



An analysis of social sector expenditure in India since ninth five year plan

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Abstract

This paper focuses on the correlation between social sector expenditure & PCI and IMR since Ninth Five Year Plan. At the present day world, globalisation, liberalisation, privatisation and marketization has changed the approach of the economic development. UNDP says that the people are the real wealth of a nation. Thus, the importance of the social sector development is increasing day by day. Although, social sector outlay of the General Government has become double from Ninth Five Year Plan to Eleventh Five Year Plan. But there is discrepancy in the allocation of funds among various components of the social sector. Health and education are the main component of the social sector development. The public outlay is far from satisfactory for health sector in India. Private sector expenditure is more in the health sector to that of public sector in India.

Keywords: social sector expenditure, PCI, IMR, globalisation, liberalisation, privatisation, marketization

Introduction

In India, social inequalities have deep historical roots. Ancient social-system was fractured because of caste and untouchability. Then came the rules of externally oriented minorities. Over a thousand years which created new hierarchical system which ultimately resulted in deep social fractures. However, India has made considerable progress since independence towards social sector development. Many social indicators such as GER, IMR, MMR and poverty ratio has improved since independence. The incidence of poverty has declined from over 50 per cent in the 1950s, to 21.9 per cent in 2011-12. It means it has become about half since independence in India. The literacy rate has increased from less than 20 per cent in 1951 to 75 per cent in 2011. India has improved Human Development Index since last decade. Nevertheless, India's performance in the social sector is far from satisfactory. There are much more disparity in India, such as – regional, economic, social and cultural etc.

Therefore, the ultimate objective of planned development is to ensure well-being through sustained development in the quality of life of the people particularly marginalised section of the society. The policy makers should give emphasis on social sector development and programmes. The development of human resources contributes to sustained growth and productive employment. A healthy, educated and skilled workforce can contribute more effectively to economic development. There are two major areas in the social sector – health and education which requires more investment. Thus, there is need for heavy investment in developing social infrastructure. For development of education sector, there is need for investment in primary, secondary and higher education. There is need to invest in school building and equipment, provision of teachers and other supporting staff. The government has taken the task of expanding education to rural, hilly and tribal areas also. At the higher education, there

is need of investment in colleges and universities and research institution as well.

Social sector expenditure in the budget on education, health, family welfare, drinking water and sanitation, women & child development, welfare of scheduled caste & OBC, tribal welfare, minorities & welfare of disabled taken together. Despite lot of talk about importance of social sector expenditure, year after year government has failed to bring any significant improvement in social sector expenditure. Expenditure on social sector enhances the choice and capability of a person. It enhances productivity and efficiency of the people. It can reduce the income-inequality in the society.

Expansion of education is very important for socio-economic development of a nation. Education is recognised as one of the critical elements of the national developments efforts and higher education in particular, is of vital importance for the nation – as it is a powerful tool to build knowledge – based society of the 21st century. It enhances the choice and capability of a person. It enhances the health and hygiene in the society which leads to enhance the productivity of the work-force.

Higher education can transform people into more productive work-force and utilise the manpower according to the need of an economy. It can transform the work-force according to the need of an organisation. It enhances a person to take decision rationally. Thus, the society can utilise the available resources optimally. The society can achieve its full potential of social and economic development. The standard of living of the society can be improved through higher education. It predicted that India will see a sharp decline in the dependency ratio over the next 30 years, which should be considered as an invaluable asset which if equipped with knowledge and skills can contribute effectively to the development of the national as well as global economy.

Expansion of expenditure on health and family welfare can enhance the productivity of the coming generation. There is a proverb that “A healthy mind lives in a healthy body”. Expansion of health related awareness can also reduce the health related expenditure of the society. This surplus could be utilised in another productive purpose. Expansion of family welfare programmes can help to achieve sustainable development. Family planning is a part of family welfare programmes. Family planning can help to reduce the birth rate and tend to achieve demographic transition. The control over population can automatically solve much more problems. If the population is limited then given amount of social sector expenditure can achieve the targets easily. The per capita social sector expenditure automatically increases. It also help to achieve higher level of human development.

Thus, there is synergy among various sector of social sector development. One component of social sector expenditure also affects another sector directly or indirectly. Increases in family welfare programme expenditure can help to achieve the goal of many social indicators such as – IMR & CBR etc. Social sector expenditure can help to achieve many international targets such as – eradication of poverty, universal primary education, pure drinking water, environment etc.

Review of Literature

There are several studies are such as Seema Joshi (2006) ^[7] in her research paper, “Impact of Economic Reforms on Social Sector Expenditure in India” analysed that as a proportion of aggregate expenditure, the share of social sector expenditure in the combined expenditures of the Central and State Governments registered an increase during the reform period. In case of Central Plan and Non-Plan Expenditure, the social sector spending (As a per cent of aggregate expenditure) increased significantly from 10.59 per cent in the post-reform period (1991-92 to 2002-03). It has also been find out in this paper that as a proportion of GDP, Central Expenditure incurred on the social sector has followed a highly fluctuating trend in both pre- reform and post- reform periods. There is the fact that is worth noting is that the social sector expenditure of the Centre as percentage of aggregate expenditure and GDP has increased during the reform period. E.A.S Sharma (2005) ^[13] in his research paper, “Social Sector Allocations” analysed the social sector allocation of Tenth Five Year Plan. He find out that the share of the state in the total plan outlay has also been shrinking over the years. The states had a 50 per cent share in the Fourth, Fifth and Sixth Plan. It came down to 37.5 per cent in the Eight Plan, 43 per cent in the Ninth Plan and 40 per cent during the first three years of the Tenth Plan. Despite these trends, the States have been making every effort to maintain their outlays on social sectors. He says that economic reforms has come from the west and got transplanted on to the Indian Soil. The ‘reformist’ saw the reforms as an end in itself. No attempt was ever made to understand the human development concerns that permeated the country side. No changes were initiated to mitigate them. The daily gyrations of Sensex and the sentiment on the Dalal Street seem to excite the reformists in Delhi, more than the muted wail of the millions who are inherently disadvantaged, exploited and unable to articulate. S. Mahendra Dew and Jos Mooij (2002) ^[3] in his research

paper, “Social Sector Expenditure in the 1990s: Analysis of Central and State Budgets” focuses on social sector expenditure in the 1990s and looks at several aspects, including overall levels of allocation, expenditure in the 1990s, and looks at several aspects, including overall levels of allocation, expenditure on health and education and inter-state disparities. India’s social sector expenditure in the 1990s was lower than that in the 1980s and also less than that of most other developing countries. To improve Human Development Index, there is an obvious need to step up social sector expenditure and improve fund utilisation. In this paper, they have examined trends in the social sector expenditure in the Central and State budgets for 1990-91 to 2000-01. They have found that the share of the social sector expenditure of the General Government (Centre & State taken together) has not increased during the reform period, except in 1999-00. The share in the 1990s was lower than those of the 1980s. As a proportion of total public expenditure, the share for the social sector has definitely increased since the mid-1990s if both revenue and capital expenditures are taken together. The proportion was higher in the second half of the 1990s than it was in the late 1980s. The per capita real expenditure on the social sector has also increased since the mid-1990s. From the middle of the 1990s onwards, the per capita real expenditure was higher than it was in the 1980s. P.R. Panchamukhi (2000) ^[9] in his research paper, “Social Impact of Economic Reform in India: A Critical Appraisal has analysed the impact of economic reforms on the social sector in India by comparing the data of the pre-reform period and reform period. He has found that there is a declining trend in the budgetary allocations of both the Central and State Governments for various sub-sectors of the social sector, especially health and education. It has also showed how the reforms are likely to have subtle effects on the basic value of the country. Considering the efforts by the public sector and the private sector for developing education and health in particular, it was found that during the period of reform the allocations are likely to be affected adversely. The relative allocations to the sub sectors of the social sector are found to have been disturbed even showing the declining trends during the reform period. It has been found that economic reforms have promoted consumerism, imposed constraint on freedom such as in the context of federal set-up, seem to have increased the possibilities of more corruption, led to work-loss due to disputes, seem to be associated with rising crime rates etc. Santosh Mehrotra, Jan Vandemoortele and Enrique Delamonica (1998) ^[8] in their paper, “Reallocating Public Spending for Basic Social Services in Developing Countries” has analysed that all social sector expenditures do not play as important role in supporting economic growth and reducing poverty as basic social services – preventive and curative health services, water and sanitation, family planning and basic education. They are not only more efficient in terms of providing ‘Human Capital’ but they are also more equitable. Nevertheless there is little information about what developing country governments spend on these basic services. This paper presents data from six case studies- El Salvador, Guinea, Nepal, Niger, Philippines and Tanzania – estimating the level of public spending on basic social services with special emphasis on the need for future work on assessing the

possibilities for increasing these expenditures. The relevance to issues in the health and education sector in India is notable. They have noted that public spending on basic social services – which is known to be pro poor has been rarely monitored by developing country governments. A major reason for this is that the functional classification of data presented in budgets does not allow such expenditures to be monitored.

Objectives and Scope of the Study

We want to find out that whether the present level of social sector expenditure is adequate to fulfil the needs and aspirations of the society. Many international organisations has targeted to improve the social development of various countries of the world. They have defined many social indicators. At present we will have to improve the social indicators to follow the international norms. Failure in the improvement of the social – indicators of India would lead to decreases our credit and reputation at the international platform. Thus, we are committed to improve our social indicators.

In 1990s, UNDP has focussed on Human Development. The dimension of development has changed from wealth centred to human development approach. The report of the UNDP says that “the people are the real wealth of the society”. It means, the human beings are the end of economic development. The human are not the means but the end of economic development. It has also been proved that there is no positive correlation between economic development and human development. It has been noticed that many countries of lower income group has achieved the higher level of human development.

Health and education are the main component of the social sector. The expenditure on education is not appropriate to fulfil the need of our society. Population is increasing rapidly but the educational facilities are not increasing in that proportion. The pressure on educational institutions is increasing day by day.

Our objective is whether social sector expenditure is adequate to meet the aspiration of the people. It has been observed that the social sector expenditure has declined after economic reform. But, after some years, the social sector expenditure has come on the track. Economic-reform has reduced the social sector expenditure all of a sudden. Some people argue that the aim of economic reform process was to withdraw the state from some economic activities to increases involvement in the social sector. On the other hand, some people says that expenditure on social services would be adversely affected. In this paper, we want to analyse the social sector expenditure since Ninth Five Year Plan.

Budgets are the main policy documents which can reveal the

social and economic priorities of the governments. In order to know the policy priorities, we can look at the expenditure pattern of the budget. Effects of social sector expenditure on human development not only depend on the level of the expenditure but also on the effectiveness of their utilisation. Prevalent corruption, inefficient bureaucracy has reduced the impact on social sector expenditure on human development.

There are different ways of examining the trends in budget expenditures. One way is to look at social sector expenditures as a proportion of GDP or GSDP. We can also calculate social sector expenditure as percentage of the aggregate budget expenditure. We can also look at the real per capita expenditures for the social sector. We want to know whether social sector expenditure has declined or increased in the 1990s. Whether the composition of the social sector has changed after Ninth Plan or not? Are there any increases in education and health expenditure? Are there any inter-state disparities in social sector expenditure etc.?

The social sector is critical for the overall socio and economic development of a nation. The human capital revolution of the post 1960, has focussed on the social sector expenditure. It should be noticed that the social impact of any policy change deserves a serious attention because it would have long-term implications for the nation. Education, health and medical care, water supply and sanitation, equality of economic opportunities, housing conditions etc. are the main components of the social sector. The components of the social sector are inter dependent. Thus, there are the synergy amongst the various components of the social sector.

Methodology

To achieve the objectives of the study, mainly secondary information has been used for conducting this research. Secondary information has been collected from various government sources such as – Ministry of Finance, Reserve Bank of India. Some other secondary information has been collected from other relevant websites, journals and research paper. Simple statistical tools such as - average, proportion, growth rate and correlation have been used to analyse the research problem.

Analysis

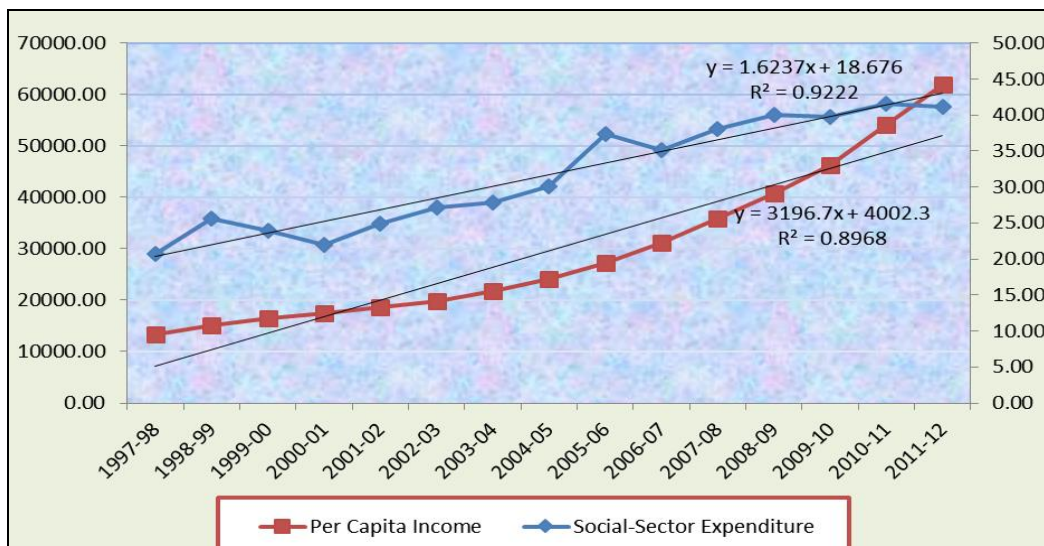
The social sector expenditure has contributed a lot for socio and economic development of a nation. Table-1 shows the trends in the expenditure of General Government (Centre, State & Union Territory) for the social sector. It has been found that there is correlation between social sector expenditure and per capita income of the people. The table of social sector expenditure and PCI year-wise since 1997 has given below.

Table 1: Trends in Social Sector Expenditure by the General Government (Centre, State & Union Territory) and Per Capita Income of India from 1997-98 to 2011-12 (Ninth Plan to Eleventh Plan)

Year	Expenditure on Social Services as % age of Total Expenditure of General Government	Per Capita Income at Current prices (Rs.)
1997-98	20.70	13,352
1998-99	25.60	15,158
1999-00	23.90	16,546
2000-01	22.00	17,381
2001-02	24.90	18,523

2002-03	27.10	19,706
2003-04	27.90	21,763
2004-05	30.02	24,143
2005-06	37.40	27,131
2006-07	35.07	31,206
2007-08	38.00	35,825
2008-09	40.00	40,775
2009-10	39.70	46,249
2010-11	41.50	54,021
2011-12	41.20	61,855

Source: Economic Survey of Various Years, Handbook of Statics on Indian Economy by the R.B.I.



Source: Economic Survey of Various Years, Handbook of Statistics on Indian Economy by the R.B.I.

Fig 1: Trends in Social Sector Expenditure by the General Government (Centre, State and Union Territory) and Per Capita Income of India from 1997-98 to 2011-12 (Ninth Plan to Eleventh Plan)

The compound annual growth rate of the expenditure on social sector for each five year plan has been calculated. It has been found that the compound annual growth rate of social sector expenditure has been 2.20 per cent per annum during Ninth Five Year Plan. During this period, the per capita income has grown at compound annual rate of 8.23 per cent per annum.

During Tenth Plan, the compound annual growth rate of social sector expenditure is 8.37 per cent per annum. It has been the highest compound annual growth rate for the period of study. (Ninth Plan to Eleventh Plan).

The social sector expenditure has grown at a faster rate during Tenth plan. During this period, per capita income has also grown at compound annual growth rate of 12.07 per cent per annum. All the above calculations are based on current prices. The per capita income has also grown at a faster rate during Tenth Five Year Plan. In respect of social sector expenditure Tenth Five Year Plan is the golden period.

During Eleventh Plan, the compound annual growth rate of social sector expenditure is 2 per cent per annum. The compound annual growth rate is lesser to that of Tenth Plan because, the general government has already spend larger proportion on social sector during earlier plan. The total outlay of General Government has reached to 41.20 per cent during 2011-12 (end of the Eleventh Plan). During Eleventh Plan, the compound annual growth rate of per capita income is 14.72 per cent per annum. It is the highest growth rate of per capita during the period of study. The per capita income has

grown at a faster rate because earlier investment in the social sector has increased the efficiency and capability of the people.

During the Eleventh Plan, the per capita income of the people has grown at a faster rate. The increased share of social sector expenditure by the General Government has increased the productivity of the people. It has contributed in the skill development of the people. A skilled person can contribute to the society much more. The productivity of that person will determine the remuneration of that person. In this way, the market forces will determine the higher wage rate for a skilled person. Thus, social sector expenditure is very fruitful.

Table 2: The Pearson Correlation Coefficient between the Social Sector Expenditure and Per Capita Income of India from 1997-98 to 2011-12 (Ninth Plan to Eleventh Plan)

Variables	Social Sector Expenditure	Per Capita Income
Social Sector Expenditure	1.0	0
Per Capita Income	0.9068	1.0

Source: Authors Calculation

The value of the correlation coefficient between social sector expenditure and PCI is (0.9068). It means both the variables are highly correlated to each other. The value of the correlation coefficient is positive. The value of the correlation coefficient has been calculated at 1 per cent level of

significance. The response of social sector expenditure on PCI is very fruitful.

Thus, it has been concluded that the social sector expenditure has been very fruitful to enhance the per capita income. An increase in PCI has enhanced the standard of living of the people. They are able to afford more nutritious food. They are also aware of the problem of health. They are more conscious

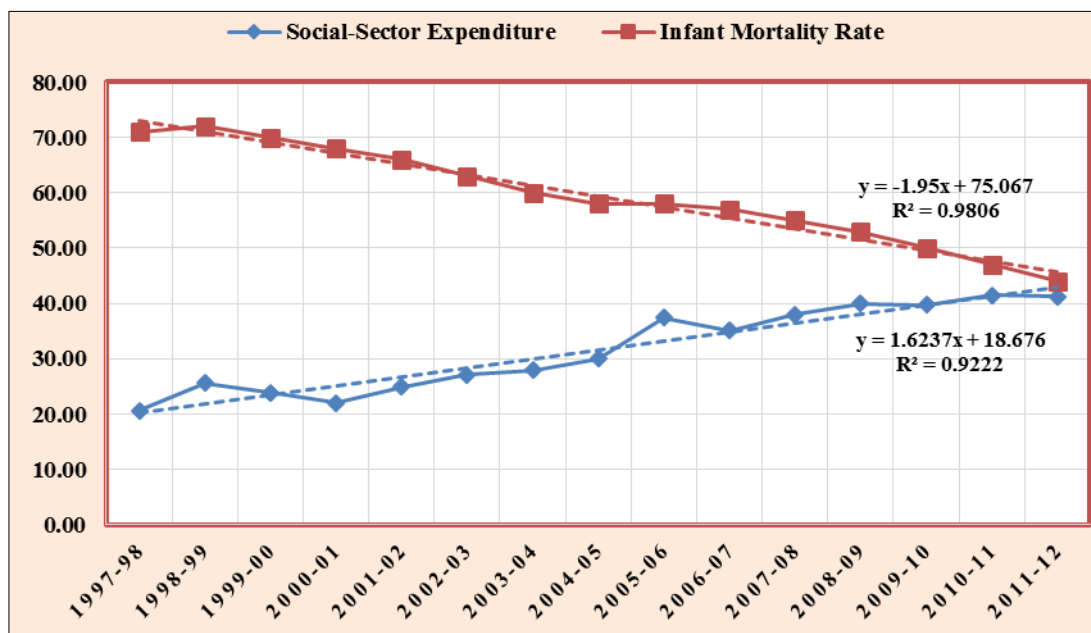
towards health and education. Thus, an increase in the social sector outlay has reduced the prejudices among the society. At present, a better work-culture has developed among the society.

Social sector expenditure by the General Government (Centre, State and Union Territory) and IMR has been given below:

Table 3: Trends in Social Sector Expenditure by the General Government (Centre, State and Union Territory) and Infant Mortality Rate of India from 1997-98 to 2011-12 (Ninth Plan to Eleventh Plan)

Year	Expenditure on Social Services as % age of Total Expenditure of General Government	Infant Mortality Rate
1997-98	20.70	71
1998-99	25.60	72
1999-00	23.90	70
2000-01	22.00	68
2001-02	24.90	66
2002-03	27.10	63
2003-04	27.90	60
2004-05	30.02	58
2005-06	37.40	58
2006-07	35.07	57
2007-08	38.00	55
2008-09	40.00	53
2009-10	39.70	50
2010-11	41.50	47
2011-12	41.20	44

Source: Economic Survey of Various Years, Handbook of Statistics on Indian Economy by the R.B.I.



Source: Economic Survey of Various Years, Handbook of Statics on Indian Economy by the R.B

Fig 2: Trends in Social Sector Expenditure by the General Government (Centre, State & Union Territory) and Infant Mortality Rate of India from 1997-98 to 2011-12 (Ninth Plan to Eleventh Plan)

It has been analysed from the figure that social sector expenditure and IMR is highly correlated to each other. Increase in social sector outlay has reduced the infant mortality rate to a great extent. Both the variables are negatively correlated to each other. Both these variables are highly sensitive.

The compound annual growth rate of the expenditure on social sector for each five year plan has been calculated. It has been found that the compound annual growth rate of social sector expenditure has been 2.20 per cent per annum during Ninth Five Year Plan. During this period, the infant mortality rate has also decreased at 2.01 per cent per annum during the plan

period. Thus, the compound annual growth rate between social sector expenditure and infant mortality rate is same during the Ninth Five Year Plan. Both the rate has been around 2 per cent per annum during the plan. Therefore, both these variables are highly correlated to each other. There exists negative correlation among these variables. Thus, the outcome has been satisfactory during Ninth Five Year Plan.

During Tenth Plan, the compound annual growth rate of social sector expenditure is 8.37 per cent per annum. It has been the highest compound annual growth rate for the period of study (Ninth to Eleventh Plan).

The social sector expenditure has grown at a faster rate during Tenth Plan. During this period, the infant mortality rate has also declined at compound annual rate of 2.31 per cent per annum. During, this period, the rate of compound annual decreases rate of IMR has increased to some extent. Because, we have taken all the components of the social sector expenditure during the period. Thus, the effects of social sector expenditure on the infant mortality rate have decreased at a lower rate but it is a positive sign for the future. During Eleventh Five Year Plan, the compound annual growth rate of social sector expenditure is 2 per cent per annum. The compound annual growth rate is lesser to that of Tenth Plan because, the General Government has already spent larger proportion on social sector during earlier plan. The total outlay of General Government has reached to 41.20 per cent during 2011-12 (end of the Eleventh Plan). During this plan, the IMR has declined at a compound annual rate of 5.50 per cent per annum. It is the highest rate of decline in the IMR for the period of study. Therefore, we can say that the previous expenditure has already contributed for the social sector development of a nation. There is synergy between past and present expenditure on the social sector. Therefore, we can say that there is high negative correlation between social sector expenditure and infant mortality rate.

Table 4: The Pearson Correlation Coefficient for the Social Sector Expenditure and Infant Mortality Rate of India from 1997-98 to 2011-12 (Ninth Plan to Eleventh Plan)

Variables	Social Sector Expenditure	Infant Mortality Rate
Social Sector Expenditure	1.0	0
Infant Mortality Rate	-0.9352	1.0

Source: Authors Calculation

The value of the correlation coefficient between social sector expenditure and Infant Mortality Rate is (-0.9352). it means both the variables are highly correlated to each other. The value of the correlation coefficient is negative. The value of the correlation coefficient has been calculated at 1 per cent level of significance. The response of social sector expenditure on infant mortality rate is very positive.

Policy Implications

It has been found that the social sector expenditure has contributed a lot for socio and economic development of our country. It has been found that there is strong positive correlation between social sector expenditure and per capita income.

It has been found that the social sector development is considered the real development of a society at present. It can be said that the expenditure of the General Government on the social sector has been increasing over the years. But the share of some most important component of the social sector has not increased to that extent. Education and health are the major component of the social sector but the share of these two sectors is far from satisfactory.

The importance of the social sector has increased over the years. Many international organisations have also determined to improve the social development. Many social indicators has been developed to measure the level of social development of an economy. Thus, there is an international pressure also to improve many social indicators.

Therefore, we can conclude that there is the need to increase not only the quantity of spending but the quality of the spending on the social sector. The social sector has got much more success to reduce the poverty ratio. Reduction in the poverty can be considered as great achievement of the social sector. Reduction in poverty ratio and social sector is inter-related to each other. Reduction in poverty ratio automatically enhances the level of social sector development.

Conclusions

It has also been found that the IMR has reduced to great extent over the years. It has become approximately half from Ninth Plan to Eleventh Plan. Thus, we can say that the infant mortality rate has declined during the period of study.

It has also been found that inter-sectorial allocations of the social sector expenditure can be improved by providing more allocations to health sector. The expenditure on health sector is not appropriate to meet the demands of the coming generation. In respect of health sector, private expenditure is greater to that of public expenditure. Therefore, the problem of access of health facilities for lower income group has adversely affected. Thus, for the inclusion of health facilities for lower income groups there are needed to enhance the public outlay on health sector

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