in the fifth plan as it occupied in the fourth⁹². The strategy adopted was to increasingly integrated family planning services with those of heath, MCH and nutrition.

Further, the fifth plan, in additions to laying targets for physical infrastructure, laid down a target of 18 million sterilization, 5.9 million IUCD insertions, and 8.8 million conventional contraceptive users. In order it implement the programme 'as a truly family welfare programme' it was envisaged that the extension of the scope and coverage of immunization and nutritional prophylaxis would reduce the infant mortality rate and improve the nutritional status of children in the 0-6 age group.

The wide spread political disillusionment of the time partially crystallizing around a charismatic in the opposition, Jayaprakash Narayan, eventually led to the proclamation of emergency in 1975⁹³. The emergency facilitated the passage of the National Population Policy of April 1975. The policy announced contained a comprehensive range of anti-natalist measures. The measures specified to achieve the desired birth rate of 25 per 1000 by 1984 include the following:

- (a) Raising the legal minimum age at marriage to 18 and 21 respectively for females and males;
- (b) Increased monetary incentives for sterilizations;
- (c) Offering 'group incentives' at the level of the village and district;
- (d) Introducing 'population values' in the educational system;

⁹²Government Of India, (Planning Commission) (1974), The Fifth Five-Year Plan, GOI Press New Delhi.p.240.

⁹³ Rao, Mohan(2004), as cited in note 24.p.45.

- (e) Drawing all government department into the 'motivation of citizens to adopt responsible reproductive behavior' and
- (f) Special measures were proposed to raise female educational levels and organize child nutrition in an attempt to stimulate demand for family planning⁹⁴.

Family Planning was included in the twenty-point programme devised by Prime Minister Indira Gandhi and the Fine Point Programme of her son, and heir apparent, Sanjay Gandhi. It can be noted that, political backing at the highest levels was forthcoming for the adoption of a policy which implicitly compromised citizenship with fertility, which advanced compulsory sterilizations and the use of administrative machinery to achieve what had hitherto been though of as 'unthinkable'95.

By, December 1976, never in the history of the family planning programme have the states achieved the national sterilization target manifold. It ranges from 400 percent to more than 100 per cent in an overwhelming majority of the states and that too in Eight months. The high percentage in the sterilization was because the 'Sanjay effect – a combination of coercion, cruelty, corruption and cooked figures for 7 million forced sterilization'.

⁹⁴ Gulhati, Ravi (1974), India's Population Policy: History and Future, World Bank Staff Working Paper

No. 265, World Bank, Washington.

95 Minkler, Meredith (1997), Thinking The Unthinkable: The Prospect of Compulsory Sterlisation in India, International Journal of Health Services, 7: 2.

Later, in the election of 1977, the congress party was swept out of power largely due to what came to be described as the 'excesses' committed in the name of family planning⁹⁶. The new government also committed itself to checking population growth. The new government strongly argued the case for a voluntary programme emphasizing socio-economic development. In sum, the fifth plan period witnessed the failure of yet another approach to population control, that of coercion. We see the same shifts of programme strategy and emphasis that were also noted in the earlier plan periods. And yet the goals remained largely elusive. Indeed towards the end of this period, it was acknowledged that the programme has received set back⁹⁷.

The Sixth Five-Year Plan (1980-85)

Despite accepting the recommendations of the working group on population policy and being influenced by the ICMR-ICSSR report which observed that health had not been integrated with overall development and thus that the family planning programme was for from being a success; the sixth plan did not reflect the fundamental thrust of these policy documents. Noting the 'reverses' suffered by the programme, the sixth plan document, set out to arrest the trend'. The plan also acknowledged that 'high morbidity and mortality rates' were responsible for the decision for more children. The aim was, therefore, 'to being down their rates through improvement of health and nutrition status through various extension

⁹⁶ Davidson, r.g. (1979), 'Political Will and Family Planning: The Implications of India's Emergency Experience', Population and Development Review, 5: 1(March).

⁹⁷ Government Of India, (Planning Commission) (1980), The Sixth Five-Year Plan, GOI Press New Delhi.p.276.

programmes of immunization, prophylaxis, supplementary nutrition and health care services, 98.

The outlay on family planning was again increased and amounted to Rs. 10.1 billion while health destined Rs. 18.2 billion. The strengthening of rural health service was undertaken under the Minimum Needs Programme. And in 1983, the government announced to first health policy since Independence. It is obvious that a system that announces a health policy 35 years after Independence could not have placed much emphasis on the health of the population. Nevertheless, what was so striking about this policy statement was the base with which the population itself was blamed for the poor state of health in an classic case of victim blaming. The first fault of the people was, of course, their reproductive excesses. As it that was not enough, they are also blamed for poverty and ignorance. Not at fault was the abysmally low allocation made to health, the fact that of this law allocation, a large population was towards medical collages and hospitals, that of the remaining funds for public health, the malaria eradication programme concerned a large proportion so that there were actually no funds left for the primary health care system ⁹⁹.

The Seventh Five-Year Plan (1985-90)

Reviewing the programme of the family planning programme in the preceding plan period, the seventh plan document observed that achievement fell short of targets in all

⁹⁹ Ibid, p.55.

⁹⁸ Rao, Mohan(2004), as cited in note 24.p.54.

components of the programme¹⁰⁰. It was noted that here had been an inability to meet targets both in infrastructure development and in the control of communicable diseases. And further, that the performance of the MCH component of the programme, in immunization and antenatal care was for from satisfactory. The short falls were attributed to, among other factors, back of infrastructure facilities to, among other factors, lack of infrastructure facilities, the persistently high infant morality rates and high levels of maternal and child morality¹⁰¹.

In view of the actual performance in the sixth plan period, the goal of reaching a net reproductive rate of one was pushed forward from 2006 to 2011. The seventh plan set forth the following targets to be reached by 1990:

- (a) An effective couple protection rate (CPR) of 42 percent,
- (b) A crude birth rate (CBR) of 29.1,
- (c) A crude death rate (CDR) of 10.4
- (d) An infant mortality of 90 per 1000 line births,
- (e) Universal immunization of children, and
- (f) Antenatal care for 75 percent of all pregnant women.

Further, family planning and health obtained an out lay of Rs. 32.56 billion and Rs. 33.92 billion respectively out of a total outlay of Rs. 1800 billion. The year 1986 also witnessed the

Government Of India, (Planning Commission) (1985), The Seventh Five-Year Plan, GOI Press New Delhi.p.321.

¹⁰¹ ibid,p.322.

communication of a new population policy. The policy statement enunciates the government's commitment to promote a voluntary, two-child norm. To this end, the policy committed itself to bring down morbidity and mortality rates, in particular early childhood mortality, through strengthened health services, enforcement of the law relating to age at marriage, health and population education, educational and employment facilities for women and so on. Incentives and the policy of leasing central assistance to states were to be continued¹⁰².

Over the period of the seventh plan the programme was pursued with renewed vigor, concentrating on one of the most vulnerable sections of India's population – poor women. As Bose observed, the family welfare programmes was 'perceived as the family planning programme, which in effect is the same steriisation programme, which in term means the female sterilization programme, which basically means the laparoscopic method of sterilization.

However, the Mid-term appraisal of the plan acknowledged that of the total decline in the birth rate during the period 1969-81, 47 percent of the reduction could be attributed to a rise in the age at marriage, a change in the age structure of the population, and other factors. That is to say, factors other than those related to the family planning programme contributed to a substantially large proportion of the decline in the birth rate over this period. The

¹⁰²Raina, B.L (1988), as cite in note 28,p.78.

document concluded that fertility behavior depends as much more than access to family planning services' 103.

Towards the end of the seventh plan, as indeed in the past at the end of the Third and Fourth Plans, It was increasingly, grudgingly accepted that the family planning programme had not succeeded. But there were winds of change that were blowing in the larges economy that were to have profound consequences to health and family planning, indeed to the way India had been imagined. A new direction was given to the Indian economy, in the 1990 with the initiation of the stabilization – structural adjustment programme under the aegis of the World Bank

The Eighth Five-Year Plan (1992-97)

The prime minister in his foreword to the Eight plan wrote:

The Eight plan is being launched at a time of movement's changes in the world and in India. The international political and economic order us being restructured everyday, and as the 20^{th} century draws to a close, many of it distinguishing philosophies and features have also been swept away. In this changing turbulent world, our policies must also deal with changing realities. Our basic policies have stood us I very good stead, and now provide us an opportunity to respond with flexibility to the new situation, 104.

Government Of India, (Planning Commission) (1992), The Eight Five-Year Plan, GOI Press New Delhi.p.1.

¹⁰³ Government Of India, (Planning Commission) (n.d.), The Seventh Five-Year Plan 1985-90: Mid-Term Appraisal,, GOI Press New Delhi.p.194.

The plan noted that while the seventh plan objectives of achieving a CPR of 42 percent had been met, there had not been a matching decline in birth rate. The plan also noted that 'containment of population is not merely a function of couple protection or contraception, but is directly corelated with female literacy, age at marriage of girls, status of women in the community, the IMR, quality and out reach of health and family planning services and other socio-economic parameters¹⁰⁵. Further, for the first time, no centrally fixed targets were specified. This was not, of course, to mean that targets did not exist for the plan. The target reduction in the birth rate will be the basis of designing, implementing and monitoring the programme against the current method of CPR. While the centre may prepare broad guidelines, suitable parameter would be designed by the individual state for this purpose. In other worlds, that the states would now set their own targets, while the center would maintain the need for the targeted reduction in the birth rate, clearly a case of having the cake and eating it too. The operational strategy was spelt as area-specific, micro planning, 'linking population control with the programmes of, social security, access to health services and mother and childcare.

Further, in 1994, India committed itself to the RCH approach at Cairo. But in preparation for the Cairo conference the central government unveiled a Draft National Population Policy that raised a storm together with Swaminathan Committee report, the World Bank also came out with a policy document that was to profoundly influence developments in the country¹⁰⁶. One positive out come of the Cairo conference was the

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105 ibid.:p.333

¹⁰⁶ Srinivasan, K (1995), Regulating Reproduction in India's Population: Efforts, Results and Recommendations, Sage, New Delhi.p.60.

removal, formally, of method specific targets in April 1995 on an experimental basis from Kerala and Tamil Nadu and from 17 districts in other states. In April 1996, targets were removed from all over the country, although influential plainness bemoaned that this had been done without a proper appraisal of how the target free system worked in practice.

The Ninth Five Year Plan (1997-2002)

Noting once again the inability to make a dent in the health scenario, the Ninth Plan document draw attention to the marked disparities in health between states, and the sub optimal functioning of PHCs due to a number of factors, including lack of infrastructure, critical lack of manpower, of equipment and drugs and so on. The plan stated that reduction in the population growth rate has been recognized as one of the priority objective during the ninth plan period. It observed that 'the current high population growth rate is due to (a) the large size of the population in the reproductive age group; (b) higher fertility due to unmet need for contraception; (c) high wanted fertility due to prevailing high IMR¹⁰⁷.

During this period, two important policy documents were announced, first, the National Population Policy, significantly announced before the second, the National Health Policy. The national population policy stated that 'in the context of the very large number of poor in the country, it would be dificult to conceive of an exclusive government mechanism to provide health services to this category and that in principle this policy welcomes the participates of the private sector in all areas of heath activities while also encouraging the

¹⁰⁷ Government Of India, (Planning Commission) (1997), The Ninth Five-Year Plan, GOI Press New Delhi.p,151.

setting up of private insurance investments and strongly encourages a what could be called heath tourism, with domestic health facilities in the secondary and tertiary sectors providing services on a payment basis to service seekers from oversees and indeed that these, private, facilities will be encouraged, give credence to the criticism that the policy legitimates privatization¹⁰⁸.

We thus find, at the end of the Ninth plan, a virtual tug-of-war with regard to the population policy. While the centre is for new, committed to a target free approach, the states, some of whom have inaugurated populations policies of their own significantly none of them with health policies¹⁰⁹. Further the states have continued to rely on targets and at the policy level, announced programmes replete with elements of coersion. At the same time, there are moves a head at the centre to bring in an explicit commitment to targets and indeed a compulsory two child norm. With health services in shambles, there are also moves to bring injectable contraceptives. In short, the pull of the neo-Malthusian tides seems to be irresistible.

¹⁰⁸ Jan Swasthya Abhiyan (2001), National Health Policy 2001: Legitimising Privatisation, Delhi Science

¹⁰⁹ Rao, Mohan(2004), as cited in note 24.p.70.

CHAPRER 6

Summary And Conclusions

It may be noted that the theory of demographic transition was based on the historical experience of the countries of northern and western Europe since 1650 and was enumerated to explain the rapid population increase in many western developed nations. However, the transition theorists asserts that this theory has universal application¹¹⁰. It would appear that attempts to fit the Indian case within the strait jacket of the transitional theory are rather naive and simplistic. The logical flows as well as the dangers of applying this theory would become apparent on a closer examination of the specific details of the theory vis-à-vis the Indian situation From the frame work of the transition theory in respect of both the sequence and tempo of change.

According to the transition theory, pre 1921 India was characterized by the pretransitional stage, during which the population is supposed to be stationary. This was however, not strictly true. Even during the period 1871-1921 when both birth and death rates remained high, the population of India increased by nearly 20 percent, thus invalidating the zero growth hypotheses. This so called pre-transitional stage in India should have been followed by the early transitional stage during which the death rates decline while birth rates remained high or might have risen because of improved health of the child bearing population. Nothing of this kind is happened in India. While death rates indeed declined in the latter was relatively a smaller order. So it would appear that India jumped the historical

¹¹⁰ Premi, M.K and Tyagi, R.P, as cited in note 1, p.26

sequence and entered the late transitional stage, skipping the early transitional stage ¹¹¹. As regards the time component of the transition theory, it will be noted that in India, as in most developed countries around the world, the decline in mortality was achieved during a comparatively short time span. In the West, the whole process of declining mortality experienced since the industrial revolution was extended over a period of hundred years or more in case of France and Sweden. In case of Italy it took 90 years (with the exception of Japan among the developed countries), and was dependent in the early stages or the more or less direct effects of economic development. By contrast, in India the substantial decline in the death rate during the early part of the 20th century was accomplished within a decade or two and was the result of increasingly effective public health measures and improved medical knowledge. Many scholars have pointed out that even among the Western countries there was no uniformity in the demographic trends. There cannot be any typical lengths of time which could trigger a fall in death or birth rates and usher in various phases of transition in a sequential fashion¹¹².

The main substantive and methodological reason why the theory of demographic transition cannot be applied to India and other developing countries is that while scientific truths and technology have universal validity, historical processes involving demographic, economic and cultural change cannot have an all-pervasive validity. There are essential differences between the conditions and the factors that determine the demographic experience of the West since the Industrial Revolution, and those conditions and factors that have and continue to influence the demographic changes in the developing world in modern

The Second Stage or the Transitional Stage is Sub divided into Early and Late Transitional phases.

Hauser, P.M and Duncan, O.D, "Demography as a Body of Knowledge" in Hauser and Duncan ,eds., the study of population (The University of Chicago Press 1959). P.94

times, especially after the Second World War. For instance, as noted earlier in the industrialized West, the decline in the death rates was protracted over a period of 100 years, and this decline took place during a period of continuous economic advance and did not depend during the early stages of progress in medical technology. By contrast, the substantial decline in the death rate in India was accompanied within a very short period and under the impact of modern preventive medicine. What is more, this decline in mortality was not dependent on any radical alteration in country's economic structure.

Similarly quite different forces are likely to operate in the area of fertility reductions in developing countries like India. First the whole experience of the Western world in reducing fertility through family planning, late marriages etc., are available to India and other developing countries. Secondly, methods of contraception which were then unknown to the West, are being developed in India, and will be more acceptable to the people. Thirdly, quite novel and effective means of mass communication have brought to the people, both for urban elite and rural folk's, the necessary information and knowledge concerning family planning. Fourthly, Westernization has already exposed masses in the Third world to ideas which promote practices leading to fertility reduction (like late marriages and abortion etc.) finally government in most of the countries have evolved suitable policies designed to tackle their respective population problems. All these developments are likely to bring down the fertility levels more effectively and in less time than was experienced during the population cycles of Western countries¹¹³.

¹¹³ Premi, M.K and Tyagi, R.P, as cited in note 1. p.27

Further, there exists a wide regional demographic disparity in the country. It could been seen that, the southern states like Kerala and Tamil Nadu, have fared better in the progress of transition than their counterparts in the North. On an examination, the state level scenario shows that the state of Orissa, which ranks one of the lowest in terms of development, appears among some of the most developed states Maharashtra, Punjab, Haryana and Gujarat with regard to fertility levels achieved. On the other hand, Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh, continue to struggle with very high birth rates.

While considering the population policy of India, it is necessary to concentrate on fertility as the single most important factor contributing to population change. Infact, India has the distinction of being the first country in the world to launch a nation-wide family planning (anti-natalist) programme with full government support. In the First Five Year Plan that India adopted after Independence, it was held that:

"The recent increase in the population of India and the pressure exercised on the limited resources of the country have brought to the forefront the urgency of the problem of family planning and population control. It is, therefore, apparent that population control can be achieved only by the reduction of birth rate to the extent necessary to stabilize the population at a level consistent with requirements of national economy."

The policy has been consistently pursued and expanded through the years. During early Sixties, the programme was extended by way of offering a wide choice of contraceptives, which came to be known as the cafeteria approach. A system of incentives was also introduced by offering monetary payments to acceptors, service providers and

motivators. In 1966, a separate Department of Family Planning was created in the Ministry of Health, Government of India in 1978, to emphasize the voluntary nature of programme; the term family planning was replaced by family welfare during Eighties. Family welfare programmes stressed on integrating immunization, childcare and safe motherhood. Despite these developments and colossal amounts of money spent in setting up a mammoth infrastructure, the Indian family planning programme was less than the success, if not a complete failure, as a results never matched targets and always lagged behind.

The ineffectiveness of the programme can be primarily attributed to the fact that the problems of poverty, basic education and public health were not integrated with the family planning policy and therefore, failed to facilitate acceptance among the masses on voluntary lines. It could reach only those who had access to the basic education, minimum level of public health facilities, social security and mass media. Village health guides and multi purpose health workers failed to convey the message of the family planning programming despite their door to door campaign largely because of their mechanical approach and apathy to the programme in particular. Obviously, neither receptivity nor response could be built up among the poorer classes.

The basic limitation of the family planning programme was that it was not conceived as an integrated programme of over all general planning for the social and economic development of the country. Rather, it was designed in isolation with birth control as its primary goal. Indian planners while determining the long term objective of the planning assessed that the gains of economic growth would percolate downward and take care of poverty and inequalities while the family planning programme would restrict the numbers

side by side. It was not appreciated that economic growth would not benefit all classes in an equitable manner unless it was participative and instead could aggravate relative poverty and inequality were mistaken to be the inevitable functions of economic growth. It was never realized that effective measures for reduction in poverty and inequality, on the contrary, would actively contribute towards social development and economic growth.

Finally, it can be said that development of individual capabilities and reduction of deprivation is of intrinsic importance to help control the growth rate of population. China's success in controlling the reproduction rate rests largely on its land reforms, near universal literacy rate among younger groups, radical reduction in morbidity and malnutrition, a strong social security system and the participation of women in the labour force 114. So when it is compared with chinese experience, the state of Kerala has remarkably developed social welfare system which managed a spectacular restraint in growth rate. While litteracy rate in India is 65.38 percent, Kerala has achieved 90.92 percent. The Infant Mortality Rate is 14 against 74 per thousand. That social development is more crucial and influential in controlling the growth rate of population than economic growth is further corroborated by the fact that Punjab, despite its comparative economic prosperity, has a higher reproduction rate than Kerala. Thus, rate of reproduction is low in societies, which developed individual capabilities through the spread of basic education and public health. On the other hand, the birth rates are higher in societies where deprivation exists in a larger form. The states of Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan with the lowest literacy rates, of cource, have the highest birth rates in the country. It is therefore, important that social development must

Gupta, Ashok, A Billion is enough: India's Population problem – A Way Out, IMH Publishers, A-48, Kailash colony, New Delhi 2001.p.37.

precede any family planning programme to enable it to be a success. It may also be worthwhile to mention that social development not only influences birth rate, but also works as an instrument of better economic and social performance which in turn contributes to enhance the quality of life in many other spheres.

Economic development is another important aspect which has been proved both historically and theoretically that there is direct relationship between poverty and the rate of growth of population. The high level of population growth in poor economies is attributed partly due to lack of economic development and resultant facilities necessary for the survival through healthy growth of the next generation. Economic development leads to higher standard of living and also inculcates the desire to sustain the further progress for future generations. This demands a higher level of resources for upbringing the education of children, inevitably limiting family size. At the same time, economic development also includes and hastens social development, besides opening up numerous opportunities for the development and use of physical and human capabilities, which in turn play a vital role in controlling birth rate.

Socio-economic development, though a pre-requisite for any successful birth control programme, would not be sufficient when seen in the context of the Indian experience of family planning based on voluntary responses of the people. Demographic history indicates that total fertility rate in India has come down from 5.96 of 1951 to 3.3 of 2001, i.e. only 2.66 in 50 years. One can well imagine that how much more time would be required to reach the replacement level of 2.1 percent. The Technical Group on Population Projections (1996) had reported that India would achieve replacement level of 2.1 TFR in 2026. Keeping

Population Policy 2000 indicates that the population of India will stabilize in the year 2045. As per the United Nation's estimates India's population will touch 153.3 crore in 2050¹¹⁵, meaning thereby that India's population will not stabilize before 2050. This however, is a long time we cannot wait at this juncture of history. Any further wait would prove catastrophic. Indeed India entered stage two of the demographic transition way back in 1921.

Therefore, socio-economic developments need to be backed by direct state intervention, so designed as to be effective but without infringing on the rights and dignity of the people in a democratic polity which ensures individual freedom and choice. In addition, state intervention may not only address birth-rates but also play complementary role by improving economic and social indicators. The existing programme has not only failed to check the burgeoning population but also does not hold much hope for the future. Even if radical policy shifts and reallocation of resources are made for socio-economic development against a background of large scale poverty, illiteracy, economic disparity, gender and educational inequality and social discrimination, it would take more than 20 years before some results are achieved. Similarly, any suggestion of intervention based on compulsion through coercive methods is bound to lead to a recall of the emergency years and the psychological trauma unleashed by the forced sterilizations. The state therefore, would have to tread slowly and carryout a fine balancing act whereby intervention not only makes an effective impact on controlling birth rates but also remains sensitive to basic human rights without injuring human dignity. Besides, it should also be socially justifiable, economically feasible, individually prudent and politically acceptable.

¹¹⁵ United Nations. World Population Prospects: The 1996 Revision (New York,!996).

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