AN ANALYSIS OF ASPECTS OF CENTRAL GOVERNMENT'S PARTICIPATION IN RURAL DEVELOPMENT IN INDIA: 1981-82 TO 2008-09

Dissertation Submitted to the Jawaharlal Nehru University
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DECLARATION

This is to certify that the dissertation entitled ***"An Analysis of Aspects of Central Government's Participation in Rural Development in India: 1981-82 to 2008-09"*** submitted by me in partial fulfillment of the requirement for the award of the degree of Master of Philosophy of Jawaharlal Nehru University, is my own work. This dissertation has not been submitted for the award of any other degree in this University or any other University.

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CERTIFICATE

We recommend that this dissertation be placed before the examiners for the evaluation.

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Dedicated To

My Grandma

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Needless to say, I am solely responsible for all the errors and shortcomings that might have crept into the work.

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List of Abbreviations

AREP	Accelerated Rural Electrification Programme
ARWSP	Accelerated Rural Water Supply Programme
AYUSH	Ayurveda, Yoga, Unani, Siddha, Homeopathy
BPL	Below Poverty line
CAGR	Compound Annual Growth Rate
CHC	Community Health Centers
CRSP	Central Rural Sanitation Programme
CSO	Central Statistical Organisation
DDP	Desert Development Programme
DMU	Delivery Monitoring Unit
DPAP	Drought Prone Areas Programme
DRDA	District Rural Development Agencies
DWCRA	Development of Women and Children in Rural Areas
EAS	Employment Assurance Scheme
FCI	Food Corporation of India
GCF	Gross Capital Formation
GCFA	Gross Capital Formation in Agriculture
GDFC	Gross Domestic Capital Formation
GDP	Gross Domestic Product
GKY	Ganga Kalyan Yojana
GoI	Government of India
IAY	Indira Awaas Yojana
IRDP	Integrated Rural Development Programme
IWDP	Integrated Wasteland Development Programme
IWMP	Integrated Watershed Management Programme
JGSY	Jawahar Gram Samridhi Yojana
JRY	Jawahar Rozgar Yojana
MCH	Maternal-Child Health Centers
MWS	Million Wells Scheme
NDWM	National Drinking Water Mission
NFBS	National Family Benefit Scheme
NFFWP	National Food for Work Programme
NHRM	National Rural Health Mission
NMBS	National Maternity Benefit Scheme
NOAPS	National Old Age Pension Scheme
NREGA	National Rural Employment Guarantee Act
NREP	National Rural Employment Programme
NSAP	National Social Assistance Programme

NWDB	National Wasteland Development Board
NWDPRA	National Watershed Development Project in Rainfed Areas
PHC	Primary Health Center
PMGSY	Pradhan Mantri Gram Sadak Yojana
PMGY	Pradhan Mantri Gramodaya Yojana
PPP	Public Private Partnership
PURA	Provision of Urban Amenities in Rural Areas
RBI	Reserve bank of India
RCH	Reproductive and Child Health Programme
REC	Rural Electrification Corporation
RGGVY	Rajiv Gandhi Grameen Vidyutikaran Yojana
RGNDWM	Rajiv Gandhi National Drinking Water Mission
RIDF	Rural Infrastructure Development Fund
RLEGP	Rural Landless Employment Guarantee Programme
SEB	State Electricity Boards
SGRY	Sampoorna Grameen Rozgar Yojana
SGSY	Swarnajayanti Gram Swarozgar Yojana
SHG	Self Help Groups
SITRA	Supply of Improved Tool Kits to Rural Artisans
SRA&ULR	Strengthening of Revenue Administration and Updating of Land Records
SSA	Sarva Shiksha Abhiyan
TDET	Technology Development, Extension and Training
TRYSEM	Training of Rural youth for self employment
UEE	Universalisation of Elementary Education
UNICEF	United Nations International Children's Emergency Fund
WDSCA	Watershed Development in Shifting Cultivation Areas

Chapter 1

Introduction

The role of the government in economic development is one of the most critical and frequent questions dealt with by researchers. Government involvement in the rural sector is crucial for many reasons. One of the most important reasons for government intervention is market failure. It is known that the market can fail in case of provision of public goods making it necessary for government intervention. Government also plays a key role in reducing poverty through well-devised and coordinated poverty alleviation and public works programmes. Public works programmes also address the problem of inequality at all levels as they do not discriminate on the basis of caste, sex or age which is one the most common problems noticed in rural areas. Also it is less likely that the social security services in the rural areas are provided under the normal functioning of market forces as it would not be profitable for market players. And even if it is feasible, the associated cost would prevent a majority of the rural population from accessing the services. This makes a strong case for analysing the trends in government expenditure towards the rural sector. The post reform fiscal adjustment policy has led to concerns among economists that the levels of pro-poor spending may be reduced. Given the concerns raised by economists that the adverse impacts of the reforms were more on rural poverty as compared to urban poverty, it is essential to look at the impact of reform on the rural sector.

Budgets are the most crucial policy documents that reveal the social and economic priorities of governments. In order to understand policy priorities, one therefore, has to look at budgets and expenditure patterns. The study of Central Government budgetary expenditure is also important as it reflects the national priority of the country. Although a significant proportion of expenditure is done by state governments, the Centre plays an important role in development as it has considerable influence over the state governments. Often, the impact of social sector investments is much lesser than the expected level because of inefficient bureaucracies, corruption and other similar rent-seeking activities. This however cannot be a reason for a reduction in expenditures on social sector and poverty alleviation programmes.

Since the time of Independence, the stated objective of the government has been to ensure social development and eradication of poverty. Given the importance of the government's expenditure in the rural sector for Indian economy, the current study intends to analyse the Central Government budgetary expenditure over time with reference to rural sector. The study tries to find out the change in level and composition of rural sector expenditure so as to examine the government's changing priority and spending patterns over time. The main questions which are going to be addressed in the study are: What are the changes in the composition of rural sector expenditures from 1980's onwards? Were there any improvements in rural sector expenditures? How fiscal reforms have affected the development of the rural sector? How the Indian agricultural sector has been treated by the government over this period?

The second Chapter discusses the role of the government in the development process of the economy in general and rural sector in particular, theoretically. The importance of government expenditure in the development of rural sector is also going to be dealt with. The other possible ways of government intervention will be looked at.

Chapter 3 inspects the ways by which the Central Government intervenes in the rural sector. The initiatives of Central Government in developing Rural Infrastructure, providing Rural Employment and strengthening the Rural Social Sector will be discussed. A survey of existing studies is also undertaken to find out how far the government has been successful in achieving its objectives.

Chapter 4 covers the analysis of major trends in expenditure of the Central Government over the period 1981-82 to 2008-09. The trends in pre and post reform period will also be looked at to understand the impact of economic reforms on rural sector. The expenditure patterns by aggregate do not reveal the trends in the expenditures of the main components within it. So the major components of the rural sector expenditure will also be analysed separately. Furthermore, to gauge the involvement of the government in the rural sector in the broader sense, a detailed focus would be given on Public Investment in Indian Agriculture.

Finally, in Chapter five the major conclusions of the empirical analysis will be put forward.

Chapter 2

Role of Government in Rural Development

2.1 Market and Government

Over the years the view that economic affairs of the society are best guided by decision of individuals (market) and not by collective authority (government) has undergone severe criticism. The government interventions become necessary in a large number of situations to promote development. One of the most important reasons for government intervention is market failure. It is an accepted fact that the market can fail in a number of cases and cannot always allocate goods at socially desirable levels. Hence the equilibrium attained by the market may not be efficient and can be improved substantially through proper government intervention.

In case of public goods, where the goods are non-rival[1] and non-excludable[2] in consumption, the seller is unable to ensure that only those who purchased the goods would be able to consume it (Samuelson, 1954). Thus, the government has to step in to provide these goods to the people. In the presence of positive externalities, which exist when an individual or firm making a decision does not receive the full benefit of the decision, the social marginal benefit from consumption of a good or service exceeds the private marginal benefit. In this case laissez-faire may lead only to the production of sub-optimal quantities of the commodity. Here, the only solution may be for the government to step in and compensate. In cases where there are increasing returns to scale, firms would be unable to equate prices with marginal costs. Hence, the actual output would be below the potential output, and government intervention may be essential in order to extract the true costs and benefits of production (Ramakumar, 2008).

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[1] Non-rivalry means that consumption of the good by one individual does not reduce availability of the good for consumption by others.

[2] Non-excludability means that no one can be effectively excluded from using the good.

The problems of moral hazard and adverse selection due to the presence of incomplete information are other examples of market failure. Here, the primary problem is that, complete information about one party is not available to the other party, leading to socially sub-optimal levels of provision of goods. Once again, the role of the government in removing asymmetries in information flow becomes important, and in many cases, this may be possible only through public provision (Stiglitz, 1996). The state intervention is necessary also for securing income redistribution. In developing countries, given the incompleteness, and often absence of markets in a large number of spheres and the presence of information asymmetry, the role of the government becomes even more crucial (Stiglitz, 1996).

According to the neo-liberal ideology, based on neo-classical reasoning, the state must play a minimal role, preferably no economic role. It should rather confine its economic role to creating an environment for the free play of market forces. However, it is known that markets very often do not respond to the needs of the poor with low purchasing power. The role of government in fulfilling the basic needs of people has been well argued. The state may be a flawed institution but it is the only institution obliged to respond to claims for welfare entitlements. The role of the state as social welfare regulator cannot be questioned (Radhakrishna and Sharma, 1998). Thus, the state must play a positive role consistently in favour of the rural poor despite the gap between the rhetoric of the policy and reality of the implementation. As Tobin (1970) said, "In some instances, notably education and medical care, a specific egalitarian distribution today may be essential for improving the distribution of human capital and earning capacity tomorrow". India's rural sector fits into this proposal made by Tobin. The rural sector which is backbone of the Indian economy suffers from negligence in terms of distribution of resources. The lack of government attention has been one of the factors leading to depressing growth in agriculture in the 1990s, and is regarded as the main drag in Indian economy (Shah et al, 2007). The depressing growth in agriculture, the main occupation of rural India, has resulted into an agrarian crisis, with thousands of farmers taking their own lives, and many others (in over 25 per cent of India's districts) taking to the gun (Patnaik, 2003; Deshpande, 2002).

This makes it necessary for the government to particularly look at the rural social sector. In agriculture, female labourers get lower wages than male labourers. Similarly there is also discrimination on the basis of caste. In this context government public works programme is important as it avoids the discrimination. Increase in security and income of the rural labourers through government programmes might reduce the malnutrition in labour households. The other vulnerable groups are old people and widows who face greater financial insecurity. It is the primary responsibility of the government to provide financial security to these disadvantaged groups. The insecurity of the rural labourers, particularly women and children, increased further because of reduction in common property resources[3] (Dev, 1998). Apart from these forms of the insecurity, rural labourers have little access to healthcare, safe drinking water, sanitation, housing etc. Also there are significant regional variations in the insecurity of rural labour. This makes it important to study how government intervention in these areas of the rural sector has contributed to rural welfare over time. It is also important to note that allocation of funds is only a necessary condition but not a sufficient condition for making a significant impact on the living of rural labourers. Management or administrative aspects are equally important for the efficient delivery of the programmes for the poor.

The role of the government is crucial in promoting Human development. Chakraborty (2003) cites six reasons for why public policy stance should promote human development. Firstly, human development is an end itself, which needs no further justification. Secondly, it is a means to higher productivity. Thirdly, it reduces human reproductivity, by lowering the desired family size. Fourthly, human development is good for the physical environment; that the impact of population growth and population density is detrimental for environment due to deforestation, desertification and soil erosion. Fifthly, reduced poverty contributes to a healthy civil society, democracy and greater social stability. Sixthly, it has political appeal, for it may reduce civil disturbances and increase political stability (Chakraborty, 2003; Streeten, 1994).

[3] Common Property Resources are the resources accessible to the whole community of a village and to which no individual has exclusive property rights.

2.2 Composition of Government's Spending

Several studies have shown that the level of public expenditure and growth are inter-related but little is known about how the composition of the public expenditure affects a country's growth rate. Economic theories develop a rationale for government provision of goods and services based on the failure of markets to provide public goods, internalize externalities, and cover costs when there are significant economies of scale. But these theoretical notions do not easily translate into operational rules, as to which component of public expenditure to cut down upon or to increase. Some of the examples of fiscal restraints faced by the government include dilemmas on whether the government should decrease the expenditure allocated on social sectors like health and education or whether the future growth process can be compromised by reducing expenditure on infrastructure or if the expenditure on defence should be reduced. The answer depends on the contribution of these components to the economic development. Governments undertake different type of expenditure to pursue a variety of goals, one of which may be to bring about an increase in per-capita income. Studies have shown that developing countries can improve their economic performance by changing the composition of their expenditure. Devarajan et al, (1996) concluded that the increase in public investment's share in the budget of developing countries could be misleading. Several components of current expenditure, such as operation and maintenance, may have higher rate of returns than capital expenditure. Expenditures which are normally considered productive could become unproductive if they are used in excess. Capital expenditure if excessively used can become unproductive at the margin (Devarajan et al, 1996). Thus, the issue to be addressed is how to choose the level and composition of government expenditure.

In this context public expenditure is categorized as 'Productive' and 'Unproductive' public expenditure. In one view, Productive Expenditures are those expenditures which provide services to the private sector in its production activities whereas Unproductive Expenditures have no direct influence on the private economy (Evans and Karras, 1994). However, expenditures can be productive even when they do not provide services to the private sector. For instance, when government participates in most of the economic activities, the same public expenditure incurred may provides services to the production activities performed by the public sector. Thus public expenditure becomes productive for the public sector itself, even without serving the private sector. This suggests that the increase in degree of participation of the government in the economic activities does not lead to fall in productivity of public expenditure. Some of the expenditure like public investment in transport and communication is said to be 'productive'. For other categories of public spending there appears to be some disagreement over whether they constitute 'productive' expenditure or not. While some economists classify defence and education as government consumption thereby placing them in the unproductive category; others model them as productive. They consider spending on public education as being an investment in human capital thereby making them productive. Similarly defence spending helps protect a property right which increases the probability that an investor will receive the marginal product of capital.

Government spending can have direct and indirect effects on poverty. The direct effects are the benefits the poor receive from expenditures on employment programs. The indirect effects arise when government invests in rural infrastructure, agricultural research, and the health and education of rural people stimulating agricultural and non-agricultural growth, thereby leading to greater employment and income-earning opportunities for the poor and availability of cheaper food. Using state-level data for 1970-93, a simultaneous equation model was developed by Fan, Hazell and Thorat (2000) to estimate the direct and indirect effects of different types of government expenditure on rural poverty and productivity growth in India. The results show that in order to reduce rural poverty, the Indian government should give highest priority to additional investments in rural roads and agricultural research. The per rupee investments made by the government not only have a much larger impact on poverty than other types of government investments, but also generate higher productivity growth.

2.3 Government's Spending during the Reform Period

In the post-economic reform period, there has been a debate about the impact of reform policies on important indicators such as economic growth and other macro variables i.e. poverty, inequality, human development and employment. There have been improvements in some indicators such as the balance of payments, higher growth in services, higher accumulation of foreign exchange reserves, IT revolution, improvement in telecommunications, recent stock market boom, higher growth of exports, etc. It is, however, important to assess the impact of economic reforms on rural areas as it comprises of more than two-third of India's population.

It is also claimed that one of the aims of the economic reform process is to withdraw the state from some of its economic activities, in order to step up expenditures for (and increase state involvement) the social sector. On the other hand, since the introduction of economic reforms, there have been apprehensions that expenditures on social services and poverty alleviation programmes would be adversely affected.

Faster growth through economic reforms is not always accompanied by a faster rate of poverty reduction. A common feature of the growth process in an open and liberalised environment is that the peasantry has a much smaller role in sustaining economic growth and can thus be partially excluded from development (Chandrasekhar and Ghosh, 2006). Poverty can be reduced if growth increases employment potential (quantity and quality). Similarly, the extent to which the working poor are able to integrate into the economic process also determines the impact of growth on poverty. For example, if there is a mismatch between the opportunities available due to economic reforms and the skills of the workers, the poor will not be able to take advantage of such opportunities and gain from the reforms. The experience of globalisation has shown that it increased interpersonal and regional disparities across many countries. Stepping up public investment in physical and social infrastructure has immense potential for reducing regional disparities in the levels of development (Dev, 2004).

Participation of the state in developing agricultural production infrastructure and general infrastructure has decreased since the beginning of macro reforms in India. As a result, agricultural growth has deteriorated and rural poverty has increased (Desai, 2002). This suggests that one cannot expect to progress on agricultural growth and poverty alleviation unless the state accelerates its public expenditure on the agricultural production infrastructure and general infrastructure. Some economists have argued that "since the reforms did not extend directly and significantly to agriculture and to rural non-agricultural activities, it is unlikely that they, in themselves, could have contributed to an increase in unemployment and poverty if indeed there was any". But it is evident that a cut in fertilizer subsidy and public investment would affect the agricultural sector adversely. Similarly, increase in issue prices for PDS (as part of the reform process) would also have affected the rural poor (Dev, 1995). Cuts in public expenditure directly affect the rural areas. It is shown that the adverse impacts of the reforms were more on rural poverty as compared to urban poverty. The following table shows the direct and indirect impact of reforms on Rural Poor according to Dev (1995).

Table 1: Impact of Reforms on Rural Poor

Due to Reforms (Directly)	Due to Reforms (Indirectly)
• Decline in rural non-agricultural employment and income • Decline in fertilizer subsidies • Reduction in central expenditure on anti-poverty programmes • Decline in expenditures on sectors which improve social consumption	• Increase in expectations of traders and farmers regarding prices • Increase in the issue prices of PDS • Inability of the state governments to undertake relief works to increase the purchasing power of the rural poor • On the positive side, decline in industrial protection and devaluation were expected to shift the terms of trade towards agriculture. Devaluation can also have negative effects in the short run. For examples, in some states, areas under foodgrains were shifted to non-farm activities for export purposes.

Source: Dev (1995)

There is a greater emphasis now on effectiveness rather than efficiency, in the narrow neo-classical sense of the term. There is a shift from the obsession with "getting things done cheaply" towards actually "accomplishing one's goals" (Drechsler, 2005). When reforms have been guided by narrow considerations for efficiency and profitability, they have invariably gone wrong, especially where the social and economically disadvantaged are concerned.

2.4 Government's Budgetary Expenditure

The following section categorises the government's budgetary expenditure to rural sector into three major categories i.e. Rural Infrastructure, Rural Employment and Rural Social Sector. The possible impacts of a change in budgetary expenditure on these three categories are also analysed.

2.4.1 Rural Infrastructure

Poverty eradication in India's backward regions is impossible without a massive increase in public investment in all forms of rural infrastructure. The role of the state in building agricultural infrastructure (like technology evolution and transfer, irrigation, electricity, inputs supply, marketing) and general infrastructure (like roads and communication) is important in revitalisation of agriculture and rural sector. Empirical studies have highlighted the positive impact of infrastructure on growth performance. Rural infrastructure in particular, coming predominantly through public investment, has been shown to improve agricultural productivity and lower rural poverty (Binswanger et al., 1989; Fan, Hazell and Thorat, 2000). A strong positive correlation between rural poverty and deficiency of infrastructure is a well established phenomenon. For example, a National Council for Applied Economic Research's (NCAER) *India Rural Infrastructure Report* clearly demonstrates that different infrastructure deficiency indices are positively correlated with rural poverty rates. In other words, the higher the deficiency of infrastructure in a region, the higher the poverty rate and vice versa. Rajaraman (2003b) in this context observes that there is empirical evidence on the positive growth and poverty eradication outcomes of investment in rural infrastructure, and on higher incremental returns to infrastructure provision in relatively poorly endowed regions. Thus one can argue that the poverty rate gives an indication of the extent of the need for infrastructure.

Rural Infrastructure being largely a non-excludable and non-rival public good, finds it difficult to impose user charges in return for the use of rural infrastructure. Village road connectivity has the classical characteristics of a public good, for which private provision is not possible, unlike inter-city highways. Direct recovery through user charges is possible in some sectors like irrigation but can face constraints (Rajaraman, 2003a). The rural sector with low purchasing power is not a profitable market for investors. Because of these issues private sector does not find it profitable to invest in rural infrastructure. Therefore, in absence of private investment public investment is needed to ensure rural development.

Government investments (both physical and human) can directly increase agricultural output. Improved road investment has been shown to enhance agricultural output with an elasticity of about 0.20 (Binswanger et al, 1989). This is the direct effect of government infrastructure. Government investment also increases the rate of return to private agricultural investment and thereby leads to greater investment and output. It is estimated that the private investment responds to public investment with elasticities in the range of 0.26-0.90 for rural India (Binswanger et al., 1989). Moreover, by increasing the viability and profitability of financial intermediaries, infrastructure can facilitate the emergence and growth of financial institutions. This results in increasing access to working and investment capital and reduces the costs of borrowing for long-term investment. Better credit facilities, by enabling the smoothing of consumption, may also increase the willingness of farmers to take risk.

India has had a lending facility for rural infrastructure since 1995-96, which perhaps the only one of its kind anywhere in the world. The **Rural Infrastructure Development Fund (RIDF)** is a demand-driven non-concessional scheme targeted at sub-national state governments. If the infrastructure is of the rural roads type, classically non-excludable and non-rival public goods, fiscal recovery will be a function of the generalized fiscal position of the states (Rajaraman, 2005). Even if the pattern of sanctions targets cross-state parity, the pattern of disbursement remains determined by state government's willingness to draw the funds. Thus, the RIDF is entirely demand-driven in its pattern of disbursements. Even though the scheme is non-concessional, it has always offered a rate advantage over other sources. The scheme did not direct as to how state governments were to service RIDF loans. In the first year of the scheme RIDF lending was confined almost exclusively to irrigation projects. The share of irrigation came down sharply to less than half in RIDF-II, and subsequently fell to about a quarter. The compensating increase in share has gone to rural roads (Rajaraman, 2005).

With the help of rank correlation coefficients between states ranked by area-normalised cumulative disbursement and rankings by per capita SDP (for 25 states), and by a relative infrastructure index (available only for a limited set of 17 states) a study by Rajaraman, (2005) showed that the pattern is not corrective of the spatial inequality of infrastructure endowment, nor of the spatial pattern of per capita domestic product. The coefficients obtained are shown below.

Table 2: Rank Correlation Coefficients

Rankings	Per capita SDP, 1994-97	Relative infrastructure Index 1993
No. of states	25	17
Cumulative disbursement Per km rural area	0.52 (2.88**)	0.79 (4.94**)

Source: Rajaraman (2005)

This indicates that the present system of disbursement of RIDF does not result in an efficient allocation from the point of view of equality and development. Poorer states and less endowed regions within states should be given technical assistance to identify financially viable projects, since the projects readily available are typically available for better endowed regions, where the demands in terms of technical complexity and community involvement are lower. Without fiscal conditionalities and technical assistance the procedural ease of schemes like the RIDF will only deepen the fiscal problem at state-level in the medium term, and will do nothing to correct spatial inequalities in infrastructure endowment (Rajaraman, 2005). Rajeev (2008) also talks about the problem with RIDF in financing rural development. According to him, the analysis of already existing data reveals that states with comparatively poor rural infrastructure are also poor users of the fund. To put it more strongly, the author observes that at best there is no relation between inadequacy of infrastructure facilities and allocation of funds.

2.4.2 Rural Employment

Rural labour comprises both agricultural labour and labour engaged in non-agricultural manual work in rural areas. It constitutes a large section of the workforce in India, and is probably the most deprived and disadvantageous group in the country. Therefore, governments need to initiate effective measures to improve their conditions.

Empirical studies on rural employment have found the following three major characteristics regarding agricultural employment in India: the slow growth of agricultural employment in the rural areas, the shift to non-agricultural employment in rural areas and the growing casualisation of labour. For some, the expansion of non-agricultural output and employment is seen as part of a mechanism similar to Lewis, in which surplus labour from agriculture is transferred to higher value added manufacturing and services, reflecting a positive development process. On the other hand, others view it as the inability of agriculture to provide a sufficient livelihood for the rural population; particularly the rural poor. This emanated from the basic need to diversify their employment channels for sheer survival. The trends are of some importance in view of the lively debate that has raged among Indian economists concerning whether the observed shift to non-agricultural production is the outcome of the 'push' factor due to slow growth of agricultural employment or is the result of positive 'pull' because of the demand changes consequent upon greater agricultural prosperity. It was observed that pull factors out of agriculture were significant, and that a crucial role was played by the expansion of government expenditure (both Central Government and states) on rural development, infrastructure and services and by the related fallout of favours, contracts, etc. that emanated both from official patronage and the political process in rural areas (Sen, 1998). To a very large extent, access to such employment and resources (created by government expenditure) was confined to the better-off and more powerful groups in rural society, to whom such incomes were more lucrative than agriculture (Sen, 1998). It is also likely that a substantial proportion of the expenditure targeted at specifically poorer groups ended up in the hands of the richer or more powerful groups who could control allocation of such official resources or benefit from large administrative costs associated with such expenditure. In this context it is useful to analyse the effectiveness of government employment programmes for development of rural poor and reducing inequality.

There are mainly two approaches to create more employment and improve the quality. One is through sectoral programmes and the other is through direct employment programmes and both the approaches overlap to some extent. Employment can be increased if economic growth is labour intensive. The development of agriculture and the rural non-farm sector will improve employment and wages. Policies have to be framed for both unskilled and skilled workers and youth employment is an important focus area. Direct employment programmes such as wage and self-employment schemes have to be effectively implemented. Labour intensive employment programmes, if properly designed and implemented, hold high promise as instruments for addressing both short-term relief and long-term asset creation. Public works programmes have long been recognised as effective policy instruments of providing food security, particularly in rural areas (Dev, 2004).

Apart from market, non-market factors play a major role in most part of rural India. Rural labourers are a heterogeneous group; they may be landless labourers, part time share croppers or marginal/small farmers dependent on big farmers for credit and other requirements. This structure and operation of the rural labour market is unlikely to ensure the best outcomes in terms of wages and incomes for the various rural labour groups if left to the market alone and hence the government, centre state and local, must intervene to improve their condition. The interventions in the rural labour markets by the state may not be very effective in the absence of proper macro-economic strategies, including fiscal, monetary, trade and labour market policies. Government intervention will also have limited effectiveness in the absence of significant employment growth and appropriate social policies (Radhakrishna and Sharma, 1998).

2.4.3 Rural Social Services

The rural labour in developing countries suffers from various kinds of social insecurity. Even 60 years after independence, rural Indians have no guarantee of state sponsered education or health. The public distribution and social security systems are wrecked by inefficiency and corruption added on to this are the various social obligations on the rural society. Therefore, the basic needs of health, education, food and social security create a major demand for government intervention. Most of the employment in the rural areas takes place in unorganized sector which is charaterised by low earnings, poor working conditions and lack of protection by conventional social security programmes. Labour, credit and insurance markets are important for the poor in these countries. Deprivation and vulnerability may result if these markets do not function well. In case of market failure or absence of market the government can interfere in market functioning to improve social security. Even if the market is perfect, government intervention would always be welcome to alter highly uneven distributions of income, wealth and assets (Dev, 1998). This provides a rationale for introducing social security measures by the government. A study carried by Sen (1998) found that there was a remarkable increase in the proportion of rural workforce which works as casual labourers, indicating greater insecurity of contracts as well as uncertainty of finding employment. Thus, there is a need of greater government attention to the rural social sector to improve the condition of a large section of people.

Amartya Sen and Jean Dreze distinguish between two different aspects of social security; protection and promotion. The protective-type programmes such as old age pension, widow pension, and survivor benefits provide a certain degree of support to persons facing specified adverse contingencies. India has followed a dualistic pattern of social security system where around 10 percent of the employees (organized) are covered by protective social security measures such as medical care and benefits relating to sickness old age, maternity, survival, etc. For the rest of the

90 percent of the workers (unorganized labour) most of whom are in rural sector, however, India has so far relied on promotional measures such as self-employment and wage employment programmes, general health, and education (Dev, 1998). This also makes it important to analyse the expenditure pattern of the government towards promotional and protective measures and achievements of government to the rural social sector.

Macroeconomic policies that promote growth are important because they provide productive employment. But there is a need of direct intervention because growth alone cannot take care of poverty. Often high growth has resulted in increase in inequality. In government budgets, expenditure on food subsidy, rural development, and social services constitute total finances for promotional and protective security programmes. There is a growing awareness now that protective type social security programmes may be more effective in reaching the poor compared to promotional measures.

The development policy is often based either on the 'income-centered' approach or the 'capabilities' approach. The contrast between the mainstream, income-centered approach to development policy and the capabilities approach may be illustrated most sharply by considering their respective treatments of ends and means. The income-centered approach assesses investment in "human capital" including health, nutrition, and education-entirely in terms of the extra income or output the investment generates, judging it to be worthwhile if the rate-of-return exceeds the capital cost. By contrast, proponents of the capabilities approach would argue that the enhancement of people's ability to read and write, or to be well-nourished and healthy, should be considered ends in themselves, even if the conventionally measured economic return to investment in literacy, or improved food intake and health care, is zero (Anand and Ravallion, 1993).

Studies have shown that the level of public expenditure on the social sectors is significantly associated with improvements in human development. Of course, a one-to-one relationship between social spending and indicators of human development is difficult to be obtained. However, higher levels of public expenditure on the social sectors do denote a particular "public policy stance" and public expenditure can be used as a good proxy to measure it (Chakraborty, 2003). Anand and Ravallion (1993) concluded that "certain components of public spending can matter greatly in enhancing human development in poor countries, and that they matter quite independently of what they do or do not deliver in terms of reduced income poverty". Given the importance of public spending for human development indicators, the recent policy emphasis on fiscal adjustment has led to concerns that levels of pro-poor spending may be reduced. Guhan's study (1995) also comes out with the actual items under development and social services which are directly related to the poor in the central budget. According to his calculations, only about two-thirds of the allocation in the central budget for rural development and social services can be regarded as being oriented to the poor in a broad sense.

Land is the most important means of production in an agrarian economy without which no agricultural production can take place. Land ownership was highly unequal at the time of Independence. Land reforms also seem to have been relegated to the background in the 1990s. State governments have taken initiatives related to liberalisation of land laws in order to promote large scale corporate farming. This is in sharp contrast to the policy environment soon after Independence when land reforms were meant to provide ownership rights to small and marginal farmers on equity considerations. Though the pressure of population has led to sub-division and fragmentation of land holdings, thereby considerably weakening the case for further lowering of land ceilings, the need for effective implementation of the existing land ceiling laws cannot be ignored. The Ninth Plan had laid strong emphasis on agrarian restructuring to make agriculture more efficient leading to increased "output and employment". However, progress on different components of the land reforms package during the Plan has been extremely limited. At the end of the Eighth Plan, 74.9 lakh acres was declared as ceiling surplus and 52.13 lakh acres was distributed among 5.5 million beneficiaries. By the end of the Ninth Plan, the position was virtually the same. There has been no progress in the detection of concealed land and its distribution to the landless rural poor (Tenth Five Year Plan 2002-07; Patnaik, 2007a).

An important concern raised by many development economists during the implementation of economic reforms in India was that the fiscal adjustment strategy may adversely affect the social sector expenditures. It was argued that the emphasis on reducing budget deficits may result in the relative reduction of expenditures in the 'soft' sectors (Chandrasekhar and Ghosh, 2002). For instance, a study by Ramakumar (2008) concludes that, overall, the fears of expenditure decline raised by scholars were largely real. A long run outcome of the fiscal policy in India was the inability of the state to raise tax collections towards meeting expenditure requirements. It is in this context that it is important to analyse the trends in levels and composition of government budgetary expenditure in India.

2.5 Issues in Agriculture

The growing disproportionality between agricultural and non-agricultural growth has increased over time. Today agriculture and allied sectors account for less than 20% of the GDP and employ 60% of the total workforce. However there is a continuous steady decline in the share of this sector in the GDP. What used to be the backbone of the Indian economy now stands as a mere contributor to it. When the famous British historian Eric Hobsbawm said: *"The most dramatic change of the second half of this century and the one which cuts us forever, from the world of the past is the death of the peasantry"*, he was referring to a spectacular decline world over in the role of agriculture. Agriculture is the nucleus of food supply, livelihood of majority of population and a significant source of income for India.

In rural areas also, individuals have to rely on the market for their basic needs like health, fuel, transportation and education. This results in lower share of income allocation for food consumption even by poor people. The collapse of public provision in some of these areas which required purchases from private suppliers was responsible for the fall in food consumption in the household budget. The increase in prices also contributed to that (Chandrasekhar and Ghosh, 2006).

In the initial five year plans it was assumed that whereas agriculture was subject to secular diminishing returns, industrialization would allow surplus labour currently underemployed in agriculture to be more productively employed in industries which operated according to increasing returns to scale. Planners were aware that institutional changes were required in order to realize the production potential of agriculture. It was believed that the 'food problem' could be taken care of through changes in agrarian relations, creation of 'infrastructure' through community development programmes and greater provision of public irrigation facilities (Chakravarty, 1986).

The agricultural bottleneck was seen as an important factor responsible for the failure of the strategy of development based on the Mahalnobis model. It was argued that the agriculture sector was underestimated by treating agriculture as a bargain sector thereby believing that output growth could be accelerated without much investment, by making suitable institutional adjustments. The agricultural growth is now not a constraint on the growth of the non-agricultural sector. This is a reversal of the situation prevalent till the 1980s when the agricultural supply constraint constituted a barrier to rapid non-agricultural growth (Chandrasekhar and Ghosh, 2006). This makes it necessary to look at the public investment in agriculture in order to find out the government's changing priority towards the agriculture sector.

2.6 Fiscal Policy

One of the important indicators of government involvement in the economy is the nature of its fiscal policy. Fiscal policy consists of both resource mobilisation and expenditure strategies. A study of expenditure strategies has the advantage that one can analyse the directions of flow of public funds in the economy. It becomes possible to understand the prioritisation of expenditures by the government, as well as the factors that would influence changing priorities over time. Therefore, a study of government expenditure pattern over time would be important. India had, in 1991-92, entered into a programme of fiscal adjustment, which continues to guide its economic policy thinking. Concerns have been raised on the impact of new policies on public expenditure. In this context it would be interesting to see the effect of new policies on the public expenditure diverted to the rural sector.

In the 1980s, the expenditure by the government in India had increased significantly, as a share of the GDP, in a large number of anti-poverty programmes and employment-creating activities. As these higher levels of expenditures were financed out of borrowings, the debt-GDP ratio of the government rose sharply. A fiscal crisis followed, which led to a fiscal adjustment policy from 1992 onwards. The fiscal crisis was most severe for the Central Government. The fiscal crisis of the Centre adversely affected the transfer of statutory funds to the States. Expenditure by the government on social and economic services is a crucial necessity for fulfilling the basic needs of people in developing countries. In India, this democratic function of the government would appear to face a serious threat from the nature of fiscal crisis that has developed. A transcending of this fiscal crisis is critical to liberating the government from constraints in spending, and reducing the social costs of spending cuts. However, to rise from the present fiscal crisis, a progressive transformation of the nature of fiscal policy would be required (Ramakumar, 2008).

The basic philosophy of reforms has been to reduce public involvement in a number of production and distribution mechanisms whose performance can better be sustained and even enchased by private sector. The private participation while improving quality of services is also likely to become too expensive for the majority of the people to afford. The state, therefore, cannot absolve its constitutional duty of providing basic services to people on its own cost. Another relevant factor is that reforms are putting pressure on the state finances in two ways. First the tax GDP ratios are not increasing commensurate with the increases of GDP, and are often falling short of the targeted collections. Besides, pressures to enhance GDP growth demands reallocation of public funds to the industrial, manufacturing, and infrastructure and service sectors relative to social sectors, poverty alleviation programmes, rural development and primary sectors (Shariff et al, 2002).

An increase in government expenditure often results in a higher fiscal deficit. In mainstream literature it is widely believed that the fiscal deficit necessarily raises the domestic real rate of interest and hence, lowers the level of private investment via 'crowding out' effect. If investment demand increases due to increased government investment expenditure (for e.g. deficit financing) then the rate of interest has to be adjusted in such a way that full crowding out takes place and the ex post savings investment identity is maintained. But this point of view assumes that the economy is in full employment, a condition that is not fulfilled in most developing countries. In fact in a demand-constrained economy which is operating well below full employment, if aggregate demand rises, aggregate supply would also increase until the two are exactly equal. The process of increase in income and employment due to an increase in demand would continue until an amount of savings, which is exactly equal to the increase in home and foreign investment is generated. In other words, 'investment determines savings', which is diametrically opposite to the pre-Keynesian position of 'savings determines investment'. Hence, a fiscal deficit finances itself in the sense that it generates an equal amount of 'excess private savings'. Therefore, there is no valid reason to believe that increased government investment financed by borrowing would necessarily increase the real rate of interest and cause crowding out of private investors, to maintain ex post savings-investment identity (Patnaik, 2001; Das, 2004).

In 2000, the Fiscal Responsibility and Budgetary Management (FRBM) Bill was introduced in the Parliament. The FRBM Act was passed by Parliament in 2003. The Act states that, the government should initiate appropriate measures to reduce the fiscal deficit and revenue deficit so as to eliminate revenue deficit by 31st March 2008 and thereafter build up adequate revenue surplus. Thus from the early 2000s, fiscal compression became a legally binding policy for the government. This may have serious implications for the sectors where the government expenditure is needed and therefore, requires greater attention.

2.7 Government's Budget

Budgets are the most crucial policy documents that reveal the social and economic priorities of governments. It is in these expenditure decisions that official objectives and stated commitments get a concrete shape (Dev & Mooij, 2002). In order to understand policy priorities, one therefore, has to look at budgets and expenditure patterns. Of course, it is true that the effect of these expenditures on human development does not only depend on their level, but also on the effectiveness of their utilisation. Often, the impact of social sector investments is less than what it could be because of inefficient bureaucracies, waste and corruption. These inefficiencies, important as they are, should however not detract us from the issue of the expenditure levels itself and there is also no reason to provide justification for a reduction in expenditures on social sector and poverty alleviation programmes.

There is an elitist bias in the process in budget-making process. The finance ministry has become more and more dominant in the process of Plan and budget-making in the 1990s, and the whole process is not very participatory or democratic. Many policy makers and economic advisors to the government seem to regard the Plan in general or social sector spending in particular as residual. In times of a fiscal crisis it is in the social sector that the first budget cuts are made. A substantial increase in the allocation for the social sector is only likely to happen when something changes in the budget making process. In that respect, movements towards decentralised planning and increasing awareness among the public about budgets are to be welcomed. Whether something is going to change for the better will, however, depend mainly on activities and pressures from the grass roots level, vigilance of civil society and the ways in which these local groups can and will be involved in the policy process (Dev & Mooij, 2002).

Given the importance of the government expenditure in the rural sector for our economy, the present study would look at the Central Government budgetary expenditure over time with reference to rural sector. Although the share of the Central Government in total social sector expenditure is low (around 20 per cent), the centre is nevertheless important, because it has a considerable influence on policy directions in the states. The main questions which are going to be addressed in the study are: What are the changes in the composition of rural sector expenditures from 1980's onwards? Were there any improvements in rural sector expenditures? How fiscal reforms have affected the development of the rural sector? How the Indian agricultural sector has been treated by the government over this period?

The next chapter will explore the channels through which the government funds the development of the rural sector. In particular the intervention of the Central Government will be looked at in the following Chapters. While in Chapter 3 different programmes and schemes of the Central Government will be looked at, in Chapter 4 some empirical analysis will be done with regard to the Central Government expenditure in the rural rector. The next Chapter also contains a discussion on the methodology and results of existing literature regarding government expenditure and rural development.

Chapter 3

Government Intervention in Rural Sector in India

The last chapter focused on the need for government intervention in an economy as well as the different ways by which the government may do so. In the rural sector, in the absence of proper markets, the need for government intervention is even more. The development of the rural sector requires greater government attention because the financial need for the development of the rural sector (e.g. infrastructure, credit) cannot be ensured through market forces. In India, government finances Rural Development by credit provisions and by separate budgetary allocations. The Government's intervention in the Indian Rural Sector would be examined in this Chapter.

An important step to effective financial planning is developing and implementing a budget. Proper allocation of the economy's resources to different sectors is the key to an all-inclusive development. Budgetary resources allocated by Central and State governments are an important source of finance for rural development for any country. Various programmes for rural development are operational in India for which funds are allocated by governments. One of the objectives of this chapter is to look at the initiatives undertaken by the Central Government for the development of rural sector. Developing rural sector means the development of all its components like rural infrastructure, rural employment and rural social sector. In order to analyse government expenditures, expenditures under these three categories are looked at separately as it was done in the previous chapter. Then a survey of existing studies is undertaken to find out how far the government has been successful in achieving its objectives. Finally, the trends in Central Government's expenditure towards the rural sector will be analysed empirically in the next Chapter.

3.1 Rural Infrastructure Development Initiatives of the Central Government

The provision of basic infrastructure facilities in the rural areas such as schools, health facilities, roads, drinking water, electrification etc. is necessary for the overall development of India. As discussed in the first Chapter, rural infrastructure helps to reduce poverty along with stimulating growth. An improvement in rural infrastructure also contributes to improving agricultural productivity in the rural areas. The major programmes for rural infrastructure development are mentioned below:

Rural Electrification: Power is one of the key constituents of infrastructure required for growth and development. Electricity has become one of the basic human needs and every household must have access to it. In rural India, 24-hour electricity is necessary for faster economic development. As per the 2001 census, out of about 13.8 crore rural households, only about 6.02 crore households (43.52%) have access to electricity. Further, 24-hour electricity is a distant dream for a majority of rural electrified households.

Central Schemes for Rural Electrification include **Pradhan Mantri Gramodaya Yojana (PMGY)**, **Accelerated Rural Electrification Programme (AREP)** and **accelerated electrification of one lakh villages and one crore households**. PMGY was launched in 2000-01 but the rural electrification component was added in the fiscal year 2001-02. This assistance was extended to the state governments in the form of a 30% grant. AREP was introduced in 2003-04 with interest subsidy of 4%. Accelerated electrification of one lakh villages and one crore households was launched in March 2004 by merging AREP and **Kutir Jyoti programme** along with a capital subsidy of 40% and a 60% loan assistance.

The Ministry of Power launched **Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)** as one of its flagship programmes in March 2005 with an objective to electrify all village habitations and to provide free electricity connections to all rural Below Poverty Line (BPL) households. This programme was later brought under the ambit of Bharat Nirman. Rural Electrification Corporation Limited (REC), a Central Public Sector Enterprise under Ministry of Power, which was incorporated on July 25, 1969; is the nodal body for the RGGVY for establishment of a framework for implementation of the project. RGGVY is financed through 90% grant and 10% loan. The main objective of REC is to finance and promote rural electrification projects all over the country. REC also provides financial assistance to State Electricity Boards, State Government Departments and Rural Electric Cooperatives for rural electrification projects by sponsoring them (REC; Planning Commission; GoI).

Provision of Urban Amenities in Rural Areas (PURA): There are wide gaps in the availability of physical and social infrastructure between rural and urban areas. Lack of livelihood opportunities, modern amenities and services for decent living in rural areas, leads to migration of people from rural to urban areas. The primary objective of this scheme is to provide urban amenities and livelihood opportunities in the rural areas to bridge the rural-urban divide. The aim of the scheme is the holistic and accelerated development of compact areas around a potential growth centre in a Gram Panchayat (or a group of Gram Panchayats) within a Public Private Partnership (PPP) framework. The list of infrastructure, urban amenities and economic activities to be provided under PURA are as follows: (i) Water and Sewerage (ii) Construction and maintenance of Village Streets (iii) Drainage (iv) Solid Waste Management (v) Skill Development (vi) Development of Economic Activities (vii) Village Street Lighting (viii) Telecom (ix) Electricity generation etc. (x) Village linked tourism (xi) Integrated Rural Hub, Rural Market (xii) Agri-Common Services Centre and Warehousing (xiii) Any other rural economy based project (PURA Guidelines,2003; GoI).

Bharat Nirman: Bharat Nirman, a programme to build rural infrastructure, was launched by the Government of India in 2005. Under Bharat Nirman, action was proposed in the areas of irrigation, rural housing, rural water supply, rural electrification, rural roads and rural telecommunication connectivity. It was a time-bound plan for rural infrastructure by the Government of India in partnership with State Governments and Panchayat Raj Institutions. Phase I of the programme was implemented in the period 2005-06 to 2008-

09. Phase II is being implemented from 2009-10 to 2011-12. Realising the need to integrate the rural economy in the growth fold, Bharat Nirman was projected as the most ambitious programme that could revive the rural economy. The target and achievement of Bharat Nirman Programme is shown in Annex 1 (Bharat Nirman, 2005).

Rural Housing Programme: Housing is one of the basic requirements for human survival. It is an important social infrastructure and it is the government's duty to provide every person a shelter to live. For a shelterless person, possession of a house brings about a profound social change in his existence, thus integrating him with his immediate social environment. **Indira Awaas Yojana (IAY)** is a flagship scheme of the Ministry of Rural Development to provide houses to the poor in the rural areas. The Government of India is implementing IAY since the year 1985-86 to provide financial assistance for construction/upgradation of dwelling units to the below poverty line (BPL) rural households belonging to the scheduled castes, scheduled Tribes and freed bonded labourers categories. From the year 1993-94, the scope of the scheme was extended to cover non-Scheduled Castes and Scheduled Tribes rural BPL poor, subject to the condition that the benefits to non-SC/ST would not be more than 40% of the total IAY allocation. The benefits of the Scheme have also been extended to the families of ex-servicemen of the armed and paramilitary forces killed in action, 3% of the Houses are reserved for the rural Below Poverty Line physically and mentally challenged persons, From 2006-07 onward, funds and physical targets under IAY are also being earmarked for BPL minorities in each state. Indira Awaas Yojana is a Centrally Sponsored Scheme funded on cost-sharing basis between the Government of India and the State Governments in the ratio of 75:25. However, in the case of North-Eastern States and Sikkim, funding will be shared between the Government of India and these States in the ratio of 90:10 respectively. In the case of Union Territories, the entire funds under this Scheme are provided by the Government of India (Ministry of Rural Devt.; Union Budgets).

Rural Roads: Rural Road Connectivity is a key component of Rural Development. It promotes access to economic and social services and thereby helps in generating increased agricultural incomes and productive employment opportunities in India. Still about 40% of the Habitations in the country are not connected by All-weather roads. It is well known fact that at large number of places suffer from bad quality or no road connectivity and this can be attributed to poor construction or maintenance. The **Pradhan Mantri Gram Sadak Yojana (PMGSY)** was launched on 25 December 2000 as a fully funded Centrally Sponsored Scheme. The primary objective of the PMGSY was to provide connectivity, by way of all-weather roads (with necessary culverts and cross-drainage structures, which is operable throughout the year), to the eligible unconnected habitations in the rural areas, in such a way that all unconnected habitations with a population of 1000 persons and above are covered in three years (2000-2003) and all unconnected abitations with a population of 500 persons and above by the end of the Tenth Plan Period (2007). In respect of the Hill States (North-East, Sikkim, Himachal Pradesh, Jammu & Kashmir, Uttaranchal) and the Desert Areas (as identified in the Desert Development Programme) as well as the Tribal (Schedule V) areas, the objective would be to connect habitations with a population of 250 persons and above (PMGSY Guidelines; Union Budgets).

Rural Water Supply Programme: Clean drinking water is a basic necessity of life. To ensure this basic need of mankind, Government of India introduced the **Accelerated Rural Water Supply Programme (ARWSP)** in 1972-73, to assist the States and Union Territories to accelerate the pace of coverage of drinking water supply. A Technology Mission on drinking water named **National Drinking Water Mission (NDWM)** was launched in 1986, which subsequently was renamed as **Rajiv Gandhi National Drinking Water Mission (RGNDWM)** in 1991. The key objectives of the programme were: Providing safe drinking water to all villages, assisting local communities to maintain sources of safe drinking water in good condition and giving special attention for water supply to Scheduled Castes and Scheduled Tribes. To achieve these objectives, ARWSP is being implemented through the Rajiv Gandhi National Drinking Water Mission. The Central Government supplements the efforts of the states by providing financial and technical support (Ministry of Rural Development; Union Budgets).

Rural Sanitation: A direct relationship exists between water, sanitation and health. Sanitation is one of the basic amenities entitled to man as it has a direct linkage with food hygiene and upkeep of general well-being and health. The objective of supplying safe water cannot be achieved unless the sanitary aspects of water and the issue of sanitation are addressed together. Consumption of unsafe drinking water, improper disposal of human excreta and lack of personal and food hygiene have been the major causes of many diseases in a developing country like India. High infant mortality rate is also attributed largely to poor sanitation. It was in this context that the centrally sponsored **Central Rural Sanitation Programme (CRSP)** Total Sanitation Campaign was launched in 1986 with the objective of improving the quality of life of the rural people and to provide privacy and dignity to women. The concept of sanitation was expanded in 1993 to include personal hygiene, home sanitation, sage water and disposal of garbage, human excreta and wastewater. The components of the programme included construction of individual sanitary toilets for household Below Poverty Line (BPL), conversion of dry latrines to water-pour flush toilets, construction of village sanitary complexes for women, setting up of sanitary marts and production centres, intensive campaign for creating awareness and health education, etc (Ministry of Rural Development; Planning Commission) .

3.2 Government Participation in Rural Employment

National Rural Employment Guarantee Act (NREGA): Implemented by the Ministry of Rural Development, National Rural Employment Guarantee Act (NREGA) is the flagship programme of the Central Government. The basic objective of the Act is to enhance livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. This guaranteed work can also serve other objectives such as: generating productive assets, protecting the environment, empowering rural women, reducing rural urban migration and fostering social equity, among others. The Act came into force on February 2, 2006 and was implemented in a phased manner. In Phase-I it was introduced in 200 of the most backward districts of the country. It was implemented in an additional 130 districts in Phase-II 2007-2008. As per the initial target, NREGA was to be expanded countrywide in five years. However, in order to bring the whole nation under its safety net and keeping in view the demand, the Scheme was extended to the remaining 274 rural districts of India from April 1, 2008 in Phase III. The Central Government bears the entire cost of wages for unskilled manual workers and 75 percent of the cost of material and wages for skilled and semi-skilled workers (NREGA Guidelines, 2005).

Sampoorna Grameen Rozgar Yojana (SGRY): The Sampoorna Grameen Rozgar Yojana (SGRY) was launched on 25 September, 2001 by merging the on-going schemes of **Employment Assurance Scheme (EAS)** and the **Jawahar Gram Samridhi Yojana (JGSY)** with the objective of providing additional wage employment and food security, alongwith creating durable community assets in rural areas. The programme was self-targeting in nature, with provisions for special emphasis on women, scheduled castes, scheduled tribes and parents of children withdrawn from hazardous occupations. The annual outlay for the programme is Rs.10,000 crore which includes 50 lakh tonnes on food grains. The cash component is shared between the Centre and the States in the ratio of 75:25. Food grains are provided free of cost to the States/UTs. The payment of food grains is made directly to Food Corporation of India (FCI) at economic cost by the Centre. However, State Governments were responsible for the cost of transportation of food grains from FCI warehouses to work-site/PDS shops and its distribution. Minimum wages are paid to the workers through a mix of minimum five kg of food grains and at least 25 per cent of wages in cash.

The Employment Assurance Scheme (EAS) was introduced w.e.f. 2nd October, 1993 in the rural areas of 1778 blocks of the country situated in drought prone areas, desert, tribal and hill areas. Over the years the Scheme was extended to all the Rural Blocks of the country. The EAS was basically meant for creation of additional employment opportunities during the period of acute shortage of wage employment through manual work for the rural poor living below the poverty line. The secondary objective was the creation of a durable community, social and economic assets for sustained employment and development. Jawahar Gram Samridhi Yojana (JGSY) was launched w.e.f. 1.4.99 to ensure development of rural infrastructure at the village level by restructuring the erstwhile **Jawahar Rozgar Yojana (JRY)**. The Jawahar Rozgar Yojana was one of the major wage employment programmes launched in the year 1989 by merging the two wage employment programmes namely **National Rural Employment Programme (NREP)** & **Rural Landless Employment Guarantee Programme (RLEGP)**. It was the single largest wage employment programme implemented in all the villages of the country through the Panchayati Raj Institutions. The primary objective of JGSY was creation of demand driven community village infrastructure including durable assets at the village level and assets to enable the rural poor to increase the opportunities for sustained employment. The secondary objective was generation of wage employment for the unemployed poor in the rural areas (Ministry of Rural Devt.; GoI, Planning Commission).

National Food for Work Programme (NFFWP): The National Food for Work Programme was launched in November, 2004 in 150 most backward districts of the country, identified by the Planning Commission in consultation with the Ministry of Rural Development and the State governments. The objective of the programme was to provide additional resources apart from the resources available under the Sampoorna Grameen Rozgar Yojana (SGRY) so as to generate supplementary wage employment and provide food-security through creation of need based economic, social and community assets in these districts.. The NFFWP was to be open to all rural poor who are in need of wage employment and desire to do manual and unskilled work. The programme was self-targeting in nature and was 100 perecnt centrally sponsored. The programme has been subsumed in National Rural Employment Guarantee Act which has come in force in 200 identified districts of the country including 150 NFFWP districts (GoI).

Integrated Rural Development Programme (IRDP)/Swarnjayanti Gram Swarozgar Yojana (SGSY): The Integrated Rural Development Programme (IRDP), introduced in selected blocks in 1978-79 and universalised from 2 October 1980, aimed to provide assistance to rural poor in the form of subsidy and bank credit for productive employment opportunities through successive plan periods. The objective of IRDP was to provide income generating assets to identified families through mix of credit and subsidy to enable them to improve their income levels and to eventually cross the poverty line. Subsequently, **Training of Rural Youth for Self Employment (TRYSEM), Development of Women and Children in Rural Areas (DWCRA), Supply of**

Improved Tool Kits to Rural Artisans (SITRA) and **Ganga Kalyan Yojana (GKY)** were introduced as sub-programmes of IRDP to take care of the specific needs of the rural population. The programmes were found to be ineffective because of the provision of a one-time credit without follow-up action and due to the lack of a continuing relationship between borrowers and lenders. This undermined the basic objectives of the programme. The marginal impact of the self-employment programmes led to the constitution of a committee by the Planning Commission in 1997 to review self-employment and wage-employment programmes. The committee recommended the merger of all self-employment programmes for the rural poor and a shift from the individual beneficiary approach to a group-based approach.

On 1 April 1999, the IRDP and allied programmes, including the **Million Wells Scheme (MWS)**[4], were merged into a single programme known as Swarnajayanti Gram Swarozgar Yojana (SGSY). The objective of the SGSY is to bring the assisted poor families (Swarozgaries) above the Poverty Line by ensuring appreciable sustained level of income over a period of time. This objective is to be achieved by inter alia organising the rural poor into Self Help Groups (SHGs) through the process of social mobilization, their training and capacity building and provision of income generating assets. The SHG approach is expected to helps the poor to build their self-confidence through community action. The focus of the programme is on establishing a large number of micro-enterprises in rural areas based on the ability of the poor and potential of each area, both land-based and otherwise, for sustainable income generation. Due emphasis was to be given on different components such as capacity building of the poor, skill development training, credit, training, technology transfer, marketing and infrastructure. The subsidy allowed under the SGSY is 30 per cent of the total project cost, subject to a ceiling of Rs 7,500 (for SC/STs and disabled persons subsidy limit is 50 per cent of the project cost subject to a ceiling of Rs 10,000). For Self-Help Groups (SHGs), subsidy would be 50

[4] Million Wells Scheme was taken up as a sub-scheme of NREP (National Rural Employment Programme) and Rural Landless Employment Guarantee Programme (RLEGP). The objective of the scheme was to provide open irrigation wells to small and marginal farmers amongst the Scheduled Caste/Scheduled Tribes and freed Bonded Labourers who are below poverty line, free of cost. From 01.01.1996, this scheme had been delinked from J.R.Y. and made an independent scheme by itself. Now the scheme is no more in operation and merged with S.G.S.Y. since 01.04.1999.

per cent of the project cost subject to a ceiling of Rs. 1.25 lakh or per capita subsidy of Rs. 10,000, whichever is less. SGSY is being implemented through the District Rural Development Agencies (DRDAs) with involvement of panchayati raj institutions, banks and NGOs. It is financed on 75:25 cost-sharing basis between the Centre and the states (Tenth five year plan; Union Budgets; SGSY Guidelines, 1999).

3.3 Ensuring Social Security in Rural Areas

National Social Assistance Programme (NSAP): Article 41 of the Constitution of India directs the State to provide public assistance to its citizens in case of unemployment, old age, sickness and disablement and in other cases of undeserved want within the limit of its economic capacity and development. It is in accordance with these noble principles that the Government of India on 15th August 1995 included the National Social Assistance Programme in the Central Budget for 1995-96. The programme came into effect from 15 August 1995 and was transferred to the State Plan from 2002-2003. The National Social Assistance Programme (NSAP) then comprised of National Old Age Pension Scheme (NOAPS), National Family Benefit Scheme (NFBS) and National Maternity Benefit Scheme (NMBS). These programmes were meant for providing social assistance benefit to the aged, the BPL households in the case of death of the primary breadwinner and for maternity. The NOAPS provides a monthly pension of Rs. 75 to destitute BPL persons above the age of 65. The NFBS is a scheme for BPL families who are given Rs. 10,000 in the event of the death of the breadwinner. The NMBS provided Rs. 500 to support nutritional intake for pregnant women. These programmes were aimed to ensure minimum national standards in addition to the benefits that the States were then providing or would provide in future. However, in the states that do not have their own scheme, these central provisions are clearly inadequate to provide relief to old and needy persons. On 1st April, 2000 a new Scheme known as Annapurna Scheme was launched. This Scheme aimed at providing food security to meet the requirement of those senior citizens who, though eligible, have remained uncovered under the NOAPS. Under the Annapurna Scheme 10 kgs of food grains per month are provided free of cost to the beneficiary (GoI).

National Rural Health Mission (NHRM): Recognizing the importance of health in the process of economic and social development and to improve the quality of life of the India citizens, the Government of India launched the National Rural Health Mission to carry out necessary architectural correction in the basic health care delivery system. The NRHM was launched on 12^{th} April 2005, to provide accessible, affordable and accountable quality health services to even the poorest household in the remotest rural region. The NHRM seeks to provide effective healthcare to rural population throughout the country with special focus on 18 states, which have weak public health indicators and/or weak infrastructure. These 18 States are Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Manipur, Mizoram, Meghalaya, Madhya Pradesh, Nagaland, Orissa, Rajasthan, Sikkim, Tripura, Uttaranchal and Uttar Pradesh. The Mission adopts a synergistic approach by relating health to determinants of good health viz. segments of nutrition, sanitation, hygiene and safe drinking water. It also aims at mainstreaming the Indian systems of medicine to facilitate health care. The Plan of Action includes increasing public expenditure on health, reducing regional imbalance in health infrastructure, pooling resources, integration of organizational structures, optimization of health manpower, decentralization and district management of health programmes, community participation and ownership of assets, induction of management and financial personnel into district health system, and operationalizing community health centers into functional hospitals meeting Indian Public Health Standards in each Block of the Country.

The Mission is conceived as an umbrella programme subsuming the existing programmes of health and family welfare, including the **Reproductive and Child Health Programme (RCH)**, **National Disease Control Programmes** for Malaria, TB, Kala Azar, Filaria, Blindness & **Iodine Deficiency and Integrated Disease Surveillance Programme**. The budgetary central allocation of the NRHM for 2008-09 was in the range of Rs.12000 crores. The States were also expected to raise their contributions to Public Health Budget by minimum 10% p.a. to support the Mission activities. The Mission is an articulation of the commitment of the Central Government to raise the public spending on Health to 2-3% of GDP (NRHM Guidelines, 2005).

Land Reforms: In an economy where over 60 per cent of the population is dependent on agriculture, the structure of land ownership is central to the well being of the people. Agrarian reforms is a central issue for rural reconstruction and ensuring social justice to landless rural poor and thus for creating sustainable base for the overall growth. The Land Reforms Division of Government of India, since the First Plan Period, is taking up steps towards effective land reforms which include abolition of zamindari and all intermediaries, introduction of family ceiling, reduction of ceiling limit in 1972 and monitoring the progress of distribution of ceiling surplus land as a part of the 20-Point Programme of the Government. It initiated amendments of the Constitution 13 times for incorporation of 277 land laws in the Ninth schedule. At the end of the Eighth Plan, 74.9 lakh acres was declared as ceiling surplus and 52.13 lakh acres was distributed among 5.5 million beneficiaries. By the end of the Ninth Plan, the position was virtually the same. There has been no progress in the detection of concealed land and its distribution to the landless rural poor in later period (GoI; Planning commission).

A Central sector scheme of computerisation of Land Records is also under implementation since 1988-89. A Centrally Sponsored Scheme for **Strengthening of Revenue Administration and Updating of Land Records (SRA&ULR)** was first approved by the Cabinet during 1987-88 for States of Bihar and Orissa. In the year, 1989-90 the Scheme was extended to other States. The State were also requested to take up resurvey and settlement operations by preparing necessary schemes and programmes to adopt new technology in the field of survey, settlement, updation/reproduction of maps and revenue records which include use of Photogrammetric System, Global Positioning System, use of Scanner and Digitizers for preservation, updation and reproduction of cadastral maps etc. Central allocation for land reforms has increased from 1.52 crore in 1981-82 to 357.40 crore in 2008-09 (GoI; Planning commission).

Watershed Development Programme: The Watershed approach has conventionally aimed at treating degraded lands with the help of low cost and locally accessible technologies such as in-situ soil and moisture conservation measures, afforestation etc. and through a participatory approach that seeks to secure close involvement of the user-communities. The broad objective was the promotion of the overall economic development and improvement of the socio-economic conditions of the resource poor sections of people inhabiting the programme areas. The **Drought Prone Areas Programme (DPAP)** and the **Desert Development Programme (DDP)** were brought into the watershed mode in 1987. The **Integrated Wasteland Development Programme (IWDP)** launched in 1989 under the guidance of the National Wasteland Development Board also aimed at the development of wastelands on watershed basis. All these three programmes were brought under the Guidelines for Watershed Development with effect from April, 1995. Other major programmes implemented through this approach were the **National Watershed Development Project in Rainfed Areas (NWDPRA)** and the **Watershed Development in Shifting Cultivation Areas (WDSCA)** of the Ministry of Agriculture (GoI).

Sarva Shiksha Abhiyan (SSA): Sarva Shiksha Abhiyan (SSA) is not a programme oriented to rural sector only but is however important for rural sector given the condition and requirement of education in rural sector. SSA is Government of India's endevour towards achievement of Universalisation of Elementary Education (UEE) in a time bound manner, as mandated by 86th amendment to the Constitution of India making free and compulsory Education to the Children of 6-14 years age group, a Fundamental Right. SSA is being implemented in partnership with State Governments to cover the entire country and addresses the needs of 192 million children in 1.1 million habitations. The programme seeks to open new schools in those habitations which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grants. Existing schools with inadequate teacher strength would be provided with additional teachers, while the capacity of existing teachers to be strengthened by extensive training, grants for developing teaching-learning materials and strengthening of the academic support structure at a cluster, block and district level. SSA seeks to provide quality elementary education including life skills. It has a special focus on girl's education and children with special needs. SSA also seeks to provide computer education to bridge the digital divide (GoI).

3.4 Studies on Government Programmes

It is also important to see the performance of government progammes especially when the government policy has changed considerably over recent years due to reforms. The effectiveness of these government policies regarding rural sector has been widely discussed over time in the existing literature. Government programmes and expenditure policies has been analysed in the existing literature both for pre and post reform periods. In the following section strength, shortcoming and achievements of the policies are pointed out.

The growth of electrification in India has been almost frantic. Desperate efforts have been made to meet targets. However, there was no master plan. The method followed by the State Electricity Boards (SEB) has been "to connect a village to be electrified to the nearest village that has been electrified". This has given rise to an inefficient distribution network. Alternative energy sources have hardly been explored. Several problems associated with rural electrification are socio-economic in nature and do not have simple solutions. There are however, a number of technical problems which have arisen from an unplanned growth. Technical problems most frequently quoted are: Rural electrification in India has been almost entirely carried out by extending the grid. Rarely have local resources been utilized for generating power and the distribution networks have grown in a haphazard fashion. As a result, distribution losses are very large and often the terminal voltages are poor (Gupta and Sen, 1989).

Growth in agricultural GDP declined from 3.4 per cent in the 1980s to 3 per cent in the 1990s. The growth rate in foodgrains production declined from 2.81 per cent in the 1980s to 1.98 per cent in the 1990s. This is a matter of concern for rural areas. One of the main factors for the deceleration in agricultural growth was decline in public investment. Public sector investment declined significantly from 10.0 per cent of GDP in the 1980s to 7.8 per cent of GDP in the 1990s. Within the post-liberalisation period, it declined from 8 per cent in the Eighth Plan period to 6.6 per cent in the Ninth Plan period (Dev, 2004). Private expenditures have increased but public and private investments cannot be treated as substitutes for each other as their compositions are different. In the post liberalisation period, private, institutional and external investments have tended to become more and more market determined. In the post-liberalisation period, the decline in infant mortality has been much slower in rural areas as compared to urban areas. Social sector expenditure in India in the 1990s is low. It is lower in comparison to what India spent in the 1980s; it is low with respect to other developing countries, and certainly vis-à-vis other east Asian countries, and compared with the UNDP recommended ratios. Officially, poverty has declined but there is a debate on the issue (Sen and Himanshu, 2004; Patnaik, 2007b).

The total expenditure of the Centre had grown in the 1990s and 2000s at a rate significantly slower than the same in the 1980s. As a result, even when certain sub-sectors recorded increase in shares of expenditures to total, the levels of absolute increase in expenditures would have been smaller. In Rural Development, which includes a large number of anti-poverty programmes in the rural areas, there was a major fall of expenditure as a share of GDP in the 1990s. This fall was due to major cutbacks in the components of employment creation within Rural Development. The allocation for rural employment programmes was about Rs. 6000 crore in 1993-94 which reduced to less than Rs. 3000 crore in 2000-01 at constant 1999-2000 prices (Annex 2). The fall was partly due to the non-inclusion of expenditure on Indira Awas Yojana (IAY) under Rural Development from the year 1996-97. But the expenditure on IAY was not very significant before 1996-97. In 1994-95 the allocation was only Rs. 31 crore which rose to Rs. 634 crore in 1995-96 at constant 1999-2000 prices (Annex 3). The allocation to IAY increased further to Rs 1428 crore in 1996-97 and remained roughly at this level for the rest of the decade. In the next chapter the trends in individual components of the expenditure will be looked at in details. The rise in expenditure noted in the 2000s was because of two reasons: first, the introduction of the Pradhan Mantri Gram Sadak Yojana (PMGSY) in 1999-00; and secondly, the introduction of new schemes for wage- and self-employment creation (such as the Sampoorna Gramin Rozgar Yojana or SGRY and the Swarnajayanti Gram Swarozgar Yojana or SGSY) in the rural areas, both of which are included under Rural Development. In many human priority sectors (such as Education and Health) as well as infrastructural sectors like Water and Power

Development, there was a fall in the share of expenditure by the Centre to the GDP for fairly long stretches of years in the 1990s. In almost all these sectors, the share of expenditure in the GDP had recorded a rise in the 1980s. While there was some recovery visible in the 2000s in sectors like Education, Health and Agriculture and Allied Services, these were largely insufficient to compensate for the sharp falls in the 1990s (Ramakumar, 2008).

The growth rate of rural employment was around 0.5 per cent per annum between 1993-94 and 1999-2000, as compared to 1.7 per cent per annum between 1983 and 1993-94. The daily status unemployment rate in rural areas has increased from 5.63 per cent in 1993-94 to 7.21 per cent in 1999-2000. Overall employment growth declined from 2.04 per cent during 1983-94 to 0.98 per cent during 1994-2000 (Dev, 2004). In the case of rural family welfare the allocations declined in the mid-1990s before picking up in the late 1990s. In the case of rural development, the share of rural wage employment programmes declined drastically since the mid 1990s. Similar trend is also observed for special programmes like self-employment programmes (e g, IRDP). There has been a sharp shift in the allocations to housing, social sector and welfare and water supply and sanitation.

Allocation to Rural Employment showed a major decline from Rs 2,704 crore in 1990-91 to Rs 1,749 crore in 2000-01, with an average annual percentage decline of -1.9 per cent. The share of Rural Employment Programme to total expenditure on Rural Development had a major decline from 79 per cent in 1990-91 to 32 per cent in 2000-01. It drastically reduced to 32 per cent in 2000-01 from 51.5 per cent in 1999-2000. As a result, the expenditure on the two schemes, i e, Jawahar Gram Samridhi Yojana (JGSY) and Employment Assurance Scheme (EAS) under Rural Employment Programme has got a cut of 8 and 12 per cent points respectively in the total share of Rural Development in 2000-01 over the previous year. It appears that the allocations have been diverted for funding the PMGSY introduced during 2000-01 that has been allotted a large sum of Rs 2,500 crore at nominal prices (Shariff et al, 2002).

In addition, changes have been found in the composition of social sector expenditures over time. The most significant change is a shift from rural development, starting from 1996-97. In the post 1996-97 period, there was a significant decline in the expenditure on rural development. Rural development means, to a large extent, poverty schemes (such as JRY-type wage employment schemes and IRDP-type self employment schemes), so it means that there seems to be a definite shift from poverty alleviation schemes to human development programmes, as exemplified by the Basic Minimum Services. Within the rural development outlay at the centre, there is a shift away from rural employment schemes to rural housing, water, and rural roads. We also have schemes on basic minimum services since 1996-97. With regard to health, not much has happened. Neither the states nor the centre 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 declined from around 4.1 per cent in 1990-91 to 3.8 per cent in 1998-99. More resources have to be allocated to education, particularly to primary education. The international norm is 6 per cent of GDP. The education expenditure of the centre increased from 0.25 per cent of GDP in 1994-95 to 0.36 per cent in 1998-99. The increase is almost completely due to the increase in spending on elementary education, and to a large extent related to the introduction and expansion of the mid-day meal programme. The intra-sectoral allocations also show that there has been a shift towards elementary education in the 1990s. The shifts within education and health towards priority areas are in the right direction (Mooij & Dev, 2002; 9^{th} Five year plan, 1997).

For financing some of the programmes in rural sector, the government has also relied heavily on institutional finance. A major criticism of institutional financing is that large farmers are able to secure a larger finance from institutions, some of which might have been diverted for unauthorised purposes or money lending to small farmers, with a view to securing economic and social hegemony (Avadhani, 1979). Institutional finance had not fulfilled the objectives of planning to any significant extent by helping the poorer classes of villagers and promoting their productive activity. On the other hand, it might have led to increased inequalities in income and wealth in the rural areas. It has benefited mostly the larger cultivators. Institutional finance was also expected to increase employment and incomes of the people through Rural Development Projects, self-employment schemes, etc. But no visible evidence could be recoded of falling unemployment or poverty; on the contrary, there was evidence of increasing poverty and unemployment (Satish, 2005).

Provision of financial services to the poor and underprivileged sections of the society has always been in the focus of various programmes initiated by governments since independence in India. The IRDP aimed at providing income-generating assets to the rural poor through the provision of cheap bank credit. It became the lynchpin of India's anti-poverty effort in the 1980s. It peaked to cover over 4 million households by 1987. Several independent evaluation studies based on micro-surveys showed substantial mis-classification of beneficiaries under the IRDP, with better-off families being selected. Little support was provided for skill formation, access to inputs, markets and necessary infrastructure. In the case of cattle loans, for example, a majority of cattle owners reported that they had either sold off the animals bought with the loan or that these animals were dead. Cattle loans were financed without adequate attention to other details of fodder availability, marketing of milk, etc. Besides corruption, the programme was ill-conceived as it was a supply led, and not a demand-led credit programme so that the clients did not have a choice over the purpose and amount; entrepreneurial skill was assumed which was not there; backward and forward linkages were never of any concern during implementation. Credit target was the main concern and the bureaucratic machinery was in charge of ensuring the credit achievement. It was principally an instrument for powerful local bosses to opportunistically distribute their largesse. There was no attempt made to ascertain whether the loan being provided would truly lead to the creation of a viable long-term asset. No attempt was made to work out the necessary forward and backward linkages to ensure that the loan was a success. Little information was collected on the intended beneficiary. In chasing targets of high credit supply, what we may term as the "quality of lending" was completely undermined. All these only weakened the strength of the financial institutions to serve the poor and the rural areas, and further reduced their interest in transacting such business. The IRDP alone accounted for 40 per cent of the losses incurred by commercial banks in rural lending in 1988. The share of the formal financial sector in total rural credit was 56.6 per cent compared to informal finance at 39.6 per cent and unspecified sources at 3.8 per cent (Shah et al, 2007; Satish, 2005; 10th Five year plan, 2002).

The government has already started to encourage microfinance through the subsidy linked credit programme of the Swarnjayanti Gram Swarojgar Yojana. This programme, which is based on the group approach, is operated through the rural development agencies of the state government at the district level. Field level feedback of SGSY indicates that there were many instances where the groups formed under this programme disintegrated after accessing the credit and subsidy. This phenomenon sets a negative example for the SHG-bank linkage programme. However in the Indian context the role of the state in developmental efforts cannot be kept aside. But it has to be realised that microfinance is a means or an instrument for development, and not an end itself (Satish, 2005).

Underutilisation of allocated resources is an important phenomenon. The problem is even worse when one looks at mid-year utilisation rates. This has been done in a study by Rajaraman (2001). The study focuses on some major rural development schemes for 2000-01. The utilisation rates of these funds, for most of the schemes, were less than 50 per cent of the funds allocated for the first six months. In other words, in the first six months, less than 25 per cent of the annual allocation was used. The utilisation rate of the two major employment schemes (the Employment Assurance Scheme and JGSY, the successor of JRY) was 42 per cent (of 50 per cent). This, according to Rajaraman, is especially surprising, "since the first six months of the fiscal year from April encompass the agricultural slack season, when the demand for rural employment should be at its peak". The utilisation rates at the end of the year are, however, much higher "suggesting hasty, wasteful utilisation in the second half of the fiscal year". Underutilisation of funds seems to be more in the poorer states. So, although these schemes are meant to alleviate poverty, the poor states make less efficient use of them than the better-off ones. Underspending hardly occurs in non-Plan expenditure, but it does occur in most years in most sectors in the Plan. Reasons behind this underutilization are related to complicated scheme procedures, absence of matching funds, lack of local infrastructure or skills, lack of interest, deliberate delays in release of the funds, etc (Rajaraman, 2001).

For most of the studies discussed above, functional or budget classification is used to carry out empirical study and the study is done for 'Rural Development' and 'Social Services'. This classification does not provide data for urban and rural expenditure separately (except expenditure for rural development). For example, 'Water Supply and Sanitation' comes under Social Services in functional classification and have both rural and urban components. For most of the studies the data was taken from Reserve Bank of India (RBI) and Indian Public Finance Statistics.

Given the concerns raised by economists that the adverse impacts of the reforms were more on rural poverty as compared to urban poverty it is important to look at rural sector separately. So this study gives special emphasis on the rural sector. Most of the data used for the study is taken from the Volume 2 of the Expenditure Budget of the Government of India for all individual years from 1981-82 to 2008-09 which provides a ministry-wise summary of budget provisions. Only those expenditures are accounted which were done exclusively for the rural sector. All the allocations for Ministry of Rural Development are taken into consideration and schemes/programmes initiated towards development of rural sector by other ministeries are also included in the analysis. Further since actual expenditure was not provided Revised Estimates are taken. Other data sources also consulted for this study are mentioned in the next chapter. In Chapter 4 empirical study for the Central Government expenditure is done with special reference to Rural Sector.

Chapter 4

Trends in Government Budgetary Expenditure on Rural Sector

The previous Chapter dealt with the different channels through which rural sector is funded by the Central Government in India. Budgetary allocation is one of the most important ways to fund Rural Development. Therefore, a study has been carried out to analyse budgetary allocation and its elements. Changes in national priorities are reflected in the pattern of budgetary expenditure. For that reason, the budgetary expenditure trend of the government is essential to understand. Central Government is important since its policies have significant impact on state governments. To begin with the Central Government budgetary expenditure is looked into.

4.1 Data Sources and Methodology

Major data sources used for the analysis are; Union Budget, Reserve Bank of India (RBI), Central Statistical Organisation (CSO). To see the flow of public resources to rural areas through budgetary expenditure, only those heads of expenditure are taken which are done exclusively for the development of rural areas. Therefore, allocation to ministry of rural development is taken into consideration first. Allocation of funds to other ministries; ministry of Agriculture and Ministry of Health is also used for the analysis. Data is taken for the period 1981-82 to 2008-09 from budget documents of Government of India. This has been arranged in a manner whereby a comparison for the different years can be drawn easily. The following is done while collecting data from Union Budget of the Central Government.

i. Revised Estimate data for all the years (1981-82 to 2008-09) is taken from the budget documents (Expenditure budget).
ii. Revised Estimates for Plan and Non-Plan expenditure is taken (Unit crores of Rupees at current prices).
iii. Non plan expenditure (if available) is tabulated separately.

iv. Revenue and Capital expenditure is not given for different heads and years, therefore, have not been considered for analysis. Where ever available, the value of capital expenditure is very low for most of the years.

The different heads in the data (Annex 2 & 3) is explained below:

a) **Land Reforms:** It contains the allocation for land reforms in the Ministry of rural development. The funds were allocated to states to carry out land reforms such as upgrading revenue machinery and updating land records etc. A Central sector scheme of computerisation of Land Records is also under implementation. Initially this was a subject of the Department of Rural Development but from 2001-2002 it has been placed under the newly formed department i.e. the Department of Land Resources.

b) **Agricultural marketing:** Values under this head are expenditure on agricultural marketing and quality control, development of agricultural produce markets, providing infrastructural facilities, market research and investigation. The subject was transferred to the Ministry of Agriculture from 1999-2000. So, the allocation for Agricultural marketing for the year 1999-2000 onwards is taken from the Department of Agriculture and Cooperation, Ministry of Agriculture.

c) **IRDP & Others:** The objective of Integrated Rural Development Programme (IRDP) was to provide income generating assets to identified families through a mix of credit and subsidy, to enable them to improve their income levels and eventually cross the poverty line. It consisted of Subsidy to District Rural Development Agencies and other programmes. Under this programme funds were given to the District Rural Development Agencies for providing subsidies and the bank subsequently provided the loans. In April, 1999 IRDP merged with another scheme namely Swaranjayanti Gram Swarozgar Yojana (SGSY). The objective of SGSY is to bring every assisted family above poverty line. SGSY covers all aspects of self-employment like organization of rural poor into Self Help Groups (SHGs) and their capacity building, training, planning of activity clusters, infrastructure development, financial assistance through bank credit and subsidy and marketing support.

d) **National Grid:** The scheme for setting up Rural Godowns aims at creation of a network of rural godowns to take care of storage requirements for agricultural produce, inputs, etc. of small/marginal farmers so as to avert distress sale of food grains. The scheme had been transferred to State governments from 1993-94. Therefore, no central allocation was made 1993-94 onwards.

e) **Social Security and Welfare:** In 1995-96 a separate category of expenditure as Social security and welfare was created. The main constituent was National Social Assistance programme (NSAP) which was a centrally sponsored programme with 100 percent central funding to the states/UTs to provide the benefits under its three components viz. (1) National Old age Pension Scheme (2) National Family Benefit Scheme and (3) National Maternity Benefit Scheme. The programme came into effect from 15 August 1995 and was transferred to the State Plan from 2002-2003.

f) **Special Development Programmes**: Components under this head include allocations for Development of Woman and Children in Rural Areas, Other Rural Development Programmers, Expenditure on strengthening block level administration and District Rural Development Agency (DRDA). It was under this head, that the programme for 'Training of Rural youth for self employment (TRYSEM)' was undertaken. The main objective of TRYSEM was to train rural youth (18-35 years) from the target families in technical skills so as to enable them to take up self/wage employment. Assistance was also provided for strengthening the training infrastructure. TRYSEM was merged with SGSY in April, 1999.

From 1985-86 expenditure on 'Development for Woman and Children in Rural Areas (DWCRA)' and 'Rural Roads in Tribal and Dacoit Prone Area' was also taken under this head. DWCRA aims to improve socio-economic status of the poor woman in rural areas through creation of opportunities for income generating activities on a self sustaining basis. The programme was jointly funded by Central Government, state government and UNICEF. This Scheme was also merged with Swarnajayanti Gram Swarojgar Yojana

(SGSY) from April, 1999. The other centrally sponsored scheme for grant-in-aid to states for construction of roads in tribal areas was discontinued from 1990-91.

'Other Rural Development Programmes' and 'Expenditure on strengthening block level administration' are other constituents of this. Other Programmes of Rural Development includes provisions for expenditure on Community Development, promotion of voluntary action and assistance to Panchayati Raj Institutions. A Centrally-sponsored scheme District Rural Development Agency (DRDA) Administration was launched on 1 April 1999 with the objective of strengthening the DRDAs and making them more professional in their functioning. The funding pattern of the DRDA Administration is in the ratio of 75:25 between the Centre and the States. This is also included under this head. The scheme of Block level administration discontinued from Ninth plan.

Grants to National Institute of Rural development, Assistance to Council for Advancement of People's Action and Rural technology (CAPART), Provisions for urban Amenities in rural areas (PURA) and Management Support to Rural Development Programmers and strengthening of District planning process all of which started from 2006-07 was taken under special development programmes.

For year 1994-95 expenditure for MPs' local Area Development scheme was also shown in the budget document. This scheme was shown under the ministry for this year only. This amount is not taken into consideration.

g) **Rural Employment:** Initially, National Rural Employment programme (NREP) was the only employment programme. This was a centrally sponsored scheme which was meant to help the rural poor by generating additional employment opportunities for them and by creating durable community assets in rural areas with a view to strengthen the rural infrastructure. From 1983-84, Rural Landless Employment Guarantee Programme (RLEGP) was added to this existing scheme. The basic objective of the this Programme was to improve and expand the employment opportunities available for the rural landless labour with a view to generate employment opportunities to at least one member of every landless labour household up to 100 days a year.

A new programme viz. Jawahar Rojgar Yojna (JRY) for providing intensive employment was launched in 1989-90. The JRY was implemented with the basic objectives of generation of additional gainful employment for unemployed and underemployed persons and creation of economically productive and socially useful assets and improvement in the overall quality of the life in rural areas. In 1989-90 the RLEGP and the NREP, were merged with JRY. A new scheme namely, Employment Assurance Scheme (EAS) was introduced w.e.f. 2nd October, 1993 in drought areas, desert areas, tribal areas and hill areas in which the Revamped Public Distribution System was operational. The programme was restructured from 1st April, 1999. There was no expenditure under this scheme from 2000-2001 onwards. The Food for Work Programme (FFWP) started in January, 2000-01 as part of the Employment Assurance Scheme (EAS).

The Million Wells Scheme (MWS) which was earlier a sub scheme of JRY, become a separate scheme from 1.1.1996. The objective of the scheme was to provide open irrigation wells free of cost to poor, small and marginal farmers and freed bonded labours. Since it was earlier a part of JRY it is taken under Rural Employment. The programme of erstwhile Jawahar Rozgar Yojana was restructured and renamed as Jawahar Gram Samridhi Yojana (JGSY). The revamped programme came into effect from 1.4.1999. The programme aims at creating need-based rural infrastructure at the village level to boost rural economy in general and improve the quality of life.

National Rural Employment Guarantee Act (NREGA) 2005 was notified on 7th September, 2005. The Act provides a legal guarantee of 100 days of wage employment in every financial year to every rural household whose adult members volunteer to do unskilled manual work.

h) **Drinking Water & sanitation:** The allocation for Drinking Water & sanitation started late in 1985-86. 'Accelerated Rural Water Supply

Programme' and 'Rural Sanitation' were the constituents of this scheme. The Accelerated Rural Water Supply Programme was introduced to assist the State Governments towards provision of drinking water to all rural habitations in the country by accelerating the pace of implementation of the programme. The scheme of rural sanitation aims at supplementing the efforts made under different central and state sector programmes for providing latrines in individual houses with an overall objective of improving the quality of life in the rural areas. Because of its importance a separate Department of Drinking Water Supply was created under Ministry of Rural Development in year 2000-01. From this year Department of Rural Employment & Poverty Alleviation was closed and their major programmes were merged with the Department of rural development.

i) **Housing:** Expenditure for rural housing was started from the year 1992-93. The Indira Awaas Yozna (IAY) was started in May, 1985 as a sub-scheme of Jawahar Rozgar Yojana. From 1st January, 1996 it is being implemented as an independent scheme and the ongoing scheme of Rural Housing merged with it. The objective of the IAY was to provide dwelling units to the SCs/STs and freed bonded labour below the poverty line free of cost.

j) **Wasteland development:** Initially, expenditure as Area Development is taken under this head which consist of 'Development of Desert Areas' and 'Drought Prone Area Programme' (DPAP). For year 1981-82, Special subsidy for minor irrigation (2 Crore) is also added. In year 1993-94, Department of Wasteland development was created and the allocation under this department is also covered under this head. This department consisted of expenditure for 'National Wasteland Development Board (NWDB)' and 'Integrated Wasteland Development Projects (IWDP)'. NWDB was mainly responsible for development of wastelands on non-forest areas aimed at checking land degradation, putting such wastelands in the country to sustainable use and increasing biomass availability, specially fuelwood and fodder. IWDP scheme was a scheme of the Department under which major projects were undertaken on the basis of micro-watershed or area approach basis.

In 2000-01 a new Department of Land Resources was created under the ministry which includes expenditure on 'Technology Development, Extension & Training' and 'Land Reform' along with the above mentioned four schemes. Expenditure on Land Reforms is taken under separate head. From 2004-05, a national mission on Bio-fuel under the department was launched by Planning Commission as per recommendations of a Committee on Development of Bio-fuel. Integrated Wastelands Development Programme (IWDP), Drought Prone Areas Programme (DPAP) and Desert Development Programme (DDP) had been integrated and consolidated into a single programme named Integrated Watershed Management Programme (IWMP) in place of all the above mentioned three Area Development Programmes in the year 2007-08. Technology Development, Extension & Training programme was discontinued after 2006-07. New scheme 'Professional Support, Capacity Building & Technology Development, Extension & Training, etc.' were created under the department from 2007-08. The provision has been proposed for Professional Support, Capacity Building, Monitoring & Evaluation, Information, Education & Communication and related activities for Area Development Programme including Technology Development, Extension and Training (TDET). No allocation were made for 'Professional Support, Capacity Building & Technology Development, Extension & Training, etc.' in 2008-09 and the programme was discontinued.

k) **Road and Bridges:** The Pradhan Mantri Gram Sadak Yojana (PMGSY) for rural roads was launched on 25^{th} December, 2000 as a 100% centrally sponsored scheme with the objective of providing connectivity to all unconnected habitations in rural areas with a population of more than 500 persons through good all-weather roads by the end of the Tenth Plan period. In respect of hill States (North East, Sikkim, Himachal Pradesh, Jammu & Kashmir, Uttaranchal) and the desert areas, the objective was to connect habitations with a population of 250 persons and above. Besides the programme aims to upgrade the existing rural roads. Before the start of this scheme there were very less expenditure on rural roads. This was mainly financed from 50% of the rupee 1 per litre cess being levied on high speed diesel. This head include the allocation mainly for this scheme.

Data for all of the above mentioned heads are taken from Ministry of Rural Development/Ministry of Rural Areas & Employment except for the years before 1991-92, where it is taken from Department of Rural Development under the Ministry of Agriculture. Again from 1981-82 to1983-84 we had Ministry of Rural Development and the data is taken from the ministry during the period.

Data is also collected for the Budgetary Expenditure of Central Government on Rural Health.

l) **Rural Health:** Data for this head is also taken from the Budget documents of the Central Government. Budgetary allocation for the Ministry of Health & Family Welfare is considered. Since we are concerned with expenditure on rural sector, only Rural Health programme is taken into consideration. For the years 1982-83 to 1985-86 values under Rural Health shows the Expenditure for 'Health Guide Schemes'. Village Health Guide Scheme was launched in 1977 as a 100 per çent Centrally sponsored scheme with the objective of training a person selected by the Community for Primary Health Care in all states except Tamil Nadu, Jammu & Kashmir, Kerala and Arunachal Pradesh. On an average one person per 1000 population of a village, is trained for 3 months and is equipped with a manual of instructions and a medicine kit. In 1979 the scheme was included in the category entitled for 50 percent Central assistance. The scheme was taken under Family Welfare Programme and 100 per cent funding was resumed and a revised scheme was communicated to the State in 1981. It was emphasized that VHG should not consider his role as a source of income or a step towards future employment in Government. The guide is meant to be a vital link between the community and health functionaries thereby ensuring community participation and preparing a cadre of volunteers selected by the community itself where socially inclined people can provide primary health care services.

Then, for the period 1986-87 to 2004-05 data for expenditure for the 'Rural Family Welfare Services' is taken. 'Rural Family Welfare Services' was a programme of the 'Department of Family Welfare' under the Ministry of Health & Family Welfare. Under this programme Rural Family Welfare Centres have been sanctioned at all block level PHCs (Primary Health Centre) up to 1.4.1980 to provide Family Planning and MCH (Maternal-Child Health Centers) services in rural areas. In order to provide comprehensive Primary Health Care Services at the grass-root level, subcentres for every 5000 rural population (3000 population in the tribal and hilly areas) were established. These sub-centres provide basic health and family welfare services to the rural population.

The National Rural Health Mission (NRHM) was launched by the Central Government in 2005 throughout the country, with special focus on 18 states which includes 8 erstwhile Empowered Action Group States, 8 North-East States, Himachal Pradesh and Jammu & Kashmir to provide accessible, affordable, accountable, effective and reliable primary health care facilities, especially, to the poor and vulnerable sections of the population of rural India. Since, the launch of NRHM, several activities have been undertaken under NRHM like strengthening institutional mechanism at State, District and Sub-District level, financial support at Village, Sub Centre, Primary Health Centres (PHC), Community Health Centers (CHC), Sub-District, District and State level for better utilization of health services; prevention and control of communicable and non-communicable diseases; revitalizing local health traditions and mainstreaming Ayurveda, Yoga, Unani, Siddha, Homeopathy (AYUSH) etc. The provision of funds for NHRM is made for two departments of Ministry of Health and Family Welfare i.e. 'Department of Health and Family Welfare' and 'Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH)'.

m) **'Agriculture and Allied Services'** and **'Irrigation and Flood Control':** Data for expenditure on both 'Agriculture and Allied Services' and 'Irrigation and Flood Control' taken from RBI's 'Handbook of Statistics on the Indian

Economy'. This is because; many of the allocations under the ministry are not spent exclusively on rural sector. For example, allocations for Delhi Milk Schemes, Assistance to Fisheries institutes, Economic Statistics and Management, Payment to Indian council of Agricultural Research (ICAR) etc. may have urban components which are not given separately. Also, there are several heads and subheads allocated under the Ministry of Agriculture that have change overtime making it difficult to make it comparable for all years. On the other hand RBI data has fixed components over the period. So, Reserve Bank of India's data is considered for allocation to agriculture sector. Table for 'Public Sector Plan outlay' is used for the purpose. The values are available for the period 1985-86 to 2008-09. Even in the previous version of 'Handbook of Statistics on the Indian Economy' the data is not available for the years before 1985-86.

n) **GDP and Components of GDP:** Data for GDP and its components (at factor cost) is also taken from Reserve bank of India (Annex 6).

o) **Gross Capital Formation:** Central Statistical Organisation (CSO) is consulted for data related to Capital formation in India (Annex 7).

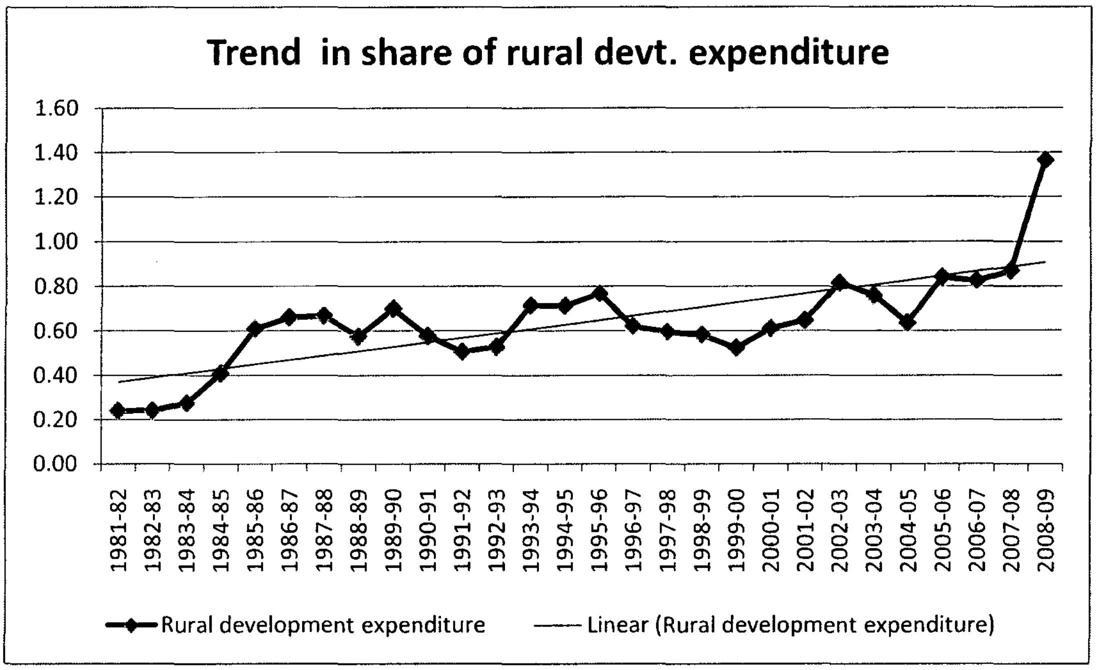
p) **Population:** For calculation of per capita expenditures the rural population data is obtained from Census for the 1981, 1991 and 2001 (Annex 9).

Firstly, the major trends in expenditure of the Central Government over the whole period (1981-82 to 2008-09) are analysed and then the trends in pre and post reform periods are looked into. The current situation of the economy and the rural sector is related to the government policy with regards to expenditure over time. Examination of budget expenditure is done, primarily, by two ways. One by looking at the expenditure concerned as a proportion of GDP and secondly by looking at the real per capita expenditure. A decade wise growth rate of different components of the Central Government's expenditure is also analysed. Public Capital Formation in Agriculture is also examined to see the government involvement in Indian Agriculture. The expenditure as the share of GDP is analysed below.

4.2 Trends in Rural Expenditure of Central Government

In annual budgets, Rural Development Expenditure is taken as the sum of Special Programmes for Rural Development, Rural employment, Land Reforms and Other Rural development Programmes.

Figure 1: Trend in Rural Development Expenditure (as percentage of GDP) as shown under Ministry of Rural Development

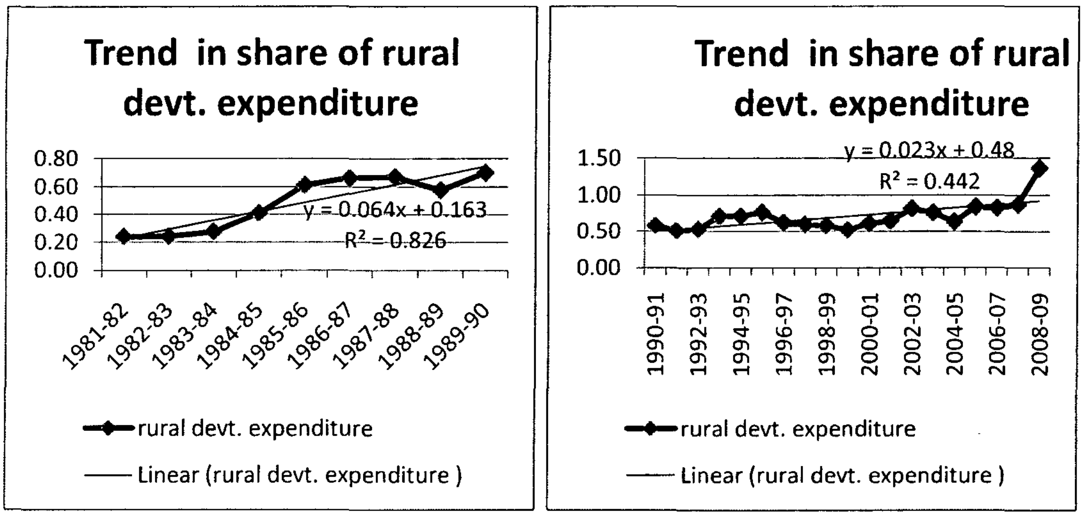


For the purpose of this study, a sum of all allocations to the Ministry of Rural Development[5] is referred as Rural Development Expenditure. This includes the allocation for the above four categories along with other components (Annex 2 &3). The components are also examined separately in the following sections. Figure 1 shows the trend in share of Rural Development Expenditure with respect to GDP over time. The graph is drawn on the basis of value of total expenditure obtained from ministry/department of rural development for the year 1981-82 to 2008-09. The total allocation (at current prices) is divided by GDP to get the share of expenditure with respect to GDP.

[5] Agriculture Marketing was transferred to the Ministry of Agriculture from 1999-2000. So, the allocation for Agricultural marketing for the year 1999-2000 onwards is taken from the Department of Agriculture and Cooperation, Ministry of Agriculture.

The graph shows an overall increase in the share of rural development expenditure for this period which is very clear from the linear trend line fitted for the graph. However there are periods where the share has fallen continuously for more than one year. It is found that the share has increased continuously from 0.24% of GDP in 1981-82 to 0.70% of GDP in 1989-90 with minor fluctuations. This share of less than one percent is not a healthy figure given the importance of the components for the development of rural sector. In this period, only at one instance i.e. in 1988-89 the share has decreased from the previous year. After 1989-90, the share of rural development expenditure exhibits a cyclical pattern of increase and decrease in the share upto year 2007-08 where the share remained at 0.87% of GDP. This means that in the first 10 years the share tripled but during the next 17 years there was very minor increase. After that there has been a sudden increase in the share in 2008-09 because of a large increase in spending under National Rural Employment Guarantee Schemes. Now to analyse the difference in trends in the two above mentioned periods let us draw the graphs for the two periods separately.

Figure 2: Trend in Rural Development Expenditure (as percentage of GDP) in the two sub-periods

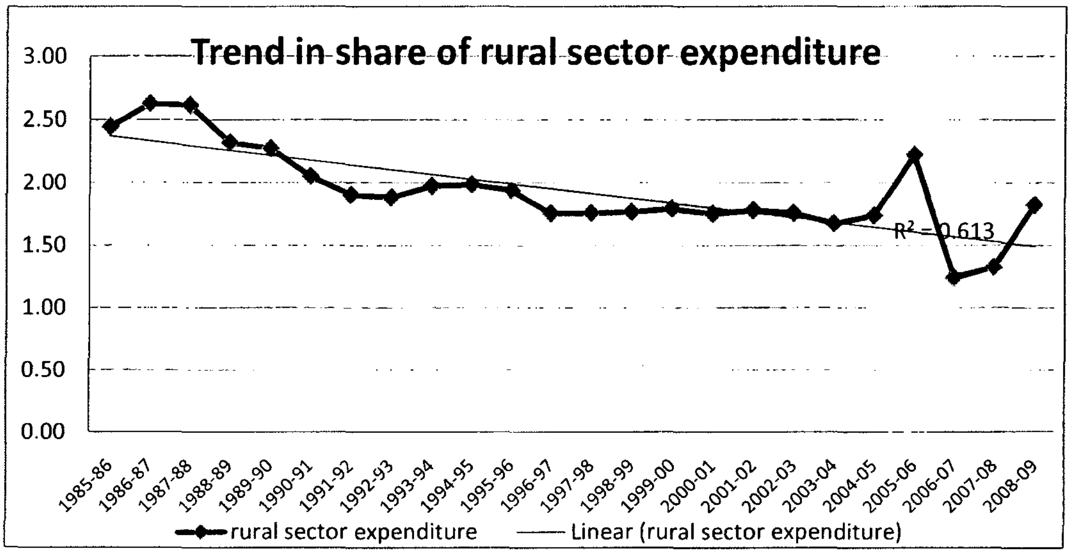


It is clearly visible from figure 2 that the trend has been positive in the first sub-period. Further the slope of the trend line is 0.064 which means the share has been increasing with an annual average rate of 6.4% per year. Moving on to the second sub-period; it also shows a slightly increasing trend. The trend line fitted here has a slope of 0.023 which is approximately one-third of the previous case.

This means that the rate of increase has been three times in the period 1981-82 to 1989-90 in comparison to the later period. The second period was the post reform period. Thus it is seen that in the post reform period the rate of growth in share of budgetary rural development expenditure has fallen down to one third of the pre-reform period.

Figure 3 shows the trend in Rural Sector Expenditure. While the Rural Development Expenditure which was analysed above showed only the allocated expenditure to the Ministry of Rural development the Rural Sector Expenditure also covers some additional expenditure incurred for the development of the rural sector. Here the expenditure for 'Agriculture and Allied Services' and 'Irrigation and Flood Control' is also considered. In addition to that, budgetary allocation to Rural Health is also taken for the analysis. The period for which the data is analysed is 1985-86 to 2008-09 because of the unavailability of the data for earlier period (1981-82 to 1985-86) for some heads. In this case the result is not same as that of previous one. A clear downward trend is observed from the graph.

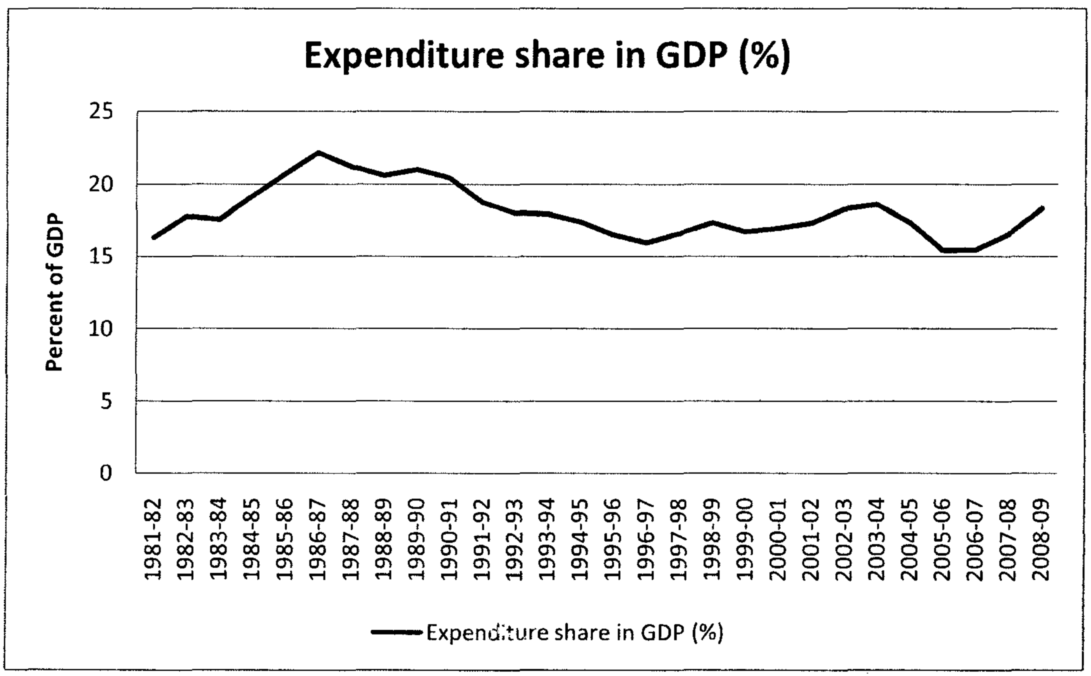
Figure 3: Trend in Rural Sector Expenditure (as percentage of GDP) for the period 1985-86 to 2008-09



The share of rural sector expenditure is decreasing over time with some fluctuations. The year in which highest share was allocated towards rural sector was 1986-87 where this share was 2.62% of GDP. In year 2005-06 and 2008-09 a steep increase in the spending share is observed. The year with lowest share of expenditure was 2006-07 where the share was 1.24% of total GDP. Thus, it is found that, the share of rural sector expenditure out of GDP in 2006-07 was less than half of the level of 20 years ago i.e. 1986-87. This is very strange that the importance of rural sector decreased and the share goes towards it has fallen down over years. The difference in the trend shown by Figure 1 and Figure 3 can be only because of the change in spending pattern of 'Rural Health', 'Agriculture and Allied Services' and 'Irrigation and Flood Control' since other components are same in both the cases. The sudden increase in 2005-06 was mainly because of huge increase in expenditure due to Rural Employment and Rural Health.

It is also important to look at the pattern of total Central Government expenditure. Figure 4 shows the share of overall government expenditure as percentage of GDP.

Figure 4: Trend in Central Government's expenditure (as percentage of GDP) for the period 1981-82 to 2007-08



It is found that expenditure of the Central Government has remained between 15-20% of GDP for most of the years. In between 1985-86 to 1990-91 the expenditure was above the level of 20% of GDP. The figure shows that, from the beginning of the reform process the share of total expenditure of the government has also fallen except for a couple of years. This indicates that the government has not been able to increase its revenue from the income which it generated in the economy. The government can increase its tax and non tax revenue through the expanding economic activities of the economy by imposing more and reasonable taxes. The taxes should be aimed to reduce inequality.

4.3 Components of Rural Expenditure

Now let us move to the components of the expenditure of the rural sector development. Presently under the Ministry of Rural Development, there are three departments i.e. Departments of Rural Development, Land Resources and Drinking Water Supply. But the number and types of departments have changed over time. For the period 1984-85 to 1990-91 there was no Ministry for Rural Development and these allocations were made under the Department of Rural Development, Ministry of Agriculture. Here the different types of expenditures have been classified into four major categories, out of which three are based on the current classification of the Ministry of Rural Development by which it formed the three departments. For all the years from 1981-82 onwards all the individual expenditures were classified in three categories viz. i) Rural Development ii) Land resources iii) Drinking Water & Sanitation iv) Rural Health. The total expenditure for all these three categories were obtained for all the years from 1981-82 to 2008-09. The following are the components of the above written four categories. The value is obtained by adding all the components.

i) Rural Development: Agricultural marketing, IRDP & Others, National Grid, Social Security and Welfare, Special Development Programmes, Rural Employment, Housing, Road and Bridges

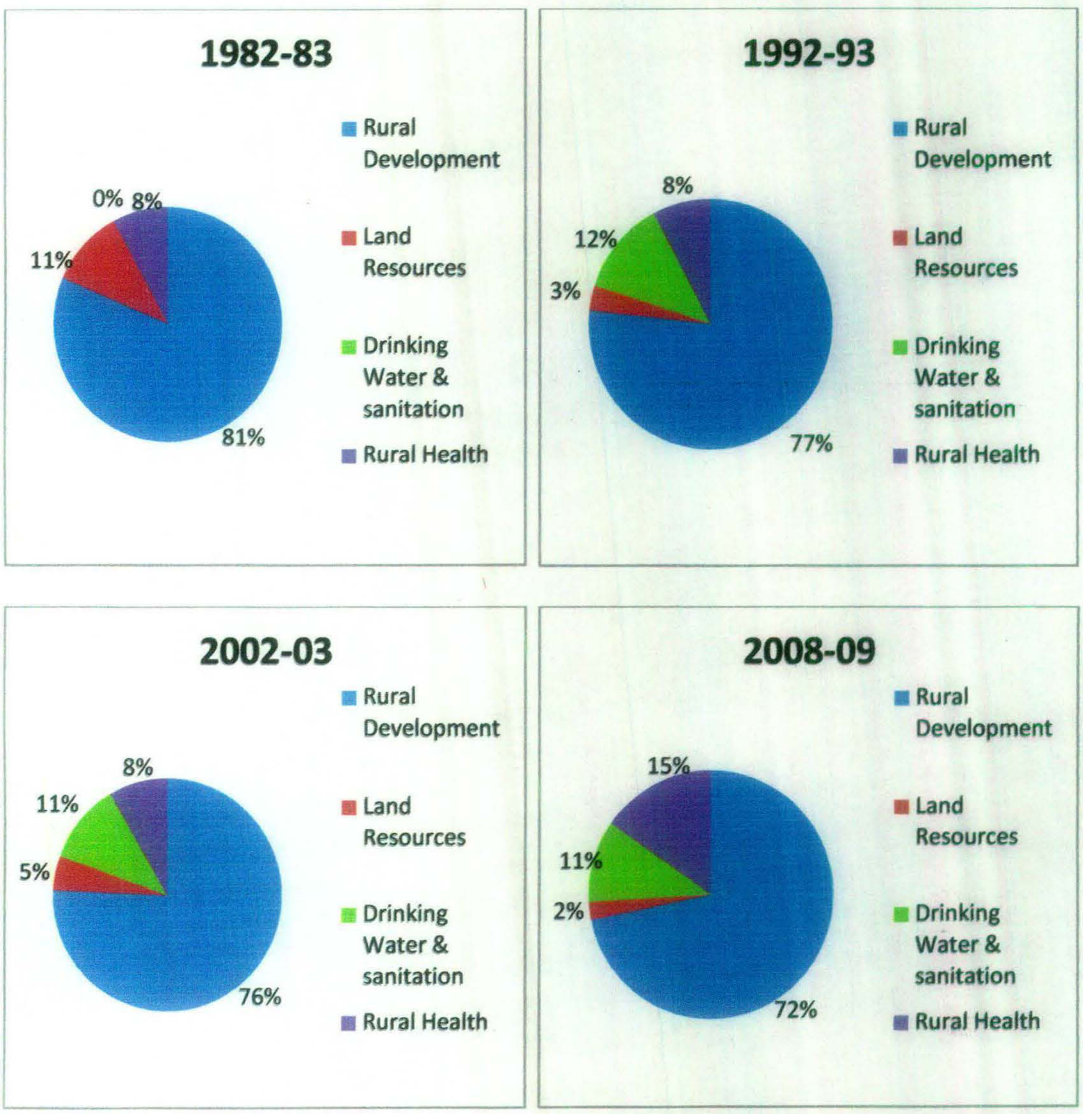
ii) Land resources: Land Reforms, Wasteland development

iii) Drinking Water & Sanitation: Drinking Water & sanitation

iv) Rural Health

The composition of the expenditure of the Central Government on the four major categories (Rural development, Land Resources, Drinking Water & Sanitation and Rural Health) over time is shown by figure 5. The pie charts are drawn for the gap of 10 years each except for the last year 2008-09 where the gap is 6 years. The planned allocations at current value are used to draw these charts.

Figure 5: Changes in composition of rural expenditure over time for major categories



The distribution of expenditure among these four major categories is not same for all the years. The share of Rural Development expenditure has decrease continuously over this period. The share of expenditure on rural development came down from 81% in 1982-83 to 72% in 2008-09. The fall in share of expenditure is not sudden but has decreased gradually. In the first 10 years the share decrease from 81% to 77 %, hence a fall of 4%. After the next 10 years the relative share has come down further and in the year 2002-03 it was 76% of the sum. Recent data shows that the expenditure on rural development gone down further by 4% to 72% in 2008-09.

Rural health expenditure shows a stable pattern. It had remained 8% of the sum for three of the above four years. In 2008-09 the expenditure share has almost doubled to 15%. This is because of the start of NRHM in 2005 by the Central Government which required a large amount of government expenditure.

The relative importance of Drinking Water & Sanitation has been same for three of the above four years as the allocation percentage was more or less constant (around 11%). From 1981-82 to 1984-85 no allocation was made towards this programme.

For Land resources a large share of allocation was made in the initial years however this has subsequently faced a substantial decline. The relative importance of Land resources has diminished over the years and the funds allocated have been diverted towards other expenditures. Thus, the allocation of 11% in year 1982-83 was reduced to 2% in year 2008-09.

4.4 Growth Rate of Central Government Expenditure on Rural Development

Compound Annual Growth Rate (CAGR) of the expenditure is calculated for all the components of rural sector expenditure, discussed above, at Current Prices and Constant Prices (1999-2000) for the period of 1981-82 to 2008-09. Growth rate of Real Per Capita Expenditure is also calculated. The growth rate analysis is useful as it gives immediate information about the period in simple numbers. But since it is calculated on the basis of amount spend only in the initial and final years; it leads to loss of some information. To capture the decadal change in the expenditure pattern the overall period is divided into three sub-periods; 1981 -82 to 1989-90, 1990-91 to 1999-2000 and 2000-01 to 2008-09. The expenditure value of the initial and final year is used to calculate the compound annual growth rate. The formula used to calculate is:

$$CAGR = ((V_f/V_i)^{1/f-i}-1)*100$$

Where, V_f= Value in the final year;

V_i= Value in the initial year.

f= final year, i= initial year.

This gives the growth rate of the entire decade.

Table 3 shows the growth rates of Central Government expenditure over the period 1981-82 to 2008-09. For calculation of per capita expenditure the rural population data is taken from the Census for 1981, 1991 and 2001. First the growth rate of rural population is calculated and then this rate is used to estimate the rural population for the remaining years. Population estimate for 2009 is taken to estimate the rural population after 2001.

Table 3: Compound Annual Growth Rate (%) of Rural Development expenditure of Central Government for 1980's, 1990's and 2000's

	Growth rate at Current prices			Growth rate at Constant Prices (1999-2000)			Per capita Growth rate at constant prices (1999-2000)		
	1981-82 to 1989-90	1990-91 to 1999-2000	2001-02 to 2008-09	1981-82 to 1989-90	1990-97 to 1999-2000	2001-02 to 2008-09	1981-82 to 1989-90	1990-91 to 1999-2000	2001-02 to 2008-09
Land Reforms	33.84	7.30	18.02	23.71	-1.21	12.85	21.51	-2.85	11.43
Agricultural marketing	-2.12	1.03	51.09	-9.53	-6.99	44.88	-11.14	-8.53	42.65
IRDP and others	13.88	11.51	24.33	5.26	2.67	18.89	3.39	0.97	17.39
National Grid	1.95			-5.77			-7.45		
Special Development Programmes	69.27	10.88	6.19	56.46	2.09	1.54	53.68	0.40	0.26
Rural Employment	35.77	7.16	37.97	25.49	-1.34	31.93	23.26	-2.97	30.26
Drinking Water & sanitation		17.56	19.10		8.24	13.88		6.45	12.44
Housing			23.22			17.83			16.34
Wasteland development	10.39	12.65	9.36	2.04	3.72	4.57	0.22	2.00	3.25
Road and Bridges			14.68			9.65			8.27
Total rural devt.	30.29	13.57	24.32	20.42	4.56	18.88	18.29	2.83	17.37
Rural Health		20.12	39.20		10.59	33.11		8.76	31.43
Agriculture and Allied Services		8.95	3.63		0.31	-0.91		-1.35	-2.16
Irrigation and Flood Control		15.21	-35.39		6.07	-38.22		4.31	- 39.00
Total	50.95	13.11	13.01	39.52	4.14	8.06	37.04	2.41	6.69
GDP	13.98	14.82	12.48	5.35	5.71	7.56	3.48	3.96	6.20

** The reason for missing gaps in the above table is the unavailability of the expenditure amount, either for the initial or for the final year under corresponding head.

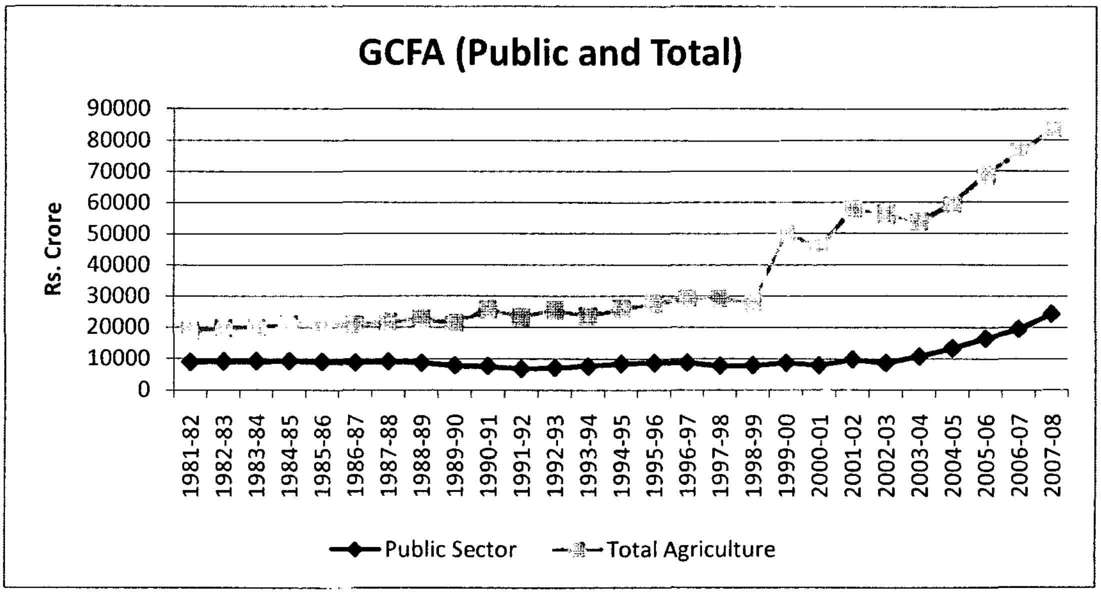
This table highlights some important facts. For almost all heads, the growth rate of expenditure in the 80's is more than in 90's. The decrease in growth rate in 1990's is mainly because of the fiscal crisis which led to a fiscal adjustment policy from 1992 onwards. The growth rate increased in 2000's but was unable to reach the level of eighties. The total Rural Development expenditure at constant prices (1999-2000) grew at the rate of 20.42% in the first decade (1980's). The large percent increase is due to low base year value i.e. low spending in 1981-82. The rate decreased to 4.56% in the subsequent decade. Again in the 2000's the growth rate of rural development expenditure increased to 18.88%. But this level is still lower than the level of 1980's. The negative growth rate of some of the components is one of the major concerns from the above. By a plenary look at the growth rate (at constant prices) it was found that expenditure on land reform, Agricultural marketing and rural employment grew at negative rates in 90's. The rate of negative growth is even more when we look at the real per capita expenditure. In 1990's, real per capita growth rate is negative even for Agriculture and allied services which is disturbing. Rural Employment and Agriculture are very important for the rural sector as most of the rural population is affected by it. Thus these components cannot be ignored by any rational government. Looking at constant prices the growth rate is negative in 1980's for Agricultural marketing and national Grid programme. This is because the subject is gradually transferred to State governments and the expenditure is reduced. In Rural Health expenditure we found that there is a huge growth rate in 2000's as compared to 90's. Although a good growth rate can be recorded, it has not increased throughout the decade but only from 2005 when the NRHM was launched. One of the major shifts in 2000's observed was the expenditure on 'Irrigation and Flood Control'. The real per capita growth rate of 'Irrigation and Flood Control' turns out to be -39.00% during 2000's. The expenditure has not been cut gradually but came down suddenly from Rs. 25,007 crore in 2005-06 to a mere amount of Rs. 462 crore in 2006-07; which only decreased further. The resources were diverted to the 'Bharat Nirman' programme of which 'Irrigation' is an important component. Phase I of the 'Bharat Nirman' programme was implemented in the period 2005-06 to 2008-09. It promised to create 10 million hectares of additional irrigation capacity by 2009 of which 6.5 million hectares brought under assured irrigation till 2009.

4.5 Public Investment in Indian Agriculture

In an attempt to see the government attention towards increasing agriculture production Capital formation in agricultural is taken into account. Capital formation is one of the basic factors for increasing production. Data for Capital formation in Agriculture and Allied Sector as well as in the Economy is taken for both public sector and Private sector from CSO at Current Prices. This is converted to constant prices using deflator (1999-2000).

It is observed from Table 4 that the share of Public Investment has continuously fallen over the period under consideration. While the share of Gross Capital Formation by Public sector in GCFA was close to 50% in 1981-82, it came down gradually to around 30% in 2007-08. Only in the recent years an increasing Public capital Formation share is observed. This decline in share of Public Capital formation can be observed from the graph below.

Figure 6: Trend in Public and Private Gross Capital Formation in Agriculture (GCFA)



The line for Public sector GCFA is stagnant around Rs. 10000 crores of value at 1999-2000 prices. It is only in the recent years that the capital formation has increased. The gap between the two lines (= GCFA - CGFA (Public Sector)) indicates the GCFA by Private Sector and Households. It is clearly visible from figure 6 that the gap has widened over time implying that more and more of the activity has been taken up by Private sector. A study by Gulati and Bathla (2001) observed that, within private sector organised corporate accounts for less than 5 per cent of Private GCFA at all-India level during 1990's. This means that a major chunk of the private GCFA is that of the household sector. Therefore, it is safe to conclude that during the period under consideration, the household sector was mainly responsible for the growth in the GCFA. Since poor farmers do not have the money to invest in infrastructure like personal irrigation facilities, agriculture, machinery etc. most of the investment must have been carried out by rich farmers. This has implications on the inequality in the access to basic infrastructure in agriculture. So, the government must ensure that rural poor have access to agriculture infrastructure which can only be done by greater government participation in Agricultural Capital Formation. The public capital formation is also necessary because it induces private investment.

The Public Capital Formation in agriculture and non-agriculture sector is also considered. The table above shows the status of Gross Capital Formation (GCF) at 1999-2000 prices. In the table, column (6) shows the percent share of public Capital Formation in agriculture in total Public Capital formation in Economy. The remaining is the non-agriculture share of public Capital Formation.

It is evident from the Table 4 that the share of Public Capital Formation in agriculture and allied sector out of total Public Capital Formation in the economy has come down from 12% in 1981-82 to 7.8% in 2007-08. On the other hand Public Capital Formation in non-agriculture sector out of total Public Capital Formation in the economy has witnessed an increase from 88% in 1981-82 to 92% in 2007-08. The agriculture sector has been neglected by the government which resulted in low planned fund to agriculture by the government. This may affect adversely the rural masses in particular and the overall economy in general.

Table 4: Gross Capital Formation in Agriculture & Allied Sector (GCFA) and Gross Domestic Capital Formation (GDFC) of economy (At constant Prices, 1999-2000)

Rs. crore

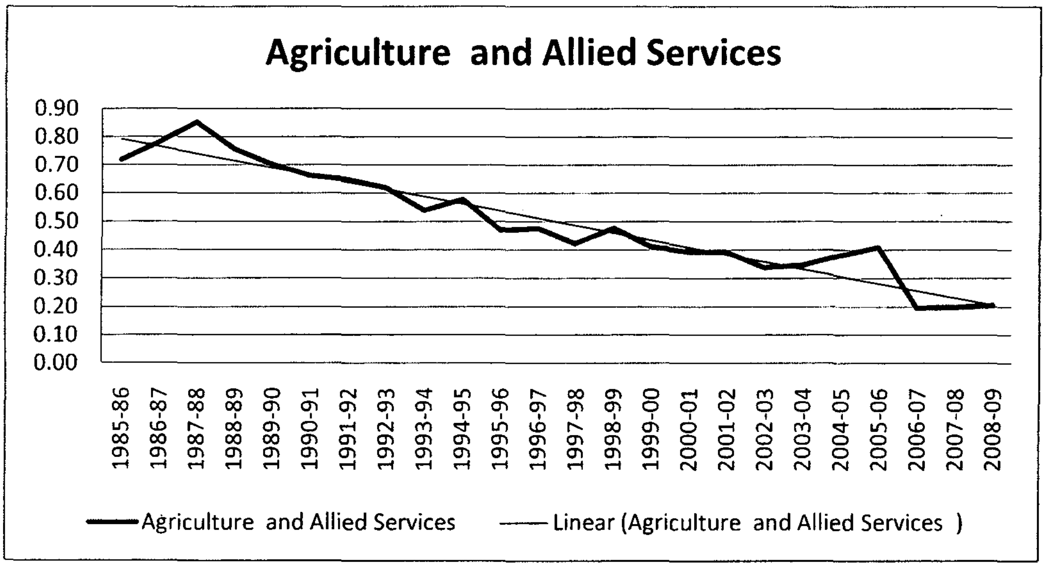
Year	GCFA (Public Sector)	GCF in Agriculture & Allied (GCFA)	GDCF of Economy (Public Sector)	(2) As a % of (3)	(2) As a % of (4)	100 - (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1981-82	8919.07	18808.27	74228	47.42	12.02	87.98
1982-83	9110.92	19723.55	81076.31	46.19	11.24	88.76
1983-84	9154.53	19927.63	78938.37	45.94	11.60	88.40
1984-85	9203.11	20932.08	87975.93	43.97	10.46	89.54
1985-86	9027.38	21098.05	96040	42.79	9.40	90.60
1986-87	8676.57	20763.83	104214.8	41.79	8.33	91.67
1987-88	9043.85	21750.13	92401.09	41.58	9.79	90.21
1988-89	8696.72	22787.83	101409.5	38.16	8.58	91.42
1989-90	7807.28	21385.05	108019.3	36.51	7.23	92.77
1990-91	7632.92	25717.98	111714.6	29.68	6.83	93.17
1991-92	6757.20	23405.09	106607.6	28.87	6.34	93.66
1992-93	7094.11	25452.13	108742.9	27.87	6.52	93.48
1993-94	7597.96	23558.63	109433.5	32.25	6.94	93.06
1994-95	8446.53	25870.14	124131.1	32.65	6.80	93.20
1995-96	8720.05	27554.18	117321	31.65	7.43	92.57
1996-97	8729.31	29211.36	115083.1	29.88	7.59	92.41
1997-98	7766.81	29186.41	112953.7	26.61	6.88	93.12
1998-99	7875.46	27744.29	118962.7	28.39	6.62	93.38
1999-00	8670.00	50150.97	144608.9	17.29	6.62	94.00
2000-01	7918.12	45259.96	129797.7	17.49	5.99	93.90
2001-02	9735.49	57961.57	147200.3	16.80	6.61	93.39
2002-03	8661.73	56049.91	135318.8	15.45	6.40	93.60
2003-04	10699.70	53828.65	152885.4	19.88	7.00	93.00
2004-05	13307.27	59605.04	180099.3	22.33	7.39	92.61
2005-06	16444.75	68801.28	216655	23.90	7.59	92.41
2006-07	19351.31	76060.62	250451.1	25.44	7.73	92.27
2007-08	24209.01	83606.31	310744.3	28.96	7.79	92.21

Source: Calculated from CSO

In the initial five year plans it was assumed that whereas agriculture was subject to secular diminishing returns, industrialization would allow surplus labour currently underemployed in agriculture to be more productively employed in industries which operated according to increasing returns to scale[6]. Agriculture was treated as bargain sector where it was believed that institutional changes were required in order to realize the production potential of agriculture, without much investment. This may have been the reasons for lesser public participation in rural sector. Indian agriculture currently needs greater attention of the government. It's high time we move ahead of the Mahalanobis model of treating agriculture as a bargain sector.

The Government allocation to Agriculture and Allied Services has been examined. The trend in share of expenditure (as % of GDP) on Agriculture and Allied Services is shown in figure 7.

Figure 7: Share of Agriculture and Allied Services expenditure (percent) in GDP



The graph shows a decreasing trend of the share of expenditure on Agriculture and Allied Services for the overall period. The share continuously decreased from 0.853% of GDP in 1987-88 to 0.2042 in 2008-09. If we look at the decade wise growth rate of the expenditure under this head, we fine that the CAGR at constant

[6] Chakravarty (1986)

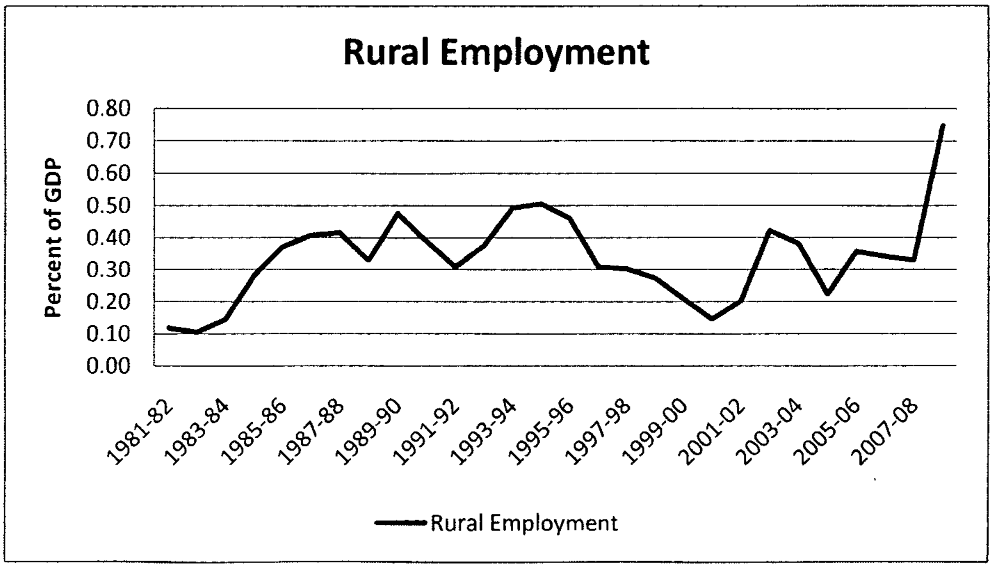
prices (1999-2000) was 0.31% in 90's and -0.91 in 2000's; indicating that the Agriculture sector expenditure is not taken seriously by the Central Government.

4.6 Rural Employment Expenditure

The expenditure patterns by aggregate do not reveal the trends in the expenditures of the main component within it. This makes it necessary to evaluate the important components of the Rural Sector Expenditure separately.

Direct Rural Employment Programmes are important as it helps directly in reducing poverty within the country. Public works programme have long been recognised as effective policy instruments for providing food security in rural areas. Figure 8 shows the trend in share of expenditure in rural employment programmes out of GDP.

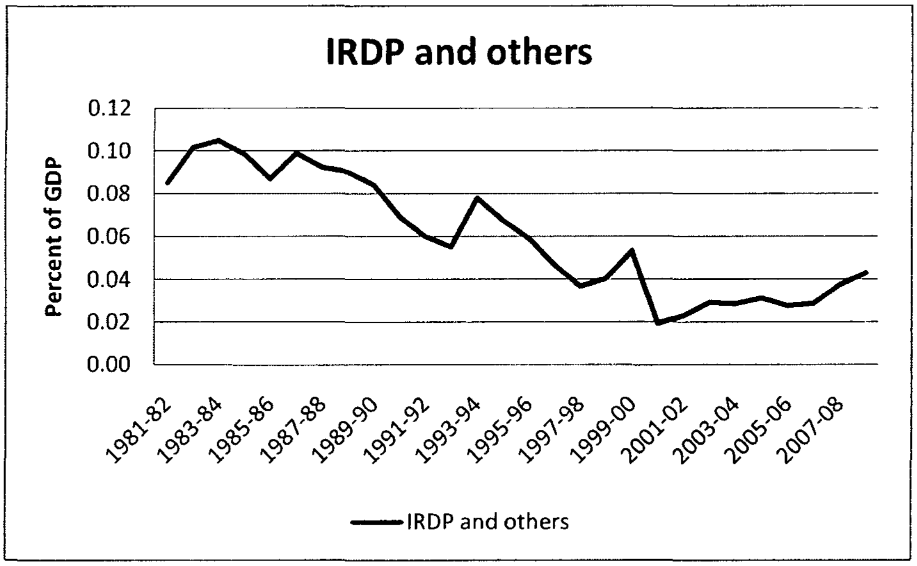
Figure 8: Share of Rural Employment expenditure (percent) in GDP.



It is observed that the share of rural employment expenditure is highly fluctuating over the period. While the initial years experienced a stable increasing pattern, the share of expenditure in the final years is fluctuating. The share of expenditure increased from 0.10% of GDP in 1981-82 to 0.42% in 1987-88. In the next year the share came down to 0.33% but again rose to 0.47% in 1989-90. After that the share decreased again. From 1994-95 we see a continuous decrease in the share of rural employment expenditure up to 2000-2001. The difference in expenditure share in the two decade is reflected in the decadal growth rate calculated in table 3. The growth rate of rural employment expenditure of the Central Government at constant prices (1999-2000) has come down from 25.49 in 1980's to -1.34% in 1990's. This has serious implications as public rural works programme play a major role in strengthening the rural sector. It contributes to the alleviation of poverty and capital construction. After 2000 the share has increased with fluctuation but the share remained less than the level of 1989-90 except for the last couple of year where there is a sharp increase in the share. This is mainly because of the NREGA component in the expenditure.

The IRDP was the other programme to provide productive employment opportunities to the rural poor. It aimed at providing income-generating assets to the rural poor through the provision of cheap bank credit. Figure 9 shows the trend in share of IRDP expenditure as percentage of GDP:

Figure 9: Share of IRDP expenditure (percent) in GDP



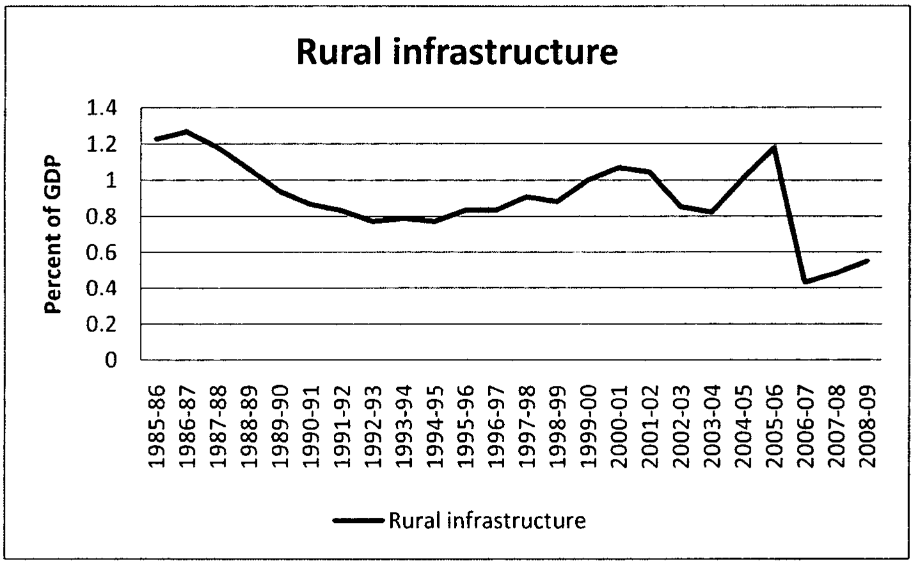
Unlike the other components, the share of expenditure on 'IRDP and others' has continuously declined from 1981-82 to 1999-00. After that from 2000-01 there is a slight increase in the share. This increase is mainly because of the start of Swarnjayanti Gram Swarozgar Yojana (SGSY). The Swarnjayanti Gram Swarozgar

Yojana (SGSY) is the major on-going programme for the self-employment of rural poor at present. The programme was started with effect from 01.04.1999 after review and restructuring of erstwhile Integrated Rural Development Programme (IRDP) and allied programmes namely Training of Rural Youth for Self Employment (TRYSEM), Development of Women and Children in Rural Areas (DWCRA) besides Million Wells Scheme (MWS). The earlier programmes are no more in operation with the launching of the SGSY.

4.7 Rural Infrastructure Expenditure

To get a picture of Centre's involvement in the development of rural sector the allocations for the programmes related to rural infrastructure is considered. The sum of allocations to Agriculture marketing, National Grid, Special development programmes, Drinking Water and Sanitation, Rural Housing, Roads and Bridges, Irrigation and flood control are taken to see the trend in rural infrastructure. Figure 10 reflects the trend in share of rural infrastructure expenditure as a share of GDP.

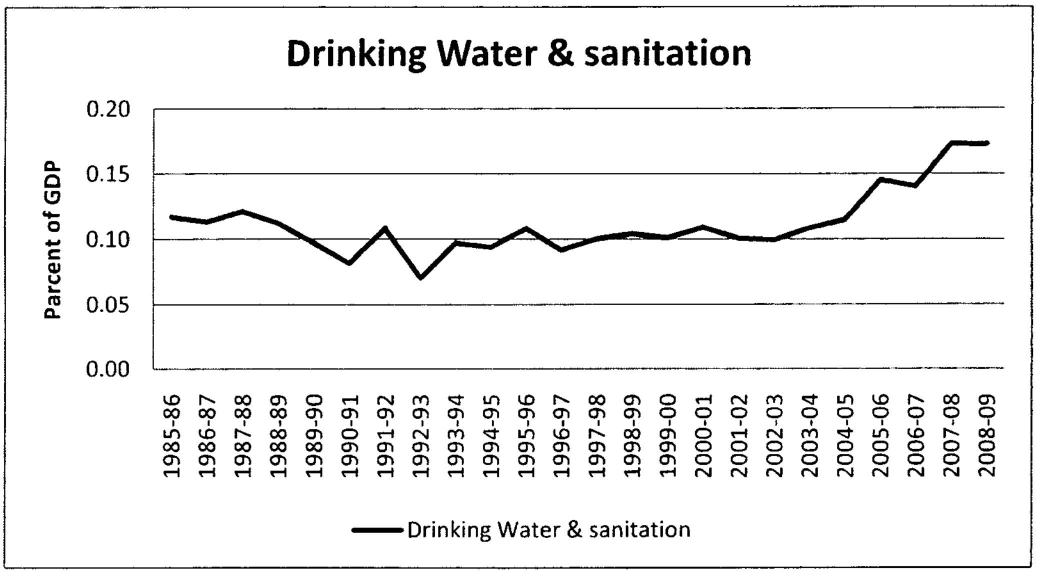
Figure 10: Trend in share of Rural Expenditure (as percent of GDP)



After showing a downward trend in the initial years the share has started increasing from 1995-96. After 2001-02, some fluctuation is observed in the following years. The decrease in share in the initial years is because the growth in spending was not matched with the growth in GDP. The priority of the government seemed to be more on the industrial development rather than in the development of rural infrastructure. The increasing trend in the following years was mainly due to spending on Rural Housing and Roads and Bridges. Rural housing schemes started in 1992-93 with the allocation of Rs. 5 crore for the year which increased substantially in the following years. During the year 1996-97, Rs. 1194 crore was allocated for rural housing. From year 2000-01 there is large allocation for Roads and Bridges also. This is because of the initiation of the PMGSY. The major decrease in year 2006-07 was due to the decrease in allocation for 'Irrigation and Flood control' as the resources were diverted to 'Bharat Nirman' programme.

Provision of 'Drinking Water and Sanitation' is an important part of rural infrastructure which is necessary to create capacity in Agriculture. This section observes the trend in the share of expenditure (as % of GDP) on Drinking Water and Supply. This is illustrated in Figure 11 shown below:

Figure 11: Trend in share of Drinking Water and Sanitation expenditure (percent) in GDP



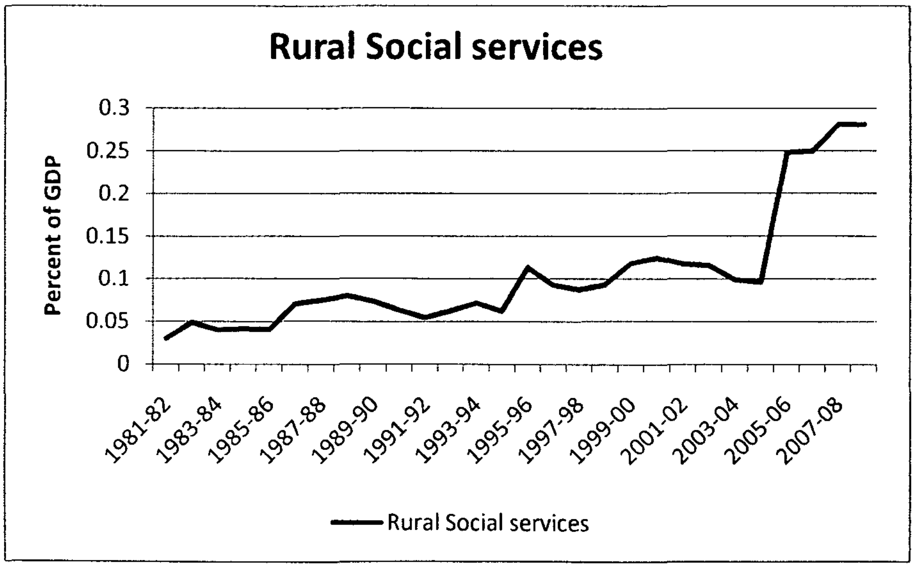
The share of expenditure on 'Drinking Water & Sanitation' to the Rural Sector has remained around 0.1% of GDP from the time it started (1985-86). But after 2004-05 it reflects a sharp increase. The CAGR for 'Drinking Water & Sanitation' at constant prices was 8.24% in 1990's and increased to 13.88% in 2000's. This implies that the

Centre increased its participation towards provision of 'Drinking Water & Sanitation' facilities in rural areas.

4.8 Trend in Expenditure on Rural Social Services

It is the duty of the State to provide public assistance to its aged citizens and in cases of sickness and disablement. The requirement of rural sector for public provided social services is even more. In the following section the Central Governments intervention in rural social services is analysed. The sum of allocations to Land Reform, Social Security and Welfare, Wasteland Development and Rural Health are taken as Rural Social services. The trend is shown in the figure 12.

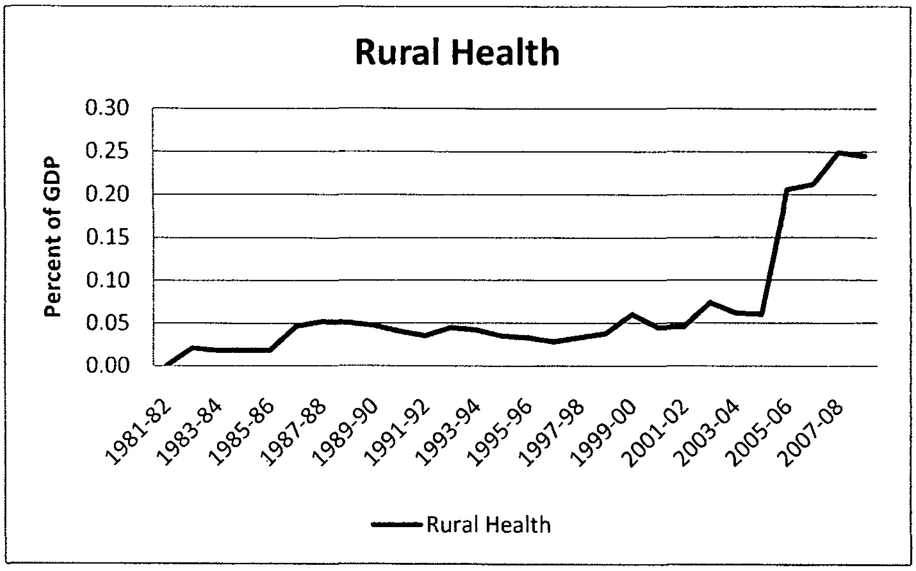
Figure 12: Trend in Share of Rural Social services expenditure (percent) in GDP



The allocation for Rural Social Services has shown a increasing trend right from the 1981-82. The share has increased with slight fluctuations except in the year 2005-06 where a big jump in the expenditure is observed. This was because of the huge allocation for NRHM. The NRHM was launched on 12th April 2005, to provide accessible, affordable and accountable quality health services to even the poorest household in the remotest rural region. The Mission is an articulation of the commitment of the Central Government to raise public spending on health to 2-3% of GDP.

Important constituents of expenditure on social services are also examined in the following sections. If we look at the Rural Health component, the Compound Annual Growth Rate of expenditure on Rural Health as Real Per Capita (Table 3) was 31.43% in 2000's compared to 8.76% in 90's. This means that lately the government has paid greater attention towards improving the rural health condition. If we look at the Rural Health data the trend is same. The following graph shows the share of GDP spent on rural health schemes.

Figure 13: Share of Rural Health expenditure (percent) in GDP



Here again the share of expenditure (as % of GDP) on Rural Health Schemes has increased at a very fast rate after 2004-05 after remaining fixed at around 0.05% for a long (1981-82 to 2004-05) period. This again confirms the finding that the government has paid greater attention toward health services and human development only in the recent years.

Land Reform is seen as an important tool to provide social security to rural poor. Land is the most important means of production in an agrarian economy without which no agricultural production can take place. The pattern of Ownership holding and operational holding of land was highly unequal at the time of Independence. Before Independence, there were three major systems of land tenure, namely Zamindari System, Mahalwari System and Ryotwari System which were highly exploitative in nature. Land reform was undertaken to remove the exploitative agrarian relations and to promote agricultural growth with social justice. Generating greater access to land by the landless rural poor is considered as an important programme for poverty alleviation in the rural sector. In this regard expenditure on land reform is an important part of the rural development expenditure. A huge difference is found between the decadal growth rates (CAGR) of expenditure in Table 3. In the 1990's the growth rate was minimal. Considering constant prices, the CAGR for allocation to land reform was negative in 1990's.

4.9 Observations

The study reveals that the expenditure of the Central Government to the rural sector has undergone a considerable change during the period (1981-82 to 2008-09) taken. The share of rural development expenditure (as % of GDP) has increased at a slower rate in post reform period compared to pre-reform period. After 2000 the expenditure has increased but the share is still lower than the level of 1980's. If we look at the CAGR the slowest growth rate was experienced in 1990's. The growth rate (CAGR) of rural employment expenditure of the Central Government at constant prices (1999-2000) has also come down from 25.49 in 1980's to -1.34% in 1990's. In the recent year the expenditure on Rural Employment has increased. Expenditure on Rural Health is another concern. Government has started allocating higher share on Rural Health only after 2004-05. The share of expenditure on agriculture and allied services has decreased continuously. Investment in Agriculture is another area of concern. Agriculture is treated as bargain sector and the importance public provision of infrastructure facility is ignored. As a result the share of public investment has fallen over time.

Chapter 5

Conclusion

This study investigated the role of Central Government in ensuring rural development in India over the period 1981-82 to 2008-09. The purpose of the study was to analyse the changes in the composition of rural sector expenditures from 1980's onwards. The study also tried to examine the proposition that there has been an improvement in the rural sector expenditure. The other research question explored in the study is the nature of interrelationship between reforms and their effects on the development of rural sector in India. The question of public participation in the expansion of Indian agriculture sector has also been considered.

The result of the study shows that the expenditure of the Central government to the rural sector has undergone a considerable change during the period of analysis. The share of rural sector expenditure is found to be decreasing over time with some fluctuations. It is observed that the share of rural sector expenditure in GDP during 2006-07 was less than half of the same 20 years earlier, i.e. during 1986-87. This observation indicates that the importance of rural sector has decreased and the share of expenditure allocated towards its upliftment has gone down; which goes against the basic nature of Indian public policy and its constitutional theories. There has been a sudden increase on this account in 2005-06 which was mainly because of huge increase in expenditure due to Rural Employment and Rural Health. An analysis of the funds allocated to the Ministry / Department of Rural development (referred to as rural development expenditure in this study) reveals an overall increasing trend in the share of rural development expenditure. However, the corresponding share is less than one percent which is far below the desired level given the importance of the components for the development of rural sector. It is observed that in the first 10 years (pre reform period) the share tripled but during the next 17 (post reform period) years there was an almost minimal increase in the share of rural development expenditure. There has been another increase in the share in

2008-09 because of a large increase in spending under National Rural Employment Guarantee Schemes.

Compound Annual Growth Rate (CAGR) of the allocations is calculated for all the components of rural sector expenditure, at Current Prices and Constant Prices (1999-2000) for the period of 1981-82 to 2008-09. Growth rate of Real Per Capita Expenditure is also calculated. Therefore, from this analysis it is found that, for almost all heads, the growth rate of expenditure in the 80's is more than in 90's. The decrease in growth rate in 1990's is mainly because of the fiscal crisis which led to a fiscal adjustment policy from 1992 onwards. The growth rate increased in 2000's but was unable to reach the level of eighties. The negative growth rate of some of the components is one of the major concerns. The expenditure on land reform, Agricultural marketing and rural employment grew at the negative rates in 90's (at constant prices). Looking at the real per capita growth rate, even agriculture and allied services grew negatively in the 90's which is an area of concern. Employment and Agriculture are very important for the rural sector as most of the rural population is affected by it. Thus these components cannot be ignored by any rational Government.

Since the expenditure patterns by aggregate does not reveal the trends in the expenditures of the main component within it, important components of the Rural Sector Expenditure are evaluated separately. Expenditure under different categories such as Rural Infrastructure, Rural Employment and Rural Social Sector are anlaysed separately. It is observed that the share of rural employment expenditure is fluctuating widely over the period taken. While the initial years experienced steady increase, the share of expenditure in the final years has fluctuated. The CAGR of rural employment expenditure of the Central Government at constant prices (1999-2000) has come down from 25.49 in 1980's to -1.34% in 1990's. This has serious implications for rural development as public rural works programme plays a major role in strengthening the rural sector. It also helps in the alleviation of poverty and capital formation. After 2000 the share has increased with some fluctuations. But the share remained less than the same reached during 1989-90 except recently where there is a sharp increase in the share. This is mainly because of the introduction of the NREGA component in the expenditure.

It has further been observed that the share of Rural Infrastructure expenditure exhibits a downward trend in the initial years up to 1994-95. The priority of the government seemed to be more on the industrial development rather than in the development of rural infrastructure in the initial years. However, in the recent years emphasis has been given on the provision of rural infrastructure with the initiation of the 'Bharat Nirman' programme. The allocation for Rural Social Services has shown a continuous increasing trend right from 1981-82. The share has increased with slight fluctuations except in the year 2005-06 when a big jump in the expenditure is observed. This was because of the huge allocation for NRHM which is an articulation of the commitment of the Central Government to enhance the public spending on health to 2-3% of GDP. This allocation is rightly so done keeping in mind the importance of health and sanitary issues.

In an attempt to analyse the inclination of the government towards increasing agricultural production, Capital formation in agricultural has also been taken into account. It is observed that the share of Public Investment has continuously fallen over the period under consideration. While the share of GCF of Public sector in GCFA was close to 50% in 1981-82, it came down gradually to around 30% in 2007-08. It is concluded that during the period under consideration, the household sector was mainly responsible for the growth in the GCFA, if indeed there is any. Further, since poor farmers do not have the money to invest in infrastructure like personal irrigation facilities, agriculture, machinery etc. most of the investment must have been carried out by rich farmers. This has implications on the inequality in the access to basic infrastructure in agriculture. Therefore, the government must ensure that rural poor too have access to agriculture infrastructure which can only be done by greater Government participation in Agricultural Capital Formation.

It is noted that the share of Public Capital Formation in agriculture and allied sector out of total Public Capital Formation in the economy has also come down from 12% in 1981-82 to 7.8% in 2007-08, demonstrating a continuously decreasing trend of the share of expenditure on Agriculture and Allied Services. An analysis of the decade wise growth rate of the expenditure under this head reveals that the CAGR at constant prices (1999-2000) was 0.31% in 90's and -0.91 in 2000's; indicating that the Agriculture sector expenditure is not being provided the due attention by the Central Government. This implies that the agriculture sector has been neglected by the Government which resulted in low planned fund transfer to the agricultural sector. It seems that agriculture has been treated as a bargain sector since long time which might have been the reasons for lesser public participation in rural sector. This may affect adversely the overall economy in general and the rural masses in particular. The study concludes by proposing that Indian agriculture is currently in dire need of greater Government attention.

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Annexes

Annex 1: An overview of 'Bharat Nirman' Programme

S.No	Components	Targets to be Achieved by 2009	Status	Finance
1.	Irrigation	10 million hectares of additional irrigation capacity to be created by 2009.	6.5 million hectares brought under assured irrigation till 2009. Remaining 3.5 million hectares to be completed by 2012.	The Ministry of Water Resources in collaboration with State Governments is responsible through major, medium and minor irrigation projects complemented by ground water development.
2.	Roads	To provide all-weather roads to every habitation over a 1000 population and above (500 in hilly and tribal areas); remaining 66802 habitations to be covered.	Road connections to be provide for remaining 23,000 villages approximately with population of 1000 or 500 in case of hilly or tribal areas by 2012.	Approximately Rs.48,000 crores is proposed to be invested to achieve this objective. 100% of the funds of this programme are being provided by the Central Government.
3.	Electricity	To provide electricity to remaining 125000 villages and to 23 million households.	Electricity to the remaining 40,000 villages approximately to be provided and connections to about 1.75 crore poor households by 2012.	Subsidy towards capital expenditure to the tune of 90% would be provided, through Rural Electrification Corporation Limited (REC). Electrification of un-electrified Below Poverty Line (BPL) households will be financed with 100% capital subsidy @ Rs.2200/- per connection in all rural habitations.
4.	Housing	To construct 60 lakh houses.	Target of 60 lakh additional houses for the poor achieved till 2009. New Target of 1.2 crore houses by	The Ministry of Rural Development through the Indira Awaas Yojana undertakes this activity as a Centrally Sponsored Scheme where the cost is

S.No	Components	Targets to be Achieved by 2009	Status	Finance
			2014 adopted.	shared between the Centre and States on 75:25 basis.
5.	Drinking water	To provide drinking water to 55067 uncovered habitations by 2009. All habitations with failed sources and water quality problems will be addressed.	Cover approximately 55 thousand uncovered habitations and provide safe drinking water to approximately 2.16 lakh villages affected by poor water quality. Safe drinking water to all uncovered habitations by 2012.	The Ministry of Rural Development, Department of Drinking Water Supply is responsible for meeting this goal in partnership with State Governments. The programme is a Centrally Sponsored Scheme which is funded on a 50% matching share basis between the Government of India and the State Government. For the rural water supply, component of Bharat Nirman, it was envisaged that Rs. 25,300 crores would be required as Central share during 4 years.
6.	Telephone connectivity	To connect remaining 66822 villages with telephone by 2007.	Increase rural tele-density to 40% by 2014 and provide broadband connectivity and Bharat Nirman Seva Kendras to all 2.5 lakh Panchayats by 2012. Percentage of Rural Teledensity as on 30.04.2010 was 24.97% for all India.	The resources for implementation of universal services obligation are raised through a Universal Service Levy which has presently been fixed at 5% of the adjusted gross revenue of all telecom service providers except the pure value added service providers like internet, voice mail, e-mail service providers. The rules also make a provision for the Central Government to give grants and loans to the Fund.

Source: Compiled from Bharat Nirman, GoI (2005); Department of telecommunication Delivery Monitoring Unit (DMU) report; Ministry of Rural Development; Ministry of Power (DMU report) etc, Annual Plan, Planning Commission, Various Years

Annex 2: Allocation of planned fund (Revised Estimates) under different heads for years 1981-82 to 2008-09 at constant Prices (1999-2000)

Rs. crore

Year	Land Reforms	Agricultural marketing	IRDP & others	National Grid	Social Security and Welfare	Special Devt. Programmes	Rural Employment	Drinking Water & sanitation
1981-82	6.64	38.85	574.65	13.11		4.37	794.85	
1982-83	3.95	36.15	708.62	10.07		3.02	732.17	
1983-84	7.35	19.60	789.53	11.14		3.71	1082.14	
1984-85	22.17	29.69	769.58	17.18		5.15	2198.30	
1985-86	11.85	24.25	707.87	19.22		65.90	3022.63	952.62
1986-87	10.79	27.57	839.81	11.99		120.63	3450.10	962.63
1987-88	9.72	16.92	812.96	9.58		124.85	3653.94	1067.11
1988-89	28.17	16.42	874.78	8.84		132.27	3179.61	1086.46
1989-90	36.43	17.43	866.09	8.15		156.91	4888.28	1000.93
1990-91	47.99	13.34	749.51	7.60		142.81	4209.32	886.22
1991-92	26.84	16.65	657.85	9.25		103.33	3375.82	1187.53
1992-93	40.51	8.51	637.87	3.42		102.97	4326.13	815.61
1993-94	54.85	17.29	952.94			160.80	6034.51	1189.60
1994-95[7]	39.15	5.53	879.13			191.46	6579.06	1224.34
1995-96	50.94	4.27	825.13		709.26	188.79	6424.62	1508.79
1996-97	47.26	7.74	705.73		658.05	217.63	4645.82	1381.90
1997-98	44.33	8.14	579.06		549.88	325.72	4747.97	1573.34
1998-99	35.83	7.53	676.05		664.68	231.86	4595.66	1743.75
1999-00	43.00	6.95	950.00		710.00	172.00	3729.00	1807.00
2000-01	91.96	6.46	358.33		710.36	231.56	2710.14	2033.76
2001-02	141.05	28.18	451.37		622.04	239.04	3973.00	1984.15
2002-03	126.81	61.59	594.18			243.20	8606.48	2037.95
2003-04	131.36	76.19	630.53			274.10	8442.05	2408.26
2004-05	155.23	94.72	747.09			287.01	5319.25	2739.32
2005-06	205.63	101.22	717.18			264.02	9325.04	3793.78
2006-07	204.35	127.76	820.45			262.05	9777.07	4026.30
2007-08	192.92	148.72	1173.40			234.68	10299.86	5403.44
2008-09	241.93	122.62	1430.33			261.74	24876.97	5753.83

Source: Budget Documents, GoI, Various Years

[7] MPLAD Fund of Rs 790 crores is also allocated to the Ministry of Rural Development for this year only. So the amount is subtracted to make it comparable.

Annex 3: Allocation of planned fund (Revised Estimates) under different heads for years 1981-82 to 2008-09 at constant Prices (1999-2000)

Rs. crore

Year	Rural Housing	Wasteland development	Road and Bridges	Total rural devt.	Rural Health	Agriculture and Allied Services	Irrigation and Flood Control
1981-82		196.65		1629.12			
1982-83		192.48		1686.47	144.29		
1983-84		159.26		2072.73	134.46		
1984-85		161.83		3203.90	140.14		
1985-86		169.78		4974.12	146.94	5849.53	8944.09
1986-87		194.81		5618.34	394.00	6641.55	9656.62
1987-88		191.74		5886.82	455.48	7508.26	9161.55
1988-89		255.85		5582.40	490.04	7334.86	9073.19
1989-90		231.05		7205.27	486.50	7227.67	8468.36
1990-91		202.31		6259.10	434.47	7163.75	8360.87
1991-92		186.83		5564.10	386.62	7123.45	7828.21
1992-93	8.50	172.06		6115.58	512.90	7163.77	7994.68
1993-94	15.45	312.08		8737.50	511.91	6586.03	8296.27
1994-95	31.66	323.68		9274.02	445.41	7528.98	8590.07
1995-96	634.47	367.53		10713.80	451.30	6553.58	9342.91
1996-97	1428.56	269.20		9361.90	418.84	7159.56	9540.50
1997-98	1283.53	265.68		9377.64	515.98	6653.58	11115.48
1998-99	1591.09	238.56		9785.01	628.33	7994.89	11231.07
1999-00	1659.00	281.00		9357.94	1075.00	7365.00	14209.99
2000-01	1443.00	682.81	3136.40	11404.79	829.00	7338.01	13102.28
2001-02	1707.03	658.25	2981.39	12785.50	894.71	7756.04	13684.04
2002-03	1406.18	733.66	2895.70	16705.74	1505.50	6933.55	10837.35
2003-04	1497.50	700.59	2729.67	16890.25	1367.40	7685.43	11296.95
2004-05	2164.06	716.37	2993.03	15216.08	1429.51	9100.34	15792.58
2005-06	1972.61	907.00	4724.61	22011.09	5384.55	10711.84	19930.88
2006-07	1994.20	872.87	5587.91	23672.98	6085.91	5615.55	350.97
2007-08	2633.63	821.13	6301.60	27209.39	7805.66	6188.61	328.84
2008-09	5360.54	976.53	6556.08	45580.57	8170.44	6819.98	278.21

Source: Budget Documents, GoI, Various Years

Annex 4: Non-planned Expenditure (Revised Estimates) under different heads for years 1981-82 to 2008-09 at Current Prices

Rs. crore

Year	Agricultural marketing	IRDP & others	National Grid	Special Devt. Programmes	Rural Employment	Drinking Water & sanitation	Secretariat-Economic services	Total
1981-82								
1982-83								
1983-84								
1984-85								
1985-86								
1986-87	2.8			1.78			1.57	6.15
1987-88	2.96			1.7	0.001		1.63	6.291
1988-89	3.2			1.76			1.7	6.66
1989-90	3.66			3.56			2.13	9.35
1990-91	6.05	0.21	0.02	3.24	0.18	0.57	2.34	12.61
1991-92	6.21	0.24	0.02	3.53	0.21	0.59	2.44	13.24
1992-93	6.53	0.24	0.02	3.83	0.21	0.59	2.7	14.12
1993-94	6.57	0.24	0.01	3.8	0.3	0.69	3.2	14.81
1994-95	8.5			3.28		0.73	4.56	17.07
1995-96	9.67			3.95		0.84	5.82	20.28
1996-97	10.47			4.25		0.92	6.41	22.05
1997-98	13.99			5.74		1.11	8.35	29.19
1998-99	15.12			6.99		1.18	9.23	32.52
1999-00	15.47			8.7		0.06	10.38	34.61
2000-01	17.3			9.1		0.07	11.78	38.25
2001-02	18.22			9.07		0.06	12.27	39.62
2002-03	18.9			9.1		0.06	14.97	43.03
2003-04	18.26			8.85		0.07	14.66	41.84
2004-05	19.36			8.77		0.07	14.98	43.18
2005-06	19.61			9.32		0.07	15.69	44.69
2006-07	22.29			10.26		0.01	17.12	49.68
2007-08	21.39			10.41			18.77	50.57
2008-09	27.07			12.73			23.77	63.57

Source: Budget Documents, GoI, Various Years

Annex 5: Allocation of planned funds to four major categories (Revised Estimates) under different heads for years 1981-82 to 2008-09 at Current Prices

Rs. crore

Year	Rural Development	Land Resources	Drinking Water & sanitation	Rural Health
1981-82	326.28	46.52		
1982-83	370.10	48.79		35.84
1983-84	513.46	44.88		36.22
1984-85	878.76	53.54		40.78
1985-86	1198.66	56.70	297.37	45.87
1986-87	1484.81	68.60	321.19	131.46
1987-88	1687.19	73.60	389.85	166.4
1988-89	1667.00	112.41	430.00	193.95
1989-90	2550.47	114.91	430.00	209
1990-91	2434.81	118.97	421.23	206.51
1991-92	2250.50	115.51	641.99	209.01
1992-93	2994.02	125.10	480.00	301.85
1993-94	4648.10	237.50	770.00	331.35
1994-95	5462.18	257.82	870.00	316.5
1995-96	6813.56	324.50	1170.00	349.96
1996-97	6405.22	264.50	1155.00	350.07
1997-98	6678.16	276.25	1402.00	459.79
1998-99	7478.44	264.20	1679.00	605
1999-00	7226.95	324.00	1807.00	1075
2000-01	8876.22	800.00	2100.00	856
2001-02	10636.47	850.00	2110.00	951.46
2002-03	15244.00	950.00	2250.00	1662.15
2003-04	15587.00	950.00	2750.00	1561.44
2004-05	13980.51	1050.00	3300.00	1722.1
2005-06	21461.00	1396.00	4760.00	6755.92
2006-07	24443.80	1418.00	5300.00	8011.15
2007-08	28705.32	1400.00	7460.00	10776.51
2008-09	57035.15	1800.00	8500.00	12070

Source: Budget Documents, GoI, Various Years

Annex 6: Total Expenditure, GDP and 'Agriculture and Allied Services GDP' of Indian Economy at Current Prices

Rs. crore

Year	GDP	Agriculture and Allied Services GDP	Total expenditure (revenue + capital)
1981-82	678033.00	233036.43	110406.84
1982-83	697861.00	231480.97	123965.67
1983-84	752669.00	254712.10	131912.90
1984-85	782484.00	254267.61	149943.97
1985-86	815049.00	254015.87	168713.90
1986-87	850217.00	255076.19	188564.81
1987-88	880267.00	259153.89	186846.89
1988-89	969702.00	295428.25	199885.60
1989-90	1029178.00	300796.68	216266.72
1990-91	1083572.00	317267.00	221535.68
1991-92	1099072.00	325865.95	206089.87
1992-93	1158025.00	335706.73	208350.94
1993-94	1223816.00	354054.61	219152.90
1994-95	1302076.00	371375.77	226205.76
1995-96	1396974.00	370036.16	229897.60
1996-97	1508378.00	412799.60	240495.07
1997-98	1573263.00	410868.78	260411.97
1998-99	1678410.00	436703.03	290113.40
1999-00	1786525.00	446514.75	298052.83
2000-01	1864300.00	435385.26	315322.50
2001-02	1972606.00	457592.47	340699.82
2002-03	2048287.00	427570.51	374301.27
2003-04	2222758.00	466189.20	412647.79
2004-05	2388768.00	458563.28	413596.98
2005-06	2616101.00	498638.75	403079.37
2006-07	2871120.00	521173.46	443187.06
2007-08	3129717.00	566852.20	516203.26
2008-09	3339375.00	583338.67	609873.97

Source: Reserve Bank of India (RBI)

Annex 7: Trends of Public Capital Formation in 'Indian Economy' and in 'Agriculture and Allied Sector' at Current Prices

Rs. crore

Year	Public Sector GCFA	Total CGFA	Gross Domestic Capital Formation (Public) GDCF
1981-82	2041	4304	16986
1982-83	2263	4899	20138
1983-84	2466	5368	21264
1984-85	2678	6091	25600
1985-86	2818	6586	29980
1986-87	2895	6928	34772
1987-88	3304	7946	33757
1988-89	3442	9019	40136
1989-90	3354	9187	46405
1990-91	3628	12224	53099
1991-92	3653	12653	57633
1992-93	4175	14979	63997
1993-94	4918	15249	70834
1994-95	6002	18383	88206
1995-96	6762	21367	90977
1996-97	7296	24415	96187
1997-98	6921	26008	100653
1998-99	7583	26714	114545
1999-00	8670	50151	144609
2000-01	8176	46734	134025
2001-02	10353	61638	156537
2002-03	9563	61882	149399
2003-04	12218	61467	174580
2004-05	16031	71805	216962
2005-06	20633	86324	271834
2006-07	25473	100122	329680
2007-08	33423	115427	429014

Source: Central Statistical Organisation (CSO)

Annex 8: Allocation of planned funds to Rural Infrastructure and Rural Social Services (Revised Estimates) for years 1981-82 to 2008-09 at Current Prices

Rs. crore

Year	Rural infrastructure	Rural Social services
1981-82	12.89	46.52
1982-83	12.23	84.63
1983-84	9.28	81.1
1984-85	15.14	94.32
1985-86	3123.51	102.57
1986-87	3596.64	200.06
1987-88	3792.14	240
1988-89	4083.35	306.36
1989-90	4146.4	323.91
1990-91	4473.06	325.48
1991-92	4943.85	324.52
1992-93	5257.62	426.95
1993-94	6265.27	568.85
1994-95	7136.48	574.32
1995-96	9056.71	1224.46
1996-97	10511.37	1164.57
1997-98	12748.25	1226.04
1998-99	14255.5	1509.2
1999-00	17854.95	2109
2000-01	20603.32	2389.5
2001-02	21931.97	2462.96
2002-03	19301	2612.15
2003-04	20877.01	2511.44
2004-05	28997.51	2772.1
2005-06	38628.16	8151.92
2006-07	16255.8	9429.15
2007-08	20779.32	12176.51
2008-09	27082.96	13870

Source: Budget Documents, GoI, Various Years

Annex 9: All India Population in Rural and Urban Sector

crore

Year	Rural	Urban	Total
1981	525	160	685
1991	628	217	846
2001	741	285	1027

Source: Census of India

Annex 10: Year wise All India Population in Rural and Urban Sector

crore

Year	Rural population (Crores)
1981-82	52.5
1982-83	53.44897
1983-84	54.41509
1984-85	55.39868
1985-86	56.40004
1986-87	57.41951
1987-88	58.4574
1988-89	59.51405
1989-90	60.58981
1990-91	61.68501
1991-92	62.8
1992-93	63.84774
1993-94	64.91295
1994-95	65.99594
1995-96	67.09699
1996-97	68.21642
1997-98	69.35452
1998-99	70.51161
1999-00	71.68801
2000-01	72.88403
2001-02	74.1
2002-03	75.00734
2003-04	75.92579
2004-05	76.85548
2005-06	77.79656
2006-07	78.74916
2007-08	79.71343
2008-09	80.6895

Source: Calculated from Census data