CHAPTER I
CHAPTER I
INTRODUCTION

The Role of Human Resource in Economic Development:

Economic Development is the process of raising the output of an economy with the help of physical and human capital. For a long time physical capital was assigned a crucial importance in promoting economic growth and human capital as a factor of production, was relegated to the background. But in recent years there has been a tremendous realisation of the fact that human resources and its quantity and quality can make greater contribution to the size and composition of national output. The rapid progress achieved by Japan and West Germany in the post War period testify to the significance of human resource. This empirical experience has brought Human Resource Development into current academic and policy discussion.

Human resource development refers to the development of skills, knowledge and aptitudes of the country’s population. In economic terms, human resource development could be described as the accumulation of human capital and its effective investment in the development of the economy. In political terms, human resource development prepares people for active participation in political process, particularly as citizens in a democracy. Thus, the rapid rate of human capital formation is an important pre-condition of economic growth. Human Resource development is not only a pre-condition of economic growth, but it is also the country’s major objective.

The works of T.W. Schultz, Denison, Kenrick and Psacharapolous have brought a revolution in the thinking and literature on human resource development and today, there is a greater recognition of the fact that physical capital in the absence of devoted and dedicated human resource, can not bring about balanced development of the economy. Therefore, the policy makers have turned their attention towards the qualitative improvement of human beings.

Forms of Human Resource Development

T.W. Schultz has given a typical list of items that may be classified under the heading investment in human capital. The list is as stated under:

1. Health facilities and services, broadly conceived to include all expenditures that
affect life expectancy, strength and stamina and the vigour and vitality of the people,

2. On the job training, including old style apprenticeship organised by firms;

3. Formally organised education at the elementary, secondary, and higher levels;

4. Study programmes for adults that are not recognised by firms, including extension programmes notably in agriculture;

5. Migration of individuals and families to adjust to changing job opportunities.

However, it is widely admitted that of all these forms of human resource development, education and health occupy a pre-eminent position in promoting the quality of human beings. Education and health interact in many ways. Gunnar Myrdal therefore argued the need for a new balance between investment in people, in particular, health and education in the process of economic growth. He not only proposed that health and education were basic human needs but also that healthier and more educated population produce more resilient and skilled workers. In several respects, health development becomes a precondition for educational development and hence health promotion assumes paramount significance.

Thus, the importance of investment in human beings is well realized throughout the world. Several Asian Countries have been making efforts during the last three decades to bring about substantial improvements in social condition i.e., education, health, social welfare and social security.

Meaning of Health

Health is viewed differently by different people all over the world. The World Health Organisation has defined health as “a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity.” Thus good health is a synthesis of physical, mental and social well-being. As stated in the Indian First Five Year Plan, “Health is a positive state of well being in which harmonious development of mental and physical capacities of the individuals lead to the enjoyment of a rich and full life ....... It implies adjustment of the individual to his total environment-physical and social”. Some people even define it as a condition under which an individual is able to mobilise all his resources-intellectual, emotional and physical for optimum living. The condition of health of a community at any given point of time is described as the health status of the people and the health status is normally judged or assessed by the following indicators:

1. Average annual growth of population in percentages,
2. Life expectancy at birth (in years),
3. Infant Mortality Rate,
4. Child death rate,
5. Daily per capita calorie,
6. Percentage of Population with access to safe water,
7. Population per physician
8. Population per nursing person

**Determinants of Health Status**

The health status of an individual or a community is usually determined by three sets of factors namely, promotive, preventive and curative factors. Promotive factors are those which promote good health, namely, nutrition, better hygiene, good sanitation, and water supply. Preventive factors such as vaccination help to prevent the spread of diseases, while the curative factors tend to cure the diseases. The availability of medical infrastructure in the form of hospitals, doctors, nurses, medicines, beds and equipments belong to this group. An analysis of these factors helps to assess the health status of a nation. The health status of a population is but a reflection of the socio-economic development of the country. Economic and social development break the vicious circle of poverty and ill-health. As generally acknowledged, the agricultural and industrial revolution, followed by public health revolution and finally medical revolution in the sequential order, led to the improvement in the health status of the population in the present day advanced countries.

According to WHO/ILO joint report the health status of the people is determined by factors like housing, sanitation, nutrition, personal factors, educational status and occupational environment. Generally speaking, the determinants of health are population, poverty, per capita income, income distribution, employment, education, women education, environment, housing, sanitation, water supply, health consciousness, personal hygiene, and coverage and accessibility to medical facilities.

**Significance of Health**

From a social point of view, good health is a pre-requisite for human productivity and the development process. It is essential to economic and technological development.
Individually health is man's greatest possession, for it lays a solid foundation for his happiness.

Improvement in health would make a positive impact on economic development. Better health can increase the number of potential man hours for production by reducing morbidity and disability as well as by reducing mortality. Better health may result in more productivity per man as well as more men available for work. Selma Mushkin and Edward Denison have attempted to quantify the effects of reduction in mortality on the rate of economic growth in the United States. According to one of these estimates, decline in death rate accounted for roughly 10 per cent of the over all 3 per cent growth rate in the economy for the period 1900-1960. Thus there can be no two opinions that health is a basic input in national progress and in terms of resources for economic development nothing could be of greater significance than the health of the people.

Therefore, promotion of good health must be a prime objective of every country's development programmes. It is a precursor to improve the quality of life for major portion of mankind. The Preamble to the WHO Constitution also states that the enjoyment of highest attainable standard of health is a fundamental right of every human being and that Governments are responsible for the health of their people and that they can fulfil that responsibility of taking appropriate health and social welfare measure. 'Health' has found an important place in the constitutions of all nations of the world.

Therefore both developed and developing countries have started paying adequate attention on improving the health status of the people in the last three decades or so. A considerable portion of the Gross Domestic Product (GNP) has been earmarked for health promoting activities and health care represented by the number of medical institutions, medical personnel and availability of medicines. As a result, there has been a global transition in the health status of various countries.

Transition in Health Status

Health transition implies a dynamic process whereby the health and disease pattern of a society evolves in diverse ways as a response to demographic, socio-economic, technological, political, cultural and biological changes. So, health conditions are continuously changing during transition as different diseases disappear, appear or re-emerge and it is stated that the transition is an ongoing process rather than a relatively simple and unidirectional one over a period of time. Normally, the determinants causing health transition are grouped under four categories namely, demographic changes, social and mental changes, economic changes and political changes.
Demographic Changes

The 1970s and 1990s have seen a transition in the demographic patterns, where fertility rate and infant mortality rate simultaneously declined. Consequently, the proportion of children and elderly people have increased. Rapid urbanisation has also caused health problems. There has been a transition in the trends in morbidity and mortality patterns also. Disease patterns are also changing and the predicted increase in chronic diseases has not always been accompanied by the anticipated drop in infectious diseases.

Social and Mental Changes

Increased levels of education combined with improved communication had brought changes in life style, nutrition, traditional, social and family structures, values and even expectations. Consequently, such changes led to increased demands on health care systems.

Economic Changes

The world economic crisis of the later 1970s and 1990s characterised by poor economic performance and heavy debt burden had initiated a process of economic stabilisation and structural adjustment leading to curtailed spending on health related activities.

Political Changes

The political changes with emphasis on pluralism and individualism brought changes in policies, organisation, management and services available in all sectors. These political changes had been accompanied by an over-all trend of increasing pressure upon tight Government budgets. The Governments’ support for health programmes in the past two decades had reaped considerable returns in terms of health gains and morbidity transition. The changing pattern of health problems is reflected in the growing importance of chronic and non-communicable diseases. The beginning of the 20th century and earlier parts could be termed as the medical era in which allopathic medicine emerged as the dominant approach to health care.

Major Policies towards Health Development

However, unfortunately, the prevailing health scenario in several countries especially developing countries is really pathetic. Nearly 100 million people are trapped in the vicious circle of poverty, malnutrition, disease and despair that saps their energy, reduces their work capacity and limits their ability to plan for the future. Average life expectancy is over 70 years in some countries but barely 50 in others. It is estimated that out of 1000 infants born alive, nearly 100 to more than 200 die during their first year of life in most developing countries. Women in most poor countries face a risk of dying during pregnancy
and delivery 200 times greater than women in a rich country.

There is a wide gap between the developed and developing countries in terms of their level of health and resources. Within individual countries whatever their level of development, analogous gaps are commonly evident between different groups of the population and different regions. In view of these disquieting developments, it had become a matter of equity and social justice to make health progress available to all people through new approaches, new strategies and better management of available resources.

The Declaration of Alma-Ata adopted on 12, September 1978 by the International Conference on Primary Health Care which was jointly sponsored and organised by WHO and UNICEF stated that Primary Health Care is the key to attaining the target of ‘Health for All’ by the year 2000 A.D., as part of over-all development and in the spirit of social justice. The declaration called on all Governments to formulate national policies, strategies and plans of action to launch and sustain primary health care as part of a comprehensive national health system and in co-ordination with other sectors.

More specifically, Governments have been called upon to initiate action in the following areas:

1. Pursue economic policies that will benefit the poor.

2. Expand investment expenditure on tertiary facilities.

3. Promote the rights and status of women.

4. Reduce Government expenditure on tertiary facilities.

5. Finance and implement a package of public health intervention to deal with infectious disease control, prevention of AIDS and environmental pollution.

6. Finance and ensure delivery of package of essential clinical services.

7. Improve management of Governmental health services.

8. Encourage social and private insurance.

9. Encourage suppliers (both public and private) to compete to deliver clinical services.

10. Generate and disseminate information on provider performance on essential equipments and drugs.
India, since its independence, has been evincing greater interest in Human Resource Development. When India was liberated from the yoke of foreign rule, she inherited qualitatively poor human stock characterised by illiteracy, ill health, malnutrition and all symptoms of under development. She realised that without qualitative improvement of this backward people, achievement of economic progress and meaningful political progress was impossible. In a country where poverty and malnutrition have for centuries been accompanied by mass epidemics, health care is an absolute necessity and on gaining independence, India made it one of her priorities.

The Government of India assigned the responsibility of health development to the State Governments. However, it did not absolve of its responsibilities in the matter of Human Resource Development through health promotion. Therefore, it provided the necessary guidelines to the State Governments and fixed national targets for achieving ‘Health for All’ in the country. Towards this end, the Government of India has earmarked increasing outlays in various Five Year Plans to strengthen the medical infrastructure in the country. Several innovative national schemes and programmes were also conceived and implemented by the Ministry of Health and Family Welfare. The Government also participated in the implementation of various World developmental schemes in this regard. It also directly implemented Central sector schemes in the Union Territories under its direct jurisdiction. Therefore, the efforts undertaken by the Government in the initial stages of economic development were really judicious and commendable. Its emphasis on primary health care as an instrument of rural health development has exerted congenial impact on the health situation of the rural people.

India is a signatory to the Alma-Ata Declaration of 1978. The National Health Policy which was approved by the Indian Parliament in 1953 marked the beginning to the quest for equity in health expressed as WHO’s goal of ‘Health for All’ by the year 2000. Health for All has received endorsement at the highest official level.

As a part of the formulation of the VII Five Year Plan, special Working Groups were appointed to develop strategies for eight important elements in health development. They are: urban and rural health care, population, family welfare and maternal child health; control and containment of non communicable diesases, medical education, training, manpower planning and development; research and development with particular reference to health service research; Indian systems of medicine and homeopathy with particular reference to the use of ISM practioners in primary health care and health education/ information and communication.
Consequent to these policy directions, the health sector of India has really made rapid and remarkable strides both in terms of health inputs and output. The progress recorded by India can be seen from Table 1.1.

**Table 1.1**

**PROGRESS OF HEALTH IN INDIA : 1961-1991**

(Per 1000 Population)

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<tbody>
<tr>
<td>1.</td>
<td>Infant Mortality Rate</td>
<td>146.00</td>
<td>129.00</td>
<td>110.00</td>
<td>80.00</td>
</tr>
<tr>
<td>2.</td>
<td>Death Rate</td>
<td>22.80</td>
<td>19.00</td>
<td>12.50</td>
<td>9.80</td>
</tr>
<tr>
<td>3.</td>
<td>Birth Rate</td>
<td>41.70</td>
<td>37.20</td>
<td>33.90</td>
<td>30.00</td>
</tr>
<tr>
<td>4.</td>
<td>Life Expectancy at birth</td>
<td>41.30</td>
<td>46.40</td>
<td>53.00</td>
<td>58.00</td>
</tr>
<tr>
<td></td>
<td>(in years)</td>
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As Table 1.1 clearly shows, there had been a steady decline in mortality rate over the years. Life expectancy and infant survival conditions are better than what is normally predicted for a country of India’s level of income. And relatively speaking, health conditions in India are more favourable than those prevailing in some of the neighbouring South Asian Countries.

**Health Status Across the States and Union Territories**

The remarkable health progress made by India is shared by the health development occurring in various States and Union Territories. In almost all the States, the parameters of health development have shown positive trend. However, it is quite true that the health development among the States is also marked by regional disparities. The State of Kerala is credited with the highest development in health as indicated by the greater decline in infant mortality rate and death rate, while States like Uttar Pradesh and Bihar are at the lower end of the scale. The experiment of a small Union Territory like Pondicherry in the sphere of health is something remarkable and its accomplishment is even better than the performance of Kerala in certain respects.

**Problem Setting**

In fact, the Union Territory of Pondicherry is credited with a large proportion of spending on human development or social development in which education and health receive lion’s share. The per capita expenditure on health services was Rs.7.13 in Bihar,
Rs. 16.9 in Tamil Nadu, Rs.19.25 in Kerala, Rs. 34.14 in Assam. The per capita expenditure has reached the level of Rs. 363.7 (excluding JIPMER) in Pondicherry and Rs. 433 (including JIPMER) in 1991 whereas it was only Rs. 60.61 for All-India.

According to comparative health information across the states provided by the Government of India, the population served per bed was 1347 at the All India. It was 427 in Kerala, 1191 in Himachal Pradesh, 1311 in Karnataka, 2341 in Haryana whereas it was 286 in Pondicherry in 1988. The population served per hospital was 74169 for All-India and it ranged from a low of 5886 in Pondicherry to the high figure of 210154 in Haryana in 1991. It was 1,57,000 in Karnataka, 78,323 in Himachal Pradesh, 45,778 in Arunachal Pradesh and 10,269 in Kerala. The Doctor-population ratio was 1:1165 in Tamil Nadu, 1: 1457 in Karnataka, 1: 1924 in Andhra Pradesh, 1:7213 in Kerala and it was 1: 1701 in Pondicherry. As a result of increased per capita health expenditure and availability of health infra-structural facilities Pondicherry has attained a remarkable health transition as can be evidenced by the data contained in the Table 1.2.

Table 1.2
(Per 1000 Population)

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Indicators of Health Progress</th>
<th>1961</th>
<th>1991</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Death rate</td>
<td>25.3</td>
<td>10.5</td>
</tr>
<tr>
<td>2.</td>
<td>Infant Mortality rate</td>
<td>136.2</td>
<td>33.9</td>
</tr>
</tbody>
</table>


A careful analysis of the above table shows that there has been an impressive fall in death rate and infant mortality rate during 1961 and 1991 thanks to the vigorous implementation of health schemes and policies and huge investment in the health sector.

This achievement of the Union Territory in health transition is something unique and remarkable. In fact, it provides a model for various States including Kerala. However, unfortunately this transition in health status and its new development model have not been focused by the researchers so far. Hence the present attempt.

For a long time, it was considered both by health personnel and policy makers that health transition occurs as a result of Government expenditure on health and the consequent augmentation of health facilities. This is partly true. However, the reality is that the health of an individual or of a society is the outcome of the developments occurring in all
sectors of human activities. In fact, health has to be considered as a matter of social welfare which becomes a function of Government's efforts in various sectors of activities. For instance, the development of the economy is reflected in increasing State income, per capita income, the growth of non-agricultural sector, the per capita availability of food, fish and milk which increases with the development of the economy or factors which have a direct bearing on the promotion of the health of the people. Likewise, improvement in literacy level of the people, enlightenment through various literacy programmes, availability of water supply and proper hygienic systems, tend to provide both promotive and preventive aspects of health. Therefore, today health promotion activity has to be viewed as a package of promotive, preventive and curative services which are influenced by a wide gamut of factors stemming from economic, social, environmental and even psychological and political spheres. Therefore, the determinants of health status are many and varied and the relative significance of these factors are to be examined in the context of the temporal transition in health status so that the future planning in health sector can be optimally envisaged. This is another area of concern of this research.

The analysis of the determinants of health status will naturally indicate the type of linkages emanating from the economic and non-economic sectors and hence the intersectoral linkages and health development have come to dominate the health literature, and this study makes a modest attempt in understanding the close relationship between health and non-health sectors.

As noted earlier, the health performance of Pondicherry and the health strategies adopted in this Union Territory are a model for other States. To establish this contention, it is proposed to compare the health performance of the Union Territory of Pondicherry with that of other States in India. This comparison will be another area of interest of this dissertation.

Objectives of the Study

In the light of the above problem setting, the following objectives are framed for the present study:

(i) to assess the transition in the health status of the Union Territory of Pondicherry, since 1961.
(ii) to study the relative significance of determinants of health status.
(iii) to analyse the inter-sectoral linkages in health development.
(iv) to compare the health development of Pondicherry with other States of Indian Union and
(v) to suggest policy measures to promote the future health status of the Union Territory of Pondicherry in the light of the health goals set by the Government of
Hypotheses Formulated

Keeping the above health issues in mind and the objectives of the study framed, the following hypotheses are to be tested against the empirical evidences.

1. The health development and transition in the Union Territory of Pondicherry as measured by the declining infant mortality rate, death rate, maternal mortality rate and the spread of health services had been remarkable.

2. While mortality rates have declined and are low, the morbidity rate has not declined significantly.

3. There are considerable disparities in mortality rates and medical infrastructure between regions and between rural and urban areas.

4. The health status of the Union Territory is determined more by non-health factors than by health factors. This implies that promotive factors such as per capita income, water supply, availability of foodgrains and per capita expenditure on health exercise greater influence on health status than the curative services. Per capita income, literacy, water supply and housing and infant mortality rate are negatively related.

5. There are strong and positive linkages between health sector on the one hand and non-health sectors on the other, one contributing to the other.

6. The Union Territory of Pondicherry enjoys better health status today than other States of the Indian Union including Kerala.

Area and Period of Study

This study is mainly confined to Union Territory of Pondicherry. However, for purposes of comparison the health experiences of Other States are also examined by taking certain vital indicators. This study is spread over a period of 30 years from 1961 to 1991.

Policy Value

The study will be replete with a number of policy implications. The analysis of existing problems will offer solutions which will form the basis of future policy making designed to improve the well being of the people especially the weaker sections who are India.
found to be suffering from many handicaps and hardships in the health sphere.

Chapterisation of the Thesis

**Chapter I** provides the introduction, problem setting, objectives, hypotheses and policy value of the study.

The review of literature and concepts are outlined in **Chapter II**.

The methodology, data base, and models used in the study are described in **Chapter III**.

**Chapter IV** outlines the profile of the Union Territory of Pondicherry.

The transition in the health status of the Union Territory of Pondicherry is sketched in **Chapter V**.

The determinants of health status are assessed in **Chapter VI**.

**Chapter VII** evaluates the intersectoral linkages in health development.

The comparative performance of Pondicherry in health development *vis-a-vis* other States of India is outlined in **Chapter VIII**.

**Chapter IX** summaries the main findings and provides policy suggestions for the future health development of the Union Territory of Pondicherry.