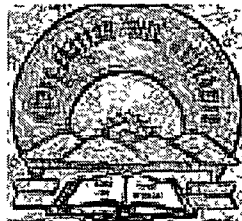


**PUBLIC EXPENDITURE AND
HUMAN DEVELOPMENT
IN
MEGHALAYA.
1984 – 85 to 2003'-04.**

DISSERTATION SUMMITTED TO NORTH EASTERN HILL UNIVERSITY
FOR THE DEGREE OF MASTER OF PHILOSOPHY
2009



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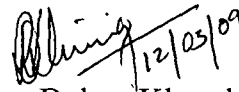
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I, Ms. Rupa Bakor Kharshiing, hereby declare that the subject matter of this Dissertation is the record of the work done by me, that the contents of this Dissertation did not form the basis of the award of any previous degree to me or to the best of my knowledge to anyone else, and the Dissertation has not been submitted by me for any research degree in any other University/ Institute.

This is being submitted to the North Eastern Hill University for the degree of M.Phil in Economics.



(Rupa Bakor Kharshiing)

Registration Number: 279 of 14.09.2007

Dedicated

To

My Family

PREFACE

This research work is carried out in a period during which the state of Meghalaya has witnessed substantial changes in expenditure policies. Further, during this time period, there were some recurrent social tensions, which we believe might have led to substantial changes in the public expenditure policies. The study, therefore, is intended to assess the impact of public expenditure on human development in Meghalaya and more importantly, to ascertain that public expenditure has a stronger influence on human development than the per capita income. The study covers a period of twenty years from 1984-85 to 2003-2004 where we have considered education and health as the important indicators of human development in Meghalaya.

The study, as such, would not have been successful without the guidance and help from a number of individuals. I would therefore like to acknowledge them.

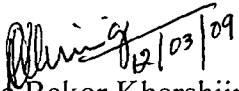
First of all I am deeply indebted to Dr. B.Mishra, my supervisor, whose guidance has helped me accomplish my work. He has been very patient with me and I have learned so much from him which would help me in my future endeavour.

I also expressed my sincere gratitude to Prof. S.K.Mishra and Dr.De who has helped me with the statistical analysis, the area, I had little knowledge of.

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I would like to make special mention of my beloved parents, my husband and son, and my brothers whose encouragement and support has helped me complete my work.

Above all, I thank and I give the glory and honour to the Almighty God for giving me the opportunity to pursue my studies and for giving me the strength to continue my work in spite of some obstacles during my study.


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CONTENTS

Chapter	Page Nos.
I. INTRODUCTION	1-11
1.1. Introduction	
1.2. Background of the Study	
1.3. Problem Formulation	
1.4. Objectives	
1.5. Hypothesis	
1.6. Data and Methodology	
1.7. Chapter Plan	
II. REVIEW OF LITERATURE	15-35
2.1. Introduction	
2.2. Studies on the Effect of Public Expenditure on Human Development	
2.3. Concluding Remarks	

III. THEORETICAL ISSUES RELATED TO PUBLIC POLICY STANCE AND HUMAN DEVELOPMENT 38-46

3.1. Introduction

3.2. Public Expenditure Stance on Human Development

3.3. Concluding Remarks

IV. TRENDS AND PATTERN OF PUBLIC EXPENDITURE IN MEGHALAYA 49-62

4.1. Introduction

4.2. Growth of Public Expenditure in Meghalaya

4.3. Growth of Public Expenditure on Education and Health in
Meghalaya

4.4. Analysis on the Growth of the Gross State Domestic Product
and Expenditure on Education and Health

4.5. Concluding Remarks

V. EFFECT OF PUBLIC EXPENDITURE ON HUMAN DEVELOPMENT IN MEGHALAYA 63-76

5.1. Introduction

5.2. Public Expenditure and Human Development- A Comparative
Analysis

5.3. Specification of the Model

LIST OF TABLES

	Page No.
Table 4.1 – Growth of expenditure of the Government of Meghalaya from 1984 – 85 to 2003 -04 (Rs. In Crores)	50-51
Table 4.2 – Growth of public expenditure on Education and Health (Rs. Crores)	54-55
Table 4.3 – Growth of Gross State Domestic product and combined public expenditure on Education and Health	59-60
Table 5.1 – Human development Index of Meghalaya	64
Table.5.2 – A comparison of the growth of Public Expenditure and Human Development Index in Meghalaya	64
Table 5.3 – District wise Literacy rate in Meghalaya by place of residence.	65-66
Table 5.4 – District wise Literacy Rate in Meghalaya by sex.	67
Table 5.5 – Infant Mortality Rate in Meghalaya.	68
Table 5.6 – Effect of Public expenditure on Education and Health and per capita income on HDI in Meghalaya.	70
Table 5.7 – Effect of combined Public expenditure on Education and Health and per capita income on hid on Meghalaya.	70
Table 5.8 – Trends of Public Expenditure on Basic Social Sector in Meghalaya.	73
Table 5.9 – Social Expenditure Ratio of Meghalaya	74

CHAPTER - I
INTRODUCTION

CHAPTER - I

INTRODUCTION

1.1 Introduction

Economic development theorists generally agree that the quality of human resources has a significant impact on economic development and growth. This body of thinking is of the opinion that the quality and quantity of labour determine production by virtue of it being a factor of production. Moreover, improving the quality of the labour force yields implicit, non-economic outputs related to the generation of ideas and decisions which have a significantly positive impact on investment, innovation and other growth opportunities. Although various factors determine the quality of human capital, it is the quality and quantum of public spending/investment in a socialistic welfare characterized state, which determines the quality of and quantity of human development.

Human Development is broadly defined as a process of enlarging people's choices, as well as raising the level of well being. Theoretically, these choices can be indefinite and vary over the time and space. From among these the choice to lead a long and healthy life, the choice to acquire knowledge and be educated, and to have access to resources needed for a decent level of living are considered to be three most critical and socially valuable perspectives. A range of social outcomes can reflect these choices in the well being of the people, most important being life expectancy, literacy and the per capita income. Life expectancy and educational attainments are value ends in themselves; and per capita income is to incorporate other aspects of well being not captured by indicators on the social attainments on education, health and longevity of people. Therefore, development has to be woven around people, not people around development. It has to be development of the people, by the people and for the people. Based on the above logic, it can be argued that Human development has two sides: (1) the formation of human

capabilities such as improved health, knowledge and skills and (2) the use of their acquired capabilities for productive purposes, leisure or for being active in cultural, social and political affairs.

The scales of human development must finely balance the two sides otherwise considerable human frustration may be the resultant outcome. Striking a balance between these two requires a smooth and steady growth of per capita income. According to this sense of human development, income is clearly one of the options that people would like to have, albeit an important one. But it is not the sum total of lives. Development must, therefore, be more than just the expansion of income and wealth. This gets substantiated by the results of several empirical research studies which reveals that per capita income cannot be a sole determinant of achieving human development; public spending on social sectors also has a significant role to play (Streeten (1979)¹, Isenman (1980)², Sen (1981)³, Anand and Ravallion (1993)⁴, Chakraborty (2004)⁵.

In a socialistic and welfare characterized state, governments directly control a significant share of national resources and shape the policy environment for private economic agents and civil society. In the interest of economic and social progress, the use of public resources must emphasize efficiency and equity. Such involvement of the government in turn raises the quality and sustainability of development programmes and helps to build a better scale of human development. As a result, the question of human development remains as a logical offshoot of the public economic policies of expenditure on social services which comprises public expenditure on education, health and family welfare. To what extent, public economic policies of public expenditure affect the scale of human development remains an open question.

Financing human development is a very critical aspect of ensuring that public policies become concrete realities and that the poor and vulnerable sub populations are supported by the state, enabling them to become empowered being capable of realizing the inherent potential in a participatory and democratic context. As the UNDP Human

Development Report (1991)⁶ noted, the best strategy for human development is to ensure, through strong policies, generation and better distribution of primary incomes. In addition, government services in social infrastructure (schools, health clinics, nutrition and subsidies) as well as physical infrastructure (roads, electricity and housing) can help the poor bridge the gap caused by paucity of income.

Policy makers in recent years are increasingly interested in the composition of public spending. This attention stems from the recognition that expenditure allocations in favour of education and health can boost economic growth while promoting equity and reducing poverty. This particular argument has been put forward by many researchers like, Barro (1997)⁷, Chu (1995)⁸, and Tanzi and Chu (1998)⁹. If, the above argument will be taken as a starting point for establishing a causal effect relationship between the level of public expenditures and the level of human development then the relevant research question that arises here: does public policy stance make an impact on human development? Since there is a contemporaneous transformation of many socio-economic and policy variable that result in human development, it is a difficult task to establish a bivariate link between the growth of public expenditure and growth of human development. However, we believe that a causal-effect analysis would enable us not only in understanding the intricacies of public expenditure growth but also to have a better understanding of the mechanism of changes that take place in the quantum of public expenditure in the social sector and the way that it gets transformed to the end result of better human development indicators.

1.2 Background of the study

The available literature on the casual effect relationship between the growth of public expenditure and the pace of human development remains elusive in the sense that there exist two opposing views to this intricate relationship. In fact, the evidence on whether the aggregate education and health spending have a beneficial impact on relevant social indicators- taken as a proxy for outputs of public spending on social sectors- is mixed.

Many studies show that the relationship between public spending for education and measures for education attainment is weak. The note worthy studies are Landau (1986)¹⁰, Noss (1991)¹¹, Mingat and Tan (1992)¹² and Flug, Spilimbergo, and Wachtenheim (1998)¹³. Instead, other variables have been found to be important in explaining education attainment. Appleton, Hoddinot, and Mackinnon (1996)¹⁴, in their studies made an attempt to include per capita income, the age distribution of the population, parental perceptions of costs and benefits, and family background of parental education. Gallagher (1993)¹⁵, in his study, explains that after correcting for its quality and efficiency, spending on education has a positive impact on indicators of educational attainment.

Similarly, many studies like Kim and Moody (1992),¹⁶ McGuire and others (1993)¹⁷, Aiyer, Jamison, and Londono (1999)¹⁸, Musgrove (1996)¹⁹, Filmer and Pritchett (1997)²⁰, and Filmer, Hammer and Pritchett (1998)²¹ find that the contribution of public health outlays to health status as measured by infant mortality and child mortality is either small or statistically insignificant. Carrin and Politi (1995)²² concluded that poverty and income are crucial determinants of health status indicators but fail to find that public health spending has a statistically significant effect on these indicators. They contended that cross-country differences in income alone account for 84percent of the variation in infant mortality, with socio-economic variables accounting for 11percent, and public

spending for less than one sixth of one percent. These results are echoed by Demery and Walton (1998)²³ who note that the conclusion that public spending is a poor predictor of good health is a common one. In contrast, Hojman (1996)²⁴ in his study concludes that public health spending has a statistically significant effect on health status.

Although the evidence presented in the above –mentioned studies in general goes against the presumption that higher public spending on education and health is effective in improving social indicators, some relevant issues are overlooked in these studies. As noted earlier, allocations within the sectors are widely considered to be important in explaining changes in social indicators, but these studies typically sidestep this issue. In fact, Ogbu and Gallagher (1991)²⁵ find in a studies of 5 African countries that enrollment rate are affected by the composition of public education spending. And in a survey of 10 country studies, Mehrotra (1998)²⁶ concludes that high education attainment is associated with relatively high public spending on education and a relatively high share of primary education in total education expenditures. Unfortunately, neither paper supports its claim about the efficacy of public spending on basic education with statistical analysis.

Filmer, Hammer, and Pritchett (1998)²⁷, attempt to address the issue of allocations within the health sector by including a measure of government spending on primary health care in their cross-section analysis of the causal factors of infant mortality. As it turns out, they fail a statistically significant impact of primary health care spending on infant mortality rates. But their aggregate health sector data are not necessarily consistent with either the overall fiscal or the intra-sectoral data. Measurement errors may have been further exacerbated by the use of statistical techniques to create imputed values for missing observations.

The present work is, therefore, an attempt to shed some further empirical light on the issue of public expenditure's ability to promote human development by focusing on the experience of a under developed economy of Indian Federation, namely the one of Meghalaya.

1.3 Problem Formulation

It is against this background an attempt will be made in this study to look into the intricacies of the growth of public expenditure vis-à-vis the pace of human development in Meghalaya. Meghalaya is comparatively a backward state, where agriculture is the predominant sector providing means of livelihood to more than 65 percent of the population. Although certain significant developments have taken place in some spheres in the state since its attainment of Statehood, the access to opportunities for a 'reasonably minimum' standard of living is one of the lowest in the country. The developmental efforts of the state have resulted in a paradoxical growth, where the exponential growth of the state income stays at 12.61 percent level and that of public expenditure at 14.68 percent. This particular trend indicate that high exponential growth rate of public expenditure has not provided enough stimuli to the state income to grow at a steady desired level. This, we believe might have been due to the failure of the public expenditure programmes to address themselves to the right set of objectives that fiscal policy accords. Thus, it is observed that phenomenal growth of public expenditure in the state of Meghalaya without a corresponding growth in State income has brought about an explosive growth of public expenditure in the state. The observed trend has no doubt culminated in form of low level of per capita income in the face of a rising population and deteriorating economic conditions of the people .This evident from the relative rank of Meghalaya in poverty which deteriorated from 14th position in 1983 to 27th position in 1999-2000. A closer scrutiny of Meghalaya's fiscal scenario exhibits rising trends of public expenditure on the social services followed by the general and economic services. The exponential growth rate of total public expenditure on the social services during the period 1984-85 to 2004-2005 stayed at 15.93 percent where as the corresponding exponential growth rate for general services and economic services stayed at 15.78 an 13.41 respectively. If public expenditure on social services will presumably be taken to reflect public expenditure on human capital then experiences of the state negate the above functional relationship as economic backwardness coupled with a reasonable degree of

poverty make its presence felt in the state. Further, the disproportionate growth of the social sector has not only absorbed most of the public investment fund over the years, but also has given rise to a weaker linkage between the different sectors of the economy.

Ultimately, we believe, it is the size of public expenditures that the community looks to. No doubt, public passions about the levels of public expenditures run high. But underneath the policy controversies, a vital question about the actual behaviour of the quantum of public expenditures and its impact on human development awaits dispassionate analysis. This is, what we intend to study in this present work.

1.4 Objectives

The study covers a period of twenty years from 1984-85 to 2004-2005. This is a period during which the state economy has witnessed substantial changes in expenditure policies. Further, during this time period, there were some recurrent social tensions, which we believe might have led to substantial changes in the public expenditure policies. However, we will not examine in details the social tension aspect of the public expenditure problem due to limited scope and objective of our study. Keeping these general problems in view, an attempt was made in this work to study in detail the following aspects of state's public expenditure and its effect on human development of the state. The specific objectives of the study are spelt out as follows:

1. To analyse the link between per capita public expenditure on the health and education and Human Development Index (HDI).
2. To examine if public spending on education and health has a stronger impact on human development than the growth of per capita income.
3. To examine the extent to which public expenditure on social services increase with the rise in the State Domestic Product.

1.5 Hypothesis

1. There is a positive functional relationship between per capita public expenditure on health and education and Human Development Index (HDI).
2. The impact of public spending on education and health on human development is stronger than that of the growth of per capita income.
3. Expenditure on social services has a tendency to increase with rising SDP.

1.7 Data and Methodology

The relevant statistical data for twenty years from 1984-85 to 2004-05 had been collected from the annual budgets of the Meghalaya State Government, including their Memoranda, other Government publications as well as unpublished works and various issues of UNDP Human Development Reports as well as Government of India Human Development Reports. The methodology that had been adopted for this study is both descriptive and analytical, and appropriate techniques was used to estimate the trends in public expenditure on health and education, which are considered to be the most important indicators of human development. The relevant data collected had be analyzed by the help of suitable statistical techniques and the results obtained is subjected to economic logic. The model is specified with per capita expenditure on health and education and per capita income as regressors. We have used the following equation to evaluate the impact of public spending on education and health care.

$$Y_i = f(X_{1i}, X_{2i}, Z_i),$$

Where Y_i is a social indicator reflecting education attainment or health status for a state i , which is a function of aggregate public spending on education or health care as a share of GDP, X_{1i} , allocation to different programmes within the sector (i.e., primary education and primary health care) as a share of total sectoral spending, X_{2i} , and a vector of socio-economic variables Z_i .

1.8 Chapter Plan

The topical analysis of the thesis is as follows. For the purpose of expositional covering and systematic analysis, the thesis has been divided into six chapters.

The first chapter is an introduction in nature. In this chapter we have dealt with understanding the deeper meaning of human development. We have also identified the various indicators of human development which have helped us in understanding the intricate relationship between these indicators, *viz*; public expenditure on education and health and per capita income, and human development.

This Chapter is an attempt to review some of the important works carried out by various researchers on the stance of Public expenditure and human development. An attempt has been made in this section to discuss the major conceptual and empirical issues relating to the causal effect relationship between the growth of public expenditure and the pace of human development.

In chapter three we have examined some of the theoretical issues related to public policy stance and human development. This chapter is concerned with the arguments for public policy stance, in terms of expenditure as the key instrument. Further, this chapter also, assesses the theoretical and empirical advancement towards public policy intervention in providing human development which reflects the community's growing concern with social aspects of development and where education

and health have occupied the centre stage.

Chapter four is divided into three sections. Section-I is concern with the growth and pattern of public expenditure in Meghalaya. An attempt has also been made to analyze the growth of Gross State Domestic Product and the per capita income of the state for the entire 20 years covered by our study. In this section we have also carried out a brief analysis of the growth of public expenditure consequent upon the growth of Gross State Domestic product in order to know the extent to which Meghalaya's public expenditure is responsive to the state income. Section-II on the other hand, deals with the growth of public expenditure, particularly, on education and health since these are regarded as the two most important indicators of human development. In this section we have again tried to analyze the growth of expenditure on education and health consequent upon the growth of the total public expenditure of the state. Section III examines on whether expenditure on social services such as education and health rises with the increase in the Gross State Domestic Product in Meghalaya.

Chapter V is an attempt to specify the methodology and to carry out the empirical analysis. The chapter is divided into three sections. Section I is an attempt to spell out the various components of the HDI such as literacy rate of the state of Meghalaya and the infant mortality rate, which reflects the level of human development. The purpose of the section is to have a comparative picture on the growth rate of the public expenditure on health and education and the various components of Human Development for the state of Meghalaya. In Section II, an attempt is made to specify the models for undertaking the empirical analysis and the results obtained by using the specified models are reported subsequently. Section III is an attempt to analyze the trend of public expenditure in basic social sector in Meghalaya and also to find out the four government expenditure ratios, viz., the Public Expenditure Ratio (PER), the Social Allocation ratio (SAR), the Social Priority Ratio (SPR), and the Human Expenditure Ratio (HER) as according to norms laid down by the UNDP's Human Development report 1991.

Chapter six gives us the summary of our study and thus arrives at the conclusion and followed by some policy prescriptions.

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CHAPTER - II
REVIEW OF LITERATURE

CHAPTER - II

REVIEW OF LITERATURE

2.1 Introduction

In the previous chapter we have pointed out that there has been an explosive growth of public expenditures in the state of Meghalaya. With the explosive growth of public expenditure, there has been an increase in the total public outlay for the social sector of the state economy. If, public expenditure on social sector can be taken as an indicator of human development, then it is believed that the greater amount of public expenditure must have been translated to a higher level of human development in the state. In order to ascertain the relationship between Public expenditure and human development, it is imperative to examine the relationship between public expenditure and human development as reported by various studies that have been carried out in recent years, in India and abroad. We believe that a review of the existing literature pertaining to the problem will not only help us in understanding the intricacies of the problem but also in identifying the ways in which the public expenditures gets translated in to a higher level of human development. With this in mind, an attempt is made in the following paragraph to review some the important and relevant studies that have been carried out by several researchers pertaining to the public expenditure stance on human development.



2.2. Studies on the Growth of Public Expenditure and Human Development

An attempt is made in the following paragraph to review some of the important works done in India and abroad on the intricate relationship between public expenditure and human development.

A number of studies have been carried out in recent years to study the effects of public expenditure and human development and to identify the variables of public expenditure and human development.

In exploring the health impact of economic growth, poverty reduction and public health expenditure, Carrin and Politi (1995)¹, observe that a tremendous amount of public expenditure in developing countries have improved their health status over the past decades. Further, they maintain that the currently achieved health status in developing countries, especially that of the poorest, cannot be denoted as satisfactory. Often the immediate response to this caveat is that developing countries should continue to grow and that, eventually, economic growth will trigger sufficient human development. They have tried to find out to what extent variables other than sheer economic development play a role in health status improvement. In particular, they study the impact of poverty reduction and public health expenditure in developing economies on health. The latter variables are often quoted as necessary for the improvement of developing countries' health status. It is obvious that quite a number of societal factors impact upon the population health levels. For instance, the population dynamics, the economy, the educational system, social infrastructure and the environment have main effects on health. They tried to analyze these interactions by the construction of a multi-sectoral model, developed by Anand and Ravallion (1993)². The study concludes that, in addition to economic growth, the *allocation of resources* is also vital for the determination of health status.

In order to substantiate their result, they tried to bring into their analysis in a later stage, two types of allocation mechanisms, i.e., the inter-sectoral allocation, or the allocation of economic resources between the private and public sector, and more specifically, the degree of provision of social services and Secondly, the inter-household allocation of economic resources, or the income distribution. They argued that it is the distribution of GDP or GNP in favour of *public resources* for basic health services, including family planning and nutrition, as well as elementary education, which matters significantly for health improvement of all socio-economic population categories. On this basis, the study recommends that the governments can make a good case for public expenditure for health and education for improving the scale of human development. The study tried to capture the resultant causal –effect relation among the various inters dependent variables in the following manner.

where $HS = HS (GNPC, PESS, POV) \quad (1)$
 HS = health status indicator
 GNPC = gross national product per capita (PPP)
 PESS = public expenditure on social services
 POV = poverty indicator

By using data pertaining to the years 1985-1990 and covering 22 selected developing countries, the study tried to run a regression analysis to the above mentioned functional relationship. Their analysis shows that lower rates of total or rural absolute poverty are associated with better health status. Furthermore, they assert that in their analysis, GDP per capita keeps its role in determining health status.

No doubt, the findings of the above study substantiates the positive role that public expenditure on public health plays in enhancing the scale of human development, it does not spell out whether their result can be extrapolated to a larger set of countries. We believe that some times, the government effort to finance basic health services is not captured well by the PHE percentage variable. Moreover, the PHE percentage does not take account of the extent to which public health service systems are efficient. Indeed, a

significant level of public health expenditure may hide large inefficiencies, whereas a modest level of public health expenditure may result in a quite performing system. It is precisely this difference in efficiency that is of capital importance for health status. In addition, PHE percentage does not capture efforts to finance the complementary determinants of health such as sanitation and water infrastructure and basic education.

In an attempt to study the impact of public expenditure on human development, Griffin and Mckinly (1992)³, argued that the composition of public expenditure is more important than its volume. Human development is partly about changing spending priorities not between the private and public sectors but within the public sector itself. They believe that in most developing countries much can be done to promote human development by reallocating government expenditure without the need to raise additional revenue through taxation. Therefore, if government does more in some areas without raising taxes, it will have to do less in other areas. This in turn means that the distribution of the benefits and burdens of public sector activities will alter, i.e., some groups will gain and others will lose and hence it will be necessary to build political support for human development by creating effective coalitions of potential beneficiaries. It was further argued that human development is not politically neutral; it is not a technocratic solution to development problems; it requires broadly based popular support. Thus governments which pursue a human development strategy will have to abandon old ways of thinking (which divide expenditure into public investment and public consumption) and adopt new ways based on new categories. They noted that a human development strategy frequently would entail a change in the sectoral composition of government expenditure and in particular a reallocation away from ministries concerned with production (industry, agriculture, commerce) and law and order (interior, defense) in favour of ministries concerned with the social services (education, health, labour) Finally, it was argued that in many countries the process of human development would be accelerated by a reallocation of spending within the ministries concerned with human capital formation. The evidence of the study indicates that when all costs and benefits are taken into account, the return on investment particularly in countries at a lower level of

human development is higher at the base of a pyramid of expenditure than at the summit. Thus the return on primary education is higher than the return on secondary education, which in turn is higher than the return on university education. Similarly, the return on expenditure on primary health care and preventive medicine is higher than the return on investments in hospitals and curative medicine. Again, the return on basic vocational training and apprenticeship programmes is higher than the return on expenditures intended to produce lawyers, highly qualified business managers and certified public accountants. There is thus a predisposition within a human development strategy to spread government spending evenly at the base of a pyramid of expenditure, to favour small projects rather than large, to disperse expenditure widely over a geographical area and to encourage local participation in programme implementation. The study therefore concludes that if such public expenditure policies are followed by countries then they would ensure a higher level of human development for their people.

Amoako (1996)⁴ on a discussion of public expenditure and the poor in South Africa, argues that Governments can contribute most to economic and social progress by focusing on the things that they do best. Sustained improvement in living standard through growth, human capital development, and safety nets requires a strong partnership between governments and the private sector. Governments need to provide goods and services -- law and order, national security, and an environment conducive to business and the smooth functioning of civil society -- which only the state can provide. And even where activities fall in the domain of private economic agents, governments sometimes must correct market failures, but without creating vast and costly administrative and bureaucratic structures. Public expenditures accounted for more than 30 per cent of GNP for Africa as a whole in 1993: ranging between 19 per cent for Cameroon and 47 per cent for Egypt. The efficient management of these resources is critical to growth, to human capital formation, and to the welfare of the poor. That management in turn requires a cadre of professionals who can formulate and implement government policies, but they are in short supply in many developing countries, especially in most countries of Sub-Saharan Africa. This is part of the reason why public administration is often weak, as

manifested in ineffective tax collection, poorly managed public expenditure, abandoned public health measures, poor law enforcement, and haphazard justice. Because poorly functioning bureaucracies give conflicting signals to the private sector, they also damage long-term investment. Building institutional capacity thus needs to figure prominently in any strategy to reduce poverty. Public expenditures are, therefore, essential for human and physical capital formation and for providing income support for the poor. In recognition of this, the signatories to the Social Summit in Copenhagen committed themselves to "increase significantly and/or utilize more efficiently the resources allocated for social development. But governments are not channelling enough resources to these areas. A major part of the reason is excessive military spending in all but a handful of countries. Consider Sub-Saharan Africa. Its spending rose from less than 1 per cent of GNP in 1960 to more than 3 per cent in 1990 -- this, in countries that could not provide adequate immunization coverage for children or universal primary education. Indeed, military expenditure as a percentage of the combined education and health expenditures increased from 27 to 43 during 1980 and the early 1990s, respectively, for Africa as a whole. In contrast, it declined for both the developing and the industrial countries during the same comparable period. The broad reviews of government expenditure are needed to help governments restructure and make tough choices about the allocation and reallocation of their public expenditures. In the long term, the reform of public spending promises greater benefits for human development ,that is to redirect the increased social spending toward services that benefit the poor, especially basic education and essential health services.

In their study on child mortality and public spending on health , Deon and Pritchett (1997)⁵ used cross-national data to examine the impact on child (under 5) and infant mortality of both non-health (economic, cultural, and educational) factors and public spending on health. They come up with two striking findings: (i) Roughly 95 percent of cross-national variation in mortality can be explained by a country's per capita income, the distribution of income, the extent of women's education, the level of ethnic fragmentation, and the predominant religion and (ii) Public spending on health has

relatively little impact, with a coefficient that is numerically small and statistically insignificant at conventional levels. Independent variations in public spending explain less than one-tenth of 1 percent of the observed differences in mortality across countries.

The above estimates imply that for a developing country at average income levels, actual public spending per child death averted is \$50,000 to \$100,000. This contrasts markedly with a typical range of estimates for the cost-effectiveness of medical interventions to avert the main causes of child mortality of \$10 to \$4,000.

Further, the study outlines three possible explanations for this divergence between the actual and apparent potential of public spending: the allocation of public spending, the net impact of additional public supply, and public sector efficacy.

Demery and Walton(1998)⁶, in their analysis of poverty reduction and other social goals, mentions that the core social targets relate to mortality, education, and gender gaps in school enrolments, which they believe has a positive impact on human development. They believe that achieving these targets is an important end in itself. The capacity to live a healthy life and to read and write enhances human capabilities; at the same time, eliminating differences in education between men and women improves social justice. There are also two-way relationships between human capabilities and social and economic change. Economic advance can cause social progress, notably through increased public and private spending out of rising income on factors that improve social conditions. Better health and education can also raise productivity. Most important, there are critical interrelationships between social conditions: better education for women has a powerful influence on improving child health and reducing fertility, independent of income. Further, they mention that governments and donors could do something to help reach the social targets. How does this relate to direct public action and, in particular, to public spending? Part of the answer to this question may be that both public and private action is hidden behind the projection. Public spending is central to the “20–20” initiative, for example, that proposes that at least 20 percent of government spending and

donor support should go to spending on basic services such as primary health, primary education, and clean water. Rising incomes underpin increased public and private spending on education and health. Increased education for women increases household investments in children. But surely a case exists for increased discretionary spending by governments and donors. While most practitioners believe this, the evidence is more ambiguous: public and societal actions can make a major difference to social outcomes, but the answer does not lie in increased spending alone. Improving the policy and institutional framework for social service delivery and use is often of equal or greater importance. One of the important findings was that Incomes and other socioeconomic factors—notably women’s education—are generally much more important than public spending in explaining differences in mortality; in both education and health, variations in outcomes are explained more by differences in the efficacy of public action than by levels of public spending. In addition to ensuring that sufficient budgetary provision is made for good-quality, basic services, we must pay more attention to other critical factors that govern outcomes. It will often be as important (if not more so) to focus on the policy and institutional reforms necessary to achieve well-functioning social sectors.

Mingat and Tan (1998)⁷ explore differences in education in rich and poor countries by first systematically documenting the relationship between per capita GNP and various indicators of educational development. The main purpose of their study is to ascertain whether the above functional relationship can be translated to a better human development scale. The study was an attempt to exploit a simple accounting identity relating the availability of resources to their expenditure, to clarify the sources of rich countries' advantage in education. Data for a sample of 125 countries in 1993 confirm the expected favourable relationship between per capita GNP and each of the following dimensions of educational development:

- The sector context (as reflected by the demographic burden on the education system, the government's fiscal capacity, and so on).

- The production of education services, including such factors as public spending on education and the composition of spending.
- Education outcomes, in terms of coverage and student learning.
- Efficiency of sector operations.
- Equity in access and distribution of public spending on education.

Given the government's predominant role in education, the study made an attempt to examine in more detail the allocation of spending by levels and pedagogical and non –pedagogical inputs. Shares of spending were based on regression of estimates of relations between shares and country wealth. The study concludes that in general the share of primary education decline as countries grow rich while those of secondary and higher education rise.

One appealing explanation for why richer countries achieve better results is that they have more resources for their education systems. But bigger budget allocations to education contribute relatively little to differences in resources aside from the systematic differences in education across rich and poor countries; the study also finds evidence of substantial diversity among countries at comparable levels of per capita GNP. Countries set different priorities in the allocation of public spending, pursue different policies that affect how education services are organized and delivered, and make different tradeoffs as to how resources are used to support expansion of coverage and reduction in the pupil-teacher ratio. In countries where education is poorly developed, policy choices that affect the market for teachers (and therefore their cost), as well as the balance between expansion of coverage and reduction in the pupil-teacher ratio have especially strong effects on the prospects for progress in education. Further they argue that higher level of public expenditure is positively correlated with the scale of human development.

Mundel (1998)⁸, in his study financing for human development, has analyzed public expenditure policies pursued by today's advanced Asian economies (AAE) and their policies for financing the provision of education and health services during the high-growth phase. The study further reveals that the AAEs combined prudent low-deficit

fiscal policies with large allocations for social services. This was further combined with efficient public resource allocation within the social sectors for basic education and health services, and reliance on the private sector for higher levels of education and expensive curative health-care. By doing so, the AAEs are able to ensure higher level of human development in their countries.

Filmer, Hammer and Pritchett (2000)⁹ in an attempt to examine the impact of public spending on health and non-health factors (economic, educational, cultural) in determining human development, focused on the evidence showing two weak links in the chain between government spending for services to improve health and actual improvements in health status. First, they observed that the institutional capacity is a vital ingredient in providing effective services. When this capacity is inadequate, health spending, even on the right services, may lead to little actual provision of services. Second, they argue that the net effect of government health services depends on the severity of market failures—the more severe the market failures, the greater the potential for government services to have an impact. Evidence from their study suggests that market failures are the least severe for relatively inexpensive curative services, which often absorb the bulk of primary health care budgets. In general, public spending influences health status by lowering the effective price of health-enhancing inputs (whether information on food cleanliness or a heart transplant). They further noted that the influence of public expenditure on health status and thereby human development depends on the following four distinct mechanisms:

1. *Composition of public spending*
2. *Output of the public sector*
3. *Net impact of public sector supply on overall consumption*
4. *The health production function*

Within the above framework, the consensus argument is that increases in public spending on primary health care are effective in improving aggregate measures of health status and thereby increasing the pace of human development.

In an attempt to study the relationship between public expenditure and human development, Chakraborty (2004)¹⁰, examines the impact of public expenditure on human development across selected developed and developing countries. Using fixed effects model of pooled least squares for the early 1990s, the analysis of the link between per capita public expenditure on health and education and Human Development Index (HDI) revealed that there is a positive functional relationship between the variables. Further the result of the analysis reveals that the per capita income, though it was found significant in determining human development, is not a sole factor, which leads to human development. The study also reveals that the per capita spending on education and health has relatively stronger impact on human development than growth in per capita income per se. The same results were obtained in the study when HDI is replaced for GDI in model specifications. This result confirms that trend of public expenditure on human capital formation gets transformed to the end results of better human development indicators and gender-sensitive indicators in particular. In other words, the public policy stance plays a crucial role in human development.

Husain (2005)¹¹, in one of his well known articulated paper on financing human development in Pakistan, mentioned that Pakistan is committed to achieve its Millennium Development Goals (MDGs) and that this achievement is possible only when Pakistan increases its public expenditure on social services such as expansion of schooling particularly for the female population, increasing pupil-teacher ratio, improving sanitation access, increased immunization coverage, and improving nutritional status of the children. By doing so, the country will experience higher level of human development. Further the empirical results of the study indicated that growth of per capita expenditure and large targeted intervention in child survival, malnutrition and schooling over and above the more general intervention could take Pakistan closer to achieving higher level of human development. Further he asserted that by increasing public expenditure on their children's human capital the country can bring about the desired results in improving child schooling, health and

nutritional outcomes. He also made an attempt in his study to argue that most economists would think in terms of production function i.e., according to the study, a set of inputs are deployed to produce one unit of output. However, he noted that in case of MDGs increasing public expenditure on the inputs such as teachers, doctors and Para medical staff, generation transmission and distribution of water and collection of waste and garbage, supply of immunization shots etc., would produce expansion of school, improved access to health, nutrition, water supply and sanitation, immunization coverage etc. It was further observed in the study that some of these inputs are additive while others interacted with each other in a positive way and thus the result is that the output is greater than the sum of all the inputs. For instance the study reveals that the provision of inputs for potable water supply and sanitation interact with inputs for health in a way that the outcomes of improved access to health, water and sanitation are positively correlated and thus ensuring faster growth of human development in the country. Therefore, it was noted that instead of thinking independently of financing for education, financing for health, financing for water supply and sanitation the government should think in terms of financing MDGs and include all expenditures on inputs that are deployed for achieving the outputs or outcomes such as higher level of human development.

Further an attempt was also made in the study to explain that federal government ministries, provincial departments, district government departments are all organized vertically and that they do not conform to the conceptual issue that have been outlined above. Thus, it was felt that there is a disconnection between optimally efficient utilization of financing and the actual delivery of these programs. Further, the study has designed the correct measure to capture expenditures on human development. The study reveals that there are three types of expenditures that are incurred. First is the public expenditure, second is the expenditures by private and non-governmental sectors who provide schooling or health services and finally is the expenditures incurred by the households themselves in form of tuition fees, text books, purchase of medicines, vaccines etc. Furthermore, when all three types of expenditures are taken together they

give us a complete picture of the expenditures on inputs used for achieving MDGs. The study concluded that Pakistan's public expenditures on human development are low by international standards and are approximately 4 percent of GDP. But total public and private expenditures amount to more than 8 percent of GDP which is twice what the public sector spends. Households themselves spend at least 4 percent on health, education, water supply and sanitation. Thus it was felt that donors have to agree on an integrated plan of human resource development that will meet the MDGs. They should then channel their resources on the basis of certain criteria i.e. cost effectiveness, efficiency in the resource use, targeting the poor households, quality of service etc. In this manner human resource development will be ensured.

Oriakhi (2006)¹², in his study on fiscal decentralization, public expenditure, efficient service delivery and sustainable human development observes that satisfactory service delivery in Nigeria remained a mirage although huge funds were allocated and seemingly expended by the Federal, State and Local Governments towards the provision of educational, health and other infrastructural facilities. The dearth of these basic and essential services has therefore initiated formidable challenges to sustainable human development in Nigeria. Further, the study reveals those education indicators such as primary enrolment ratio, pupil-teacher ratio, and secondary and tertiary enrolment ratios are not improving. Also, health indicators such as life expectancy, infant and maternal mortality rates, and the ratio of population per physician are all worsening. The study has identified the probable factors as constraints to adequate service delivery at sub-national levels of government such as; the mismatch between expenditure assignments and sources of revenues, lopsided vertical allocation formula which favoured the Federal Government, rent-seeking and outright theft, inadequate institutional guidelines (constitutional and budgetary) and ineffective monitoring of the public expenditure process. Following the identifications of the above problems, suggestions were made in the study towards the improvement of service delivery at sub-national levels of government. Foremost was the need to reform and modernise institutions and processes for budget and financial management in order to enhance the capacity for tracking public

expenditure. Further, it was noted that the Federal Government should devolve a greater share of both revenue/tax sources and funds allocated from the federation account to sub-national levels of government; check high expenditure on electioneering campaigns at both individual and party levels as it constitute a major inducement for the diversion of public funds to offset initial campaign expenditure; and the need to tie budget items to community based projects and empower the communities to track such expenditures, etc. It was also asserted that decentralization when properly conceptualized, structured and implemented could initiate prudent use of resources and facilitate growth and as well as human development. It was concluded that in order to boost the efficiency, effectiveness and poverty focus of public expenditure towards achieving the human development, appropriate decentralization according to the true dictates of federalism should be adopted and that there should be budgetary and financial management reforms to increase public expenditure on social services, such as education and health, for a sustainable human development.

In an attempt to study the impact of health financing on human development, Gottret and Schieber (2006)¹³, observes that it is the international community who must live up to its promise to scale up human development assistance and make it predictable and sustainable. They also discussed that ultimately it is the developing countries that must face the challenges of organizing their institutions and health financing systems in order to provide to provide sufficient financial resources, ensure equitable access to effective health interventions, and protect their people against health and income shocks which, according to the study, are necessary for scaling up human development. Their study provides an overview of health financing policy in developing countries which aims at raising human development. They discussed the health sector as an extremely complex one, and that reformers must be prepared to deal with its complexities when designing and implementing health policy reforms. They assessed health financing policies from the perspectives of the basic financing functions of collecting revenues, pooling resources, and purchasing services. They have also evaluated these functions for their capacity to improve health outcomes, provide financial protection, and ensure consumer

satisfaction—in an equitable, efficient, and financially sustainable manner. These health policy reforms would eventually result in sustainable human development.

Further, the study shows that there are three basic principles of public finance:

- *Principle 1.* Raise enough revenues to provide individuals with a basic package of essential services and financial protection against catastrophic medical expenses caused by illness and injury in an equitable, efficient, and sustainable manner.
- *Principle 2.* Manage these revenues to pool health risks equitably and efficiently.
- *Principle 3.* Ensure the purchase of health services in ways that are allocatively and technically efficient.

The study reveals that all health financing systems of the developing countries have tried to follow the above principles in order to ensure better human development. Further it was found out that globally there exists an enormous mismatch between countries' health financing needs and their current health spending. Thus, it was felt that programmes to improve public expenditure management are an important priority and may even constitute a necessary precondition for scaling up programs in health or other social sectors to assist human development. Further the evidence suggests that well-designed conditional public expenditure have the potential to improve human development and health outcomes in developing countries.

Gupta, Clements and Tiongson (1998)¹⁴, in their study on public spending and human development observes that social indicators are improving in many developing countries as public spending on education and health increases. However they believe that a greater share of investment in human capital should be channelled towards primary education and preventive health care. They also believe that public spending on education and health, because of its positive effects on the formation of human capital, can boost economic growth. However they argued that the productivity and the benefit of public expenditure on education and health would depend on depends on how funds are allocated within these sectors. The study has made use of data from a sample of 118

developing and transition countries. These data suggest that, since the mid-1980s, real per capita expenditures for education and health have been increasing in developing countries, on average, but declining in transition economies. Further the study reveals that the increases in public spending on education and health in countries with IMF-supported programs have been comparable and sometimes larger than in other countries, despite the fiscal consolidation often required by adjustment programs. These increases have been accompanied by tangible improvements in social indicators. But a sizable portion of public spending on education and health is devoted to higher education and curative health services. Thus, it was observed that in a number of countries, increase in public spending for primary education and preventive health can ensure that the benefits of social spending are distributed more equitably while accelerating human development.

Nayak and Thomas (2007)¹⁵, in their study on human development and deprivation in Meghalaya have made an attempt to construct human development indices of the state of Meghalaya at the district level. They have constructed individual indices of education, health and income and expenditure. For an over all educational status in the state of Meghalaya two indices were constructed, one for literacy rate and the other for intensity of education. It was found out that the education index was as high as 0.767 in Meghalaya. Again for health status, two indicators were considered such as infant mortality and life expectancy and as such the health index of Meghalaya is 0.139. Further it is apparent from the study that the income index of Meghalaya was as low as 0.480 which shows that the income level of Meghalaya is very poor. The study also finds evidence that not only that the income of the people was low but there was also widespread inequality of income among the seven districts in Meghalaya. The expenditure indices reveal that the average consumption expenditure was not only low in the state but also varied significantly across the districts which are the reason for low human development in the state. The expenditure indices of Meghalaya were 0.313. Finally the study reveals that the Human Development Index of Meghalaya was very low, which is 0.406 and that there was a disparity of human development across the districts and also in all the districts in the states. Further an analysis has also been made in the

study on the status and trend of human development and deprivation in Meghalaya and comparing it with other leading States of the country. The analysis reveals that there has been an improvement of HDI both in rural and urban areas in Meghalaya and India as a whole. Finally the study concluded with some policy prescriptions such as; the need for enhancement of fund allocation of poverty alleviation programmes in the state , to raise the literacy rate of the state , that health facilities should not only be expanded but also to ensure that rural centre are made to function with adequate medicines and medical staff and that there should be convergence of governmental development activities which would result in gender equality, better education and improved health and these which will be transformed into higher level of human development.

Sen and Karmakar (2005)¹⁶ on a discussion of the reprioritization of public expenditure for human development argues that in India, in the urgent and substantial task of raising the level of human development of their citizens, the basic challenge faced by most of the states is to break the 'vicious circle' of poverty, low human development and low income. They further argued that low levels of income across the population also limit the ability of the state governments to finance human development through their own resources. This is clearly indicated by the strong association between public expenditures both across states and over time. Furthermore, they also discussed that within the framework of fiscal responsibility legislation which has been enacted by the centre as also several States, it is not feasible to vigorously push for public expenditures financed by deficits, and consequent borrowings. Over and above this constraint, for most of the states a large part of budgetary expenditure consists of committed expenditure of some sort or the other (salaries, interest payments, loan repayments and other contractual payments). They elucidate that in the short and even in the medium term most of these expenditures cannot be reduced drastically and that the macroeconomic performance cannot be suddenly improved through action at the state level alone, and therefore, an important method of managing resources to finance consistent and balanced human development lies in the reprioritization of current expenditure in accordance with the urgent needs and shortfalls in particular areas.

They further asserted that the use of rights-based and needs-based approaches in the public provision of education and health care is to be considered. The public provision (free or subsidized) of other education and health services should respond to the needs of marginalized and disadvantaged groups. They believe that shifting resources from low-productivity sectors, such as defense and general administration, to education and health can go some way towards meeting higher level of human development.

Qureshi (2009)¹⁷, in an attempt to analyze the relationship between human development, public expenditure and economic growth, recognized that human development and economic growth are strongly related and that it is the level of public expenditure that determines human development. With endogenous GDP formulation, the study examines the impact of public expenditure on human development and economic growth in Pakistan. Further, the study used the system dynamics approach to model, identify and help manage the development path of human development and economic growth in Pakistan given alternative policies for public expenditure on human development. For this purpose the model endogenously determines path of population cohorts, education, health and economic indicators. The simulation results suggest that the current level of public expenditure on human development is extremely low and any further decrease will have irreversible negative impact on human development and economic indicators, even if the resources so saved are effectively invested in economic growth. Further, the study reveals that higher public expenditure on economic growth may neither result into better human development indicators nor economic indicators. On the contrary, it was observed that higher public expenditure on human development not only improves human development indicators but also supplements economic growth. Thus, the study suggests reorientation of fiscal policy in Pakistan and to anchor it to human development by allocating more public funds.

Choudhry (2009)¹⁸, in an article on public expenditure and human development in Tripura, have recognised the importance of public expenditure in the process of human development. This paper examines the trends and pattern of public expenditure on human

development in Tripura and attempts to explain these trends in view of overall changes in the fiscal situation of the State. The paper also presents a comparative analysis of the level of public spending on human development in Tripura and other Indian States. The paper further examines in detail the composition of public expenditure in sectors that are important for human development. It was found that per capita spending on human development in Tripura is substantially higher than most States in India. It is, however, low in relation to a number of northeastern States. An overview of the findings of the paper reveals that although the per capita expenditure on human development has also been increasing in absolute terms, it has not kept pace with the growth of GSDP in the State and as a result, despite a rise in per capita expenditure on human development, the human expenditure ratio (HER) has fallen over the 1990s. The paper reveals that the slow growth of expenditure on human development relative to GSDP is closely related to the fiscal deterioration in the State in particular because of rise in debt stock and rising expenditure on salaries, wages and pensions from 1998-99 onwards. Further it was found out that the major constraint on public spending on human development is the dependence of the State on Centre for its revenues. Fluctuations in Central transfers are an important determinant of the fiscal situation in the State which in turn affects the capability of the State to invest in human development. It was also observed that within the social sector, education accounts for a large share of expenditure and despite deterioration in fiscal conditions, the State has managed to keep spending on education at more than 7 per cent of GSDP. In contrast, it was found that spending on other human development areas, including health, as a share of GSDP has tended to decline. Finally the study reveals that public expenditure on social sector is important for determining the level of human development in the state.

In trying to find out a correlation between education expenditure and human development in Nigeria, Aigbokhan, Imahe and Ailemen (2009)¹⁹, aims at examining the impact of education expenditure on human capital development in Nigeria. The study presents an overview of the trend of education expenditure vis-à-vis the national shortfalls in human capital development. Further, they argued that there is no doubt that

education is a growing sector in Nigeria, and that there is a correlation between education and human development. Insufficient and uncertain budgetary allocations to education have resulted in the deterioration of its impact on human capital development. They also explained that there has been a severe financial and economic constraint which has affected all levels of education and their capacities to provide services and also the capacity of the students and their families to finance formal education studies. Furthermore, it was noted that the shortfalls in manpower supply in the targeted sectors; technology teachers, university academic staff, and the inadequate existing avenues for training technology teachers in Nigeria, point to the fact that education sub-sector has failed in its role in human capital development in the country. The study revealed that the investment expenditure on education did not demonstrate a positive effect on the overall human capital development in Nigeria and that the overwhelming nature of human capital development vis-à-vis the technological implications and the socio-economic threats of globalization trends should constitute enough reasons for any nation especially the developing one to feel concerned about the future survival of education. It was also noted that in the case of Nigeria, it should be determined in taking the necessary and bold remedial steps which are clearly focused on adequate investment on human capital development via education investment. They finally concluded that higher and fixed percentages of annual budgetary allocations should be devoted to education, monitoring the allocations, disbursements and timely utilization of Education Tax Fund in the education sub-sector, and the sourcing of internal and external education funds. Thus, higher expenditure on education would result in better human capital development in Nigeria.

2.3. Concluding Remarks

The studies review above has made a substantial contribution in identifying some important variables affecting human development. A large number of explanatory variables have been experimented by many authors in determining the level of human

development with different sets of models. For instance the most usual variables being used and found statistically significant are per capita public, expenditure, health care expenditure, public spending on education, per capita GNP, per capita GDP and public expenditure on social services. The studies therefore reveals that the level of public expenditure on health and education particularly, have a significant impact on human development.

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CHAPTER - III

THEORETICAL ISSUES RELATED TO PUBLIC POLICY STANCE AND HUMAN DEVELOPMENT

CHAPTER - III

THEORETICAL ISSUES RELATED TO PUBLIC POLICY STANCE AND HUMAN DEVELOPMENT

3.1. Introduction

The studies on the level of public expenditure and human development as reviewed in the last chapter have several weaknesses in them. Moreover, we have observed that most of the studies on the level of public expenditure and human development are merely empirical exercises and the limitation of these studies can be ascertained in terms of their failure to translate these empirical underpinnings into theoretical foundations. In addition, we may be tempted to mention here that in most of the studies on the level of public expenditure and human development, the choice of variables has been largely inductive i.e., on the basis of additional explanation provided by the variables rather than on the basis of *a priori* reasoning. As such, these studies have provided spurious explanation to their model adding very little to the understanding of the level of public expenditure and human development. Keeping these limitations in mind, an attempt is made in this chapter to provide the conceptual clarification to the public expenditure stance on human development.

3.2. Public Expenditure Stance on Human Development

There are various theoretical issues that are related to public policy and human development. Theoretically, there are six reasons why public policy stance should promote human development. First and above all, human development is an end itself, which needs no further justification. Second, it is a means to higher productivity. Third, it reduces human reproductively, by lowering the desired family size. Forth, human development is good for physical environment; that the impact of population growth and population density is detrimental for environment due to deforestation, desertification and soil erosion. Fifth, reduced poverty contributes to healthy civil society, democracy and greater social stability. Sixth, it has politically appeal, for it may reduce civil disturbances and increase political stability, (Streeten, 1994).¹

Arndt (1998),² states that the arguments for public policy stance, in terms of expenditure as the key policy instrument, rest on the fact the functioning of the market cannot, by itself, activate the signalling, response and mobility of economic agents to achieve efficiency in both state (allocative efficiency) and dynamic (shift in the production frontier) terms.

The theoretical and empirical advancement towards public policy intervention in providing human development reflect the community's growing concern with social aspects of development; steel, mills, dams and machine building industries have now been displaced from the commanding heights of development strategy, instead so-called soft sectors such as education and health have occupied the centre stage. Certain public goods such as defence, administration, clean environment etc that cannot be provided by market, because no consumer will be excluded once these services are provided and hence consumers will not 'buy' these services, (Mundle 1998)³ .

The essence of human resource development becomes one of ensuring that the

work force is continuously adapted for an upgraded to meet the new challenges of its total environment. This implies that those already on the job require retraining, reorientation or adaptation to meet new challenges. As, Yesufu (2000)⁴ and Adamu (2003)⁵ argue that this special human capacity can be acquired and develop through education, training, health promotion, as well as investment in all social services that influenced man's productive capacities.

It may be mentioned that orthodox measures of well being, such as growth of GDP per head or by some distribution-corrected value of GNP per head , used in empirical literature have inherent limitations in capturing wider aspects of well being and the contingent process of development. The genesis critique of the use of GNP per capita for measuring the level of development in various countries can be traced back to the United Nations Report, 1954,in which specific recommendations were made against the use of this indicator as a measure of human development. Subsequently , a formidable array of literature followed since 1970s in support of this proposition and argued for construction of indices based on socio-economic indicators for measuring development Noorbakhsh (1998),⁶ Hicks and Streeten (1979),⁷ Morris(1979),⁸ Adelman and Morris (1967),⁹ UNRISD(1972).¹⁰ In the seventies, the concept of " basic needs" became the central core of the debate on human development policies (Hicks and Streeten, 1979).

Empirical evidence shows that in a semi-logarithmic framework of regressing proportionate shortfalls of life expectancy against per capita GDP, reveals that nearly half of the variations in the expectancy could be attributed to differences in GNP per head. In this context, it is important to note that the substantial impact of higher GDP per head on life expectancy and other social outcomes of better literacy level, low mortality rates among children and better schooling among children seems to work via factors in which public policy stance play a significant part, (Dreze and Sen, 1995)¹¹.

As, Sen and Karmakar (2005)¹² argues that it is the human development sectors, which are overlapping substantial with the social services, are primarily in the domain of the states in terms of the constitutional assignment of functions in India.

Therefore, in the urgent and substantial task of raising the level of human development of their citizens, the basic challenge faced by most of the states of India is to break the 'vicious circle' of poverty, low human development and low income. Low levels of income across the population also limit the ability of the state governments to finance human development through their own resources. This is clearly indicated by the strong association between public expenditures and per capita incomes often noticed by researchers, both across states and over time. Moreover, within the framework of fiscal responsibility legislation which has been enacted by the centre as also several States (after the strong support it got from the Twelfth Finance Commission), it is not feasible to vigorously push for public expenditures financed by deficits, and consequent borrowings. Over and above this constraint, for most of the states a large part of budgetary expenditure consists of committed expenditure of some sort or the other (salaries, interest payments, loan repayments and other contractual payments). Given that in the short and even in the medium term most of these expenditures cannot be reduced drastically and that the macroeconomic performance cannot be suddenly improved through action at the state level alone, an important method of managing resources to finance consistent and balanced human development lies in the reprioritization of current expenditure in accordance with the urgent needs and shortfalls in particular areas.

The public provision of education and health care may be considered using rights-based and needs-based approaches. Owing to the limited resources of Governments in developing countries, the universal provision of education and health care is almost impossible. However, basic education and primary health care command general support under a rights-based approach. The public provision (free or subsidized) of other education and health services should respond to the needs of marginalized and disadvantaged groups. Huge financial resources are needed in most countries of the

region to expand education and health services and improve their quality. Shifting resources from low-productivity sectors, such as defence and general administration, to education and health can go some way towards meeting the need.

Expenditures on education may affect health and parental education may benefit children. Health expenditures may themselves affect the value of education. These links are important for understanding the potential range of benefits which accrue to expenditures on human capital (Appleton and Teal, 1998)¹³.

The dominant view in economic literature is that Government must play a role in correcting market failures in the area of allocation of resources over time, because of the 'myopic' nature of market participant , four decades of development experience world over has shown that there can be "government failures" as well , resulting not only in economic losses due to Misallocations of resources arising from faulty investment decisions but also from diversion of resources to rent seeking activities because of the very regulations themselves, (Ramji , Suresh and Srinivasan , 2000)¹⁴ . It is possible to analyse economic policy formulation and implementation in India , in terms of the changing boundaries of state and market , and the emerging new balances as a result of Economic Reform. Economic activity from a functional point of view classifying state into (a) Producer state --Producing commercial goods and services.(b) Regulatory state setting and enforcing rules that encourage or discourage economic activities of market participants.(c) facilitator state – providing public goods such as police , judiciary , roads etc. and (d) Welfare state providing a wide variety of merit goods such as education and health services

Oriakhi (2006),¹⁵ argues that in spite of the huge funds allocated and seemingly expended by the Federal, State and Local Governments in Nigeria towards the provision of educational, health and other infrastructural facilities, satisfactory service delivery remain a mirage.

The dearth of these basic and essential services initiates formidable challenges to sustainable human development. Education indicators such as primary enrolment ratio, pupil-teacher ratio, and secondary and tertiary enrolment ratios are not improving. Also, health indicators such as life expectancy, infant and maternal mortality rates, and the ratio of population per physician are all worsening. Probable factors identified as constraints to adequate service delivery at sub-national levels of government include; the mismatch between expenditure assignments and sources of revenues, lopsided vertical allocation formula which favoured the Federal Government, rent seeking and outright theft, inadequate institutional guidelines (constitutional and budgetary) and ineffective monitoring of the public expenditure process..

The most significant challenges to improving health system performance in developing countries are weak public sector management, particularly at the district or municipal level. Most of the empirical analysis (Gottret and Schieber, 2006)¹⁶ support direct correlations among the quality of policies and institutions, absorptive capacity, and the country's ability to improve certain health outcomes through increased government health spending. Several tools have been developed to improve public sector management.

Caldwell (1986)¹⁷ believes that the core social targets relate to mortality, education, and gender gaps in school enrolments. Achieving these targets is an important end in itself. The capacity to live a healthy life and to read and write enhances human capabilities; at the same time, eliminating differences in education between men and women improves social justice (though it may sometimes conflict with cultural norms).

Taking the clue from the above argument, it can be argued that there are also two-way relationships between human capabilities and social and economic change. Economic advance can cause social progress, notably through increased public and private spending out of rising income on factors that improve social conditions. Better health and education can also raise productivity. Most important, there are critical

interrelationships between social conditions: better education for women has a powerful influence on improving child health and reducing fertility, independent of income.

Demery and Walton (1998)¹⁸ are of the opinion that Public spending is central to the “20–20” initiative, for example, that proposes that at least 20 percent of government spending and donor support should go to spending on basic services such as primary health, primary education, and clean water. Rising incomes underpin increased public and private spending on education and health. Increased education for women increases household investments in children. But surely a case exists for increased discretionary spending by governments and donors. While most practitioners believe this, the evidence is more ambiguous: public and societal actions can make a major difference to social outcomes, but the answer does not lie in increased spending alone. Improving the policy and institutional framework for social service delivery and use is often of equal or greater importance.

It may be mentioned here that in an environment of low growth and increased attention devoted by both the authorities and the public to government spending, the efficient allocation of resources in such growth promoting items as education and health seems of paramount importance, (Afonso and Aubyn ,2004)¹⁹. Furthermore, and in what concerns the health sector, there is a genuine concern that for most OECD countries public spending in healthcare is bound to increase significantly in the next decades due to ageing related issues. Again, and since most of expenditure on healthcare comes from the public budget, how well these resources are used assumes increased relevance.

The strategy that has proved effective in improving economic and social well-being consists of three elements, (Ababa, 1996)²⁰: labour-demanding growth, investments in education and health and safety nets for poor and vulnerable groups. Increasingly, a fourth element -- good governance -- is being added, because governments directly control a significant share of national resources and shape the policy environment for private economic agents and civil society. In the interest of economic and social progress,

the use of public resources must emphasize efficiency and equity. Beyond that, the most important attributes of good governance are accountability, transparency, and participation. Participation, for example, increases stakeholders' ownership of policies and projects -- which contributes to their willingness to share costs and maintain the assets created. Such involvement in turn raises the quality and sustainability of development programmes and helps to build local capacity.

Higher public spending on health as a share of GDP, is said to be very tenuously related to improved health status, (Filmer and Pritchett, 1997)²¹. The observed efficacy of public spending is several orders of magnitude lower than the apparent potential. The correct interpretation of the empirical results and their policy implications depend on three factors, *cost effectiveness of public spending, the net impact of additional public supply, and public sector efficacy*. Each can explain the observed results and almost certainly each contributes to explaining the low typical efficacy of actual public spending

In recent years, some studies have pointed out that, poor expenditure on health sector in most developing countries is worsened by an inverted nature of health expenditure pyramid. About three-quarters of all public expenditure on health are for expensive medical care that benefits a small minority of the population living in the urban areas, (Griffin and McKinley, 1992)²². A high proportion of the budget for health, 80 to 90 per cent in some countries, is spent on hospitals, almost all of which are located in the cities. At the same time, only about 60 per cent of the people have access to primary health care. A high proportion of the poor, and of those living in rural areas, is not reached by the health care system and is forced to rely on home remedies and traditional medicine. Therefore, the case of public expenditure proceeds from market failures of one kind or another, (Rao, 1998)²³.

It is believed that under many situations, markets fail to secure appropriate signals, responses and mobility because: (i) not all goods and services are traded. Markets cannot determine the prices of public goods; (ii) goods exhibiting externalities in

consumption and production force a wedge between market prices and social valuation and the market will not ensure a socially desired supply; (iii) some goods are characterized by increasing returns to scale. In case of such natural monopolies, society can gain from lower prices and higher output when the public sector is the producer or a subsidy is paid to the private sector to cover the losses of producing optimal output; (iv) information asymmetry between the providers and consumers of services such as social insurance can give rise to the problems of moral hazard and adverse selection; and (v) state intervention is necessary also for securing income redistribution.

3.3 Concluding remarks

Based on the above arguments, we may be tempted to argue that public spending on social services particularly on health and education has a strong impact on the level of human development. The substantial impact of higher GDP per head on human development seems to work but even it happens via factors in which public policy stance play a significant part.

Further, the array of literature in favour of social indicators to measure human development has resulted in the collation of data on a spectrum of socio-economic indicators across countries, which has inevitably resulted in the attempts to construct the composite indices of human development.

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CHAPTER - IV

TRENDS AND PATTERN OF PUBLIC EXPENDITURE IN MEGHALAYA

CHAPTER - IV

GROWTH AND PATTERNS OF PUBLIC EXPENDITURE IN MEGHALAYA

4.1 Introduction

In the previous chapter an attempt was made to explore the public expenditure stance on human development in conformity with the objectives and hypotheses of our study. It is observed from our discussion thereto that the growth and pattern of public expenditure gets translated in to the higher level of human development scale. No doubt, any analysis of the growth and pattern of public expenditure requires an in-depth analysis of the actual growth of public expenditure in the state of Meghalaya and the direction in which it has moved over the years. Since, public expenditure on education and health are considered to be two important indicators of human development an attempt is made in this chapter to look in to the growth and pattern of public expenditure on education and health over the years. It may be mentioned here that it is the size and composition of public expenditure, which ultimately the society looks to. Underneath the policy controversies regarding the social desirable level of public expenditure and its compositional pattern, vital questions about the actual behaviour of these expenditures and its intricacies await dispassionate analysis. Therefore, this chapter is an attempt in this direction.

We intend to divide this chapter in to three sections. Section I (4.2) discusses the growth of public expenditure in the state over the years and section II (4.3) is an attempt to present the pattern of public expenditure in the state. An attempt is made in Section III (4.3) to examine the extent to which public expenditure on social services such as

education and health has a tendency to rise with the increase in the Gross State Domestic Product in Meghalaya.

4.2 Growth of Public Expenditure in Meghalaya

In recent years, there has been a tremendous growth of public expenditure in Meghalaya. The tremendous growth of public expenditure in the state might have been due to the accumulated economic and social aspirations of the society at large. We are not going to venture at this particular aspect of the problem as our main objective in this chapter is to find out the direction and composition of public expenditure in the state of Meghalaya. In order to understand the intricacies of the growth of public expenditure in the context of Meghalaya, it is proper to analyse first the trends or the direction in which it has moved. Keeping this in mind, an attempt is made in the following paragraph to discuss the growth of total public expenditure both revenue and capital accounts of the state of Meghalaya from 1984-85 to 2003-04. No doubt, this will give us the overall picture of the growth of public expenditure in the State during the period of our study. The following Table 4.1 presents the trend of the growth of total public expenditure.

**TABLE 4.1 GROWTH OF TOTAL PUBLIC EXPENDITURE
(BOTH REVENUE AND CAPITAL ACCOUNT)
OF THE STATE OF MEGHALAYA**

Years	Total expenditure (Rs in crores)	GDP at current prices (Rs in crores)	Per capita Expenditure (Rs)	Per Capita Income at Current Prices (Rs)	Column 2 as a percentage of column 3
1984-85	148.07	388.83	1002.51	2633	38.08

1985-86	174.8	438.76	1151.52	2890	39.84
1986-87	206.6	485.21	1326.06	3114	42.58
1987-88	243.32	578.72	1522.65	3622	42.04
1988-89	285.56	648.06	1734.87	3937	44.06
1989-90	328.68	808.66	1910.93	4702	40.65
1990-91	385.72	950.73	2199.09	5420	40.57
1991-92	550.02	1119.37	3042.15	6191	49.14
1992-93	614.22	1297.56	3309.38	6991	47.34
1993-94	588.1	1510.87	3083.9	7956	38.92
1994-95	559.77	1664.94	2855.97	8543	33.62
1995-96	714.54	1995.19	3549.63	9971	35.81
1996-97	741.8	2198.25	3587.04	10702	33.75
1997-98	810.98	2497.35	3818.17	11841	32.47
1998-99	959.94	2939.28	4403.39	13576	32.66
1999-00	1092.96	3637.74	4885.83	16262	30.05
2000-01	1305.51	4048.78	5688.5	17642	32.24
2001-02	1316.77	4614.98	5596.13	19613	28.53
2002-03	1390.6	4900.1	5874.95	20702	28.38
2003-04	1548.99	5564	6462.2	22962	27.84

Source :

Finance Accounts, Government of Meghalaya, 1984-85 ; 1985-86;1986-87;1987-88;1988-89;1989-90;1990-91; 1993-94; 1994-95;1995-96;1996-97;1997-98;1998-99;1999-2000;2000-2001;2001-2002;2002-2003;2003-2004.

Estimates of State Domestic Product of Meghalaya Linked Series, 1980-81 to 1998-99; 1999-2000 to 2006-2007.

Budget 1991-92, Volume II, Part II, Government of Meghalaya, Finance Department.

Memorandum on the Budget Estimates of the Government of Meghalaya for the year 1992-93, Government of Meghalaya , Finance Department.

It is observed from column 2 of the above table 4.1 that the total public expenditure grew from Rs. 148.07 crores in 1984-85 to Rs.1548.99 crores in 2003-04 recording an average annual rate of increase of 47.31 per cent.

Column 3 of the above table shows the growth of Gross State Domestic Product from Rs.388.83 crores in 1984-85 to 5564.00 crores in 2003- 04 with an average annual rate of increase of 66.55 per cent.

In column 4 we observed that the per capita public expenditure increased from Rs.1002.5 in 1984-85 to Rs. 6462.20 in 2003-04. In terms of the average annual rate of increase, the per capita public expenditure records an increase of 27.23 per cent only.

The growth of per capita income is depicted in column 5 of the above table. It is observed that there has been a continuous increase in per capita income which, grew from Rs. 2633 in 1984-85 to Rs. 22962 in 2003-04, thereby recording an average annual rate of increase of 36.60 per cent.

Based on the trends in the growth of public expenditure as observed in the above table, it may be inferred that the average annual rate of increase of the total public expenditure is less than the average annual rate of increase of the Gross State Domestic Product. The average annual rate of increase of the per capita public expenditure is also very low compared to that of the total public expenditure and Gross State Domestic Product. Thus, we find that although, Government expenditure has increased over the years covered by our study, the rate of growth of public expenditure has not kept pace with the rate of growth of Gross State Domestic Product. This might have been due to a gradual withdrawal of the state from the provision of the social services in a post globalization era.

The total public expenditure as a percentage of the Gross State Domestic Product is presented in column 6 of the above table. It is observed that during the entire period

under study, the public expenditure as a percentage of gross state domestic product shows a declining trend except for the period 1984-85 to 1991-92. Incidentally, we observe a rising trend of public expenditure as a percentage of state domestic products from the year 1984-85 to 1991-92, where the rising share of public expenditure in state domestic product increased from 38.08 per cent to 49.14 per cent. However, from the year 1992-93 onwards, there has been a decline in the percentage throughout, up to the year 2003-04, where, it declined from 47.34 percent in 1992-93 to 27.84 percent in 2003-04. This decline might have been due the emergence of a market economy characterized by a philosophy of public-private partnership in the provision of some of its social services in a post globalization scenario.

It is to be noted that, although, there has been a continuous increase in the absolute level of total public expenditure during the period 1984-85 to 2003-04, the rates of annual increase vary considerably. We believe that an aggregative picture of the growth of total public expenditure does not give us a clear picture about the composition and direction of its change over a period of time and its final culmination in the form of a higher scale of human development. Keeping the objective of our study in mind, it is worth pursuing an analysis of compositional pattern of public expenditure in terms of the share of public expenditure on health and education. It is believed that for a more clear understanding of the impact of public expenditure on the pace of human development, it is absolutely necessary to also have knowledge of the growth of public expenditure on education and health as well.

4.3 Growth of public expenditure on education and Health in Meghalaya

It has been pointed out in the previous chapter that there exists a functional relationship between the scale of human development and the level of Public expenditure on education and health. This particular view has been substantiated by a large number of researchers. What have been the consequences of public expenditure on human development remains an open issue, which will be addressed in the next chapter of our work. We believe that a given trend in the growth of public expenditure on education and health in the state of Meghalaya will provide some further insights in understanding the impact of public expenditure on human development. Keeping this in mind, an attempt is made in the following paragraph to study the trends in the growth of public expenditure on education and health. Table 4.2 depicts the trends in the growth of public expenditure on education and health for the entire period covered by the study.

TABLE 4.2 GROWTH OF PUBLIC EXPENDITURE ON EDUCATION AND HEALTH OF THE STATE OF MEGHALAYA (RUPEES IN CRORES)

Years	Total public Exp	Exp on education	Exp on Health	Per capita exp on education	Per capita exp on health	Column 3 as a % of column 2	Column 5 as a % of column 2
1984-85	148.07	16.62	10.7	112.53	72.44	11.22	7.22
1985-86	174.8	19.94	11.26	131.36	74.18	11.41	6.44
1986-87	206.6	22.22	10.73	142.62	68.87	10.76	5.19
1987-88	243.32	26.6	11.17	166.46	69.9	10.93	4.81
1988-89	285.56	33.66	13.96	204.5	84.81	11.79	4.89

1989-90	328.68	50.63	16.53	294.36	96.1	15.41	5.03
1990-91	385.72	55.53	18.73	316.6	106.78	14.4	4.86
1991-92	550.02	67.22	22.82	371.79	126.22	12.22	4.15
1992-93	614.22	76.43	26.17	411.8	141	12.44	4.26
1993-94	588.1	91.56	27.43	480.13	143.84	15.57	4.66
1994-95	559.77	84.92	26.42	433.27	134.8	15.17	4.72
1995-96	714.54	109.14	30.19	542.18	149.98	15.27	4.23
1996-97	741.8	115.53	33.7	558.66	162.96	15.57	4.54
1997-98	810.98	131.3	39.69	618.17	186.86	16.19	4.9
1998-99	959.94	159.71	50.48	732.61	231.56	16.64	5.26
1999-00	1092.96	195.12	55.92	872.24	249.98	17.85	5.12
2000-01	1305.51	219.93	63.1	958.3	274.95	16.85	4.83
2001-02	1316.77	228.25	73.54	970.04	312.54	17.33	5.58
2002-03	1390.6	221.97	74.3	937.77	313.9	15.96	5.34
2003-04	1548.99	240.62	72.78	1003.84	303.63	15.53	4.7

Source :

Finance Accounts, Government of Meghalaya, 1984-85 ; 1985-86;1986-87;1987-88;1988-89;1989-90;1990-91; 1993-94; 1994-95;1995-96;1996-97;1997-98;1998-99;1999-2000;2000-2001;2001-2002;2002-2003;2003-2004.

Estimates of State Domestic Product of Meghalaya Linked Series , 1980-81 to 1998-99 ;1999-2000 to 2006-2007.

Budget 1991-92, Volume II, Part II, Government of Meghalaya, Finance Department.

Memorandum on the Budget Estimates of the Government of Meghalaya for the year 1992-93, Government of Meghalaya, Finance Department.

Column 3 of the foregoing table exhibits the growth of expenditure on education and it may be noted that expenditure on education grew from Rs.16.62 crores in 1984-85 to Rs.240.62 crores in 2003-04, thereby, recording an average annual rate of increase of 67.39 per cent.

Expenditure on health as indicated in column 4 , shows that there has been an absolute increase in this particular category of public expenditure, which increased from Rs. 10.7 crores in 1984-85 to Rs. 72.78 crores in 2003-04, registering an average annual rate of increase of 29.01 per cent .

Column 5 gives us the growth of per capita expenditure on education and it may be noted that it has increased from Rs. 112.53 crores in 1984-85 to Rs. 1003.84 crores in 2003-04, thus recording an average annual rate of increase of 39.6 per cent.

Column 6 of the above table shows the per capita expenditure on health which has grown from Rs. 72.44 crores in 1984-85 to Rs. 303.63 in 2003-04. The average annual rate of increase of per capita expenditure on health stands at 15.96 per cent only.

Based on our above mentioned observations, it may be noted here that the average annual rate of increase of expenditure on education is higher than the average annual rate of increase of expenditure on health. Further, it is observed that the average annual rate of increase of per capita revenue expenditure on education is higher than that of the average annual rate of increase of per capita revenue expenditure on health. This particular trend exhibits that the government expenditure on education has grown faster than its expenditure on health. The unbalanced public expenditure growth on the areas of education and health may be ascribed to several factors. The foremost important factor, as we believe, is the prioritization of social values that the society places in making a choice between these two broad social objectives. The second approach is the supply factor. In an economy where the private sector is not well developed, the public sector has to play a double role. On the one side, it has to be directly involved in the production process and on the other side it has to evolve such programmes, which can help to stimulate the private sector in participating in developmental activities. The massive investment in the social and economic overheads has been made continuously in order to increase the productive capacity of the economy either by increasing the skills, organizational capacity or by increasing the capital stock in the economy – a catalyst for

achieving high economic growth rate. Thus, both demand and supply factors have made decisive influence on expanding the public sector size in the economy.

We may say that this rising trend of public expenditure on education is because of the Government's effort in universalisation of education, which it provides free. However Government expenditure on health has suffered a set back. This may be due to many factors, for instance, due the existence of predominant subsistence agriculture sector, the public sector is compelled to make larger investments in infra-structural and other developmental activities in order to reduce the intense pressure on the subsistence sector and provide more employment opportunities elsewhere in the economy. Many non-exclusive public expenditure programmes, which are also guided by externality conditions, come within the domain of the public sector. For example, administrative, maintenance of law and order etc., are some of the areas where the services have continuously been expanded.

Column 7 of the table indicates expenditure on education as a percentage of the total public expenditure. It is found that the expenditure on education as percentage of total expenditure has not shown a steady growth. It shows an increase of 11.22 per cent in 1984-85 to 17.85 per cent in 1999-2000. However this growth did not sustain and the data shows that expenditure on education as a percentage of the total public expenditure has declined to 15.53 per cent in 2003-04.

Column 8 of the said table shows the expenditure on health as a percentage of the total public expenditure. It is distressing to note that expenditure on health has remained low throughout the period covered by our study. The year 1984-85 shows a percentage growth of 7.22 per cent which is also the highest percentage. After 1984-85 we observe a decline trend throughout and in 2003-04 the expenditure on health as a percentage of the total public expenditure falls to 4.7 per cent. This shows that even with the increase in total public expenditure, the expenditure on health has not increased in the desired proportion.

Further, an attempt is made to calculate the exponential growth rate of economic variables presented in the above table by using the following estimation equation

$$Y = ae^{rt}$$

where ,Y =total public expenditure or as the case might be
r = growth rate , t=time factor and 'a'= constant term

The least squares estimates of the above equation gives the following results;

$$TE = 27.16e^{0.12t}, R^2 = 0.975$$

$$EE = 23.4e^{0.1412t}; R^2 = 0.966$$

$$EH = 31.70e^{0.112t}; R^2 = 0.989$$

$$GSDP = 69.99e^{0.143t}; R^2 = 0.998$$

$$PCI = 70.74e^{0.116t}; R^2 = 0.996$$

where, TE is total expenditure, EE is expenditure on education, EH is expenditure on health, GSDP is the gross state domestic product at current price and PCI is the per capita income at current price.

It is observed from the above estimating equations that the exponential growth rate of the total expenditure remains around 12 percent during the period covered by our study. Further, the value of R^2 suggests that about 97 percent variations in the total public expenditure is due to the time factor alone and 3 percent variations in the total public expenditure remain unexplained by time factor. By using the similar procedure, we have been able to find out the exponential growth rate of the public expenditure on education which is 14.12 percent and that of the public expenditure health is 11.2 percent over the 20 year period covered by our study. Moreover the value of R^2 shows that 96 percent of

and 98 percent of the expenditure on education and health respectively is explained by the time factor. further, the exponential growth rate of the gross state domestic product is 14.3 percent and that of the per capita expenditure is 11.6 per cent during the period covered by study and also the value of R^2 shows that 99 percent and of the variations in both the gross state domestic product and the per capita income is explained by the time factor alone.

4.4. Analysis of the growth of the State Domestic Product and Expenditure on Social Services – Education and Health

In this section an attempt is made to find out the relationship between the growth of the State Domestic Product and the expenditure on social services in Meghalaya. To achieve human development it is important for the Government to increase its expenditure on social services such as expenditure on education and health as the State Domestic Product increases. The following table shows the growth of State Domestic Product and combined expenditure on education and health.

TABLE 4.3 GROWTH OF STATE DOMESTIC PRODUCT AND COMBINED EXPENDITURE ON EDUCATION AND HEALTH

Years	GSDP(Current prices) (In Rs. Crores)	Expenditure in Education (In Rs. Crores)	Expenditure in Heath (In Rs. Crores)	Combined Expenditure (In Rs. Crores)	Column 5 as a % of Column 2
1984-85	388.83	16.62	10.7	27.32	7.03
1985-86	438.76	19.94	11.26	31.2	7.11
1986-87	485.21	22.22	10.73	32.95	6.8
1987-88	578.72	26.6	11.17	37.77	6.53
1988-89	648.06	33.66	13.96	47.62	7.35

1989-90	808.66	50.63	16.53	67.16	8.31
1990-91	950.73	55.53	18.73	74.26	7.81
1991-92	1119.37	67.22	22.82	90.04	8.04
1992-93	1297.56	76.43	26.17	102.6	7.9
1993-94	1510.87	91.56	27.43	118.99	7.88
1994-95	1664.94	84.92	26.42	111.34	6.69
1995-96	1995.19	109.14	30.19	139.33	6.98
1996-97	2198.25	115.53	33.7	149.23	6.79
1997-98	2497.35	131.3	39.69	170.99	6.85
1998-99	2939.28	159.71	50.48	210.19	7.15
1999-00	3637.74	195.12	55.92	251.04	6.9
2000-01	4048.78	219.93	63.1	283.03	7
2001-02	4614.98	228.25	73.54	301.79	6.54
2002-03	4900.10	221.97	74.3	296.27	6.05
2003-04	5564.00	240.62	72.78	313.4	5.63

Source:

Finance Accounts, Government of Meghalaya, 1984-85 ; 1985-86;1986-87;1987-88;1988-89;1989-90;1990-91; 1993-94; 1994-95;1995-96;1996-97;1997-98;1998-99;1999-2000;2000-2001;2001-2002;2002-2003;2003-2004.

Estimates of State Domestic Product of Meghalaya Linked Series , 1980-81 to 1998-99 ;1999-2000 to 2006-2007.

Budget 1991-92, Volume II, Part II, Government of Meghalaya, Finance Department.

Memorandum on the Budget Estimates of the Government of Meghalaya for the year 1992-93, Government of Meghalaya , Finance Department.

The above table shows the growth of Gross State Domestic Product, which increased from Rs.388.83 crores in 1984-85 to Rs.5564.00 crores in 2003- 04 with an average annual rate of increase of 66.55 per cent.

Column 3 shows that expenditure on education grew from Rs.16.62 crores in 1984-85 to Rs.240.62 crores in 2003-04 recording an average annual rate of increase of 67.39 per cent.

In column 4 we observe that the expenditure on health increased from Rs. 10.7 crores in 1984-85 to Rs. 72.78 crores in 2003-04 with an average annual rate of increase of 29.01 per cent .

The combined expenditure on education and health increased from Rs.27.32 crores in 1984-85 to Rs. 313.4 crores in 2003-2004 recording an average annual rate of increase of 52.35 per cent .

From the above table, it is observed that expenditure on social education records the highest average annual rate of increase followed by the gross state domestic product and expenditure on health shows the lowest percentage. The combined public expenditure also shows a high average annual rate of increase moving along with the gross state domestic product.

Further the column 6 of the said table shows that the growth of the combined public expenditure on education and health as a percentage of the gross state domestic product has not changed much recording the highest percentage of 8.31 percent in the year 1989-90. We also find that there is a decline in the public expenditure on social services as a percentage of the gross state domestic product from 7.03 percent in 1984-85 to 5.63 percent in 2003-04. The reason for this is due to the increasing activities of the private sector which have been able to provide social services like education and health, particularly in the urban areas of the state, by setting up schools, colleges and also hospitals in the state in recent years. Thus the government has diverted its expenditure on other activities such as administration, law and order and other domains.

4.5. Concluding Remarks

Based on the observations made in the foregoing paragraphs, it may be mentioned here that the total public expenditure and also expenditure on social services have increased in absolute terms during the period of our study. Further, there has been a lop-sided growth of public expenditure, which seems tilted towards education in comparison to public health. If the growth of human development remains dependent on the growth of public expenditure on education and health, then, the resultant question that arises is that to what extent, the lopsided growth of public expenditure has affected the scale of human development?

CHAPTER – V

EFFECT OF PUBLIC EXPENDITURE ON HUMAN DEVELOPMENT IN MEGHALAYA

CHAPTER - V

EFFECT OF PUBLIC EXPENDITURE ON HUMAN DEVELOPMENT

5.1. Introduction

In this chapter an attempt is made to find out the extent to which the state of Meghalaya has been able to translate its explosive growth of public expenditure on social sectors like education and health into a better scale of human development during the period of our study.

The chapter is divided into three sections. Section I is an attempt to spell out the various components of the HDI such as literacy rate of the state of Meghalaya and the infant mortality rate, which reflects the level of human development. The purpose of the section is to have a comparative picture on the growth rate of the public expenditure on health and education and the various components of Human Development for the state of Meghalaya. We believe that a comparison between these variables will provide the desired base in undertaking the empirical analysis in the subsequent section of this chapter. In Section II, an attempt is made to specify the models for undertaking the empirical analysis and the results obtained by using the specified models are reported subsequently. In order to substantiate the result obtained in section II, an attempt is made in Section III to analyze the trend of public expenditure in basic social sector in Meghalaya and also to find out the four government expenditure ratios, viz., the Public Expenditure Ratio (PER), the Social Allocation ratio (SAR), the Social Priority Ratio (SPR), and the Human Expenditure Ratio (HER) as according to norms laid down by the UNDP's Human Development report 1991.

5.2. Public Expenditure and Human Development- A Comparative Analysis

The HDI being a summary indicator of the level of achievement in human well being, it measures achievements in the basic dimensions of human development – health, education and income. The following table shows the HDI of Meghalaya for the years 1981,1991,2001 and 2005.

TABLE 5.1 HUMAN DEVELOPMENT INDEX OF MEGHALAYA

Year	HDI
1981	0.317
1991	0.365
2001	0.52
2005	0.58

Sources:

National Human Development Report 2001 and Meghalaya State Human Development Report (Draft)

In the above table we find that the HDI of Meghalaya has increased from 0.317 in 1981 to 0.58 in 2005. However it is observed that there has been a marginal increase in the HDI over a period of time covered by our study.

To get a clear understanding of the relationship between public expenditure and human development we have compared the percentage growth of public expenditure and HDI. The following table shows this relationship.

TABLE 5.2 THE GROWTH OF PUBLIC EXPENDITURE AND THE HDI IN MEGHALAYA.

Years	Total expenditure	Per capita Exp.Health	Per capita Exp.education	HDI
1984-85	148.07	72.44	112.53	0.317
1991-92	550.02	126.22	317.79	0.365
2001-02	1316.77	312.54	970.04	0.52
2003-04	1548.99	303.63	1003.84	0.58

It may be noted that in the above table we have used the 1981 data for the year 1984-85 and 2005 data for the years 2003-04 due to non availability of the relevant data for these years.

In the above table the average annual rate of increase of total expenditure is 47.31 percent. The per capita expenditure on health and education records an average annual rate of increase of 15.96 percent and 39.60 percent respectively. The HDI on the other hand shows an average annual rate of increase of 4.15 percent. This shows that although the HDI has increased with the increase in per capita expenditure on health and education yet the increase is not as much as that of public expenditure. One of the reasons for this slow development is due to the rapid growth of population in the state during the period of our study, therefore the HDI is not increasing as much as the increase in public expenditure. However we can still say that both the public expenditure and HDI are moving in the same direction and thus conclude that there is a positive relationship between public expenditure on social service and the pace of human development in Meghalaya.

To have a clearer picture of the HDI we felt the necessity to take into account the growth of the various components of HDI such as literacy rates, infant mortality rates and the birth and death rates of Meghalaya, to mention a few, and find out how they have increased in the years under our study. These data are again available only for the years 1981, 1991 and 2001.

TABLE 5.3 DISTRICT WISE LITERACY RATES IN MEGHALAYA BY PLACE OF RESIDENCE

Districts	1981			1991			2001		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Jaintia hills	20.77	66.01	24.51	30.35	81.37	35.32	48.97	91.14	52.79

East Khasi Hills	31.95	65.25	43.73	46.36	83.68	60.04	63.72	88.65	74.74
West Khasi Hills	31.47	52.35	31.97	49.06	71.82	50.52	63.13	83.83	65.50
East Garo Hills	33.05	47.41	33.51	46.99	68.79	48.38	57.97	82.15	61.57
West Garo Hills	21.69	61.25	25.91	34.34	78.29	39.32	46.09	85.17	50.78
South Garo Hills	NA	NA	NA	NA	NA	NA	62.66	77.10	63.67
Ri Bhoi	NA	NA	NA	NA	NA	NA	52.28	83.96	55.21
Meghalaya	27.45	64.12	34.08	41.05	81.74	49.10	57.00	87.12	63.31

Source:

Meghalaya State Human Development Report (Draft)

In table 5.1, literacy rates by place of residence are reported for all the seven districts of Meghalaya. While the literacy rate has increased for both the areas and for all the districts over a period of twenty years, the increased has been more rapid in the rural areas compared to the urban areas in all the districts except for East Garo Hills. Notably, figures show that there is a wide divergence in the literacy rate across the areas and districts. The urban areas of East Khasi Hills and Jaintia Hills Districts the literacy rate at 89 percent and 91 percent respectively, are than the urban state literacy rate. In the rural areas of jaintia Hills and west Garo Hills Districts the literacy rates, 49 percent and 46 percent respectively, are substantially lower than the rural state literacy rate of 57 percent.

It may be pointed out here that there has been an increase in the over all literacy rate of the State from 34.8 percent in 1981 to 63.31 percent in 2001. Since the Government of Meghalaya has been increasing its expenditure on education as we have

seen in the above tables this has resulted in increasing the literacy rate of the state which is one of the important component of the Human Development Index.

In the following table 5.4 we attempt to examine the growth of literacy rate in Meghalaya by sex .

TABLE 5.4 DISTRICT WISE LITERACY RATES IN MEGHALAYA BY SEX.

Districts	1981			1991			2001		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Jaintia hills	24.63	24.38	24.51	34.37	36.31	35.32	50.52	55.54	53.00
East Khasi Hills	46.46	40.20	43.73	62.86	57.04	60.04	78.12	75.82	76.98
West Khasi Hills	34.08	29.75	31.97	52.98	47.94	50.52	67.02	64.21	65.64
East Garo Hills	39.01	27.66	33.51	54.70	41.70	48.38	67.39	55.74	61.70
West Garo Hills	32.04	19.55	25.91	46.93	31.32	39.32	57.51	44.51	51.03
South Garo Hills	NA	NA	NA	NA	NA	NA	62.60	48.61	55.82
Ri Bhoi	NA	NA	NA	NA	NA	NA	69.22	62.67	66.07
Meghalaya	37.89	30.08	34.08	53.12	44.88	49.10	66.14	60.14	63.31

Source:

Meghalaya State Human Development Report (Draft)

In the above table, in the state as a whole we note that the female literacy is lower than male literacy rates in all the three censuses except for Jaintia Hills District

where the female literacy rate is higher . Although this gap exists the total percentage growth for both male and female in Meghalaya has been showing a rising trend. In sum we may say that the literacy rate for both male and female have been rising along with the rise in public expenditure on education.

For health, the indicators available are infant mortality rate and the birth and death rate of Maghalaya. These are reflected in the following tables.

**TABLE 5.5 INFANT MORTALLITY RATE IN MEGHALAYA
(PER THOUSAND)**

Year	Infant Mortality Rate
1981	79
1991	80
2004	56

Source:

Meghalaya State Human Development Report (Draft)

From the above table we find that the infant mortality rate have declined from 79 per 1000 live birth in 1981 to 56 per 1000 live birth in 2004 . Hence we may say that the IMR have increased during the period of our study with the increase in the Government expenditure on health.

From the all the above figures we find that each indicator or component of the Human Development Index have increased during the period of our study which implies that the State Government’s increasing public expenditure on education and health have a significant impact on the Human development Index. Thus we may say that public expenditure on social services in Meghalaya plays an important role in ensuring human development in the state.

5.3. Specification of the Model

In this section an attempt is made to study the intricate relationship between public expenditure and human development by applying specific models which evidently follow from our discussions in chapter-II.

The model is specified with per capita expenditure on health and education and per capita income as regressors. It is generally observed that the human development is positively correlated to the income levels of a state. However, the question we are interested in is how effective the expenditure by government on social sectors like education and health in attaining better levels of human development. The model thus is specified in the following form:

Model 1:

$$\text{HDI} = a + b_1 \text{PUB_H} + b_2 \text{PUB_E} + g \text{PCI}$$

where HDI = Human Development Index

PUB_H = per capita expenditure on health

PUB_E = per capita expenditure on education

PCI = per capita income

Model 2:

$$\text{HDI} = a + b \text{PUB} + g \text{PCI}$$

where HDI = Human Development Index

PUB = per capita combined expenditure on education and health

PCI = per capita income

5.3.1. Results and Findings

The results obtain from Model 1 and Model 2 are given in the following tables 5.1 and 5.2 respectively.

TABLE 5.6: EFFECT OF PUBLIC EXPENDITURE ON EDUCATION AND HEALTH AND PER CAPITA INCOME ON HDI

Variable	Beta	Std. Error	t-statistic	p-level
PUB-Education	0.194524	0.312644	0.622189	0.542583
PUB-Health	0.883584	0.268880	3.286167	0.004653
PCI	0.090839	0.269175	0.337472	0.740148

The results show that public expenditure on education and health and per capita income have positive relationship with human development index with per capita expenditure on health showing the highest contribution to the HDI and is also statistically significant.

TABLE 5.7: EFFECT OF COMBINED PUBLIC EXPENDITURE ON EDUCATION AND HEALTH AND PER CAPITA INCOME ON HDI

Variable	Coefficient	Std.Error	t- statistic	p-level
Combined exp on education and health	0.998697	0.307346	3.249426	0.004718
PCI	0.017628	0.307346	0.057357	0.954930

From the above table we find that the HDI and per capita combined expenditure on health and education shows significant positive relationship between the two. Further the result reveals that the increase in public expenditure on human resource development could increase the HDI to 0.99 percentage points. The coefficient of per capita income is 0.017 which translate that rise in per capita income can lead to 0.017 percentage point rise in HDI.

5.4. Trends of Expenditure in Basic Social Sector in Meghalaya

Human development requires among other things, greater investment in basic services like education, health, and nutrition. Investing in these sectors directly addresses the worst consequences of being poor. Inter-sectoral allocation to basic social sector, and intra-sectoral allocations aimed at addressing the priority concerns for human development.

In order to have a clearer picture of the growth of public expenditure in basic social sector in Meghalaya we also felt the necessity to analyse the trend of public expenditure in terms of the net state domestic product and we have tried to find out the four government expenditure ratios, viz., the Public Expenditure Ratio (PER), the Social Allocation ratio (SAR), the Social Priority Ratio (SPR), and the Human Expenditure Ratio (HER) as according to the UNDP's Human Development report 1991.

The UNDP's Human Development Report 1991 introduced four government expenditure ratios, viz., the Public Expenditure Ratio (PER), the Social Allocation ratio (SAR), the Social Priority Ratio (SPR), and the Human Expenditure Ratio (HER) as indicators of the extent of political commitment of the government to the social sector.

The PER is the proportion of the state income that goes into public expenditure. So $PER = \text{Total expenditure} / \text{NDSP}$

The SAR conveys to what extent the public expenditure is channelised for the development of social sector. So Social Allocation Ratio = Social service expenditure/Total Expenditure)

The Social Priority Ratio (SPR) is a sub set of SAR. It reflects the funds allocated towards the cause of the most important Social service like primary education, public health, maternal and child health, nutrition and water supply and Sanitation.

The Human Expenditure Ratio (HER) or Human Priority Ratio (HPR) is the percentage of the state income devoted to human priority concerns. Hence HER = Human Development/Expenditure Ratio. By definition, HER is the product of the other three ratios. An increase in the SAR, SPR or HPR maybe viewed as wise allocation of public expenditure which is expected to expand the welfare base in the economy.

The UNDP report (1991) suggested certain expenditure norms. It was suggested that HER of 5 per cent is essential if a country was to do well on the human development front. This may be achieved in an efficient manner by keeping the PER moderate (around 25 per cent), allocating much of this to social sector (more than 40 per cent), and focusing on social priority areas (giving them more than 50 per cent).

In order to find out the four government expenditure ratios, viz., the Public Expenditure Ratio (PER), the Social Allocation ratio (SAR), the Social Priority Ratio (SPR), and the Human Expenditure Ratio (HER) as indicators of the extent of political commitment of the government of Meghalaya to the social sector, it is important to have a glimpse of the trend of net state domestic product(NSDP) and public expenditure, particularly expenditure on social services, of the state of Meghalaya from 1984-85 to 2003-04.

**TABLE 5.8 : TRENDS OF PUBLIC EXPENDITURE ON BASIC SOCIAL
SECTOR
(RS. IN CRORES)**

Year	NSDP	Total Expenditure	Social Service Expenditure	Expenditure on Social Priority Sectors
1984-85	348.07	148.07	42.15	27.32
1985-86	387.76	174.8	46.48	31.2
1986-87	425.98	206.6	48.27	32.95
1987-88	514.55	243.32	58.13	37.77
1988-89	569.07	285.56	77.66	47.62
1989-90	715.44	328.68	96.15	67.16
1990-91	839.82	385.72	114.27	74.26
1991-92	985.98	550.02	142.50	90.04
1992-93	1149.7	614.22	161.18	102.6
1993-94	1308.9	588.1	181.46	118.99
1994-95	1434.96	559.77	165.01	111.34
1995-96	1729.03	714.54	212.16	139.33
1996-97	1898.43	741.8	227.26	149.23
1997-98	2165.96	810.98	253.64	170.99
1998-99	2579.37	959.94	299.95	210.19
1999-00	3268.51	1092.96	356.04	251.04
2000-01	3694.92	1305.51	409.97	283.03
2001-02	4220.31	1316.77	435.93	301.79
2002-03	4439.58	1390.6	425.89	296.27
2003-04	4968.83	1548.99	479.14	313.4

Source :

Finance Accounts, Government of Meghalaya, 1984-85 ; 1985-86;1986-87;1987-88;1988-89;1989-90;1990-91; 1993-94; 1994-95;1995-96;1996-97;1997-98;1998-99;1999-2000;2000-2001;2001-2002;2002-2003;2003-2004.

Estimates of State Domestic Product of Meghalaya Linked Series , 1980-81 to 1998-99 ;1999-2000 to 2006-2007.

Budget 1991-92, Volume II, Part II, Government of Meghalaya, Finance Department.

Memorandum on the Budget Estimates of the Government of Meghalaya for the year 1992-93, Government of Meghalaya , Finance Department.

In table 5.8 we find that the net state domestic product have increased from rupees 348.07 crores in 1984-85 to rupees 4968.83 crores in 2003-04, public expenditure have also increased in during the period of our study. Now, by using the above data we have tried to find out the Public Expenditure Ratio (PER), the Social Allocation ratio (SAR), the Social Priority Ratio (SPR), and the Human Expenditure Ratio (HER), of the state of Meghalaya. The following table gives us this analysis.

TABLE 5.9: SOCIAL EXPENDITURE RATIO

Year	Public Expenditure Ratio (PER)	Social Allocation Ratio (SAR)	Social Priority Ratio (SPR)	Human Expenditure Ratio (HER)
1984-85	42.54	28.47	64.82	7.8
1985-86	45.08	26.59	67.13	8.05
1986-87	48.49	23.36	68.26	7.7
1987-88	47.29	23.89	64.98	7.34
1988-89	50.18	27.19	61.32	8.37
1989-90	45.94	29.25	69.85	9.39
1990-91	45.93	29.63	64.99	8.84
1991-92	55.78	25.91	63.19	9.13
1992-93	53.42	26.24	63.66	8.92
1993-94	44.93	30.86	65.57	9.09
1994-95	39.09	29.69	67.47	7.76
1995-96	41.33	29.69	65.67	8.06
1996-97	39.07	30.64	65.66	7.86
1997-98	37.44	31.28	67.41	7.89
1998-99	37.22	31.25	70.08	8.15
1999-00	33.44	32.57	70.51	7.68
2000-01	35.33	31.40	69.04	7.65
2001-02	31.20	33.11	69.23	7.15
2002-03	31.32	30.63	69.56	6.67
2003-04	31.17	30.93	65.41	6.31

From the above table 5.9, the following findings could be highlighted:

- a) The Public Expenditure Ratio (PER) shows that it is higher than the norm suggested by the UNDP for all the years recording the highest percentage in the year 1991-92. This signifies that the government of Meghalaya have been increasing its economic activities during the period of our study.

- b) In terms of allocation to social services, the Social Allocation ratio (SAR) in Meghalaya has always remained lower than the 40 per cent norm suggested by the UNDP. However, from the year 1996-97 to 2003-04 the SAR is around 30 percent which is close to the UNDP norm. This shows that the Government has been trying to increase its expenditure on social services.

- c) The Social Priority Ratio (SPR), however, shows a good picture recording more than 60 percent for all the years of our study which is more than the 50 percent norm suggested by the UNDP. This shows the Government's commitment in the recent years to raise the level of human development in the state.

- d) The Human Expenditure Ratio (HER) in Meghalaya has remain well above the UNDP norm of 5 percent with the highest percentage of 9.39 in 1989-90. Though SAR was low throughout the period of our study but the SPR was very high thus leading to high growth of HER in the state. Thus, the high percentage of HER signifies that the Government of Meghalaya has been trying to ensure greater human development for its people.

5.5. Concluding Remarks

Thus the results and findings shows that social spending has stronger impact on human development than economic growth per se. Further, the value of HER for Meghalaya also suggests that there is a high degree of political commitment to human priorities. This result is in confirmation with the trend that public expenditure on human capital formation gets transformed to the end results of better human development indicators. In other words, the public policy stance plays a crucial role in human development in Meghalaya.

CHAPTER – VI

**CONCLUSION AND POLICY
PRESCRIPTIONS**

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Our study examined the impact of social sector public expenditure on human development. Using model of pooled least squares for the early a period of twenty years i.e, from 1984-85 to 2003-04, the analysis of link between per capita expenditure on health and education and Human Development Index (HDI) revealed that there is a positive functional relationship between the two.

An attempt is made in the following paragraphs to present a summary of the major findings of our study. The important findings of our study are as follows.

Chapter 1 is an introductory in nature where we addressed ourselves to the intricate relationship between public expenditure and Human Development. The chapter reveals that education, health and per capita income are important indicators of human development. We have also discussed that public expenditure on social services can play an important role in increasing the level of human development.

In chapter 2 we have discussed the various literature by different authors in which they have studied the relationship between public expenditure and human development and thereby we could understand better the intricate relationship between the two. The studies that have been discussed reveals that Government expenditure on education and health does have an impact on human development.

Further, in chapter 3, we have touched upon the various theoretical issues that are related to public policy and human development. The studies show that the growth of public expenditure is important for human development and that human development gets transformed into economic development. Here the Government plays a vital role to make sure that there is 'allocative efficiency' of the public expenditure of the state.

Moreover, it is important to note that the substantial impact of higher GDP per head on life expectancy and other social outcomes of better literacy level, low mortality rates among children and better schooling among children seems to work via factors in which public policy stance play a significant part.

In chapter 4 we concentrated on the growth and pattern of public expenditure in Meghalaya and we found that there has been an increase in the public expenditure in Meghalaya during the period of our study. The public expenditure on education and health have also increased during these years which shows that the Government of Meghalaya has been making serious efforts in raising the pace of human development in the state. Furthermore, we also found that the increase in the State Gross Domestic Product during the period of our study has not contributed much to the growth of public expenditure on social services, such as health and education.

Chapter 5, discusses the growth of the Human Development Index in Meghalaya during the period of our study, and it reveals that the Human Development Index in Meghalaya has increased over the years although the increased has not been that high. We have also compared the growth of public expenditure and the HDI and found the HDI is responding to the growth of public expenditure on education and health. We were also able to examine the growth of some of the important indicators of education and health in Meghalaya, such as the state's literacy rates and the infant mortality rates during the period of our study, which reveals that the literacy rates have increased over the period and the infant mortality rates have declined. This shows that the Government's efforts in increasing public expenditure on social services have a positive impact on the growth of human development. In this chapter we were also able to find out, through our analysis that the growth of public expenditure has a greater impact on human development than the growth of the per capita income of the state during the period of our study. Moreover, we also found out that the Human Expenditure Ratio of Meghalaya was high and well above the UNDP norm which shows that the Government is committed to raise the level of Human Development in the State.

The per capita income is not a sole factor which leads to human development. Also, the estimated coefficients of pooled least squares revealed that per capita spending on education and health has relatively stronger impact on human development than growth in per capita income per se. Improving the education and health of people is not only a goal in itself for a better quality of life but also its positive impact on the economic development of a state is far-reaching. The provision of education and health is a key element of a policy to promote broad-based economic growth. The main asset of the poor is clearly their labour and both education and health services improve the productivity and earnings of workers. Education is considered a major remedy for many problems faced by developing countries. For example, high fertility rates are adding to population pressures in several countries. It is widely accepted that female education helps to lower fertility rates. Moreover, educated parents are in a better position to look after the education and health needs of their children. Education and health are important tools to empower poor people and overcome exclusion based on gender, location and other correlates of poverty. Public policy stance, thus have a crucial role to play in the state of Meghalaya.

Policy Implications

In the light of the extensive findings of our study, we would like to make few suggestions having policy implications.

Firstly, in the wake of the unabated mounting pressure of public expenditure both on developmental and non-developmental services, it is felt that there is a need to have expenditure administrative policy reforms which may give way to rationalizing and controlling wasteful Public Expenditure. Such a step would also help in diverting resources from less productive sector to the social service sector of the State's economy. The government must see that the concept of growth with ' Social Welfare and Justice' is ensured to the people in general. Huge financial resources are needed in the region to expand education and health services and improve their quality. Multiple channels of financing will also be required to raise sufficient resources, including both public and private sources, communities, non-governmental organizations, bilateral donors and multilateral organizations. An integrative approach using multiple sources is recommended for the provision of education and health services.

Secondly, the most reliable and sustainable public source is tax revenue. Improving tax administration and expanding the tax base will generate more revenue. Generally, the education and health services provided by the public sector are either free of charge or carry a nominal fee. Modest user charges for improved quality of services can be introduced. For reasons of equity, however, mechanisms are needed to ensure that the poor are not barred from using the services for lack of income. The active involvement of communities and non-governmental organizations can augment resources for education and health. Communities can make contributions in kind and/or cash. Non-governmental organizations have long been active in both the education and health sectors. They can mobilize internal and external resources and also provide leadership for advocacy. Private sector participation raises the quality, efficiency and supply of services,

which allows the enhanced allocation of public resources to rural and remote areas as well as slums in urban areas.

Besides the above implications, reprioritization of expenditure within the education and health sectors can improve achievements. Most importantly, however, good governance is the most necessary to improve access and quality of public expenditure and to ensure greater human development in the state and thus economic development.

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