REVIEW OF LITERATURE

It is quite important to review the existing literature for conducting a meaningful research. Several empirical studies have been conducted in the context of public expenditure on various dimensions of social sector in India and elsewhere over the different time periods with varied conclusions. The present chapter reviews existing studies relating to the social sector in order to evaluate the management of social sector in India through the analysis of patterns of public expenditure on social sector including education and health and to study the impact of social spending on various social attainments. The brief review of studies relating to different dimensions of social sector has been presented below in the chronological order.

Shah (1969) in a study tries to assess the expenditure on elementary education as well as the progress in the elementary education during 1950-51 to 1960-61. The study suggests various determinants of measuring the quality of education such as basic training, qualifications and background of teachers, provision of specialised institutions, facilities in the form of teaching aids and equipment, and scope for extra-curricular activities in schools. But the teacher-pupil ratio and the expenditure per pupil, the two crude measures that have been used in the study to assess the quality of education. It is found that all the total direct expenditure, public expenditure, salary and non-salary expenditure on elementary education have gone up but per-pupil expenditure on elementary education, in real terms, has declined over the decade of 1950s which shows that less amount have been spent on education of every pupil enrolled in 1960-61 than in 1950-51. International comparisons have been made separately for developed and underdeveloped countries to assess the proportion of school-age children attending elementary schools and for teacher-pupil ratio. The study finds that the proportion of school-age children going to elementary schools is below 50 per cent in India and other underdeveloped countries but it hovers around 90 per cent in most developed countries. It observes a vast disparity among developed and underdeveloped countries in the proportion of school-age children attending elementary schools as compared to the disparity in teacher-pupil ratio. The study recommends that there
should be a reallocation of resources in favour of elementary education in any plan for expansion of educational facilities.

Pandit (1972) attempts to review the progress of expenditure on school education as well as the trends in contributions from private and public sources of finance during 1950-51 to 1965-66. For this purpose, the study focuses on growth in educational expenditures against growth of national income and population; the place of educational expenditure in budgetary allocations of centre and states; the growth in teacher salaries; variations in cost per pupil; and the role of private enterprises in school education. The study reveals that the growth in educational expenditure in the country as a whole has been faster than the growth in population and national income. But wide variations among different states have been found in terms of budgetary allocations to education. It is found that the overall shares of educational expenditure as well as the share of school education in the total Plan expenditure have consistently declined during the three Five Year Plans which calls for serious consideration to discover the ways of raising additional resources for further development of school education in the country. The share of government in the contribution to school finance has considerably increased but the contribution from local bodies, households and other sources has declined over the years which shows that state is taking greater responsibilities for financing school educational programmes. There are wide variations reported in per-pupil cost between the school education and higher education levels indicating the poor quality of instructions at the school level as compared to that at the higher education level. It is observed that growth in average salary per school teacher has been highest for primary education followed by that of middle school teachers and university teachers. The role of private enterprises in the management and financing of school education has been diminishing in the last 20 years. Therefore, it is evident that for resource allocations with other developmental sectors such as health, irrigation, power, etc. both at the centre and state levels and even within the education sector, school education has to compete more with higher education.

Banerji (1974) discusses about the health practices followed in India during pre and post-independence period. The study also attempts to examine the present state of health services and to study the health behaviour of rural populations in
India. It is quite difficult to assess the nature of health problems in ancient India, but the great emphasis on preventive diseases shows a fairly mature attitude of the society towards the health problems that might have been prevailing at that time. But the introduction of British rule in India has dealt almost a fatal blow to still active Indian health system. At that time, the entire health system has been purposively developed to provide the Western system of medical services to a small privileged group - the armed forces, the British civilians and the Indian gentry. It is found that though after independence, the new leadership has readily shown its commitment towards providing good health services to the vast masses of people of the country, but without considering the necessary basic changes to be required in the system at that time. It is reported in the study that one of the major limitations in the medical education system in India is that the resources of the community are utilised to train doctors who are not suitable for providing services in rural areas where the need for health services is so desperate. The campaigns against specific diseases such as malaria, population growth, smallpox, leprosy, etc. have turned to be the costly affairs that have hindered the development of a permanent health services system in the rural areas. The study brings out that the existing health services working at a grossly poor level of efficiency that has led to considerable under-utilisation of limited resources. The study recommends for rectification of the existing imbalance in allocation of resources as well as requiring a shift in investment from urban to rural areas, from curative to preventive and from the privileged to the underprivileged sections of the society.

Panikar (1976) throws light on the relevance of alternative approaches and techniques of health care delivery system in India. Health care system, especially in underdeveloped countries like India, has to be assessed in terms of its cost effectiveness due to limited availability of resources like hospitals, dispensaries, medical and para-medical personnel, drugs etc. The study admits that the overall state of health in India is poor which is reflected in high crude death and infant mortality rates and low life expectancy in India as compared to some of the Asian countries. There is also a considerable disparity in the state of health among rural and urban areas in India. It is found that though certain contagious diseases like cholera, malaria, smallpox and plague have been brought under control but some
preventable diseases like coughs, fevers, diarrhoea are still rampant and account for a substantial proportion of deaths in India. The study also tries to explain some unhealthy bias in the medical care system in India in the form of more concentration of hospitals equipped with modern and expensive technology and other facilities in the urban areas. Hence, the vast majority of the population living in villages either get poor or no medical care at all. Therefore, the worst state of health in rural areas calls for higher priority to the provision of medical care in rural areas. The study suggests that the greater emphasis be given to preventive measures, and an integrated approach involving immunisation, environmental sanitation, public health education, nutrition and medical care, is necessary for solving the country’s health problems.

Korien (1981) in a study on elementary education aims to present the actual educational progress, in quantitative terms, that has been registered in India since independence in contrast to the official mythical version towards fulfilling the constitutional directive of universal elementary education. The study focuses on analysing and correcting the serious flaws in the official data on school enrolments. It is found that the unwarranted optimism revealed in official pronouncements, on new target dates to accomplish the objective of universalisation of elementary education in near future, is in large part due to the fact that the education enrolment statistics are completely at variance with reality. Therefore, until one makes the necessary corrections in the official enrolment statistics which constitute the basis for such optimistic official pronouncements, it is evident that there are no reasonable grounds to make possible to achieve universalisation of elementary education even within this decade. The study has found that despite tremendous financial outlays and efforts during 1950-1976, it has been possible only to enrol around 55 per cent of the population in the age group 6-14 years but the recent slow annual growth in enrolment is not able to register any sustained dramatic increases because the vast majority of the non-enrolled children are either girls or belong to the most deprived social groups including scheduled castes, tribes, landless agricultural labourers, urban slum-dwellers, etc. The study identifies the dropout as the most significant problem affecting elementary education, which has remained virtually unchanged during the post-independence period. The study also tries to examine as to whether it
is possible to achieve at least universal primary education for five years of compulsory schooling by 1990. The study, in this case, comes up with same conclusion as in case of elementary education that even universal primary education by the end of this century will be a herculean task. Finally, the study brings out that neither revamping the entire educational structure, nor spending the entire educational budget on elementary education, nor a radical restructuring of the political system will ensure universal elementary education in the coming decades.

Patel (1985) tries to seek the rapid improvements made by the Third World countries in the field of education, at least in quantitative terms, during 1950-1981, and to review the expansion in educational enrolment that has taken place in the Third World since 1950. The study examines the educational distance measured in years between the developed countries and the Third World around 1950s and it appears as 60-70 years for primary education, 40-50 years for secondary education and 30-40 years for higher education. Therefore, the advanced countries have developed a considerable lead by 1950 over the Third World in all the three levels of education, and the Third World has been obviously on the periphery of educational progress. The educational advance in the Third World has been reported as spectacular between 1950 and 1981. By 1981, the Third World has, on a comparable per capita basis, equalled the levels of primary enrolment in the developed countries; reached the mid-1950 levels of secondary enrolment and nearly attained the 1950 levels of enrolment in higher education in the developed countries. It is evident that the educational distance between developed countries and Third World has been rapidly covered during 1950-1981. The study also highlights some problems still remain to be solved and need to be studied carefully and their incidence has to be clearly identified so that each country devises an appropriate educational strategy to guide its development plans.

Panikar (1986) reviews the recent developments in the financing of health care system and their implications for sustaining the momentum of health improvement in China. In 1949, at the time of Liberation, China has one of the world’s poorest health care delivery systems and has been described as ‘the sickman of Asia’. As against the crushing health problems, health resources at the command of Chinese authorities have been quite meagre and unevenly distributed. Given the
genesis of the core health problems and mounting pressure on the limited health care resources, one feasible option before the Chinese authorities has been to focus on preventive measures and resort to redistribution of the available manpower resources. It is found that the Chinese authorities have showed a great understanding of nature of health problems and have evolved various ways of resolving them within the constraints imposed by limited resources. The study highlights some of the important innovations in the field of Chinese health care system like reliance upon non-pecuniary incentives to motivate the masses to get involved in preventive health programmes, a multi-tiered network of medical care facilities with a built-in referral system, the development of medical personnel of appropriate training and skill at different points, all these have financial implications which are equally relevant to other developing countries. It is found that some recent developments in the Chinese health care system like epidemiological transition, ideological and institutional changes have raised some serious concerns regarding the ability of the present health care system to cope up with the new and increasing demands on the system. It is also seen that recent reforms in the economic structure such as the new responsibility system, weakening of fiscal support to the rural co-operative health insurance scheme, cut backs on state subsidies to health care and resumption of private medical practice result in an overall rise in cost of health care and access to health care facilities are bound to become more unequal.

Chand (1987) examines the vital role of community financing in solving problems of funding health care activities and tries to analyse its impact on community participation or utilisation of health services. The Indian government is carrying out an initiative, to train one traditional birth attendant (TBA) and one community health worker (CHW) at a stipend of Rs. 50 per month for each village since 1977. The study reveals that parallel to government efforts, several voluntary organisations have been experimenting with alternative strategies in implementing primary health care. The Comprehensive Health and Development Project, Pachod has been covered in the study which has been experimenting with various methods of community financing for primary health care since 1977. Community financing requires great organisational and managerial groundwork but it constitutes a small proportion of total primary health costs. It is found that health education strategies
often require expensive educational inputs or intensive personnel involvements that are not practically applicable. Therefore, by giving impetus to local community initiative through involvement of community health workers and encouraging community financing towards their reimbursement, substantial resources can be mobilised within the community, without the necessity of increasing direct government health spending. The study brings out that apart from the financial implication, the rapid dissemination of health awareness, the increase in motivation of community health workers, and the increase in utilisation of preventive services as consequence of community financing makes it an attractive proposition to experiment with on a large scale.

Tulasidhar (1989) discusses about the proximate factors that affect health status in India while examining the inter-relationship among public spending, medical care, availability of infrastructure and health quality covering state level data over a period of 12 years during 1971-72 to 1982-83. The study uses infant mortality rate as a proxy for health quality while medical care has been reflected in terms of proportion of births under supervision of trained personnel to the total births. The states’ share in the public spending on health care has risen substantially during the period of study despite of the fact that central government has increased its expenditure on family welfare programme. The states’ real per capita expenditure on health care have revealed a wide variations and it has grown faster than the growth of real per capita state domestic product in all states. The regional disparities across states in terms of curative expenditure have declined while inter-state variations in terms of preventive expenditure more or less remain the same over the time. The study brings out that ‘public spending’ as well as ‘medical attention at birth’ seems to have strong impact on infant mortality. In case of preventive spending, ‘expenditure per area’ appears to be more influential variable than ‘per capita expenditure’. Across infrastructure variables, ‘accessibility in terms of distance from primary health centre and sub-centre’ turns out to be more important variable than ‘population coverage’. Among socio-economic variables, ‘literacy’ is the only variable that has strong relationship with infant mortality as well as medical care. It has a strong direct impact on the level of public expenditure on health. The level of public expenditure and medical attention at birth are found to be inversely
related with neonatal mortality rate at conventional levels of significance while level of poverty and per capita preventive expenditure have no significant impact on mortality rates. The study suggests that resources should be allocated in such a manner that reduces costs of utilising public infrastructure, and helps in improving infrastructure utilisation rates significantly.

Sen (1991) attempts to examine the extent of governmental involvement in human development in terms of expenditure incurred on relevant heads during 1974-75 to 1989-90 for the nation as a whole and for selected individual states. The study finds that as far as relative emphasis on different aspects of human development is concerned, social services in general (health and related areas and social security in particular) have assumed greater significance in India with the passage of time. An important observation made in this study is that the relative emphasis on social services like education, health and allied functions is greater than on agriculture, irrigation and power. Being education and health, the two primary aspects of human development, the study highlights the issues that arise with the government action in such areas involving substantial expenditure. The study emphasizes the immediate need to give special attention to adult education if the literacy rate has to be improved in the short-run and women must be targeted in particular, mainly because illiteracy is much higher among females; moreover, this has important effects in the spheres of health and family planning. The study also shows that given the relatively high levels of private spending, the government should concentrate on public health, leaving expensive hospital services to the private sector as far as possible. The study finally suggests two strategies, namely (i) restructuring public expenditures, and (ii) appropriate policy adjustments, in order to improve the provision of social services without raising public expenditures substantially.

According to Anand and Ravallion (1993), “Under-development is viewed as the lack of certain basic capabilities rather than income per se”. They try to explore the implications of different approaches of economic development like income-based approach and human development approach for development policy. The study primarily focuses upon relative importance of private incomes and public services in attaining basic human capabilities, which are still largely lacking in most poor nations. Using database of 22 developing countries, the study has found that
increase in social spending is relatively more effective in influencing social outcomes than reduction in income poverty. The cross-country regression analysis reveals that public expenditure on healthcare has contributed two-third improvement in life expectancy while reduction in income poverty has contributed only one-third. The study has found similar results while defining social attainments in terms of infant mortality and under-5 mortality. The study concludes with important policy implication that when social spending and poverty reduction are main drivers of human development, rather than income per se, then government intervention plays a significant role in promoting human development.

Prabhu and Chatterjee (1993) examine the trends of state government expenditures on health, education and nutrition as well as the impact of such expenditure on the level of health, education and nutrition attainments for 15 major states during the period 1974-75 to 1991-92 using the educational and health attainment indices. The study brings out that the state governments have accorded a relatively low importance to the investments in social sector which is reflected by a very small proportion of capital expenditure being the constituent of total social sector expenditure. An analysis of intra-sectoral allocation of expenditures in education and health sector reveals considerable variations across states in the emphasis given to elementary education whereas the health expenditures in almost all states show a skewed pattern with medical expenditure having a substantial share among total health spending. The study also uses four expenditure ratios developed by UNDP namely, public expenditure ratio, social allocation ratio, social priority ratio and human expenditure ratio to point out the governments’ commitment towards human development. The study has found no impact of educational infrastructure on educational attainment while a significant relationship exists between health attainment and infrastructure as well as between nutritional attainment and infrastructure suggesting the urgent need for stepping up the infrastructure development so as to improve the health and nutritional levels. The study has recommended an enhanced allocation with special focus on primary level facilities and sustained effort at the level of states as main ingredients of success in the human development sphere.
Tulasidhar (1993) assesses the likely impact of public expenditure compression on the states’ spending on health and reviews the recent changes in the allocation of resources to health care by the centre and states during the adjustment period. The study also attempts to identify the threats to sustainability of present levels of spending on health care and to suggest the various feasible ways to minimise the impact of structural adjustment. It is found that expenditure compression at the centre particularly in the form of a cut in transfers to states has an adverse impact on states’ spending on social sectors including health. The study shows that the share of central transfers in poorer states’ expenditure is significantly higher than in the richer states. Due to higher dependency on central funds, the poorer states’ spending is adversely affected even more by expenditure compression at the centre associated with structural adjustment. An analysis of patterns of expenditure compression in net transfers to states reveals that the states absorb 30 per cent of the envisaged cut in fiscal deficit of 3.75 per cent of GDP during the first three years of structural adjustment. The study exhibits that the overall impact of adjustment programmes on medical and public health budget seems to have been marginal but due to cuts in specific purpose health sector grants to states, the burden of compression falls mainly on preventive expenditures. Moreover, preventive expenditures are known to have high cost effectiveness; therefore, a cut in such type of expenditure also causes allocative inefficiency. Sustainability of present level of health care spending in the near future primarily depends upon the success of the ongoing stabilisation and structural adjustment programme but it is too early to interpret the results of ongoing structural adjustment programme. Further, the burden of compression on states’ finance will persist as the expenditure compression at the centre will continue for some years. The study suggests some options available to the states to reduce the burden of compression during adjustment period such as- freeze creation of new health facilities for some time and concentrate on consolidating the existing facilities; put greater effort in targeting the existing programmes to the deprived sections of the society; and initiate moves to recover a part of cost from the users of health facilities without affecting the poor.

Gupta and Sarkar (1994) analyses the impact of macro-economic and sectoral policy reforms undertaken by the Indian Government on human resource
development (HRD) since 1991. The study exhibits that there have been expenditure reductions on HRD in the plan and non-plan accounts during 1990s at the central and state levels. The reduction in HRD expenditure in case of states stem from the tacit attempts made by the states to control expenditure level under overall compulsion of resources availability even before the introduction of stabilisation programmes undertaken by the central government. The study also reveals the various reasons for the strained resource position of the states like lack of sufficient generation of own resources, deceleration in net devolution of resources from the central government, restraint on market borrowing and loans against small savings. In case of central government, the reduction in HRD expenditure is mainly on account of stabilisation policies to reduce fiscal deficit. The study finds that budgetary data, both at the central and state levels appear to increasingly point towards a lack of adequate protection for the affected sections of the population. The study concludes that the absolute reduction in expenditure on social services both at the central and state levels may well raise the social cost which ultimately may undermine the purpose of the entire economic reforms programme and its acceptance by the political system.

Prabhu (1994) analyzes the impact of budgetary measures undertaken thus far on social sectors with particular reference to education and health sectors which account for the bulk of social sector expenditures. The study also reviews country evidence with respect to the impact of adjustment on social sectors with particular reference to south-east Asian countries and outlines the state of human development in India. The study observes that the structural adjustment programme in the country is being implemented against a background of incomplete structural transformation, high level of poverty, low level of human development and distorted patterns of expenditure in education and health which are attuned more towards higher level facilities as compared to primary level institutions. The bulk of expenditure on social sectors is incurred by state governments which have pursued human development strategies with varying degrees of intensity. Given such dismal initial conditions and a low rate of growth of the economy, the pursuit of ‘structural adjustment with a human face’ depends to a very large extent on the prioritisation of goals and the degree of political commitment at both the centre and the states’ level.
The study reveals that the participation of the people, particularly women and the adoption of community approach are imperative if the success of social sector programmes is to be ensured. Therefore, the enhancing of allocations at the central level could, at best, serve as a signal to the states to follow similar policies.

Guhan (1995) analyses the centre’s social sector expenditure in terms of its dimensions, trends and compositions with data from six central budgets from 1990-91 to 1995-96 giving a particular attention to so called social expenditure of significance to the poor. Further, the study explores the available options for making such expenditure more cost effective and purposeful. The study is confined to the budgetary expenditure on social sector of central government only and social sector expenditure covers outlays on rural development and social services excluding food subsidies. The study shows that there has been a definite shift in favour of employment programmes between 1990-91 and 1995-96. Under rural development, the shares of programmes for asset creation and for area development have declined. The study observes that centre’s anti-poverty portfolio is riddled with much needless confusion and complexity in its conceptualisation, design and administration. As a result, outlays addressed to the same or similar purposes are fragmented among a number of schemes; the activity-based classification of ‘employment’ fudges a number of functional ends; in many schemes allocations are no more than symbolic; and the overlap within the central portfolio is compounded by the overlap between central and states’ schemes and within the latter. The study concludes that during and beyond economic adjustment, it is necessary to both increase the levels of social expenditures and to restructure the programmes so that whatever amounts are spent are cost-effective. This will entail an optimal mix of the different approaches to poverty alleviation such as employment generation, basic needs provision, welfare, asset creation, backward area development and social assistance; reforms to individual programmes in the light of experience; a clear delineation of the centre’s role; and the involvement of local bodies, to the fullest extent, in the delivery of these programmes using the potential opened up in the 73rd and 74th Amendments to the Constitution.

According to Filmer and Pritchett (1999), “there has been a discrepancy among the apparent potential of public spending to improve health status and the
actual performance”. The study uses the cross national data of 98 developing countries to examine the impact of both public health spending and non-health factors on infant mortality and under-five mortality. The study finds a small and an insignificant impact of public health spending on infant mortality and under-five mortality. Moreover, 95 per cent variations in mortality across countries have been explained by per capita income, inequality of income distribution, extent of female education, level of ethnic fragmentation, and predominant religion in a country where public spending on health is not a significant determinant of mortality. While examining the difference in the public expenditure on health among the 10 best and 10 worst health performers, the study has found this difference as very small whereas the differences in public expenditure among the countries within the 10 best and 10 worst groups have been very wide. The study suggests three things that must happen to have a significant impact of public health spending on health status- first, public spending on health must create effective health services; second, the existence of those new public services has to change the total amount of effective health services consumed by the population; and third, the additional services consumed have to be cost-effective in improving health.

Panchamukhi (2000) attempts to examine the impact, incidence and effects of economic reforms on the social sector in India by comparing data of the pre-reform period and the reform period without giving an impression that the economic reforms have an impact only on the social sector or that the impact on other sectors is less important than the impact on the social sector. The study mainly focuses on education and health, two major components of the social sector. Since expenditures on social sector are normally treated as developmental expenditures, it is found in the study that during the reform period, plan expenditures, developmental expenditures and capital expenditures have all relatively declined. In case of education sector, not only the total allocation to this sector, but also the inter-sectoral allocation within the education sector seems to have suffered during the reform period. A large decline in the growth rate of per pupil expenditures on elementary education and a decline in the rate of growth in case of university education show a very disturbing trend, which deserve a specific attention of the policy-makers. In case of health sector, the study finds that the increase in plan
allocations to this sector is much less than the population growth rate during the reform period which also presents a dismal picture. The study brings out an interesting development relating to allocations to the social sector (particularly education and health) that though the states and union territories have a major share in these sectors, but they have registered smaller increases relative to the increase in the central government expenditure. The study also shows that the central assistance to the states has relatively declined during the reform period, even for the sectors like welfare. Possibly, as a result of less encouragement received from central assistance, compelling demands of the non-social sector and relatively slow growing fiscal capacity of the states, the social sector expenditures of the individual states do not seem to show very encouraging increases though they have actually shown a relatively declining trend. The study also attempts to examine whether these declining trends are due to economic reforms themselves by considering specifically the logical relationship between three important fiscal components of the economic reforms namely; tax rate reduction, economy in non-plan expenditures, reduction in fiscal deficits, and their implications for the social sector. The study finds that in case of all the three fiscal measures during the reform period, it is the social sector which bears the major brunt of this policy. The study recommends for an immediate need for making special efforts to safeguard the interest of the social sector in the face of economic reforms.

Shariff and Ghosh (2000) have attempted to analyse the patterns of public expenditure on major heads of accounts in education at the national and state levels in India during 1980-81 to 1995-96. The public expenditure on education is mostly met by the state funds and centre meets a small proportion of total educational expenditure though its share has been increasing over the years. The study shows that public expenditure on education is predominantly on the revenue account and bulk of the educational expenditure comes from non-Plan account. An inter-state comparison in the study regarding the spending pattern for education reveals that almost all the states have focussed their fiscal efforts towards elementary education in order to promote universalisation of elementary education. But the relative share of elementary education in the total education budget has declined in most states. The study also shows the significant variations among all the states for the states’
spending on education as a share of NSDP and a significant decline has been registered in the share of education in the budgets of most states due to the low priority accorded to social sectors, including education, by structural adjustments and stabilisation policies. The share of secondary education in educational expenditure remains more or less constant while the share of university and higher education shows a declining trend. An interesting observation has been seen in the study that though both centre and states show a concern about the universalisation of elementary education but it is the secondary education that benefits more by receiving a considerable proportion in the total public budget on education in India. The study considers expenditure per pupil on education to reflect the trends in the development of education. It also presents some preliminary calculations that reveal the substantial scope exists for channelling to elementary education part of the existing high levels of household expenditure on education.

Canagarajah and Ye (2001) analyses equity and efficiency issues in public spending on health and education in Ghana during 1992-98. This study attempts to evaluate the pro-poorness and effectiveness of the health and education sectors by examining the operating systems, resource distribution, and service utilisation, and to assess the efficiency of the public spending, and to assist the Government of Ghana in identifying the strategies and mechanisms to ensure easy access to public spending information at all government levels by civil societies, NGOs and communities. The study reveals that total public spending in the education sector has declined significantly in the second half of the 1990s and basic education enrolment has been stagnant or declining in public schools but increasing in private schools, resulting in a moderate increase in total enrolment while enrolment in higher levels are lagging behind those in basic education. Therefore, the quality of basic education in public schools remains poor while it has steadily improved in private schools. Moreover, regional disparities are significant, with lower public resource allocations and lower enrolment ratios and a great gender gap in the three poorest regions of Ghana. The study also identifies some apparent reasons that affect basic education enrolment like parents’ unemployment or low incomes; lack of returns in the labour market for people with basic education; and domestic demands placed on the girls. Therefore, the education system in Ghana is certainly non pro-poor but up to the
secondary level, it provides reasonably equal access to a majority of the population. The study points out the three poorest regions of Ghana are in urgent need of financial resources in order to expand their teaching capacity, in terms of both physical facilities and the number of teachers. The study also describes that among Western African countries, Ghana lags behind in terms of both public health spending and the efficiency level of its health system. The distribution of health facilities favours more affluent regions and urban areas because of higher investments from both the public and private sectors while the shortage of infrastructure due to lack of investments from both the private and public sectors seems apparent for the poor regions where the share of health facilities is not sufficient for the size of the population. The availability of health facilities and personnel do not result in better health indicators in this study. Public spending in less affluent areas appears to be much more effective in terms of immunizing children, probably due to the outreach services. The study points out that the preventive measures of health outputs do not correspond to health inputs, but the curative outputs are more or less consistent with pattern of health facility and personnel distribution. It is apparent in this study that to improve health services, the efficiency and the priority (basic versus tertiary and preventive versus curative care) of the system must be addressed before expanding the budget envelope. Finally, the study comes up with a conclusion that in a fiscally constrained economy, public spending in the social sectors needs to be linked to outcomes to ensure efficient and equitable delivery of services.

Dev and Mooij (2002) examines the trends in the social sector expenditure in the central and state budgets for 1990-91 to 2000-01 covering plan, non-plan, revenue and capital outlays. The study focuses on several aspects including overall levels of allocation, expenditure on health and education and interstate disparities. The study finds that the centre has done better than the states in the post-reforms period so far as social sector expenditure is concerned but one can also argue that centre has been able to perform better by withholding money from the states. The most significant change, visible both at the centre and the states, is a shift away from rural development, starting from 1996-97 and within the rural development outlay at the centre, there is a shift away from rural employment schemes to rural housing,
water and rural roads. In other words, there is a shift from the traditional ways of addressing rural poverty to human development or basic needs interventions. With regard to health, neither the states nor the centre have increased their health expenditures considerably. Intra-sectoral allocation shows that there has been a shift towards public health and maternal and child health. With regard to education, the share of education expenditure from all the departments has declined from 1990-91 to 1998-99. The picture on the share of education for the states is the same, but there has been an increase in the central government expenditure after 1995-96. The study finds such increase is almost completely due to increase in spending on elementary education, and to a large extent related to the introduction and expansion of mid-day meal programme. The intra-sectoral allocations also show that there has been a shift towards elementary education in the 1990s. In most states, social sector expenditure has not increased very much in the first half of the 1990s, but in the second half there has been an increase, in terms of per capita real expenditure. The study observes that there has been underutilisation of approximately 10 per cent of Plan expenditure during the last years of 1990s and analyses several reasons behind such underutilisation related to new and/or complicated scheme procedures, absence of matching funds, lack of interest, deliberate delays in release of the funds etc.

Gupta, Verhoeven and Tiongson (2002) use cross-sectional database for 50 developing and transition countries to analyse the impact of public spending on education as well as health on education attainment and health status during 1993-94. Education attainment has been measured in terms of ‘gross enrolment ratio’ at primary and secondary levels of education, ‘persistence through Grade 4’ and ‘dropout rate’ at primary level of education while health status is described in terms of ‘infant mortality rate’ and ‘child (under-5) mortality rate’. In case of education, in addition to public spending, the socio-economic variables used in the study are- percent of population in the age group 0-14 years, per capita income, urbanisation and child nutrition. In case of health, in addition to public spending, the control variables used are- per capita income, adult illiteracy rate, access to sanitation and safe water, and urbanisation. Education regression results show that total education spending has a statistically significant effect on all education attainment indicators except for ‘persistence through Grade 4’ whereas socio-economic variables, like per
capita income, urbanisation and percent of population in the age group 0-14 years, are important in describing variations in enrolment rates. Urbanisation turns out to be a strong determinant of enrolment rates. The intra-sectoral distribution of public expenditure on education has also a statistically significant impact on education attainment indicators. Health regression results reveal that total public spending on health proves to be statistically significant in explaining the variations in health status in terms of infant mortality and child mortality while health spending at primary level of education has insignificant impact on health status. The control variables, such as adult illiteracy rate, income per capita and urbanisation, are also important in explaining variations in infant and child mortality. The study suggests that the policy-makers in developing and transition countries need to provide greater attention while making allocations to education and health sectors, as these allocations play a significant role in promoting equity in such countries.

Shariff, Ghosh & Mondal (2002) present an analysis of trends in state-adjusted expenditures and allocations on the social sector and poverty alleviation programmes in India over a period from 1991-92 to 1999-2000. The study finds that a considerable portion of public expenditure on social sector and poverty alleviation programmes is undertaken by the states but the central share seems to be increasing over time. Overall, expenditure on social sector schemes is increasing in real terms but mainly through increased expenditure of the central government and the state governments seem to be easing out of their constitutional commitment to sustain programmes in the social sectors, which is a matter of concern. The study reveals that multiplicity of programmes within the social sector and poverty alleviation programmes such as primary education, rural employment, micro credit programmes, old-age assistance programmes etc. has caused so much of confusion that none seems to be efficiently implemented. The study highlights the need for increased allocations to promote and provide elementary education and basic health services, and ensuring nutrition to the millions in India.

UNDP et al. (2002) with the help of several ministries of the Government of Angola have carried out a detailed study on financing of the social sectors in Angola during 1997-2001 period. The study presents the data on overall expenditure of the government and donors in the social sectors, with special emphasis on the education
and health sectors as well as it analyses the trends in the intra-sectoral distribution of expenditure in these sectors vis-à-vis the priorities set in government policies and strategic plans. The study also describes the budget management system and analyses its implications for policy implementation, planning and financing in the health and education sectors. The study focuses only on the expenditure budgeted and executed by the government but neither takes into account the private expenditure carried out by households nor the expenditures made by private and state companies and philanthropic, non-state institutions. The study shows that the overall level of public expenditure has been high but the weight of the social sectors in this expenditure has been among the lowest on the African continent. The intra-sectoral distribution of educational expenditure in this study reveals the low priority given to the challenge of achieving universal primary school enrolment in the country where almost half of the children in the official age bracket for primary school are not enrolled. The study identifies ‘the exaggerated importance given to scholarships’ as a major distorting factor in the distribution of resources within the education system which accounts for half of the value of expenditure on basic education. The study points out that the country needs a balanced education system, with adequate capacity beyond the primary level and it would be more efficient and equitable to train a large number of students at tertiary level within the country by developing the university facilities and institutes than to send a relatively small number of students abroad at enormous cost and with a high risk of non-return on the part of the beneficiaries. Regarding scholarships, the expenditure on this component should be drastically reduced and limited mainly to training needs at post-graduate level, in areas of key importance for the development of the country. So far as intra-sectoral distribution of health expenditure is concerned, the study shows that there is a heavy concentration of expenditure at tertiary level at the expense of primary health care. The study finds a Department in the Ministry of Health, which has a responsibility of procurement and distribution of drugs for the primary health care network and municipal hospitals, but such Department has neither the resources nor sufficient logistical and technical capacity to meet the needs of these levels of the health system. As a result, there are some parts of the country that have received almost no drugs at all in the last few years. The study highlights the immediate need to step up and reorient expenditure to the primary
health care network and to the national programmes to combat the major endemic diseases including HIV/AIDS in particular. The study also identifies some inadequacies in the budget management system like shortcomings in the budget classification; absence of an adequate strategic framework in the distribution of budget allocations within the sectors; weaknesses in the information management systems within the sectors etc. The study stresses more for the need of a strong strategic framework in the social sectors, with adequate norms, regulations, information management systems and mechanisms for inspection and coordination as well as the need for strong systems for controlling financial management and conversion of municipal administrations into budget units, as these are the bodies responsible for delivery of health and education services at primary level, through the new municipal sections for social services. Therefore, this study contributes towards better planning and budget management framework for the social sectors and thereby helps in creating the pre-conditions for recovery of education and health services, making it possible to move forward towards universal primary school enrolment and the reduction of high rates of morbidity and mortality, in accordance with the Millennium Development Goals.

Kaur & Misra (2003) examines the level and effectiveness of social sector expenditure in the field of education and health covering a sample of 15 non-special category states over the period 1985-86 to 2000-01. The study clearly bring out that health status and educational attainment are multi-dimensional concepts whose outcomes are determined by complex interaction among a variety of variables, with the importance of each variable being different for health and education status and also for different stages of education. The study establishes that public spending on education has been productive, though it has been more at the primary than at the secondary level of education. Further, the relationship between public spending on education and primary enrolment is stronger for poorer than non-poorer states. Female education is instrumental in enhancing both primary and secondary enrolments whereas the relationship between public spending and health outcome turns out to be weaker, though it is indicative more of inadequate than ineffective health expenditure. Infrastructure availability seems to have a significant influence in reducing infant mortality. The study concludes that state spending has played a
less important role in case of health than education in narrowing down the gender and rural-urban disparities. However, the study also suffers from few limitations such as cross state analysis does not allow for direct assessment of the impact of micro determinants of education and health outcomes such as school management indicators, quality of health services being rendered etc. Some other macro variables such as private sector spending, governance issues (influencing the quality of expenditure) have been excluded from the analysis for lack of data.

Baldacci et al. (2004) have tried to assess the impact of social spending and other policy interventions on human capital, economic growth, and social indicators with a view to evaluate their implications for the MDGs using panel data relating to 120 developing countries including India during the period 1975 to 2000. They have used four system of equations for- ‘real per capita income growth’, ‘total investment’, ‘educational attainment’, and ‘health status’ to examine the direct and indirect effects of social spending on human capital and economic growth taking into account the interaction between education and health interventions. The study has found that both education and health spending have a positive and significant direct effect on indicators of education and health capital, and a positive and significant indirect effect on economic growth. Education spending has both an immediate as well as a lagged effect on social indicators and economic growth. The full effect of education spending on education capital has to be realised with a significant time lag of 10 to 15 years. The health spending has a positive and an immediate impact on health capital. The substantial variations in the effects of social spending on social indicators and economic growth have been found across different country groups in the study. As positive effects of social spending on social indicators and economic growth have been the highest among low-income countries as well as sub-Saharan Africa, thus, social spending can be more effective in such countries in achieving the MDGs. The study brings out that the quality of governance has a significant direct impact on the linkage between social spending and social indicators. However, in countries suffering from poor governance, health spending has no impact on indicators of health capital whereas the effect of education spending on education indicators has also been reduced in such countries. In addition to quality of governance, the macroeconomic policies like reducing
inflation, improving fiscal balances have a positive effect on growth. The study concludes that the quality of governance as well as macroeconomic environment needs to be strengthened and the efforts to meet the MDGs need to be wide-ranging.

Bhat and Jain (2004) examine the relationship between income and public healthcare spending using state level data for 14 major states during the period 1990 to 2002. The study has found that the governments at state level have a target of allocating only about 0.43 per cent of their GSDP to health and medical care excluding allocations received under centrally sponsored programmes such as family welfare. Further, the goal of spending 2 to 3 per cent of GDP on health looks very ambitious task at current level of spending as well as fiscal position of state governments. The study estimates that for every one per cent increase in state per capita income, the public healthcare spending has increased by around 0.68 per cent. As the real per capita spending by the government on health as a per cent of income is declining, thus the government priority for health spending has been decreasing for all states over the years. The less and declining allocations to the health sector by the states have been found responsible for the rapid growth in the private health expenditure in India. Moreover, the effective utilisation of large existing network of public primary care facilities with the help of private partnerships is vital to enable better delivery.

Mooij and Dev (2004) discuss about India’s social sector priorities as they appear from the budget speeches between 1990 and 2002; actual expenditures on the social sector covering plan, non-plan, revenue and capital outlays; and the budget-making process. The analysis of budget speeches shows that the Finance Ministers all want to give the impression that the budgets are made primarily for the poor, but that very little is said about social inequality and the redistribution of wealth. Another phenomenon that becomes clear in the study is that the conceptualisation of poverty has changed in the course of the 1990s. Initially the main emphasis was on income and employment but from 1996 onwards, the emphasis shifted more to other human development aspects, such as health, education, housing, and rural roads. This shift in prioritisation in the budget speeches corresponds with a shift in expenditure patterns. The analysis of budget-making process reveals that the process is not very participatory or democratic because the budgets are prepared mainly
within the Ministries with little outside participation while the process of Plan preparation is more participatory. The study finds that under-spending of the resources allocated is an important feature of social sector expenditure and labour & employment is a particularly big under-spending sector. There are two important observations have been made in the study. First, there is an urgent need to step up social sector expenditure and second, there is an obvious need for a better utilisation of the resources allocated.

Sudhakar and Moss (2005) in a study look at the sustenance of the proportions of the government budgetary expenditure devoted to the social sector development during 1991-92 to 1995-96 (post-reform period) in relation to 1986-87 to 1990-91 (pre-reform period) covering plan, non-plan, revenue and capital accounts. The study also helps in understanding the extent of priority given to the social sector as a whole as well as to its various individual components over the post-reform period. It reveals that, on an average, the expenditure on social sector has increased, though marginally, during the post-reform period for the centre and states combined. Thus, the expenditure proportion of the social sector could be sustained in India during the post-reform period in relation to the pre-reform period. But in case of all the states combined, on an average, the expenditure proportion of the social sector has gone down during the post-reform period which shows that the states combined could not sustain the pre-reform expenditure proportion of the social sector during the post-reform period. As far as individual components of the social sector are concerned, the study finds that all the states combined have neglected social security and welfare while the centre has neglected food subsidy in allocating their respective budgetary resources during the post-reform period compared to pre-reform period. Finally, the study observes that there is an urgent need to step up due expenditure proportions of medical, public health, sanitation and water supply, family welfare, housing, labour and employment apart from social security and welfare during the post-reform period by all the states combined.

Prabhu and Selvaraju (2006) in their study raise the point towards the unsatisfactory situation with respect to the public financing of the health sector in the country. The study examines the public spending on health across major Indian states during 1980-81 to 2002-03 across four time periods. India has been
characterised as a country with relatively high levels of expenditure on health along
with low levels of attainment as compared to many East Asian countries. The private
expenditure as compared to public expenditure on health has been very high in India
indicating the failure of the public sector to provide adequate healthcare services in
India. The state-wise analysis of the trends in public spending on health in terms of
real per capita public expenditure reveals positive and relatively high growth rates in
real per capita public expenditure on health during the first phase from 1980-81 to
1987-88 while the real per capita public spending on health has registered negative
growth for most of the states during the second phase from 1988-89 to 1991-92 due
to the substantial fiscal stress. The third phase from 1992-93 to 1997-98 has
witnessed a recovery in the growth rates of real per capita public expenditure on
health to positive levels of all states except Uttar Pradesh. The most of the states
have shown an increase in their real per capita public spending on health during the
fourth phase from 1998-99 to 2002-03 on account of the implementation of the
recommendations of the Fifth Pay Commission. The study highlights the
unsatisfactory situation with respect to public financing of health sector in India and
concludes that a concerted effort has been required to raise allocations to the health
sector by the state governments.

Selvam (2007) examines the linkage between privatisation and social
spending on four major overheads namely; education, health, road construction and
social welfare in the least developed African economies with reference to Ethiopia
to explore whether or not the privatisation programme in the country has benefited
the society during the period from 1994-95 to 2003-04. The study reveals that the
expenditure on education and road construction depict an increasing trend which
helps to improve the quality of human stock, and to enhance the market
connectivity. But the spending on health and social welfare show a declining trend
against all odds that privatisation improves the social spending. It is observed in the
study that the country over a decade with various economic reforms including
privatisation has been unsuccessful in stimulating recovery due to slow growth rate
with a lot of uncertainties. The study exhibits that the link between privatisation and
social spending is weak and partial because the revenue collected from privatisation
is too small to divert and accommodate in large quantity for social overheads. The
study concludes that privatisation, if pursued within the wrong framework and without human development as an objective in mind, would fail to achieve the objective of improving human well-being.

Sen (2007) discusses the rationale and practical issues relating to use of performance indicators in general and for social sector interventions in particular, and illustrates its possible use by the state governments in India with the case of two departments of the Government of Chhattisgarh—health and school education. The study also discusses the administrative set-up of the selected departments and desirable revamp of the set-up along with the budgetary system, and discusses the preconditions of useful application of performance indicators. The study also quotes several examples of performance measurement systems in operation in the government in developed countries like Australia, New Zealand, United Kingdom and the US. The study lists out some important health and educational outcome indicators that can be used for the performance measurement in social sectors. Health outcomes include standard indicators like infant mortality rate, life expectancy, percentage of deliveries with medical attention, and morbidity rate. Other possible health indicators would be hospital beds per thousand persons (availability of facilities), doctors and other medical staff per thousand persons (availability of medical personnel), percentage of population with basic health facility within reasonable distance (accessibility), medical expenses as percentage of household expenditure (subjective cost of medical services), and mortality-morbidity ratio (quality of service). The study also identifies some educational outcomes that include usual indicators like enrolment ratio (preferably net) and literacy rate and other possible educational indicators can be completion rate (primary and secondary levels), pass-out rates and drop-out rates at both primary and secondary levels, learning achievement rates and unemployment rate among those completing different levels and not continuing with further education. The study concludes that performance budgets are regularly prepared in several states as well as the Government of India, but their utility, and actual use for any purpose, is limited and can be considerably enhanced by careful identification of performance indicators.
The effectiveness of sector-specific aid on education has been analysed in a study by Dreher et al. (2008) considering ‘primary school enrolment’ as an outcome variable covering panel database of 100 developing countries during the period 1970-2004. The panel data fixed effects model used in the study reveals that per capita aid for education turns out to be a strong determinant of primary school enrolment while public spending on education does not have a significant impact on primary school enrolment. The other control variables used in the study such as literacy, share of population below the age of 15 years, and the degree of urbanisation also have an insignificant effect on primary school enrolment along with public spending on education. The per capita income is negatively associated with primary school enrolment but its effect is not significant at conventional levels. The results of panel data regression analysis remain qualitatively unchanged when General Method of Moments (GMM) and Two-stage Least Squares (2SLS) estimators have been applied in the study. The study finally concludes that primary school enrolment can be improved substantially if donors fulfil their promise to double current aid efforts.

Guruswamy et al. (2008) in a study observe the important characteristics of the government health care financing by studying the levels, patterns and trend of public expenditure on health in India during 1995 to 2006 at the national and state levels. The study also examines the interrelationship between the pace of economic development, in terms of growth in GDP and public expenditure on health at the state level as well as it explores alternative health care financing options. The study shows that public expenditure on health as a proportion of GDP has remained stagnant but the pattern of such expenditure is irregular at the national level. The study also finds some differences that exist among the states regarding their health expenditure patterns. The relatively less developed or poorer states seem to be spent more on health as a proportion of GSDP as compared to developed or richer states. Health care financing in India predominantly comes from private sources through private insurance and out-of-pocket payments while public expenditure on health constitutes a meagre proportion of total health spending. The study identifies the more health spending by the households across the country as an important factor responsible for the rise in private out-of-pocket expenditure on health care.
Therefore, health financing in India in this study is characterised by the stagnant and inadequate levels of public expenditure and a rising trend in private out-of-pocket expenditure on health. In such a health care system, the study highlights a need to consider alternative health care financing options like community-based financing of health care, employer-based insurance schemes and private health insurance from the perspective of equity as well as to ensure risk-free, unbiased access to health care for all.

Rajkumar and Swaroop (2008) have made an attempt in their study to examine the role of governance in determining the efficiency of public expenditure in improving human development outcomes with the presumption that role of good governance is a key to development effectiveness. The role of governance has been defined by the level of corruption and the quality of bureaucracy in a country. The quality of governance has been emerged as a strong determinant of efficacy of public spending in improving education and health outcomes. The results show that public spending on health has a significant negative impact on child mortality especially in countries with good governance while it has no impact on child mortality in countries with weak governance. This indicates that as the quality of bureaucracy increases or the level of corruption falls, public expenditure on health becomes more effective in improving child mortality. Similarly, in case of education, public expenditure on education turns out to be more effective in improving educational attainment particularly in countries with good governance whereas it has insignificant effect on educational attainment in countries with weak governance. The findings of the study have important implications especially for developing countries that have relatively low level of public spending on health and education and where the quality of governance is often poor.

According to Ramakumar (2008), social sector expenditure has been defined as the sum of revenue and capital expenditures on two components- ‘social services’ and ‘rural development’. The study has used the functional classification of expenditure given in budget documents to study the changing role of the governments in India with respect to the priorities in their expenditure strategies during 1950-51 to 2005-06. The four ratios such as public expenditure ratio, social allocation ratio, social priority ratio and human expenditure ratio have also been
used to analyse the changes in the patterns of public expenditure. The analysis of public expenditure at the central level reveals that public expenditure of the central government has declined sharply in the 1990s and 2000s as compared to 1980s owing to the fiscal adjustment strategies adopted by the government during the implementation of economic reforms. Therefore, the growth rate of social services within the centre’s social sector expenditure in 1990s and 2000s has been lower than its growth rate in the 1980s due to the reason that the growth rate of aggregate public expenditure of the centre has been higher in 1990s and 2000s than the growth rate in 1980s as well as the composition of social sector expenditure appears to have shifted from the human priority areas in the 1990s and 2000s as compared to 1980s. The state-level analysis of expenditure also shows that there has been a shift of social sector expenditure away from the human priority areas in the 1990s and this situation has worsened in the 2000s indicating that in some of the human priority areas, the fall in share of expenditures has been sharper in the 2000s than the fall in share of expenditures in the 1990s. The study clearly brings out that significant rise in the social sector expenditure of the central government in the 2000s does not result into the increase in the overall social sector expenditure due to the reason that such increase in social sector expenditure by the centre appears to have been offset by a corresponding fall in the social sector expenditure by the states. Therefore, the state governments in India should become willing and able to spend significantly higher amount of resources in the social sector.

Jain (2010) attempts to find the impact of economic reforms on health poverty measured in terms of infant mortality rate and life expectancy at birth. Eight variables such as female literacy rate, basic amenities index, per capita health expenditure, percentage of area under forest, percentage of cropped land, percentage of population below poverty line, percentage of households having access to electricity, and health infrastructure index have been used in the study to explain variations in infant mortality rate and life expectancy at birth. The study has found female literacy rate, cropped land and basic amenities as significant variables in explaining variations in health poverty. Further, cross-state analysis indicates some sort of mismatch between the rate of economic growth, health expenditure and health indicators in India. The role of private sector has continuously been
increasing in the expenditure on health sector in India since the economic reforms. The rural population has been spending relatively a higher proportion of their income on health as compared to urban population in India. The study concludes that instead of spending on treatment, healthcare measures to be adopted for prevention from spread of diseases that include the expansion of basic amenities in the form of safe drinking water, sanitation facilities etc.

Lakshmi et al. (2012) examine the pattern and determinants of public expenditure on health in Andhra Pradesh during 1985-2005 using multiple regression technique. Andhra Pradesh has been incurring around 1 per cent of its GSDP on health while the share of health expenditure as a per cent of aggregate public expenditure as well as a per cent of social sector expenditure has also shown a declining trend during the period of study. This indicates that supply of healthcare in rural and remote areas of the state are far from satisfactory level leading to a large-scale rural-urban differentials. The five determinants namely, per capita GSDP, literacy rate, population, per capita fiscal deficit and infant mortality rate have been used to examine their impact on per capita health expenditure. The study reveals that per capita GSDP and literacy rate have significant and positive impact on per capita health expenditure whereas population has significant but negative impact on per capita health expenditure indicating that with the increase in population, the government expenditure does not increase at the same rate that results into the decline in per capita health expenditure. The other variables such as per capita fiscal deficit and infant mortality rate do not have significant impact on per capita health expenditure. Thus, the government should follow a suitable mechanism of raising resource efficiency so as to increase the public spending on health in Andhra Pradesh.

Prachita and Shanmugam (2012) assess the efficacy of 17 major states in India in raising health outcomes using stochastic frontier model covering panel database for the period 2000-01 to 2008-09. The performance index relating to IMR as health attainment indicator has been used in the study to measure the performance of Indian states. The study finds large scale variations across states in terms of IMR. The per capita public spending on health at national and state levels has increased during the period of study. The study reveals that per capita public spending on
health as well as per capita income of states have positive and significant effect on health performance. The health infrastructure variables such as doctors and sub-centres are also important factors in raising health outcomes whereas primary health centre variable has negative impact on health performance. Among major states, the mean efficiency of 7 states has been below the average mean efficiency. This indicates that, in order to improve their performance, these states need to pursue the best practices that have been adopted by better performing states like Kerala and West Bengal. Finally, the study suggests immediate policy interventions to be required from both centre and states so as to improve the efficiency of states in attaining the Millennium Development Goals relating to health sector.

Purohit (2012) attempts to analyse the disparity in terms of human development and health outcomes across rich and poor states and across rich and poor strata and rural-urban segments of 19 major Indian states. The study has also contributed in understanding the causes of disparity between rural and urban areas both in poorer and richer states of India and also in comparing human development and health outcomes across states using 12 dependent variables including three mortality indicators such as infant mortality rate, child mortality rate and under-five mortality rate, and 48 independent variables representing various socio-economic aspects. In terms of human development among major states, the poorer states have lower HDI value or Inequality adjusted HDI value as compared to richer states. The study has revealed that all the three mortality indicators are higher for rural areas in comparison to urban areas except for Kerala. The study has found a considerable disparity among rural and urban areas even within poorer and richer states. Lack of female education, proper housing, sanitation facilities and insurance have found to be significant factors in influencing mortality. The study emphasises the need to increase the public expenditure on health and to popularise the government-run health insurance schemes primarily meant for the poorer and marginalised sections of the society.

Dutta (2013) analyses the achievement and improvement indices of human development in Indian states for the period 1981-2011 so as to see the level of progression or deterioration in the achievement level of Indian states. In order to see how Indian states have extensively changed their position over time, health,
education, standard of living and human development achievement and improvement indices have been used in the study. A wide difference in the ranking of states has been found in terms of achievement and improvement indices. The states with lower ranking in terms of achievement index have achieved the top most position with respect to improvement index and vice-versa indicating some convergence. The study concludes with the striking result that there has been low improvement of certain low-achieving states like Arunachal Pradesh, Odisha, Uttar Pradesh etc. indicating that despite of low achievement level, these states have not been making any effort to improve human development. Therefore, the government should take proper initiatives to improve the level of human development and poverty reduction in such states.

Ghosh (2013) examines the inter-state variations in the human development indicators of 15 major states in India and their association with per capita income and per capita social sector expenditure during 1981-2008. The study indicates that the inter-state variations in the HDI have declined over time as states appear to have converged in terms of human development and the poor states have managed to catch-up the rich states in terms of human well-being. The convergence has also taken place in rural and urban areas during the period of study. The study reveals a significant divergence in per capita income indicating that the poor states have failed to catch-up with the rich ones in terms of per capita income. However, the convergence in literacy rate and life expectancy at birth has made it possible to achieve significant reductions in regional disparities in terms of human development. The analysis of assessing the relative effects of per capita income and per capita social sector expenditure on human development reveals that per capita expenditure on social sector has been more effective than per capita income in achieving improvements in human development. Female literacy and gender parity in literacy are also found to have significant influence on various dimensions of human development. The study comes up with the conclusion that spending higher amount of per capita expenditure on social sector could be a more effective way of improving human development rather than thinking about an automatic improvement in human development due to an increase in per capita income. Therefore, public investment in all activities of social sector such as education,
health, water supply and sanitation, housing, social security and welfare of marginalised sections of the society etc. should be significantly enhanced to achieve the improvements in various dimensions of human development and to reduce the regional disparities.

Mahmud et al. (2013) in their study try to explain the probable reasons for rapid and spectacular improvements made in many social development indicators in Bangladesh during the last two decades. Despite of the low level of public spending on both education and health the study finds two possible reasons for improvements in social development indicators in Bangladesh. The first main reason is the adoption of low-cost solutions like the use of oral rehydration saline (ORS) for diarrhoea treatment leading to a decrease in child mortality and the second is the increased awareness created through effective social mobilisation campaigns such as immunisation, contraceptive use and girls’ schooling. The study has also found some other factors like government’s commitment and support for welfare oriented programmes, and the involvement of NGOs also play a significant role in achieving rapid progress in social development indicators in Bangladesh. The study concludes that the gains from low-cost solutions have already reaped so further progress may depend upon the increased public spending on social sector and an improvement in service delivery systems. Moreover, reductions in child and maternal mortality will require more expensive interventions and the provision of relatively costly health systems.

Roy (2013) tries to evaluate the performance of 15 major Indian states in terms of human development considering educational indicators such as literacy rate, gross enrolment ratio, and health indicators such as life expectancy at birth and infant mortality rate over the period 1980-81 to 2009-10. The study has presented a diverging trend across states in terms of per capita income indicating that the gap between poor and rich states has been widening over the period of study. The disparities in terms of income have been higher within the rural areas as compared to urban areas across states. The converging trend has been found in terms of various human development indicators indicating the decline in the gap between states in terms of literacy rate, gross enrolment ratio and life expectancy at birth. The gap between rural and urban areas within the states has also been declining over the
period. The study elucidates that the performance of states in terms of various human development indicators increases with the increasing income at a declining rate indicating that per capita income at higher levels become less important in generating gains in terms of human development indicators.

After incorporating the linkages between educational attainment and health status, Bhakta (2014) examines both direct and indirect impact of public expenditure on health and education of children using a panel data simultaneous equation model for 20 Indian states during 2003 to 2011. IMR has been used to capture the health status of children while GER, NER and DOR have been used in the study to capture educational attainment. The study has found that public spending on health is not a significant determinant of health status whereas public expenditure on Supplementary Nutrition Programme significantly improves the health status of children but at a diminishing rate indicating that the government must raise expenditure on this programme. Further, access to safe water and sanitation facility in their own residence, literacy rate and per capita GSDP are negatively associated with IMR at significant level whereas TFR and urbanisation have direct and significant impact on health status of children. The study reveals that IMR has a significant impact on educational attainment in terms of GER, NER and DOR as IMR is inversely related with GER and NER while it is positively related with DOR. The effect of public spending on elementary education is substantially lower on DOR than GER. This implies that relatively more public expenditure on elementary education is required to reduce DOR as compared to GER. The study also estimates the percentage changes in public spending on both health and education required to accelerate the prevailing rate of growth in IMR, NER and DOR. The study brings out that with current level of public spending on health and education; it requires 20 years to achieve target value of 10 for IMR while 6 and 10 years for achieving 100 per cent NER and zero DOR. Apart from this, public spending on health has to be augmented by 95 per cent each year to achieve the targeted rate of IMR while only 23 per cent increase is required each year in education sector to achieve 100 per cent NER. However, public spending on education has to be augmented further to 75 per cent each year for achieving zero DOR.
Gebregziabher and Nino-Zarazua (2014) use different econometric methods like two-stage least square (2SLS) model, fixed effects (FE) model, limited information maximum likelihood (LIML) model and continuously updating estimator (CUE) to examine the impact of government social sector spending on aggregate welfare measured in terms of Inequality-adjusted Human Development Index (IHDI) as well as in terms of child mortality covering panel database of 55 developing and transition countries over the period of 20 years from 1990 to 2009. The study has found that government spending on social sector has a positive and significant effect on IHDI. IHDI is found to be higher especially for countries having strong democratic institutions and better bureaucratic quality. The government spending on health as well as per capita income are found to be important factors explaining variations in child mortality. Among other control variables, access to improved sanitation has an indirect impact on child mortality while access to safe water as well as fertility rate is positively associated with child mortality rate. Female education and the degree of urbanisation both are negatively associated with child mortality. The study also attempts to analyse the individual effects of different components of social sector expenditure, such as health spending, education spending and social protection spending, on aggregate welfare. Health spending appears to be more effective in enhancing aggregate welfare than government spending on education and social protection. Finally, the study finds no strong evidence to show that the efficiency of government spending on social sector relies upon democratic governance.

An in-depth review of above mentioned studies relating to various dimensions of social sector in India and elsewhere clearly brings out that the management of social sector is the foremost pre-requisite for the socio-economic progress of a country. After reviewing the existing literature, it has been observed that most studies have covered the financing aspect of the social sector, and only a few studies have reported the impact of public expenditure on the attainments achieved in the social sector. No earlier study has undertaken a detailed analysis of public expenditure and its effect on the social sector in terms of attainments achieved for all the states in India. The present study is an attempt to fill this gap.