



Government of Bihar
Finance Department

Economic Survey
2007 - 2008

March 2008

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EXECUTIVE SUMMARY

Macro Overview

1. The slower pace of growth of Bihar economy in the current decade is because of its disadvantaged secondary and tertiary sector. In the primary sector, however, Bihar was able to register a higher growth rate (2.84 percent) than the national average (2.61 percent). The GSDP for the state shows large year-to-year variation, mainly because of variations of income from the primary sector. Thus, the Bihar economy is seen to suffer from two clear disadvantages — first, its growth rate is much lower than the national average and, second, there are large yearly variations in the growth rate.
2. The Per Capita Income in the state is the lowest in India. In 2004-05, the Per Capita Income in Bihar (Rs. 5772) was only 25.1 percent of the national Per Capita Income (Rs. 22946). However, this disadvantage is not equally present in all the districts of the state. The Per Capita Income of the districts varies from Rs. 31441 (Patna) to Rs. 3636 (Sheohar). Broadly speaking, the districts in south Bihar are generally more prosperous than those in the north.
3. The state government has taken a series of measures directed towards all the dimensions of good governance. The *Panchayati Raj Institutions* are being strengthened and given financial teeth to ensure local participation in both development plans and overall governance. The *Panchayat Sarkar* is being made functional by providing not only physical infrastructure in terms of office buildings, but also manpower to operationalise local governance. *Gram Kachharis* have been established and *Nyaymitras* appointed.
4. As a move to bring about greater equity in its development programmes, the state government has reserved 50 percent of all the posts of *Panchayati Raj Institutions* for women and 20 percent for extremely backward classes. For SC/ST also, reservation was introduced in proportion to their population in the local bodies.
5. Administrative Reforms Commission has been constituted by the state government to strengthen the administrative setup and make it more efficient and accountable. The Commission had recommended a restructuring of the departments so as to decrease their

number from 47 to 36. Till date, the state government, acting on partial acceptance of this recommendation, has reconstituted certain departments to bring their number to 44.

6. The Right to Information Act 2006 has been implemented in the state. The first information call centre in the country has been established in Bihar through which the public would be able to seek information under the Right to Information Act, using basic phone services of BSNL.
7. The holding of the *janta darbar* by the Chief Minister has created a desirable pressure on the police administration to record crimes. In the last two years, there has been a significant fall in most of the major crimes such as murder, dacoity, kidnapping, kidnapping for ransom, road dacoity, bank dacoity, etc.
8. Bihar is particularly vulnerable to floods and earthquakes. Floods are a regular feature in Bihar and a significant portion of the state falls within the highly vulnerable seismic Zones IV and V of India. The entire approach of the state government to disaster management has undergone a paradigm shift. It has spend Rs. 1365 crore for a massive flood relief operations in 2007.

Agriculture

1. Changes in land utilisation pattern in Bihar have been marginal but significant. Between 2005-06 and 2006-07, the net sown area has fallen and the area sown more than once also has fallen from 24.89 percent to 19.66 percent, thereby showing a fall of 4.9 lakh hectares. Over the years, there has been a increase in the non-agricultural use of geographical area, which has increased by 10.3 thousand hectares between 2000-01 to 2005-06. While land under miscellaneous tree crops and groves has increased by 9.4 thousand hectares, there has been a significant increase in current fallow land by 88.9 thousand hectares. A fall in the net sown area and increase in the area of current fallow land could be indicative of either falling soil fertility or a non-remunerative agriculture or both.
2. Agricultural production for 2007-08 has fallen short of the production levels achieved in 2006-07. Overall foodgrain production in the state has fallen by 26.04 percent, with a fall in its acreage also by 7.90 percent. Production of oilseeds too has fallen by 21.53 percent accompanied by a 7.93 percent fall in its acreage. While acreage of sugarcane has increased in 2007-08 by 2.19 percent, its production has fallen by 7.65 percent, due to floods.

3. While the state is very richly endowed with water resources, their spatial and temporal distribution have been a source of perennial problem which are to be seen in simultaneity of floods and drought in different regions of the state. Interlinking of rivers is being planned as a step towards integrated water management which would generate additional irrigation capacity, alleviate problems of floods and droughts and also facilitate simultaneous development of indigenous irrigation system.
4. At present, 9.41 lakh hectares of area of the state is water logged. Of these, 8.35 lakh hectares are in north Bihar, and 1.06 lakh hectares fall in the Mokama *Tal* area. While 1.75 lakh hectares of the water logged area has been reclaimed till date, reclamation of the remaining part is not economically viable.
5. Fertiliser consumption in the state has been increasing in the post-bifurcation period. However, availability of DAP was less than what was demanded by the state government and, as a consequence, its consumption is likely to have been constrained by supply. Against a demand of 2.5 lakh MT for Kharif-2007, only 1.10 lakh DAP was available in the state.
6. The supply of good quality seed has been a long standing problem in the state and Bihar has one of the poorest seed replacement ratios in the country. Over the past two years, a series of measures have been taken for timely and sufficient supply of good quality seeds for increasing the seed replacement ratios for different crops.
7. The dependence on the market for inputs, where marginal and small holdings together account for 96.50 percent of total number of holdings and 67.36 percent of total owned area, makes agricultural credit a critical input in Bihar's agriculture. However, agricultural credit scenario is not very encouraging. While only 1.3 percent of cultivators in Bihar availed institutional credit during 2002-03, the corresponding figure for India as a whole was 24.2 percent. Also, average amount of credit disbursed to cultivators during the year was found to be a meager sum of Rs 322 against Rs. 2647 for all India.
8. Following abolition of Bihar State Agricultural Marketing Board (BSAMB), the fate of 1500 rural *hats* under its purview is also hanging in balance. The Board had developed infrastructure during 1978-79 with the World Bank assistance, but at most places these *hats* are in a very poor shape because of poor maintenance.

Industry and Allied Sectors

1. The share of the industrial sector in the GSDP is 5.4 percent. Compared to the national average of industrial income at 20.1 percent, this figure is very low. Bihar's total industrial income is only 0.4 percent of the total national income from the same sector. It is also a fact that overall industrial sector of the state is dominated by unregistered units, accounting for half of its total income.
2. The industrial sector in Bihar covers a range of products, but in terms of value addition, the important industries are food, beverages, tobacco and petroleum products. Together, they account for more than 85 percent of the total industrial income. The remaining industries contribute a marginal 15 percent to the total industrial income of the state.
3. There are 262 large and medium industrial units in the state which are concentrated only in few divisions of the state. The highest concentration of large and medium industrial units is in the Patna division (38.2 percent). The concentration pattern of large and medium industries shows that 10 districts do not have any large or medium industrial units and 11 districts have less than 5 in each.
4. Small industries, dominated by tiny enterprises and artisan based industries, play a significant role in the industrial sector of the state. Generally, their contribution to employment generation is substantial, even when the levels of productivity and total production remain low in this sector. The total employment provided by this sector in 2007-08 (upto December, 2007) was 5.5 lakh mandays.
5. The share of tiny industrial units among all the SSI units (both registered and unregistered) is as high as 99.9 percent. These units are evenly spread throughout the state with a relatively low employment potential. While the small, medium and large industrial units display geographical concentration, the tiny and artisan based industries are spread across the state.
6. There are 1675 exporting units in the industrial sector which is dominated by unregistered units. Only 80 units are registered and the remaining 1596 are unregistered. The gross exports amounts to Rs. 25.30 crore, which is merely 0.68 percent of the gross output in the sector

(Rs. 3703 crore). Also, there is regional concentration in the export oriented industrial units in the state.

7. For the agro-based industries, there are vast investment opportunities in sugar and allied industries, particularly in the production of ethanol and co-generated energy. In view of this, the sugar industry in the state has been given a thrust during the Eleventh Plan period. It is envisaged to boost sugarcane acreage and productivity by providing incentives. The major constraints for growth of sugarcane cultivation have been waterlogging, shortage of fertilizers, improved variety of seeds and inadequate irrigation facilities. By and large, the interventions needed are demonstrations, training, technology transfer and improved implements. An attractive incentive policy aimed to encourage investments in sugarcane based industries has been declared by the state government.
8. The size of the non-agro-based industries in the state is rather small. Apart from the petroleum refinery at Barauni, there are only a few metal-based industries in Bihar which include metal cutlery, utensils and kitchenware and non-structural ceramic ware. The other non-agro-based industries are, leather and handloom.
9. Despite the huge potential, the tourism industry in the state is still in its infancy. In spite of that, there is a steady increase in the number of Indian and foreign tourists to Bihar, the total of which increased from 61.06 lakh in 2003 to 107.65 lakh in 2006. Recognising the potential of the sector and the need to revitalize tourism, the state government has declared the tourism sector at par with other industries and a draft policy on tourism is in the pipeline.
10. Industrial sickness is one of the major problems of Bihar. Out of a total 72.6 thousand registered SSI units in the state, 52.1 thousand units were working and 20.5 thousand units were closed as per the third All India Census of SSI (2001-02).
11. Substantial prospects of industrialisation exist in the state, particularly in the agro-based industrial sector. For attracting investments, infrastructure development is the sine qua non. With the new initiatives by the state government, the confidence of the industrial sector is increasing, as is evidenced by the new proposals coming to the state.

Physical Infrastructure

1. Building up quality infrastructure is one of the major challenges for Bihar. The state government has prioritised the development of a strong network of infrastructure to promote investment and economic growth. The major focus of state government's initiative are power and road.
2. For power, the installed capacity in Bihar has been moribund and currently under renovation and modernization. It may be noted that 70 percent of the generating capacity of erstwhile Bihar has fallen within the jurisdiction of Jharkhand, leaving 70 percent load with the present Bihar after bifurcation. Thus, Bihar is totally dependent on its share in central power stations. The special task force on Bihar Power Sector set up by Government of India reported that Bihar faced energy and power shortage of 8.1 percent and 16.9 percent respectively during 2006-07. During April-May, 2007, the state had energy shortage of 7.9 percent and peak deficit of 12.2 percent. According to the special task force, the power sector in Bihar is expected to face an energy shortage of 41 percent at the end of the Eleventh Plan and peak deficit of 58 percent. BSEB/BSHPC has proposed to install new power plants to meet the future power requirement in the state of Bihar.
3. Bihar has a total road length of 81655 kms, including national highways (4.4 percent), state highways (5.9 percent), major district roads (9.5 percent), other district roads (4.7 percent) and village roads (77.5 percent). Part of the roads under the last two categories are unpaved. The state government has given top most priority to the development of road sector. Immediate attention is being given to repair the entire National Highway stretches within the state. A total of 773 kms of national highways was renovated in 2006-07. In 2007-08, another 1230 kms of national highways are expected to be renovated; by December, 2007, the work has already been done in 360 kms. All the State Highways are also being upgraded to two-lane highways at par with modern standards.
4. The development of civil aviation is still nascent in the state. However, there has been a steady growth in aircraft movement, number of passenger, and quantum of freight and mail in recent years. The domestic aircraft movement in Patna airport has more than doubled in the last twelve years from 2444 in 1995-96 to 4970 in 2006-07. In the last two years, there has been an

accelerated growth in passenger traffic. The telephone services in Bihar (basic and mobile) are provided by five agencies — BSNL, Reliance, Bharti, Tata Telecom and Aircel. Of these, BSNL has the largest share of the market including the mobile connections.

5. There are a total of 9054 post offices in the state, of which 8622 are rural and 432 are urban post offices. Of these post offices, while 8939 are permanent offices, 115 are temporary or experimental post offices. There has been a very sharp decline in the postal traffic in the state. However, post offices still play a major role in mobilising small savings. In 2006-07, of Rs. 3485.83 crore was mobilized in post offices with 67.27 lakh live accounts.

Social Sector

1. In terms of human development, Bihar was at the lowest position among the major states in India. This was so in 1981, 1991 and 2001 as well. In 2001, the Human Development Index for Bihar was only 0.367, compared to 0.472 for the country.
2. In terms of the literacy rate, Bihar performs much below the national average. The literacy rate in Bihar in 2001 was only 47.0 percent as against a national average of 65.4 percent. Such low educational development acts as a major constraint on the efforts for economic development. The district having the highest literacy rate is Patna (62.9 percent) and the lowest level of literacy was found in Kishanganj district (31.1 percent). The dropout rates in Bihar are much above the national average. The dropout rate is higher among girls as compared to boys, although at the primary level, drop-out rates are higher among boys. Dropout rates are significantly higher among SCs/STs as compared to the total population.
3. The unsatisfactory functioning of schools is due to shortage of teachers, teacher absenteeism and involvement of teachers in non-teaching duties. In view of this, the state government has taken a decision to appoint 2.36 lakh elementary and secondary school teachers to clear the entire backlog of vacancies at these levels.
4. There has been a relative neglect of technical, medical and vocational education in Bihar. The number of engineering / architecture degree colleges in Bihar is only 7 and the number of Medical and related colleges is 23. The number of Polytechnic Institutes is only 13 in Bihar. Bihar has done comparatively better in providing Arts, Science and Commerce education and

neglected the technical, medial and vocational fields. Thus, Bihar is an ideal place for the proposed location of one new IIT and one new IIM during the Eleventh Plan period.

5. The state government had constituted a Common Schooling System Commission in August, 2006. The Commission had set the target that the elementary education should be universalized in Bihar by 2012-13. For the universalisation of secondary education, the target year is 2015-16 and it was also planned to universalise senior secondary education by 2016-17. For attaining these goals, the Commission has estimated the number of required primary, middle and higher secondary schools in each year from 2008-09 to 2016-17.
6. Demographic indicators are also found to be unfavourable in Bihar and show characteristics of a highly disadvantaged state. The birth rate in Bihar in 2005 was high 30.4, as against a national average of 23.8. The death rate at 8.1 was also comparatively higher in Bihar. The IMR for Bihar in 2005 was 61 per 1000 live births against a national average of 58. The Child Mortality Rate in Bihar in 2000 was also high at 34.7 per thousand live births against a national average of 29.3.
7. A sum of Rs. 222 crore has been invested so far to enhance infrastructure in health and the resources have been evenly distributed to build up infrastructure from the PHCs to the district hospitals. A State Health Resource Centre is being set up for which the tendering process has been completed. The available human resource has been reorganised to enhance its effective deployment. The government has taken a conscious decision to provide 24-hours services at PHCs by redeploying staff from the APHCs.
8. The incidence of poverty has come down from the level of 62.2 percent in 1983-84 to 41.4 percent in 2004-05. Nevertheless, the poverty ratio for 2004-05 is still quite high compared to the national figure of 27.5 percent.
9. A number of poverty alleviation programmes have been designed and implemented over the years to help the poor come out of their poverty. For building up their social capital, a cooperative environment is sought to be created by forming Self-Help Group (SHG) which, besides strengthening their social capital, could also lead to good economic returns to their pooled labour and skill. Under this, the *Swarnajayanti Grameen Swarojgar Yojna* (SGSY) plays an important role not only aiding the formation SHGs, but also providing the groups

with opportunities to undertake an economic enterprises. Similarly, National Rural Employment Guarantee Programme (NREGP) is a landmark programme which has made 'access to employment' a constitutional right of the citizens. Similarly, *Indira Awas Yojna* (IAY) has been for long a popular programme for addressing the cause of the homeless in society.

Banking and Allied Sectors

1. Bihar is underserved in terms of banking facilities. The state accounts for only 5.0 percent of all the bank branches in the country, although it accounts for 8.1 percent of country's population. There has practically been no growth in this sector during the period 2004-06.
2. While there has been significant growth in total deposits in Bihar during years 2005-06 to 2006-07, Bihar's share in the total credit of scheduled commercial banks has remained practically the same; in fact, it declined marginally during 2005-06 and thereafter remained unchanged. In 2007, the per capita deposit in Bihar (Rs. 5,035) was 21.5 percent of the all India figure (Rs. 23,382). In contrast, per capita credit in Bihar (Rs. 1,518) was only 8.7 percent of the national average (Rs. 17,541).
3. In 2006-07, the priority sector advances constituted 63 percent of the total advances, of which agriculture claimed 34.1 percent. The advances made to the small scale industries have been very limited (4.3 percent). For augmenting credit flow to this sector, development of infrastructure in power and roadways would be necessary alongwith the revival of the Industrial Estates.
4. As on March 2006, agriculture accounted for about 22.7 percent of the total credit, industry and manufacturing about 22.2 percent, personal loans 31.8 percent, trade 14.8 percent and the rest 8.5 percent. The inter se distribution of credit among the different sectors showed minor variations.
5. The CD ratio of Bihar currently stands at 31.1 percent, far below the national average of 75 percent, and way behind the CD ratios of states like Maharashtra (98 percent), Rajasthan (82.5 percent) or even Madhya Pradesh (62.2 percent). The poor CD ratio of the state can be

attributed to a number of factors such as poor bank presence, poor credit absorption capacity, poor infrastructure, apart from higher incidence of NPA (Non Performing Assets) accounts.

6. The low disbursement of credit also indicates that the credit requirements of the state are being met at higher rates of interest from private lending agencies, eating into the profitability of enterprises in the state. This naturally is a serious hindrance to industrial growth in the state. Further, this also indicted flights of capital away from the state.
7. CD ratios across districts show wide variations, form 18.8 percent in Siwan to 57.7 percent in neighbouring West Champaran. CD ratios of RRBs also show similar variations across different districts with an even wider range, the highest being 63.3 percent for Katihar and the lowest being 19.9 percent for Jehanabad. The high CD ratios in many districts are, however, related to high accumulated interests on previous loans; they do not reflect the banks' willingness to increase the ground level credit flow.
8. At the state level, there are only 2 functional Government Companies/ Corporations working in the financial sector — Bihar State Financial Corporation (BSFC) and Bihar State Credit and Investment Corporation (BSCICO). BSFC, originally established in 1954, was revived in 2004-05. BSCICO was established in 1975. BSFC has arrears of accounts for 1 year while the BSCICO has four years' arrears in accounts. BSFC has been earning some profits; in case of BSCICO, the losses which were move than Rs. 27 crore in 200-01 have been reduced to Rs. 9 crore in 2001-02.
9. Till December 2007, NABARD had sanctioned 9,372 projects in the state under the RIDF, of which as many as 7,951 are related to minor irrigation. It has disbursed only Rs. 540 crore in the state out of the total sanctioned amount of Rs 1723.70 crore. The total credit disbursed by NABARD by way of refinancing the banks amounted to Rs 156 crore during 2006-07.
10. Bihar is gradually catching up with other states in SHG Banks Linkages. As on March 2007 a cumulative number of 72,638 SHGs were credit linked to Banks and the total credit flow to these SHGs was Rs. 202.98 crore. NABARD, has estimated that there is a potential for formation of around 5 lakh SHGs, 1.5 lakh of which can be credit linked by 2006-07. Major handicaps in the spread of SHG-Bank Linkage Programme include the absence of reputed NGOs and low awareness of SHG lending among the stakeholders.

11. Among the different schemes for rural poverty alleviation, SGSY and PMRY are the important anti-poverty programmes in the state. However, for SGSY and PMRY schemes, the recovery rates are only 31.12 and 24.69 percent respectively.

Public Finance

1. Till 2003-04, the state government had a deficit in its revenue account, but it had a surplus of more than Rs. 1000 crore in the revenue account for the first time in 2004-05. This surplus has been increasing continuously since then and is poised to increase to about Rs. 3500 crore at the end of 2007-08. This could be possible by increasing revenue, especially since 2005-06, and by containing expenditure, particularly by efficient debt management. After 2003-04, the Gross Fiscal Deficit (GFD) as percentage of GSDP has been decreasing and the state is now well poised to achieve the FRBMA target of containing the GFD within 3 percent of GSDP.
2. The fiscal position of the state government started showing improvements since 2004-05 and there was a distinct turnaround in its fiscal position in 2006-07 due mainly to substantial increase in the central grants and share of taxes supplemented by better expenditure and debt management. The sustainability parameters have improved significantly, though the tax potential remains substantially untapped. Further, the state government is now in a much better position to direct its resources towards social sector and improving infrastructure. In terms of vulnerability, however, the state government still remains overwhelmingly dependent on the external resources.
3. The state government's own revenue, tax and non-tax combined, barely meets 22 percent of its total expenditure, and the rest has to come from its share of taxes and grants from the central government. While the total revenue of the state government has grown by 150 percent during the last 5 years, its own total revenue, tax and non-tax combined, has grown only by 76 percent.
4. While the development expenditure of Bihar has constituted about 60-70 percent of the total expenditure during all the years, in absolute term, it has more than doubled over the years, except for a marginal decline in 2004-05. The non- developmental expenditure, however, has increased at a slower rate. Around 80 percent of the total expenditure has been non-plan

5. The gross transfer of resources from the central government to Bihar increased steadily from 51 to 66 percent of the aggregate disbursements. More than 80 percent of the gross transfer to the state government came from its share of central taxes and the rest from grants and loans. There is not much difference between the gross and net figures of resource transfer, as the state government received only small amount of loan from the central government during the last 3 years.
6. The outstanding liability as a percentage of GSDP had increased from 49 percent in 2002-03 to 53 percent in 2005-06, but thereafter it has been brought down to less than 46 percent during the next two years. This reflects the state government's ability to contain the borrowings. The total growth of outstanding liabilities since 2002-03 has been 48 percent. The major part of this huge debt (64 percent) is due to the internal loans raised by the state government from the market, and about 16 percent from the central government. One significant feature of the composition of outstanding debt is that the loans from the central government has been continually reducing since 2002-03.
7. The major sources of taxes are sales tax, stamp and registration fees, excise duty of the state, taxes on goods and passengers and taxes on vehicles. These 5 taxes together make up more than 95 percent of the total tax receipts of the state government. Of these, sales tax alone comprises more than 50 percent of the total tax receipts, followed by stamp and registration fees (15 percent). These taxes are highly buoyant and their yields increase with the increase in the level of the GSDP. The cost of collection was insignificant compared to the total collection for all major taxes, except for stamp and registration fees, where it was about 8 percent of total collection.
8. The tax and non-tax revenue of Bihar together constitute only about 5 percent of its GSDP which is too low, even at the existing level of poverty. By examining the buoyancy ratios, it can be seen that the values of buoyancy are quite high, since the total revenue of the state as

well as its own revenue are rising faster than the change in its GSDP. Thus, it can be expected that the tax-GDP ratio will rise more rapidly in future.

9. The general services constitutes the bulk of expenditure from the Consolidated Fund (31 percent), followed by social services (27 percent) and economic services (14 percent) in 2007-08. The state government has accorded high priority to social sectors, in view of the low levels of education and health indicators in the state. The revenue expenditure constitutes the bulk of total expenditure amounting to more than 70 percent of the total expenditure. Salary alone accounted for one quarter of the revenue receipt of the state government and about 29 percent of its revenue expenditure. During the last 6 years, however, this proportion has come down. However, this decline is not because of any decrease in absolute terms in expenditure on salary and pension, but due to significant increases in both revenue receipt and revenue expenditure.
10. The quality of expenditure in Bihar has undergone significant improvement over the recent years. The capital outlay has increased from a meager 6 percent to nearly 20 percent of total expenditure, while the revenue expenditure has gradually declined from 79 percent to 76 percent. The share of plan expenditure in total expenditure has also increased from 20 percent to 35 percent.

CHAPTER I

MACRO OVERVIEW

In the first year of the Eleventh Five Year Plan (2007-08), Bihar has embarked upon a number of development initiatives to achieve the plan targets. Essentially, these targets include an inclusive growth at the accelerated pace, accompanied by improved delivery of social services. The population of Bihar was 83.0 million in 2001 and is projected to reach 97.2 million at the year-end of 2007-08. The density of population stood at 881 persons per sq. km in 2001, and has now reached 1033 persons. But fortunately, in spite of such demographic pressure on land, the present Bihar has abundant natural resources in the form of its fertile land and plentiful water to pursue its development goals.

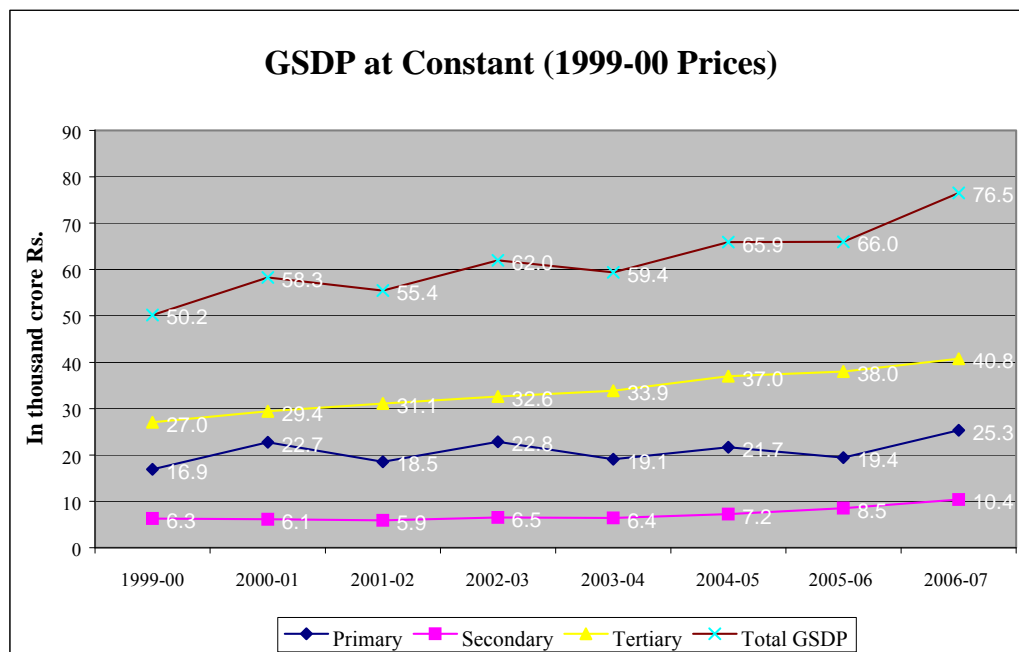
As a consequence of the development initiatives of the state government in recent years, a sense of optimism is clearly visible in the state. These initiatives include substantial allocation of resources for the social sector and infrastructure. In addition, the state government has made concerted efforts to attract private investments in the industrial sector. Another area of improvement has been the management of the state finances in respect of resource mobilisation, rationalisation of expenditure and debt management. Quite expectedly, the resulting optimism is also shared by a number of international development agencies and they have showed interest to finance some important development projects in the state.

This Economic Survey presents the details of the progress made by various sectors of the state economy and also the efforts of the state government to promote development. This discussion is divided into six sectors — Agriculture, Industry, Infrastructural Development, Social Sector, Banking and Allied Sectors and, finally, Public Finance.

1.1 Gross State Domestic Product (GSDP)

In response to a national policy, the Gross State Domestic Product (GSDP) at constant prices is now being estimated by using 1999-00 prices. Earlier, 1993-94 prices were used for estimation of GSDP at constant prices. Tables 1.1 and 1.2 present the estimates of GSDP at current and constant

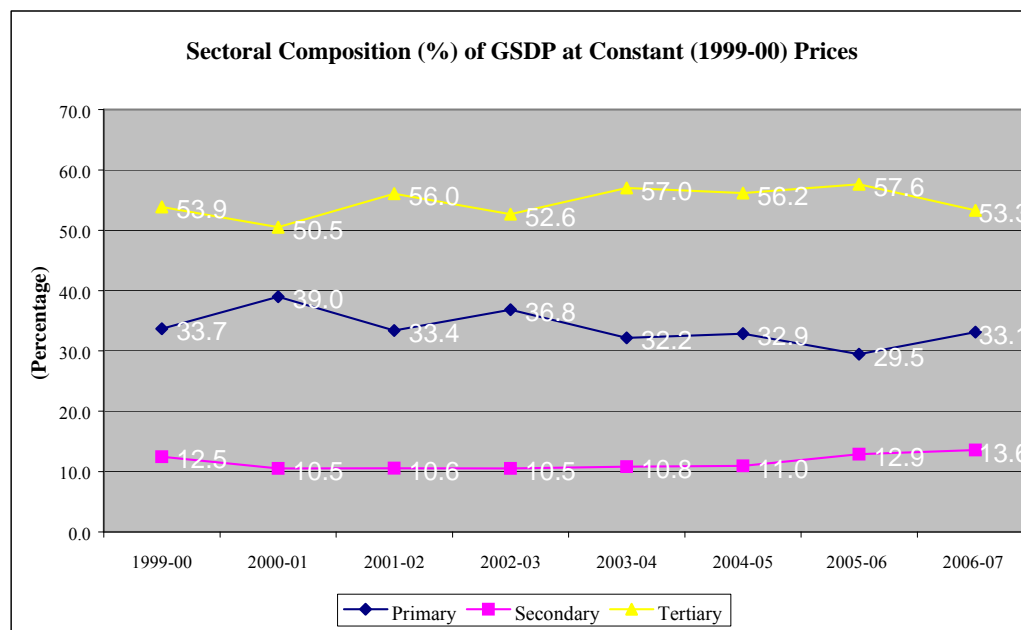
prices respectively. The corresponding estimates for Net State Domestic Product (NSDP) are presented in Table 1.3 and Table 1.4



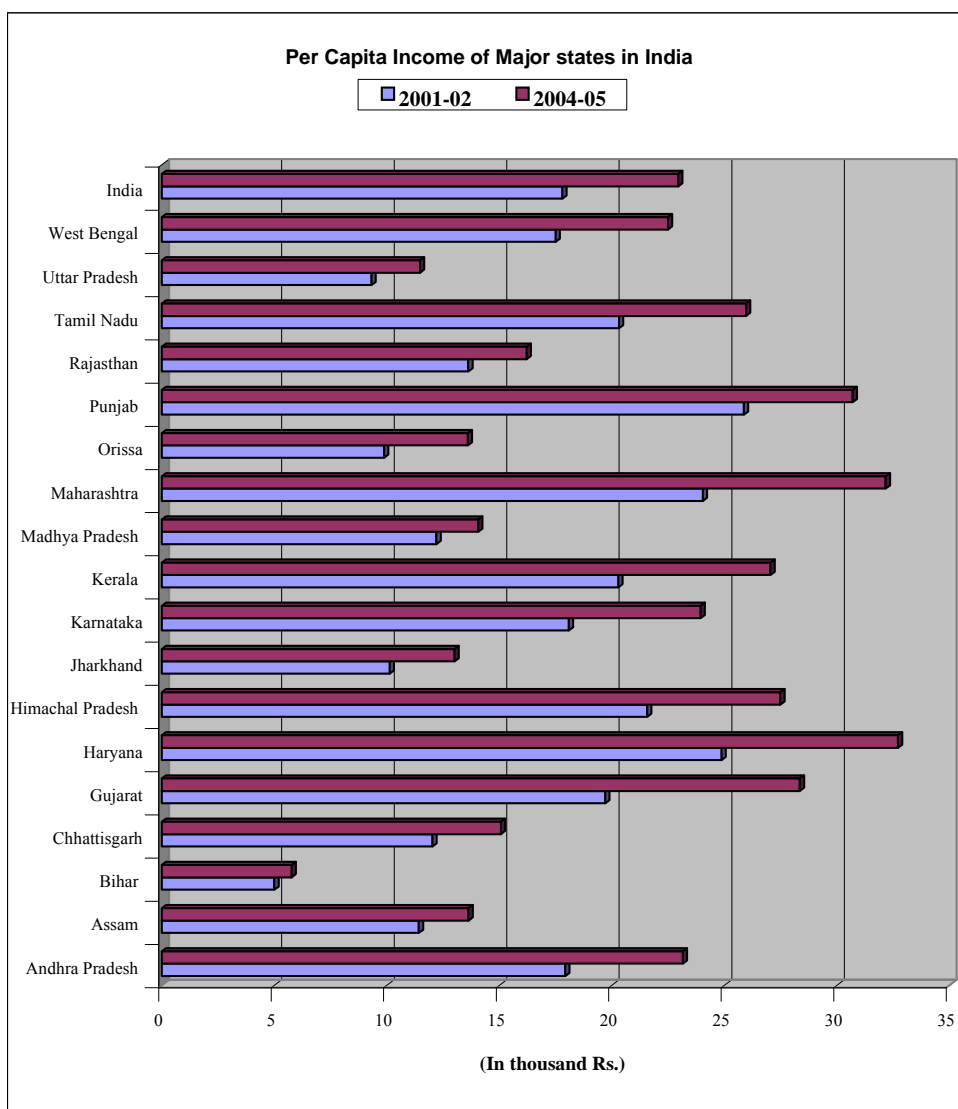
The medium term growth rate of the GSDP since 1999-00 is estimated to be 4.94 percent. The sectoral growth rates indicate that it is the secondary sector which has grown at the fastest speed (7.15 percent), followed by the tertiary sector (5.78 percent). The primary sector has grown at only 2.84 percent. During the same period, the national economy has grown at 6.5 percent. But it should be noted that the slower pace of growth of Bihar economy is because of its disadvantaged secondary and tertiary sector. In the primary sector, however, Bihar was able to register a higher growth rate (2.84 percent) than the national average (2.61 percent). Within the broad divisions of primary, secondary and tertiary sectors, the estimates of GSDP also present growth rates of a number of sub-sectors. Three of these sub-sectors have recorded very high growth rates in the recent past — fishery (7.89 percent), construction (13.54 percent) and communications (11.38 percent).

The primary sector accounts for about one-third of Bihar economy and the growth in income in this sector shows considerable years-to-year variation (Table 1.5). During 1999-00 to 2005-06, it has varied from (-)21.9 percent in 2001-02 to 33.7 percent (2006-07). Consequently, the GSDP for the state has also shown large year-to-year variation. It varied from (-)4.8 percent in 2001-02 and 16.0 percent in 2006-07. Thus, the Bihar economy is seen to suffer from two clear disadvantages — first, its growth rate is much lower than the national average and, second, there are large yearly variations in the growth rate.

Because of large variations in the growth rates of sectors and sub-sectors, the sectoral composition of the GSDP also varies from year-to-year (Table 1.6). For the three-year period (1999-00 to 2001-02), the average shares were — primary (35.4 percent), secondary (11.2 percent) and tertiary (53.4). For the three-year period (2004-05 to 2006-07), the average shares were — primary (31.8 percent), secondary (12.5 percent) and tertiary (55.7 percent). Thus it is observed that the share of the primary sector has gone down in last eight years by 3.6 percent. Consequently, during the same period, the shares of secondary tertiary sectors have gone up by 1.3 percent and 2.3 percent respectively.



Per Capita Income : Inter-state Comparison



The relative position of the economy of Bihar in comparison to other state of India can be judged from the Per Capita Income figures of major Indian states (Table 1.7). For all the four years for which comparable estimates are available (2001-02 to 2004-05), the Per Capita Income is seen to be the lowest in India. In 2004-05, the Per Capita Income in Bihar (Rs. 5772) was only 25.1 percent of the national Per Capita Income (Rs. 22946).

Table 1.1 : Gross State Domestic Product (GSDP) at Factor Cost at Current Prices (Figures in Rs crore)

Sl. No.	Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06 (Prov)	2006-07 (Quick)	Growth Rate
1	Agriculture & Animal Husbandry	15202.5	19732.4	17666.4	21144.5	19040.9	19717.5	19678.5	25737.0	4.75
2	Forestry & Logging	910.6	1007.8	1083.7	1151.4	1243.0	1351.5	1464.9	1587.5	8.04
3	Fishing	696.7	825.3	1031.8	1126.7	1189.9	1135.7	1167.4	1272.2	7.78
4	Mining & Quarrying	94.4	109.1	165.7	51.3	45.0	40.2	45.4	51.4	-14.35
Sub Total (Primary)		16904.2	21674.6	19947.6	23473.8	21518.8	22244.9	22356.3	28648.0	4.99
5	Manufacturing	3614.0	3470.4	3237.2	3686.1	3719.6	4291.0	5957.7	6573.7	9.66
	5.1 Registered	1150.7	871.1	749.1	1025.6	738.3	1119.1	2411.5	2733.6	15.39
	5.2 Un-registered	2463.4	2599.3	2488.1	2660.5	2981.3	3171.9	3546.2	3840.1	6.77
6	Construction	1929.2	1941.4	2235.1	2688.8	2775.4	3434.6	3854.8	5658.0	15.74
7	Electricity, Water Supply & Gas	718.5	1008.4	727.2	740.2	906.6	1082.2	1279.7	1549.4	9.95
Sub Total (Secondary)		6261.7	6420.2	6199.4	7115.0	7401.6	8807.8	11092.3	13781.1	11.77
8	Transport, Storage & Communication	3724.0	3905.0	4004.9	4298.3	4666.4	5159.7	5528.7	6000.4	7.30
	8.1 Railways	1563.8	1711.1	1825.3	1931.7	2110.1	2347.0	2418.0	2491.2	5.54
	8.2 Other Transport & Storage	1392.6	1472.1	1494.1	1621.7	1720.2	1882.9	2012.8	2218.6	6.86
	8.3 Communication	767.6	721.8	685.6	745.0	836.1	929.8	1097.9	1290.6	8.38
9	Trade, Hotel & Restaurant	7540.9	8614.1	9582.6	11936.4	12761.7	16045.4	16574.6	17672.0	13.78
Sub Total (Transport, Communication & Trade)		11264.8	12519.0	13587.5	16234.7	17428.1	21205.1	22103.4	23672.4	11.90
10	Banking & Insurance	1819.1	2056.0	2735.7	2723.2	2889.9	2908.2	3042.9	3183.9	7.56
11	Real Estate, Ownership of Dwelling & Business	2097.1	2358.4	2583.3	2900.2	3401.2	3737.6	4203.2	4726.6	12.43
Sub Total (Finance & Real Estate)		3916.2	4414.4	5319.0	5623.3	6291.1	6645.8	7246.1	7910.5	10.23
12	Public Administration	3793.6	4122.9	4550.8	4093.8	4912.8	5109.1	5409.0	6659.7	7.18
13	Other Services	8059.4	8127.8	8200.0	8576.1	9408.3	9778.4	11475.0	13579.7	7.40
Sub Total (Tertiary)		27034.1	29184.1	31657.4	34527.9	38040.3	42738.4	46233.5	51822.2	9.80
Total GSDP		50199.9	57278.9	57804.4	65116.8	66960.7	73791.1	79682.0	94251.3	8.46
Per Capita GSDP (Rs.)		6304	6996	6850	7610	7685	8323	8838	10286	6.37

Source : Directorate of Statistics and Evaluation, Government of Bihar

Table 1.2 : Gross State Domestic Product (GSDP) at Factor Cost at Constant (1999-00) Prices (Figures in Rs crore)

Sl. No.	Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06 (Prov)	2006-07 (Quick)	Growth Rate
1	Agriculture & Animal Husbandry	15202.5	20861.4	16287.3	20665.7	16899.2	19417.2	17069.6	22821.0	2.61
2	Forestry & Logging	910.6	962.9	987.7	1023.2	1066.1	1116.8	1165.3	1215.4	4.11
3	Fishing	696.7	769.2	984.8	1069.3	1091.5	1095.3	1144.7	1243.3	7.89
4	Mining & Quarrying	94.4	133.4	242.5	68.0	55.6	43.9	54.7	68.5	-13.35
Sub Total (Primary)		16904.2	22727.0	18502.3	22826.1	19112.3	21673.2	19434.3	25348.2	2.84
5	Manufacturing	3614.0	3389.9	3144.4	3386.1	3317.2	3526.5	4404.5	4593.2	4.02
	5.1 Registered	1150.7	785.8	678.1	841.6	621.8	790.4	1487.0	1553.8	6.70
	5.2 Un-registered	2463.4	2604.1	2466.3	2544.5	2695.4	2736.1	2917.6	3039.4	2.91
6	Construction	1929.2	1952.6	2121.2	2522.2	2472.9	3037.1	3440.0	5082.9	13.54
7	Electricity, Water Supply & Gas	718.5	778.0	602.1	615.7	631.7	654.4	672.5	717.0	-0.56
Sub Total (Secondary)		6261.7	6120.5	5867.7	6524.0	6421.8	7218.1	8517.0	10393.2	7.15
8	Transport, Storage & Communication	3724.0	4054.0	4030.7	4319.4	4576.8	4938.0	5236.1	5646.2	5.96
	8.1 Railways	1563.8	1755.2	1789.1	1827.7	1940.6	2047.0	2204.6	2374.4	5.54
	8.2 Other Transport & Storage	1392.6	1503.8	1497.8	1575.4	1582.0	1672.9	1675.4	1755.9	3.02
	8.3 Communication	767.6	795.0	743.8	916.3	1054.2	1218.1	1356.1	1515.9	11.38
9	Trade, Hotel & Restaurant	7540.9	8700.9	9529.8	11357.2	11419.5	13880.5	13397.9	13496.3	9.17
Sub Total (Transport, Communication & Trade)		11264.8	12755.0	13560.5	15676.7	15996.2	18818.4	18634.0	19142.5	8.19
10	Banking & Insurance	1819.1	2014.3	2473.6	2366.7	2311.2	2494.1	2704.3	2932.1	5.90
11	Real Estate, Ownership of Dwelling & Business	2097.1	2209.8	2304.4	2399.7	2508.6	2637.6	2768.9	2920.5	4.75
Sub Total (Finance & Real Estate)		3916.2	4224.1	4778.0	4766.4	4819.7	5131.7	5473.2	5852.6	5.29
12	Public Administration	3793.6	4138.9	4471.5	3854.5	4372.3	4378.1	4348.5	5067.6	2.82
13	Other Services	8059.4	8295.1	8267.4	8328.6	8663.4	8689.1	9549.1	10718.4	3.50
Sub Total (Tertiary)		27034.1	29413.0	31077.3	32626.1	33851.6	37017.3	38004.8	40781.1	5.78
Total GSDP		50199.9	58260.4	55447.4	61976.2	59385.7	65908.6	65956.2	76522.5	4.94
Per Capita GSDP (Rs.)		6304	7116	6571	7243	6816	7434	7315	8351	2.92

Source : Directorate of Statistics and Evaluation, Government of Bihar

Table 1.3 : Net State Domestic Product (NSDP) at Factor Cost at Current Prices (Figures in Rs crore)

Sl. No.	Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06 (Prov)	2006-07 (Quick)	Growth Rate
1	Agriculture & Animal Husbandry	14308.4	18714.6	16503.6	19877.5	17652.0	18130.8	17898.9	23741.0	4.24
2	Forestry & Logging	875.7	970.4	1043.5	1106.6	1194.2	1296.1	1402.1	1516.3	7.93
3	Fishing	627.1	735.9	900.5	973.5	1011.4	939.6	952.1	1035.7	6.09
4	Mining & Quarrying	74.8	87.3	131.6	42.8	37.1	34.0	39.2	45.2	-13.04
Sub Total (Primary)		15885.9	20508.1	18579.3	22000.4	19894.7	20400.4	20292.3	26338.2	4.46
5	Manufacturing	3144.7	2937.9	2647.2	3040.2	2979.7	3403.0	4948.7	5427.0	8.90
	5.1 Registered	997.1	696.7	553.8	814.7	505.1	847.5	2107.1	2392.4	15.99
	5.2 Un-registered	2147.5	2241.2	2093.3	2225.4	2474.7	2555.5	2841.6	3034.7	5.27
6	Construction	1889.4	1884.9	2167.5	2620.0	2688.8	3323.2	3717.9	5489.7	15.59
7	Electricity, Water Supply & Gas	407.7	569.0	323.3	385.4	472.7	568.7	712.0	921.7	10.95
Sub Total (Secondary)		5441.8	5391.7	5138.0	6045.5	6141.2	7294.9	9378.6	11838.5	11.68
8	Transport, Storage & Communication	2902.3	3099.1	3202.7	3410.1	3665.6	3989.8	4152.7	4493.6	6.46
	8.1 Railways	1072.2	1210.9	1339.4	1419.2	1502.9	1602.3	1608.1	1613.9	5.98
	8.2 Other Transport & Storage	1239.8	1314.5	1316.8	1414.6	1498.6	1654.6	1781.0	1980.2	6.82
	8.3 Communication	590.3	573.7	546.4	576.3	664.1	733.0	763.6	899.5	6.64
9	Trade, Hotel & Restaurant	7426.7	8481.4	9453.1	11801.6	12608.7	15894.3	16414.8	17502.9	13.89
Sub Total (Transport, Communication & Trade)		10329.0	11580.5	12655.8	15211.6	16274.3	19884.1	20567.4	21996.5	12.09
10	Banking & Insurance	1766.4	1988.3	2649.7	2645.1	2807.4	2815.8	2940.0	3069.6	7.49
11	Real Estate, Ownership of Dwelling & Business	1341.4	1476.0	1487.5	1626.9	1917.1	1943.6	2070.6	2191.5	7.53
Sub Total (Finance & Real Estate)		3107.8	3464.2	4137.2	4272.0	4724.5	4759.5	5010.6	5261.1	9.52
12	Public Administration	3228.4	3445.7	3776.7	3385.6	4047.8	4453.0	4733.1	5963.3	8.12
13	Other Services	7924.4	7972.8	8010.6	8362.3	9152.9	9409.7	11024.2	13028.5	6.99
Sub Total (Tertiary)		24589.6	26463.2	28580.3	31231.6	34199.5	38506.2	41335.2	46249.3	9.52
Total NSDP		45917.3	52363.0	52297.6	59277.5	60235.4	66201.5	71006.1	84426.0	9.38
Per Capita NSDP (Rs.)		5766	6396	6197	6928	6913	7467	7875	9214	5.98

Source : Directorate of Statistics and Evaluation, Government of Bihar

Table 1.4 : Net State Domestic Product (NSDP) at Factor Cost at Constant (1999-00) Prices (Figures in Rs crore)

Sl. No.	Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06 (Prov)	2006-07 (Quick)	Growth Rate
1	Agriculture & Animal Husbandry	14308.4	19861.7	15202.2	19520.4	15685.0	18138.0	15695.4	21344.7	-0.44
2	Forestry & Logging	875.7	926.0	949.8	982.2	1022.6	1071.3	1117.8	1165.8	4.06
3	Fishing	627.1	683.4	866.0	930.7	934.5	933.8	978.6	1072.5	7.13
4	Mining & Quarrying	74.8	112.3	211.4	60.5	48.9	38.9	49.8	63.5	-11.75
Sub Total (Primary)		15885.9	21583.4	17229.3	21493.8	17690.9	20182.1	17841.6	23646.5	0.61
5	Manufacturing	3144.7	2882.0	2611.6	2815.7	2694.3	2839.3	3662.8	3792.6	3.29
	5.1 Registered	997.1	620.4	501.4	653.6	419.6	569.8	1249.8	1298.8	6.50
	5.2 Un-registered	2147.5	2261.6	2110.2	2162.1	2274.7	2269.5	2413.0	2493.9	1.97
6	Construction	1889.4	1899.1	2059.9	2460.3	2396.7	2945.2	3330.9	4953.5	15.31
7	Electricity, Water Supply & Gas	407.7	353.1	233.2	300.2	258.3	245.5	240.5	260.7	-5.83
Sub Total (Secondary)		5441.8	5134.2	4904.7	5576.2	5349.3	6030.0	7234.2	9006.8	8.25
8	Transport, Storage & Communication	2902.3	3275.3	3275.8	3508.7	3747.6	4096.4	4325.3	4699.5	6.77
	8.1 Railways	1072.2	1269.8	1324.9	1355.6	1459.5	1557.1	1704.0	1864.9	7.28
	8.2 Other Transport & Storage	1239.8	1354.5	1334.8	1386.8	1381.9	1477.4	1472.4	1542.8	2.71
	8.3 Communication	590.3	651.0	616.1	766.3	906.2	1062.0	1148.8	1291.9	12.81
9	Trade, Hotel & Restaurant	7426.7	8575.4	9412.4	11236.5	11287.8	13759.7	13275.8	13372.8	9.27
Sub Total (Transport, Communication & Trade)		10329.0	11850.7	12688.1	14745.1	15035.3	17856.2	17601.1	18072.3	8.61
10	Banking & Insurance	1766.4	1950.0	2395.7	2297.1	2240.1	2419.9	2626.0	2799.4	5.78
11	Real Estate, Ownership of Dwelling & Business	1341.4	1361.0	1325.9	1296.2	1274.3	1294.3	1261.8	1229.6	-1.27
Sub Total (Finance & Real Estate)		3107.8	3311.0	3721.6	3593.3	3514.4	3714.1	3887.7	4029.0	3.13
12	Public Administration	3228.4	3478.4	3754.2	3218.0	3618.0	3848.4	3818.8	4537.9	3.69
13	Other Services	7924.4	8146.6	8094.9	8138.2	8446.5	8401.1	9214.0	10328.5	3.17
Sub Total (Tertiary)		24589.6	26786.7	28258.8	29694.6	30614.3	33819.8	34521.7	36967.7	5.74
Total NSDP		45917.3	53504.2	50392.8	56764.6	53654.5	60031.8	59597.5	69621.0	4.60
Per Capita NSDP (Rs.)		5766	6535	5972	6634	6158	6771	6610	7598	2.76

Source : Directorate of Statistics and Evaluation, Government of Bihar

Table 1.5 : Yearly Percentage Growth Rates of GSDP at Constant (1999-00) Prices

Sl. No.	Sector	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06 (Prov)	2006-07 (Quick)
1	Agriculture & Animal Husbandry	37.2	-21.9	26.9	-18.2	14.9	-12.1	33.7
2	Forestry & Logging	5.7	2.6	3.6	4.2	4.8	4.3	4.3
3	Fishing	10.4	28.0	8.6	2.1	0.4	4.5	8.6
4	Mining & Quarrying	41.3	81.8	-72.0	-18.1	-21.1	24.8	25.1
Sub Total (Primary)		34.4	-18.6	23.4	-16.3	13.4	-10.3	30.4
5	Manufacturing	-6.2	-7.2	7.7	-2.0	6.3	24.9	4.3
	5.1 Registered	-31.7	-13.7	24.1	-26.1	27.1	88.1	4.5
	5.2 Un-registered	5.7	-5.3	3.2	5.9	1.5	6.6	4.2
6	Construction	1.2	8.6	18.9	-2.0	22.8	13.3	47.8
7	Electricity, Water Supply & Gas	8.3	-22.6	2.3	2.6	3.6	2.8	6.6
Sub Total (Secondary)		-2.3	-4.1	11.2	-1.6	12.4	18.0	22.0
8	Transport, Storage & Communication	8.9	-0.6	7.2	6.0	7.9	6.0	7.8
	8.1 Railways	12.2	1.9	2.2	6.2	5.5	7.7	7.7
	8.2 Other Transport & Storage	8.0	-0.4	5.2	0.4	5.7	0.1	4.8
	8.3 Communication	3.6	-6.4	23.2	15.0	15.5	11.3	11.8
9	Trade, Hotel & Restaurant	15.4	9.5	19.2	0.5	21.6	-3.5	0.7
Sub Total (Transport, Communication & Trade)		13.2	6.3	15.6	2.0	17.6	-1.0	2.7
10	Banking & Insurance	10.7	22.8	-4.3	-2.3	7.9	8.4	8.4
11	Real Estate, Ownership of Dwelling & Business	5.4	4.3	4.1	4.5	5.1	5.0	5.5
Sub Total (Finance & Real Estate)		7.9	13.1	-0.2	1.1	6.5	6.7	6.9
12	Public Administration	9.1	8.0	-13.8	13.4	0.1	-0.7	16.5
13	Other Services	2.9	-0.3	0.7	4.0	0.3	9.9	12.2
Sub Total (Tertiary)		8.8	5.7	5.0	3.8	9.4	2.7	7.3
Total GSDP		16.1	-4.8	11.8	-4.2	11.0	0.1	16.0
Per Capita GSDP		12.9	-7.7	10.2	-5.9	9.1	-1.6	14.2

Table 1.6 : Sectoral Composition (Percentages) of GSDP at Factor Cost at Constant (1999-00) Prices

Sl. No.	Sector	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06 (Prov)	2006-07 (Quick)
1	Agriculture & Animal Husbandry	30.3	35.8	29.4	33.3	28.5	29.5	25.9	29.8
2	Forestry & Logging	1.8	1.7	1.8	1.7	1.8	1.7	1.8	1.6
3	Fishing	1.4	1.3	1.8	1.7	1.8	1.7	1.7	1.6
4	Mining & Quarrying	0.2	0.2	0.4	0.1	0.1	0.1	0.1	0.1
Sub Total (Primary)		33.7	39.0	33.4	36.8	32.2	32.9	29.5	33.1
5	Manufacturing	7.2	5.8	5.7	5.5	5.6	5.4	6.7	6.0
5.1	Registered	2.3	1.3	1.2	1.4	1.0	1.2	2.3	2.0
5.2	Un-registered	4.9	4.5	4.4	4.1	4.5	4.2	4.4	4.0
6	Construction	3.8	3.4	3.8	4.1	4.2	4.6	5.2	6.6
7	Electricity, Water Supply & Gas	1.4	1.3	1.1	1.0	1.1	1.0	1.0	0.9
Sub Total (Secondary)		12.5	10.5	10.6	10.5	10.8	11.0	12.9	13.6
8	Transport, Storage & Communication	7.4	7.0	7.3	7.0	7.7	7.5	7.9	7.4
8.1	Railways	3.1	3.0	3.2	2.9	3.3	3.1	3.3	3.1
8.2	Other Transport & Storage	2.8	2.6	2.7	2.5	2.7	2.5	2.5	2.3
8.3	Communication	1.5	1.4	1.3	1.5	1.8	1.8	2.1	2.0
9.	Trade, Hotel & Restaurant	15.0	14.9	17.2	18.3	19.2	21.1	20.3	17.6
Sub Total (Transport, Communication & Trade)		22.4	21.9	24.5	25.3	26.9	28.6	28.3	25.0
10	Banking & Insurance	3.6	3.5	4.5	3.8	3.9	3.8	4.1	3.8
11	Real Estate, Ownership of Dwelling & Business	4.2	3.8	4.2	3.9	4.2	4.0	4.2	3.8
Sub Total (Finance & Real Estate)		7.8	7.3	8.6	7.7	8.1	7.8	8.3	7.6
12	Public Administration	7.6	7.1	8.1	6.2	7.4	6.6	6.6	6.6
13	Other Services	16.1	14.2	14.9	13.4	14.6	13.2	14.5	14.0
Sub Total (Tertiary)		53.9	50.5	56.0	52.6	57.0	56.2	57.6	53.3
Total GSDP		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 1.7 : Per Capita Net State Domestic Product at Current Prices (Rs) for Major Indian States

State	2001-02	2002-03	2003-04	2004-05
Andhra Pradesh	17932 (9)	19087 (9)	21372 (8)	23153 (9)
Assam	11423 (14)	12247 (13)	12821 (14)	13633 (14)
Bihar	5004 (18)	5606 (18)	5362 (18)	5772 (18)
Chhattisgarh	12032 (13)	12369 (12)	14963 (12)	15073 (12)
Gujarat	19713 (7)	22624 (6)	26672 (4)	28355 (4)
Haryana	24883 (2)	26818 (2)	29504 (1)	32712 (1)
Himachal Pradesh	21570 (4)	22902 (4)	25059 (5)	27486 (5)
Jharkhand	10129 (15)	11139 (15)	11999 (16)	13013 (16)
Karnataka	18091 (8)	19576 (8)	21238 (9)	23945 (8)
Kerala	20287 (6)	22776 (5)	24492 (6)	27048 (6)
Madhya Pradesh	12209 (12)	11500 (14)	13722 (13)	14069 (13)
Maharashtra	24044 (3)	26858 (1)	28848 (2)	32170 (2)
Orissa	9879 (16)	10164 (16)	12645 (15)	13601 (15)
Punjab	25868 (1)	26395 (3)	28607 (3)	30701 (3)
Rajasthan	13621 (11)	12641 (11)	15738 (11)	16212 (11)
Tamil Nadu	20326 (5)	21740 (7)	23358 (7)	25965 (7)
Uttar Pradesh	9320 (17)	9963 (17)	10637 (17)	11477 (17)
West Bengal	17499 (10)	18494 (10)	20548 (10)	22497 (10)
India	17800	18899	20936	22946

Source : Economic Survey 2006-07, Government of India.

Note : Figures in brackets indicate the ranking of the districts

1.2 Regional Disparity

It has been already noted that Per Capita Income is the lowest in Bihar, compared to all other Indian states. However, this disadvantage is not equally present in all the districts of the state. Table 1.8 presents the Per Capita Gross District Domestic Product (GDDP) of the 38 districts in Bihar for 2003-04 and 2004-05. From this table, it is apparent that three districts with the highest Per Capita GDDP are — Patna (Rs. 31441), Munger (Rs. 10087) and Begusarai (Rs. 9312). At the other end, three districts with the lowest Per Capita GDDP are Araria (Rs. 4578), Sitamarhi (Rs. 4352) and Sheohar (Rs. 3636). Between 2003-04 and 2004-05, the relative position of some of the districts have changed, but broadly speaking, the districts in south Bihar are generally more prosperous than those in the north.

An idea about the relative economic prosperity of the different districts can also be had from the extent of small savings in post offices and public provident fund (Table 1.9). For the state as whole, the average per capita small savings was Rs. 264 in 2005-06 and Rs. 191 in 2006-07. Taking the savings figures of 2006-07, it is observed that three districts with the highest per capita savings are — Patna (Rs. 675), Saran (Rs. 339) and Nalanda (Rs. 328). The three districts at the bottom are — Sitamarhi (Rs. 68), East Champaran (Rs. 68) and Araria (Rs. 51). From these figures again, it emerges that the districts in south Bihar are relatively more prosperous than those in north Bihar.

One can also obtain an idea about the regional economic disparity in Bihar from the per capita consumption of petrol, diesel, cooking gas and kerosene oil (Table 1.10). Except for kerosene oil, other three fuels are used in the relatively more prosperous regions. From the table, it is observed that the three districts with the highest per capita consumption of petrol are — Patna, Bhagalpur and Muzaffarpur. On the other end, the three districts with the lowest per capita consumption of petrol are — Arwal, Nawada and Sheohar. The pattern of regional disparity revealed by the figures for petrol consumption suggests that the size of the urban economy also plays an important role in determining the economic conditions of a district.

Table 1.8 : Gross District Domestic Product (GDDP) and Per Capita GDDP for Different Districts of Bihar

Division / District	GDDP (1999-00 Prices) (in Rs. crore)		Per Capita GDDP (1999-00 Prices) (in Rs.)	
	2003-04	2004-05	2003-04	2004-05
Patna	13721.3	15923.9	27605 (1)	31441 (1)
Nalanda	1425.3	1408.7	5849 (14)	5727 (17)
Bhojpur	1395.2	1372.6	5968 (11)	5786 (16)
Buxar	793.2	795.0	5385 (19)	5303 (27)
Rohtash	1780.3	1864.2	6932 (5)	7138 (6)
Kaimur	806.5	755.8	5931 (12)	5452 (22)
Gaya	2259.0	2245.1	6175 (7)	6023 (13)
Jehanabad	531.6	521.5	5465 (18)	5267 (29)
Arwal	306.4	297.0	4962 (28)	4726 (34)
Nawada	942.4	911.3	4918 (30)	4657 (35)
Aurangabad	1166.9	1143.4	5499 (16)	5287 (28)
Bhagalpur	2001.9	2129.3	7899 (3)	8268 (4)
Banka	804.5	902.7	4805 (32)	5316 (25)
Munger	1140.6	1197.7	9711 (2)	10087 (2)
Sekhpora	284.6	273.5	5109 (21)	4806 (33)
Jamui	695.1	742.9	4693 (33)	4913 (32)
Lakhisarai	495.2	516.3	5994 (10)	6188 (11)
Khagaria	758.0	849.5	5628 (15)	6194 (10)
Begusarai	1870.7	2342.0	7573 (4)	9312 (3)
Muzaffarpur	2674.3	3030.5	6824 (6)	7611 (5)
Sitamarhi	1210.4	1262.8	4260 (37)	4352 (37)
Sheohar	225.6	204.7	4101 (38)	3636 (38)
Vaishali	1401.9	1737.7	4933 (29)	6018 (14)
East Champaran	2066.7	2287.2	4989 (26)	5423 (23)
West Champaran	1901.3	1997.0	5930 (13)	6113 (12)
Darbhanga	1782.7	1976.4	5126 (20)	5574 (19)
Madhubani	1648.4	2598.6	4414 (35)	6851 (7)
Samastipur	1756.8	2075.0	4967 (27)	5783 (15)
Saran	1716.1	1830.9	5057 (23)	5312 (26)
Siwan	1370.6	1440.3	4846 (31)	5019 (31)
Gopalganj	1122.7	1166.5	4992 (25)	5107 (30)
Saharsa	971.5	1063.6	6082 (8)	6521 (9)
Supaul	853.9	1032.2	4692 (34)	5572 (20)
Madhepura	804.1	885.7	5008 (24)	5417 (24)
Purnia	1485.5	1549.9	5490 (17)	5600 (18)
Arariya	996.6	1070.8	4353 (36)	4578 (36)
Katihar	1519.0	1744.1	6019 (9)	6779 (8)
Kishanganj	698.9	762.6	5104 (22)	5461 (21)
Total	59385.7	65908.6	6816	7434

Source : Directorate of Statistics and Evaluation, Government of Bihar

Note : Figures in brackets indicate the ranking of the districts

Table 1.9 : Districtwise Small Savings in Post Offices and Public Provident Fund (2005-06 and 2006-07)

Division / District	2005-06			2006-07		
	Target (Rs crore)	Achievement (Rs crore)	Per Capita Savings (Rs)	Target (Rs crore)	Achievement (Rs crore)	Per Capita Savings (Rs)
Patna	620	573.3 (92.5)	1062 (1)	460	373.0 (81.1)	675 (1)
Nalanda	110	110.7 (100.6)	408 (3)	80	91.1 (113.9)	328 (3)
Bhojpur	110	128.4 (116.7)	500 (2)	80	82.7 (103.4)	315 (4)
Buxer	75	63.2 (84.3)	394 (4)	55	47.9 (87.1)	292 (5)
Rohtas	110	99.4 (90.4)	354 (6)	80	81.5 (101.9)	284 (6)
Kaimur	45	42.7 (94.9)	289 (10)	35	34.9 (99.7)	211 (8)
Gaya	100	99.2 (99.2)	249 (13)	75	70.7 (94.3)	174 (13)
Jehanabad	20	21.2 (106.0)	200 (20)	20	15.7 (78.5)	145 (21)
Arwal	20	14.1 (70.5)	210 (10)	10	10.5 (105.0)	153 (20)
Nawada	50	45.4 (90.8)	219 (18)	35	35.8 (102.3)	169 (15)
Aurangabad	60	53.0 (88.3)	230 (16)	50	39.0 (78.0)	165 (16)
Bhagalpur	80	96.2 (120.2)	347 (7)	60	58.2 (97.0)	205 (10)
Banka	20	16.4 (82.0)	89 (34)	10	13.8 (138.0)	73 (35)
Munger	60	46.8 (78.0)	359 (5)	45	32.0 (71.1)	240 (7)
Shekhpura	20	14.1 (70.5)	235 (15)	15	9.6 (64.0)	156 (19)
Jamui	25	22.6 (90.4)	141 (27)	20	14.6 (73.0)	89 (29)
Lakhisarai	20	13.5 (67.5)	147 (26)	15	9.1 (60.7)	97 (27)
Khagaria	20	16.7 (83.5)	114 (29)	15	12.0 (80.0)	80 (32)
Begusarai	90	72.5 (80.5)	270 (12)	70	49.4 (70.6)	180 (12)
Muzaffarpur	120	127.7 (106.4)	298 (9)	90	72.5 (80.5)	165 (17)
Sitamarhi	25	26.9 (107.6)	88 (35)	20	21.3 (106.5)	68 (36)
Sheohar	10	6.5 (65.0)	110 (31)	5	5.4 (108.0)	89 (30)
Vaishali	100	75.2 (75.2)	242 (14)	75	64.9 (86.5)	204 (11)
West Champaran	70	55.4 (79.1)	159 (22)	50	45.6 (91.2)	128 (22)
East Champaran	50	39.3 (78.6)	87 (37)	35	23.4 (66.9)	51 (37)
Darbhanga	100	85.4 (85.4)	226 (17)	70	65.6 (93.7)	170 (14)
Madhubani	60	64.7 (107.8)	158 (23)	40	51.9 (129.7)	124 (23)
Samastipur	80	60.0 (75.0)	154 (25)	55	47.6 (86.5)	120 (24)
Saran	110	123.5 (112.3)	332 (8)	80	128.6 (160.7)	339 (2)
Siwan	110	87.5 (79.5)	282 (11)	80	65.5 (81.9)	207 (9)
Gopalganj	50	48.8 (97.6)	198 (21)	35	40.6 (116.0)	161 (18)
Saharsa	20	21.9 (109.5)	127 (28)	15	20.2 (134.7)	114 (26)
Supaul	10	17.4 (174.0)	88 (36)	10	16.0 (160.0)	79 (33)
Madhepura	10	16.4 (164.0)	94 (33)	10	15.3 (153.0)	86 (31)
Purnea	50	45.7 (91.4)	157 (24)	35	35.0 (100.0)	117 (25)
Araria	15	15.7 (104.7)	64 (38)	15	12.8 (85.3)	51 (38)
Katihar	40	30.4 (76.0)	111 (30)	35	27.2 (77.7)	97 (28)
Kishanganj	15	14.4 (96.0)	97 (32)	15	11.5 (76.7)	76 (34)
Total of State	2700	2512.5 (93.0)	264	2000	1852.7 (92.6)	191

Source : Department of Finance, Government of Bihar

Note : Figures in brackets indicate the ranking of the districts

Table 1.10 : Districtwise Consumption of Petroleum and Related Products (2006-07)

Division/District	Total Consumption (MT)				Per Capita consumption (kgs.)			
	Petrol	Diesel	LPG	Kerosin Oil	Petrol	Diesel	LPG	Kerosin Oil
Patna	26355	99855	52629	35364	4.8 (1)	18.1 (3)	9.5 (1)	6.4 (28)
Nalanda	2694	26968	7017	17958	0.9 (22)	9.7 (11)	2.5 (13)	6.4 (29)
Bhojpur	2422	20983	8578	17266	0.9 (23)	8.0 (24)	3.2 (3)	6.5 (25)
Buxar	1839	18521	4129	10543	1.1 (13)	11.3 (8)	2.5 (14)	6.4 (30)
Rohtas	4466	53698	7833	17911	1.6 (5)	18.7 (2)	2.7 (10)	6.2 (31)
Kaimur	1246	12943	1725	8152	0.8 (28)	8.6 (19)	1.1 (30)	5.4 (36)
Gaya	5292	37669	9366	28136	1.3 (8)	9.3 (16)	2.3 (15)	6.9 (7)
Jehanabad	911	9324	3528	9301	0.8 (29)	8.6 (20)	3.2 (14)	8.6 (1)
Arwal	262	1645	434	2391	0.4 (38)	2.4 (38)	0.6 (36)	3.5 (38)
Nawada	1070	12266	3023	13942	0.5 (37)	5.8 (29)	1.4 (28)	6.6 (16)
Aurangabad	2249	24944	4439	15604	1.0 (17)	10.6 (9)	1.9 (16)	6.6 (17)
Bhagalpur	5379	40125	8436	17584	1.9 (2)	14.1 (7)	3.0 (7)	6.2 (32)
Banka	1336	6356	3143	16951	0.7 (32)	3.4 (36)	1.7 (22)	7.4 (4)
Munger	1880	22617	6727	10160	1.4 (6)	17.0 (4)	5.1 (2)	7.6 (3)
Shekhpura	501	5787	1189	4146	0.8 (30)	9.4 (13)	1.9 (17)	6.7 (9)
Jamui	1225	7792	1842	10767	0.7 (33)	4.8 (32)	1.1 (31)	6.6 (18)
Lakhisarai	557	7740	938	5127	0.6 (35)	8.2 (23)	1.0 (33)	5.5 (35)
Khagaria	1035	14900	1669	9964	0.7 (34)	9.9 (10)	1.1 (32)	6.6 (19)
Begusarai	3849	78493	8294	18452	1.4 (7)	28.5 (1)	3.0 (8)	6.7 (10)
Muzaffarpur	8550	70510	14181	30853	1.9 (3)	16.1 (5)	3.2 (5)	7.0 (6)
Sitamarhi	2785	15905	5749	20550	0.9 (24)	5.1 (31)	1.8 (19)	6.5 (26)
Sheohar	351	1733	0	3745	0.6 (36)	2.9 (37)	0 (38)	6.2 (33)
Vaishali	5360	30482	9026	21254	1.7 (4)	9.6 (12)	2.8 (9)	6.7 (11)
West Champaran	3388	30238	5571	28024	1.0 (18)	8.5 (22)	1.6 (25)	7.9 (2)
East Champaran	5060	39539	7212	24951	1.1 (14)	8.6 (21)	1.6 (26)	5.4 (37)
Darbhanga	5098	36355	9856	25596	1.3 (9)	9.4 (14)	2.6 (12)	6.6 (20)
Madhubani	4271	19468	7291	27790	1.0 (19)	4.7 (33)	1.7 (23)	6.6 (21)
Samastipur	4129	34448	6271	26520	1.0 (20)	8.7 (18)	1.6 (27)	6.7 (12)
Saran	4843	30444	10120	25111	1.3 (10)	8.0 (25)	2.7 (11)	6.6 (22)
Siwan	4174	23373	5734	20721	1.3 (11)	7.4 (26)	1.8 (20)	6.5 (27)
Gopalganj	3372	23621	4863	16659	1.3 (12)	9.4 (15)	1.9 (18)	6.6 (23)
Saharsa	1565	9235	3004	13111	0.9 (25)	5.2 (30)	1.7 (24)	7.4 (5)
Supaul	1524	7063	913	13540	0.8 (31)	3.5 (35)	0.5 (37)	6.7 (13)
Madhepura	1963	12150	2489	10580	1.1 (15)	6.8 (27)	1.4 (29)	5.9 (34)
Purnea	3095	27679	9641	20040	1.0 (21)	9.3 (17)	3.2 (6)	6.7 (14)
Araria	2336	15522	1802	16762	0.9 (26)	6.1 (28)	0.7 (34)	6.6 (24)
Katihar	2452	44916	5049	18714	0.9 (27)	16.0 (6)	1.8 (21)	6.7 (15)
Kishanganj	1605	6700	1021	10496	1.1 (16)	4.4 (34)	0.7 (35)	6.9 (8)
Total of State	130489	982007	244743	641736	1.3	10.1	2.5	6.6

Source : Indian Oil Corporation

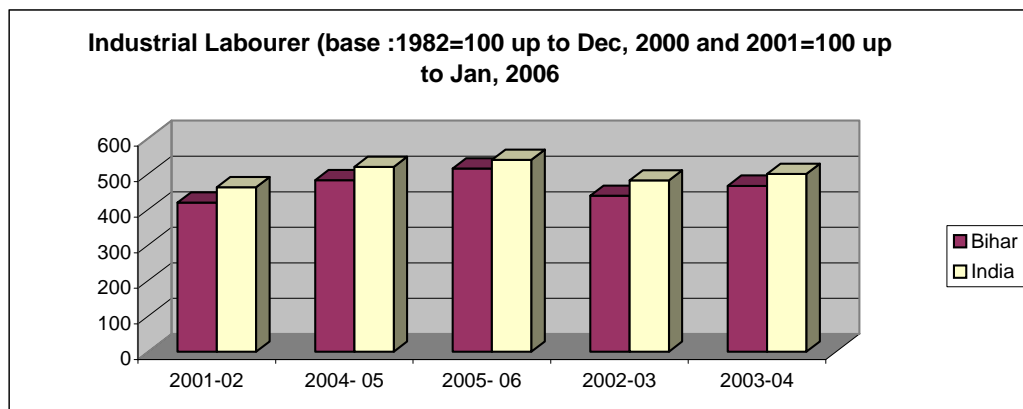
Note : Figures in brackets indicate the ranking of the districts

1.3 Consumer Price Index

The central government collects the necessary price data to prepare four different Consumer Price Indices for — Industrial Labourers, Agricultural Labourers, Urban Non-Manual Employees and Rural Labourers. Table 1.11 presents these indices for both Bihar and India.

For industrial labourers, the consumer price index has been rising slightly faster in Bihar than in India as a whole. For the new series (base 2001=100), the consumer price index in Bihar was 141 in September, 2007; for India as a whole, the index stood at 133. However, for urban non-manual workers, the consumer price indices (1984-85=100) were lower in Bihar. In September, 2007, this index stood at 490 in Bihar, compared to 516 for India.

For consumers in rural areas, there are two price indices, one for agricultural labourers and the other rural labourers. Both these indices have 1986-87 as the base year. For both these types of labourers, the consumer prices are nearly the same in Bihar and India. In September, 2007, the consumer price index for agricultural labourers in Bihar and India were 408 and 410 respectively. For rural labourers, the price indices in Bihar and India were identical. It should, however, be noted that upto the middle of 2006-07, the consumer price indices for agricultural and rural labourers used to be a little lower in Bihar than in India as a whole.



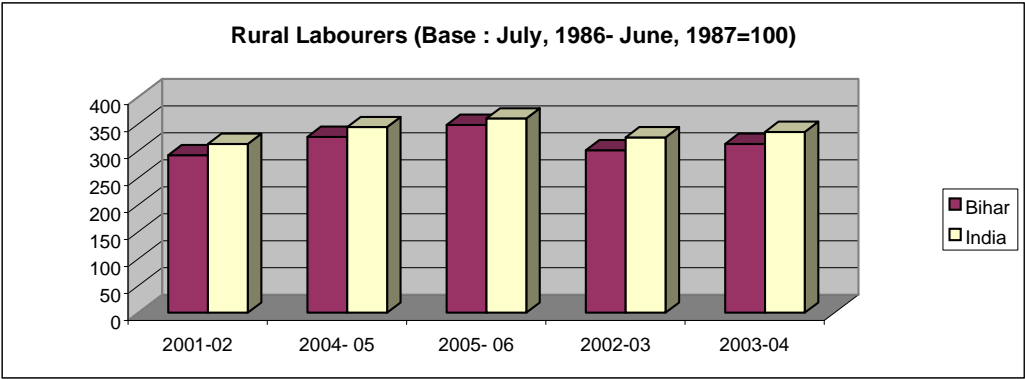
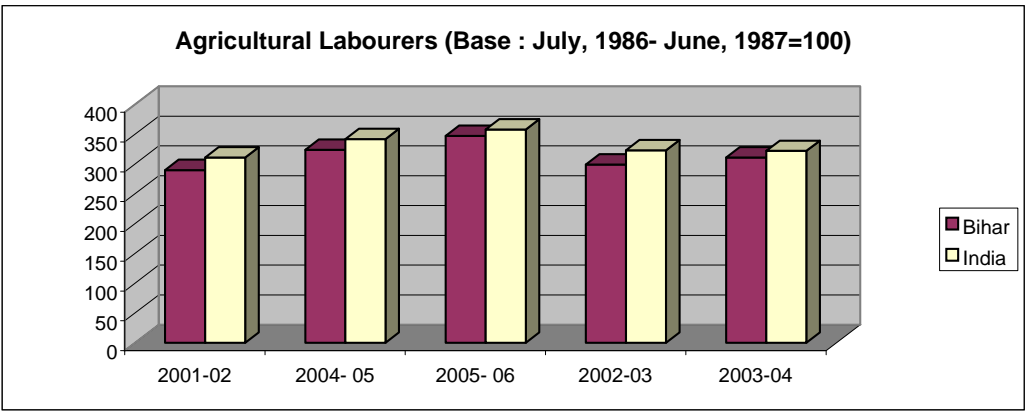
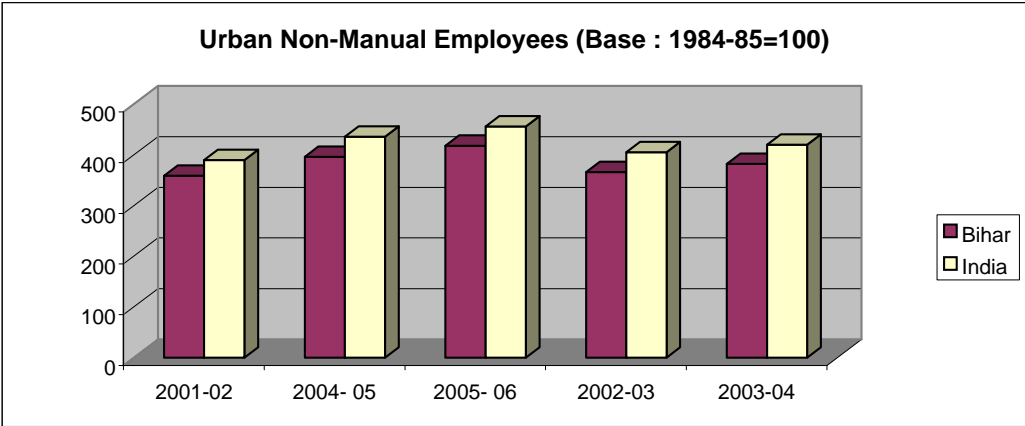


Table 1.11 : Wholesale Price Index and Consumer Price Index

Year	Wholesale Price Index (Base : 1993-94=100)	Consumer Price Index								
		Industrial Labourers (base : 1982=100 upto Dec, 2000 and 2001=100 upto Jan, 2006)		Agricultural Labourers (Base : July, 1986-June, 1987=100)		Urban Non-Manual Employees (Base : 1984-85=100)		Rural Labourers (Base : July, 1986-June, 1987=100)		
		India	Bihar	India	Bihar	India	Bihar	India	Bihar	India
2001-02	161.3	420	463	290	311	359	390	292	313	
2002-03	166.8	439	482	299	323	366	405	301	325	
2003-04	180	467	500	311	322	382	420	313	335	
2004-05	187.3	483	520	324	342	396	436	326	344	
2005-06	195.6	516	540	347	358	418	456	348	360	
2006-07	Apr	199.0	120	120	352	360	426	465	353	362
	May	201.3	123	121	353	365	430	471	355	367
	Jun	203.1	124	123	360	370	437	477	361	372
	Jul	204.0	126	124	368	372	438	481	369	374
	Aug	205.3	127	124	366	375	444	484	367	376
	Sep	207.8	130	125	376	380	455	488	377	-
	Oct	208.7	132	127	389	386	462	493	389	387
	Nov	209.1	132	127	390	390	462	494	390	391
	Dec	208.4	131	127	388	390	464	493	388	391
	Jan	208.8	128	127	387	391	463	496	387	391
	Feb	208.9	128	128	388	392	465	497	388	393
	Mar	209.8	130	127	394	392	466	498	394	393
2007-08	Apr	211.5	130	128	391	394	464	501	391	395
	May	212.3	128	129	385	395	461	503	386	396
	Jun	212.3	130	130	385	399	463	506	385	400
	Jul	213.6	134	132	390	404	475	514	391	404
	Aug	-	138	133	400	408	482	515	400	408
	Sep	-	141	133	408	410	490	516	408	410

Source : Reserve Bank of India

1.4 External Cooperation

To supplement the recent development initiatives of the state government, some international development agencies have extended their cooperation in providing loan assistance for a number of development programmes. These international agencies include — the World Bank (WB), the Asian Development Bank (ADB) and the Department for International Development (DFID) of the United Kingdom (UK).

The assistance from the World Bank is in the form of project loan and it covers three projects — Bihar Rural Livelihood Project, Development Policy Project and Strengthening of Panchayats Project. From the ADB, the state government will receive project loans for Bihar State Road Investment Programme, Phases I and II, and Urban Investment Development Programme. The ADB will also provide programme loan for Power Sector Development Programme. Finally, the ADB will provide loans for five investment projects — Dagmara Hydroelectric Power Ltd., Augmentation of Transmission System, Strengthening of Distribution System, Development of Renewable Energy and Rural Electrification. As regards the cooperation of DFID, it will provide a grant of £50 million for a project on Urban Services for the Poor in Bihar. The state government will provide a contribution of £5 million to this project. The financial details of assistance from the World Bank and ADB are presented in Table 1.12. The total assistance from World Bank and ADB will add up to US \$ 2083 million, which is approximately equivalent to Rs. 8300 crore. This amount will be released over a period of six years.

Table 1.12 : Loans from External Agencies

Agency	Loan Amount (million US\$)	Loan Schedule (million US\$)					
		2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
The World Bank							
Rural Livelihood Project	63	3	5	20	25	7	3
Development Policy Project	450	112	112	112	112	—	—
Strengthening of Panchayat Project	120	—	—	60	60	—	—
Total	633	115	117	192	197	7	3
Asian Development Bank (ADB)							
Road Investment Programme – I	500	—	200	200	100	—	—
Road Investment Programme – II	300	—	—	30	120	100	50
Power Sector Development	150	—	100	30	20	—	—
Dagmara Hydroelectric Power	100	—	—	20	50	20	10
Augmentation of Transmission	80	—	20	30	30	—	—
Strengthening of Distribution	70	—	20	30	20	—	—
Renewable Energy Development	50	—	20	30	—	—	—
Rural Electrification	50	—	20	30	—	—	—
Urban Infrastructure Development	150	—	—	30	50	50	20
Total	1450	—	380	430	400	—	—
Grand Total (WB+ADB)	2083	115	497	622	597	170	80

Source : Department of Finance, Government of Bihar

1.5 Governance

The strengthening of different institutions of governance has been a prime concern of the present government. A number of steps were taken earlier to introduce administrative reforms and the efforts were strengthened last year. In addition, the state government has also made several crucial efforts to improve the law and order situation in the state. Finally, the state government has also proved itself to be a sensitive and responsive one when it had organised a massive relief operation after north Bihar had to face an enormous flood in 2007. Indeed, the entire approach of the state government to disaster management has undergone a paradigm shift. The administrative reforms, improvement in law and order, and disaster management constitute the major pillars of the current initiatives towards improved governance.

Governance in the New Public Management (NPM) paradigm is understood to comprise the following eight characteristics, a proper blend of which constitutes good governance : Participation, Rule of law, Transparency, Responsiveness, Consensus Orientation, Equity and Inclusiveness, Effectiveness and Efficiency, and Accountability. The state government has taken a series of measures directed towards all the above mentioned characteristics of good governance. On one hand, the public-private partnership is being proactively encouraged; on the other, the *Panchayati Raj Institutions* are being strengthened and given financial teeth to ensure local participation in both development plans and overall governance. For the latter, *Panchayat Sarkar* is being made functional by providing it with not only physical infrastructure in terms of office buildings but also manpower to operationalise local governance. *Gram Kachharis* have been established and *Nyaymitras* appointed.

As a move to bring about greater equity and ensure inclusion of concern and voices of the marginal segments of the society in its development paradigm, the state government has reserved 50 percent of all the posts of *Panchayati Raj Institutions* for women and 20 percent for extremely backward classes. For SC/ST also, reservation was introduced in proportion to their population in the local bodies. There have been moves to promote equitable distribution of not only outcomes but also opportunities, as reflected by an incentive of Rs. 10,000 for all students belonging to the minority community, who pass their secondary examination in first division.

To provide a sensitive and direct response to the specific and express concerns of different segments of the society, a number of commissions and committees have been constituted by the state government. These include *State Mahadalit Commission*, State Commission for Extremely Backward Classes, State Commission for Backward Classes, State Minorities Commission, and Bihar Land Reforms Commission. Further, *Janta Ke Darbar Main Mukhyamantri* programme is being run under the guidance of the Chief Minister to ensure that the general public is able to freely communicate its grievances to him and that these grievances are redressed in an expeditious manner. Also, the state government officials at block, sub-division, district and secretariat level have been directed to earmark a day in each week to meet people, listen to their grievances and take immediate steps to resolve them.

In addition, the efforts towards administrative reforms and e-governance reflect closely on the state government's commitment in engaging the remainder criteria of good governance, i.e., rule of law, effectiveness and efficiency, together with accountability and transparency.

Administrative Reforms

Administrative Reforms Commission has been constituted by the state government to strengthen and restructure the administrative setup so as to make it not only more efficient but also more accountable. The state government has accepted and already implemented most of the recommendations in the first report of the Administrative Reforms Commission. The Commission had recommended a restructuring of the departments in such a way as to decrease their number from 47 to 36. Till date, the state government, acting on partial acceptance of this recommendation, has reconstituted certain departments to bring their number to 44.

The state government has made substantive moves towards financial decentralisation in the administrative setup. There have been efforts at devolution and enhancement of financial authority at various levels of the state government. While the departmental secretary can now approve schemes upto Rs. 2.5 crore under plan head (Table 1.13) and upto Rs. 1.0 crore under non-plan head, the minister of the concerned department can sanction schemes with an outlay upto Rs. 10.0 crore under plan head, and upto Rs. 5.0 crore under non-plan head. Following arrangements have been made for vesting authority for appraisal and approval of schemes under plan and non-plan heads :

- (a) Departmental Standing Finance Committees : This Committee is headed by the Departmental Principal Secretary/Secretary with Internal Financial Adviser and Joint Secretary/Deputy Secretary of the planning branch as members. The Committee is responsible for appraisal of schemes under the plan and non-plan head. The Principal Secretary could invite as members representatives of the Planning Department, Finance Department or any other department at his discretion.
- (b) Plan Approval Committee : This Committee has the Development Commissioner as its Chairperson. Its members are Departmental Secretary, Principal Secretary of the Finance Department with the Principal Secretary of the Planning and Development as its Member-Secretary. The Committee is responsible of appraisal of schemes under the plan head.
- (c) Non-Plan Expenditure Committee : This Committee is headed by the Principal Secretary of the Finance Department and is responsible for appraisal of non-plan schemes.

Table 1.13 : Powers of Appraisal and Approval

Outlay of Scheme	Appraising Authority	Approving Authority
New Schemes under Plan Head		
1. Upto 2.5 crores	Administrative Dept.	Departmental Secretary
2. 2.5 crores to 10.00 crores	Standing Finance Committee	Department Minister
3. 10 crore – 20 crore	Departmental Standing Finance Committee	Department Minister and Finance Minister
4. More than 20 crore	Empowered Committee	Cabinet
5. Establishment of New Independent Organisation	Empowered Committee	Cabinet
New Schemes under Non-Plan Head		
1. Upto 1 crore	Administrative Dept.	Departmental Secretary
2. 1 crore – 5 crore	Departmental Standing Finance Committee	Departmental Minister
3. Above 5 crore	Non-Plan Expenditure Committee	Cabinet
4. Establishment of a new Independent Organisation	Non-Plan Expenditure Committee	Cabinet

Note : If the scheme involves purchase of new vehicle or creation/upgradation of new posts, then such a proposal would be put before Empowered Committee in case of plan head, and before *Prashasi Padvarg* Committee headed by Departmental Secretary in case of non-plan head.

Administrative Efficiency/Accountability : Measures have been taken to bring about efficiency in the administrative set up by making provisions for discharging of inefficient government servants from service. A Committee is to be formed under the chairmanship of the Chief Secretary, which would evaluate and recommend the cases of gazetted officers for forced retirement. Further, Committees under the chairmanship of departmental secretary would be formed to consider the cases for non-gazetted officials. The above mentioned committees would also meet once in a year to consider termination of the services of the absentee officials.

Prevention of Corruption : The state government has started a systematic campaign against corrupt government personnel and those with assets disproportionate to their known sources of income. In the last two years, 189 government personnel have been caught in vigilance trap cases, out of which 57 were gazetted officers. Cases have been registered against 231 government personnel under the Prevention of Corruption Act in the last two years. Whereas between 1995 and 2005, only 45 vigilance trap cases were reported, cases have been filed against 760 people in court in 2007 alone, out of which 329 are against gazetted officers.

Strengthening of Administrative Setup : Administrative efficiency in the state has been particularly marred by understaffing of crucial positions in the setup. The state government has initiated the process to one time filling up of a total of 163 vacancies of Bihar Administrative Services which were to be filled by direct appointments from 48th to 52nd batch of Bihar Public Service Commission. Appointments have been made for the 248 posts of assistants in the Secretariat and associated offices. Further, a total of 315 Judicial Services Civil Magistrates have been appointed.

E-Governance

As a major step towards bringing in an inclusive and transparent governance in the state, a host of e-governance measures are being implemented by the government over the last two years. The Department of Information Technology (IT) has been created in April 2007, which acts as the nodal agency for IT projects in the Government. The Department has initiated a number of projects, many of which are in an advanced stage of execution. The Bihar State Wide Area Network (BISWAN) Project has been awarded to M/s TCS in October 2007, under which districts and blocks will be connected through leased lines (electronic communication) at a cost of Rs. 256 crore. By March 2008, the state government plans to set up PoPs (Points of Presence) in the state headquarters, all the district headquarters and 106 block headquarters. It must be noted that a PoP is an electronic hub located in the State HQ/District HQ/Block HQ that would connect various local offices to the BISWAN. The PoPs in remaining locations are to be set up by the end of July, 2008. Further, the Bihar Revenue and Intranet Data Centre (BRAIN DC) is being setup for efficient, transparent and on-line management of the 55 Government Treasuries and 66 Commercial Tax offices in the state. Software applications for both components have been prepared and customized and necessary hardware provided. A Data Centre for BRAIN has been set up in Technology Bhawan at Patna and it is ready for hosting applications. The treasury and VAT applications (CT_MIS and VAT_MIS) are proposed to be put into operation using the BRAIN DC and BISWAN from April 2008.

All secretariat offices are being connected through a local network called SecLAN. This would provide data, voice and video connectivity to all these offices. The SecLAN would be connected to the State Data Centre where a number of applications would be hosted to facilitate office work. An Integrated Workflow and Document Management Software (IWDMS) is being installed which would be used through SecLAN for reducing paperwork, tracking file movement and providing ready access to various ACTs, Rules, Guidelines and Circulars of the Government.

With a view of enabling the common citizen to access IT and IT Enabled Services at his doorsteps, Common Service Centres (CSCs), named 'Vasudha', are being set up in each panchayat. The Vasudha Kendra would be an e-kiosk equipped with computer, printer etc. having internet

connectivity. It would be set up by a Service Centre Agency (SCA), a private party, with its own investment and it would operate the Kendra through a computer trained village level entrepreneur. Government to citizen (G-2-C) services and Business to citizen (B-2-C) services would be offered on minimum payment basis to ensure sustainability.

The Bihar Online portal is planned as another major step towards empowering the citizen. The portal would provide information on a wide range of subjects pertaining to Bihar and the Government. It would also offer interactive services as well as payment services to the people through an user-friendly interface.

Further, steps have been initiated for implementing several State Mission Mode Projects (MMPs) such as e-Health, e-District, Land Resources, Transport, etc. Besides, IT applications for NREGS, Jail Modernisation, e-Procurement etc are being developed.

Implementation of RTI Act

Access to information is both an instrument and outcome of transparent governance. To ensure access to information for the masses, the State Information Commission has been constituted in Bihar. The state government has also created the post of Chief Information Commissioner along with four state Information Commissioners, keeping in mind the work of the Commission. Further, the Right to Information Act 2006 has been implemented in the state. The first information call centre in the country has been established in Bihar through which the public is able to seek information under Right to Information Act through basic phone services of BSNL.

Law and Order

In the last two years, there has been a significant fall in most of the major crimes such as murder, dacoity, robbery, kidnapping for ransom, road dacoity, road robbery etc. While murders committed in the state fell by more than 12 percent in 2007 as compared to 2006, kidnapping for ransom fell by 54 percent. Similarly, the number of dacoity fell by 33 percent, road dacoity by 28 percent, burglary by 8 percent and theft by 6 percent. If one takes a look at the trend over the post

bifurcation period from 2001 to 2007, these declines in major crimes get further emboldened. While total number of murders in the state have declined by 18 percent over the period 2001-07, number of kidnappings for ransom have declined by almost 77 percent over the period (Table 1.14). Number of dacoities in the state have also halved over the same period, falling by 50 percent. While robberies in the state have declined by 20.5 percent, road dacoities and road robberies have fallen by 41 percent and 14 percent respectively over 2001-07. The information on districtwise crime situation is presented in Appendix I-VI.

Table 1.14 : Crime Scenario in Bihar

Nature of Crime	Accuse / Year							Growth (in percent)
	2001	2002	2003	2004	2005	2006	2007	
Murder	3619	3634	3652	3861	3423	3225	2963	-18.13
Dacoity	1293	1259	1203	1297	1191	967	646	-50.04
Robbery	2175	2236	2425	2909	2379	2138	1729	-20.51
Ransom	385	396	335	411	251	194	89	-76.88
Road dacoity	257	252	247	287	224	211	151	-41.25
Road robbery	1296	1323	1430	1875	1310	1251	1109	-14.43

Source : Department of Home, Government of Bihar

Table 1.15 : Convictions in Bihar

Year	Category of Punishment				Total
	Hanging	Imprisonment			
		Life	More than 10 yrs	Less than 10 yrs	
2006	17	1389	366	5067	6839
2007	39	2168	680	6966	9853

Source : Department of Home, Government of Bihar

There has been a concerted effort on the part of the state government towards bringing a greater correspondence between investigation and prosecution of criminal cases in the state. A campaign for speedy trial of matters pending in courts has yielded good results. In last two years, a record number of 17448 criminals have been convicted in the state (Table 1.15). While 6839 criminals were convicted in 2006, a total of 9853 criminals were convicted in 2007. What is noteworthy is that not only number of convictions have increased significantly in the state, but the severity of punishment too has increased reflecting effective investigation backing the prosecution of crime.

Further, to curb possibilities of law and order violations through a special campaign, Sub-Divisional Magistrates and Executive Magistrates started proceedings under 107 Criminal Procedure Code (Cr.P.C) against 87351 persons, of which 26629 were asked to execute bonds and bound down. In a similar manner, proceedings under 110 CrPC was started against 1951 persons out of which 508 were asked to execute bonds and bound down. The use of section 110 CrPC were revived after many decades. Also, bail cancellation procedures have been started against those criminals who had indulged in fresh crime while being on bail.

Bihar has become the first state in the country to enact and implement a new Police Act. The Bihar Police Act 2007 takes into account respect for promotion of human rights and the emerging challenges of policing and security of the state and then redefine the role of the police. In a uniquely innovative exercise of tapping available trained human resources for the policing needs of the state, 5000 ex-servicemen were inducted in the police force in 2006-07 followed by another 11500 persons in 2007-08

Jail Administration

Efforts have been made by the state government towards strengthening jail administration in the state. A total of 4861 new posts have been sanctioned as an effort towards strengthening jail administration.

Table 1.16 : Manpower in Jail Administration

Sl. No.	Designation	Already Sanctioned Post	New Sanctioned Post	Total Sanctioned Post	Functioning Force	Vacant	Vacancy in Percent
1	2	3	4	5	6	7	8
Security Related Designation							
1	Jail Supritendent	57 (Including 2 Head Offices)	-	57	33	24	42.11
2	Jailor	31	12	43	19	24	55.81
3	Assistant Jailor	108	93	201	71	130	64.68
4	Chief Head Constable	7	32	39	5	34	87.18
5	Head constable	266	284	550	223	327	59.45
6	Constable	2247	2844	5091	1281	3736	73.38
	Ex. Servicemen against Constable				74		—
7	Lady Constable	157	0	157	105	52	33.12
8	Special Task Force	0	770	770	0	770	100.00
Total		2873	4035	6908	1811	5097	73.78
Medical Related Designation							
9	(A) Jail Doctor	64	-	64	51	13	20.31
	(B) Jail Doctor (External Source)	-	43	43	0	43	100.00
10	Compounder (Misrak)	58	43	101	11	90	89.11
11	Dresser (Paridhapak)	51	50	101	13	88	87.13
Total		173	136	309	75	234	75.73
Other Designation							
12	Account Officer	0	6	6	0	6	100.00
13	Accountant	0	32	32	0	32	100.00
14	Account Clerk	0	23	23	0	23	100.00
15	Lower Division Clerk	15	21	36	14	22	61.11
16	Jail Clerk	81	0	81	81	0	0.00
17	Barber	0	105	105	0	105	100.00
18	Labour (Mazdoor)	22	503	525	22	503	95.81
Total		118	690	808	117	691	85.52
Grand Total		3164	4861	8025	2003	6022	75.04

Source : Department of Home, Government of Bihar

Table 1.17 : Inmate Capacity and Strength of the Jails in Bihar

Sl. No.	Name of Jail	Capacity			Classification of Prisoners			Ratio (Strength / Capacity)		
		M	F	Total	M	F	Total	Total	F	M
1	C.J. Muzaffarpur	1218	11	1229	1925	73	1998	1.63	6.64	1.58
2	C.J. Gaya	1414	14	1428	2135	73	2208	1.55	5.21	1.51
3	C.J. Beur, Patna	2260	100	2360	2514	99	2613	1.11	0.99	1.11
4	C.J. Buxar	1144	0	1144	1129	0	1129	0.99	—	0.99
5	S.C.J. Bhagalpur	3324	0	3324	2283	0	2283	0.69	—	0.69
6	C.J. Bhagalpur	1962	0	1962	1267	0	1267	0.65	—	0.65
Total		11322	125	11447	11253	245	11498	1	1.96	0.99
1	D.J. Gopalganj	52	3	55	506	22	528	9.6	7.33	9.73
2	D.J. Bhabhua	83	2	85	491	6	497	5.85	3.00	5.92
3	D.J. Jehanabad	134	6	140	789	17	806	5.76	2.83	5.89
4	D.J. Madhepura	96	3	99	472	6	478	4.83	2.00	4.92
5	D.J. Jamui	184	4	188	674	21	695	3.7	5.25	3.66
6	D.J. Nawada	218	18	236	806	25	831	3.52	1.39	3.70
7	D.J. Araria	160	2	162	484	7	491	3.03	3.50	3.03
8	D.J. Supaul	126	12	138	390	12	402	2.91	1.00	3.10
9	D.J. Purnia	400	12	412	924	63	987	2.4	5.25	2.31
10	D.J. Sitamarhi	264	22	286	644	27	671	2.35	1.23	2.44
11	D.J. Betiah	482	25	507	1132	51	1183	2.33	2.04	2.35
12	D.J. Aurangabad	336	3	339	730	33	763	2.25	11.00	2.17
13	D.J. Biharsharif	474	25	499	975	37	1012	2.03	1.48	2.06
14	D.J. Chapra	530	12	542	989	34	1023	1.89	2.83	1.87
15	D.J. Khagaria	424	3	427	707	14	721	1.69	4.67	1.67
16	D.J. Samastipur	614	10	624	906	59	965	1.55	5.90	1.48
17	D.J. Darbhanga	391	10	401	579	37	616	1.54	3.70	1.48
18	D.J. Sasaram	582	10	592	863	29	892	1.51	2.90	1.48
19	D.J. Saharsa	433	10	443	626	29	655	1.48	2.90	1.45
20	D.J. Ara	1053	25	1078	1520	39	1559	1.45	1.56	1.44

Table 1.17 : Inmate Capacity and Strength of the Jails in Bihar (Contd.)

21	D.J. Hajipur	764	25	789	1115	11	1126	1.43	0.44	1.46
22	F.D.J. Bhagalpur	0	83	83	0	117	117	1.41	1.41	—
23	D.J. Kishanganj	211	10	221	272	15	287	1.3	1.50	1.29
24	D.J. Begusrai	946	10	956	1164	19	1183	1.24	1.90	1.23
25	D.J. Munger	450	32	482	569	19	588	1.22	0.59	1.26
26	D.J. Motihari	1142	35	1177	1372	58	1430	1.21	1.66	1.20
27	D.J. Lakhisarai	416	7	423	456	7	463	1.09	1.00	1.10
28	D.J. Madhubani	596	25	621	647	14	661	1.06	0.56	1.09
29	D.J. Katihar	719	40	759	709	31	740	0.97	0.78	0.99
30	D.J. Banka	708	6	714	671	19	690	0.97	3.17	0.95
31	D.J. Phulwarisharif	568	0	568	542	0	542	0.95	—	0.95
32	D.J. Siwan	664	20	684	601	15	616	0.9	0.75	0.91
33	D.J. Shekhpura	282	5	287	230	2	232	0.81	0.40	0.82
Total		14502	515	15017	23555	895	24450	1.63	1.74	1.62
1	Sub Jail Patnacity	35	2	37	231	0	231	6.24	0.00	6.60
2	Sub Jail Barh	165	2	167	538	6	544	3.26	3.00	3.26
3	Sub Jail Hilsa	200	10	210	535	18	553	2.63	1.80	2.68
4	Sub Jail Buxar	51	3	54	113	19	132	2.44	6.33	2.22
5	Sub Jail Danapur	87	0	87	202	1	203	2.33	—	2.32
6	Sub Jail Jhanjharpur	100	25	125	257	4	261	2.09	0.16	2.57
7	Sub Jail Sherghati	230	10	240	336	16	352	1.47	1.60	1.46
8	Sub Jail Mashaurhi	180	13	193	208	0	208	1.08	0.00	1.16
9	Sub Jail Bagha	464	25	489	504	15	519	1.06	0.60	1.09
10	Sub Jail Birpur	125	5	130	121	1	122	0.94	0.20	0.97
11	Sub Jail Dalsinghsarai	149	15	164	121	3	124	0.76	0.20	0.81
12	Sub Jail Benipur	200	15	215	137	8	145	0.67	0.53	0.69
13	Sub Jail Bikramganj	282	25	307	197	8	205	0.67	0.32	0.70
14	Sub Jail Naugachhia	464	20	484	266	7	273	0.56	0.35	0.57
15	Sub Jail Rosera	232	0	232	100	0	100	0.43	—	0.43
16	Sub Jail Udakishanganj			0	Not Started Functioning				—	—
Total		2964	170	3134	3866	106	3972	1.27	0.62	1.30
Grand Total		28788	810	29598	38674	1246	39920	1.35	1.54	1.34

Source : Department of Home, Government of Bihar

Steps have also been taken by the state government towards addressing these problems of jail administration. On the front of security, 1030 INSAS rifles have been allocated to the state prisons. Further, close circuit cameras are to be installed in six central prisons. A special security force has also been constituted for outer security of the prisons, for which 770 posts have been created. The retired army officials are being appointed in these posts.

Capacity in jails is being expanded through construction of new prison cells under the Prison Reform Plan. Under this plan, approval has been given for construction of divisional jails in Gopalganj, Jamui, Jehanabad and sub-jails in Benipatti and Dawoodnagar. An additional capacity of 27 thousand inmates would be created on completion of these plans. Besides expansion of jail capacity, a series of steps have been taken towards better sanitation and hygiene facilities in the jails. For this, approval has been given for renovation of 1200 old toilets with an outlay of Rs. 60 lakh. Further, the cage latrines of 400 old barracks are to be modernised with an estimated cost of Rs. 2.4 crore and 1233 new toilets have been constructed in the jails. Approval for establishment of 900 handpumps and 50 modern kitchens under the Prison Reform Plan has been given. Stress is also on ensuring that prisoners get proper diet.

Disaster Management

Bihar has been historically prone to many disasters. Bihar is particularly vulnerable to two kinds of disasters – floods and earthquakes. Floods are a regular feature in Bihar and a significant portion of the state falls within the highly vulnerable seismic Zones IV and V of India. The periodic destruction of life, livelihood and property in a mass scale has been a recurring phenomenon in Bihar. Historically, the 1934 earthquake and the floods in 1975 are a part of popular historical memory. The number of disasters have risen over the years, not just in Bihar, but worldwide in the past few decades. With the rise in number of disasters over the years, disaster management constitutes an extremely important part of governance today.

In spite of the regular occurrence of disasters, there had not been any concerted effort in the past at the level of the state government to address the issue, except for carrying out post-disaster relief work. This was marked by severe lacuna, as in most cases the institutional machinery of the state government was caught unaware in the face of disasters. In the last two years, there has been a paradigmatic shift in the state government's approach to disaster management from mere post-

disaster relief operations to a framework of strategic preparedness to face disasters. This implies a shift in strategy towards building institutions for (a) prevention of disasters, (b) preparedness to face disasters and (c) mitigation of effects of disasters.

The state government has embarked on a strategic approach to managing and mitigating the impact of both floods and earthquakes. For effective management of disasters in keeping with the new paradigm, the state government has been focusing on a policy of rigorous pre-disaster planning and practice for preparedness and emergency response.

Scale of Damages due to Floods : The floods in 2007 brought with it massive destruction of life, livelihood and property. Table 1.18 below provides a perspective based on the comparison of the devastation caused by floods in Bihar over the period 1998-2007, taking into account the destruction caused by four episodes of floods in the last ten years.

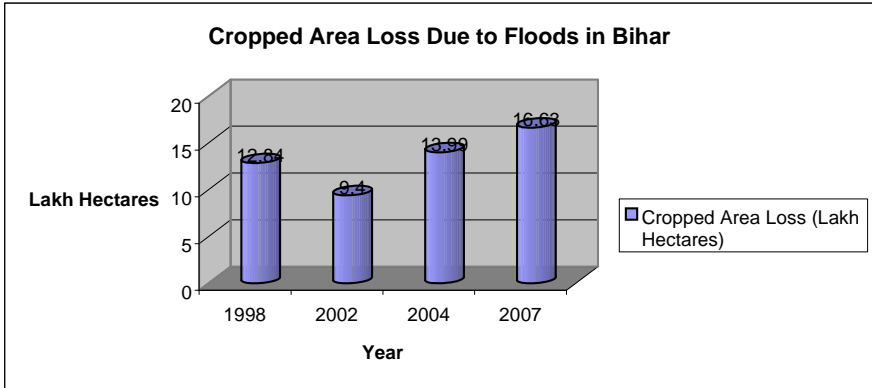
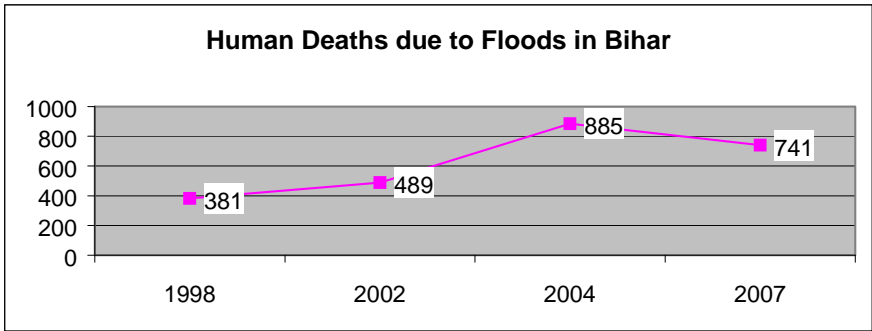
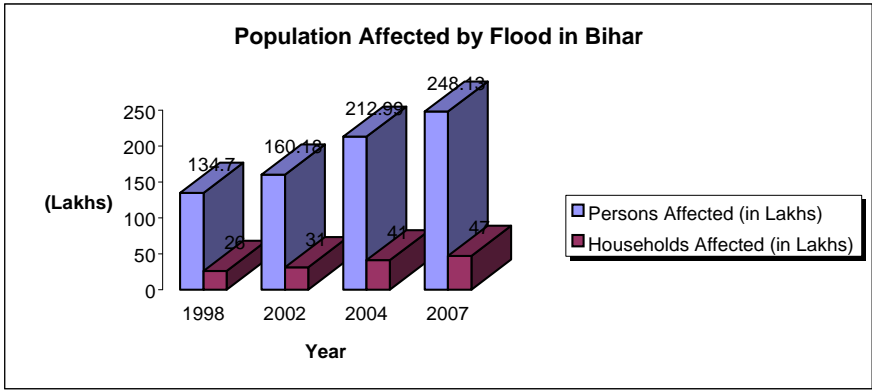
Table 1.18 : Scale of Devastation Caused by Floods in Bihar

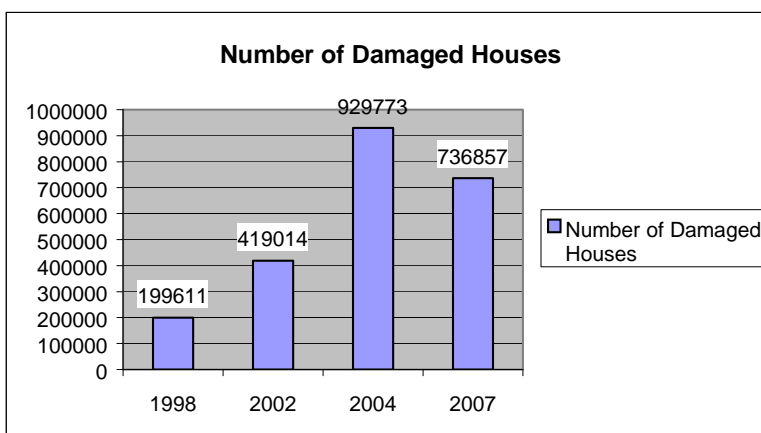
Year	Number of				Cropped Area Loss (lakh hectares)
	Persons Affected (in lakhs)	Households Affected (in lakhs)	Number of Damaged Houses	Human Deaths	
1998	134.7	26	199611	381	12.84
2002	160.18	31	419014	489	9.4
2004	212.99	41	929773	885	13.99
2007	248.13	47	736857	741	16.63

Source : Department of Disaster Management, Government of Bihar

The floods in 2007 affected 22 out of 38 districts in Bihar. In all, 50 percent of blocks (264 out of 533) were inundated. This covered 3574 Panchayats, 12610 villages and touched the lives of 248.13 lakh people and 47 lakh households. This flood was even more severe than the floods in 2004 when 212.99 lakh people and 41 lakh households were affected. The scale of human deaths has also been increasing with every flood in Bihar. In 2007, as many as 741 people died in the floods. The loss to cropped area was also significantly higher than previous episodes of floods and stood at 16.63 lakh hectares in 2007. The number of houses damages, however, was 34 percent less in 2007 compared to 2004. Thus by almost every measure of damage and devastation, the floods in Bihar in 2007 have been unprecedented.

Comment [MSOffice1]: Insert
Graphs 1-4 from Sheet 1





Scale of Relief Operations : In keeping with the new concerted effort at disaster management, the emphasis of the state government was on mitigating the impact of the flood. The main focus was on delivering relief as per people's entitlements. The state government's own resources and the resources from the Calamity Relief Fund were pooled to deliver the largest ever relief programme in Bihar. The increase in flood relief allotment in 2007 can be seen in Table 1.19.

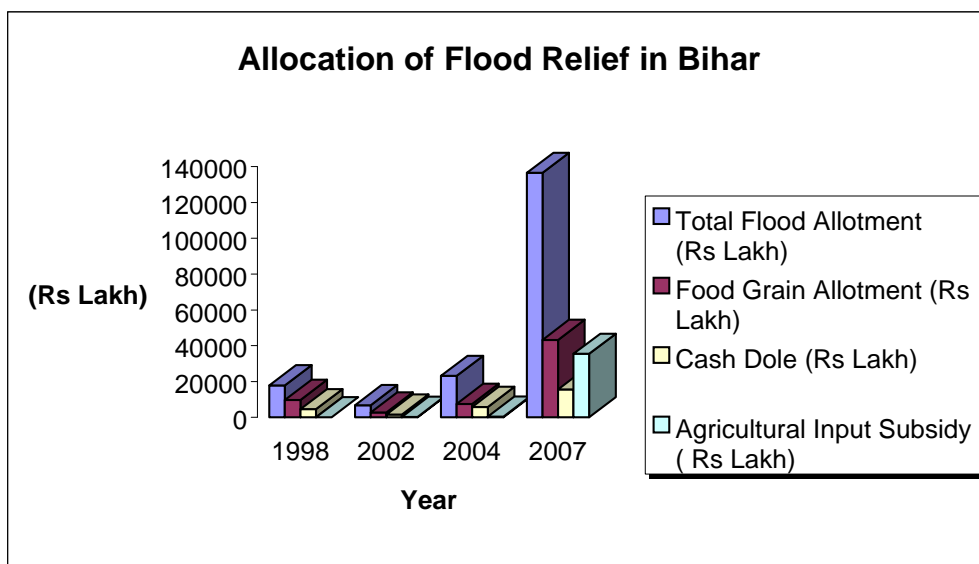
Table 1.19 : Scale of Response to Devastation Caused by Floods in Bihar

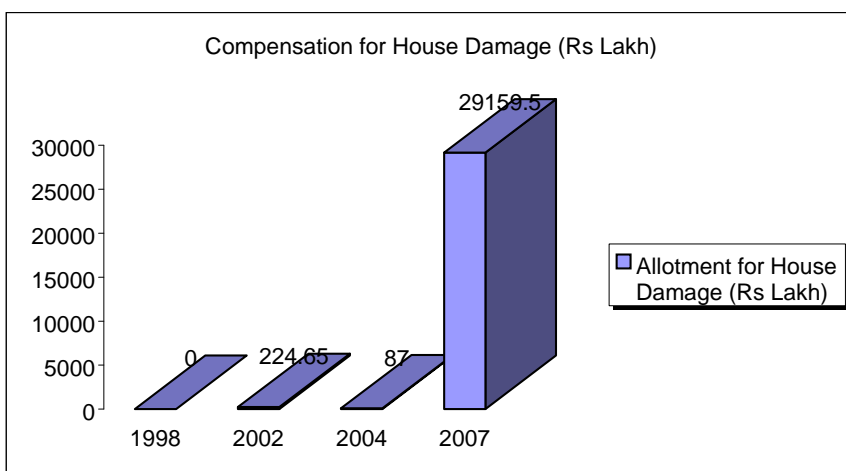
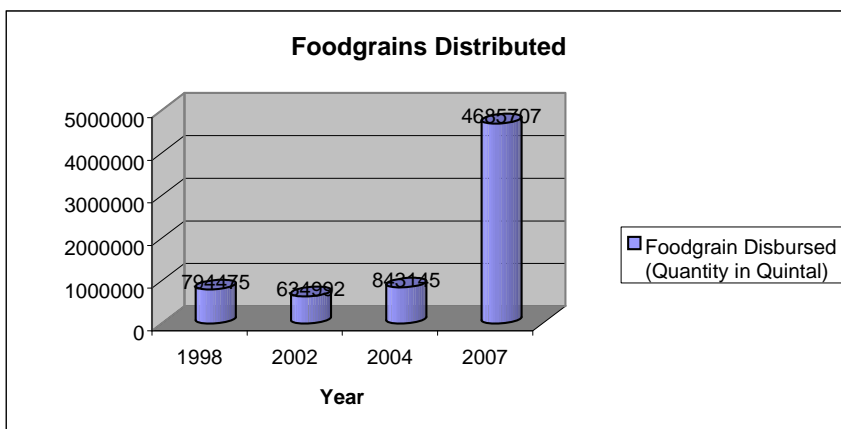
	1998	2002	2004	2007
Foodgrains distributed (quintals)	794475	634992	843145	4685707.15
Allocated Amount (Rs. lakh) for				
Total	17817	6757.35	23132.75	136519.00
Foodgrains	9647.74	2743.7	7500	43252.55
Cash Dole	4505.68	1500	5777.5	15623.50
Agricultural Input Subsidy	0	225	375	35495
Ex-gratia payment for human deaths	169.05	263	305.16	1050.00
Compensation for house damage	0	224.65	87	29159.50

Source : Department of Disaster Management, Government of Bihar

Total allocation for flood relief increased more than five times from Rs. 23132.75 lakh in 2004 to Rs. 136519.00 lakh in 2007 for food assistance. There was a five-fold increase in food grain allotment, a doubling of the total allotment for cash dole at Rs 200 per household and more than a 100 times rise in the agricultural input subsidy in 2007 as compared to 2004.

The ex-gratia payment for human deaths went up from Rs. 305.16 lakh to Rs 1111.5 lakh (Rs 741 lakh from Calamity Relief Fund (CRF) and Rs 370.5 lakh from the *Mukhya Mantri Relief Fund*), because of the increase in payment for each death. For the first time, a payment of Rs. 15000 was made to the next of kin of the first girl child born in a relief camp. Every household affected by floods in 2007 was provided one quintal each of rice and wheat free of cost. In the process, 46.85 lakh quintals of foodgrain had been disbursed by November 2007. This was more than a four-fold increase compared to the disbursals in 2004. The CRF allocation for house damage compensation in 2007 was Rs 29159.50 lakh. Besides this, the state government has decided to launch *Mukhya Mantri Awas Yojana* to reconstruct the fully damaged *kutcha* houses and huts. An amount of Rs 1250 crore has been earmarked for this project – Rs 950 crore from the State Plan and Rs 300 crore from the CRF. In the first phase, Rs 488 crore from the State Plan has been allocated for the year 2007-08. Notably in 1998, there were no allotments for house damage compensation. In 2004, there was an allotment of just Rs. 87 lakhs, but no disbursals were made. In 2002, Rs. 224.65 lakh had been allotted, but less than 50 percent of the allocation was actually disbursed.





Long Term Initiatives in Disaster Management : The significant difference in the quality of relief operations in 2007 compared to previous years has been the stress on long term rehabilitation rather than just short-term relief. For long term initiatives towards prevention and mitigation of floods involve, the state government has taken the following steps :

- (a) Intra-state River Linking scheme for irrigation, flood control and drainage improvement has been prepared.
- (b) Rs. 316 crore has been sanctioned for a scheme for reconstruction of all Zamindari embankments in the state.
- (c) A scheme for removal of silt from river beds has been submitted to the Planning Commission for approval.

In addition to the above measures, the state government has started the Bihar Disaster Risk Management (BDRM) programme which is supported by the central government and UNDP. The aim of the programme is to build up village based people's committees and village level plans to foresee and face disasters before outside help reaches. Under this arrangement, skilled Village Level Task Forces will undertake search and rescue, first aid, and other operations. The revamping strategy of the BRDM programme introduced in May 2007 has yielded the following outcomes till date :

- (a) Blocks most vulnerable to floods in 14 Disaster Risk Management (DRM) districts and 180 most sensitive villages in each block have been identified based on an analysis of a 20 year dataset.
- (b) To ensure people's participation and selection of village task force members, intensive field level work consisting of *prabhat pheri*, *nukkad natak*, rallies and village meetings were organised by mobilization of 1151 field workers from 67 agencies.
- (c) Intensive monitoring was done at the state level through 362 field inspections and supervisions.
- (d) Village Disaster Management plans have been prepared in 504 villages. Village Level People's Committees and Village Level Task Forces on Search and Rescue, First Aid, early warning and other areas have been formed involving 15000 villagers.
- (e) For the first time in Bihar, the highly skilled National Disaster Management Force (NDRF) was mobilized to impart quality training in Search and Rescue and First Aid training. Altogether, 70 NDRF members in 14 teams were involved in the training of district and block-level trainers and thousands of Village Task Force (VTF) members. So far, 4800 VTF members have been trained in 472 villages. Mock drills were organised for the VTF members after completion of training.

The revamping strategy will be continued in the rest of the 10000 villages of the 14 DRM districts. DRM will also be extended to the other 24 districts of Bihar.

In the case of earthquakes, the focus of the state government has been geared towards a systematic and intensive approach to generate awareness about Bihar's seismic vulnerability. The emphasis is on building technical capacity and ensuring necessary legislation to transform Bihar into a state where all constructions (public or private) would be based on the best available seismic-proof construction technology. Towards this end, 7 professors from the National Institute

of Technology at Patna, Bihar College of Engineering at Bhagalpur and Muzaffarpur Institute of Technology have undergone two phases of specialized training in IIT Delhi under the central government's programme for National Capacity Building of Engineers. In addition, 30 senior structural engineers from the private and government sectors in Bihar were chosen after intensive screening to attend a highly advanced training programme, involving faculty from IIT Mumbai and Structural Engineering Resource Centre (SERC) Chennai. The training has been successfully completed in Patna and Chennai. These programmes were supported by National Disaster Management Authority (NDMA). These trained engineers and professionals constitute a state level resource team of experts to undertake further trainings of all engineers and other construction professionals in seismic proof construction technology. This capacity building exercise will be continued till the aim is achieved.

Proposed Activities in Disaster Management : In the coming year, the state government has plans for undertaking the following activities in the field of disaster management :

- (a) There is a proposal to implement an Earthquake Vulnerability Reduction Plan for Patna, involving people's committees and urban local bodies. The Plan and strategy will be eventually extended to all urban centres in Bihar.
- (b) A new Disaster Management Code is being brought in to replace the old relief code in keeping with the paradigmatic shift in the approach to disaster management.
- (c) The State Disaster Management Authority and the District Disaster Management Authorities are being constituted to emerge as professional organisations specializing in the management of disasters.
- (d) The District Level Emergency Operation Centres will be provided with state of the art facilities, professional training and national and international connectivity.
- (e) Comprehensive Standard Operating Procedures will be prepared in coordination with various sectoral departments.

It is thus apparent that the state government has already adopted a holistic, synergised and state of the art approach for disaster management in Bihar. Essentially, the approach encompasses the administrative structure for disaster management, the human base of the programme covering engineers and other professionals, the mechanism for people's participation and, finally, the financial resource base of the programme.

Appendix I : Total Murders in Bihar

MURDER IN BIHAR : 2005 TO 2007					% Change over the Years		
Sl.No	Distt	2005	2006	2007	2005-06	2006-07	2007-08
1	PATNA	436	387	320	-11.24	-17.31	-26.61
2	NALANDA	158	137	121	-13.29	-11.68	-23.42
3	BHOJPUR	158	127	107	-19.62	-15.75	-32.28
4	BUXAR	68	53	35	-22.06	-33.96	-48.53
5	ROHTAS	107	102	89	-4.67	-12.75	-16.82
6	BHABUA	57	59	55	3.51	-6.78	-3.51
7	GAYA	158	158	157	0.00	-0.63	-0.63
8	NAWADA	78	77	75	-1.28	-2.60	-3.85
9	AURANGABAD	58	82	67	41.38	-18.29	15.52
10	JEHANABAD	52	39	38	-25.00	-2.56	-26.92
11	ARWAL	28	22	17	-21.43	-22.73	-39.29
12	SARAN	118	106	85	-10.17	-19.81	-27.97
13	SIWAN	89	93	74	4.49	-20.43	-16.85
14	GOPALGANJ	74	72	48	-2.70	-33.33	-35.14
15	EAST CHAMPARAN	107	119	111	11.21	-6.72	3.74
16	BAGHA	40	48	34	20.00	-29.17	-15.00
17	WEST CHAMPARAN	68	72	61	5.88	-15.28	-10.29
18	MUZAFFARPUR	130	134	149	3.08	11.19	14.62
19	VAISALI	60	99	120	65.00	21.21	100.00
20	SAMASTIPUR	62	45	51	-27.42	13.33	-17.74
21	SHEOHAR	10	16	23	60.00	43.75	130.00
22	DARBHANGA	41	62	76	51.22	22.58	85.37
23	SITAMARHI	121	102	74	-15.70	-27.45	-38.84
24	MADHUBANI	69	62	76	-10.14	22.58	10.14
25	SAHARSA	17	44	50	158.82	13.64	194.12
26	MADHEPURA	52	60	68	15.38	13.33	30.77
27	SUPAUL	34	31	36	-8.82	16.13	5.88
28	PURNIA	113	57	90	-49.56	57.89	-20.35
29	KATI HAR	78	59	63	-24.36	6.78	-19.23
30	ARARIA	62	63	48	1.61	-23.81	-22.58
31	KISHANGANG	25	18	23	-28.00	27.78	-8.00
32	BHAGALPUR	101	119	92	17.82	-22.69	-8.91
33	BANKA	49	65	46	32.65	-29.23	-6.12
34	NAUGACHHIA	52	35	30	-32.69	-14.29	-42.31
35	MUNGER	103	74	74	-28.16	0.00	-28.16
36	SHEKHPURA	33	25	19	-24.24	-24.00	-42.42
37	LAKHISARAI	52	47	35	-9.62	-25.53	-32.69
38	JAMUI	81	66	44	-18.52	-33.33	-45.68
39	KHAGARIA	47	53	48	12.77	-9.43	2.13
40	BEGUSARAI	121	87	96	-28.10	10.34	-20.66
41	RAILWAY PAT	15	16	15	6.67	-6.25	0.00
42	RAILWAY JMP	7	5	7	-28.57	40.00	0.00
43	RAILWAY MFP	23	18	10	-21.74	-44.44	-56.52
44	RAILWAY KTR	11	10	6	-9.09	-40.00	-45.45
	TOTAL	3423	3225	2963	-5.78	-8.12	-13.44

Source : Department of Home, Government of Bihar

Appendix II : Dacoity in Bihar

Dacoity in Bihar : 2005 to 2007					% Change over the Years		
Sl.No	Distt	2005	2006	2007	2005-06	2006-07	2005-07
1	PATNA	127	87	58	-31.50	-33.33	-54.33
2	NALANDA	41	27	16	-34.15	-40.74	-60.98
3	BHOJPUR	32	32	10	0.00	-68.75	-68.75
4	BUXAR	30	28	12	-6.67	-57.14	-60.00
5	ROHTAS	23	20	7	-13.04	-65.00	-69.57
6	BHABUA	18	30	7	66.67	-76.67	-61.11
7	GAYA	112	72	48	-35.71	-33.33	-57.14
8	NAWADA	19	7	8	-63.16	14.29	-57.89
9	AURANGABAD	21	23	30	9.52	30.43	42.86
10	JEHANABAD	35	16	11	-54.29	-31.25	-68.57
11	ARWAL	10	2	4	-80.00	100.00	-60.00
12	SARAN	50	41	33	-18.00	-19.51	-34.00
13	SIWAN	51	37	22	-27.45	-40.54	-56.86
14	GOPALGANJ	10	25	11	150.00	-56.00	10.00
15	EAST CHAMPARAN	52	42	25	-19.23	-40.48	-51.92
16	BAGHA	1	9	4	800.00	-55.56	300.00
17	WEST CHAMPARAN	26	14	12	-46.15	-14.29	-53.85
18	MUZAFFARPUR	47	50	31	6.38	-38.00	-34.04
19	VAISALI	14	19	9	35.71	-52.63	-35.71
20	SAMASTIPUR	20	34	24	70.00	-29.41	20.00
21	SHEOHAR	11	2	1	-81.82	-50.00	-90.91
22	DARBHANGA	25	25	9	0.00	-64.00	-64.00
23	SITAMARHI	19	12	13	-36.84	8.33	-31.58
24	MADHUBANI	45	50	17	11.11	-66.00	-62.22
25	SAHARSA	6	1	7	-83.33	600.00	16.67
26	MADHEPURA	17	16	10	-5.88	-37.50	-41.18
27	SUPAUL	39	7	9	-82.05	28.57	-76.92
28	PURNIA	38	21	28	-44.74	33.33	-26.32
29	KATI HAR	19	8	9	-57.89	12.50	-52.63
30	ARARIA	37	43	40	16.22	-6.98	8.11
31	KISHANGANG	15	7	11	-53.33	57.14	-26.67
32	BHAGALPUR	14	14	15	0.00	7.14	7.14
33	BANKA	33	17	20	-48.48	17.65	-39.39
34	NAUGACHHIA	6	4	2	-33.33	-50.00	-66.67
35	MUNGER	19	19	5	0.00	-73.68	-73.68
36	SHEKHPURA	4	5	3	25.00	-40.00	-25.00
37	LAKHISARAI	8	6	5	-25.00	-16.67	-37.50
38	JAMUI	38	25	14	-34.21	-44.00	-63.16
39	KHAGARIA	12	14	8	16.67	-42.86	-33.33
40	BEGUSARAI	9	7	6	-22.22	-14.29	-33.33
41	RAILWAY PAT	15	18	11	20.00	-38.89	-26.67
42	RAILWAY JMP	10	7	10	-30.00	42.86	0.00
43	RAILWAY MFP	11	15	3	36.36	-80.00	-72.73
44	RAILWAY KTR	2	9	8	350.00	-11.11	300.00
	TOTAL	1191	967	646	-18.81	-33.20	-45.76

Source : Department of Home, Government of Bihar

Appendix III : Robbery in Bihar

Robbery IN BIHAR 2005 TO 2007					% Change over the Years		
Sl.No	Distt	2005	2006	2007	2005-06	2006-07	2005-07
1	PATNA	635	535	381	-15.75	-28.79	-40.00
2	NALANDA	91	56	48	-38.46	-14.29	-47.25
3	BHOJPUR	46	57	42	23.91	-26.32	-8.70
4	BUXAR	35	35	29	0.00	-17.14	-17.14
5	ROHTAS	26	37	20	42.31	-45.95	-23.08
6	BHABUA	18	16	19	-11.11	18.75	5.56
7	GAYA	129	100	90	-22.48	-10.00	-30.23
8	NAWADA	31	24	17	-22.58	-29.17	-45.16
9	AURANGABAD	27	34	26	25.93	-23.53	-3.70
10	JEHANABAD	35	16	16	-54.29	0.00	-54.29
11	ARWAL	14	7	4	-50.00	-42.86	-71.43
12	SARAN	60	80	82	33.33	2.50	36.67
13	SIWAN	122	100	71	-18.03	-29.00	-41.80
14	GOPALGANJ	53	40	32	-24.53	-20.00	-39.62
15	EAST CHAMPARAN	66	55	41	-16.67	-25.45	-37.88
16	BAGHA	4	7	10	75.00	42.86	150.00
17	WEST CHAMPARAN	30	38	15	26.67	-60.53	-50.00
18	MUZAFFARPUR	91	102	70	12.09	-31.37	-23.08
19	VAISALI	52	59	51	13.46	-13.56	-1.92
20	SAMASTIPUR	15	33	28	120.00	-15.15	86.67
21	SHEOHAR	4	3	0	-25.00	-100.00	-100.00
22	DARBHANGA	18	25	20	38.89	-20.00	11.11
23	SITAMARHI	61	50	42	-18.03	-16.00	-31.15
24	MADHUBANI	33	21	16	-36.36	-23.81	-51.52
25	SAHARSA	28	34	55	21.43	61.76	96.43
26	MADHEPURA	38	40	34	5.26	-15.00	-10.53
27	SUPAUL	35	24	36	-31.43	50.00	2.86
28	PURNIA	96	70	47	-27.08	-32.86	-51.04
29	KATI HAR	34	14	26	-58.82	85.71	-23.53
30	ARARIA	44	48	50	9.09	4.17	13.64
31	KISHANGANG	10	11	11	10.00	0.00	10.00
32	BHAGALPUR	58	50	31	-13.79	-38.00	-46.55
33	BANKA	14	18	27	28.57	50.00	92.86
34	NAUGACHHIA	16	15	12	-6.25	-20.00	-25.00
35	MUNGER	64	47	38	-26.56	-19.15	-40.63
36	SHEKHPURA	14	16	11	14.29	-31.25	-21.43
37	LAKHISARAI	33	13	19	-60.61	46.15	-42.42
38	JAMUI	42	60	21	42.86	-65.00	-50.00
39	KHAGARIA	39	31	26	-20.51	-16.13	-33.33
40	BEGUSARAI	53	52	65	-1.89	25.00	22.64
41	RAILWAY PAT	28	30	10	7.14	-66.67	-64.29
42	RAILWAY JMP	9	5	10	-44.44	100.00	11.11
43	RAILWAY MFP	15	22	16	46.67	-27.27	6.67
44	RAILWAY KTR	13	8	14	-38.46	75.00	7.69
	TOTAL	2379	2138	1729	-10.13	-19.13	-27.32

Source : Department of Home, Government of Bihar

Appendix IV : Kidnapping for Ransom in Bihar

Kidnapping for Ransom in Bihar : 2005 to 2007					% Change over the Years		
Sl.No	Distt	2005	2006	2007	2005-06	2006-07	2005-07
1	PATNA	25	28	14	12.00	-50.00	-44.00
2	NALANDA	16	5	0	-68.75	-100.00	-100.00
3	BHOJPUR	3	5	0	66.67	-100.00	-100.00
4	BUXAR	8	10	1	25.00	-90.00	-87.50
5	ROHTAS	6	1	0	-83.33	-100.00	-100.00
6	BHABUA	4	3	1	-25.00	-66.67	-75.00
7	GAYA	7	9	1	28.57	-88.89	-85.71
8	NAWADA	12	6	6	-50.00	0.00	-50.00
9	AURANGABAD	1	1	2	0.00	100.00	100.00
10	JEHANABAD	3	2	0	-33.33	-100.00	-100.00
11	ARWAL	2	0	0	-100.00	—	-100.00
12	SARAN	6	7	0	16.67	-100.00	-100.00
13	SIWAN	5	8	7	60.00	-12.50	40.00
14	GOPALGANJ	3	4	2	33.33	-50.00	-33.33
15	EAST CHAMPARAN	31	10	7	-67.74	-30.00	-77.42
16	BAGHA	18	27	5	50.00	-81.48	-72.22
17	WEST CHAMPARAN	30	16	1	-46.67	-93.75	-96.67
18	MUZAFFARPUR	12	4	5	-66.67	25.00	-58.33
19	VAISALI	3	2	6	-33.33	200.00	100.00
20	SAMASTIPUR	4	2	2	-50.00	0.00	-50.00
21	SHEOHAR	3	0	0	-100.00	—	-100.00
22	DARBHANGA	3	4	1	33.33	-75.00	-66.67
23	SITAMARHI	4	2	2	-50.00	0.00	-50.00
24	MADHUBANI	4	0	0	-100.00	—	-100.00
25	SAHARSA	1	1	2	0.00	100.00	100.00
26	MADHEPURA	0	0	5	—	—	—
27	SUPAUL	1	0	0	-100.00	—	-100.00
28	PURNIA	6	1	0	-83.33	-100.00	-100.00
29	KATIHAR	1	3	2	200.00	-33.33	100.00
30	ARARIA	1	0	0	-100.00	—	-100.00
31	KISHANGANG	1	0	0	-100.00	—	-100.00
32	BHAGALPUR	3	3	2	0.00	-33.33	-33.33
33	BANKA	1	1	2	0.00	100.00	100.00
34	NAUGACHHIA	1	1	1	0.00	0.00	0.00
35	MUNGER	0	3	3	—	0.00	—
36	SHEKHPURA	1	1	1	0.00	0.00	0.00
37	LAKHISARAI	3	4	1	33.33	-75.00	-66.67
38	JAMUI	12	5	3	-58.33	-40.00	-75.00
39	KHAGARIA	2	4	0	100.00	-100.00	-100.00
40	BEGUSARAI	3	7	2	133.33	-71.43	-33.33
41	RAILWAY PAT	0	2	1	—	-50.00	—
42	RAILWAY JMP	0	0	0	—	—	—
43	RAILWAY MFP	1	2	0	100.00	-100.00	-100.00
44	RAILWAY KTR	0	0	1	—	—	—
	TOTAL	251	194	89	-22.71	-54.12	-64.54

Source : Department of Home, Government of Bihar

Appendix V : Road Dacoities in Bihar

Road Dacoity in Bihar : 2005 to 2007					% Change over the Years		
Sl.No	Distt	2005	2006	2007	2005-06	2006-07	2005-07
1	PATNA	25	21	22	-16.00	4.76	-12.00
2	NALANDA	5	11	6	120.00	-45.45	20.00
3	BHOJPUR	12	11	2	-8.33	-81.82	-83.33
4	BUXAR	13	8	4	-38.46	-50.00	-69.23
5	ROHTAS	10	7	3	-30.00	-57.14	-70.00
6	BHABUA	7	9	3	28.57	-66.67	-57.14
7	GAYA	13	16	10	23.08	-37.50	-23.08
8	NAWADA	9	3	5	-66.67	66.67	-44.44
9	AURANGABAD	2	10	13	400.00	30.00	550.00
10	JEHANABAD	6	3	4	-50.00	33.33	-33.33
11	ARWAL	2	0	0	-100.00	—	-100.00
12	SARAN	7	3	5	-57.14	66.67	-28.57
13	SIWAN	5	4	2	-20.00	-50.00	-60.00
14	GOPALGANJ	1	2	4	100.00	100.00	300.00
15	EAST CHAMPARAN	7	6	1	-14.29	-83.33	-85.71
16	BAGHA	0	2	2	—	0.00	—
17	WEST CHAMPARAN	1	3	1	200.00	-66.67	0.00
18	MUZAFFARPUR	7	7	8	0.00	14.29	14.29
19	VAISALI	7	6	5	-14.29	-16.67	-28.57
20	SAMASTIPUR	0	2	1	—	-50.00	—
21	SHEOHAR	1	0	0	-100.00	—	-100.00
22	DARBHANGA	1	2	1	100.00	-50.00	0.00
23	SITAMARHI	2	1	3	-50.00	200.00	50.00
24	MADHUBANI	0	5	1	—	-80.00	—
25	SAHARSA	0	0	4	—	—	—
26	MADHEPURA	0	3	1	—	-66.67	—
27	SUPAUL	5	3	2	-40.00	-33.33	-60.00
28	PURNIA	9	4	0	-55.56	-100.00	-100.00
29	KATI HAR	5	0	2	-100.00	—	-60.00
30	ARARIA	2	2	7	0.00	250.00	250.00
31	KISHANGANG	2	0	0	-100.00	—	-100.00
32	BHAGALPUR	6	9	5	50.00	-44.44	-16.67
33	BANKA	9	7	6	-22.22	-14.29	-33.33
34	NAUGACHHIA	3	3	1	0.00	-66.67	-66.67
35	MUNGER	15	12	4	-20.00	-66.67	-73.33
36	SHEKHPURA	1	0	0	-100.00	—	-100.00
37	LAKHISARAI	3	0	2	-100.00	—	-33.33
38	JAMUI	9	8	5	-11.11	-37.50	-44.44
39	KHAGARIA	9	12	3	33.33	-75.00	-66.67
40	BEGUSARAI	3	6	3	100.00	-50.00	0.00
41	RAILWAY PAT	0	0	0	—	—	—
42	RAILWAY JMP	0	0	0	—	—	—
43	RAILWAY MFP	0	0	0	—	—	—
44	RAILWAY KTR	0	0	0	—	—	—
	TOTAL	224	211	151	-5.80	-28.44	-32.59

Source : Department of Home, Government of Bihar

Appendix VI : Road Robbery in Bihar

Road Robbery in Bihar : 2005 to 2007				% change over the years			
Sl.No	Distt	2005	2006	2007	2005-06	2006-07	2005-07
1	PATNA	296	229	216	-22.64	-5.68	-27.03
2	NALANDA	28	25	21	-10.71	-16.00	-25.00
3	BHOJPUR	29	35	32	20.69	-8.57	10.34
4	BUXAR	16	20	18	25.00	-10.00	12.50
5	ROHTAS	13	29	15	123.08	-48.28	15.38
6	BHABUA	10	11	7	10.00	-36.36	-30.00
7	GAYA	69	69	61	0.00	-11.59	-11.59
8	NAWADA	17	16	8	-5.88	-50.00	-52.94
9	AURANGABAD	13	26	20	100.00	-23.08	53.85
10	JEHANABAD	22	9	5	-59.09	-44.44	-77.27
11	ARWAL	9	6	1	-33.33	-83.33	-88.89
12	SARAN	40	60	60	50.00	0.00	50.00
13	SIWAN	96	87	56	-9.38	-35.63	-41.67
14	GOPALGANJ	34	32	26	-5.88	-18.75	-23.53
15	EAST CHAMPARAN	46	40	29	-13.04	-27.50	-36.96
16	BAGHA	2	2	5	0.00	150.00	150.00
17	WEST CHAMPARAN	15	12	8	-20.00	-33.33	-46.67
18	MUZAFFARPUR	54	57	47	5.56	-17.54	-12.96
19	VAISALI	34	47	38	38.24	-19.15	11.76
20	SAMASTIPUR	9	8	14	-11.11	75.00	55.56
21	SHEOHAR	2	1	0	-50.00	-100.00	-100.00
22	DARBHANGA	15	15	15	0.00	0.00	0.00
23	SITAMARHI	36	41	33	13.89	-19.51	-8.33
24	MADHUBANI	21	14	8	-33.33	-42.86	-61.90
25	SAHARSA	21	23	42	9.52	82.61	100.00
26	MADHEPURA	26	38	28	46.15	-26.32	7.69
27	SUPAUL	24	23	26	-4.17	13.04	8.33
28	PURNIA	56	59	30	5.36	-49.15	-46.43
29	KATIHAR	20	7	13	-65.00	85.71	-35.00
30	ARARIA	33	38	41	15.15	7.89	24.24
31	KISHANGANG	6	6	9	0.00	50.00	50.00
32	BHAGALPUR	34	17	20	-50.00	17.65	-41.18
33	BANKA	9	7	21	-22.22	200.00	133.33
34	NAUGACHHIA	11	10	6	-9.09	-40.00	-45.45
35	MUNGER	33	20	25	-39.39	25.00	-24.24
36	SHEKHPURA	9	9	7	0.00	-22.22	-22.22
37	LAKHISARAI	11	8	14	-27.27	75.00	27.27
38	JAMUI	26	38	15	46.15	-60.53	-42.31
39	KHAGARIA	23	21	17	-8.70	-19.05	-26.09
40	BEGUSARAI	38	36	48	-5.26	33.33	26.32
41	RAILWAY PAT	1	0	0	-100.00	—	-100.00
42	RAILWAY JMP	0	0	1	—	—	—
43	RAILWAY MFP	2	0	2	-100.00	—	0.00
44	RAILWAY KTR	1	0	1	-100.00	—	0.00
	TOTAL	1310	1251	1109	-4.50	-11.35	-15.34

Source : Department of Home, Government of Bihar

CHAPTER II

AGRICULTURE

Importance of agriculture in an economy where about 90 percent of the population live in the rural areas can hardly be exaggerated. As a sector whose production conditions crucially determine the living conditions of such a huge majority of masses, its economic health is organically linked to the prosperity and well-being of the entire state. The sector is important not only because of its contribution to the state's income and number of livelihoods dependent on it, but also because of the tremendous potential with which nature has endowed this sector. Bihar not only has one of the most fertile soil in the country, but is also endowed with abundant water resources. Geographical location and spread further endow the state with an agro-climatic diversity which is pregnant with possibility of a vibrant agricultural sector, led by high value added agro-processing sector based on a vast and stable agricultural base.

Bihar has a geographical area of 93.6 lakh hectares, which has been categorised in three agro-climatic zones, namely, North-West Alluvial Plane (Zone 1), North-East Alluvial Plane (Zone 2) and South Alluvial Plane (Zone 3), with Zone 3 having further sub-classification of Zone 3A and Zone 3B (Appendix I). As agricultural practice is sensitive to agro-climatic conditions, one also finds great variations across the zones in terms of land utilisation, cropping pattern and cropping intensity. While agriculture is found to be most extensive in the north-western part of the state, its expanse in the southern part, in particular in the south-east, is found to be substantively lower. Net sown area in Zone 1 is 65.43 percent of its geographical area, while the net sown area in Zone 3A is only 42.20 per cent of its geographical spread. The corresponding figures for Zone 2 and Zone 3B being 63.81 per cent and 57.06 per cent respectively. Cropping intensity is found to be the highest in the North-Eastern part of the state, with 36 percent of its geographical area being sown more than once with the corresponding figures for the southern part falling to 6.56 percent and 8.66 percent for Zone 3A and Zone 3B respectively (Table 2.1) (Appendix VI). Here, it is pertinent to note that it is the North-East Zone which receives the earliest and highest rainfall in the state.

2.1 Land Utilisation

While 34.59 percent and 36.19 percent of the area of the North-Western and North Eastern Zones is non-culturable, more than half of the area (57.8 percent) of Zone 3A is unculturable. However, in this seeming disadvantage of the southern zone lies a huge resource base, as this

region has the highest coverage of forests in the state, with about 15 percent of its area being under forest cover. Almost 12 percent of the area of Zone 3B is also found to be under forest cover (Table 1). These forests can be developed to economic advantage of the region and the state.

While 59.36 percent of the state's total geographical area of 93.6 lakh hectares is the net sown area, share of total non-culturable area in the state stands at 40.30 percent. While changes in land utilisation pattern are very slow unless propelled by revolutionary changes in environment or in production system, changes in land utilisation pattern in Bihar have been marginal but yet significant. Net sown area has also fallen by 1,06,699 hectares over the period 2000-01 to 2005-06 to 5555839 hectares (Appendix II). What is crucial is that area sown more than once, reflecting cropping intensity, has fallen from 24.89 percent of total geographical area to 19.66 percent, thereby showing a fall of 489505 hectares. Over the years, there has been a marginal increase in the non-agricultural use of geographical area, which has increased by 10295 hectares between 2000-01 to 2005-06. Forest coverage has remained stable in the post-bifurcation period, as has the permanent pastures and grazing land. While land under miscellaneous tree crops and groves has increased by 9359 hectares, there has been a significant increase in current fallow land by 88915 hectares. A fall in the net sown area and increase in the area of current fallow land could be indicative of either falling soil fertility or a non-remunerative agriculture or both.

Table 2.1 : Land Utilisation Pattern (in per cent) across the Agro-Climatic Zones in Bihar

Sl. No.		Zone 1	Zone II	Zone IIIA	Zone IIIB
1	Forests	2.66	0.17	15.16	11.84
2	Barren & Unculturable land	2.94	5.57	9.56	4.13
3	Land Put to Non-Agricultural Use	19.91	18.05	16.94	14.80
3.i	Land Area	15.32	13.48	12.95	12.30
3.ii	Water Permanent	2.58	3.27	1.64	1.38
3.iii	Water Temporary	2.01	1.30	2.36	1.12
4	Culturable Waste Land	0.16	0.36	1.90	0.39
5	Permanent Pasture & Grazing land	0.17	0.16	0.36	0.16
6	Land Under Miscellaneous Tree Crops and Groves	4.25	3.38	1.41	0.52
7	Fallow other than current Fallow	0.72	1.72	2.85	1.48
8	Current Fallow	3.78	6.77	9.62	9.63
9 (3+4+ 5+6+7 +8)	Total Unculturable Land	34.59	36.19	57.80	42.94
10	Net Sown Area	65.43	63.81	42.20	57.06
11	Area Sown More than Once	24.55	36.09	6.56	8.66

Source : Department of Agriculture, Government of Bihar

2.2 Rainfall and Production in 2007-08

Bihar had favourable rains in the agricultural year of 2007. The average rainfall in the state in the period and the week ending on September 30, 2007 was about 22 percent and 41 percent in excess of the normal respectively. However, its temporal and regional spread has not been uniform which also led to one of the worst floods in recent memories in Bihar. But nevertheless, floods have failed to leave a mark on the prospects of agricultural production in the state. Rather, second advance estimates show agricultural production exceeding the target set for the year 2007-08. While the area under rice has exceeded the target of 3176 thousand hectares by almost 126 thousand hectares, its production is likely to exceed the target of 3599 thousand MT by almost 177 thousand MT. The second advance estimates put rice production in the state at 3775 thousand MT on an acreage of 3301 thousand hectares (Appendix III). Production and acreage of maize too is likely to be more than double the targets set. As against the acreage and production target of 269 thousand hectares and 432 thousand MT, the estimated acreage under maize is 473 thousand hectares with production estimated at 1076 thousand MT. As the kharif crops, particularly rice and maize, were most likely to have been affected by the floods, an increase in their acreage and production in comparison to the yearly target augurs well for the agricultural production of the year.

Wheat production for 2007-08 is estimated to be 3474 thousand MT on an acreage of 2049 thousand hectares. Similarly, coarse cereal production in 2007-08 is likely to be 1119 thousand MT on an acreage of 517 thousand hectares. Thus, the total cereal production in Bihar for 2007-08 is estimated at 9487 thousand MT on an acreage of 6386 thousand hectares. Total pulse production for the year is likely to be 365 thousand MT on an acreage of 448 thousand hectares. Thus, the total foodgrain production is likely to be 8733 thousand MT on an acreage of 6317 thousand hectares.

The acreage under oilseeds for the year is estimated to be 129 thousand hectares with a likely production of 116 thousand MT. Acreage under jute and mesta is likely to be 147 thousand hectares with an estimated production of 1715 thousand bales (1000 bales of 180 kgs). Sugarcane production is likely to be 4930 thousand MT on an acreage of 119 thousand hectares.

2.3 Production and Productivity Trends

Although agricultural production for the year 2007-08 is likely to overshoot the target for the year, it has fallen way short of the production levels achieved during the previous year 2006-07. While rice production has fallen by 24.4 percent in comparison to the previous year, production of wheat has fallen by about 19 percent (Appendix IV). It is maize which has suffered the most significant fall, with its production falling by almost 47 percent over the previous year. Here it would be pertinent to note that though the target for the year did not reflect the effect of floods on production, a comparison with the previous year shows the strong effect that the floods have had on maize production in particular. Other coarse cereals too have taken a beating, with both their acreage and production falling by 4.73 percent and 5.23 percent respectively. Total cereal production has fallen by 26.35 percent. Importantly enough, while total pulses production too is seen to be falling over the previous year by 18.13 percent, production of kharif pulses has increased by 7.54 percent despite a significant fall in its acreage by 4.36 percent. This is reflective of significant leap in productivity of kharif pulses. Overall foodgrain production in the state has fallen by 26.04 percent in comparison to the previous year, with a fall in its acreage also by 7.90 percent. Production of oilseeds too has fallen by 21.53 percent accompanied by a 7.93 percent fall in its acreage as compared to the previous year. Interestingly, while acreage of sugarcane has increased in 2007-08 by 2.19 percent, its production is seen to have fallen by 7.65 percent, which again might have to do with crop loss due to floods. It can be clearly seen that fall in production of most of the crops in the current agricultural year is accompanied by a fall in their acreage, for which floods of 2007 are mainly responsible. This gets reflected in the comparative loss of acreage for different crops. While acreage of rice and maize, most adversely affected by the floods, have fallen by 1.54 percent and 40.77 percent respectively, fall in area under wheat is only by 0.23 percent.

Cereal production in the state has fallen significantly over the years. Though the production trends of agriculture in the state are marked by substantive fluctuations, an overall downward trend of cereal production is quite explicit. Total cereal production had fallen from 11437 thousand MT in 2000-01 to 10527 thousand MT in 2002-03, rising marginally in the next year to 10653 thousand MT in 2003-04 (Table 2.2). In the following year, cereal production took a nose dive falling by 30.2 percent to almost 7435 thousand MT. This fall in cereal production was led largely by more than 50 percent fall in rice production in the state which fell from about 5448 thousand MT in 2003-04 to 2625 thousand MT in 2004-05. While the production of wheat too had fallen from 3689 thousand MT to 3280 MT over these two years, maize

production had increased marginally from 1474 thousand MT to 1491 thousand MT. It is noteworthy that fall in production of cereals was accompanied by a fall in their acreage. The next two years were periods of recovery, as cereal production in the state increased to 7664 thousand MT and 11362 thousand MT in the years 2005-06 and 2006-07 respectively. The significant part of this recovery was that there was a substantive increase in production of all the major cereals in 2006-07, with production of rice, wheat and maize increasing by about 43 percent, 55 percent and 49 percent respectively. Therefore, the fall in production of all these crops in the current year reverses the trend of recovery over the previous two years.

**Table 2.2 : Production and Acreage trends of Foodgrains and Oilseeds in Bihar
(Area : '000 Hectares, Production '000 MT)**

Crops		Total Rice	Wheat	Total Maize	Total Other Cereal Coarse	Total Cereals	Total Rabi Pulses	Total Kharif Pulses	Total Pulses	Total Food-grain	Total Oilseeds
2000-01	Area	3656.84	2067.33	620.50	55.47	6400.15	613.13	104.10	717.22	7117.37	153.68
	Production	5444.37	4437.96	1497.31	57.74	11437.38	522.75	98.79	621.54	12058.92	130.91
2001-02	Area	3552.20	2126.33	594.34	53.38	6326.25	597.46	96.75	694.21	7020.46	142.74
	Production	5202.87	4391.08	1488.32	52.83	11135.09	461.85	85.24	547.09	11682.18	120.00
2002-03	Area	3584.70	2130.93	603.61	64.20	6383.43	604.51	93.28	697.79	7081.22	137.22
	Production	5085.59	4040.61	1349.76	51.10	10527.05	479.49	81.40	560.89	11087.94	104.93
2003-04	Area	3577.99	2076.84	616.43	46.72	6317.98	592.83	88.04	680.87	6998.85	140.51
	Production	5447.80	3688.94	1473.57	42.87	10653.18	474.44	82.37	556.81	11209.99	123.72
2004-05	Area	3188.25	2022.35	626.85	42.46	5879.91	567.22	82.00	649.22	6529.13	136.92
	Production	2625.14	3279.95	1491.18	38.71	7434.97	387.32	84.08	471.40	7906.37	116.31
2005-06 (Provisional)	Area	3252.36	2003.73	648.82	46.63	5951.53	517.51	79.88	597.39	6548.9	135.09
	Production	3495.93	2763.32	1361.11	44.39	7664.76	368.86	78.24	447.09	8111.85	133.51
2006-07 (Provisional)	Area	3353.54	2054.48	798.31	46.71	6253.04	519.61	87.26	606.86	6684.27	140.60
	Production	4996.56	4292.34	2028.95	45.07	11362.91	371.91	74.02	445.93	11194.77	148.78
2007-08 (2nd Advance Estimate)	Area	3301.97	2049.66	472.88	44.50	5869.01	365.20	83.45	448.65	6317.67	129.45
	Production	3775.38	3474.17	1076.33	42.71	8368.59	285.49	79.60	365.09	8733.86	116.76

Source : Department of Agriculture, Government of Bihar

Production of pulses in the state has shown a more secular falling trend over the post-bifurcation years, with the exception of 2002-03 when their acreage and production both increased by 0.51 percent and 2.52 percent respectively. While 2004-05 had seen a fall of 15.34 percent in total pulse production, current year has been worse with a 18.13 percent fall in production which has been accompanied by even greater fall of 26.07 per cent in acreage. Thus total foodgrains production shows an overall fall in production from the level of 12058 thousand in 2000-01 to a low of 7906 thousand MT in 2004-05. Thereafter, one sees a recovery of their production to 11194 thousand MT in 2006-07 which has been reversed with a fall to 8733 thousand MT in the current year.

Oilseed production in the state has also shown a fluctuating trend of production over the post-bifurcation period, achieving the highest production level in 2006-07. After an initial fall from 130 thousand MT in 2000-01 to 104 thousand MT in 2002-03, its production increased to 148 thousand MT in 2006-07. There have been significant productivity gains in these crops as is reflected by an increase in production despite a fall in acreage in 2005-06. Oilseeds production increased from 116 thousand MT in 2004-05 to 133 thousand MT despite a marginal fall in acreage from 136 thousand hectares to 135 thousand hectares.

Sugarcane production too has shown sharp fluctuations with 2006-07, recording the highest production figure of 5338 thousand MT in the post-bifurcation period. After witnessing an increase in production from 3987 thousand MT in 2000-01 to 5211 thousand MT in 2001-02, there was a cumulative decline in its output hitting a low of 3769 thousand MT in 2004-05 (Table 2.3). It is noteworthy that changes in acreage of sugarcane are not reflected in changes in production. On the one hand, despite an increase in acreage from 103 thousand hectares in 2003-04 to 104 thousand hectares in 2004-05, production fell from 4285 thousand MT to 3769 thousand MT. On the other hand, despite a fall in acreage from 104 thousand hectares in 2004-05 to 101 thousand hectares in 2005-06, production had increased from 3769 thousand MT to 4240 thousand MT. This lack of correlation between acreage and output is reflective of a band of productivity potential yet to be achieved in farming practice. Similar is the case with fibre crop production in the state. Here also a neat correlation between acreage and production is absent. Production of fibre crops too has shown a fluctuating trend, with recovery in the later years achieving the highest production levels in the post-bifurcation period. After registering a fall from 1381 thousand bales in 2000-01 to 1096 thousand bales in 2002-03, their production increased to 1474 thousand bales in 2005-06, falling again to 1392 thousand bales in 2006-07.

**Table 2.3 : Production and Acreage of Commercial Crops and Oilseeds in Bihar
(Area : Hectares, Production : MT)**

Crops		Jute*	Mesta*	Sunhemp	Total Fibres	Sugarcane	Tobacco	Total Commercial Crops
2000-01	Area	135296	31907	2446	169649	93529	15432	108961
	Production	1133.701	246.256	1.675	1381.632	3987577	17947	4005524
2001-02	Area	142630	15374	2558	160562	113438	13708	127146
	Production	996.435	105.293	2.010	1103.738	5211114	15076	5226190
2002-03	Area	147796	20026	4235	172057	107270	14952	122222
	Production	973.546	120.281	3.012	1096.839	4520510	16805	4537315
2003-04	Area	154588	20011	3441	178040	103599	14353	117952
	Production	1147.358	138.908	2.467	1288.733	4285888	15960	4301848
2004-05	Area	140876	16057	3864	160797	104457	16004	120461
	Production	1223.691	147.292	2.962	1373.945	3769207	18581	3787788
2005-06	Area	131049	14532	3191	148772	101243	149101	250344
	Production	1329.252	143.039	2.587	1474.878	4240463	17242	4257705
2006-07 (Provisional)	Area	127113	14140	3207	144460	117179	14097	131276
	Production	1253.329	136.527	2.637	1392.493	5338840	16140	5354980
2007-08 (2 nd Advance Estimate)	Area	133.01	149.1			119.74		
	Production	1272.91	142.47			4930.25		

* Production in '000 bales of 180 kg

Source : Department of Agriculture, Government of Bihar

If we take a districtwise breakup of major cereal crops, we get a picture of regional spread of agricultural production pattern in the state. While 53.20 percent of total rice production comes from Zone 3B, which is the south-western part of Bihar, Zone 1 (the North-East Alluvial Plains) leads in production of wheat, contributing 45.3 percent of total wheat production in the state. Zone 2 (north-western part of Bihar), is the leading producer of maize contributing nearly 50 percent of total maize production in the state (Appendix V). Productivity of maize crop in this region is also the highest among the three zones. Productivity of rice is found to be the highest in Zone 3A, while productivity of wheat is found to be the highest in Zone 1, and productivity of maize is found to be highest in Zone 2. These are all the leading producers of the respective crops, except for Zone 3A whose contribution to the rice basket of the state is lesser because of its smaller size. Rohtas district is found to be the leading producer of both rice and wheat in the state, and it also has the highest yield rates among all the districts for these two crops. In fact, the top three rice-producing districts (Rohtas, Aurangabad and Kaimur) together account for more than a quarter (27 percent) of total rice production in the state. Khagaria followed by Purnea in Zone 2 is the leading maize producer in the state. While Rohtas leads wheat production in the state, East Champaran and Gopalganj districts are the second and third largest wheat producers among all the 38 districts in Bihar.

2.4 Irrigation

Irrigation is a key variable determining the health and prosperity of agriculture. Not only does it ensure stability of agricultural production in a highly volatile climate dependent on monsoons, assured irrigation is a necessary pre-requisite of HYV technology. However, Bihar's tryst with irrigation and water management has its own peculiarities. While the state is very richly endowed with water resources, their spatial and temporal distribution have been a source of perennial problem in Bihar which are to be seen in simultaneity of floods and drought in different regions of the state. On the one hand, northern plains of Bihar, crisis-crossed by a host of Himalayan rivers, have been perennially plagued by floods; on the other, incidences of drought in other parts of the state have also continued. Irrigation infrastructure in the state, therefore, has been naturally sensitive to this spatial and temporal variation of water resource distribution in Bihar. While the southern parts (in particular the south-west) have a better developed canal irrigation network, the northern plains rely heavily on ground water irrigation (minor irrigation).

Bihar has a total created irrigation capacity of 60.74 lakh hectares, of which 32.42 lakh hectares is accounted for by minor irrigation, and the remaining 28.33 lakh hectares are accounted for by medium and major irrigation systems. While more than half of the created irrigation capacity is due to minor irrigation, about 98 percent of the capacity is owed to private tubewells. While there are 5556 state tubewells in the state of which 5130 are energised, there are 10,97,485 private tubewells of which 9,54,226 were operational in 2006-07.

In 2005-06, out of 43.24 lakh hectares of irrigated area, 10.62 lakh hectares were irrigated by canals, 1.83 lakh hectares by tanks, 28.95 lakh hectares by tubewells, while other wells irrigated the remaining 11687 hectares. Thus, while the tubewell irrigation shows nearly 90 percent utilisation of total created capacity of minor irrigation, irrigation from canal and tank was only about 44 percent of total created capacity. In fact, there has been a steady fall in area irrigated by canals from 12.29 lakh hectares in 2000-01 to 10.62 lakh hectares in 2005-06, a fall of 1.67 lakh hectares (Table 2.4). On the other hand, area irrigated by tubewells increased from 28.71 lakh hectares in 2000-01 to 31.03 lakh hectares in 2003-04 and then fell to 28.94 lakh hectares in 2005-06.

Table 2.4 : Sourcewise Irrigated Area (in Hectares)

Year	Canal	Tank	Tube well	Other Well	Other Sources	Total Irrigated Area
2000-01	1229769	179637	2871170	15874	264665	4561115
2001-02	1237156	139580	2964846	15870	181562	4539014
2002-03	1259338	149071	2965410	18260	179503	4571582
2003-04	1143361	149856	3103326	13222	157070	4566835
2004-05	1062594	117531	2886959	6694	123362	4197140
2005-06	1061478	182599	2894879	11687	174044	4324687

Source : Department of Agriculture, Government of Bihar

However, capacity utilisation of major and medium irrigation sources has shown significant improvement over past two years. A total of 16.96 lakh hectares were irrigated in 2006-07 from these sources, and 16.86 lakh hectares were irrigated in 2007-08, thereby reflecting a capacity utilisation of nearly 60 percent. The government is focussing on an integrated water management which would entail simultaneous development of not only modern irrigation systems but also expansion and development of traditional systems of irrigation such as *ahars* and *pynes*. These traditional system have evolved from thousands of years of living experience accumulated in indigenous technology by the people of the region.

Interlinking of Rivers

Interlinking of rivers in the state is being planned as a step towards integrated water management which would generate additional irrigation capacity in the state, alleviate problems of flood and drought, and also facilitate simultaneous development of indigenous irrigation system. For this, a river basin would be taken up as a unit and plans are to be prepared for irrigation, flood control and water drainage according to that. This would also lead to spontaneous development of all the traditional means of irrigation such as *ahars*, *pynes*, ponds, etc, falling in that basin which have been losing their relevance over time due to neglect of their repair and proper maintenance. Interlinking of rivers would facilitate transfer of water from water surplus basins to water deficient basins in the state.

Creation of Additional Irrigation Capacity and Restoration of Lost Irrigation Capacity

There is a target to achieve an irrigation capacity of 170 thousand hectares through various medium and major irrigation schemes, and multipurpose irrigation plans in the state. Various plans under which this additional irrigation capacity is to be created are Western Kosi Canal Project, Durgawati Waterbody Plan, Sone Canal Modernisation Plan, Barnar Waterbody Plan, Bateswarnath Ganga Pump Cananl Phase-1, Jamania Pump Canal Project, North Koel Waterbody, Tilaiya Diversion Plan, Punpun Barrage Plan, Batane Waterbody Plan, Mandai Wear Plan, Uderasthan Barrage Plan, Lower Morehar, Lower Kiul, and Bagmati Multipurpose Plan.

A major step towards restoration of lost irrigation capacity has been through the restoration of Gandak Canal System. Gandak Barrage Project was started in 1968, but was shut down in 1985, even before its completion at the instructions of the Planning Commission. Consequently, against 11.52 lakh hectares of irrigation capacity, an irrigation capacity of only 8.96 lakh hectares could be established. Due to poor upkeep and maintenance over time, even the existing canal systems have lost capacity due to silting and damage caused by floods. As a result, the Gandak canal system has a useful irrigation capacity of only 3.96 lakh hectares. The proposal to restore 1.12 lakh hectares of lost irrigation capacity of the western canal system of the Gandak with an outlay of Rs. 294 crore has been sanctioned by the Central Water Commission and the Planning Commission, and has also got the administrative sanction of the state government. This programme is to be executed by 2009-10.

Accelerated Irrigation Benefit Programme (AIBP)

The central government has made significant changes in its Accelerated Irrigation Benefit Programme (AIBP). The loans which were given to the state governments for implementation of this programme would be grants from the financial year 2007-08. In order to maximise utilisation of the grant, efforts are being made by the state government to bring other operational irrigation schemes also under AIBP.

Participatory Irrigation Management

Under the National Water Policy, management of all the canal systems is to be handed over to the committees of beneficiaries. There would be a committee at the level of each of the irrigation systems. There would also be subcommittees at the level of beneficiary villages. The committees at the level of irrigation system would be responsible for upkeep, operation, and evaluation and collection of irrigation cess. Out of the generated revenue from each of the crops, 30 percent would be paid to the government, while the balance 70 percent would be spent by the committee on the maintenance and upkeep of the system. Uptil March 2006, 46 irrigation systems had been transferred to these committees for management.

Water Logging

At present, 9.41 lakh hectares of area of the state is water logged. Of these, 8.35 lakh hectares of water logged area is in north Bihar, and 1.06 lakh hectares fall in the Mokama *Tal* area. While 1.75 lakh hectares of the water logged area has been reclaimed till date, reclamation of the remaining part is not economically viable. Accordingly, focus should be laid on developing this area for bio-drainage, aquaculture and pisciculture etc.

2.5 Agricultural Inputs

Fertiliser Consumption

Fertiliser consumption in the state has been increasing in the post-bifurcation period. Consumption of nutrient has gone up from 94 kg/hectare in 2001-02 to 141 kg/hectare in 2006-07 (Table 2.5). This trend of increasing use of fertilisers is likely to be maintained in 2007-08 also, as total fertiliser consumption in the Kharif-2007 has been 15.11 percent more than the corresponding figure for Kharif-2006. While a total of 8.81 lakh MT of fertilisers were used during Kharif-2006, the figure for Kharif-2007 is 10.14 lakh MT. Against a demand of 9 lakh MT of urea and an availability of 8.53 lakh MT, consumption of urea was 7.84 lakh MT in Kharif-2007. Availability of DAP was less than what was demanded by the state government and, as a consequence, its consumption is likely to have been constrained by supply. Against a demand of 2.5 lakh MT for Kharif-2007, only 1.10 lakh DAP was available in the state, and final consumption was 1.04 lakh MT. Consumption of NPK (Nitrogen, Phosphorous and Potassium) was 81 thousand MT in the season, while that of MOP was only 15 thousand MT.

Table 2.5 : Fertiliser Consumption (in '000 MT) in Bihar

Fertiliser	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07			2007-08
						Kharif	Rabi	Total	Kharif
Urea	1201.3	1256.1	1309.2 9	1280.3 7	1381.2 6	666.51	931.59	1598.1	784.00
DAP	189.27	186.6	60.45	98.75	178.52	95.9	167.32	263.22	104.00
SSP	57.42	74.6	25.2	4.77	30.59	16.96	9.83	26.79	15.15
MOP	72.49	33.3	31.85	51.26	123.48	26.86	63.52	90.38	30.22
Ammonium Sulphate	13.42	13.5	10.39	4.54	7.39		6.56	6.56	
CAN	0	4	11.39	0	0			0	
12:32:16	35.61	41.5	37.68	67.96	124.92	66.47	75.81	142.28	62.75
15:15:15	1.36	0.9	1.94	2.33	1.74	0.08	2.47	2.55	0
20:20:00	17.87	4.9	0.98	13.07	18.86	8.73	28.46	37.19	18.23
18:18:06	0	3.3	1.76	0	0	0	0	0	0.16
12:12:12	0	2	0.8	0	0	0	0	0	0.24
Total Complex (NPK) Fertilisers	54.84	52.6	43.16	83.96	145.52	75.28	106.74	182.02	81.38
N	597.52	622.1	623.58	618.8	688.06	333.591	475.1207	808.7117	335.0722
P	111.42	113	45.86	70.9	131.02	69.856	108.8617	178.7177	70.6548
K	49.39	27.1	25.68	41.98	94.34	26.7632	50.6121	77.3753	26.156
Total (NPK)	758.33	762.2	695.12	731.68	913.42	430.2102	634.5945	1064.8047	431.883
Consumption of Nutient (Kg/hect.)	94	95.84	87.47	92.15	119.78	113.09	171.05	141.71	

Source : Department of Agriculture, Government of Bihar

For Rabi 2007-08, 7.69 lakh MT of urea was consumed in the state till January 2008 (Table 2.6). There was no supply bottleneck as 8.55 lakh MT of urea was available in the state during the year. Similarly, while 2.15 lakh MT of DAP was available by January 2008, its consumption upto that month was 1.86 lakh MT. Availability and consumption of both MOP and NPK are seen to be increasing steadily.

Table 2.6 : Demand, Availability and Consumption of major Fertilisers in 2007-08

Fertiliser Demand, Availability and Consumption (in Lakh MT) in 2007-08						
Fertiliser	Kharif 2007			Rabi 2007-08		
	Demand	Availability	Consumption	Demand	Availability (till Jan 08)	Consumption (Till Jan 08)
Urea	9	8.53	7.84	11	8.55	7.69
DAP	2.50	1.102	1.04	2.5	2.15	1.86
MOP	1.00	0.302	0.15	1.00	0.69	0.64
NPK	2.00	1.09	0.81	2.00	0.69	0.68

Source : Department of Agriculture, Government of Bihar

Seeds

Proper seed management helps agriculture in achieving its productivity potential. The supply of good quality seed has been a long standing problem in the state and Bihar has one of the poorest seed replacement ratios across the country. Over the past two years, a series of measures have been taken for timely and sufficient supply of good quality seeds to the farmers, and focus has also been laid on increasing the seed replacement ratios for different crops.

As a result of these efforts, Seed Replacement Ratio (SRR) for paddy has increased from 10 percent in 2004-05 to 14 percent in 2007-08 (Table 2.7). Likewise, SRR for wheat has increased from 9 percent to 15 percent, that of kharif maize has increased from 40 percent to 56 percent, and that of rabi maize has increased from 45 percent to 75 percent over the same period. However, this success with cereals could not be repeated for pulses, as SRR for *arhar* after being stable at 8 percent for the years 2005-06 and 2006-07 has actually fallen to 3.6 percent in 2007-08. *Urad* too has not met with much success as there has been only a marginal increase from 7 percent in 2004-05 to 9.1 percent in 2007-08. However, *moong* has been a success story among the pulses as its SRR has increased from 7 percent in 2004-05 to 30 percent in 2007-08. Also, SRR for the rabi pulses have improved more than their kharif counterparts. While SRR for gram and pea has increased from 5 percent each in 2004-05 to 10 percent each in 2007-08, the corresponding increase for *masoor* and *tur* has been from 6 percent to 10 percent and 30 percent to 40 percent respectively.

Table 2.7 : Seed Demand, Supply (in Quintals) and Seed Replacement Ratios of Major Crops in Bihar

Year/Crops	2004-05			2005-06		
	Requirement	Supply	SRR	Requirement	Supply	SRR
Kharif Crops						
Paddy	177600	131271	10.00%	192400	194250	11%
Maize	16500	11382	40.00%	21500	10320	50%
Arhar	3000	204	7.00%	3250	262	8%
Urad	1200	165	7.00%	1300	105	8%
Moong	360	115	7.00%	390	315	8%
Year/Crops	2006-07			2007-08		
	Requirement	Supply	SRR	Requirement	Supply	SRR
Kharif Crops						
Paddy	207200	203977	12.00%	222000	204824	15%
Maize	41500	20880	50.00%	50000	42390	50%
Arhar	3500	360	8.00%	3750	410	10%
Urad	1400	167	8.00%	1500	550	10%
Moong	420	325	9.00%	450	918	10%
Year/Crops	2004-05			2005-06		
	Requirement	Supply	SRR	Requirement	Supply	SRR
Rabi Crops						
Wheat	270000	210450	9%	300000	237852	10%
Maize	18650	20734	45%	20300	22942	50%
Gram	10100	5465	5%	11600	10668	5%
Pea	2100	1559	5%	2400	1780	5%
Lentil	4600	3925	6%	5300	4074	6%
Tur	1400	2240	30%	1440	2543	30%
Year/Crops	2006-07			2007-08		
	Requirement	Supply	SRR	Requirement	Supply	SRR
Rabi Crops						
Wheat	320000	265400	11%	345000	-	15%
Maize	55000	54200	60%	75000	-	75%
Gram	13000	5230	6%	8325	-	10%
Pea	2700	1700	7%	3000	-	10%
Lentil	6000	4100	7%	6600	-	10%
Tur	1500	3200	40%	3000	-	40%

Source : Department of Agriculture, Government of Bihar

Supply of seeds had been a major bottleneck in achieving a high SRR for various crops, which has shown signs of change over last two years. While supply of seeds for the paddy crop was only 1.31 lakh quintals against a need of 1.77 lakh quintals in 2004-05, the gap was significantly closed down over the following years. While in 2005-06, there was surplus seed supply for paddy, the shortfall in 2006-07 was only 4223 quintals. However, the gap between supply and demand for seeds of pulses, in particular *arhar* and *urad* continue to be a problem.

Over the past two years, steps have been taken towards correcting the supply bottleneck in the seed sector. While Bihar State Seed Corporation (BSSC) was revived from a state of liquidation in the previous year, all the seed multiplication farms have been operationalised in 2007-08. While the Corporation has started its main processing unit at Kudra, its other plants at Bhagalpur, Begusarai and Hajipur are also in the process of being renovated. About 1.95 lakh quintals of seed will be processed in these units during rabi 2007-08. These steps have already started yielding results as BSSC has generated profit in its very first operational year after revival, and self-sufficiency was achieved in foundation seeds in kharif-2007.

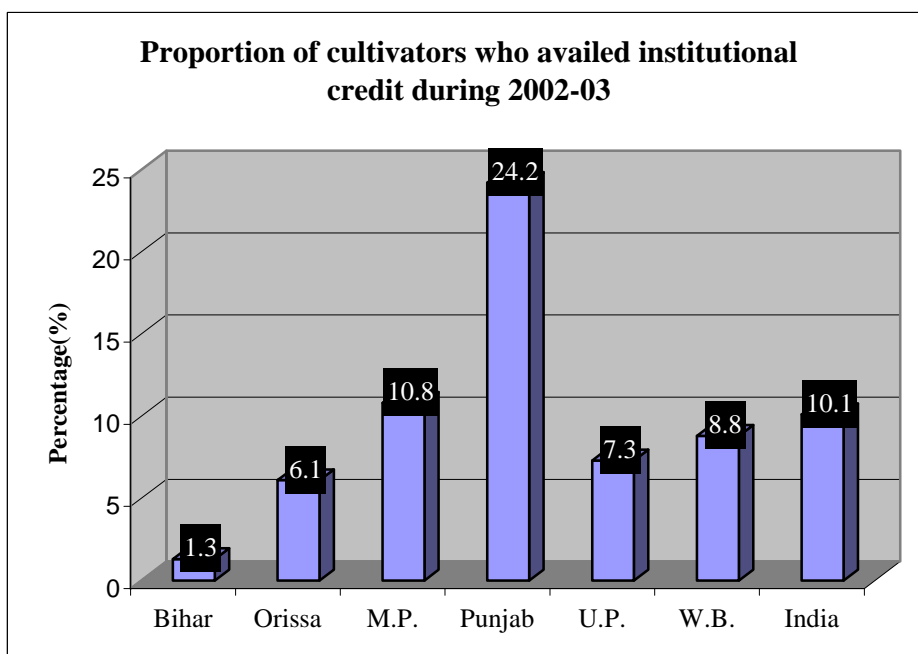
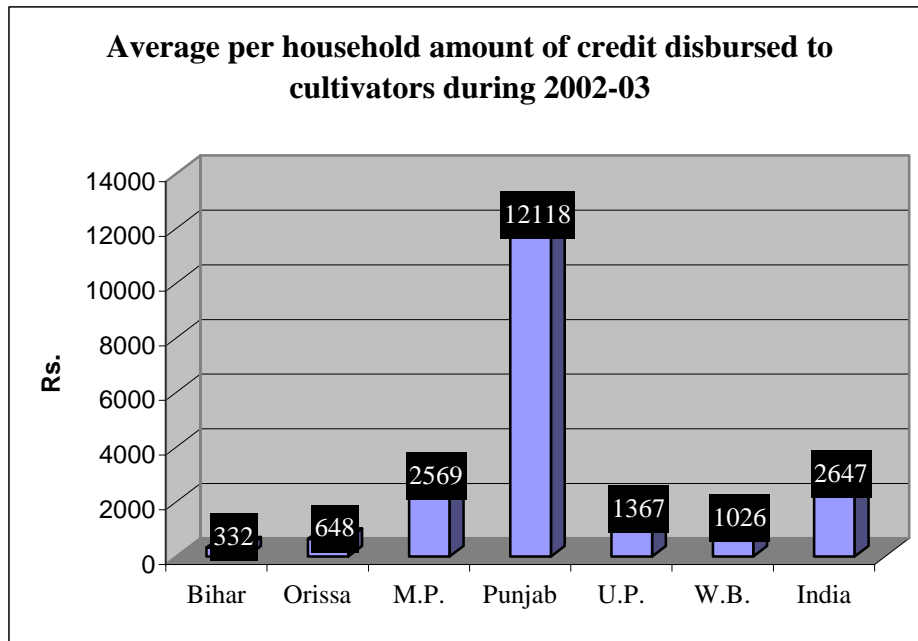
2.6 Agricultural Credit and Crop Insurance

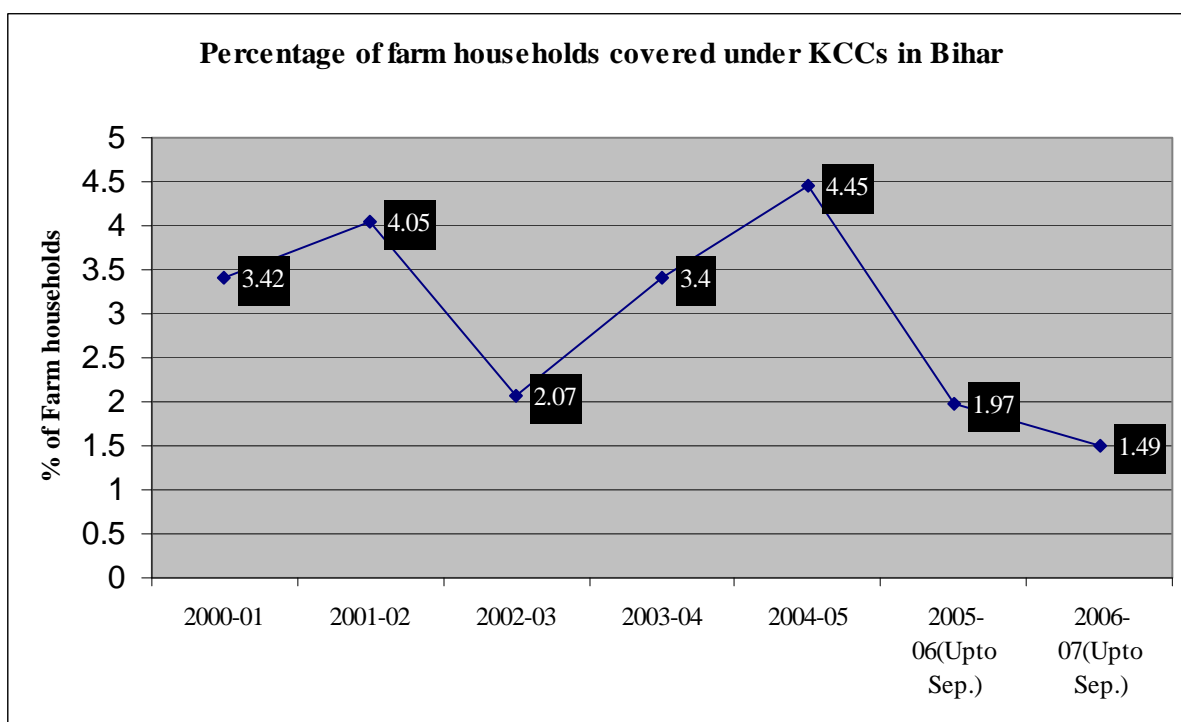
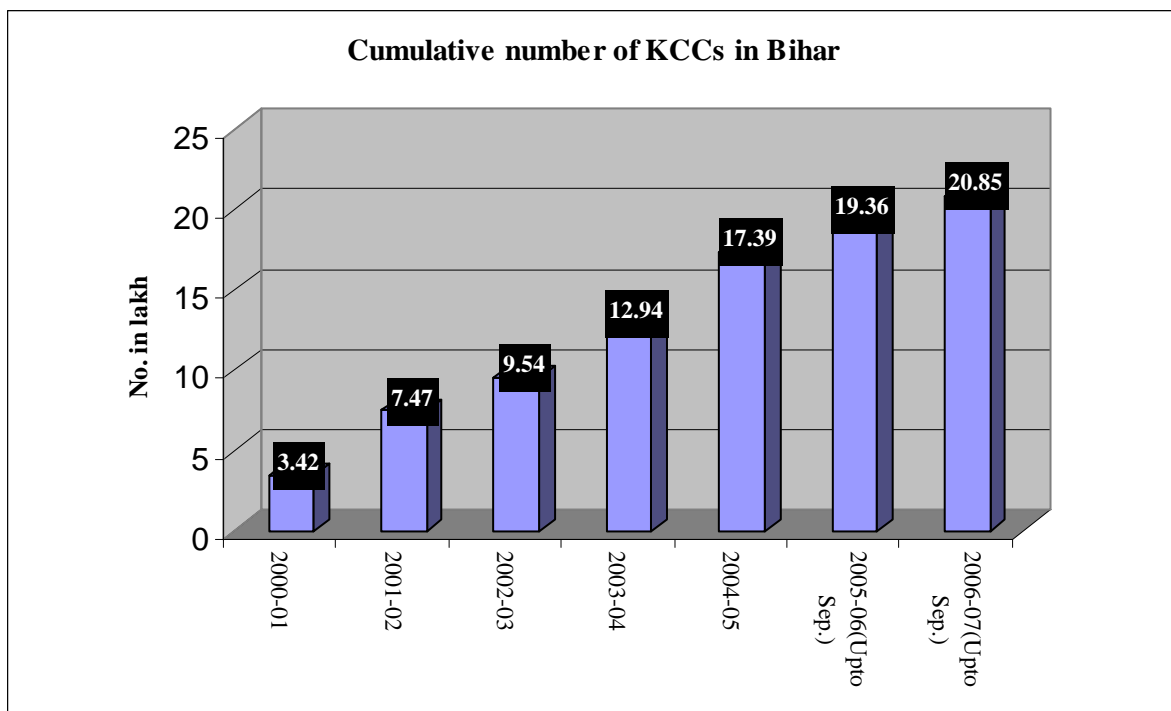
As modern and scientific methods of production take root in agriculture, cultivation comes to be directly connected with market, both for its input and output. While production for market is not yet the predominant characteristic of agriculture in Bihar, its dependence on the market for inputs is quite large. This dependence on the market for inputs in an agriculture, where marginal and small holdings together account for 96.50 percent of total number of holdings, and 67.36 percent of total owned area (NSS report 491), makes agricultural credit a critical input in agricultural production. However, agricultural credit scenario is not very encouraging. While only 1.3 percent of cultivators in Bihar availed institutional credit during 2002-03, the corresponding percent for Punjab and India as a whole was 24.2 percent and 10.1 percent respectively. Also, average amount of credit disbursed to cultivators during the year was found to be a meagrely sum of Rs 322 against Rs 12,118 for Punjab and all India average of Rs. 2647.

Kisan Credit Card (KCC)

KCC Plan was started in 1999 to facilitate credit disbursal to farmers, under which arrangements were made for the farmers to obtain credit on time, subject to a maximum of Rs. 50,000. However, the coverage of farmers in the state under the plan has not been uniform over the years. While coverage of farmers under KCCs increased from 3.42 percent in 2000-01

to 4.05 percent in 2001-02, it fell to 2.7 percent in the following year of 2002-03. Thereafter, it increased again to cover 3.4 percent farmers in 2003-04 and 4.45 percent in 2004-05. Thereafter, a drastic fall is observed with only 1.97 percent farmers covered upto September 2005-06 and 1.49 percent covered upto September 2006-07. A total of 20.85 lakh KCCs have been issued in Bihar till September 2006. However, KCCs have come very handy in the 2007 flood relief measure. Under a special credit plan of 2007-08 meant as a relief measure, a total of 163174 KCC cardholders were disbursed a total amount of 44172 Rs. lakh.





Short term Cooperative Credit Distribution

Short term agricultural credit disbursed through PACS (Primary Agricultural Cooperative Societies), Central Cooperative Banks and Cooperative Banks at the state level has increased significantly in 2007-08 in comparison to the previous years. Agricultural loans worth Rs. 22393.88 lakh were distributed against a target of Rs. 16200 lakh, thereby credit disbursal exceeding the target by 38.23 percent (Table 2.8).

Table 2.8 : Cooperative Credit Distribution in Bihar

Year	Target (in Rs. lakh)	Distribution (in Rs. lakh)	Distribution as % of Target
2004-05	63000	27374.77	43.45202
2005-06	96100	23460.76	24.41286
2006-07	69900	29553.33	42.27944
2007-08	16200	22393.88 (Kharif)	138.2338

Source : Department of Cooperative, Government of Bihar

Crop Insurance

A total of 684435 farmers were insured for their crops in 2006-07 with the insured amount reaching a sum of Rs. 118572.7 lakh. This was an increase of almost 67 percent over the previous year. The total insured amount also increased by about 90 percent (Table 2.9). While a larger proportion of farmers take insurance for the kharif crops, over the last three years, there has been relatively greater increase in the farmers insured for the rabi season. As a result, the number of farmers insured for rabi season has increased from 118090 in rabi 2004-05 to 339749 in rabi 2006-07. However, compensation as percentage of insured amount has fallen significantly over last three years from 50.18 percent in 2004-05 to 6.26 per cent in 2006-07. While this may be a reflection of lesser amount of crop damage, it might as well be indicative of bottlenecks in settlement of compensation claims. To make the distribution of compensation related to crop insurance more transparent, certificates regarding compensation payment are being distributed through camps.

Table 2.9 : Crop Insurance in Bihar

	Number of insured Farmers	Insured Amount (in lakhs)	Compens- ation	Benefici- ary Farmers	% of Benefici- ary Farmers	Compensa- tion as % of insured amount	% increase over previous year in no. of insured farmers	% increase over previous year in insured amount
Kharif 04	293442	34084.72	21184.71	268532	91.511099	62.1530997		
Rabi 04-05	118090	13716.17	2802.49	54613	46.24693	20.4320156		
Total 2004-05	411532	47800.89	23987.2	323145	78.522448	50.1814924		
Kharif 05	221985	33911.27	10088.61	125958	56.741672	29.7500212	-24.3513	-0.50888
Rabi 05-06	187961	28439.99	5299.73	102760	54.670916	18.6347815	59.16758	107.3464
Total 2005-06	409946	62351.26	15388.34	228718	55.792226	24.6800786	-0.38539	30.43954
Kharif 06	344686	59133.07	4017.44	75880	22.014239	6.79389722	55.27446	74.37586
Rabi 06-07	339749	59439.59	3410.43	65927	19.404619	5.73764052	80.75505	109
Total 2006-07	684435	118572.7	7427.87	141807	20.718841	6.26440362	66.95736	90.16883

Source: Department of Cooperative, Government of Bihar

2.7 Extension Services

Innovations in agricultural technology and practices, and their extension to the masses for effective application in fields is at the core of extension services in agriculture. The thrust of these services is towards promoting behavioural changes among the farmers, creating an enabling environment for mass adoption of scientific practices in farming which would lead to greater efficiency in production.

Falling productivity in Bihar's agriculture, in particular for the cereals, is largely attributed to a distorted pattern of nutrient consumption in terms of NPK ratio, poor seed-replacement ratios, and low levels of mechanisation. In last two years, the state government has taken several initiatives on all these fronts to bring forth productivity gains. In the previous financial year, Agricultural Technology Management Agencies (ATMAs) were universalised to all the districts of the state and an amount of Rs. 309 crore was sanctioned for establishment of soil testing laboratories in all the 534 blocks of the state, in the current year, 38 soil testing laboratories are to be set up for which Rs. 5.36 crore has been sanctioned. Taking this initiative further in the current financial year, an initiative has been taken to collect soil samples from all the 40,000 villages in the state.

Proper management of seed supply goes a long way in solving various problems regarding poor seed replacement ratios, use of inferior quality of seeds etc. Short supply of good quality seeds had become a perennial problem for the state's agriculture sector. To address this shortage of seed supply, while 45 state farms were brought under cultivation for seed production in the last year, all the 215 state farms have been brought under cultivation in the current year. The decision to revive Bihar State Seed Corporation from its state of liquidation has been vindicated as it has earned a profit of Rs. 71 lakh in its very first operational year.

Besides these, *Kisan Sammans* award was given this year at the block, district and state level. These honours are meant to go a long way in bringing about behavioural changes among the masses towards agriculture. In the current financial year, while 534 farmers were given the *Kisan Shree* award at the block level, 35 farmers were given *Kisan Bhusan* award at the district level, and one was given *Kisan Ratna* award at the state level.

2.8 Farm Mechanisation

There has been increased stress on farm mechanisation in the current financial year. Farmers have been given incentives to go in for farm mechanisation. The state government has given

subsidy on identified agricultural machineries, in particular on small farm implements such as power tiller, thresher, willower, zero-tillage reaper, zero-seed drill, and specialised power driven equipments. This is being done under Farm Mechanisation Plan with an outlay of Rs. 18.22 crore for the financial year 2007-08. This programme is included in the Macromode Plan, sponsored by the central government, to encourage farm mechanisation in the country. To encourage selected agricultural equipments, the state government would provide a subsidy of 25 percent in addition to the provisions made under the Macromode Plan. Thus there would be a subsidy of 50 percent on purchase of the selected farm equipments. However, tractors would continue to have 25 percent subsidy on them as provided for by the Macromode Plan, as small farm implements have been prioritised in the mechanisation programme.

2.9 Agricultural Marketing

After the repeal of BAPMC (Bihar Agricultural Producers Marketing Cooperative Act), agricultural market in the state is functioning without any formal institutional structure. Presently, there is a total of 1324 acres of land in 95 markets, out of which 54 have developed infrastructure on them. A major market development scheme with five modern terminal markets at the top, 54 marketing yards belonging to Bihar State Agricultural Marketing Board (BSAMB) being converted to agribusiness centres, in the middle tier, and 1500 rural haats with developed facilities is proposed at the grass root level. These haats/agribusiness centres are proposed to be fed by 10000 On Farm Primary Processing Centres (OFPPC) at farm gates. Part of the scheme will be financed under assisted Market Infrastructure Development Project of Asian Development Bank (ADB) and the government would seek funds for the remaining through sources like National Horticulture Mission etc.

Following disbanding of BSAMB, the fate of 1500 rural *haats* under its purview is also hanging in balance. The Board had developed infrastructure during 1978-79 with the World Bank assistance, but at most places these *haats* are in a very poor shape because of poor maintenance. In the meantime, absence of a fully functional market body has certainly created a significant glitch of non-availability of market intelligence, as there is no information on market arrivals, its prices and destination of despatch etc.

2.10 Horticulture

Bihar has a very strong potential in fruits and vegetable production, which could provide a strong base for a vibrant and high value added food-processing industry in the state. It is the

third largest vegetable producer in the country, and ranks seventh in fruit production among the states. While it contributes 13.16 percent of total vegetable production in the country, its share in national fruit production is 5.6 percent. It is the largest producer of guava and litchi, third largest producer of pineapple, fourth largest producer of mango, and sixth largest producer of banana in the country. Similarly, on the vegetable side, while being the largest producer of *okra* in the country, it is the third largest producer of onion, potato, brinjal and cauliflower.

Total production of vegetables in 2005-06 was 76.54 lakh MT on an acreage on 4.96 lakh hectares (Table 2.10). Brinjal, onion, cauliflower, tomato, and cabbage together accounted for 56.01 percent of total vegetable production in 2005-06 (Table 2.11). While brinjal had a share of 13.47 percent in total production, the share of onion was 13.22 percent. Total fruit production in Bihar was 31.92 lakh MT in the year 2005-06 (Table 2.12). Mango is the most important fruit both in terms of acreage and production in the state. It accounted for about 48 percent of total area under fruits and about 38 percent of total fruit production in the state in 2005-06. Banana comes next with about 30 percent share in total production, while accounting for only 9.61 percent of total acreage under fruits. Litchi and guava are found to have roughly equal share of 6.26 and 6.23 percent respectively in total fruit production in the state. These four fruit crops together account for 80.57 per cent of total fruit production in the state and about 78 percent of total area under fruit crops.

Regional distribution of fruit production also reveals an interesting trend. North-western plains of Bihar (Zone 1) are the leading producer of fruits accounting for 45.33 percent of total fruit production. This zone accounts for 61.2 percent of mango production, 41.09 percent of guava production, 81.91 percent of litchi production, 62.60 percent of banana production and 52.39 percent of lemon production in the state. Muzzafarpur, Vaishali, Darbhanga and Samastipur are the leading fruit producing districts of this region. In fact, these are also the leading fruit producing districts in the whole of Bihar.

North-eastern plains of Bihar account for 20.44 percent of total fruit production in the state. Almost the entire (94.25 percent) amount of pineapple production takes place in this region. Further, 68.3 percent of total coconut production in the state comes from this zone. Purnea is the leading fruit producing district of this region, followed by Saharsa, Katihar and Kishanganj. While Purnea and Kishanganj account for 33.28 percent and 34.56 percent of

pineapple production respectively, their share in coconut production are 15.33 percent 5.56 percent. Saharsa and Madhepura are important banana producing centres of this region.

Table 2.10 : Vegetable Production in Bihar (Area in Hectares, Production in MT, Productivity in MT/Ha.)

Name of vegetables	2003-04			2004-05			2005-06			2006-07
	Area	Production	Productivity	Area	Production	Productivity	Area	Production	Productivity	Est. area
1	2	3	4	5	6	7	8	9	10	11
Cauliflower	59726	955616	16	59701	955216	16	59778	938515	15.7	59867
Cabbage	36509	584144	16	36513	598813	16.4	36602	578312	15.8	36649
Onion	48309	917871	19	48759	975180	20	49837	1011691	20.3	50108
Tomato	45260	588380	13	45987	735792	16	46028	727242	15.8	46171
Chillies	38278	459336	12	38070	456840	12	38134	442354	11.6	38312
Brinjal	54096	1081920	20	29143	582860	20	53697	1030982	19.2	53807
Okra (<i>Bhindi</i>)	58045	928720	16	53651	1073020	20	56232	714146	12.7	56295
Bottle-gourd	25205	40328	16	56173	730249	13	29213	566732	19.4	29318
Sponge-gourd	33321	466494	14	33606	470484	14	33684	458102	13.6	33808
Ridge-gourd	7749	46494	6	8078	48468	6	8096	46957	5.8	8114
Bitter-gourd	8484	50904	6	8424	50544	6	8508	49346	5.8	8604
Pointed-gourd	4594	45940	10	4594	45940	10	4642	47813	10.3	4710
Cowpea	11751	70506	6	11582	69492	6	11636	86106	7.4	11723
Others	61049	976784	16	59685	835590	14	59742	955872		59862
Total	492376	7213437		493966	7628488		495829	7654170		497348

Source : Department of Agriculture, Government of Bihar

South-western part of Bihar (Zone 3B) accounts for 25.19 percent of total fruit production in Bihar. It is a major region of guava production, contributing about 41.77 percent of the total produce in the state. It also accounts for 16.26 percent of mango and about 20 percent of lemon production in the state. Production in this region of the state is led by the districts of Rohtas, Bhojpur, Buxar and Nalanda districts. The south-eastern part of Bihar (Zone 3A) has a share of only 9.04 percent in total fruit production of the state. Leading centres of production in this region are Bhagalpur and Banka. Bhagalpur is an important centre of mango production,

contributing 5.67 percent to the total produce in the state. It's contribution to state's lemon produce is also 5.7 percent.

Table 2.11 : Vegetable Production in Bihar

% Distribution of Total Vegetable Production, Area, and Productivity in Bihar according to major vegetable crops				
Area-Ha/Prod-MT				
Sl. No.	Name of vegetables	2005-06		
		Area	Production	Productivity
1	2	3	4	5
1.	Cauliflower	12.06	12.26	15.7
2.	Cabbage	7.38	7.56	15.8
3.	Onion	10.05	13.22	20.3
4.	Tomato	9.28	9.50	15.8
5.	Chillier	7.69	5.78	11.6
6.	Brinjal	10.83	13.47	19.2
7.	Okra (<i>Bhindi</i>)	11.34	9.33	12.7
8.	Bottle-gourd	5.89	7.40	19.4
9.	Sponge-gourd	6.79	5.98	13.6
10.	Ridge-gourd	1.63	0.61	5.8
11.	Bitter-gourd	1.72	0.64	5.8
12.	Pointed-gourd	0.94	0.62	10.3
13.	Cowpea	2.35	1.12	7.4
14.	Others	12.05	12.49	
	Total	100.00	100.00	

Source : Department of Agriculture, Government of Bihar

Since the increase in both acreage and production of vegetables and fruits has not been very encouraging in recent years, serious efforts have been made by the state government over the last two years to expand horticulture in Bihar. In the previous year, Chief Minister's Horticulture Mission was launched in 19 districts of the state which were not covered under the National Horticulture Mission, thereby universalising the coverage of the programme in the state. In the current financial year, *Naya Bagh Lagao Abhiyan* has been launched as a massive area expansion programme. Under this programme, farmers are asked to pay a token amount of Rs.1.00 per plant to be delivered at their field. Already 12 lakh applications have been received for mango, *litchi* and guava taken together. Another 13 lakh applications have been received for banana. An expansion of 10,000 hectare is expected to take place under this programme.

Table 2.12 : Production of Major Fruit Crops in Bihar

Name of district	Share of Districts in total Fruit Production (in Per cent)								Total
	Mango	Guava	Pine-apple	Coconut	Banana	Lemon	Litchi	Other Crops	
Zone 1									
Saran	2.95	2.82		0.54	2.40	2.83	3.10	3.82	2.66
Siwan	1.56	2.30		0.64	1.98	2.70	3.26	3.60	1.96
Gopalganj	1.69	1.96		0.12	1.85	2.19	3.50	2.65	2.82
E. Champaran	5.62	6.40	2.73	1.70	2.72	8.85	6.34	3.30	4.51
W. Champaran	4.76	5.94	3.03	1.30	2.46	9.68	5.38	4.02	4.10
Muzaffarpur	7.27	5.45		3.42	18.11	3.87	26.33	4.21	10.84
Sitamarhi	4.05	2.53		1.09	1.98	1.66	7.03	2.35	3.04
Sheohar	1.84	1.09		0.53	0.85	0.91	3.11	1.48	1.40
Vaishali	6.43	4.74		2.33	10.68	3.45	13.03	4.08	7.34
Darbhanga	9.63	2.23		3.42	6.07	4.89	2.81	4.26	6.49
Madhubani	4.70	1.67		3.11	3.22	4.04	2.44	4.00	3.62
Samstipur	7.72	2.14		2.48	7.34	4.82	3.85	4.11	6.15
Begusarai	2.98	1.83		1.82	2.94	2.50	1.74	3.44	2.69
Total	61.20	41.09	5.75	22.51	62.60	52.39	81.91	45.33	45.33
Zone 2									
Purnea	2.04	1.33	33.28	15.33	3.02	2.65	4.20	3.31	4.12
Araria	0.37	0.60	4.54	5.72	1.30	1.66	1.17	1.65	1.22
Kishanganj	0.45	0.70	34.56	5.56	2.06	1.57	1.15	2.60	2.56
Katihar	2.37	1.54	4.04	6.81	2.20	1.80	4.86	3.56	2.73
Saharsa	1.95	2.35	9.63	15.28	3.64	3.53	1.40	3.17	3.38
Madhepura	1.51	2.25	8.19	11.04	3.80	2.68	0.70	2.72	2.93
Supaul	0.92	1.48		6.64	1.76	1.27	0.35	1.32	1.41
Khagadia	1.15	1.25		1.92	2.29	1.37	0.99	2.11	1.57
Total	10.76	11.51	94.25	68.30	20.07	16.53	14.82	20.44	20.44
Zone 3A									
Mungare	0.72	0.76		0.54	0.91	1.20	0.63	1.30	0.81
Seikhpura	0.51	0.40		0.31	0.40	0.44	0.27	0.63	0.44
Lakhisarai	0.32	0.36		0.11	0.35	0.35	0.13	0.43	0.31
Jamui	0.61	0.62		0.36	0.65	0.87	0.49	1.35	0.65
Bhagalpur	5.67	2.47		1.49	3.88	5.70	1.60	3.51	4.14
Banka	3.97	1.01		0.60	2.09	2.57	0.15	1.81	2.48
Total	11.78	5.63		3.40	8.28	11.13	3.26	9.04	9.04
Zone 3B									
Patna	2.36	3.59		1.83	1.74	3.11		4.72	2.226819
Nalanda	1.63	4.85		0.40	1.28	2.02		3.69	1.705075
Bhojpur	3.22	6.40		1.05	0.97	2.17		2.88	2.282361
Buxar	2.20	4.95		0.41	0.61	1.59		1.60	1.541268
Rohtas	3.09	10.38		0.27	0.81	1.81		1.72	2.293889
Kaimur	1.70	4.14		0.12	0.60	1.28		1.26	1.2452
Gaya	0.63	2.12		0.13	0.62	1.89		2.58	0.847979
Jehanabad	0.13	0.77		0.14	0.40	0.87		1.23	0.357154
Arwal	0.12	0.67		0.09	0.29	0.59		0.87	0.271226
Nawada	0.58	1.74		0.04	0.88	2.23		2.40	0.876205
Aurangabad	0.59	2.16		0.50	0.85	2.41		2.24	0.908722
Total	16.26	41.77		4.98	9.05	19.95		25.19	25.19

Source : Department of Agriculture, Government of Bihar

Road Map for Agricultural Production

A road map for development of agriculture has been prepared under guidance of ICAR/RAU scientists. With implementation of the roadmap, it is expected that there shall be a substantial boost to agricultural productivity and income level of farmers. Through the activities under this road map, by the year 2012, following milestones are projected to be achieved :

- **Enhancement of Crop Productivity**

1. Rice	14.86 Qtls/ha to 29.72 Qtls/ha
2. Wheat	20.55 Qtls/ha to 30.50 Qtls/ha
3. Maize	26.71 Qtls/ha to 35.25 Qtls/ha
4. Pulses	7.22 Qtls/ha to 10.13 Qtls/ha
5. Oil seeds	10.32 Qtls/ha to 12.00 Qtls/ha
6. Sugarcane	455.6 Qtls/ha to 600.00 Qtls/ha
7. Fruits	109.32 Qtls/ha to 146.05 Qtls/ha
8. Vegetables	165.92 Qtls/ha to 200.60 Qtls/ha

(Note : Present productivity figures relate to 2006-07 for fruits & 2005-06 for vegetables, target figures relate to 2012)

- Enhancement of Crop intensity from 133 percent (2004-05) to 161 percent.
- Per-capita annual agricultural production to increase from Rs. 661 (2004-05) to Rs. 1300.
- The land productivity level in value terms to increase from Rs. 7351 (2004-05) to Rs. 14000.

2.11 Animal Husbandry

Total livestock population in the state according to Census 2003 is 407.83 lakh. Of this, 39.8 percent are milch animals with population of cows being 104.7 lakhs, and that of buffaloes being 57.66 lakhs (Table 2.13). The state also has a substantive number of goats (96.06 lakhs), which are known as the poor man's cow. Strength of poultry in the state is quite large at 139.68 lakhs. With such a huge livestock wealth, there is abundant growth potential of livestock products in the state. Though livestock income forms an important component of rural income in Bihar, its character is that of subsistence rather than of prosperity. Development of livestock wealth and production can provide a very sound base of economic prosperity in the villages of Bihar.

Table 2.13 : Livestock wealth of the state

Sl. No.	Livestock	Population (in lakhs)
1	Cow	104.70
2	Buffalo	57.66
3	Pigs	6.27
4	Lambs	3.46
5	Goat	96.06
6	Poultry	139.68

Source : Livestock Census 2003

Livestock Products

There was production of 5450 thousand MT of milk, 9455 lakh eggs and 2.31 lakh kgs of wool in the financial year 2006-07 (Table 2.14). While there is a trend of steady increase in milk production in the state, production of egg and wool has shown greater volatility over last two years, with production of wool showing a declining trend. While milk production has recorded an enhanced growth rate from 6.68 percent in 2005-06 to 7.71 per cent in 2006-07, wool production has shown a recovery with a growth of 5 percent in 2005-06 and 2006-07, though it continues to remain much below the production level of 2001-02 (Table 2.15). In fact, wool production has declined substantively over the last six years with its production falling from 4.24 lakh kg in 2001-02 to 2.31 lakh kg in 2006-07. Egg production has also shown a fall from 100 lakh eggs in 2005-06 to 94.55 lakh eggs in 2006-07, thereby showing a negative annual growth of 5.45 percent.

Table 2.14 : Livestock Production in Bihar

Sl. No.	Livestock Product	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
1.	Total milk (in 000, litres)	2632	2869	3175	4743	5060	5450
2.	Eggs (in crores)	74	74	78	79	100	94.55
3.	Wool (in lakh kg.)	4.24	3.62	3.94	3.78	2.2	2.31

Source : Animal Husbandry Department, Government of Bihar

Table 2.15 : Growth of Livestock Products in Bihar

Sl. No.	Livestock Product	Annual Growth over the period (in %)				
		2001-02 to 2002-03	2002-03 to 2003-04	2003-04 to 2004-05	2004-05 to 2005-06	2005-06 to 2006-07
1.	Milk	9.00	10.67	49.39	6.68	7.71
2.	Eggs	0.00	5.41	1.28	26.58	-5.45
3.	Wools	-14.62	8.84	-4.06	-41.80	5.00

Source : Animal Husbandry Department, Government of Bihar

Livestock Breeding Programme

Livestock wealth and its quality are crucially dependent on breeding infrastructure available to livestock farmers in the state. And here artificial insemination centres are of key importance as their availability not only facilitates breeding, but also goes a long way in monitoring changes in the quality of livestock. As a step towards strengthening of livestock breeding programme, out of 1401 artificial insemination centres sanctioned in the state, 422 centres have been made functional. Further, these institutions are to be provided with internal technology and structural facilities and are to be strengthened under National Animal and Buffalo Breeding Programme being run with hundred percent contribution from the central government. Efforts are being made to operationalise the rest of the centres. While 2.38 lakh animals were artificially inseminated in the year 2006-07, 78 thousand animals were inseminated till September 2007-08 (Table 2.16).

Table 2.16 : Achievements of Livestock Breeding and Health Programmes

Sl. No.	Work Type	2006-07	2007-08
1	No. of artificially inseminated Animals (in lakhs)	2.38	0.78
2	Animals Treated (in lakh)	24.96	13.69
3	Sterilisation (in lakh)	2.21	0.92
4	Immunisation (in lakh)	4.41	29.38
5	Free Distribution of fodder seed (in Qntls)	177.45	146.89

Source : Animal Husbandry Department, Government of Bihar

Institutional Infrastructure

There are 851 veterinary hospitals in the state, out of which 39 are sub-division level veterinary hospitals, 783 are first class hospitals and another 29 are travelling veterinary hospitals (Table 2.17). These institutions play an important role in prevention and treatment of animal diseases in the state. There has been an effort to strengthen and modernise these institutions. Of these 851 hospitals, a total of 352 veterinary hospitals are being run either in rented accommodation or in dilapidated buildings. Further, while there are 38 districts in the state, there are only 29 animal husbandry districts and 9 animal husbandry divisions in the state. An important decision has been taken to create 9 new veterinary districts and one new division to deepen the work of the department.

Table 2.17 : Institutional Infrastructure of Animal Husbandry

Sl. No.	Institutions	Number
1.	Veterinary Hospitals	851
2.	Artificial Insemination Centres	1401
3.	Frozen Semen Bank	04
4.	Animal Sector	03
5.	Poultry Sector	03
6.	Animal Health and Production Institute	01

Source : Animal Husbandry Department, Government of Bihar

2.12 Poultry and Fisheries

Poultry

Poultry development has been taken up as a priority area for generating additional employment and strengthening the rural economy which is crucially dependent on livestock income. Three poultry development sectors in Patna, Bhagalpur and Muzzafarpur are working towards organising poultry business, and scientific development of poultry farming and providing poultry farmers with high breed chickens. There was a production of 1.07 lakh eggs and 0.08 lakh chickens in these sectors in 2006-07.

There is a proposal for each one of these poultry sectors to be further strengthened by a low-input technology sector to be established under a plan, sponsored by the central government. While the work has already begun in Patna and Bhagalpur, the plan has been sanctioned for other places. While the central government is funding of 80 percent of the programme, share of the state is 20 percent. There is a plan to revitalise other closed poultry sectors in the state to make the state self-reliant in poultry and egg production.

With a view to provide more livelihood opportunities to the youth and help them generate self-employment, training programmes are being run to provide functional and scientific knowledge to the interested youth. There is also a programme to send them for training outside the state to make available to them the most modern technological information. In total, 1000 poultry farmers are to be trained. Further, under the Venture Capital Fund Plan, there is a plan to make loans available through banks at low rates (equal to agricultural loans) for establishment of dairy and poultry units. Under this plan, 50 per cent of the loan would be interest free.

Fisheries

Fish production in the state had increased substantively during the Tenth Plan period. It increased from 240 thousand MT in 2001-02 to 267.04 thousand MT in 2006-07. However, the growth in production has been adversely effected over the past two years due to deficient rainfall and floods in 2007. Uptil September 2007, fish production stood at 144.85 thousand MT.

Keeping in mind available water resources in the state, a target of 450 thousand MT of annual fish production from all sources has been fixed for the 11th Five Year Plan. Further, programmes are being run to increase productivity of developed ponds to 2500 kgs, for which fish producers in the state are being sent to Andhra Pradesh for special training programme. To make proper use of water bodies in the state, 20 *chaurs/mans* are to be brought under the fisheries department in order to develop them for fish production.

2.13 Dairy Sector

Dairy sector has a key role to play in development of the rural economy of the state. It would not only enhance income generation in the villages but also has a good potential of employment generation in the underemployed agricultural sector. Therefore, besides focussing on milk production, the dairy development programmes for the year 2007-08 is also oriented towards providing milch animals and basic infrastructural support to the dairy farmers and unemployed youth, particularly those belonging to Scheduled Castes, Scheduled Tribes and Backward Castes in the rural areas.

A dairy plant is being established in Biharsharif with its processing unit having a capacity of 4.0 lakh litre per day and a 30.0 MT capacity milk powder plant. The work on the plant was started in 2006, and it is due to be completed in 2008-09. Establishment of this plant would generate a huge market for milk for the dairy farmers of the region. Execution of this plan is likely to generate direct employment for 1500 persons, and indirect employment for around 75,000 people.

Further, a plan to establish 250 mini dairy units has been sanctioned in 2007-08 in 10 districts (Arwal, Banka, Jamui, Siwan, Chhapra, Supaul, Madhepura, Lakhisarai, Nawada, and Sheikhpura). Each of these ten districts are supposed to have 25 units, with an estimated cost of establishment of Rs. 1 lakh per unit. For establishment of each unit, there is a provision of grant of Rs 20,950 to the unemployed youth/farmer/dairy farmer, which is to be used for seed

money, insurance of milch animals, and bearing the cost of fodder and other health related expenditure in the first month of purchase of the milch animal. The remaining amount for the purchase of cows is to be provided through banks. Thus, a total of Rs. 52.375 lakh in grants would be made available to the farmers for establishment of these 250 units. This plan would generate direct employment for 250 people.

A plan to establish ideal dairy village units, one each in four districts (Lakhisarai, Chhapra, Nawada and Arwal) has been sanctioned in the current financial year. Each unit would comprise of a group of five villages, out of which one of the villages would be developed as the modal committee by providing it with basic infrastructure. Modal committee would be provided with a committee building, milk bulk cooler, milk testing equipments, artificial insemination centre and first aid facilities. This plan is estimated to generate direct employment for 10 persons, and indirect employment for 1000 people.

Dairy Cooperative

Bihar's famous dairy cooperative COMFED is collecting 6 lakh litres of milk per day through five dairy unions in the state. Around 85 per cent of the 5500 dairy cooperatives in the state are functional. These dairy cooperatives are benefiting a total of 2.67 lakh members, 82 per cent of whom supply milk daily to these cooperatives. These programmes of dairy cooperative have made substantive contribution in the social and economic upliftment of the beneficiary rural population.

2.14 Forestry

Bihar has a notified forest area of 6374 sq kms., which forms 6.87 percent of total geographical area of the state. Of these 6374 sq kms, the state has 76 sq kms of very dense forest, 2951 sq kms of dense forest and 2531 sq kms of open forest. The rest of the area has a crown density of less than 10 per cent.

The state has less than 10 percent tree cover as against the desirable 20 percent for plain areas as per the National Forest Policy. Almost 50 percent of the notified forest area is either barren or is degraded. Efforts are being made to rehabilitate the degraded forests as well as to give fillip to agro-forestry. As a result of these efforts, rehabilitated area of degraded forest rose from 2849 hectares in 2004-05 to 15237 hectares in 2006-07. Further, there has been a substantive growth in forestation. While 93.73 lakh plantations were done in 2005-06, 164.90

lakh plantations had already been done in the current year upto September 2007. As an important step towards agro-forestry, the state has launched the Community Based Forest Management and Conservation Plan under *Rashtriya Sam Vikas Yojna* (RSVY), which proposes to introduce poplars on a large scale in Vaishali district. Such agro-forestry would not only boost income of the farmers but will also form the raw material base for setting up of wood based industries in the state.

2.15 Land Reforms

The state government had constituted the Bihar Land Reforms Commission in the previous financial year. The Commission submitted its first interim report on *Bhoodan* which was accepted by the state government and efforts are afoot to implement the recommendations of the Commission expediently. Important recommendations of the Commission, as accepted by the state government are :

- Concerted action to ascertain correctly area of land donated, confirmed, distributed and mutated.
- Physical verification of the *Bhoodan* land, confirmation, distribution, mutation of the distributed land, delivery of possession and action against illegal ejection in a campaign mode to be completed by December, 2009.
- Creation of a functional administrative structure under Divisional Commissioner to work in tandem with *Bhoodan Yagna Committee*.
- Designation of Divisional Officer as the main executive officer responsible for the timely completion of this drive.
- Appointment of retired Additional Collector, one for each district as well as a total of 101 *amins* on contract basis, especially for tasks related to confirmation and distribution of Bhoodan Land.

Furthering this drive towards land reforms, the *Bhoodan Yagna Committee* has been revived with a view to give impetus to the distribution of the remaining *Bhoodan* land among eligible persons. Besides this, 38 posts of Additional Collectors and 101 posts of *amins* have been created by the state government as per the recommendation of the commission.

Poor state of land records has been a major bottleneck for both land reforms and an efficient revenue administration. For this, a series of measures have been taken by the state government over the last two years. In order to ensure continuous updation of land records as well as

demand of land rent and cess, the proceedings of Mutation of land on account of transfer due to sale, inheritance, succession etc. has been linked with issuance of correction slip with details of *khata*, *khesra* and boundaries in triplicate, visual map showing geometrical shape and dimensions of the land, entry of the name of transferee in tenants ledger, fixation of rent and cess, creation of demand, generation of demand notices and issuance of rent receipt.

In the current year, a pilot project for digitisation of survey maps has been undertaken in Mushahari circle of Muzzafarpur district. While this digitisation will help in preserving original survey maps, it would also be very useful in publishing updated versions, incorporating changes on account of mutation due to transfer of land. This project will serve as precursor for on line updation of survey maps.

Further, to enable revenue authorities to generate mutation notices on suo-moto basis immediately after transfer of land and mutate the same, a system of sending copy of registered documents along with fee notices by registration office to the concerned Circle Office has been introduced. Also, a system of granting receipts by *Halka Karmcharis* for applications received for mutation and other purposes has been introduced to help curb malpractices and protect the *raiyats* from exploitation.

Bihar Land Acquisition Resettlement and Rehabilitation Policy 2007

The state government has also framed a new policy regarding land acquisition, known as Bihar Land Acquisition Resettlement and Rehabilitation Policy 2007. An innovative feature of this policy is that it provided for additional benefits to persons who voluntarily agree for acquisition of their land. The salient features of the policy are :

- The cost of the land to be acquired shall be fixed after adding 50 per cent of the value of land fixed for realisation of stamp duty.
- Whenever the land owner consents for acquisition of his/her land, the rate of solacium to be paid shall be 60 percent, instead of 30 per cent.
- Whenever homestead land or house of any person is acquired he/she will be entitled for a plot of homestead land subject to a maximum of 5 decimal.
- Every land owner whose house has been acquired shall be paid an amount of Rs. 10,000 as one time assistance for temporary accommodation, and Rs. 5000 for transportation of his/her household goods. **(Cond.)**

- Displaced agricultural labourers, who have been earning livelihood for a period of at least three years from the land being acquired and rendered jobless, will be entitled for one time payment of wage for two hundred days as fixed under Minimum Wages Act as well as for job card under NREGP.
- 100 percent exemption from conversion fee, in the event of change in the use of land for Industrial Development and Institutional Infrastructure Development Schemes has been recommended by State Investment Promotion Board and District level Single Window Clearance Committee.

Appendix I
Agro-Climatic Zones in Bihar

Agro climatic Zones	Districts	Soil	Ph	Initiation/ Cessation of rainfall	Total Rainfall (mm)	Temperature (dg. Celcius)		Important Cropping Sequence
						Maximum	Minimum	
Zone-1 (North West alluvial plane zone-Pusa)	Saran, Siwan, Gopalganj, E.Champaran, W.Champaran, Sheohar, Sitamarhi, Madhubani, Darbhanga, Muzzafarpur, Vaishali, Samastipur, Begusarai	Sandy loam, loam	6.5 – 8.4	12 th June/ 30 th Sep to 10 th Oct	1040 – 1450 (1245.00)	36.6	7.7	Rice – Wheat, Rice-Rai, Rice- Sweet Potato, Rice-Maize (Rabi), Maize-Wheat, Maize-Sweet Potato, Maize-Rai, Rice-lentil
Zone-2 (North-East Alluvial Plane zone- Purnea)	Supaul, Khagaria, Saharsa, Madhepura, Purnea, Katihar, Kishanganj, Araria, Naugachia.	Sandy loam, Clay loam	6.5 – 7.8	7 th June/30 th Sep to 10 th Oct	1200 – 1700 (1450.00)	33.8	8.8	Jute-Rice, Jute- Wheat, Jute- Potato, Jute-Kalai, Jute-Mustard, Rice-Wheat- Moong, Rice- Toria
Zone-3		Sandy loam, Clay loam, loam, Clay	6.8 – 8.0		990 – 1240 (1115.00)	37.1	7.8	Rice-Wheat, Rice- Gram, Rice-Lentil, Rice-Rai
Zone-3A (South Alluvial Plane Zone- Sabour)	Sheikhpura, Lakhisarai, Jamui, Banka, Munger and Bhagalpur			15 th June/30 th Sep to 10 th Oct				
Zone-3B (South Alluvial Plane Zone- Sabour)	Bhabhua, Rohtas, Aurangabad, Buxar, Bhojpur, Jehanabad, Gaya, Nalanda, Patna, Nawada			10 th June/ 30 th Sep to 10 th Oct				

Source : Department of Agriculture, Government of Bihar

Appendix II

Changes in the Land-Utilisation Pattern

Year	Geographical Area (In Hectare)	Percentage of Geographical Area Under						
		Forests	Barren and Unculturable Land	Land Area	Water Area		Total Col. 5-7	Culturable Waste Land
					Permanent	Temporary		
1	2	3	4	5	6	7	8	9
2000-01	9359568	6.59	4.66	13.63	2.22	1.66	17.50	0.49
2001-02	9359568	6.64	4.66	13.67	2.22	1.66	17.54	0.49
2002-03	9359568	6.64	4.66	13.69	2.22	1.64	17.55	0.49
2003-04	9359568	6.64	4.66	13.71	2.22	1.64	17.57	0.49
2004-05	9359568	6.64	4.66	13.73	2.22	1.64	17.58	0.49
2005-06	9359568	6.64	4.66	13.74	2.22	1.62	17.59	0.49
Year	Percentage of Geographical Area Under							
	Permanent Pastures and Grazing Land	Land Under Misc. Tree Crop and Groves not Included in Net Area Sown	Fallow Land Other than Current Fallow	Current Fallow	Total Unculturable Land (4,5 & 8 to 12)	Net Sown Area (Col. 2- 15)	Total Cropped Area	Area Sown more than Once
10	11	12	13	14	15	16	17	18
2000-01	0.19	2.47	1.44	6.15	39.50	60.50	85.39	24.89
2001-02	0.19	2.51	1.44	6.01	39.49	60.51	84.37	23.86
2002-03	0.19	2.53	1.42	5.33	38.83	61.17	85.02	23.85
2003-04	0.19	2.55	1.39	5.48	38.97	61.03	84.22	23.19
2004-05	0.19	2.56	1.42	6.92	40.46	59.54	79.06	19.52
2005-06	0.19	2.57	1.38	7.12	40.30	59.36	122.02	19.66

Source : Department of Agriculture, Government of Bihar

Appendix III
Second Advance Estimates of Major Crops in Bihar (2007-08)

Sl. No.	Crops	Area (,000 hectares)			Production (,000 tonnes)			Yield (Kg/hectare)		
		Kharif	Rabi	Total	Kharif	Rabi	Total	Kharif	Rabi	Total
1	2	3	4	5	6	7	8	9	10	11
1	Rice	3301.97	0.00	3301.97	3775.38	0.00	3775.38	1143.00	0.00	1143.00
2	Wheat	0.00	2049.66	2049.66	0.00	3474.17	3474.17	0.00	1695.00	1695.00
3	Jowar	3.74	0.00	3.74	3.83	0.00	3.83	1025.00	0.00	1025.00
4	Bajra	4.76	0.00	4.76	5.13	0.00	5.13	1077.00	0.00	1077.00
5	Maize	269.22	203.66	472.88	432.37	643.96	1076.33	1606.00	3162.00	2276.12
6	Ragi	14.65	0.00	14.65	12.12	0.00	12.12	727.00	0.00	727.00
7	Small Millets	3.68	0.00	3.68	2.73	0.00	2.73	743.00	0.00	743.00
8	Barley	17.68	0.00	17.68	0.00	18.90	18.90	0.00	1069.00	1069.00
A	Coarse Cereals	313.73	203.66	517.39	456.18	662.86	1119.04	1454.00	3162.00	2162.85
	Cereals	3929.43	2456.98	6386.41	4687.74	4799.89	9487.63	1192.98	1953.57	1485.59
9	Tur	0.00	35.12	35.12	0.00	43.37	43.37	0.00	1235.00	1235.00
10	Urad	25.03	0.00	25.03	19.10	0.00	19.10	763.00	0.00	763.00
11	Moong	8.39	0.00	8.39	4.77	0.00	4.77	568.00	0.00	568.00
12	Other Kharif Pulses	14.91	0.00	14.91	12.36	0.00	12.36	829.00	0.00	829.00
13	Gram	0.00	64.20	64.20	0.00	55.47	55.47	0.00	864.00	864.00
14	Other Rabi Pulses	0.00	301.00	301.00	0.00	230.20	230.20	0.00	765.00	765.00
	Total Pulses	48.33	400.32	448.65	36.23	329.04	365.27	750.00	822.00	814
	Total Foodgrain	3664.03	2653.64	6317.67	4267.79	4466.07	8733.86	1165.00	1683.00	1382
15	Groundnut	0.87	0.00	0.87	0.43	0.00	0.43	494.00	0.00	494.00
16	Castorseed	0.00	0.14	0.14	0.00	0.14	0.14	0.00	945.00	945.00
17	Seasum	3.32	0.00	3.32	2.61	0.00	2.61	736.00	0.00	736.00
18	Nigerseed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Soyabean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	Sunflower	3.08	6.79	9.87	3.77	10.04	13.81	1227.00	1478.00	1400.00
21	Rapeseed & Mustard	0.00	84.63	84.63	0.00	75.32	75.32	0.00	890.00	890.00
22	Linseed	0.00	27.83	27.83	0.00	23.82	23.82	0.00	856.00	856.00
23	Safflower	0.00	0.79	0.79	0.00	0.63	0.63	0.00	799.00	799.00
	Total Oil Seeds	9.27	120.18	129.45	6.81	109.95	116.76	937.00	915.00	916.00
24	Cotton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	Jute *	133.01	0.00	133.01	1272.91	0.00	1272.91	1722.00	0.00	1722.00
26	Mesta *	14.91	0.00	14.91	142.47	0.00	142.47	1720.00	0.00	1720.00
	Jute & Mesta	147.92	0.00	147.92	1715.38	0.00	1715.38	1720.00	0.00	1720.00
27	Sugarcane	119.74	0.00	119.74	4930.25	0.00	4930.25	41176.00	0.00	41176.00
28	Onion	0.00	15.89	15.89	0.00	12.79	12.79	8.03	0.00	8.03
29	Potato	59.26	89.16	148.42	474.67	717.76	1192.43	8.01	8.05	8.03

*000 bales of 180 kg

Source : Department of Agriculture, Government of Bihar

Appendix IV

Changes in Production and Acreage of Major Crops in Bihar

1	2	Annual Growth Rates (in Percent)								
		Rice	Wheat	Maize	Other Coarse cereals	Total Cereals	Rabi Pulses	Kharif Pulses	Total Pulses	Annual Growth Food-grains
		3	4	5	6	7	8	9	10	11
2000-01	Area	1.70	-0.65	-2.81	-12.97	0.34	0.13	4.12	0.69	0.37
	Production	-1.86	-3.18	4.98	-16.14	-1.62	-0.53	4.94	0.30	-1.53
2001-02	Area	-2.86	2.85	-4.22	-3.77	-1.15	-2.55	-7.05	-3.21	-1.36
	Production	-4.44	-1.06	-0.60	-8.51	-2.64	-11.65	-13.71	-11.98	-3.12
2002-03	Area	0.91	0.22	1.56	20.26	0.90	1.18	-3.59	0.51	0.87
	Production	-2.25	-7.98	-9.31	-3.27	-5.46	3.82	-4.51	2.52	-5.09
2003-04	Area	-0.19	-2.54	2.12	-27.22	-1.03	-1.93	-5.62	-2.42	-1.16
	Production	7.12	-8.70	9.17	-16.10	1.20	-1.05	1.19	-0.73	1.10
2004-05	Area	-10.89	-2.62	1.69	-9.13	-6.93	-4.32	-6.86	-4.65	-6.71
	Production	-51.81	-11.09	1.20	-9.72	-30.21	-18.36	2.08	-15.34	-29.47
2005-06	Area	2.01	-0.92	3.50	9.82	1.22	-8.76	-2.59	-7.98	0.30
	Production	33.17	-15.75	-8.72	14.69	3.09	-4.77	-6.95	-5.16	2.60
2006-07	Area	3.11	2.53	23.04	0.17	5.07	0.41	9.24	1.59	4.75
	Production	42.92	55.33	49.07	1.53	48.25	0.83	-5.39	-0.26	45.58
2007-08 (2 nd Advance Estimate)	Area	-1.54	-0.23	-40.77	-4.73	-6.14	-29.72	-4.36	-26.07	-7.90
	Production	-24.44	-19.06	-46.95	-5.23	-26.35	-23.24	7.54	-18.13	-26.04

Source : Department of Agriculture, Government of Bihar

Appendix IV (Contd.)

Changes in Production and Acreage of Major Crops in Bihar

Year	Area/ Production	Annual Growth Rates (in Percent)							
		Jute	Mesta	Sunhemp	Total Fibres	Sugarcane	Tobacco	Total Commercial Crops	Total Oilseeds
12	13	14	15	16	17	18	19	20	21
2001-02	Area	5.42	-51.82	4.58	-5.36	21.29	-11.17	16.69	-7.12
	Production	-12.11	-57.24	20.00	-20.11	30.68	-16.00	30.47	-8.33
2002-03	Area	3.62	30.26	65.56	7.16	-5.44	9.07	-3.87	-3.87
	Production	-2.30	14.23	49.85	-0.63	-13.25	11.47	-13.18	-12.56
2003-04	Area	4.60	-0.07	-18.75	3.48	-3.42	-4.01	-3.49	2.40
	Production	17.85	15.49	-18.09	17.50	-5.19	-5.03	-5.19	17.90
2004-05	Area	-8.87	-19.76	12.29	-9.68	0.83	11.50	2.13	-2.56
	Production	6.65	6.04	20.06	6.61	-12.06	16.42	-11.95	-5.99
2005-06	Area	-6.98	-9.50	-17.42	-7.48	-3.08	831.65	107.82	-1.34
	Production	8.63	-2.89	-12.66	7.35	12.50	-7.21	12.41	14.79
2006-07 (Provincial)	Area	-3.00	-2.70	0.50	-2.90	15.74	-90.55	-47.56	4.08
	Production	-5.71	-4.55	1.93	-5.59	25.90	-6.39	25.77	11.44
	Area	4.64	5.45			2.19			-7.93
	Production	1.56	4.35			-7.65			-21.53

Source : Department of Agriculture, Government of Bihar

Appendix V

Districtwise (Zonal) Breakup of Production of Major Crops in 2006-07 (Area : Hectares, Production : MT, Productivity : Kg/hectare)

District	Rice			Wheat			Maize		
	Area	Product- ion	Product- ivity	Area	Producti on	Product- ivity	Area	Produc- tion	Product- ivity
Zone-1									
Saran	76724	83723	1091.2	88112	201100	2282.3	27807	51130	1838.7
Siwan	73991	114275	1544.4	91887	188586	2052.4	19410	40846	2104.4
Gopalganj	24065	25164	1045.7	83202	204117	2453.3	14925	28204	
Muzaffarpur	111611	77439	693.8	85448	164235	1922.0	21543	39389	1828.4
E.Champaran	137457	96403	701.3	98931	210009	2122.8	18239	21251	1165.1
W.Champaran	106491	84980	798.0	83627	171188	2047.0	16620	31968	1923.5
Sitamarhi	71398	48491	679.2	68299	114925	1682.7	6149	12506	2033.8
Sheohar	19901	10309	518.0	14075	18745	1331.8	972	2783	2863.2
Vaishali	49221	33953	689.8	47893	118112	2466.2	34162	70700	2069.6
Darbhanga	47134	39896	846.4	67180	130435	1941.6	13418	34888	2600.1
Madhubani	129314	111954	865.8	82177	131422	1599.3	1217	3209	2636.8
Samastipur	41529	18771	452.0	51366	143623	2796.1	44568	155766	3495.0
Begusarai	18897	29487	1560.4	52750	111236	2108.7	63287	133338	2106.9
Total	907733	774845	853.6	914947	1907733	2085.1	282317	625978	2217.3
% of Total	31.89	17.23		44.64	45.30		43.98	35.44	
Zone-2									
Saharsa	67886	67828	999.1	42621	71654	1681.2	30479	105078	3447.6
Supaul	75702	87944	1161.7	50795	90972	1791.0	11902	54189	4552.9
Madhepura	61449	69914	1137.8	36629	58660	1601.5	39810	130422	3276.1
Purnia	108768	106878	982.6	46296	55663	1202.3	42889	170959	3986.1
Kishanganj	110921	111896	1008.8	57551	30950	537.8	21475	74509	3469.6
Araria	79641	73376	921.3	20976	23027	1097.8	1549	5242	3384.1
Katihar	97325	131557	1351.7	35316	59431	1682.8	41090	144763	3523.1
Khagaria	13569	11761	866.8	32228	64290	1994.8	54737	194484	3553.1
Total	615261	661154	1074.6	322412	454647	1410.1	243931	879646	3606.1
% of Total	21.62	14.70		15.73	10.80		38.00	49.80	
Zone-3A									
Munger	29332	59079	2014.1	18203	38325	2105.4	7788	16098	2067.0
Shekhpura	24520	56289	2295.6	20530	42497	2070.0	1431	1899	1327.0
Lakhisarai	39302	94300	2399.4	30061	41090	1366.9	8152	11907	1460.6
Jamui	50289	88727	1764.3	11776	21484	1824.4	5033	5560	1104.7
Bhagalpur	46640	112668	2415.7	44159	74104	1678.1	44438	106568	2398.1
Banka	99429	258065	2595.5	28781	69379	2410.6	12214	25391	2078.8
Total	289512	669128	2311.2	153510	286879	1868.8	79056	167423	2117.8
% of Total	10.17	14.88		7.49	6.81		12.32	9.48	
Zone-3B									
Patna	88459	145330	1642.9	57642	129740	2250.8	11963	28613	2391.8
Nalanda	95350	227208	2382.9	82238	148159	1801.6	4973	8595	1728.3
Bhojpur	84903	226217	2664.4	62071	157593	2538.9	3635	28472	7832.7
Buxar	82457	186996	2267.8	60699	175128	2885.2	4286	4904	1144.2
Rohtas	166671	468058	2808.3	135644	402226	2965.3	589	1006	1708.0
Kaimur	133136	310928	2335.4	61070	131806	2158.3	356	470	1320.2
Gaya	53386	79459	1488.4	60101	127589	2122.9	6256	11206	1791.2
Jehanabad	52636	90042	1710.7	22166	47597	2147.3	672	1709	2543.2
Arwal	32084	66001	2057.1	10650	21528	2021.4	614	1321	2151.5
Nawada	73308	147689	2014.6	45190	96268	2130.3	2678	5953	2222.9
Auragabad	171133	444650	2598.3	61320	124525	2030.7	591	998	1688.7
Total	1033523	2392578	2314.9	658791	1562159	2371.3	36613	93247	2546.8
% of Total	36.31	53.20		32.14	37.09	387.1	5.70	5.28	
G. Total	2846029	4497705	1580.3	2049660	4211418	2054.7	641917	1766294	2751.6

Source : Department of Agriculture, Government of Bihar

Appendix VI

Zonal Land Utilisation Pattern in Bihar (Area in Hectares)

District	Geographical Area	Forests	Barren & Unculturable Land	Land Put to Non-Agricultural Use				Culturable Waste Land
				Land Area	Water Area		Total Col. 5-7	
					Permanent	Temporary		
1	2	3	4	5	6	7	8	9
Zone 1								
Saran	264887	-	18077	26745	3464	2979	33188	165
Siwan	224410	0	8873	27409	1969	1599	30977	776
Gopalganj	203774	0	5571	29729	2073	438	32240	1427
E.Champaran	431715	118	8198	49215	10069	16070	75354	298
W.Champaran	484351	91745	3020	70012	15228	8482	93722	1323
Muzaffarpur	315351	0	5287	49401	7776	4866	62043	336
Sitamarhi	221891	0	1809	43761	2531	15847	62139	137
Sheohar	43475	0	416	9219	1269	1916	12404	28
Vaishali	201449	0	24257	28392	5827	2105	36324	151
Darbhanga	254077	0	1384	42949	9357	7789	60095	159
Madhubani	353498	0	2330	69735	13428	2316	85479	515
Samastipur	262390	0	3932	52929	8189	993	62111	0
Begusarai	187828	0	18125	29062	7668	4025	40755	41
Total Zone 1	3449096	91863	101279	528558	88848	69425	686831	5356
% Share in Total	36.85	14.78	23.22	41.14	42.84	45.18	41.74	11.70
Zone 2								
Purnia	313883	113	12427	36438	6856	1487	44781	1162
Araria	271712	838	5088	39353	6438	4819	50610	567
Kishanganj	189080	354	11386	23862	7274	2574	33710	1240
Katihar	291349	1785	22279	39832	12128	4077	56037	792
Saharsa	164559	0	10883	21019	4780	2230	28029	479
Madhepura	179589	0	3949	25346	3859	1070	30275	0
Supaul	238603	0	20393	37859	9764	2912	50535	1558
Khagaria	149342	0	13686	18672	7715	4257	30644	641
Total Zone 2	1798117	3090	100091	242381	58814	23426	324621	6439
% Share in Total	19.21	0.50	22.95	18.87	28.36	15.25	19.73	14.07
Zone 3A								
Munger	139793	28524	11501	19731	5836	5427	30994	951
Shekhpura	62084	0	1080	6748	875	2133	9756	242
Lakhisarai	128602	13445	7109	7709	1200	4822	13731	724
Jamui	305289	92855	28897	34271	2188	2873	39332	10467
Bhagalpur	254300	78	22610	51137	6564	9810	67511	2342
Banka	305621	46310	43081	35232	2905	3121	41258	7958
Total Zone 3A	1195689	181212	114278	154828	19568	28186	202582	22684
% Share in Total	12.78	29.15	26.20	12.05	9.44	18.34	12.31	49.55
Zone 3B								
Patna	317236	56	13119	62187	10332	2527	75046	767
Nalanda	232732	4640	1216	30031	2523	7874	40428	218
Bhojpur	237339	0	6883	28925	2823	1443	33191	628
Buxar	166999	0	2276	12187	3230	1338	16755	576
Rohtas	390722	66723	16948	37645	8961	325	46931	1118
Kaimur	342447	113039	19269	29769	2469	1341	33579	1395
Gaya	493774	77836	27646	61493	3759	6872	72124	3294
Jehanabad	94043	637	3290	12765	835	1066	14666	152
Arwal	62631	-	2191	8518	556	706	9780	101
Nawada	248732	63775	11296	24598	3031	7379	35008	1149
Auragabad	330011	18764	16430	50752	1645	1744	54141	1903
Total Zone 3B	2916666	345470	120564	358870	40164	32615	431649	11301
% Share in Total	31.16	55.57	27.64	27.94	19.37	21.23	26.23	24.69

Appendix VI (Contd.)

Zonal Land Utilisation Pattern in Bihar

District	Permanent Pastures and Grazing Land	Land Under Misc. Tree Crop and Groves not Included in Net Area Sown	Fallow Land Other than Current Fallow	Current Fallow	Total Unculturable Land (4,5 & 8 to 12)	Net Sown Area Col. 2-15	Total Cropped Area	Area Sown more than Once
10	11	12	13	14	15	16	17	18
Zone 1								
Saran	242	8522	3836	8572	72602	192285	232691	40406
Siwan	169	8489	1579	10031	60894	163516	245701	82185
Gopalganj	214	7333	2439	5013	54237	149537	228698	79161
E.Champaran	469	26891	3031	18112	132471	299244	346285	47041
W.Champaran	1165	6339	3032	2206	202552	281799	383676	101877
Muzaffarpur	35	17101	1487	22540	108829	206522	338283	131761
Sitamarhi	1399	13837	879	28342	108542	113349	149209	35860
Sheohar	0	1926	278	2872	17924	25551	40070	14519
Vaishali	365	9642	401	4022	75162	126287	197283	70996
Darbhanga	153	12165	2239	6652	82847	171230	202256	31026
Madhubani	1442	22693	3413	11766	127638	225860	319952	94092
Samastipur	71	8179	1166	2472	77931	184459	252643	68184
Begusarai	18	3512	986	7869	71306	116522	166237	49715
Total Zone 1	5742	146629	24766	130469	1192935	2256161	3102984	846823
% Share in Total	32.86	61.23	18.63	20.13	31.50	40.49	41.94	46.35
Zone 2								
Purnia	443	8729	4793	31248	103696	210187	284067	73880
Araria	146	18904	3006	9305	88464	183251	287060	103809
Kishanganj	234	4967	3112	4512	59515	129565	193754	64189
Katihar	271	10967	6103	32864	131098	160251	259807	99556
Saharsa	1167	4273	3902	8683	57416	107143	190078	82935
Madhepura	58	6986	1082	10321	52671	126918	197768	70850
Supaul	280	3038	1578	14539	91921	146682	254094	107412
Khagaria	236	2983	7386	10331	65907	83435	129787	46352
Total Zone 2	2835	60847	30962	121803	650688	1147432	1796415	648983
% Share in Total	16.22	25.41	23.29	18.80	17.18	20.59	24.28	35.52
Zone 3A								
Munger	211	501	2420	17822	92924	46869	62710	15841
Shekhpura	0	238	2055	16631	30002	32082	35778	3696
Lakhisarai	59	241	7142	26413	68864	59738	76856	17118
Jamui	1719	1982	16918	38101	230271	75018	80536	5518
Bhagalpur	640	6564	3811	12201	115757	138543	166992	28449
Banka	1704	7336	1781	3821	153249	152372	160193	7821
Total Zone 3A	4333	16862	34127	114989	691067	504622	583065	78443
% Share in Total	24.80	7.04	25.68	17.75	18.25	9.06	7.88	4.29
Zone 3B								
Patna	122	892	1831	20201	112034	205202	231479	26277
Nalanda	4	1205	261	4008	51980	180752	220787	40035
Bhojpur	78	1905	2840	10019	55544	181795	184654	2859
Buxar	32	589	801	7122	28151	138848	161439	22591
Rohtas	105	2804	915	1030	136574	254148	342154	88006
Kaimur	142	670	6232	15602	189928	152519	187399	34880
Gaya	2198	3801	16322	132392	335613	158161	160150	1989
Jehanabad	234	1259	1725	9282	31245	62798	76184	13386
Arwal	154	848	1655	7648	22377	40254	48539	8285
Nawada	918	564	2732	38913	154355	94377	101610	7233
Auragabad	577	589	7749	34525	134678	195333	202459	7126
Total Zone 3B	4564	15126	43063	280742	1252479	1664187	1916854	252667
% Share in Total	26.12	6.32	32.40	43.32	33.07	29.86	25.91	13.83

Source : Department of Agriculture, Government of Bihar

CHAPTER III

INDUSTRY AND ALLIED SECTORS

The industrial sector in Bihar remains in a poor state with its growth rate much below the national average. In the industrial sector in the state, there are only a few mineral based industries, and agro-based and chemical-based industries are predominant. The division of the state gave a further severe blow to industrial growth in the present. This means that the industrial development of the present Bihar remains lower than that of the undivided state. It is, however, true that industrial growth in the state during the Tenth Five Year plan was 9.8 percent.

3.1 Size of Industrial Sector

With the Net State Domestic Product (NSDP) of the state during 2004-05 being at Rs. 65909 crore (at 1999-00 prices), the share of industrial income was Rs. 3527 crore. This indicates a very low share of the industrial sector in the NSDP at around 5.4 percent. Compared to the national average of industrial income at 20.1 percent, this is very low. It is worthwhile to know in this context that Bihar's total industrial income is only 0.4 percent of the total national income from the same sector. It is also a fact that overall industrial sector of the state is dominated by unregistered units, accounting for half of its total income.

The division of the state meant major changes in the structure of the industry in the present state of Bihar. The major constituents of the present industrial structure are food and non-metallic minerals. As per the Annual Survey of Industries (ASI) 2004-05, the industrial sector in Bihar covers a range of products, but in terms of value addition, food, beverages, tobacco and petroleum products account for more than 85 percent of the total industrial income. The remaining industries contribute a marginal 15 percent to the total value addition in the industrial sector of the state. An analysis of the characteristics of the industrial sector in the state as depicted by the ASI 2004-05, based on the survey of 1674 industrial units, shows that the total fixed capital investment was Rs. 2967 crore and the total working capital investment in the state was Rs. 2281 crore. The total

investment in the state industrial sector, therefore, worked out to be Rs. 5956 crore. The loans outstanding against the industrial units in the state was Rs. 1230 crore. Finally, the aggregate value of output of the industrial units was Rs. 12221 crore with a net value addition of Rs. 910 crore. It is estimated that the net income in the industrial sector was Rs. 442 crore. A profile of the industrial sector in Bihar is presented in Appendix I, along with comparable data for Rajasthan and Uttar Pradesh, two other industrially disadvantaged states.

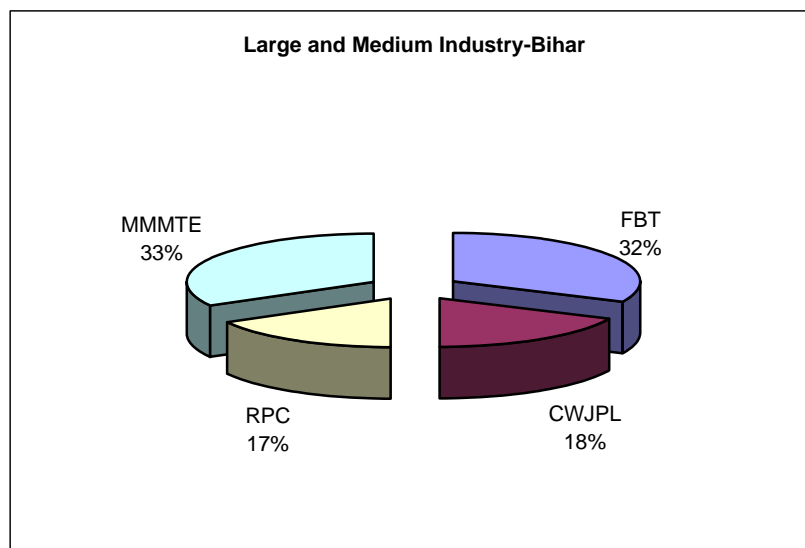
3.2. Large and Medium Industry Units

There are 262 large and medium industrial units in the state which are concentrated only in few divisions of the state. The highest concentration of large and medium industrial units is in the Patna division (38.2 percent) followed by Tirhut (21.6 percent) and Magadh (9.7 percent). The concentration pattern of large and medium industries shows that out of 38 districts spread over 9 divisions in the state, 10 districts do not have any large or medium industrial units and 11 districts have less than 5 large and medium industrial units each (Table 3.1).

Table 3.1 : Large and Medium Industry Units in Bihar 2007-08 (Upto December, 2007)

Division	Food, Beverage, Tobacco	Cotton, wool, Jute, paper, Leather	Rubber, Plastic, chemicals	Material, metal, machine, Transport, equipments	Total	% share
Patna	22	18	7	52	99	38.2
Magadh	6	1	9	9	25	9.7
Bhagalpur	2	3	2	3	10	3.9
Munger	2	3	12	1	18	6.9
Saran	12	1	0	1	14	5.4
Tirhut	21	6	13	16	56	21.6
Darbhanga	9	9	1	-	19	7.3
Koshi	-	-	-	-	-	0.0
Purnia	8	6	1	3	18	6.9
Bihar	82 (31.7)	47 (18.1)	45 (17.4)	85 (32.8)	262	100

Source: Department of Industry, Government of Bihar



FBT- Food, Beverages, Tobacco
 RPC- Rubber, plastic, Chemicals
 MMMTE- Material, metal, machine, transport, equipment
 CWJPL – Cotton, wool, jute, paper, leather

3.3. Small Industries

Small industries, dominated by tiny enterprises and artisan based industries, play a significant role in the industrial sector of a region. Generally, their contribution to employment generation is substantial, even when the levels of productivity and total production remain low in this sector. The total employment provided by this sector in 2007-08 (upto December, 2007) was 5.5 lakh mandays. It was further estimated that the state has 1.5 thousand small scale industry (SSI) units, 98 thousand tiny micro industrial units and 68 thousand artisan based industry units with a total investment of Rs. 88752 lakh.

Table 3.2 : Yearwise Permanent S.S.I Registered Units of Bihar (Excluding Jharkhand)

Sl. No.	Year	Achievement					
		SSI	Tiny/ Micro	Artisan	Total	Investment (In Lakhs)	Employment (in no.)
1	Upto 31.03.2000	1261	72767	44413	118441	44701.38	433808
2	2000-2001	35	3249	2530	5814	3805.15	14015
3	2001-2002	31	3206	3314	6551	4192.04	15283
4	2002-2003	24	3290	2983	6297	4638.07	13622
5	2003-2004	21	3462	2616	6099	5430.39	14346
6	2004-2005	17	3335	2897	6249	5371.79	13346
7	2005-2006	24	3584	3333	6941	4697.31	15732
8	2006-2007	20	3472	3612	7104	7279.79	16738
9	2007-2008	46	1537	2590	4173	8636.49	12793
	Total	1479	97902	68288	167669	88752.41	549683

Source: Department of Industry, Government of Bihar

There are, however, problems of registration of these units and, therefore, its categorisation in the national census of industries. For example, the third All India Census of SSI industries (2001-02) records only 72.6 thousand permanently registered small scale units in Bihar, out of which 52.1 thousand units are functional. One of the major revelations of the survey is that the share of tiny industrial units among all the SSI units (both registered and unregistered) is as high as 99.9 percent. These units are evenly spread throughout the state with a relatively low employment potential. It is, however, notable that while the small, medium and large industrial units display geographical concentration, the tiny and artisan based industries are spread across the state.

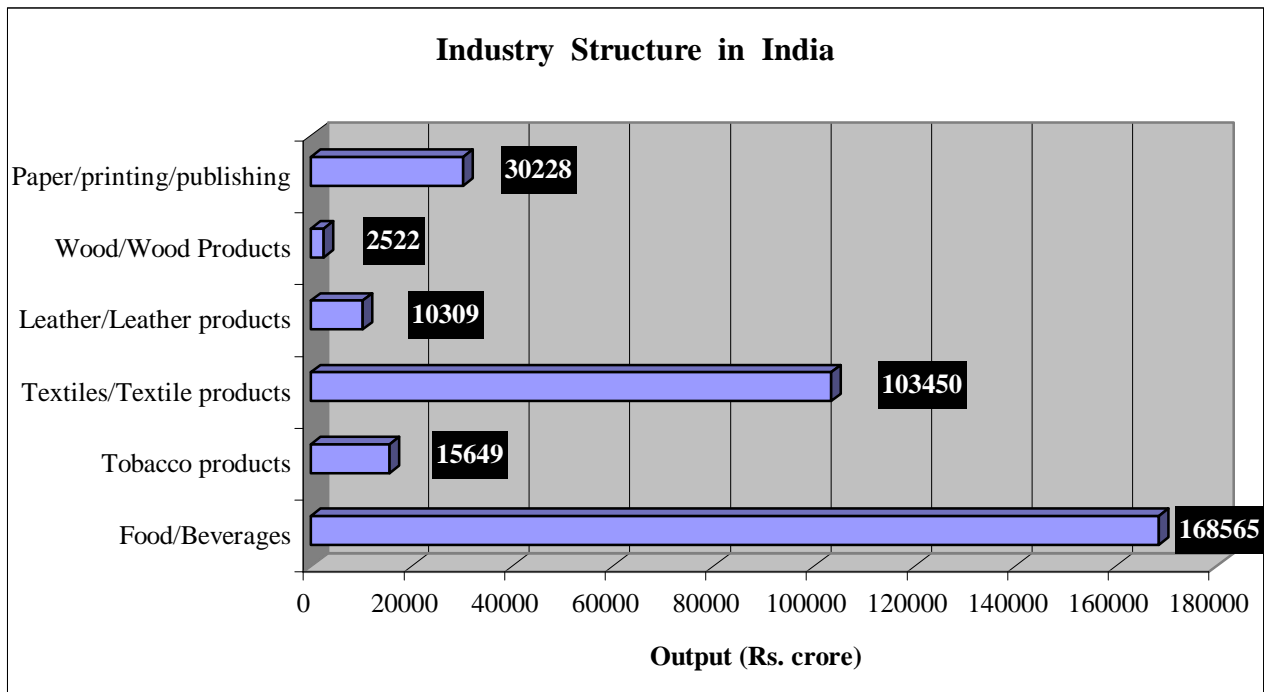
In terms of marketing pattern, there are 1675 exporting units in the industrial sector. This sector is also dominated by unregistered units — of the total 1675 export oriented industrial units, only 80 are registered and the remaining 1596 are unregistered. The gross exports amounts to Rs. 25.30 crore, which is 0.68 percent of the gross output in the sector (Rs. 3703 crore). Also, there is regional concentration in the export oriented industrial units in the state. The major export products include non-alloy steel, surgical dressings, rice, flour, doors and windows, agricultural tools, wooden furniture, cement and asbestoses products, locks, printing, book-bindings etc. The lichi export from the state is very significant. In 2003-04, export of lichi was 393 MT, constituting around 82 percent of the total exports of lichi from India.

3.4. Agro-based Industries

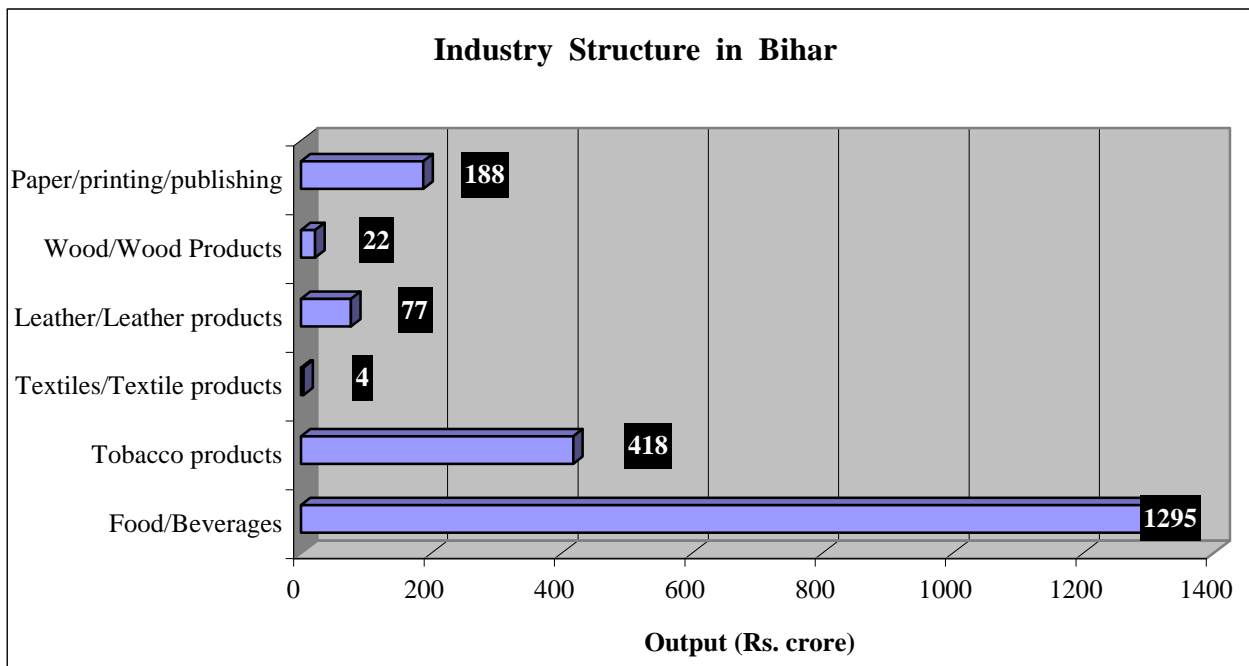
Bihar is primarily an agrarian economy and, therefore, agro-based industries are expected to play a dominant role in the industrial sector for growth and sustainability. The agro-based industries account for almost half of the net value added in the industrial sector. There remains substantial scope in the sector for further expansion. The current performance level is not very impressive from a national point of view. For instance, the ASI 2002-03 estimates the total agro-based industrial output at Rs. 330.72 thousand crore for India as a whole, out of which the contribution of Bihar is only Rs. 2.01 thousand crore, constituting a negligible share of 0.6 percent (Table 3.3). Rough estimates of inputs production for agro-based industries suggests that the state can push up this share upto 5 or 6 percent, if suitable initiatives are taken in terms of policy and other technical dimensions (Appendix II).

Table 3.3 : Size of Selected Agro-based Industries in Bihar (ASI 2002-03)

NIC code 1998	Industry Group	Output value (Rs. crore)		Share of Bihar (Percentage)
		India	Bihar	
15	Food/Beverages	168565	1295	0.8
16	Tobacco products	15649	418	2.7
17-18	Textiles/Textile products	103450	4	0.0
19	Leather/Leather products	10309	77	0.7
20	Wood/Wood Products	2522	22	0.9
21-22	Paper/printing/publishing	30228	188	0.6
	Total	330723	2005	0.6



One of the major determinants of the agro-based industrial development is the nature and structure of the farm sector and the relative importance assigned to different crops in the existing crop mix. For instance, high value agriculture offers more scope of processing and value addition compared to grains. Processing of fruits, vegetables, milk, egg etc. are very important in this context. The area under fruits and vegetables in the state was 27 thousand hectares and the production was around 1.33 lakh MT in 2006-07. The state also ranks top in the production of honey with an annual output of 8400 MT (2002). It is observed in this context that the average yield of honey in Bihar is 60 kgs per box as against the national average of only 20 kgs. One of the major significance of this activity has been that more than one lakh families are directly engaged in the honey sector.



Dairy : The two prominent agro-based industries in the state are dairy and tea. The dairy sector has grown through the cooperatives. The cooperative brand of milk and milk products under the brand name *Sudha* provides significant rural employment and income, especially for women. The sector, however, holds large untapped potential for more intensive activities to serve a growing market for dairy products, both domestic and international.

Tea : As regards tea, around 20 thousand acres of land is covered under plantations, providing employment to about 15 thousand workers. Kishanganj district is considered as a non-traditional area under the Tea Board scheme and enjoys subsidies/ incentives from the Board. The growth of the tea sector, however, is not very high, as there are only two tea processing units in the state.

Food Processing : Bihar has a great potential for food processing industries. There also exists potential for doubling the current agricultural production levels. The increased agricultural produce through such steps as increased crop intensity, crop rotation, irrigation, scientific crop management etc. would lead to higher marketable surplus.

This sector has the potential to generate additional employment to the tune of around 0.5 million. In order to help the food processing units to develop, a food park is to be established at Hajipur

with common facility centre, quality control testing lab, cold chain, etc. Other food parks at Uda Kishanganj and Begusarai are under consideration of the Government of India. Besides, a container depot is to be established at Shitalpur which will have container freight station and inland container depots for infrastructure and agro-products.

3.5 Sugar Industry

Sugar industry is the largest ago-based industry in the state. This generates sizeable employment in the farm sector, as also in the ancillary and related activities. About 5 lakh farmers are engaged in sugarcane cultivation and approximately another 1 lakh unskilled persons are engaged in the sugar industries in the state. This is despite the fact that, out of the total cultivable area of 54 lakh hectares in the state, only 2.52 lakh hectare is under sugarcane (2006-07). Thus, there is a huge untapped potential for developing sugarcane cultivation. The following table corroborates the fact.

Table 3.4 : Status of Sugar Industry in Bihar

Sl. No.	Particulars	I. Unit	2004-05	2005-06	2006-07
1.	Total Area under sugarcane	Lakh Hect.	2.27	2.30	2.52
2.	Total Production of Sugarcane	Lakh MT	125.82	129.95	143.64
3.	Productivity	MT/Hect.	55.43	56.50	57.00
4.	Cane crushed	Lakh MT	28.48	44.52	52.04
5.	Sugar Produced	Lakh MT	2.54	4.22	4.52
6.	Recovery Rate	%	9.50	9.49	8.69
7.	Crushing Duration	Days	85	126	150

Source : Department of Sugarcane, Government of Bihar

A perusal of the above table reveals that there are vast potential and investment opportunities in sugar and allied industries, particularly in the production of Ethanol and co-generated energy. Keeping in view the considerable potential for sugar industry in the state, it has been given a thrust during the Eleventh Plan period. It is envisaged to boost sugarcane productivity and area coverage by providing incentives. The major constraints for growth of sugarcane cultivation have been waterlogging (10-15 percent of the area), shortage of fertilizers, improved variety of seeds and inadequate irrigation facilities. By and large, the interventions needed are demonstrations, training,

technology transfer and improved implements. The following growth plan has been adopted by the state government for the development of sugar industry :

- (a) Expansion of area under sugarcane from the present level of 2.52 lakh hectares to 5 lakh hectares.
- (b) Doubling the present production level of sugarcane of 143.64 lakh MT by 2012.
- (c) Increasing the productivity from 57MT/Hect. to the national average of 70 MT/Hectare.
- (d) Strengthening the R&D institutions of the state, particularly the Sugarcane Research Institute at PUSA.
- (e) Promotion of R&D of new varieties of sugarcane suitable for different climatic conditions.
- (f) Facilitating investments in sugar and sugarcane based industries under the provisions of Sugarcane Industry Incentive Policy, 2006.
- (g) Encouraging production of Ethanol directly from sugarcane juice and co-generation of power.

Initiatives

An attractive incentive policy aimed to encourage investments in sugarcane based industries has been declared by the state government. The incentives include the following :

- (a) Incentive for greenfield sugar mills / expansion of existing mills : There will be reimbursement of central excise duty on sugar and exemption of purchase tax on sugarcane and stamp duty and registration fees for purchase of land for setting up the mills. Besides, there is provision of a grant of 10 percent subsidy on capital investment (machinery and equipments) to a maximum of Rs. 10 crore.
- (b) Incentive for distillers / Ethanol units and their utilisation : This allows a subsidy on capital investment (machinery and equipments) to a maximum of Rs. 3.5 crore. Under this, reimbursement of Sales Tax (VAT) on molasses, exemption of administrative charges on molasses, and stamp duty and registration fees on purchase of land are also allowed.

- (c) Incentive for setting up of co-generation plants : There is also a provision of a grant of 10 percent subsidy on capital investment (machinery and equipments), subject to a maximum of Rs. 3.5 lakh per MW or Rs. 10 crore, whichever is less. In addition, there is exemption of electricity duty on co-generated power as also on stamp duty and registration fees on purchase of land. Besides, laying of transmission line from switch yard to grid station by BSEB is also provisioned.

Under all the above three initiatives, reimbursements and exemptions are provided only for five years from the date of commercial production which should start within three years of approval.

Response to Initiatives

- (a) For setting up of new green field sugar complexes involving an investment of around Rs. 4712 crore, 20 proposals have been received.
- (b) For new ethanol units with co-generation of energy with an investment of over Rs. 380 crore, 4 proposals have been cleared by the State Investment Promotion Board (SIPB).
- (c) Proposal for establishment of 10 export oriented mega Ethanol Manufacturing projects with co-generation with an investment of more than Rs. 13,557 crore have been cleared by SIPB.
- (d) Out of the 9 working sugar mills running under the private sector, 8 have undertaken expansion programme and are setting up co-generation and distillers/ ethanol units with an investment of more than Rs. 763 crore.

Revival of closed Mills and Distilleries

The state government has decided to revive the 15 closed sugar mills and 2 distilleries of the Bihar State Sugar Corporation (BSSC) through privatisation on long term lease basis. Besides, a sum of Rs. 8.84 crore has been provided by the state government to clear the cane price dues of those sugar mills. Big corporates like Reliance and Hindustan Petroleum will be assigned the responsibility of operation of 11 closed sugar mills.

3.6. Non-Agro based Industries

Agriculture being the predominant sector of the economy, the size of the non-agro-based industries in the state is rather small. Apart from the petroleum refinery at Barauni, there are only a few metal-based industries in Bihar which include metal cutlery, utensils and kitchenware and non-structural ceramic ware. The other non-agro based industries are — leather and textile in the handloom sector.

Leather Industry

Leather Industry has a very high potential in the state given its large cattle population and high quality of hides and skins. The state produces 2.64 million bovine hides and 5.09 million bovine skin per annum. In case of goats population, the state ranks third, next only to West Bengal and Rajasthan. There are 50,000 footwear artisans in the state. Besides, there is an abundance of skilled labour available here. The main regions of leather activities in the state are : Bettiah, Muzaffarpur, Purnea, Katihar, Munger, Patna, Ara and Aurangabad and most of the leather industrial units are located in these places.

The leather industry in Bihar consists of three important segments, viz. (a) units established under Bihar State Leather Industries Development Corporation (BSLIDC) and its sister unit, Bihar Finished Leather Ltd.; (b) Private tanneries in Muzaffarpur district; and (c) Bata Tannery at Mokamaghat, Patna. There are 7 tanneries which were established in the 1970s under BSLIDC, but all of these are closed since 1993 due to financial constraints. In so far as the private tanneries in Muzaffarpur are concerned, 5 out of 9 established in Bela Industrial Estate are working presently. The destination of end products are, by and large, Tamilnadu and the Tata unit at Dewas in Madhya Pradesh. All these units have established Chrome Recovery Plants and also Effluent Treatment Plants. The major problem the plants face is the disposal of treated wastewater. The third segment of Bata Tannery at Mokamaghat is working at a low capacity due to effluent problem.

As regards footwear units, the sector consists of two segments, the organised and the unorganised sector. The organised sector includes 5 units owned by BSLIDC which mainly prepare boots and shoes including safety shoes and one unit of Bata making different kinds of footwear. The

unorganised sector, comprising artisan/household units are roughly 1000 in number and are mainly located in urban and semi-urban areas of Muzaffarpur, Bettiah, Danapur and Patna. These units are largely engaged in preparation of Chappals, Sandals and Handmade shoes for the local wholesale and retail market. The raw material is mainly procured from Kolkata. Besides, there are a few job work units supplying stitched components to Bata. These units need necessary financial support in terms of working capital and upgradation of skills and marketing support. Such units, if developed in the form of self-help groups (SHGs) with financial assistance and support under various government schemes, will go a long way in the development of the leather industry in the state.

Textile Industry

Textile industry is another important non-agro-based industry in the state. Most of the textile centers are located at Bhagalpur, Gaya, Nalanda, Darbhanga, Madhubani, Siwan and Patna, but they are on the decline. However, the handloom sector is one of the largest industrial sector in the state with 34320 total looms out of which 10,817 are in the cooperative sector and 23,503 in other than cooperative sector. Besides, there are about 11361 powerlooms. The handloom industry is concentrated in the districts of Patna, Gaya, Bhagalpur, Banka, Darbhanga, Arwal, Jehanabad, Aurangabad, Bhabhua, Nawada, Khagaria, Nalanda, Madhubani and Siwan. There are about 1089 primary weavers cooperative societies in Bihar, but only 417 are reported to be functional. In the state the total number of weavers is 1,32,294 of which about 98 thousand weavers are reported in the non-cooperative sector and 34,367 in the cooperative sector. The handloom/powerloom sector in the state can realise its high potential, if support is made available in the form of finance, power, training of weavers, designing and proper marketing facilities. The state government has been focusing on the issues faced by the weavers and initiatives are on to ease them out of the difficulties. The government has introduced welfare schemes mainly in the form of marketing assistance, modernization of weavers' training centres and repair of shed-cum-housing for rural weavers. The central government is also extending support to weavers' welfare in the form of health insurance, technology upgradation fund and *swarojgar card yojana*. There is Bihar State Handloom & Handicraft Corporation Ltd. at Patna. Besides, there are two weavers' cooperative institutions at the state level and 6 at the regional level. However, all of them, except the Siwan Regional Handloom Weavers' Cooperative are superceded and the administrators are yet to be

appointed. The state government has introduced various new schemes during the year 2006-07. These, by and large, include (a) provision of looms and accessories for *naxal* affected districts weavers; (b) workshed cum house for *naxal* affected districts weavers in cooperative sector; (c) weaving, dyeing and textile design training for riot affected weavers of Bhagalpur; (d) generator set for powerloom weavers of Gaya and Bhagalpur; (e) supply of handlooms, doobby, jack-cards to silk weavers and, (f) modernisation of weavers' training centres. In 2007-08, the new schemes introduced are: *mela* and exhibition, textile park, handloom park, handloom cluster, jute park, workshops and seminar, integrated handloom development scheme, centrally sponsored health insurance scheme and CDP scheme in project mode for Mulberry, *Tasar* and *Eri* sponsored by the centre. The continuing schemes approved for 2007-08 are, however, modernisation of handloom, supply of cycles to weavers for purchase of yarns and marketing, generator set for powerloom weavers of Gaya and Bhagalpur and strengthening of weavers' training centre.

Mineral-based Industries

Bihar has limited mineral-based industries, because, after bifurcation, the present state has been left with only 1 percent of the total mineral deposits in the country. This is in sharp contrast to the earlier position when the undivided state had 25 percent of the total mineral deposits in the country. In present Bihar, only two minerals are available in sufficient quantities, viz., limestone and pyrite. The availability of other minerals like bauxite, quartzite, feldspar, magnetite etc. are very marginal. Only 8 districts in the state have the deposits of these minerals (Rohtas, Kaimur, Bhagalpur, Banka, Munger, Jamui, Gaya and Nawada). It is estimated that Bihar has now about 68 million cubic meters of granite deposits, of which the best quality deposits are about 32.04 million cubic meters. From the revenue point of view, however, this make a difference. For instance, the revenue to the state from minerals during 2005-06 was Rs. 96.38 crore. Minor minerals like sand, bricks and stone contribute roughly 85-90 percent of the revenue collection from the sector.

There are efforts to explore petroleum and natural gas by agencies like ONGC. An agency has also been entrusted with the responsibility of exploring petroleum through a global tender under the New Exploration Licensing Policy of the Government of India. The work in this regard has already been started.

3.7. Tourism

Tourism holds the potential to emerge as the leading industry in the state. From a historical perspective, Bihar holds strategic advantages in terms of monuments and remains of international importance. The state has the capacity to attract tourists from across the globe with different interests like culture, holiday, study and adventure. The tourist map of Bihar contains Buddhist Monasteries, Jain temples, Sikh Gurudwaras and Sufi shrines reflecting the state's historical association with Lord Buddha, Lord Mahavira, Guru Govind Singh, and the great Sufi Saints. Bihar is also associated with the great Chinese tourists Fahien and Huen Tsang. The state offers tourists a variety of historical sites like Rajgir and Patliputra (the ancient capital of Magadh empire), Vaishali (the first republic of the world), Bodh Gaya, Nalanda (the renowned seat of learning and intellect) and Patna Sahib (the birth place of the last guru of the Sikhs).

Bihar is a state having a very rich cultural heritage. The government is taking several measures to protect this valuable heritage. Some of the recent measures taken by the Department of Art, Culture and Youth are the following :

- On the eve of 2550th Anniversary of Lord Buddha (*Mahaparinirvana*), many cultural programmes were organized throughout the year at places associated with Lord Buddha.
- A cultural troop visited Mauritius and shows were organized. A new scheme, 'Trace Your Roots', for persons of Bihari origin living in Mauritius has been announced.
- Cultural programmes were organized in Naxal-affected regions.
- Sports awards were given to top 144 sportspersons of international and national repute.
- Construction of the Multipurpose Cultural Complex at Kankarbagh, Patna has started.

However, the fact remains that, despite the huge potential, the tourism industry in the state is still in its infancy. In spite of that, there is a steady increase in the number of Indian and foreign tourists to Bihar, the total of which increased from 61.06 lakh in 2003 to 107.65 lakh in 2006 (Table 3.5).

Table 3.5 : Number of Tourists in Bihar

Year	No. of Tourists		
	Indian	Foreigner	Total
2003	6044710	60820	6105530
2005	8667220	63321	8730541
2006	10670268	94446	10764714

Source: Department of Tourism, Government of Bihar

The distribution of tourists in Bihar in 2006-07 by their destinations is given in Appendix III. This reflects the preference of the tourists and the places to be developed further to attract more of them in future.

Recognising the potential of the sector and the need to revitalize tourism, the Government of Bihar has declared the tourism sector at par with other industries and a draft policy on tourism is in the pipeline. It aims at rejuvenation of the Bihar State Tourism Development Corporation (BSTDC) which will operate tourist bungalows and hotels at strategic locations. It will also provide transport and communication facilities to market tourism as a commercial enterprise. The total income of the BSTDC in 2005-06 was Rs. 418 lakh with an operating profit of Rs. 44 lakh. Again, in 2006-07, BSTDC made a net profit of Rs. 66 lakh. In 2007-08 upto December 2007; the operating profit of the Corporation has been estimated at 156 lakh. The state government has also decided to constitute a Steering Committee on 'Vision Bihar : Harnessing the Tourism Potential - A Medium Term Perspective' in order to identify factors affecting development of tourism. The document will also formulate an integrated approach to tourism development and also review the incentives given for the growth of the tourism industry. A financial support of Rs. 1833 lakh has been sanctioned by the Government of India last year for the development of 'Tourist Circuit : Bodh Gaya – Rajgir-Nalanda'. The plan outlay for tourism has been increased by about 50 percent in comparison to the previous year.

3.8 Industrial Sickness

Industrial sickness is one of the major problems of Bihar. As on December 2006, there were 262 large and medium units in the state, out of which 35 units were declared sick by the BIFR. Out of

these, 17 were liable to be wound up. It is worthwhile to know in this context that, out of a total 72.6 thousand registered SSI units in the state, 52.1 thousand units were working and 20.5 thousand units were closed as per the third All India Census of SSI (2001-02). The rehabilitation of the sick units is considered a costly affair, as it involves rescheduling of past overdues with concessional rates of interest. Industrial sickness in the state is due to inadequate infrastructure facilities, non-availability of quality raw material, lack of proper communication networks, and poor access to credit and finance options.

The government has developed specific policies for eliminating industrial sickness both in large, medium as well as SSI sectors.

3.9 Industrial Incentive Policy 2006

The state government has emphasised the imperatives of an industry driven economic growth in the state and accordingly incentives have been announced for setting up of new industries and expansion of the existing industrial units in the state. The Industrial Incentive Policy of 2006 has been aimed at the rapid industrial growth in the state and it has been prepared in consultation with the Bihar Industries Association, Chambers of Commerce and the concerned government departments. Also, it has taken into consideration the policies pursued by other states in this regard. The new industrial incentive policy contains provisions for granting both pre-production and post-production incentives.

3.10 Investment Proposals

As a result of state government initiatives, around 245 new proposals have been received by the State Investment Promotion Board (SIPB) with an estimated investment of Rs. 57.84 thousand crore. Out of these, the SIPB has approved a total of 115 proposals with an investment of Rs. 40.73 thousand crore (Appendix IV) and an estimated employment potential of 96.30 thousand. Out of these, 87 proposals are for industrial units, 20 for technical institutions and 8 for hotels, multiplex, tourism, amusements, etc. The 87 industrial units include 25 new sugar mills, expansion of existing capacity in 7 sugar mills, 16 ethanol plants, 4 maize processing and 7 power plants. A total of Rs. 485.10 crore has already been invested till December, 2007.

3.11 Status of Land Acquisition

For various projects/ programmes of the Department of Industries, the state government has acquired a total of 6343 acres of land for 18 projects, out of which only 430.06 acres have been given possession for 4 projects.

Bihar Industrial Area Development Authority (BIADA)

Land Allotment : During 2006-07, 159 new units were given land involving a project cost of Rs. 172.45 crore. As against this, in the current year, 627 new units have been allotted land involving an investment of Rs. 4218.62 crore. Previously, the allotment letter used to take 2 to 3 months to be issued, but now BIADA issues allotment letter to the new units within 24 hours.

Allotment of land to 627 new units could be possible through BIADA's concerted efforts to cancel the earlier allotments, which were lying closed, abundant or being used for residential/agricultural purposes.

Infrastructure : While in the last 5 years, the funds spent on providing infrastructure facilities to industrial units was a meagre Rs. 2.6 crore, during 2007-08, BIADA has already tendered schemes worth Rs. 90 crore and work has begun on most of these schemes. The BIADA proposes to take up schemes worth Rs. 100 crore in the current financial year (2007-08).

Revenue Generation : The funds available with BIADA as on 01.04.2007, was Rs. 46.17 crore. Within a period of 8 months (as on 15.01.2008), it has increased to Rs. 97.43 crore (Appendix V), the maximum increase being under the head of "Internal Accruals" which indicate recoveries from the existing allottees and payments from land allotments made to new industrialists.

Additional Initiatives by BIADA :

- (a) Started work in the construction of Common Effluent Treatment Plant (CETP) at Hajipur Industrial Area at a cost of Rs. 1.5 crore which is the first in the Government Sector in the State.
- (b) One Food Park at Hajipur has already been allotted and it will be operational by next year. This will be the first Food Park in the state.
- (c) Setting up two major Growth Centers in Begusarai and Bhagalpur, where Handloom and Textile Parks will be established.
- (d) Created a joint venture to setup air Cargo Complex at Patna Airport.
- (e) Undertaken project for setting up Inland Container Depot at Fatuha which shall be operational within next 12 months.

3.12 Problems and Prospects of Industrialisation in Bihar

The lack of industries in Bihar is the result of apathetic national policies for long which created structural and institutional constraints in industrialisation of the state. Immediately after independence in 1948, the Freight Equalisation Policy in coal and iron ore was introduced, which served the needs of industrially advanced states, making Bihar a victim of the policy. As a consequence of the policy, the state faced de-industrialisation with investment going to other states. Bihar also missed the heavy industry boom in the country coupled with a slowdown in public investment during the sixties. Thus, it may not be an exaggeration to mention that Bihar has been a case of policy failures framed by the central government for industrialisation. The bifurcation of the state has made the situation worse for the present state of Bihar.

It has been observed earlier that the industrial sector in the state recorded a growth rate of 9.8 percent during the Tenth Plan period. However, this appreciable growth is beset with a variety of structural weaknesses. First, the overall industrial sector in the state is predominated by the unregistered units, which account for more than half of its total income. Again, an analysis of the Annual Survey of Industries (ASI) data, as presented earlier, reveals that the food/ beverages and tobacco industries accounted for more than 85 percent of the total industrial income. This clearly demonstrates a very narrow industrial base of the state. Development of the non-agro-based sector is also important in view of the heavy pressure on land. Besides, another disquieting feature of the industrial sector is heavy outstanding loans to the tune of Rs. 1230 crore against net value addition of only Rs. 910 crore.

The major problems of industrialisation of the state include abysmally low infrastructure in terms of power and communication (roads, rail, air, waterways and telecommunications). The industry specific infrastructure like cold storage, dry ports, etc. are also very weak. Infrastructure development holds the key to accelerating the pace of industrial investments. The financing of small and medium industrial units is low. As a result, the credit-deposit is very low in Bihar at 31 percent. The various institutions meant for promoting industrialisation, including the Bihar State Finance Corporation (BSFC), are themselves sick, primarily due to poor recovery of loans. As a result, the investments in the state has been on decline leading to its industrial backwardness. The Industrial Area Development Authorities (IADAs), which hitherto have been writhing under their own inherent problems, have started showing the signs of development with improved revenue

generation and infrastructural facilities as a result of additional initiatives taken by them (See Box).

With the coming in of the new Industrial Incentives Policy, 2006 and the initiatives taken up by the present state government to encourage new investments, substantial enthusiasm has been generated. The packages of concessions and incentives have tended to encourage new investments in the state. A State Investment Promotion Board (SIPB) has been set up to boost up the investments. However, a historical perspective establishes that the factors responsible for non-industrialisation of the state are complex and related more to the national policies pursued since independence. Another concern is the serious dimension of land acquisition policy, as experienced by other states. For the revival of sick industrial units, there is a proposal to create a Corpus Fund. But, financial institutions are not coming forward for this effort.

As a result of new initiatives taken by the state government, new investment proposals have started coming in to the state. The total number of proposals received for investments in the state are 245 with proposed value of investment being Rs. 57.84 thousand crore. Out of this, the State Investment Promotion Board (SIPB) has already approved 115 proposals with an investment of Rs. 40.72 thousand crore.

Prospects of industrialisation exist in the state, particularly in the agro-based industrial sector including food processing, floriculture, dairy, fisheries, etc. For attracting investments, infrastructure development is the sine qua non. With the new initiatives by the state government, the confidence of the industrial sector is increasing, as is evidenced by the new proposals coming to the state. It is imperative that the central government should come forward for undoing the wrongs perpetrated during the last 60 years by providing a policy structure that directs investments towards disadvantaged states like Bihar.

Appendix I

Estimate of Some Important Characteristics of Industries by State for the Year (2004-2005)

All Industries (Value figures in Rs. Lakhs, others in Number)

Characteristics	Rajasthan	Uttar Pradesh	Bihar
1. Number Of Factories	5740	9582	1674
2. Fixed Capital	1476796	3152999	296767
3. Working Capital	561815	1204511	228187
4. Invested Capital	2119235	5160776	595656
5. Outstanding Loans	977662	1997825	122982
6. Number of Workers	207625	453007	51430
7. Total Persons Engaged	268437	587702	61775
8. Wages to Workers	95037	209416	18087
9. Total Emolumnets	173278	415176	28356
10. Prov. Fund and Other Welfare Exp.	29829	78320	5050
11. Fuels Consumed	428357	618073	78206
12. Materials Consumed	2532629	6922543	986674
13. Total Inputs	3682033	9144756	1106754
14. Products & By-products	3819375	9555230	1204970
15. Value of Output	4488205	10913874	1222169
16. Depreciation	147908	339342	24398
17. Net Value Added	658264	1429776	91016
18. Rent Paid	13910	29219	910
19. Interest Paid	99289	197523	45882
20. Rent Received	2833	5616	83
21. Interest Received	8110	28663	685
22. Net Income	545065	1203034	44225
23. Net Fixed Capital Formation	72475	174295	-13158
24. Gross Fixed Capital Formation	220383	513637	11240
25. Addition in Stock of			
(a) Materials, Fuels etc.	32337	146583	73477
(b) Semi-Finished Goods	22614	37380	4356
(c) Finished Goods	19012	78944	12739
(d) Total	73963	262907	90572
26. Gross Capital Formation	294346	776545	101811
27. Profits	341957	709537	10818

Source: Annual Survey of Industries, Government of India

Appendix II

Production of Important Inputs for Agro-based Industries and Livestock Population in Bihar

A. Fruits & Vegetables Production (March, 2006)

Fruits Production			Vegetables Production		
	Production (Lakh M.T.)	%age Share in all-India		Production (Lakh M.T.)	%age Share in all-India
Mango	15.40	15	Potato	10.19	4
Banana	4.43	3	Brinjal	10.81	14
Guava	3.31	19	Cauliflower	9.55	20
Litchi	3.39	88	Bhindi	9.28	28
Citrus	1.34	3	Tomato	5.88	8
Pineapple	1.04	9	Onion	9.17	18
			Cabbage	5.84	10

Source: Department of Agriculture, Government of Bihar

B. Food grain production (2006-07)

(In Lakh M.T.)

Crop	Production
Rice	49.97
Wheat	42.92
Maize	20.29
Sugarcane	53.39
Pulses	4.47
Jute (Bales)	12.53
Oil Seeds	1.48

Source: Department of Agriculture, Government of Bihar

C. Livestock Population (2005)

(In million no. / pieces)

Category	Livestock (No.)			Hides (Pieces)		
	Bihar	India	% share of Bihar	Bihar	India	% share of Bihar
Cattle	14.74	189.22	7.99	1.32	23.0	5.74
Buffalo	4.04	95.48	4.23	1.32	28.0	4.71
Goats	15.39	127.07	12.11	4.59	82.0	5.60
Sheep	0.98	51.73	1.89	0.50	30.0	1.67

Source : All India Survey — CLRI, 2005

Appendix III

Tourist statistics of Bihar (Year-2006) (January to December, 2006)

Place	Tourist	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Patna	Domestic	17809	145548	310936	133035	103254	149437	168346	153337	160247	183321	174610	148767	2008647
	Foreign	252	439	420	287	120	124	97	86	459	499	622	559	3964
Gaya	Domestic	65372	75017	75123	65652	66288	64635	308820	355009	41169	5748	6097	7795	1136725
	Foreign	202	216	1494	171	113	94	142	187	160	57	159	343	3338
Bodhgaya	Domestic	56577	75649	47889	32110	15588	16273	9661	17240	54216	36689	47220	55678	464790
	Foreign	7498	21284	11287	5440	689	81	160	221	229	1534	2052	2442	52917
Rajgir	Domestic	36500	22000	19000	8678	10748	9040	21500	30000	20706	88400	37705	44000	348277
	Foreign	400	1000	300	200	50	30	200	1000	405	4000	1800	1500	10885
Raxaul	Domestic	12379	12226	13190	9306	9692	9289	10213	9623	10140	14510	15198	15781	141547
	Foreign	187	203	233	141	152	103	126	247	191	273	348	265	2469
Munger	Domestic	6230	3404	4654	3993	3823	4134	5211	4604	4156	3131	4555	3683	51578
	Foreign													
Vaishali	Domestic	7853	4200	14200	100680	15400	5078	32278	51076	6279	7540	8116	8523	261223
	Foreign	634	192	1910	3860	168	117	566	2447	1442		125		11461
Muzaffarpur	Domestic	2991	9705	8001	5101	7209	6985	5207	1330	6109	3542	4739	4720	65639
	Foreign	35	61	92	8108	81	125	201						8703
Bhagalpur	Domestic				5449	4390	5020	17025	6300	7185	6501	5995	7077	64942
	Foreign													
Sonepur Fair	Domestic											4001000		4001000
	Foreign											709		709
Shrawani Mela, Sultanganj (Bhagalpur)	Domestic							2020600	105300					2125900
	Foreign													
Total	Domestic	365711	347749	492993	364004	236392	269891	2598861	733819	310207	349382	4305235	296024	10670268
	Foreign	9208	23395	15736	18207	1373	674	1492	4188	2886	6363	5815	5109	94446
		374919	371144	508729	382211	237765	270565	2600353	738007	313093	355745	4311050	301133	10764714

Source: Department of Tourism, Government of Bihar

Appendix IV

Proposals Approved by State Investment Promotion Board (SIPB), Government of Bihar

Sl. No.	Name of the Company	Proposal	Investment (In Crores Rs.)	Direct Emoloy-ment	SIPB Apoproval date	CM / Cabinet Approval date
1.	M/S Netarhat alumini Educational Trust (Vidya Vihar Educational Trust), Purnia.	Proposal for Establishment of Engineering College in Purnea	6.74		27.2.06	13.06.06
2.	M/s International Tractors Ltd., Hosiarpur, Punjab	Proposal for production of Tractor commercial Vehicle at Industrial Area, Fatuha	150.00		27.2.06	29.9.07
3.	M/s Oil Tech Pvt. Ltd., Prakash Chandra Rastogi, C-110/7, I.I.T., Kanpur, U.P.	Establishment of Solvent Extraction Plant at Kaimur District	59.75	150	20.3.06	
4.	M/s Universal Empire Group, C- 04/23, First Floor, Safdar Ganj Development Area, Haujkhas, New Delhi	Establishment of Medical College at Bettiah District			20.3.06	
5.	M/s Gangotri Iron & Steel Co Ltd., Exhibition Road, Patna. Fax : 0612-2685959 Phone : 2665456 E-mail : gcplpat@sancharnet.in	Proposal for Capacity Expansion of the Unit and TMT and M.S. Twisted Bars Production	33.8		29.3.06	22.10.06
6.	M/s Century Ply Wood Ltd., Kolkata. Cement Manufacturing Company Ltd., Sajjan Bhajanka, Chairman, 281 Deepali Pitampura, New Delhi-110034	Proposal for establishment of one Million Ton/ Year Cement Grinding Plant at Kahalgaon	119.00	300	17.4.06	08.09.06
7.	M/s Hai Medicare & Research Institute Pvt. Ltd., Patna	Establishment of Minority Medical College at Rajabazar, Patna	8.00		2.5.06	
8.	Dr. Ashok Kumar Medical World 4U Ltd., Sussex.	Establishment of Medical College and Super Specialty Hospital at Patna	148.87		2.5.06	08.09.06
9.	Ms/ Adarsh Divya Vikash Hospital and Research Centre, Patna	Establishment of Multipurpose Medical Facilities and Research Centre in Hajipur	275.00	622	2.5.06	
10.	Sri Vinod Kumar Chaudhry, M/s Ambedkar Medical & Technical Educational Development Trust, Lohiya Nagar, Patna	Establishment of Medical and Dental College at Arrah (Bhojpur)	35.076		2.5.06	31.7.06

11.	Dr. Rajeshwar Thakur, Patna	(i) Proposal for Multi Super Specialty Hospital in the Jay Prabha Hospital Complex K. Bagh, Patna (ii) Establishment of Medical College (with training) of National Repute	500.0 300.00		2.5.06	
12.	M/s Indo-American Medical foundation, USA, Dr. Purshottam Madhu.	Establishment of Hospital and Medical College within 30 kms of Patna	100.00		2.5.06	
13.	M/s Medi Contrivers India (P) ltd. Jogeshwari, Mumbai	Establishment of Medical College and Modernization of MJK Hospital, Bettiah (W. Champaran)		700	2.5.06	
14.	M/s Rajshree Sugars and Chemicals Ltd., Combatore	Establishment of 5000 TCD Sugar Mill, 30 MW Cogeneration Plant and 60 KLPD Distillery Plant at Marukia, Madhubani	238.50	1500	22.5.06	11.07.06
15.	M/s Rajshree Sugars and Chemicals Ltd., Coimbatore	Establishment of 5000 TCD Sugar Mill, 30 MW Co-generation Plant and 60 KLPD Distillery at Kotwa (W.Champaran)	242.50	1500	22.5.06	11.07.06
16.	M/s Raj Laxmi Udyog C/o Jain Paper Agency, Rajan Complex, Naya Tola, Patna	Off-Set Paper Printing and Paper Conversion	3.00	70	19.6.06	
17.	M/s Jesuit Society Provincial Residence, Patna	Rural Management and Allied Institute (Near Balmi Complex)			10.7.06	
18.	M/s Dhauladhar Impex Pvt. Ltd., F-1 Gorakh Nath Complex, East Boring Road, Patna	Establishment of Sugar Mill 3500 TCD and 50 KLPD Distillery Plant at Bettiah.			10.7.06	
19.	M/s Brahmaputra Consortium Ltd., New Delhi	Private Industrial Park, Bihta	200.00		10.7.06	
20.	M/s Indian Gasohol Ltd., Tamilnadu	Establishment of Four Maize processing units and Silicon project one in each district Begusarai, Muzaffarpur, Khagaria and Vaishali. Its product mix is as follows- Product Mix- Annual Capacity	2500.00		10.7.06	22.09.06

		1. Ethanol- 1.20 Lacs TPA 2. Extra Neutral Alcohol- 0.36 Lacs Tpa 3. Pharmaceutical/ Perfumery alcohol- 0.02 Lacs TPA 4. Maze Oil- 0.18 Tpa 5. Ferphural Alcohol- 0.20 Lacs TPA 6. Poultry Feed and Cattle Feed- 3.96 TPA				
21.	M/s Indian Glycols Ltd., C-124, Okhla Industrial Area, Phase- 1, New Delhi	10000 TCD- Sugar Mill and 96000 KL / A Distillery and 20 MW- Co-generation Plant	550.00	317	10.7.06	17.08.06
22.	M/s Suncancer Hospital and Research Institute, Patna	Establishment of Cancer Hospital and Research Institute			10.7.06	
23.	M/s Lord Buddha Shiksha Prathisthan, Saharsa	Medical College Hospital	100.00		24.7.06	
24.	M/s Rajshree Sugars and Chemicals Ltd., Coimbatore	Establishment of 5000 TCD Sugar Mill, 60 KLPD Distillery and 30 MW co-generation Plant in Muzaffarpur Distt.	242.50	500	24.7.06	10.08.06
25.	M/s Dhampur Sugar Mills, 221 Okhla Industrial Estate, Phase- III, New Delhi	5000 TCD Sugar Mill, 60 KLPD Distillery and 30 MW Co-generation Plant at Udakishunganj, Madhepura	185.00	500	24.7.06	10.8.06
26.	M/s Shree Ganesh Sugar Mills Pvt. Ltd., IB-151, Sector- III, Salt Lake City, Kolkata	500 TCD Sugar Mill at Korma, Pakridayal, E. Champaran	140.00	210	24.7.06	10.08.06
27.	M/s Jay Mangla Sugar & Power Pvt. Ltd., B-41 Jagat Amrawati apartment, Bailey Road, Patna	5000 TCD Sugar Mill. 60 KLPD Distillery and 28 MW Co-generation at Bahadurpur, Begusarai	196.59	200	24.7.06	10.8.06
28.	M/s Telecomand Software Pvt Ltd., Katihar	¾ Year Course on Computer Science			1.8.06	
29.	M/s Bharat Sugar Mills, Singhwalia, Gopalganj	Expansion of Sugar Mill from 2500 TCD to 5000 TCD and 15 MW Co-generation Plant	137.00		1.8.06	15.9.06
30.	M/s P & M Infrastructure Pvt. Ltd., 47/B, Shri Krishna Puri, Patna	Establishment of 5000 TCD Sugar Mill, 60 KLPD Alcohol Plant & 25 MW Co-generation Plant at Guruwalia Biswas (Vill.), Chanpatia	146.93	330	1.8.06	5.10.06

		(Block) Distt.- Bettiah (W. Champaran)				
31.	M/s Remco Industries Ltd. Kharagpur, Distt. Midnapur	Asbestos Cement Products at Kanti, Muzaffarpur	30.00	100	1.8.06	22.10.06
32.	M/s S B Sugar Ltd., Kolkata	Establishment of 2500 TCD (expandable upto 5000 TCD) Sugar Mill, 30 KLPD Alcohol Plant & 8 MW Co-generation Plant at Asthawan, Nalanda.	122.40	370	1.8.06	30.08.06
33.	M/s Kamapur Sugar & Industries Ltd., Kolkata	8000 TCD Sugar Mill, 120 KLPD Distillery Plant & 26 MW Power Plant at Vill- Barhan Benusar, Bormamukund Block, Dist. Siwan.	487.80	450	7.8.06	17.10.06
34.	M/s Kamapur Sugar & industries ltd., Kolkata	8000 TCD Sugar Mill, 120 KLPD Distillery Plant & 26 MW Power Plant at Vill- Eraji, Orhara-Dhoni, Block- Rajaun, Distt. Banka	487.80	450	7.8.06	17.10.06
35.	M/s Vikash Metal & Power Ltd., Kolkata	Integrated Steel Plant at Begusarai. Sponge Iron 6.5 Lacs TPA, MS Billet 8 Lacs TPA, Blast furnace 2.5 Lacs TPA, Captive Power Plant- 100 MW	850.00	3100	7.8.06	
36.	M/s Shakti Sudha Industries, Boring Road, Patna	Establishment of Makhana Processing Unit & with Backward/ Forward Linkage	70.00		14.8.06	
37.	M/s Balmukund Lease Fin (P) Ltd., Exhibition Road, Patna	5000 TCD Sugar Mill 60 KLPD Alcohol Plant & 26 MW Power Plant at Nariar, Begusarai, Muzaffarpur	202.65	1500	14.8.06	10.10.06
38.	M/s Riga Sugar Co. Ltd., Netajee Subhash Road, 2 nd Floor, Kolkata	Expansion of Sugar Mill from 3500 TCD to 5000 TCD, 7.7 Megawatt Co- generation Plant and 50 KLPD Distillery	37.98	739	14.8.06	07.11.06
39.	M/s Harinagar Sugar Mills Ltd., West Champaran	Capacity expansion of Sugar Mill from 8500 TCD to 10000 TCD	39.96	2112	14.8.06	07.09.06
40.	M/s New Swadeshi Sugar Mills, Narkatiaganj	Capacity expansion of Sugar Mill from 5000 TCD to 7500 TCD, 30	107.40	728	21.8.06	30.11.06

		KLPD to 100 KLPD Distillery and 5MW Co-generation Plant				
41.	M/s Patna Notre Dame Sister's Society, Patliputra, Patna	Establishment of Media arts and Communication	3.32		21.8.06	
42.	M/s Ambuja Cements Ltd at P.O.- Ambuja Nagar, Taluka Kodinar, Dist.- Junagadh, Gujarat- 362715 Fax : 033-23017104 Ph. : 23017100-103	Establishment of Cement Grinding Plant of 1.5 Million Ton Capacity and 15 MW Co-generation Plant at Barh	380.00	150	21.8.06	11.09.07
43.	M/s Balmukund Concast Ltd., Patna	Capacity expansion of MS Rod and Steel production from 28350 MTA to 52350 MTA in the Bihta (Mahadeopur, Fulari) Unit.	13.96	175	06.09.06	22.10.06
44.	M/s Harinagar Sugar Mills Ltd., Harinagar, W. Champaran	Establishment of 45 KLPD Distillery Plant	45.00	89	06.09.06	22.10.06
45.	Ms/ Ganga Bangali Jute Twine Mills, Begusarai	Establishment of 5840 MT/Annum Capacity of Jute Yarn.	8.83	600	06.09.06	
46.	M/s Bihariji Flour Mills (P) Ltd., Patna City	Establishment of 1500 Tons/Month Parle-G Biscuit in collaboration with Parle Biscuit (P) Ltd. At Hajipur Industrial Area	8.55	208	06.09.06	22.10.06
47.	M/s Bihar Co-operative Sugar Mill Federation Ltd., Patna	5000 TCD Sugar Mill, 30 KL Ethyl Alcohol Plant, 28 MW Co-generation Plant at Supaul.	180.00	846	20.09.06	08.11.06
48.	M/s International Amusement Ltd., (APPU Ghar), New Delhi	Development of Mega Tourism City at LCT Ghat, Patna	1321.79	600	20.09.06	
49.	M/s Vishnu Sugar Mills Ltd., Gopalganj	Capacity expansion of Sugar Mill from 5000 TCD to 7500 TCD	41.00	26.09.06	02.12.06	
50.	M/s Protech Bio System Pvt. Ltd., New Delhi Name has been changed from M/s Protech Bio-System to M/s Protech Biosciences Pvt. Ltd.	Establishment of Drug Formulation Plant at Hajipur Large and small volume Parenteral Manufacturing Plant	35.00	425	26.09.06 02.01.08	06.01.07
51.	M/s Sharma Group of Industries, Aurangabad, Maharastra	Establishment of RPVC-pipes, SWR pipes & fittings	7.50		9.10.06 (Consent in principle)	

52.	M/s Dhanuka Pesticides Ltd., New Delhi	Establishment of Agri Malls and Multiplex Complex			9.10.06 (Consent in Principle)	
53.	M/s M P Chini Industries Ltd., Majahaulia, W. Champaran	Capacity expansion of Sugar Mill from 3500 TCD to 5000 TCD	24.35		9.10.06	15.12.06
54.	M/s Hasanpur Sugar Mills, Hasanpur Road, Samastipur Fax- 06275-258232 Phone 06275-258294	Expansion of Sugar Mill First phase- 1750 TCD to 3000 TCD (Investment Rs. 99.094 crores) Second phase- 3000 TCD to 5000 TCD (Investment Rs. 50.958 crores)	150.00	532	23.10.06	05.01.07
55.	M/s Jagar Developers Ltd., 'Ujwal', 2 nd floor, Bailey Road, Opposite Patna Museum	Establishment of Super specialty Hospital in Bailey Road, Patna	45.00	700	23.10.06 (Consent in Principle with condition)	
56.	M/s Purvanchal Urja Pvt. Ltd., R.Z.- 1/57 Tuglakabad Extension, New Delhi- 110019, Fax : 011-26088750, 26082233	Establishment of Renewable Energy Power Plant (Biomass Based Power Plant in Buxar Industrial Area)	4.00	22	23.10.06 (Consent in Principle with condition)	
57.	M/s Indian Gasohol Ltd., Erode, Tamilnadu	Proposal for establishment of ten units of 100% export oriented Ethanol Plant of total capacity 5.4 million tons from sugarcane juice at 1. Nawanagar (Buxar) 2. Bikaramgani (Rohtas) 3. Between Gaya and Aurangabad (Aurangabad) 4. Between Gaya and Nawada (Gaya) 5. Jamui 6. Lakhisarai/Monghyer 7. Between Bhagalpur and Kahalgaon (Bhagalpur) 8. Araria./Kishanganj 9. Katihar/Purnea and 10. Nalanda	13,557.00			
58.	M/s Riga Sugar co. Ltd., Kolkata Fax (033) 22303663 E-mail :	2500 TCD to 5000 TCD Expandable (within three years) Sugar Mill and 15 Megawats Co-generation	161.46	400	06.09.06 06.11.06	 09.01.07

	dhanukas@cal2.vsnl.net.in	Plant Nayagaon, Darbhanga				
59.	M/s GMR Industries Ltd., Hyderabad, Andhra Pradesh, Pin- 500016 Phone- 04023410191 Fax : 04023410184	Proposal for establishment of 2500 TCD sugar mill (Expandable up to 10000 TCD), 18 Megawatt Co- generation Plant and 45 KLPD Distillery Plant at Samastipur	220.00	340	13.11.06	
60.	M/s Vishnu Sugar Mills Ltd., Gopalganj	Proposal for establishment of 45 KLPD Distillery Plant and 15 MW co- generation Plant in factory situated at Gopalganj	94.06	400	13.11.06	26.11.06
61.	M/s Kishan Uday Raj Sugar Complex Swablambi Sahkari Samiti Limited, Paru, Muzaffarpur	Proposal for establishment of 5000 TCD Sugar Mill, 30 KLPD Ethanol Plant and 8 MW Co-generation Plant at Paru, Muzaffarpur	230.00	500	27.11.06	18.01.07
62.	M/s Dhanuka Pesticides Limited, New Delhi	Establishment of Fruit and Vegetable Centre and Packaging Centre on Hajipur-Muzaffarpur High-way			27.11.06	
63.	M/s J.H.V. Distilleries & Sugar Mills Limited, Marhowrah, Saran (Chapra)	Establishment of 6000 TCD Sugar Mill, 25 MW Co-generation Plant at Marhowrah, Dist- Saran (Chapra)	172.54	450	04.12.06	
64.	M/S Suprabhatam Sugar Industries Pvt. Ltd., 104-22 Gaurav Tower, P.V.R. Sonia complex, Vikash Puri, New Delhi	Establishment of 5000 TCD Sugar Mill, 30 KLPD Ethanol Plant and 8 MW Co-generation Plant at Vill.- Kopa Kola, Danapur, Patna	230.00	210	04.12.06	18.01.07
65.	M/S P & M Infrastructure Pvt. Ltd., 47/B, Shri Krishna Puri, Patna.	Establishment of 3500 TCD Sugar Mill and 12 MW Co-generation Plant at Vill.- Sitanabad, Block- Simri Bakhtiyarpur, Dist.- Saharsa	108.68	200	04.14.06	
66.	M/S Dhanuka Pesticides Limited, New Delhi Phone: (011)23519461 Fax- (011)23518981	Setting up of a Fully Integrated Fruit and Vegetable Processing complex at Hajipur in	55.00	200	20.12.06	

	Email: dhanuka@bol.net.in Website: www.dkanuka.co	two phases				
67.	M/S Signet Hotels Consortium, 15 B, Zaver Mahal, 66, Marine Drive, Mumbai-400020 Ph.- 022-8176856 Mob.- 9820270696 E mail- yadava@aol.com ckp@umich.edu	Establishment of world class standard hotels at Patna, Rajgir and Bodh Gaya.	90.00	450	20.12.06	
68.	M/S Winsome International Ltd., Unit:- Rameshwara Jute Mills, 301, Viashno Chambers (3 rd Floor) 6, Brabourne Road, Kolkata-1 Fax-03-3259822	Proposal for establishment of new Jute Mill of 100 MT/day at Purnea/Kishanganj in Bihar	61.00	3121	15.01.07 (Consent in principle)	
69.	M/S Braj Industries Pvt. Ltd., P.O- Sadanandpur, Dist.- Begusarai- 851211	Proposal for manufacturing of 190 Kilo litter per Day Ethanol from Sugarcane Juice at Purnea	82.00	120	15.01.07	
70.	M/S Braj Industries Pvt. Ltd., P.O- Sadanandpur, Dist.- Begusarai- 851211	Proposal for manufacturing of 190 Kilo Litter per Day Ethanol form Sugarcane Juice at Sahrpur-Kamal (Dist.-Begusarai)	82.00	120	15.01.07	21.05.07
71.	M/S Patwari Steels Pvt. Ltd., 6-M, Rajendra Nagar, Patna-16, Fax: 91-0612-2688874	Proposal for expansion of production capacity of Steel Ingot, M.S. Bar and Rod and production of Cast Grinding Media Ball.	5.08		15.01.07 Proposal noted	
72.	M/S Rego Chemical (P) Limited, 187, Rabindra Sarani, Kolkata-700007 Tel: 2225-9820 Fax : 2225-9822	Proposal for establishment of new jute Mill of 30 T.P.D. with 2.5 MW Captive Power Plant.	29.65	1250	01.02.07 (Consent in principle)	21.05.07
73.	M/S Madina Educational Welfare Trust, Swarnim, East Boring Canal Road, Patna	Establishment of Engineering College at Darbhanga (Simri, P.O.- Birdipur, Dist.- Darbhanga)	12.50	57	01.02.07 (Consent in principle)	
74.	M/S association of Management Studies, 17, Mall Road, Meerut Cant (U.P). Fax : 0121-2649606	Establishment of Engineering/ Management/ Medical College at Chapra and Patna.	17.50	-	01.02.07 (Consent in principle)	

75.	M/S Rakesh Masala Pvt. Ltd., B-165 Gujranwala Town, Part-1, Delhi-110009 Ph.- 011-27437002 Fax – 011-27120631	Setting up a Food Processing Area/Export Zone			19.02.07 (Consent in principle)	
76.	M/S Siddivinayak Trust for Nature, Educational and Health, 101, Shanti Kunj Apartment, T.N. Benerjee Road, Chhajjubagh, Patna-1 E mail- lallsanjeev@yahoo.com Ph.- 9835024872	Setting up of Dental College and Hospital at Patna	15.10		19.02.07 (Consent in principle)	
77.	M/S Classicon Ventures Limited, Pro. Deepak Kumar Sinha/ Rajiv Ranjan, 190/A, Boring Road, Patna. Phone : 3091561 E mail : sksinha_ritco@yahoo.co.in	Establishment of 500 TCD Sugar Mill with Co-generation Power Plant at Kaabh/Ayan Khan, Dist. Patna.	13.266	132	26.02.07 (Consent in principle)	21.05.07
78.	M/S JAS Infrastructure Capital Pvt. Ltd., Mahabir Tower, Main Road Ranchi	Establishment of 1215 MVV (9x135MW) coal based Thermal Power Plant at Navinagar/Likhisarai/ Pirpainti/ Banka	6500.00	5000	12.03.07 (Consent in principle)	
79.	M/S Vikash Metal & Power Ltd., Kolkata	Establishment of 2x250 MW Power Palnt at Begusari	1350.00	1000	12.03.07 (Consent in principle)	
80.	M/S Nandi Soaps Private Ltd., Raxaul	Establishment of soap manufacturing plant at Raxual	6.414	142	19.03.07	21.05.07
81.	M/S Saran Renewable Energy Pvt. Ltd., Chapra	Generation of 240 K.W Electricity from Biomass based Gasification System at Garkha, Saran.	1.45	14	19.03.07	
82.	M/S Prachin Bharat tourism (Sri Naveen Kumar Sharma, Programme Manager, Sisco Systems) E-mail : naveenshar@gmail.com	Establishment of Integrated tourist Park at Nepura, Silao, Nalanda	5.00	100	19.03.07 (Consent in principle on concept of proposal) 08.10.07 (Consent)	14.11.07
83.	M/S S.S Infrastructure Pvt. Ltd., Darbhanga.	Establishment of Ethanol Plant from 2500 TCD Sugarcane juice at Sukhait, Block- Jhanijharpur, Dist.- Madhubani.	95.04	120	19.03.07	21.05.07

84.	M/S Brij Industries Pvt. Ltd., P.O- Sadanandpur, Dist- Begusarai- 851211	Proposal for establishment of 180 Kilo Litter Per Day Ethanol Production Plant from Sugarcane Juice at Supaul.	82.00	120	26.03.07	
85.	M/S Cement Manufacturing Co. Ltd. Kolkata.	Proposal for establishment of 2x250 MW Thermal Power Plant at Kahalgaon	1650.00	225	26.03.07	
86.	M/S Pinax Steel Industries Pvt. Ltd., VII/1&2 Industrial Estate, Patliputra, Patna-13 Fax : 0612-2263924	Manufacturing of M.S Ingot by setting of Induction Furnace at Devkuli, Bihta	8.67	69	07.05.07 (Consent in principle)	
87.	M/S M J& sons Distillery & Berweries Private Ltd., Jankivilla, Near Pushpanjali Plaza, Vasant Vihar Colony, Boring Rd., Patna- 1	Setting up of Extra Neutral Alcohol Plant based on food grins at Amarpur, Banka.	36.70	375	07.05.07 (Consent in principle)	
88.	M/S Vikramsheela Textile Park Ltd., 10 R.N Mukherjee road, Kolkata-700001 Fax : 91-3322482486	Establishment to Textile Park at Bhagalpur	120.00	65	28.05.07	
89.	M/S Birla Corporation Ltd., Birla Building, 9/1, RN Mukharji road, Kolkata- 700001	Setting up of 1 Million TPA Cement grinding Unit at Barh, Patna.	155.00	350	25.06.07 (Consent in principle)	
90.	M/S B. K. Group of Companies, Park Street. Kolkata.	Establishment of 1.5 Million TPA Cement manufacturing Plant near Barauni Thermal Power Station.	137.60	150	16.07.07 (Consent in principle)	
91.	M/S Angpradesh Handloom Park Pvt. Ltd., Bhagalpur	Establishment of Handloom Park under Cluster Business Plan	27.5	5000	16.07.07 (Consent in principle)	
92.	M/S Maurya Sugar Pvt. Ltd., 47/B Sahadeo Mahato Marg, Sri Krishna Puri Patna-800001	Setting up of 2500 TCD sugar Mill & 15 MW Co-generation Power Plant at Adapur, East Champaran.	155.18	330	13.08.07	
93.	M/S Maurya Sugar Pvt. Ltd., 47/B Sahadeo Mahato Marg, Sri Krishna Puri Patna-800001	Setting up of 2500 TCD sugar Mill & 15 MW Co-generation Power Plant at Chorma, East Champaran.	157.93	330	13.08.07	
94.	M/S Saran Renewable Energy Pvt. Ltd., Chapra	Generation of 10MW Electricity from biomass	50.80	20	24.09.07 (Consent in	

		based Gasification System at Garkha, Saran.			principle)	
95.	M/S Vaishali Kisan Uday Sugar Mills Pvt. Ltd., Patna.	Proposal for establishment of 5000 TCD Sugar Mill, 72 KLPD Ethanol Plant and 26 MW Captive Power Plant at Vill.- Chechahi-Chapra, Muzaffarpur.	155.18	440	24.09.07 (Consent in principle)	
96.	M/S Munger Medical College Trust, Munger	Establishment of Medical College at Munger	22.00	300	24.09.07 (Consent in principle)	
97.	M/S Sai Iron India Ltd., Didarganj, Patna	Establishment of second Rolling Mill in the Campus of existing Rolling Mill at Sabalpur, Didarganj, Patna	32.34	367	24.09.07 (Consent in principle)	
98.	M/S Maury Sugar Pvt. Ltd., 47/B Sahadeo Mahato Marg, Sri Krishna Puri Patna-800001	Setting up of 3500 TCD Sugar Mill, 120 KLPD Distillery Plant & 16 MW Co-generation Power Plant at Vill-Gurwalia Bishwash, Anchal- Chanpatia, Dist.- W. Champaran.	241.95	300	24.09.07 (Consent in principle)	
99.	M/S Steel Authority of India Ltd. Bokaro Steel Plant, Bokaro	Establishment of 1.55 Lakh Ton Steel Processing Unit at Kumarbagh, Bettiah.	160.63	293	24.09.07 (Consent in principle)	
100.	M/S Gangotri Iron & Steel Co Ltd., 307 Ashiana Tower, Exhibition Road, Patna, Fax: 0612-2685959 Ph.- 2665456 E-mail- gcplpat@sancharnet.in	Establishment of 15 MT x 2 Nos. Induction Furnace, Concast Unit Oxygen Plant wire road Plant & A Re-rolling Mill of 300 TPD to manufacture Thermax TMT Bras Plant at Bihta, Patna	50.00	570	08.10.07 (Consent in principle)	
101.	M/S Steel Authority of India Ltd., Bokaro Steel Plant, Bokaro	Establishment of 1.07 Lakh TPA Steel Processing Unit at Sahdei, Vaishali	318.75	250	08.10.07 (Consent in principle)	
102.	M/S Prachin Bharat Tourism, (Naveen Kumar Sharma, CEO), Kalptaru Apartment, Bangalore	Establishment of Multi Media Museum at Nalanda	0.20	20	22.10.07 (Consent in principle)	
103.	M/S Kamlapur Sgar Refinery Limited, Berger House, 5 th Floor, 129, Park Street, Kolkata	Establishment of 8000 TCD Sugar Mill at Sariatpur-Chakia, East Champaran	248.80	450	29.10.07 (Consent in principle)	
104.	M/S Kamlapur Sugar Refinery Limited, Berger House, 5 th Floor, 129, Park Street, Kolkata	Establishment of 120 KLPD Ethanol Plant at Sariatpur-Chakia, East Champaran	106.10	60	29.10.07 (Consent in principle)	

105.	M/S Kamlapur Sugar Refinery Limited, Berger House, 5 th Floor, 129, Park Street, Kolkata	Establishment of 26 MW Co-generation Plant at Sariatpur-Chakia, East Champaran	132.90	30	29.10.07 (Consent in principle)	
106.	M/S Jagdamba Ispat (P) Ltd., Nasriganj, Danapur, Patna.	Capacity expansion of 5400 MT/year MS Ingot at present established unit at Danapur	1.675	15	29.10.07 (Consent in principle)	
107.	M/S Babu Cold Storage, Pilkhan road, Chura Patti, Kishanganj	Establishment of 5200 MT/Year Capacity Cold Storage for Vegetable and Food Preservation at Chura Patti, Kishanganj	1.81	07	29.10.07 (Consent in principle)	
108.	M/S Laxmiviniyak Vertures Pvt. Ltd., Malsalmi, Patna City	Establishment of one Lakh Ton/ Year Detergent Powder production Plant at Bihta	20.00	20	29.10.07 (Consent in principle)	
109.	M/S P. M .R Educational Trust, 2036, 15 th Main Road, Anna Nagar, West Channi-600040	Setting up of Engineering College in Bihar	35.00		02.01.08 (Consent in principle)	
110.	M/S Neepaz Thermal Energy Ltd., 14 th Netaji Subhas Road, 2 nd Floor, Kolkata- 700001	Setting up of Mega Thermal Power Plant in Bihar			02.01.08 (Consent in principle)	
111.	M/S Subhas Projects and Marketing Ltd., 22 Camac Street, Block-A, 3 rd Floor, Kolkata- 700016	Setting up of 2x300 MW Thermal Power Plant in Bihar		400	02.01.08 (Consent in principle)	
112.	M/S India Power Corporation Ltd., Vishwakarma, 86 C, Topsia Road (South), Kolkata-700046	Setting up of 1650 MW Coal based Power Project in Bihar			02.01.08 (Consent in principle)	
113.	M/S P & M Infrastructure Pvt. Ltd., 47/B, Sahedo Mahto Marg, Sri Krishna Puri, Patna-1	Setting up of Bodh Gaya Resort at Bodh Gaya	18.41	250	02.01.08 (Consent in principle)	
114.	M/S Maurya Sugar Pvt. Ltd., Sri Krishna Puri, Patna-1	Setting up of 3500 TCD expendable up to 6000 TCD Sugar Complex at Khartatwa, Dhonar Devli, Ramgarhwa, East Champaran.	171.96	330	02.01.08	
115.	M/S C.E.S.C Limited, R.P.G. Group, C.E.S.C House, Chaurangi Squae, Kolkata-700001	Setting up of Coal based Thermal Power Plant at Pirpaiti or other suitable place.			02.01.08 (Consent in principle)	

Appendix V

Schemewise Fund Position of BIADA

(Rs. Crore)

Sl. No.	Particulars	As on 01-04-07	As on 15-01-08
1.	Infrastructure	1.31	(-) 4.26
2.	Land Acquisition	3.70	9.58
3.	EPIP	4.94	5.42
4.	Software Tech. Park	3.23	2.82
5.	Growth Centre	12.18	22.74
6.	Agri. Exports Zone	—	0.28
7.	Jai Ghose (Land Compensation)	—	(-) 3.84
8.	Sugar cane Research	—	Negligible
9.	Quality Control	—	0.01
10.	D.I.C. Building	4.19	0.20
11.	P.H.E.D		0.75
12.	Incentive Fund	0.12	—
13.	Recovery of Incentive Fund	0.38	—
14.	Integrated Development	—	0.67
15.	Food Park	0.10	0.10
16.	NIPER	—	0.35
17.	Internal Accrual	16.03	62.61
	Total	46.18	97.43

Source: BIADA, Government of Bihar

CHAPTER IV

PHYSICAL INFRASTRUCTURE

Building up quality infrastructure is one of the major challenges for Bihar. Apart from a serious neglect of infrastructure development for decades, Bihar's flood-prone regions, present a challenge to the development of infrastructure in the state. These regions comprising less than one-fifth of Bihar's area, account for more than half of all the people in the country displaced regularly by annual floods. The state government has prioritised the development of a strong network of infrastructure as a precondition to fulfillment of higher investment, growth and development targets. This chapter highlights some of these major initiatives. Under Constitutional arrangements, the responsibility of developing some aspects of physical infrastructure lies with the State government, while others are managed by the Central government. Within the purview of the State government, this report discusses power, roads and road transport. The importance of the Bihar Infrastructure Development Enabling Act 2006 to facilitate the growth of infrastructure in the state is highlighted.

A. STATE GOVERNMENT

4.1. POWER SECTOR

Installed Capacity of Power

India has a total installed capacity of 134077 MW comprising 33486 MW hydro, 86326 MW thermal, 4120 MW nuclear and 10145 MW wind/renewable energy based power plants. On the other hand, the present installed capacity of Bihar is 586.1 MW, comprising 46.1 MW hydro and 540 MW thermal (Table 4.1).

Table 4.1 : Power- Installed capacity: India and Bihar (MW)

	Total	Hydro	Thermal	Nuclear	Wind/ Renewable Energy
India	134077	33486	86326	4120	10145
Bihar	586.1	46.1	540	-	-

Source : Report of special task force on Bihar Power Sector, Government of India, 2007

The installed capacity in Bihar has been moribund and currently under renovation and modernization. It may be noted that 70 percent of the generating capacity of erstwhile Bihar

has fallen within the jurisdiction of the separated state of Jharkhand, leaving 70 percent load with the present Bihar after bifurcation. So currently, Bihar is totally dependent on its share in central power stations and the lion's share of the power requirement of the state is being met from thermal power (Table 4.2).

Table 4.2 : Share of Bihar in Different Central Sector Power Stations

Name of Station	Capacity (MW)	Bihar's share	
		MW	Percentage
Farakka STPS	1600	362.90	22.68
Talcher STPS	1000	354.00	35.40
Kahalgaon STPS	840	91.90	10.94
Tala HPS	1020	260.10	25.50
Chukha HPS	270	80.00	29.63
Rangit HPS	60	21.00	35.00
Total	4790	1169.90	

Source : Bihar State Electricity Board (BSEB)

The per capita consumption of energy in Bihar is 75 units against that national average of 613 units. As shown in Table-4.3A, there was a shortage of 1712.969 MU energy in 2006-07. Energy shortage had increased to 2999.366 MU by December 2007.

Table 4.3A : Supply-Consumption Pattern of Energy in Bihar

Year	Energy(in MU)				
	Drawal from Central Sector	BSEB Generation	Demand Met	Energy Requirement	Energy Shortage
2006-2007	7376.713	37.217	7413.930	9126.900	1712.969
2007-08 (up to December 07)	5279.409	16	5295.409	9324.75	2999.366

Source : Bihar State Electricity Board (BSEB)

The special task force on Bihar Power Sector set up by Government of India reported that Bihar faced energy and power shortage of 8.1 percent and 16.9 percent respectively during 2006-07 (Table 4.3B). During April-May, 2007, the state had energy shortage of 7.9 percent and peak deficit of 12.2 percent.

Table 4.3 B : Power : Peak Demand and Consumption Pattern

Peak	2006-07	April-May, 2007
Peak Demand (MW)	1399	1415
Peak Met (MW)	1162	1243
Peak Deficit (-) / Surplus (+) -MW	-237	-172
Peak Deficit/Surplus (%)	-16.9	-12.2
Energy		
Energy Requirement (MU)	8425	1500
Energy Availability (MU)	7741	1381
Energy Deficit (-)/Surplus(+)=MU	-684	-119
Energy Deficit/Surplus (%)	-8.1	-7.9

Source : Report of special task force on Bihar Power Sector, Government of India, 2007.

Power Generation Status

There is no generation from thermal power stations in the state sector at present. All thermal units are shut down due to refurbishment /deteriorated condition. Out of the existing state owned power stations in Bihar, given in Table 4.4, Barauni and Muzaffarpur Thermal Power Stations are under renovation. With a view to improve the Plant Load Factor (PLF) and generation of Barauni Thermal Power Station, National Thermal Power Station (NTPC) has been appointed as a consultant and, after completion of renovation and modernization work, PLF is expected to improve significantly. In addition, the Bharat Heavy Electricals Limited (BHEL) has been appointed as an executing agency to carry out renovation and modernization work of Muzaffarpur Thermal Power Station under Rashtriya Sam Vikas Yojana. The restoration work of Unit No. 2 of Vaishali Power Generating Company Ltd (VPGCL), a joint venture company of NTPC and BSEB, was started in August, 2006 by BHEL and is expected to be completed by beginning of 2008. The hydro electric potential in Bihar is assessed at 60 MW at 60 percent load factor. About 64.1 percent of the potential in terms of installed capacity has been developed and 35.9 percent of the potential remains to be developed. Six hydro stations, (Kosi, Eastern Gandak, Sone Western Canal, Sone Eastern Canal, Agnoor and Dhelabagh) with an aggregate installed capacity of 46.1 MW are in operation in Bihar. The Kosi Hydel Power Station could not attain desired generation and is now being operated with derated capacity. The Bihar State Hydro-electric Power Corporation (BSHPC) has identified several locations in the Kosi basin with a total capacity of 226, and amongst them, one Hydro-electric scheme (126 MW) on Kosi river in Supaul district.

Table 4.4 : Existing State-Owned Power Stations in Bihar

Name of power station	Installed Capacity (MW)	Agency
Hydro		
Kosi (4x4.8)	19.2	BSHPC*
Sone E&W Canal (2x1.65+4x1.65)	9.9	BSHPC
East Gandak Canal (3x5)	15	BSHPC
Agnoor	1.0	BSHPC
Dhelabagh	1.0	BSHPC*
Hydro Total	46.1	
Thermal		
Barauni (2x50+2x110)	320	BSEB
Muzaffarpur (2x110)	220	BSEB**
Thermal Total	540	

* BSEB transferred the project to BSHPC on 16th November 2003

** Now transferred to new JV-Vaishali Generating Co.

Source : Report of special task force on Bihar Power Sector, Government of India, 2007

The trend in the power supply position has witnessed increase in both requirement and availability. Since 2003-04, availability has been going up consistently and the power deficit has been declining since 2004-05. From 10.1 percent in 2004-05, it dropped to 8.1 percent in 2006-07 (Table 4.5).

Table 4.5 : Trend in the Power Supply Position (2002-07)

Year	Requirement (MU)	Availability (MU)	Deficit (MU)	Deficit (%)
2002-03	8096	7422	674	8.3
2003-04	7588	5878	1710	22.5
2004-05	7201	6476	725	10.1
2005-06	7955	7218	737	9.3
2006-07	8425	7741	684	8.1

Source : Report of special task force on Bihar Power Sector, Government of India, 2007

Future Power Scenario in Bihar

According to the estimate carried out by the special task force, the power sector in Bihar is expected to face an energy shortage of 41 percent at the end of the Eleventh Plan and peak

deficit of 58 percent (Table 4.6). This estimate is based on actual capacity addition of 21180 MW in the Tenth Plan and proposed capacity addition of 78577 MW in the country in the Eleventh Plan, together leading to an anticipation of enhanced power supply position.

Table 4.6 : Estimate of Power Scenario at the end of 11th Plan

Peak	2011-12
Peak Demand (MW)	3607
Peak Met (MW)	1534
Peak Deficit (-)/surplus (+) MW	-2073
Peak Deficit/Surplus (%)	-57.5
Energy	
Energy Requirement (MU)	19905
Energy availability (MU)	11755
Energy Deficit(-)/Surplus(+)	-8150
Energy Deficit/Surplus (%)	-40.9

Source : Report of the special task force on Bihar's Power Sector; Government of India, 2007

The report of the 17th Electric Power Survey Committee forecasts that the electricity demand and energy of Bihar for the year 2011-12 will be 3607 MW and 19905 MU respectively, and is expected to grow further to 5598 MW and 32857 MU respectively in the year 2016-17 registering a CAGR of about 19 percent (Table 4.7).

Table 4.7 : Energy Requirement: Forecast

Year	Peak Load (MW)	Energy Requirement (MU)
2006-07	1570	9629
2007-08	1842	11194
2008-09	2177	12874
2009-10	2575	14886
2010-11	3046	17213
2011-12	3607	19905
2016-17	5598	32857
2021-22	9567	58248

Source : Report of the special task force on Bihar's Power Sector; Government of India, 2007

New Power Projects

BSES/BSPHC has proposed to install new power plants to meet the future power requirement in the state of Bihar. The proposed new projects cover six hydro and five thermal stations.

Table 4.8 : New Proposed Power Plants

Name of the project	Installed Capacity (MW)	Agency
Hydro		
Indrapuri Reservoir	450	BSHPC
Telhar Kund PSS	400	BSHPC
Sinafdar PSS	345	BSHPC
Panchghotia PSS	225	BSHPC
Hathiadah-Durgawati PSS	1600	BSHPC
Dagmara Barrage	126	BSHPC
Thermal		
Barauni Extn.	500	BSEB
Muzaffarpur	500	BSEB
Nabi Nagar	1980	BSEB
Katihar	1000	BSEB
Pirapanti	2000	BSEB

Source : Report of the special task force on Bihar's Power Sector; Government of India, 2007

In Bihar, Accelerated Power Development and Reforms Programme (APDRP) schemes broadly cover establishment of new power sub-stations, installation of consumer and feeder metering, reconductoring of overloaded 33 and 11 KV lines, renovation and modernisation of power sub-station (33/11 KV) and distribution transformers, installation of new distribution transformers (DTs) and augmentation of existing DTs. Under this programme, the necessary work for PESU (E), Patna, Muzaffarpur, PESU(W), Darbhanga, Chhapra, Gaya, Rohtas, Bhagalpur, Purnea and Saharsa Circles is under execution and that for Munger and Phase II of PESU(W) supply circles has just started.

Transmission System for Distribution of Electricity

Bihar State Electricity Board (BSEB) organises supply of electricity in Bihar under seven area boards. BSEB has adopted a phased manner of development of franchisee scheme for different activities of electricity distribution in rural areas for the benefit of rural consumers by improving consumer services and also to increase revenue collection.

In order to strengthen the sub-transmission and distribution system, a comprehensive scheme was formulated under Rashtriya Sam Vikas Yojana for Bihar in consultation with the BSEB.

The funding of the scheme is through central assistance under the Special Plan for Bihar component of Rashtriya Sam Vikas Yojana. The total scheme is envisaged to be implemented in phases as outlined in Table 4.9.

Table 4.9 : Implementation of Bihar-Sub-Transmission Scheme in Phases

Phase	Approved Estimated Cost (Rs. crore)	Works Status	Implementation by agency	Remarks
Phase I	526.28	1. Construction of 18 Nos. of sub-station. 2. Bay extension at 12 Nos. existing sub-station. 3. Construction of 1240 ckt km transmission line.	PGCIL	Completed
Phase II				
Part I	629.22 (Estimates of 2006 by BSEB) 1005.72 (Revised submitted by PGCIL)	Contracts for major Transmission lines and sub-station packages already awarded and for balance bids received/ NIT issued	PGCIL BSEB	Under Implementation
Part II	1240.86	Proposed to be taken up after completion of Part I of Phase II	PGCIL	Implementation Not yet started

Table 4.10 : Financial Status of Sub-Transmission Scheme as on December 31, 2007

(Rs. in crore)

Sl. No.	Description	Phase I	Phase II – Part I
1.	Total Sanctioned Project Cost	552.40	1005.62
2.	Fund Received	552.40	409.66
3.	Payment Released to Agency	440.72	129.98
4.	Available Fund	111.68	279.68

A number of 220 KV and 132 KV transmission lines in BSEB are not in service over a long period of time. This not only affected power supply to consumers of the state, but also created operational difficulties of the integrated grid of the Eastern Region as a whole. The BSEB has taken up needed initiative in the matter. Besides, the protection system of BSEB systems/ lines at 132 KV & 220 KV is also very weak and not functioning properly. This results in sustained faults not cleared by protection system causing stress on 400/220 KV ICTs at Biharsharif grid sub station of Powergrid and delayed clearing of faults by tripping of 400/220 KVICTs. Such frequent trippings may soon lead to damage to ICTs leading to disruption of power supply to Bihar.

Renewable Energy

There is a significant potential of renewable energy in the state of Bihar. To a certain extent, hydro, biomass, solar and wind can meet the energy requirements for lighting, minor irrigation in the villages. These can be used for captive power generation for industries also. The Bihar Renewable Energy Development Agency (BREDA) has been appointed the nodal agency for the electrification of remote villages through non-traditional sources of energy and development and implementation of renewable energy programmes in the state.

Small hydropower projects : For hydropower development, the state has a dedicated agency, viz., Bihar State Hydro Electric Power Corporation (BSHPC). Till date, for setting up small hydropower projects, 92 potential sites with an aggregate capacity of about 95 MW have been identified. Out of these, six small hydropower projects of an aggregate capacity of 46.1 MW have been installed in the state.

Biomass Power and Cogeneration : A potential of about 200 MW through setting up of biomass based power projects including co-generation projects exists in Bihar. Rice husk based biomass gasification, combustion technology for industrial application and decentralized power generation are cited as important sources for power generation in Bihar.

Wind Energy : The state's nodal agency is in the process of taking up wind resource assessment programme in association with an agency at Chennai, to identify suitable potential sites to set up wind energy based power projects.

Biogas : It is an important source of renewable energy for meeting the cooking energy needs in villages. The state has a potential of about 9.4 lakhs family size biogas plants to meet the cooking energy needs, and 1.25 lakhs biogas plants have already been installed till date.

Rural Electrification

Out of a total of 39015 villages, 20610 villages have been electrified by March, 2006. This shows that about 53 percent of villages are electrified in the state of Bihar, against 47 percent in 2004-05. BREDA is the state nodal agency for implementation of village electrification programme. The Central Government has launched a new *scheme Rajiv Gandhi Grameen Vidyutikaran Yojana* (RGGVY) for rural electricity infrastructure and household electrification in April, 2005 for providing access to electricity to all households in the country in five years. Till date, 29 unelectrified remote villages have been identified in Bihar for electrification through renewable energy sources. The national policy of rural electrification prescribes that

the state governments should ensure electrification of all villages by 2009. Under this scheme, Power Grid Corporation of India Limited (PGCIL), National Hydro Power Corporation (NHPC) and Bihar State Electricity Board (BSEB) have taken up the work of rural electrification in 38 districts as per the details given below :

PGCIL : 24 districts

Patna / Nalanda / Bhojpur / Buxer / Rohtas / Kaimur / Gaya / Nawadah / Aurangabad / Jehanabad / Arwal / Munger / Lakhisarai / Jamui / Bhagalpur / Banka / Vaishali / Muzaffarpur / Saran / Siwan / Gopalganj / Purnea / Kishanganj / Araria

NHPC : 6 districts

Sitamarhi / Sheohar / E. Champaran / W. Champaran / Darbhanga / Madhubani

BSEB : 8 districts

Katihar / Saharsa / Supaul / Madhepura / Khagaria / Samastipur / Begusarai / Sheikhpura

In addition, the on-going electrification work in 964 villages and construction of 22 Power Sub-Stations are to be completed during current financial year by BSEB. Finally, the details of Accelerated Rural Electrification Programme (AREP) / RGGVY being implemented by BSEB are as follows :

Particulars	Estimated Cost (Rs. crore)	Remarks
PGCIL (22 Districts under AREP)	1384.49	
PGCIL (Muzaffarpur & Vaishali districts)	119.64	Supplementary proposal under RGGVY submitted to REC.
NHPC (6 Districts under AREP)	233.50	Supplementary proposal under RGGVY submitted to REC.
Bihar State Electricity Board (8 Districts Proposal under RGGVY)	749.63	In principle approval communicated

Till December, 2007 PGCIL has reported progress in 10977 villages and NHPC has reported progress in 1191 villages.

New Government Initiatives in Power Sector

Power Plants to be setup through tariff based bidding: An agreement has been signed between Government of Bihar/BSEB and Infrastructure Leasing and Financial Services Limited (IL&FS) for development of additional coal based capacities to meet the growing demand for power in the state. Accordingly, the Joint Venture Company will carry out the power project development activities, initiation of process of getting all key clearances including site selection and land acquisition and selection of private entrepreneur through tariff based bidding for the installation of power projects at various places in Bihar. The plan is to install 3x660 MW capacity Thermal Power Plant at three different places.

Power plants to be set up a Nabinagar : NTPC and Government of Bihar/Bihar State Electricity Board (BSEB) have signed a memorandum of understanding (MOU) in October 2007 to promote a joint venture company for setting up and operate a 1980 MW (3x660 MW) coal based power station at Nabinagar in the district of Aurangabad in Bihar.

Power plants to be set up through IIP/MPP: BSEB has sanctioned 8 coal based power projects under merchant power plant for which MOU has been signed with Vikash Metal & Power, Kolkata for setting up 2x250 MW units at Begusarai. It has signed another MOU with JAS Infrastructure Capital Pvt. Ltd. Ranchi for setting up 9x135 MW units at Banka.

Nuclear Power Projects (4x700 MW) at Rajauli: Government of Bihar/BSEB has requested NPCIL for the installation of 4x700 MW Nuclear Power Project at an estimated cost of Rs. 22400 crore at Rajauli. A team of experts has already visited Rajauli for site selection.

4.2 ROADS AND BRIDGES

Road Network Status

Bihar has a total road length of 81680 kms, divided into five types — national highways (4.57 percent), state highways (4.71percent), major district roads (8.59 percent), other district roads (4.67 percent) and village roads (77.46 percent) (Table 4.11). Part of the roads under the last two categories are, however, unpaved. The state Government has given top most priority to the development of road sector. Immediate attention is being given to repair the entire National Highway stretches within the state. A total of 773 kms of national highways was renovated in 2006-07. In 2007-08, till January 2008, another 552 kms of national highways have been renovated, while work is in progress in 879 kms and expected to be completed by March 2008. Improvement and renovation of national highways were carried out on a large scale and at war footing, and this has greatly reduced the travel time to all the major towns in the State. The progress achieved in this sector during last two years is many times more than the average progress during the last 15 years. All the State Highways are being upgraded to two-lane

highways at par with modern standards and specifications. The upgradation of 2035 kms of state highways is in progress. The upgradation of 724 kms of Major District Roads has been completed. The upgradation work is in an advanced stage in the 3600 kms of road network which would be completed by March 2008 and that of another 1500 kms is in progress. In year 2006, 1054 kms of roads have been declared as State Highways and their upgradation to two-lane highways is under process with the help of the Asian Development Bank. In year 2008, 722 kms have been declared as State Highways.

Construction/Renovation Programme

In order to provide connectivity to remote areas, specially the rural areas, a programme of construction of major/minor bridges has been taken up under *Mukhya Mantri Setu Nirman Yojana* (MMSNY). A total of 1846 major and minor bridges, selected by a body of public representatives, have been taken up for construction under this scheme. The approval mechanism for the construction of these bridges has been decentralised at the district level. A sum of Rs. 300 crore in 2006-07 and a sum of Rs. 400 crore in 2007-08 have been made available to the Bihar State Bridge Construction Corporation Ltd. and the district administration under this scheme.

Table 4.11 : Road Network in Bihar

Category	Road Length (Km)			Percentage (%) to Total
	Pucca (Paved)	Kutcha (Unpaved)	Total	
National Highway (NH)	3734.00	0.00	3734.00	4.57
State Highway (SH)	3849.22	0.00	3849.22	4.71
Major District Roads (MDR)	7017.25	0.00	7017.25	8.59
Other District Roads (ODR)	2828.00	990.00	3818.00	4.67
Village Roads (VR)	27400.00	35861.63	63261.63	77.46
Total	44828.47	36851.63	81680.10	100

Source : Government of Bihar

The state government has identified district roads to be converted into State Highways by launching two new initiatives, called State Highway Development Programme-II and State Highway Development Programme-III, to further improve connectivity within the state. The State Highway Development Programme-I is being executed by the central agencies, CPWD and IRCON. A total outlay of Rs. 1240.1 crore was utilized for SHDP-I upto 2007-08.

In addition, important Major District Roads and bridges are being upgraded under the Rural Infrastructure Development Fund (RIDF), financed by NABARD. Several projects are being executed under Central Road Fund (CRF), Border Area Development Programme (BADP),

Inter-State Connectivity (ISC), Economic Importance (EI) and Additional Central Assistance (ACA) projects.

Out of total allocation of Rs. 2370.9 crore in 2007-08, an expenditure of Rs. 1705.2 crore has been made up to January 2008.

Bridges Construction

The Bihar State Bridge Construction Corporation Ltd. is responsible for construction of bridges in the state. The Corporation which was running in losses of about Rs. 17 crore two years ago, is not incurring losses now. This has been possible because of availability of funds in time, constitution of the new Board, centage fixation (9 percent over the turnover of Rs. 250 crore), and implementation of *Mukhya Mantri Setu Nirman Yojana*.

Presently, the schemes worth Rs. 2300 crore are being implemented by the Corporation which are as follows :

1. Implementation of 526 schemes under the *Mukhya Mantri Setu Nirman Yojana* with an outlay of Rs.1133 crore, out of which 54 bridges has been completed.
2. 8 railway over-bridges have been constructed with an outlay of Rs. 241.82 crore.
3. Works relating to bridge construction on on 47 Highways at a cost of Rs. 516 crore.
4. Works on other bridge schemes with an outlay of Rs. 410 crore.

Road Sector

New Initiative at a glance

- It has been decided to construct five additional major bridges, two over the river Ganges between Arrah and Chhapra and between Bakhityarpur and Patori, one on the Gandak between West Champaran and Gopalganj, one on the Koshi between Saharsa and Darbhanga and one on the Sone between Arwal and Sahar.
- Agreement is in final stage with IDFC and IL&FS for 4-laning of 8 main corridors (approximately 800 kms) under Public Private Partnership (PPP).
- The time limit for the execution of every road project is worked out. Incentive for early completion and penalty for delay are specified. Monitoring process of weekly progress is computerized, for which a computerized Data Centre has been established at the headquarters.
- Rules for registration of contractors have been simplified so that the registration process can be completed within three days.
- An Equipment Bank has been established to provide Plant and Machineries to the contractors on reasonable hire charges.
- Third Party Quality Control has been arranged to ensure quality of work.
- Integrated Improvement-cum-Performance based Maintenance has been introduced for all road projects.
- All work divisions including headquarters have been computerised.

4.3 MOTOR VEHICLES AND TRANSPORT

The number of motor vehicles registered has increased considerably in 2006-07 compared to the previous year. The number of vehicles registered in Bihar has increased from 80363 in 2005-06 to 147309 in 2006-07 (Table 4.12). The data till December 2007 shows that this trend will continue in 2007-08 also. This upward trend is mainly due to the lowering of the registration charges and other effective measures introduced since 2005-06.

Table 4.12 : Number of Vehicles Registered

Year	Truck	Bus	Car	Taxi	Jeep	Auto Rikshaw	Two Wheelers	Tractor	Trailer	Others	Total
2005-06	579	113	5062	427	2321	3273	61333	3509	2440	1306	80363
2006-07	1989	921	7409	1326	4430	5027	112985	6160	5281	1781	147309
2007-08 (upto Dec. 07)	1321	751	4747	1430	1990	2821	56931	3208	1991	1446	76631

Source : Department of Transport, Government of Bihar

The highest revenue collected by the Transport Department was Rs. 308.72 crore in 2005-06 and it has subsequently declined to Rs. 211 crore in 2006-07 (Table 4.13). There has been a rising trend in revenue collection during 2007-08 in comparison to year 2006-07. It is reported that the decline in the revenue collection in 2006-07 was mainly due to reduction in registration charges.

Table 4.13 : Revenue collected by Transport Department

Year	Target (Rs. crore)	Actual (Rs. crore)	Percentage of Collection
2001-02	160.00	133.10	83.19
2002-03	205.00	177.54	86.61
2003-04	275.00	217.91	79.24
2004-05	308.00	257.08	83.47
2005-06	310.00	308.72	99.60
2006-07	350.00	211.00	60.29
2007-08 (upto Dec. 2007)	272.98	171.83	62.95

Source : Department of transport, Government of Bihar

Pollution and fitness tests have been made mandatory for certifying vehicles for registration. In order to meet this requirement, 106 licenses have been granted to private enterprises to establish Fitness Testing Stations and Pollution Testing Stations. This is in addition to the

available arrangements of fitness test by the Motor Vehicles Inspectors. The process of granting and renewal of permit, particularly on inter-state routes, has been speeded up by signing an inter-state transport agreement with Jharkhand. Similar negotiations are progressing for entering into inter-state transport agreements with other neighbouring states. Registration of transport vehicles has increased to the tune of 50 percent due to reduction in tax rates. The tendency of vehicles in Bihar getting registered in other states at reduced rate has been reversed. An incentive system has been introduced for owners of transport vehicles to clear outstanding dues of tax and fines whereby they can pay their dues in six installments.

Farmers using tractor/trailer for agricultural purpose have been provided with the scheme of one-time tax payment. In respect of distribution of assets and liabilities of Bihar State Road Transport Corporation between the States of Bihar and Jharkhand the Arbitration Committee chaired by retired Supreme Court Justice Sageer Ahmed has submitted its report to the Supreme Court. The Supreme Court is expected to pass final order in the near future after hearing the various parties.

New Initiatives in Last One Year

1. Grant and renewal of permit, particularly on inter-State routes have been speeded up by signing of inter-State transport agreement with Jharkhand. Bihar-Jharkhand reciprocal agreement 2007 has been notified by Notification No. 2052 dated 25-05-2007. Negotiation is in process for entering into such inter-State transport agreements with other neighbouring States like Uttar Pradesh, West Bengal and Chhattisgarh.
2. Due to reduction in tax rates on transport vehicles exodus to other States for registration has stopped and as a result registration of transport vehicles have increased.
3. Transport vehicle owners have been provided with facility of payment of outstanding dues of tax and fine in six installments by the order No. 4057 dated 30-08-2007 of the Transport Department.
4. Formers using tractor/trailer for agricultural purpose are being provided with the facility to pay one time tax at the rate of Rs. 5000/- or Rs. 3000/- depending on the capacity of the vehicles. The order has been notified by the Notification No. 5568 dated 11-12-2007.
5. To promote Inland Water Transport, RITES has been appointed as consultant to survey Kosi, Gandak, and Sone rivers in order to make them navigable till now Rs. 32.00 lakhs has been released to the RITES.
6. Registration of mechanized boats has been made mandatory.

Bihar Infrastructure Development Enabling Act, 2006

Various policy measures are being taken by the state government to build up its physical infrastructure to meet the growing demand of the state. The state of Bihar has enacted an important legislation aiming at faster development of its social and physical infrastructure. This legislation, namely *Bihar Infrastructure Development Enabling Act 2006*, applies to Bihar state in order to promote physical and social infrastructure through Public Private Partnership (PPP). This Act applies to all infrastructures listed in Schedule 3 of this Act like roads, health, canals and embankments, water supply, etc., which have to be implemented through PPP. The state Government has the freedom to modify this list through notification. The Act lays down the main structure of financial support, management and upkeep of infrastructure. It aims at cutting down administrative and procedural delays.

B. CENTRAL GOVERNMENT

4.4 CIVIL AVIATION

Though Bihar has several airports that are in a position to operate (Darbhanga, Purnea, Gopalganj and Madhubani) and several others which can be developed (Muzaffarpur, Bhagalpur, Chhapra, Arrah, Munger and Sitamarhi), at present, there are just two functioning airports in Patna and Gaya. The development of civil aviation is still nascent in the state. However, there has been a gradual growth in aircraft movement, number of passenger, and quantum of freight and mail in recent years (Table 4.14). One finds that domestic aircraft movement in Patna airport has more than doubled in the last twelve years from 2444 in 1995-96 to 4970 in 2006-07. Similarly, passenger traffic in the domestic sector has increased from 1.36 lakh in 1995-96 to 3.11 lakh in 2006-07. In the last two years, there has been an accelerated growth in passenger traffic in the sector. In 2004-05, the number of passengers in the domestic sector was 1.76 lakh. This almost doubled to 3.11 lakh in 2006-07, registering a growth of 77 percent in just two years. However, quantum of freight and mail has not shown a very significant increase in the same period. The development of the domestic aviation sector has been accompanied by a steady decline of the international sector in terms of aircraft movement and number of passengers.

Table 4.14 : Operational Statistics : Patna Airport

Year	Aircraft Movements (in no.)		Passengers (in no.)		Freight (in tonnes)		Mail (in tonnes)	
	International	Domestic	International	Domestic	International	Domestic	International	Domestic
1995-96	518	2444	5681	136122	0	1248	-	-
1996-97	4	2618	0	130906	0	1369	-	-
1997-98	38	2828	119	133632	0	1797	0	415
1998-99	220	2205	6278	121440	2	1134	0	378
1999-00	424	4328	10758	160690	4	2046	0	491
2000-01	415	4163	9029	167887	1	2210	0	409
2001-02	141	4158	2545	153945	7	1840	14	279
2002-03	192	4536	1804	160996	20	1167	0	172
2003-04	24	4142	0	159683	0	1184	0	189
2004-05	30	3814	0	176234	0	1035	0	271
2005-06	20	4140	0	218824	0	1417	0	266
2006-07	16	4970	0	311171	0	1473	0	365

Source : Airport Authority of India, Patna

Table 4.15 gives the data on passenger traffic and revenue generation for the Patna-New Delhi-Patna sector of Indian Airlines. In just two years from 2004-05 to 2006-07, revenue in this sector has increased from Rs. 16.5 crore to Rs 28.5 crore. Passenger numbers have also increased by about 25 percent in the same period. From the data upto December 2007, we can infer that this growth has been maintained in 2007-08 also. Apart from Indian Airlines, three other airlines also operate in Patna. These are Jet airways, Jetlite and Kingfisher Deccan.

Table 4.15 : Passenger Traffic and Revenue for Patna-New Delhi Sector (Indian Airlines)

Details	2004-05	2005-06	2006-07	2007-08 (Upto December 2007)
Passenger Traffic (No.)				
Patna Delhi Sector	33920	36030	39761	35944
Delhi Patna Sector	44000	45233	54400	45153
Revenue Generation (Rs. crore)				
Patna Delhi Sector	16.5	17.76	28.5	25.25

Source : Indian Airlines, Patna

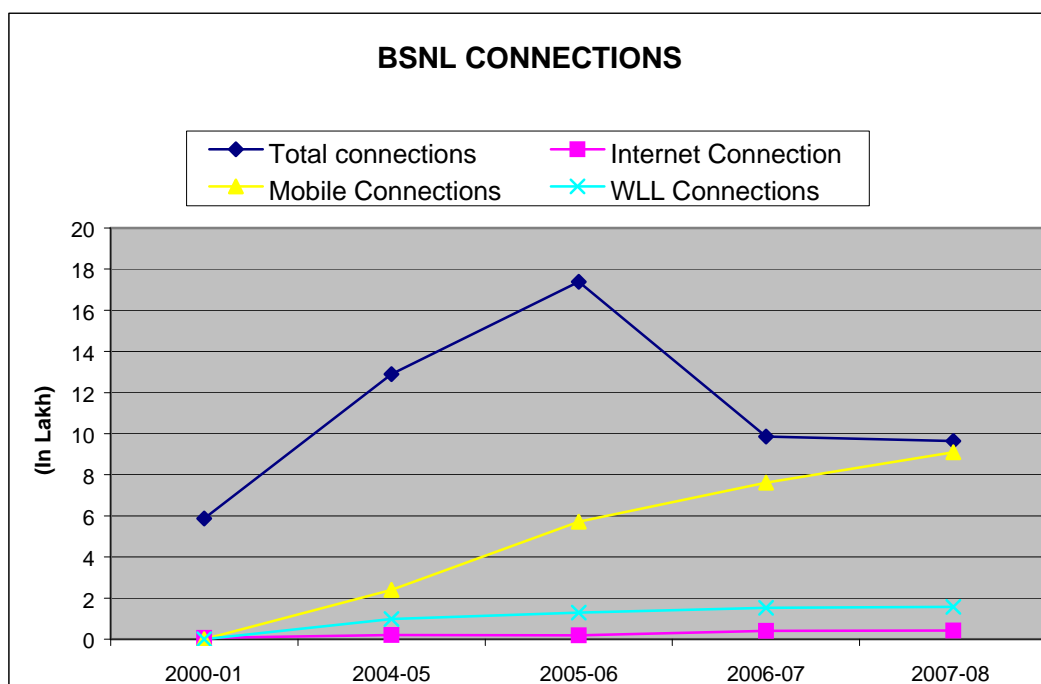
The central government needs to play a significant role in the development of civil aviation in Bihar as this is crucial to the overall growth in investment and tourism in the state.

4.5 TELECOMMUNICATION

The telephone services in Bihar (basic and mobile) are provided by five agencies — BSNL, Reliance, Bharti, Tata Indicom and Aircel. Of these, BSNL has the largest share of the market.

Table 4.16 : BSNL Details on Telecapacity

Items/Year	2000-01	2004-05	2005-06	2006-07	2007-08 (Upto Dec, 07)
No. of telephone exchanges	910	1155	1163	1202	1210
Total capacity (lakh)	7.71	16.71	21.73	13.54	13.40
Total connections (lakh)	5.88	12.89	17.38	9.86	9.64
Waiting Lists (lakh)	0.65	0.97	0.74	0.62	0.64
Automatic Trunk Exchange Capacity (lakh)	6.75	1.68	1.88	2.03	2.17
No. of Rural Public Phones (lakh)	0.14	0.38	0.38	0.00	0.38
Internet Connection (lakh)	0.06	0.20	0.19	0.41	0.42
No. of PCOs (lakh)	0.20	0.55	0.63	0.00	0.67
Mobile Capacity (lakh)	-	0.22	6.98	7.74	8.45
Mobile Connections (lakh)	-	2.40	5.71	7.61	9.10
WLL Capacity (lakh)	-	1.44	1.44	2.15	2.32
WLL Connections (lakh)	-	0.98	1.30	1.53	1.58



BSNL added 8 new telephone exchanges in 2007-08 and there are 9.64 lakh connections provided by BSNL, as on December 2007 (Table 4.16). The number of mobile connections registered a big leap from 7.61 lakh in 2006-07 to 9.10 lakh in 2007-08 (upto December). This constituted a growth rate of 20 percent. Similarly, WLL connections have also grown from 1.53 lakh in 2006-07 to 1.58 lakh by December, 2007. The internet connections have grown at an annual rate of 2 percent.

4.6 POSTAL COMMUNICATION

There are a total of 9054 post offices in the state, of which 8622 are rural and 432 are urban post offices. (Table 4.17) Of these post offices, while 8939 are permanent offices, 115 are temporary or experimental post offices. The postal reach is extended in the state through a network of 29,746 letter boxes and 911 post boxes. There has been a very sharp decline in the postal traffic in the state. The volume of letter mail and parcel traffic in the state declined by 95.7 crore between 2004-05 and 2005-06. (Table 4.18) Most significant part of decline comes from a very sharp fall of 91 percent in total unregistered domestically delivered letter mail which fell from 108.1 crores in 2004-05 to 9.5 crores in 2005-06. Even after this decline, the domestic traffic of unregistered mail accounts for almost 67 percent of total postal traffic in the state. There has been a fall in all other components of postal traffic, except the international dispatch of unregistered mail which increased by about 700 percent in 2005-06 over the previous year.

Table 4.17 : Postal Facilities in Bihar

Postal facilities (Nos.) (As on 31.03.2006)	Urban	Rural	Total
Post Offices	432	8622	9054
Departmental Post Offices	504	397	901
Extra Departmental Post Offices	35	7894	7929
Permanent Post Offices	411	8528	8939
Temporary/Experimental Post Offices	23	92	115
Night Post Offices	6	0	6
Letter Boxes	2718	27028	29746
Post Boxes	911	0	911

Source : Chief Postmaster General, Bihar Circle

Table 4.18 : Postal Traffic in Bihar

	2004-05			2005-06			% growth in Traffic
	Other than P&T Services	P&T Services	Total	Other than P&T Services	P&T Services	Total	
Total Unregistered Articles of Letter Mail (lakh)							
Domestic Delivered	10813.1	20.9	10834.0	931.0	19.2	950.3	(-) 91.23
International Dispatch	40.9	1.0	41.9	335.8	0.9	336.7	703.38
International Receipt	24.7	0.8	25.5	23.9	0.7	24.6	(-) 3.43
Total Registered Articles of Letter Mail (lakh)							
Domestic Delivered	72.6	6.0	78.6	68.9	5.7	74.6	(-) 5.06
International Dispatch	15.3	0.3	15.6	14.4	0.3	14.7	(-) 6.30
International Receipt	10.2	0.6	10.8	9.9	0.6	10.5	(-) 3.01
Total Parcels (lakh)							
Domestic Delivered	8.9	0.4	9.3	7.9	0.3	8.2	(-) 11.51
International Dispatch	1.1	0.1	1.2	1.0	(neg.)	1.0	(-) 11.76
International Receipt	1.3	(neg.)	1.3	1.0	(neg.)	1.0	(-) 17.25
Total	10988.1	30.1	11018.2	1393.8	27.7	1421.6	(-) 87.06

Source : Chief Postmaster General, Bihar Circle

Table 4.19 : Post Office Accounts in Bihar

Category of Accounts	No. of live Accounts (2006-07)	Amount (in Rs. Crore)		% Change
		As on 31.3.2006	As on 31.3.2007	
Savings	2631362	1161.49	1235.49	6.37
Recurring Deposits	1442974	561.21	589.79	5.09
Term Deposits	1243563	915.66	976.84	6.68
Monthly Income Scheme	1399181	1116.89	567.54	-49.19
Public Provident Fund	4143	31.4	29.02	-7.58
Senior Citizen's Account	5749	—	87.15	
Total	6726972	3786.65	3485.83	

Source : Chief Post-Master General, Bihar Circle

Though the total amount of postal traffic has seen reduction with the advent of private courier services and spread of internet facility, the post offices remain an important conduit of small savings in the state. A total of Rs. 3485.83 crore was mobilized in post offices with 67.27 lakh live accounts (Table 4.19). The amount saved in Savings, Recurring Deposits and Term Deposit accounts of the post offices have increase in 2005-06 as compared to 2004-05 by 6.37 percent, 5.09 percent and 6.87 percent respectively. However, there has been a significant fall in the savings generated by PPF accounts (49 percent) and MIS (Monthly Income Scheme) accounts by 7.57 percent. The overall impact has been a fall in savings by 7.94 percent.

CHAPTER V

SOCIAL SECTOR

In terms of human development, as measured by the Planning Commission in its National Human Development Report, 2001 (Table 5.1), Bihar was at the lowest position among the major states in India. This was so in 1981 and the situation continued to be unaltered in 1991 and 2001 as well. During the period after independence, Bihar remained highly disadvantaged in economic and human development in spite of the fact that the state enjoyed valuable mineral wealth. But with the creation of Jharkhand as a separate state, most of the valuable mineral resources have come under the jurisdiction of that state. As conditions stand today, Bihar can no longer depend on its natural wealth for economic progress which can come about mainly through the development of its human resources.

The development experiences of states like Kerala provide ample evidence that human resource development need not be constrained by lack of economic progress. It is possible for a state to leap frog in the matter of human and social development even while it remains economically backward. Rather, development of its human potential can subsequently become the medium that promotes economic development.

Table 5.1 : Human Development Index for Major States in India

States	1981	1991	2001
Andhra Pradesh	0.298 (9)	0.377 (9)	0.416 (10)
Assam	0.272 (10)	0.348 (10)	0.386 (14)
Bihar	0.237 (15)	0.308 (15)	0.367 (15)
Gujarat	0.360 (4)	0.431 (6)	0.479 (6)
Haryana	0.360 (5)	0.443 (5)	0.509 (5)
Karnataka	0.346 (6)	0.412 (7)	0.478 (7)
Kerala	0.500 (1)	0.591 (1)	0.638 (1)
Madhya Pradesh	0.245 (14)	0.328 (13)	0.394 (12)
Maharashtra	0.363 (3)	0.452 (4)	0.523 (4)
Orissa	0.267 (11)	0.345 (12)	0.404 (11)
Punjab	0.411 (2)	0.475 (2)	0.537 (2)
Rajasthan	0.256 (12)	0.347 (11)	0.424 (9)
Tamil Nadu	0.343 (7)	0.466 (3)	0.531 (3)
Uttar Pradesh	0.255 (13)	0.314 (14)	0.388 (13)
West Bengal	0.305 (8)	0.404 (8)	0.472 (8)
All India	0.302	0.381	0.472

Source : National Human Development Report, 2001, Planning Commission, New Delhi.

Note : Figures in bracket denote the ranks of the states.

In the following sections, a detailed survey of the developments in the social sector in Bihar has been presented emphasizing various aspects of social sector development like literacy and education, demography and health, labour, employment and poverty, rural development and *Panchayati Raj* and the development of the weaker and less empowered sections of society. Section 5.1 provides an overview of the status of education and literacy in the state focusing on social indicators, infrastructure and initiatives by the state government. It includes an evaluation of the Mid Day Meal Scheme in Bihar, the status of the literacy campaign in the state and the recommendations of the Common Schools System Commission. The emphasis of the policies of the present government has been on developing the health infrastructure and service delivery system in Bihar with the aim of an overall upliftment of the health profile of the people in the state. Section 5.2 provides a detailed assessment of the status of demography and health in Bihar based on relevant indices. Section 5.3 provides a detailed evaluation of the Integrated Child Development Scheme (ICDS) in Bihar, as this is the only programme that aims at taking care of the holistic needs of early childhood development, which in turn determines the trajectory of overall human development in the state. Section 5.4 highlights the status of health infrastructure in the state with an emphasis on the measures to enhance capacity and improve service delivery. Section 5.5 provides an evaluation of major programmes for poverty alleviation and employment generation like *Swarnjayanti Gram Swarozgar Yojana*, National Rural Employment Guarantee Programme and *Indira Awaas Yojana*. Section 5.6 highlights the initiatives of the state government to promote rural development and strengthen *Panchayati Raj* institutions. The last section, namely 5.7 summarises the special schemes being implemented in the state to ensure the development and empowerment of Scheduled Castes, Scheduled Tribes, Other Backward Classes, minorities, women, the disabled, and other marginalised social groups.

5.1 Education and Literacy

Education and skill development has been accorded high priority in the Eleventh Plan both to meet the needs of a growing economy and to promote social equality by empowering those currently excluded because of unequal access to education and skills to participate fully in the growth process. At present, public expenditure (Centre and States) on education is only around 3.6 percent of GDP. There is a need to raise this to about 6 percent.

The literacy rate or more specifically the female literacy rate is the single most crucial indicator of social development of a region. In terms of this indicator (Table 5.2), Bihar performs well below the national average and even below the levels attained in Jharkhand. The female literacy rate in Bihar in 2001 was only 33.6 percent as against a national average of 54.2 percent. The corresponding ratio for Jharkhand, Kerala and Punjab stood at 39.4 percent, 87.9 percent and 63.6 percent respectively. The figures indicate that Bihar is extremely backward in terms of human development and this can act as a major constraint in its efforts for overall economic development.

The districtwise literacy rate in Bihar as per the 2001 census may be seen from Appendix I. Appendix I also provides the genderwise break up of literacy rate and also literacy rates for SCs and STs. The districts having literacy rate above 50 percent are Siwan, Saram, Vaishali, Munger, Nalanda, Patna, Bhojpur, Buxar, Kaimur, Rohtas, Jehanabad, Aurangabad and Gaya. The district having the highest literacy rate is Patna with a literacy rate of 62.9 percent and the lowest level of literacy was found in Kishanganj district where the literacy rate was 31.1 percent.

Table 5.2 : Literacy Rates in Bihar, India and Selected States

Year		Bihar	Jharkhand	Kerala	Punjab	India
1991	Male	52.5	55.8	93.6	65.7	64.1
	Female	22.9	25.5	86.2	50.4	39.3
	Overall	37.7	40.7	89.9	58.1	52.2
2001	Male	60.3	67.9	94.2	75.6	75.9
	Female	33.6	39.4	87.9	63.6	54.2
	Overall	47.0	54.1	90.9	70.0	65.4

Source : Census Reports of 1991 and 2001.

Table 5.3 shows the dropout rates at various levels of school education in Bihar and selected states. The dropout rates in Bihar are about twice the level observed in Punjab and are also well above the national average. Appendix II shows the classwise number of children enrolled in primary and upper primary schools in Bihar during 2002-03, 2004-05 and 2006-07. The ratio of number of students of a particular category in Standard VIII to the number of students of the same category in Standard I can be taken as an indicator of the extent of dropout among that category of students. For the year 2006-07, this ratio was 17.09 percent for all students, 18.84 percent for

boys, 15.13 percent for girls, 10.78 percent for SCs and 10.82 percent for STs. This shows that the dropout rate is higher among girls as compared to boys although at the primary level drop-out rates are higher among boys (Table 5.3). Drop-out rates are significantly higher among SCs/STs as compared to the total population (Appendix II). However, there is little difference in the dropout rates for SCs as compared to STs.

One of the factors leading to dropouts in schools is the lack of adequate infrastructure facilities available in them. Appendix III shows the amount of infrastructure facilities available in schools in various districts of Bihar. The results show that in the state as a whole 89.1 percent of the schools have black boards, 3.6 percent have electricity, 36.2 percent have book banks, 33.6 percent have play grounds, 2.6 percent have computers and only in 48.9 percent of schools, teachers have some facilities of furniture. However, 90.2 percent of the schools have water supply.

Table 5.3 : Dropout Rates at Primary Level (2004-05)

States	Primary			Upper Primary	Secondary
	Total	Girls	Boys		
Bihar	51.59	48.62	53.37	74.69	83.06
Kerala	0.00	0.00	0.00	0.00	7.15
Punjab	23.96	19.91	27.42	33.67	44.06
All India	29.00	25.42	31.81	50.84	61.92

Source : 'Selected Educational Statistics, 2004-05', Ministry of Human Resource Development

According to a UNICEF study based on data collected from five districts in Bihar over three years (2000-02), if official work and holidays are taken together, a teacher spends only about two months of the year in the classroom. A combination of the factors, ranging from lack of monitoring teachers' performance to the involvement of teachers in a number of miscellaneous government duties, account for their poor attendance. The unsatisfactory functioning of schools is due to teacher absenteeism and also due to shortage of teachers. Keeping this in view, the state government has taken a decision to appoint 2.36 lakh elementary and secondary school teachers to clear the entire backlog of vacancies in this category.

Table 5.4 shows the percentage of persons in the 15+ age group distributed by levels of general education. The table reveals the backwardness of Bihar at all levels of school and vocational education. However, when it comes to the category of graduates and above, it can be seen that the gap narrows down which indicates the lopsided nature of educational development in the state where the progress of school and vocational development is neglected while higher education gets a better deal. The same pattern of development is observed when we examine the data of total enrolment by education levels as given in Table 5.5.

Table 5.4 : Percentage of Persons in 15+ Age Group by General Education Level (2004-05)

States	Not Literate	Literate up to Primary	Middle	Secondary	Higher Secondary	Diploma/ Certificate	Graduates & above
Rural							
Bihar	54.5	20.1	11.3	8.4	3.3	0.2	2.1
Kerala	10.3	27.9	31.2	15.2	6.0	5.3	4.1
All India	45.2	23.8	15.2	8.2	4.1	0.7	2.5
Urban							
Bihar	25.8	17.3	15.6	16.5	10.8	0.4	13.5
Kerala	6.6	23.3	28.3	15.8	7.3	7.4	11.1
All India	19.6	20.0	18.2	15.3	10.4	2.6	14.0
Combined							
Bihar	51.6	19.8	11.8	9.2	4.0	0.2	3.3
Kerala	9.4	26.8	30.5	15.4	6.3	5.8	5.8
All India	38.2	22.8	16.0	10.2	5.8	1.2	5.7

Source : Estimated from NSSO Report No. 517 on 'State of Education and Vocational Training in India'

Table 5.5 : Total Enrolment by Education Level ('000): 2002-03

School Level							
States	Pre-Primary	Primary	Middle	Secondary	Senior Secondary	Graduates & above	Total
Bihar	—	9414	1757	1231	16	560	12980
Jharkhand	—	2920	698	489	6	216	4329
Kerala	72	2496	1705	1477	92	245	6086
All India	5484	122136	46947	33303	1200	9516	218586

Source : 'Selected Educational Statistics, 2004-05', Ministry of Human Resource Development

Tables 5.6 and Table 5.7 show the level of enrolment in higher and professional education in Bihar and selected other states in India. Here again one notices a pattern of educational development in Bihar where the arts, science and commerce education in the state has been accorded greater importance while the state lags behind in the field of professional and technical education. For instance, the number of students enrolled in B.A., B.Sc. and B.Com courses in Bihar was 3.2, 1.6 and 5.2 times as high as compared to enrolment in these courses in Kerala. As against this, enrolment for Engineering Degree Course in Kerala was more than twice that in Bihar and level of enrolment in Medicine and related courses was almost at the same level in the two states.

Table 5.6 : Enrolment in Higher Education (2004-05)

States	Ph.D./D.Sc/ D.Phil.	M.A.	M.Sc.	M.Com.	B.A.	B.Sc.	B.Com
Bihar	2082	14581	11455	7711	220950	106566	127013
Jharkhand	524	4410	2274	3227	96717	39908	38677
Kerala	417	7443	8192	2591	68622	65905	24217
Punjab	475	13217	4234	1308	135591	21453	16386
All India	55352	469291	198719	122257	3772216	1490785	1465028

Source : 'Selected Educational Statistics, 2004-05', Ministry of Human Resource Development

Table 5.7 : Enrolment in Professional Education (2004-05)

States	Engineering Degree	Medicine etc.	B.Ed.	Poly- Technic	TTC	Tech. Ind. Arts & Crafts School
Bihar	9612	8441	9240	2823	32	14968
Jharkhand	8423	637	949	713	507	5688
Kerala	20862	8259	3317	28598	11632	60121
Punjab	17064	8744	4185	9779	1984	19067
All India	696609	256748	155192	388627	123933	742330

Source : 'Selected Educational Statistics, 2004-05', Ministry of Human Resource Development

The relative neglect of technical, medical and vocational education in Bihar can also be observed from a scrutiny of Table 5.8. It can be seen from this table that the number of Engineering / Architecture Degree Colleges in Bihar were only 7 as against 66 in Kerala and the number of Medical and related colleges in the two states was 23 and 40 respectively. While Kerala had more number of colleges providing Medical and Technical Education, the number of Arts and Science Colleges in Bihar was 4 times as that in Kerala. The number of Polytechnic Institutes was also low in Bihar (13) as compared to 56 in Kerala. The conclusion one can draw is that Bihar has

done comparatively better in providing Arts, Science and Commerce education and neglected the Technical, Medical and Vocational fields. This makes Bihar an ideal place for the proposed location of one new IIT and one new IIM during the Eleventh Plan period.

Table 5.8 : Number of Educational Institutions (2004-05)

States	University	Deemed University	Institutions of National Importance	Research Institutes	Arts, Science and Commerce Colleges	Engg./ Arch. Colleges
	1	2	3	4	5	6
Bihar	13	1	0	11	743	7
Jharkhand	5	3	0	1	117	5
Kerala	7	1	1	1	186	66
Punjab	7	2	1	0	212	27
All India	298	96	13	136	10377	1302
States	Medical/ Pharma/ Nursing Colleges etc.	Teacher Training Colleges	Law, IT, Management, MCA, Agriculture	Teacher Training Schools	Polytechnic Institutes	Tech./Ind. Arts & Crafts Schools
	7	8	9	10	11	12
Bihar	23	15	63	70	13	58
Jharkhand	8	9	8	27	10	36
Kerala	40	21	82	184	56	549
Punjab	49	24	51	26	19	181
All India	817	1082	2431	1465	1171	5114
States	Board of Intermediate Secondary Education	Junior Colleges Higher Sec. Schools	High/Post Basic Schools	Middle/ Senior Basic Schools	Primary/ Junior Basic Schools	Pre-Primary/ Pre Basic Schools
	13	14	15	16	17	18
Bihar	3	685	2944	10963	39347	1
Jharkhand	1	128	1068	4933	16572	0
Kerala	2	2309	3093	3049	6827	0
Punjab	1	1697	2283	2503	13352	2
All India	41	50272	101777	274731	767520	63596

Source : 'Selected Educational Statistics, 2004-05', Ministry of Human Resource Development

The sectorwise distribution of expenditure on education in Bihar can be seen from Table 5.9. The sectoral composition of revenue expenditure in Bihar and selected states and its distribution as between sectors such as general education, medical and public health and water and sanitation may be seen from Table 5.10.

Table 5.9 : Expenditure on Education in Bihar:2004-05 (Rs. crores)

Revenue Accounts	Plan	Non-Plan	Total
Elementary Education	225.08	2356.65	2581.74
Secondary Education	1.53	671.98	673.52
University & Other Higher Education	4.53	516.11	520.65
Adult Education	4.94	0.00	4.94
Language Development	0.08	57.35	57.43
General (research institute)	0.09	7.82	7.91
Physical Education	0.00	1.56	1.56
Technical Education	1.80	26.67	28.47
Total	238.05	3638.14	3876.22

Source : 'Analysis of Budget Expenditure on Education, 2006',
Ministry of Human Resource Development

Table 5.10 : Sectoral Composition of Revenue Expenditure (%)

States	General Education		Medical & Public Health		Water & Sanitation	
	2001-02	2006-07	2001-02	2006-07	2001-02	2006-07
Bihar	21.95	22.42	3.31	4.18	0.97	1.00
Jharkhand	20.18	18.20	4.62	6.30	2.27	1.36
Kerala	19.79	18.81	5.38	5.08	1.13	1.74
All India	16.99	16.99	4.26	4.22	1.77	1.61

Source : CMIE, Public Finance, 2006.

Scientific and Technical Education

To promote scientific and technical education, the Department of Science and Technology of the state government has undertaken the following actions :

- (a) Private sector initiatives for promoting technical education are being encouraged. No-objection certificates have been issued to eight private colleges to start new diploma and degree courses.
- (b) An MOU has been signed with the Indian Space Research Organisation (ISRO), Ahmedabad to upgrade and strengthen technical education and training.
- (c) A Central Instrumentation Centre with latest technological facilities has been proposed to attract teachers and postgraduate students towards research.

- (d) 'Scientific Foresight 2007' was organized in December 2007 in Patna as part of a series of programmes to create awareness among the population, especially the educated youth, about latest scientific developments.
- (e) A polytechnic college is being set up in Asthava, Nalanda. There is also a proposal to set up an engineering college in Chandi, Nalanda.
- (f) Scholarships and fellowships are being introduced to attract meritorious students towards scientific research.
- (g) Land in Bihta-Koilwar area has been for the proposed IIT in Bihar, approved by the Central Government.
- (h) The State government is in the process of reopening 3 engineering colleges that were taken over by the government.
- (i) New posts in Information Technology have been created in the state-run polytechnics and women's polytechnics. In addition, the vacant teaching posts in various technical institutions have been filled up on contract basis as an interim measure. Bihar Public Service Commission has been approached for making regular appointments to these posts.
- (j) A programme was organized in association with the Indo-Swedish Interaction Programme to highlight the latest use of nano-technology in the medical field.
- (k) Patna Industrial Training Institute, Digha Ghat, Patna will be administered on the basis of Public Private Partnership with B.I.T Mishra.
- (l) Six industrial training institutes in the state will be developed as Centres of Excellence in collaboration with the World Bank.

Common Schooling System Commission

The state government had constituted a Common Schooling System Commission in August, 2006. The Commission was asked to carry out a comprehensive study of the present school system in the state and then recommend a framework for Common Schooling System from the standpoint of children's fundamental 'Right to Free and Compulsory Education', under Article 21A of the Constitution. In particular, the Commission was expected to recommend norms and standards of

the schools and also work out its financial implications. In June, 2007, the Commission has submitted its Report, containing a number of extremely useful recommendations.

The Commission had set the target that the elementary education should be universalised in Bihar by 2012-13. For the universalisation of secondary education, the target year is 2015-16 and it was also planned to universalise senior secondary education by 2016-17. For attaining these goals, the Commission has estimated the number of required primary, middle and higher secondary schools in each year from 2008-09 to 2016-17. For the terminal year (2016-17), these estimates are — 64.1 thousand primary schools, 33.4 thousand middle schools (they will also have a primary section) and 21.7 thousand senior secondary schools. In addition, estimates have also been prepared for required number of teaching and non-teaching personnel. As regards financial implications, it was found that, to attain the objectives of universalisation of elementary and secondary education by 2016-17, the state has to substantially increase its present allocation for school education and then supplement it with resources from other sources, particularly the central government. The Commission has also prepared a draft bill which should be passed by the Legislature to provide a legal base to the Common School System.

Literacy Campaign

The literacy rate in Bihar is only 47.0 percent and it is the lowest among all the states of the country. A very large part of the illiterate population, both in Bihar and elsewhere, consists of the adult population. To address the literacy needs of this illiterate adults, the central government had established the National Literacy Mission (NLM) in 1988 which supports the efforts for adult literacy through a three-stage programme — Total Literacy Campaign (TLC), Post-Literacy Programme (PLP) and Continuing Education Programme (CEP).

In Bihar, the TLC was first launched in Madhepura in 1991, but it was only in 2002 when all the 38 districts had been covered by TLC. At present, 11 districts are still implementing the TLC, 24 districts have entered the PLP phase after completing TLC, and 3 districts are implementing CEP, the final phase of the programme. One of the special features of the CEP is the establishment of Nodal Continuing Education Centres (NCEC) and Continuing Education Centres (CEC). Out of a total number of 208 sanctioned NCECs in three districts (Bhojpur, Begusarai and Khagaria), 162 NCECs have already been established. Similarly, out of 2090 CECs sanctioned in those districts,

1625 CECs have already been established. In recent years, the state government has taken the following initiatives to strengthen the adult literacy campaign in the state :

- (a) The State Literacy Mission Authority (SLMA) has been constituted to guide the literacy campaign in the state and also monitor its progress.
- (b) To supplement the efforts of NLM, the state government has also planned *Mukhyamantri Shaksharata Karyakram* to enhance the literacy rate of the state. The state government has also allocated substantial fund to impart skill-development training to the neo-literates.
- (c) The state government has prepared detailed plans to impart literacy to non-literate *Panchayati Raj* representatives. All the districts have been asked to prepare complete list of non-literate *Panchayati Raj* representatives, so that further actions can be undertaken in this direction. There is also a plan to impart literacy to non-literate jail inmates in the state.
- (d) The temporary functionaries of the Directorate of Mass Education (DME) have been made permanent. Further, the retrenched staff members of the Department have been absorbed in other departments of the state administration.
- (e) A two day state level workshop titled *Bihar Mein Saksharta Abhiyan: Nayi Disha, Nayi Pahal* was organised on January 26-27, 2008 in Patna by the State Literacy Mission Authority, Government of Bihar, to explore new avenues and innovations for the literacy campaign in the state.

Mid-Day Meal Scheme (MDMS)

The MDMS adopts a 'Right Based Approach', rather than a 'Need Based Approach', for enhancement of children's nutrition, educational advancement, social equity and hygiene and sanitation.

From 1995 to 2004, a dry ration of 3 kgs was given to all children. In 2003-04, cooked meals were introduced in 30 blocks of 10 districts in Bihar. In 2004-05, a dry ration of 2 kgs to children was introduced in areas not covered by cooked meals. From January 1, 2005, the MDMS was universalized in Bihar covering all primary schools including learning centres. At the school level, *Vidyalaya Shiksha Samitis* (VSS) are responsible for implementation of the scheme. The average cost of a meal for a child is Rs. 3.61. The costs of foodgrains, pulses and oil and condiments account for 75 percent of the total cost of a meal (Table 5.11). Presently, 72 percent of the cost is

covered by contribution from the Centre while the state's share is 28 percent. The optional menu designed for the scheme contains 11 items.

Table 5.11 : Cost of MDMS Meal (Per Day Per Child)

Items	Cost in Rs.	Cost in Percentage
(1) Foodgrains (100 gms gram)	1.11	30.7
(2) Oil & Condiments	0.60	16.6
(3) Pulses (30 gram)	1.00	27.7
(4) Transport subsidy	0.15	4.2
(5) Fuel	0.25	6.9
(6) Labour	0.50	13.9
Total	3.61	100.0

Source : Directorate of MDMS, Ministry of Human Resource Development, Government of Bihar

At the school level, there were 1,12,926 cooks and helpers in April 2007, 80 percent of whom were women. 60 percent of cooks and helpers were of Scheduled Caste origin and 5 percent were from Scheduled Tribes. The cooks and helpers are paid Rs. 2500 per month. The cooks are appointed by the *Village Shiksha Samity* and a preference is given to candidates of SC/ST origin.

In 2006, 62 percent of enrolled students in government and government aided schools were covered under MDMS. The coverage was very low in Alternative and Innovative Education Centres (AIE) where only 3.5 percent of enrolled students were covered. Overall, MDMS has reached 60 percent of enrolled students (Table 5.12). However, out of a total allocation of 211906.97 qntls of foodgrains, only 90276.61 qntls (42.6 percent) were lifted in 2006-07.

Table 5.12 : MDMS Coverage (2006-07)

Type of Institution	No of Institution	Enrolment in Lakh	Beneficiaries in Lakh	Percentage of Beneficiaries
Government Schools	50257	114.24	72.18	61.84
Government Aided Schools	988	2.56		
NewSchools	10468	7.58	3.93	51.84
AIE Centres	3537	2.00	0.12	3.50
Total	65250	126.38	76.23	60.28

Source : Directorate of MDMS, Ministry of Human Resource Development, Government of Bihar

Monitoring at the state level is carried out by a Steering Committee headed by the Chief Secretary. Members include officials from health, Integrated Child Development Services (ICDS) and State Food Corporation (SFC), and other representatives. At the District level a similar committee is headed by the DM with members from health, ICDS, SFC, education and other representatives. The state government has proposed block and village level monitoring along with sample quality checking of raw material, especially foodgrains. The following problems are generally encountered in the implementation of MDMS :

- Delay in release of transportation cost;
- Problems with local State Food Corporation store;
- Teachers time being devoted more on meal than on teaching;
- Children concentrating more on meal than learning;
- Space taken for storage of food grains and cooking in the school compound;
- Children carrying utensils and unethical distributions practices;
- Bottlenecks in transportation from PDS to schools

To improve the implementation of MDMS, the state government has recently taken the following decisions :

- State share increased from Rs 0.64 to Rs 1.00 from 1 April 2007;
- Within overall supervision by the *Village Shiksha Samity* (VSS), food is to be cooked and distributed by *Mata Samitis* (MS) and Self Help Groups (SHG). Teachers are to be de-linked from the task as far as possible;
- VSS/MS/SHG are to lift grain from the Public Distribution System. A payment of Rs. 20 per quintal will be paid for this purpose. They may lift grain directly from SFC storage facilities and in this case they will be paid Rs. 35 per quintal;
- A pilot community kitchen project has been started in the urban areas of Patna and Vaishali district;
- All children are to be supplied with plates that will be stored in schools.

The achievements of the government of Bihar in the field of education are outlined below :

- 2.11 lakh Primary teachers (including *shiksha mitras*), 7575 Physical education teachers and 11458 Urdu teachers have been appointed.

- Boundary wall of 14000 schools and extra rooms in 20000 primary schools have been completed under *Mukhyamantri Samagra Vidyalaya Vikas Karyakram*. In addition, educational tours for 19566 children of middle schools have been organized.
- Rs. 63.39 crore for *Mukhyamantri Balika Poshak Yojana* and Rs. 35.86 crore for *Mukhyamantri Balika Cycle Yojana* have been allocated. Under these schemes, financial assistance is provided to girl students to procure school uniforms and cycles.
- Free distribution of textbooks among all girl students of Standard I-VIII and all students belonging to SC/ST is done.
- Constitution of *Meena Manch* and organization of *Meena Rangmanch* for the empowerment of girl students of all secondary schools has been undertaken.
- Altogether 1,26,38,427 students of Standard I-V have benefited under Midday Meal Scheme.
- 15521 new primary schools have been opened and another 6928 upgraded into middle schools.
- 10000 secondary teachers and 500 higher secondary teachers have been appointed.
- 250 middle schools, 250 project girl schools have been upgraded into Plus-2 level.
- Chanakya National Law University has been established and enrollment of its second batch of students is complete.
- Action has been initiated to establish a residential university of international standards (University of Nalanda) and Chandragupta Management Institute and Aryabhatta University of national level in the state.

5.2 Demography and Health

Bihar had a population of 83.0 million in 2001 which, as per the estimate of the Central Statistical Organisation (CSO), has increased to 93.1 million in 2007. The state has a decadal population growth rate of 28.62 percent (1991-2001), the highest among all the states in India, the national growth rate being 21.11 percent. Of its total population, no less than 89.5 per cent live in rural area, making the state the least urbanized among all the major states in India. The sex ratio in Bihar at 919 females per thousand males is slightly lower than the national ratio at 933, but the juvenile sex ratio in Bihar is higher than the national figure. Of its total population, 83.23 percent are Hindus, 16.53 percent Muslims, 0.06 percent Christian, 0.02 percent Sikhs, 0.02 percent Buddhists and 0.02 percent were Jains. As regards the age distribution of population, Bihar has larger percentage of population at lower age groups of 0-6 and 7-14 years, primarily because of high birth rates. These demographic characteristics of the state are outlined in Tables 5.13 to 5.15.

Table 5.13 : Demographic Profile of Bihar

		Bihar		India	
		1991	2001	1991	2001
1	Population (Million)	65.1	83.0	838	1029
2	Rural Population (%)	89.60	89.54	74.3	72.2
3	Sex Ratio (Females/1000 Males) All	907	919	927	933
4	Sex Ratio (Females/1000 Males) (0-6 yrs)	959	942	945	927
5	Age Distribution of Population (0-6 yrs)	13.5	20.2	12.2	10.7
6	Work Participation Ratio				
	Male (Rural)	48.5	40.8	36.2	44.3
	Male (Urban)	41.7	37.6	48.6	47.2
	Male (All)	47.6	47.4	40.9	45.1
	Female (Rural)	10.8	9.4	18.6	16.7
	Female (Urban)	4.3	4.7	8.1	9.4
	Female (All)	11.8	18.8	15.9	14.7
7	Schedule Caste of Population (%)	15.47	15.72	16.48	16.2
8	Schedule Tribes of Population (%)	0.89	0.91	8.08	8.20
9	Sectoral Distribution of Main Workers				
	Cultivators	43.6	29.3	38.7	31.7
	Agricultural Labourers	37.1	48.0	26.1	26.5
	Household Industry Workers	1.7	3.9	2.4	4.2
	Other Workers	17.6	18.8	32.8	37.6
	All Workers	100.00	100.00	100.00	100.00

Source : Census Reports

Table 5.14 : Classification of Population According to Religion (2001 Census)

Sl. No.	Community	Bihar		India	
		Population	Percentage	Population	Percentage
1	Hindus	69076919	83.23	827578868	80.46
2	Muslims	13722048	16.53	138188240	13.43
3	Christians	53137	0.06	24080016	2.34
4	Sikhs	20780	0.02	19215730	1.87
5	Buddhists	18818	0.02	7955207	0.77
6	Jains	16085	0.02	4225053	0.41
7	Other Religious Persons	52905	0.06	6639626	0.65
8	Religion not Stated	37817	0.05	727588	0.07

Source : Census Reports

Table 5.15 : Age-wise Classification of Population (2001 Census)

Age Group	Bihar		
	Total	Male	Female
1	2	3	4
0-4	13.3	13.0	13.5
5-9	15.4	15.5	15.3
10-14	13.3	13.8	12.8
15-19	8.7	9.3	7.9
20-24	7.6	7.3	7.9
25-29	7.1	6.7	7.6
30-34	6.7	6.3	7.1
35-39	6.1	6.0	6.3
40-44	5.0	5.1	4.9
45-49	4.2	4.1	4.2
50-54	3.3	3.6	2.9
55-59	2.5	2.3	2.7
60-64	2.5	2.6	2.5
65-69	1.6	1.6	1.7
70-74	1.2	1.3	1.2
75-79	0.5	0.5	0.5
80+	0.7	0.7	0.6
Age Not Stated	0.2	0.0	0.2
All Ages group	100.0	100.0	100.0

Source : Census Reports

Good health is both an end in itself and also contributes to economic growth. Meeting the health needs of the population requires a comprehensive and sustained approach. To ensure affordable health services of reasonable quality, the Eleventh Plan proposes to strengthen all aspects of the healthcare system – preventive, promotional, curative, palliative and rehabilitative. This will be accompanied by emphasis on access to clean drinking water, sanitation, diet, hygiene and feeding practices which also significantly affect the health status of the people. Public health spending is expected to be raised to at least 2 percent of GDP during the Eleventh Plan period.

Demographic indicators are also found to be unfavourable in the state of Bihar and show characteristics of a highly disadvantaged state. The birth rate in Bihar in 2005 was high 30.4, as against a national average of 23.8 and 18.1 for Punjab (Table 5.16). The death rate at 8.1 was also

comparatively high in Bihar as against a national average of 7.6 and Punjab's 6.7. With such high birth rate, the rate of population growth stands at 2.23 percent per annum against a national average of 1.63 percent, still lower at 1.14 and 0.87 percent for Punjab and Kerala respectively.

Table 5.16 : Birth Rate, Death Rate and Natural Population Growth Rate, 2005

States	Birth Rate			Death Rate			Natural Population Growth Rate		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Bihar	30.4	31.2	23.8	8.1	8.3	6.6	22.3	22.9	17.2
Jharkhand	26.8	28.8	18.7	7.9	8.4	5.7	18.9	20.4	13.0
Kerala	15.0	15.1	14.8	6.4	6.3	6.5	8.7	8.8	8.2
Punjab	18.1	18.8	17.0	6.7	7.2	5.8	11.4	11.6	11.2
All India	23.8	25.6	19.1	7.6	8.1	6.0	16.3	17.5	13.1

Source : National Institute of Public Cooperation and Child Development (NIPCCD), Statistics on Women in India, 2007

Another characteristic of a backward state which is evident in Bihar is the high Infant Mortality Rate (IMR). The IMR for Bihar in 2005 was 61 per 1000 live births against a national average of 58 and much lower levels of 44 and 14 observed in Punjab and Kerala respectively (Table 5.17). The Child Mortality Rate in Bihar in 2000 was also high at 34.7 per thousand live births against a national average of 29.3.

Table 5.17 : Infant Mortality Rate (2005) and Child Mortality Rate (2000)

States	Infant Mortality Rate (IMR) 2002 (as 1000 live births)			Infant Mortality Rate (IMR) 2005 (as 1000 live births)			Child Mortality 2000 (as 1000 live births)	
	Total	Male	Female	Total	Rural	Urban	Child Mortality	Under Five Mortality
Bihar	61	56	66	61	62	47	34.7	105.1
Jharkhand	41	44	37	50	53	33	-	-
Kerala	10	9	12	14	15	12	2.6	18.8
Punjab	51	38	66	44	49	37	15.9	72.1
All India	63	62	65	58	64	40	29.3	94.9

Source : National Institute of Public Cooperation and Child Development (NIPCCD), Statistics on Women in India, 2007

The expectation of life at birth for males in Bihar (65.66 years) was higher than the national average (63.87 years), but lower than that of Punjab and Kerala where it was 69.78 years and 71.67 years respectively. (Table 5.18) The sex ratio in Bihar of 919 females per 1000 males compares favourably with that of Punjab (876) but was still below the national average of 933. The sex ratio can be considered as an indicator of the status of women and Kerala is the only state in India where it is favourable to females (1058).

Table 5.18 : Sex Ratio, Expectation of life at Birth, Maternal Mortality Rate, 2001-2006

States	Sex Ratio 2001	Expectation of Life at Birth 2001-2006		Maternal Mortality Rate (per 1,00,000 Live Births) 2003
	Total	Male	Female	
Bihar	919	65.66	64.79	371
Jharkhand	941	-	-	371
Kerala	1058	71.67	75.00	110
Punjab	876	69.78	72.00	178
All India	933	63.87	66.91	301

Source : National Institute of Public Cooperation and Child Development (NIPCCD), Statistics on Women in India, 2007

The data on the number of Primary Health Centres and Community Health Centres in selected states of India can be seen in Table 5.19. The proportion of births assisted by a doctor/nurse/health personnel in Bihar was only 30.9 percent, much lower than the all India figure of 48.3 percent (Table 5.20). The number of institutional deliveries in Bihar was also low (22.0 percent) which was only a little over half the level observed in the country as a whole (40.7 percent). The picture emerging from the list of social indicators examined reveals a situation of very unfavourable performance of the state of Bihar on virtually all indicators of social development.

Table 5.19 : Number of Primary Health Centres and Community Health Centres, 2005

States	Sub Centres	Primary Health Centres	Community Health Centres
Bihar	10337	1648	101
Jharkhand	4462	561	47
Kerala	5094	911	106
Punjab	2858	484	116
All India	146026	23236	3346

Source : National Institute of Public Cooperation and Child Development (NIPCCD), Statistics on Women in India, 2007

Table 5.20 : Safe Delivery and Assisted Delivery among Women, 2006

States	Births Assisted by Doctor/Nurse/Health Personnel (%)			Institutional Deliveries (%)		
	Total	Rural	Urban	Total	Rural	Urban
Bihar	30.9	27.6	56.1	22.0	18.6	47.7
Jharkhand	28.7	20.8	62.2	19.2	11.0	54.1
Kerala	99.7	95.5	100.0	99.5	99.3	100.0
Punjab	68.6	67.4	70.7	52.5	48.4	60.2
All India	48.3	39.1	75.2	40.7	31.1	69.4

Source : National Institute of Public Cooperation and Child Development (NIPCCD), Statistics on Women in India, 2007

A report of the Special Task Force on Bihar, entitled ‘Road Map for Development of Health Sector’, notes that there are substantial gaps in sub-Centres, primary health Centres, and a very large gap in community health Centres along with shortage of manpower, drugs and equipments necessary for primary health care and woefully inadequate training facilities. Other factors affecting the health status include: very high fertility rate; low level of institutional deliveries and a high level of maternal deaths; very low coverage of full immunization; low level of female literacy; and poor status of family planning programme. The Report also notes that the state has launched a variety of programmes to reduce morbidity and mortality rates and these programmes are at various stages of implementation. These programmes broadly cover the following : *Janani Evam Bal Suraksha Yojana* under the overall umbrella of the National Rural Health Mission, Anaemia Control Programme, Blindness Control Programme, Vitamin–A Supplementation Programme, Routine Immunization, Programme for Elimination of Iodine Deficiency Disorders, Revised National Tuberculosis Control Programme, National Leprosy Eradication Programme, *Kala Azar* Eradication Programme, etc.

The achievements of the present government in Bihar in the Health Sector are outlined below :

- The number of patients coming to government hospitals, as well as the number of institutional deliveries, have shown a remarkable increase in the last two years. This is reflective of the growing confidence of the people in the public health care system.
- 134 X-ray units and 276 Pathology laboratories have been established in government hospitals through public private partnership.
- Dial 102 Service for Ambulance in case of accident and emergencies has been started.

- 662 new additional PHCs and 3106 sub-Centres have been sanctioned.
- 9726 new appointments of doctors and paramedics including, ANM and Grade-A nurses have been made.
- A scheme of upgrading 11 district hospitals to 200 bedded hospitals, 18 district hospitals to 300 bedded hospitals and 9 district hospitals to 500 bedded hospitals has been sanctioned.
- To ensure 100 percent immunization and institutional deliveries, a special campaign *Muskaan ek Abhiyan* has been launched. In April, 2006, the number of institutional deliveries was 3200. This has increased to 90102 in October, 2007.
- 3 new Medical Colleges have been sanctioned in Nalanda, Madhepura and West Champaran.
- As a result of upgradation of facilities, the number of patients visiting per government hospital per month has registered a remarkable increase. According to the State Data Centre of the State Health Society, in January, 2006 it was 39 patients per month per government hospital. This has increased to 4513 patients per month per government hospital in October, 2007.

5.3 Integrated Child Development Services (ICDS)

The ICDS programme was started in 1975 and has evolved into one of the world's largest and most unique outreach programmes for early childhood development. In its present form, the programme provides an integrated approach for converging basic services for improved childcare, early stimulation and learning, health and nutrition, water and environmental sanitation. The young children, and expectant and nursing mothers are the targeted beneficiaries of the scheme. The targeted population is reached through trained community-based *Anganwadi* workers and helpers, and supportive community structures. ICDS is powerful outreach programme to help achieve major national nutrition and health goals. These are embodied in the National Plan of Action for Children. It also contributes to the national goal of universal primary education. Specifically, the ICDS covers the following services — Health (Immunisation, Health Check-ups, Referral Services and Treatment of minor illness), Nutrition (Supplementary feeding, Growth monitoring and promotion, Nutrition and Health Education) and Early Childhood Care and Pre-School Education (to children in the age-group 3-6 years).

By 2007-08, 544 ICDS projects were operational in Bihar covering all development blocks. Thus 151 projects were added to the fold of ICDS in this year (Table 5.21). In these projects, 80211 *Anganwadi Centres (AWC)* are operational against the target of 80771.

Table 5.21 : Implementation of ICDS in Bihar

Year	Number of ICDS Projects	
	Sanctioned	Operational
2003-04	393	393
2006-07	532	393
2007-08	544	544

Source: ICDS Directorate, Government of Bihar

The actual number of *Anganwadi* workers and helpers amount to 99.3 percent of the sanctioned posts (Table 5.22). Thus, at the level of the AWCs, the staffing is adequate. However, there is a serious shortage of supervisory personnel. The actual strength as a percentage for sanctioned strength is just 14.3 percent for Lady Supervisors and 33.8 percent for CDPOs (Child Development Project Officers), the executive officers at the project level in the block. There is also shortage of statistical officers and other personnel at the state level.

Table 5.22 : Staffing Position for ICDS

Posts	Sanctioned Strength	Actual Strength	Actual as a Percentage of Sanctioned Strength
CDPO	544	184	33.8
Lady Supervisor	3294	471	14.3
<i>Anganwadi</i> Worker	80771	80221	99.3
<i>Anganwadi</i> Helper	80771	80221	99.3

Source: ICDS Directorate, Government of Bihar

The services being provided through the 80211 *Anganwadi* Centres are as follows :

- (a) Improve the nutritional and health status of children below the age of six years.
- (b) Lay the foundation for the proper psychological, physical and social development of the child.
- (c) Reduce the incidence of mortality, morbidity, malnutrition and school dropouts.
- (d) Achieve effective coordination of policy and implementation among various departments to promote child development.
- (e) Enhance the capability of the mother to look after the normal health and nutritional needs of the child, through proper health and nutrition education.

Only about a little over half of the budgeted funds for ICDS are actually released to Bihar (Table 5.23). The highest proportion of funds (65 percent) was released in 2004-05. In 2007-08, it is likely that at least 60 percent of budgeted funds will be released considering that 56.4 percent had

already been released by November. In 2004-05, almost 92 percent of funds released were actually spent. But in 2005-06, the actual expenditure exceeded released funds by 97 percent. In 2006-07, this gap narrowed considerably but expenditure still exceeded funds released by 10.3 percent. In 2007-08, however, there has been under-utilisation of funds till November with expenditure at 62.5 percent of released funds. The budget for ICDS in Bihar almost doubled in 2005-06 compared to 2004-05. However, the actual budget for ICDS has been cut down from Rs. 601.3 crores in 2006-07 to Rs. 468.1 crore in 2007-08. The expenditure patterns as a percentage of budget have fluctuated from 60 to 84 percent between 2004-05 and 2006-07.

Table 5.23 : Resource Utilisation in ICDS In Rs. Lakh

Items	2004-05	2005-06	2006-07	2007-08 *
Total Budget for ICDS Bihar	23874.22	43268.27	60130.05	46806.05
Total Amount of Funds Released to Bihar	15524.44	18393.33	36931.04	26378.47
Total Expenditure Reported by Bihar	14234.37	36238.58	40729.5	16490.7
Fund Released as Percentage of Budget	65.0	42.5	61.4	56.4
Expenditure as Percentage of Fund Released	91.7	197.0	110.3	62.5
Expenditure as a Percentage of Budget	59.6	83.8	67.7	35.2

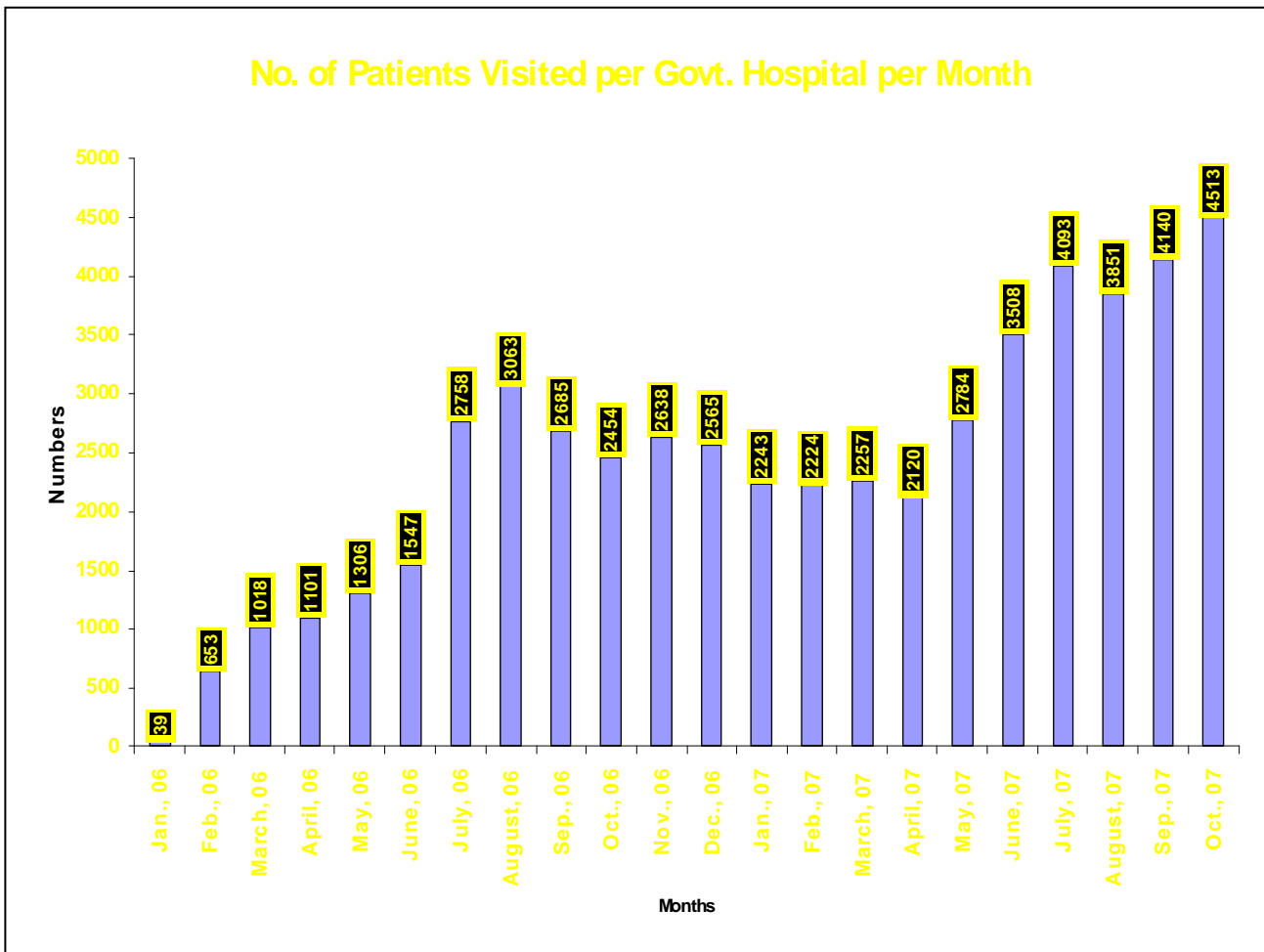
Source: ICDS Directorate, Government of Bihar

* Figures are up to November

The functioning of ICDS in the state would greatly improve if the Centre can reduce delays in transfer of funds, and if the inadequacy of funds for the Supplementary Nutrition Project (SNP) can be overcome. In addition, the staffing situation also needs improvement with additional recruitment.

5.4 Health Infrastructure

The reforms in the health sector Bihar since November 2005 started in a scenario where 11 percent of children received full immunization (NFHS II). There were low turnouts at Out Patient Departments (OPD) in rural Bihar, 95 percent of patients went to private doctors for treatment while only 5 percent used the government facilities. Since then, Bihar has come a long way registering visit of 4513 patients per government health facility per month on an average. The number of patients visiting each government hospitals increased from 39 per month in January 2006 to 4513 per month in October 2007.



The status of health infrastructure in the state is revealed in the table below. Coverage through health sub centres is 53 percent of the required norm. 75 percent of required Primary Health Centres and 45 percent of required Additional Primary Health Centres are functioning. Coverage of referral and sub-divisional hospitals are very low at 11 percent and 23 percent respectively. In comparison, district hospitals are in a better state with 63 percent functioning.

From the status of health infrastructure in the state (Table 5.24), it can be observed that, under the norm of a Health Sub-centre for every 5000 persons, Bihar requires 16576 Sub-centres. At present, it has 8858 of them, implying a coverage of 54 percent. The coverage for other types of centres are — Primary Health Centre (50 percent), Referral Hospital (11 percent), Sub-divisional Hospitals (23 percent) and District Hospitals (67 percent).

Table 5.24 : Status of Health Infrastructure (as on January 2008)

Centres	Norms	Required Number	Existing Functional	Coverage Percentage
Health Sub Centre	1 for every 5000 persons	16576	8858	54
Primary Health Centres	1 for every 30000 persons	533	398 (PHC – Corresponds to Blocks)	75
		2764	1243 (Additional PHCs)	45
Referral Hospitals	1 for every 120000 persons	619	70	11
Sub-Divisional Hospitals		101	23	23
District Hospitals		38	24	63

Source : State Health Society, Bihar

The goal this year is to provide quality and affordable 24-hour service upto the block level. A multi-pronged strategy has been adopted for this, consisting of — (a) Strengthening Infrastructure, (b) Proper Human Resource Management, (c) Involving Private Sector in Support Services, (d) Free Drug Distribution, (e) Intensive Implementation of *Janani Evam Bal Suraksha Yojana*, (f) Strengthening of Routine Immunisation and Pulse Polio Programme and (g) Improving Monitoring and Evaluation

Strengthening Infrastructure

A sum of Rs. 222 crore has been invested so far to build up and enhance infrastructure in health. From Table 5.25, it can be observed that resources have been evenly distributed to build up infrastructure from the PHCs to the district hospitals. A State Health Resource Centre is being set up for which the tendering process has been completed.

Table 5.25 : Investment in Health Infrastructure (Upto January 2008)

Health Facilities	Number	Unit Cost of Construction (Rs.)
Construction of New Health Facilities		
Health Sub Centres	751	6.4 lakh
PHCs	62	60 lakh
Sub Divisional Hospitals	20	4.91 crore
District Hospitals	11	6.42 crore
Intensive Care Units (ICU)	22	34 lakh
FRUs	76	
Upgradation of Health Facilities		
PHCs	398	23 lakh
Additional PHCs	73	24 lakh
Sub-divisional Hospitals	23	95 lakh
District Hospitals	27	95 lakh
Referral Hospitals	15	2.43 crore

Source : State Health Society , Bihar

Human Resource Management

The available human resource has been re-organised to enhance effective deployment. The government has taken a conscious decision to provide 24-hours services at PHCs by redeploying staff from the APHCs. The power to transfer doctors has been delegated to the District Magistrate.

In additions, the total number of ASHAs (Accredited Social Health Activist) to be appointed in the state over the entire period of the National Rural Health Mission is 74313. Of these, 66710 ASHAs have been selected so far. Orientation training has been provided to 56545 of them. The rest of the first round of trainings will be completed by 2008. The training of 2nd, 3rd, and 4th module will be completed in one go. Trainings will be conducted with the help of the Department of Public Health Engineering and related NGOs. The required training material has been translated and adapted according to the state's need. ASHAs are to be given reading material in the form of flip charts for better understanding and dissemination of key health messages among the villagers.

Involving Private Sector in Support Services

All district hospitals will have laboratories and collection centres have been set up at all PHCs. Reports of diagnostic tests are available within 24 hours. Of the 38 districts in the state, two private partners have been allocated 19 districts each to provide pathological services. For radiology, all 38 districts have been allocated to one private partner and 134 such units are already functional. Space has been provided to the private parties against rent. The patients from government hospitals are to be charged for identified tests as per fixed rates for both pathology and radiology. These are minimal user charges. The private parties are free to charge as per their rates for other tests. The parties are also free to charge for all the tests as per their rates from private patients.

For maintenance of hospital premises, centralized rate contract has been finalized and each district has been given three private parties to choose from. All 38 districts have started using these services, consisting of — Generator Facility, Cleaning Services, Washing, Diet.

Free Drug Distribution and Indoor Treatment

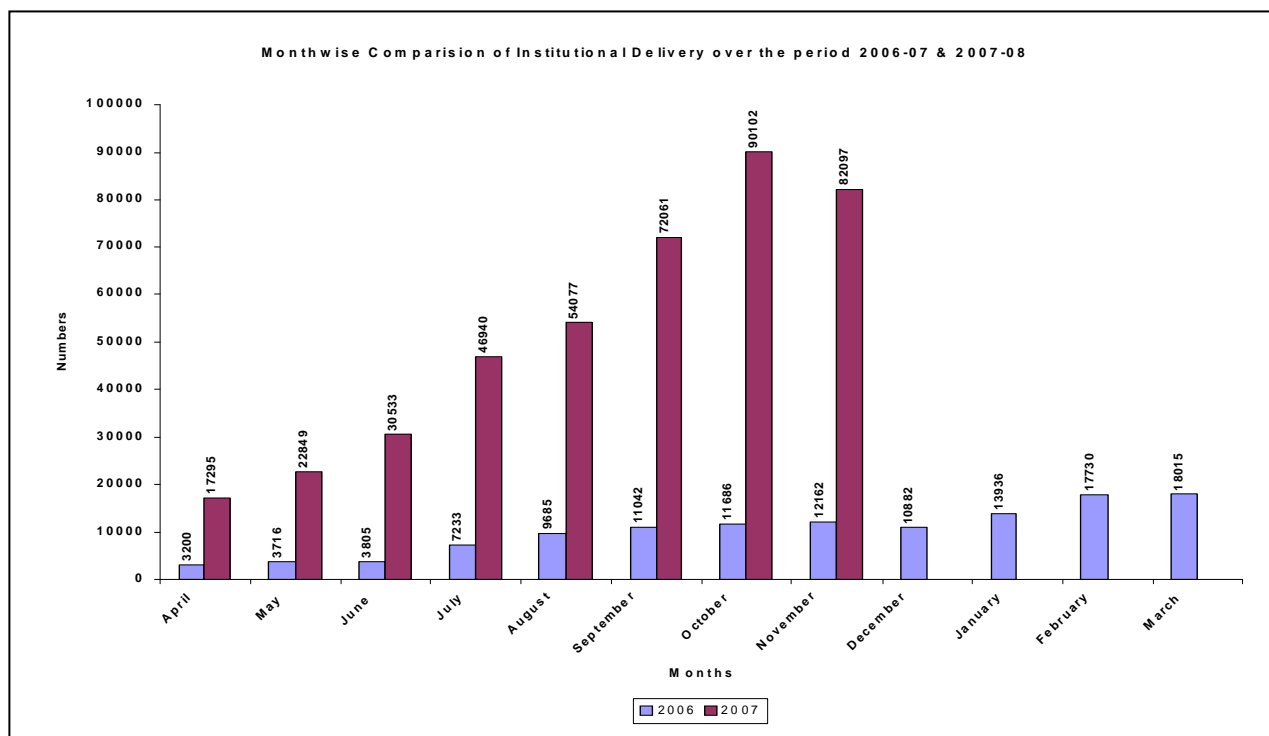
Free medicines are being distributed regularly since July 1, 2006. Initially this consisted of 13 essential OPD (Out-patient Department) drugs and 24 IPD (In-patient Department) drugs. This has

been subsequently expanded to cover 33 OPD and 107 IPD drugs along with all drugs under national programmes. Indoor treatment is being provided free of cost in all district hospitals. ICU facilities have been introduced in select district hospitals.

Janani Evam Bal Suraksha Yojana (JBSY)

Janani Evam Bal Suraksha Yojana was launched on July 1, 2006. The total amount disbursed under this scheme is Rs. 40 crore. The number of institutional deliveries went up very rapidly and is estimated to be approximately 6 lakhs in 2007-08. The progress in 2007 compared to 2006 in number of institutional deliveries is phenomenal (See graph). In October 2007, 90102 institutional deliveries took place compared to just 11686 in October 2006. The payments of Rs 1400 in rural areas and Rs 1000 in urban areas to mothers of neonatals availing institutional delivery have acted as a strong incentive.

The unprecedented success of JBSY has necessitated upgradation of labour rooms in all centres, upto the PHC level. Detailed guidelines for upgradation has been disseminated in the monthly meetings of Civil Surgeons. Efforts are being made to increase recruitment to cater to these facilities. Trainings are also being organized for skill upgradation of existing staff.



Routine Immunization and Pulse Polio Programme

2006 was declared as 'Routine Immunization Year' by the Chief Minister. In addition to Wednesday, Friday has been declared as a RI day. An alternate vaccine delivery system was instituted to reach remote areas. Vaccines were delivered at the door steps of the ANM on the morning of Immunization day. The vaccines were sent by motorcycle/ bicycle couriers from PHCs to sub-Centres. In the evening, empty vials and reports were collected by the same courier.

400 ANMs were appointed on a contract basis on per session basis to fill ANM gap in the state. Mobile RI campaigns were organized to reach inaccessible areas. In each PHC, 2 vans (totalling 800) were mobilized to reach inaccessible and unreached areas. Each van had one Medical Officer, 2 ANMs and 1 Supervisor. Each van covered 2 hard-to-reach areas per day. Approximately 20 percent of total villages in the state were covered and approximately 16 lakh doses of vaccines were administered. This included approximately 1.5 lakh new children.

The Polio campaigns were used for the purpose of identification of newborns. In this context, the state has launched the *Muskaan: Ek Abhiyan* project. Under this project, extensive network of AWW (*Anganwadi Worker*), ASHA and ANM are to be used for starting and maintaining a system for tracking new born and pregnant women. Proper incentive are being designed for achieving 100 percent immunization. A facilitywise reward system is also being institutionalized where all the staff will divide the prize money among themselves.

Monitoring and Evaluation

Monitoring and evaluation practices have been designed. A State Data Centre has been established for state level monitoring. Routine monitoring of number of OPD patients, deliveries, drug stock position and number of patients treated by each doctor are carried out. Data Centres at district, sub divisional and PHC level are being started. Monitoring team consisting of Deputy Directors and Programme Officers are sent to districts according to programme requirements. Monthly review meetings of Civil Surgeons are held at the state level. Third Party Evaluation has been proposed through institutes of repute. Cell phone facility is being extended to all health functionaries. Attendance monitoring system is being installed right across the health care system from PHCs to Medical college Hospitals.

5.5 Labour, Employment and Poverty

It is well known that the incidence of poverty is very high in Bihar. Estimates of poverty by the NSSO surveys, also establishes this point. The incidence of poverty in Bihar has come down from a level of 62.2 per cent in 1983-84 to 41.4 percent in 2004-05 (Table 5.26). Nevertheless, the poverty ratio for 2004-05 is still quite high compared to the corresponding figure of 27.5 per cent for the country as a whole.

Table 5.26 : Poverty Ratios in Bihar and India

Sector	Year	Bihar	India
Rural	1983-84	64.4	45.7
	1987-88	52.6	39.1
	1993-94	58.2	37.3
	1999-00	44.3	27.1
	2004-05	42.1	28.3
Urban	1983-84	47.3	40.8
	1987-88	48.7	38.2
	1993-94	34.5	32.4
	1999-00	32.9	23.6
	2004-05	34.6	25.7
Combined	1983-84	62.2	44.5
	1987-88	52.1	38.9
	1993-94	55.0	36.0
	1999-00	42.6	26.1
	2004-05	41.4	27.5

Source : CSO, NSSO Survey Reports.

Outmigration is a crucial survival strategy for the rural poor in Bihar. Both the census and NSSO report that Bihar has the highest rate of gross inter-state outmigration in India. It is well known that a large number of migrants from Bihar work as agricultural labourers in the more prosperous states of Punjab and Haryana.

Provision of training and employment for the youth is an important duty of the government. Some of the activities taken up by the Government of Bihar in this field are enumerated below :

- A record number of 4500 students have been admitted in the long term courses and 1700 students in the short term courses in this academic year in the Industrial Training Institutes (ITIs).

- On-line registration facilities have been created in the Employment Exchanges for the unemployed.
- To provide succour to the weaker sections, the rates of application fee, registration fee and caution money charged from the students admitted into the Industrial Training Institutes (ITIs) have been slashed and medical fee has been done away with completely.
- To provide relief to the agricultural workers, the benefit of Variable Dearness Allowance (VDA) has been extended to them along with the payable Minimum Wages (MW).
- Decision has been taken to run 8 ITIs on the lines of public private partnership.

Child labour is widely prevalent in the state of Bihar. Table 5.27 provides data on the incidence of child labour in the states of Bihar, Kerala and Punjab. The performance of Bihar cannot be considered to be favourable in this regard, and nor is there any indication that the incidence of child labour is reducing in Bihar as the census data for the period from 1971 to 2001 shows.

Table 5.27 : Child Labour as per Census, 1971-2001

States	1971	1981	1991	2001
Bihar	1059359	1101764	942245	1117500
Kerala	111801	92854	34800	26156
Punjab	232774	216939	142868	177268
All India	10753985	13640870	11285349	12666377

Source : National Institute of Public Cooperation and Child Development (NIPCCD), Statistics on Women in India, 2007

The following are some of the steps taken by the present government in the field of child and juvenile welfare :

- 20049 new *Anganwadi* Centres in 144 new ICDS projects were operationalised. At 80211 *Anganwadi* Centres, a total number of 64 lakh children, 12 lakh lactating mothers/pregnant women and 2.40 lakh adolescent girls are being benefited.
- 560 new *Anganwadi* Centres in 7 new ICDS projects were sanctioned and 1170 different posts in these projects sanctioned.
- Training was imparted to 16254 *Anganwadi Sevikas* and 10709 *Sahaikas*.

- To strengthen the relation between mother and child, *Dular Strategy* has been implemented in 14 districts. This strategy is to be extended to 105 projects in 8 districts.
- *Apna Ghar*, a unique home for destitute, helpless and orphan children was established at Patna.
- A unique home for destitute, helpless girls, called *Nishant*, was also established at Patna.
- 33 Juvenile Police units have been established.
- State Advisory Board, 38 Juvenile Justice Boards have been sanctioned, 19 of these were made functional, 19 observation homes were sanctioned and 10 made functional.
- A programme has been launched from November 14, 2007 to eradicate shall never from Patna district.

Poverty Alleviation Programmes

If one sees poverty as deprivation of basic human needs, it turns out immediately that it is a consequence of weak social capital, knowledge capital and income generation opportunities for the poor which constrain their lives and livelihoods in many ways. The various poverty alleviation programmes have been designed and implemented over the years to help the poor come out of the vicious web of disabilities and deprivations. For building up their social capital, a cooperative environment is sought to be created by forming Self-Help Groups (SHG) which, besides strengthening their social capital, could also lead to good economic returns to their pooled labour and skill for an economic enterprise. It is here that *Swarnajayanti Grameen Swarojgar Yojana* (SGSY) comes to the fore in not only aiding the formation of SHGs, but also providing the groups with opportunities to undertake an economic enterprise. Similarly, National Rural Employment Guarantee Programme (NREGP) is a landmark programme which has made 'access to employment' a constitutional right of the citizens. Similarly, *Indira Awas Yojna* (IAY) has been for long a popular programme for addressing the cause of the homeless in society. Performance of all these programmes in the current financial year is discussed below. However, performance was hampered in the current financial year due to the field staff being almost totally engaged, first, in the intensive revision of the rural household survey, and then in flood relief operations. The detailed districtwise tables for these programmes are presented in Appendix IV to IX..

Self- Help Groups (SHGs) and Swarnajayanti Grameen Swarozgar Yojana (SGSY)

A total of 8,234 SHGs were formed in the current financial year upto the month of December, which is 63.4 percent of the average annual achievement of last 8 years (12984 SHGs per year). Of these 8,234 SHGs, 4,317 were women SHGs (52.4 percent). Upto the month of December, 2007, 52 percent of the funds available for SGSY has been utilised at the state level.

A wide inter-district variation is seen in performance of SGSY, both in terms of financial utilisation and physical achievements. While the recently created Arwal district has utilised only 7.5 percent of the funds available to it, Supaul saw a high utilisation of 97.9 percent of funds. The highest number of SHGs were formed in Muzaffarpur (776), followed by Saharsa (589), Gopalganj (575) and Madhubani (459); on the other end, there were two districts where no SHG was formed — Bhagalpur and Lakhisarai (Appendix IV). While 52,675 persons were given assistance for economic activities under SGSY during the current year, nearly 19 percent of the beneficiaries were individual *swarogaris*, with the remaining beneficiaries being members of SHGs (Appendix V). Similarly, while 53,873 persons were trained under the programme, individual *swarogaris* accounted for only around 11 percent of beneficiaries. There is a noticeable shift towards financing SHGs instead of individuals. It was also found that banks have sanctioned loan to 13,322 individual *swarogaris* and 5825 SHGs (Appendix VI).

National Rural Employment Guarantee Scheme (NREGS)

NREGS is a demand based programme. 65,40,205 households were issued jobcards in the current year of which 36.09 percent demanded employment and 35.95 percent (23,51,012 households) were provided employment (Appendix VII). 0.98 percent(23,044 households) of total number of households which were provided employment were provided with 100 days of employment as stipulated in the NREG Act. There was a wide variation among the districts in terms of implementation of the programme. While only 4.19 percent of the households with jobcards are reported to be demanding wage employment in Madhubani, the corresponding figure is 93.8 percent in Banka.

The programme has generated about 493 lakh persondays of employment for 23,51,012 households in the current year(Appendix VIII). Among the beneficiaries, about 20 percent of

households were also beneficiaries under IAY or Land Reforms. As with other poverty alleviation programmes, there is wide variation in employment generation among different districts. While only 1.6 lakh persondays of employment was generated in Arwal with a fund utilisation rate of 5.4 percent, 57.7 lakh persondays of employment was generated in Lakhisarai with a fund utilisation rate of about 82 percent. The highest level of fund utilisation was found to be 87.33 percent in Nawada. The fund utilisation for the state as a whole was 41.11 percent.

Indira Awas Yojana (IAY)

As regards new targets for IAY in the current financial year, the state is lagging behind, having completed only 35.6 percent of the total new houses to be built (Appendix IX). Against the target of 5,67,171 houses under the programme, only 1,84,142 new houses, 16,578 upgraded houses and 1,074 Credit-cum-Subsidy houses were completed up to December in the current financial year, i.e a total of 2,01,794. Since nearly 62 percent of the available funds have already been utilised to achieve only 35.6 percent of the physical target, extra efforts will have to be made to ensure full achievement of the target in the current financial year.

5.6 Rural Development and *Panchayati Raj*

In the state of Bihar where about 90 per cent of the population still live in rural areas, the importance of strengthening the local self-government machinery needs no emphasis. The following are some of the steps taken by the Bihar Government in the last two years to strengthen the Panchayati Raj system in the state.

- *Panchayat Raj Task Force* has been constituted to provide suggestions and recommendations to enhance the capability of the Panchayati Raj Institutions for local self-government.
- Appointment of *Nyaya Mitra* and *Gram Kachhary Sachiv* has been undertaken to strengthen and facilitate the functioning of the *Gram Kachhary*.
- While rules pertaining to fee fixation, constitution of village volunteer force, appointment of *Gram Panchayat Sachiv* and conduct of *Gram Sabha* meetings are being framed in the light of the *Bihar Panchayat Raj Act, 2006*, following rules have already been notified under the provisions of the act:

- i) Bihar Panchayat Election Rules, 2006
 - ii) Constitution of Bihar District Plan Committee and Rules of Executive Business, 2006
 - iii) Bihar Gram Kachhary Nyay Mitra (Appointment , Service Condition and Duty) Rules, 2007
 - iv) Bihar Gram Kachhary Secretary (Appointment, Service Condition and Duty) Rules, 2007
 - v) Bihar Gram Kachhary Conduct Rules, 2007
- The Fourth State Finance Commission has been created for suggestions and recommendations to strengthen the financial condition of the Panchayats.
 - Formation of Bihar State Rural Business Hub Council in order to establish Rural Business Hubs and make them functional.
 - Capacity building of the elected PRI representatives and the concerned Government functionaries to strengthen the service delivery system.
 - Recommendations of the Third State Finance Commission have been implemented.
 - Transparent, easy and simple mechanism for smooth transfer of funds is being evolved.
 - The appointment of an Accountant in each *Gram Panchayat* is underway.

India's anti-poverty strategy through development of rural areas has the following objectives: (1) promotion of economic development of rural areas and (2) training and providing employment to the rural labour force. The idea is to address the poverty stricken in rural areas through targeted programmes. Rural development and employment generation programmes constitute the backbone of this strategy to uplift the rural population and transform the rural landscape and bring prosperity to our villages. Some of the efforts being made by the Bihar Government in this context are as follows :

- Block Informatics Centres have been set up in all 534 Blocks.
- 'E-muster', a biometric muster roll system, has been introduced on a pilot basis to ensure that genuine worker receives payment.

- Financial and physical progress in rural development programmes has greatly increased compared to previous years.
- Rs. 1045 crore was spent in 2006-07 in wage employment programmes.
- Rs. 377 crore is to be spent on NREGP Bihar in 2007-08.
- Rs. 1186 crore have been spent under Indira Awas Yojana in 2006-07, 314,697 houses completed.
- Rs. 306 crore are to be spent in 2007-08 under IAY and 1,06,456 houses to be completed.
- 9174 Self Help Groups have been financed under *Swarnajayanti Gram Swarozagar Yojana* in 2006-07.
- 3,556 SHGs are to be financed under SGSY in 2007-08.

The Department of Public Health Engineering has taken up the following initiatives in rural areas of Bihar:

- 183610 handpumps were repaired during drought period as emergency plan.
- 62 rural piped water supply schemes were commissioned.
- 228601 toilets were constructed for BPL families.
- 57406 toilets were constructed for APL families
- 95 community toilets were constructed.
- 43 panchayats have been awarded *Nirmal Gram Puraskar*.
- Deshri Block in Vashali District has been awarded *Nirmal Gram Puraskar* for achieving the target of sanitation.
- 50923 handpumps were installed for coverage of Not Covered (NC) and Partially Covered (PC) habitations at an estimated cost of Rs 11359 lakhs.
- Scheme sanctioned for reorganization of 65 old rural piped water supply schemes is under execution.

- Piped water schemes for 153 block-headquarters villages have been sanctioned.
- Scheme for construction of 64010 handpumps for coverage of NC/PC habitations have been sanctioned.
- 50 piped water supply schemes with reverse osmosis/membrane technology for covering 90 habitations affected with arsenic/fluoride problem have been sanctioned.
- Scheme for construction of one additional handpump in 57408 primary/middle schools has been sanctioned.

5.7 Special Schemes for Backward and Weaker Sections

Development and empowerment of Scheduled Castes, Scheduled Tribes, Other Backward Classes, the Disabled and other social groups in order to bring them at par with the rest of society is a commitment enshrined in the Constitution. This is to be done by adopting the approach of social justice to ensure equal rights, access to benefits and resources and empowerment to enable them to develop their potential and capacities as agents of social change, through the process of planned development. The efforts being made by the Bihar Government in the field of social welfare are outlined in the following paragraphs :

Social Welfare for the Disabled

- *Mukhyamantri Samarthya Yojana* has been launched to provide artificial limbs and appliances.
- Rate of stipend to the disabled students has been enhanced.
- Survey of 473643 persons with disability conducted and 100663 disability certificate-cum-identity cards have been distributed.
- Relaxation of ten years in age for disabled persons in competitive examinations for government jobs.
- Mobile courts arranged for the disabled persons.
- Land to be allotted to disabled at concessional rates without premium.
- 3 percent jobs have been preserved for disabled persons in government service.
- 3 percent seats in educational institutions has been preserved for disabled persons.

Social Security

- *Lakshmbai Social Security Pension Scheme* at the rate of Rs.200 per month for widows of poor families has been introduced.
- *Bihar State Disability Social Security Pension Schem'* at the rate of Rs.200 per month for handicapped from poor families has been introduced.
- *Kabir Funeral Grant Scheme* to provide help of Rs. 1500 to BPL families in the contingency of the death of a family member has been introduced.
- Personal Accident Insurance for pensioners has been introduced. Under this scheme, a premium of Rs. 15 per annum will be paid to the Oriental Insurance Company by the state Government for pensioners' insurance policy. In case of accidental death of pensioners, a sum of Rs. 1,00,000 will be paid by insurance company to pensioner's dependent.
- The rate of all social security pension schemes has been enhanced from Rs. 100 to Rs. 200 per month.
- Social Security Pension distribution is being done through local post offices by opening of savings account of the pensioner.
- The number of pensioners under social security pensions has been increased two fold from 8.79 lakhs in 2005 to 17.33 lakhs in 2007.

Scheduled Caste (SC)/ Scheduled Tribes (ST)

- 13 new 248 - seated residential high schools for SC girls and one residential high school for boys have been sanctioned.
- Allocation for facilities like meals, uniform, etc. in residential schools, has been nearly doubled after 10 years.
- MLAs have been nominated as Chairmen of the Managing Committees of the residential schools for better management.
- Rs. 80 crore sanctioned for the construction of new and additional buildings of residential schools.
- Provision of funds for the stipend schemes for SCs and STs have been increased by more than 100 percent from the year 2005-06 to 2007-08. During 2005-06, nearly 8 lakh students

were covered; during 2006-07, more than 10 lakh students were covered. During 2007-08, 28 lakh SC/ST children would be covered.

- A sum of Rs. 2 crore has been sanctioned for share capital in the Bihar State Scheduled Caste Cooperative Development Corporation.
- A sum of Rs.13 crore has been sanctioned for the economic upliftment of scheduled tribes.

Maha Dalit Commission

The dalit population is not a homogeneous one. Many among them belong to some caste categories who are even more deprived than other dalit castes. These extremely deprived (Maha Dalit) castes include *Mehatar, Dom, Musahar, Nat, Turi, Bantar, Bhuiyan, Kaunjar, Kuriar, Itari, Halalkhor, Lalbegi, Pan, Swasi, Bauri, Bhogta* and a few others. To address the development needs of these section of the population, the state government has constituted a Maha Dalit Commission in August, 2007. The Commission has five members, including a Chairman.

In November, 2007, the Commission has already submitted its Interim Report, containing a number of recommendations to improve the living conditions of the Maha Dalit Commission. These recommendations cover the following issues — food security and entitlement, economic empowerment, homestead land and home, health and family welfare, education, political empowerment and cultural development.

Backward Castes (BC)/Other Backward Castes (OBC) Welfare

- Under the stipend schemes, allocation has been enhanced by 65 percent from Rs. 30.16 crore in 2005-06 to Rs. 49.89 crore in 2007-08 for Other Backward Classes (OBC) students.
- The number of OBC students given stipend has been enhanced from 5.13 lakhs in 2005-06 to 8.91 lakhs in 2007-08.
- Rs. 12 crore have been sanctioned for construction of buildings for 4 residential girls' high schools.
- Allocation for facilities like food, uniform, etc. in residential schools has been nearly doubled.
- Rs. 4.50 crore have been sanctioned for 4 hostels each of 100 seats for OBC students.
- To strengthen the Bihar State Backward Classes Finance and Development Corporation, Rs. 1.00 crore have been sanctioned towards share capital of the Corporation.

Minority Welfare

- For the first time, an amount of Rs. 25 lakh has been received from the National Minorities Development and Finance Corporation, New Delhi to grant educational loans for technical and professional education at simple interest of 3 percent. The amount has been distributed amongst 61 beneficiaries.
- Schemes for education, employment and vocational training for minorities, specially Muslim women, are being run.
- A separate 10 point programme for the welfare of Muslim minorities is running to maintain communal harmony.
- For self-employment of the minorities of the state (Muslim, Sikh, Christian and Buddhist), funds received from the National Minority Development and Finance Corporation, New Delhi were utilized to disburse loans of Rs. 8,46,51,176 among 1532 beneficiaries at simple interest of 6 percent during 2006-07.
- Bihar State Minorities Commission has been reconstituted with a Chairman, two Vice-Chairmen and eight Members. The State Government has granted the facilities of State Ministers to the Chairman and two Vice-Chairmen.
- To facilitate the boarding of minority students after Standard X for higher education, the state Government has initiated action to build minorities' boys and girls hostels in each of the 38 districts of Bihar. Till date, 15 hostels in 14 districts have been completed. In Patna, hostels for both boys and girls have been completed.
- A scheme of merit scholarship for college going minority students has been launched and an allocation of Rs. 200 lakh has been made during the current financial year.
- A scheme of coaching to meritorious and poor minority students who wish to appear in competitive examinations has been launched. In the current financial year, an allocation of Rs. 200 lakh has been made for this purpose.
- For providing financial assistance for self-employment to divorcee Muslim women, Rs. 140 lakh have been allocated in the current financial year. In the previous year, Rs. 10 lakh were distributed among 100 beneficiaries.

- In 2007-08, Rs. 50 lakh have been allocated for the maintenance, safety and growth of the *Wakf* properties.
- Bihar State Text Book Cooperation has published primary school books in Urdu for free distribution.
- Rs. 58 lakh have been spent on the maintenance of Urdu Bhawan.
- Bhagalpur riot victims of 1989 have been provided with pension at the rate of Rs. 2500 per month and compensation of Rs. 1 lakh each. This will be available to the families whose members lost their lives.
- *Mukhya Mantri Alpsankhyak Vidyathi Protsahan Yojana* has been introduced in which every student of minority community passing matriculation with 60 percent or more marks will be given an incentive of Rs.10,000 to continue higher education.
- *Mukhya Mantri Shram Shakti Yojana* has been introduced for the skilled labourers, in which necessary short term training of 6-12 months will be given with a stipend of Rs. 1500-2000 per month. After the completion of training, they will be provided with a loan upto Rs. 50,000 for self-employment.
- Houses are being constructed for *Bidi* Labourers in Jamui, Begusarai and Nalanda districts.

Welfare of Women

- Under *Mukhyamantri Kanya Suraksha Yojana*, girls born in BPL families will get Rs. 2000. A grant of Rs. 5000 will be given to the matriculate girls from poor families having annual family income less than Rs. 60,000 per month on the registration of marriage.
- A new scheme, *Nari Shakti Yojana*, has been started for the social, economic, and cultural empowerment of women. Under this scheme, rehabilitation homes, *Palna Ghar*, hostels for working women, helplines etc. are being established in the state.

Appendix - I

District-Wise Literacy in Bihar : 2001

Percentage	Total	Male	Female	SC	ST
Bihar	47.0	59.7	31.1	28.5	28.2
Pashchim Champaran	38.9	51.1	25.2	22.3	24.1
Purba Champaran	37.5	49.3	24.3	20.6	34.3
Sheohar	35.3	45.3	23.9	16.9	38.8
Sitamani	38.5	49.4	26.1	22.2	31.4
Madhubani	42.0	56.8	26.3	22.2	35.8
Supaul	37.3	52.5	20.8	19.6	26.9
Araria	35.0	46.4	22.4	18.9	21.9
Kishanganj	31.1	42.7	18.6	28.2	15.3
Purnia	35.1	45.6	23.4	18.5	24.5
Katihar	35.1	45.3	23.8	26.3	24.2
Madhepura	36.1	48.8	22.1	17.1	33.6
Saharsa	39.1	51.7	25.3	18.5	24.5
Darbhanga	44.3	56.7	30.8	24.7	49.5
Muzaffarpur	48.0	59.1	35.8	28.9	50.4
Gopalganj	47.5	63.0	32.2	32.1	37.8
Siwan	51.6	67.3	36.9	35.6	44.0
Saran	51.8	67.3	35.8	33.6	48.5
Begusarai	48.0	59.1	35.6	31.4	78.6
Khagaria	41.3	51.8	29.4	24.2	46.7
Vaishali	50.5	63.3	36.6	29.4	29.9
Samastipur	45.1	57.6	31.7	25.1	22.0
Bhagalpur	49.5	59.2	38.1	33.7	37.2
Banka	42.7	55.3	28.7	27.6	22.2
Munger	59.5	69.9	47.4	42.6	37.3
Lakhisarai	48.0	60.7	34.0	26.3	12.9
Sheikhpura	48.6	61.9	33.9	25.2	45.6
Nalanda	53.2	66.4	38.6	29.4	29.8
Patna	62.9	73.3	50.8	38.6	68.7
Bhojpur	59.0	74.3	41.8	39.1	46.7
Buxur	56.8	71.9	39.9	37.9	44.6
Kaimur	55.1	69.7	38.8	40.5	38.6
Rohtas	61.3	75.3	45.7	41.3	30.0
Jehanabad	55.3	70.1	39.4	32.6	32.4
Aurangabad	57.0	71.1	41.9	35.7	49.7
Gaya	50.4	63.3	36.7	26.3	49.1
Nawada	46.8	60.6	32.2	22.4	20.5
Jamui	42.4	57.1	26.3	24.5	26.7

Source : Census of India-Bihar, 2001

Appendix - II

Classwise Number of Children Enrolled in Primary and Upper Primary Schools in Bihar

Category	Disaggregation	2002-03			2004-05			2006-07		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Class-1	Total	1979340	1591295	3570635	1931319	1614030	3545349	1855184	1650276	3505460
	SC	374057	265645	639702	362420	275220	637640	377448	317186	694634
	ST	20496	14339	34835	24621	17888	42509	30513	27268	57781
Class-2	Total	1112058	823656	1935714	1278052	1030612	2308664	1438365	1240176	2678541
	SC	199712	127414	327126	227958	160917	388875	264707	207812	472519
	ST	13050	8239	21289	17085	11798	28883	26093	22317	48410
Class-3	Total	874185	615808	1489993	1139764	884228	2023992	1283729	1081630	2365359
	SC	150737	90358	241095	197402	128849	326251	228373	173527	401900
	ST	10127	6107	16234	14570	9741	24311	24759	20284	45043
Class-4	Total	717832	492218	1210050	958235	688906	1647141	1161370	952918	2114288
	SC	122132	69027	191159	158631	95608	254239	199359	146035	345394
	ST	8022	4665	12687	12168	7456	19624	22239	18409	40648
Class-5	Total	615586	405874	1021460	829256	561752	1391008	1057549	837178	1894727
	SC	98611	54010	152621	124808	71057	195865	175039	122605	297644
	ST	6869	3940	10809	9826	5636	15462	20166	16133	36299
Class-6	Total	340012	191918	531930	488622	301236	789858	638980	460782	1099762
	SC	46193	20765	66958	68022	34696	102718	92654	57353	150007
	ST	2622	1271	3893	4682	2631	7313	6985	5098	12083
Class-7	Total	266724	145123	411847	414685	248095	662780	511690	360662	872352
	SC	32536	14148	46684	51706	27088	78794	69110	42944	112054
	ST	2121	1003	3124	3639	1807	5446	5451	3879	9330
Class-8	Total	146965	78855	225820	302535	181040	483575	349514	249703	599217
	SC	16202	7267	23469	36402	18592	54994	45949	28960	74909
	ST	1328	864	2192	2830	1531	4361	3627	2626	6253

Source : DISE Data

Appendix - III

Number of Schools Having Facilities in Districts of Bihar

Year : 2006-07									
Districts	Total Schools	Black Boards	Ground Level Black Boards	Common Toilet	Girls Toilet	Electricity	Book Bank	Playground	Ramps
1	2	3	4	5	6	7	8	9	10
Araria	1300	1300	1032	344	87	11	422	333	24
Aurangabad	1702	1491	292	986	150	41	557	415	184
Banka	1516	1049	930	435	224	37	347	348	55
Begusarai	1136	1007	427	687	260	76	305	381	75
Bhagalpur	1417	1417	1185	652	257	33	686	466	132
Bhojpur	2181	2145	2032	769	594	297	502	279	134
Buxar	1000	996	807	361	140	60	210	171	91
Darbhanga	1857	1514	1479	882	263	34	657	627	290
Gaya	2701	2699	2026	906	488	69	1367	959	555
Gopalganj	1242	1172	355	759	215	46	301	454	851
Jamui	961	927	611	485	105	96	429	228	113
Jehanabad	1122	1106	75	440	129	18	235	259	66
Kaimur (Bhabhua)	955	897	549	383	230	138	473	351	240
Katihar	1364	1363	779	643	164	31	161	315	26
Khagaria	706	562	86	333	70	20	251	132	43
Kishanganj	721	541	576	339	135	65	169	201	113
Lakhisarai	543	540	230	139	61	32	161	142	19
Madhepura	1047	1029	938	367	96	32	147	344	18
Madhubani	2593	2102	447	955	173	31	459	1004	1216
Munger	914	763	499	316	98	53	403	248	82
Muzaffarpur	2802	2684	1877	1619	664	59	1706	1560	1651
Nalanda	1930	1733	1018	1413	443	52	1410	796	264
Nawada	1245	638	754	286	62	3	240	343	69
Pashchim Champanan	1900	1686	1296	872	493	39	590	996	480
Patna	3444	3090	1497	1927	748	185	2385	918	232
Purba Champanan	2328	1942	624	1576	213	100	498	1078	579
Purnia	1252	1220	1043	314	66	18	308	308	50
Rohtas	1776	1539	1196	865	294	68	880	625	281
Saharsa	808	769	409	370	96	17	139	278	74
Samastipur	1891	1451	754	1144	829	43	502	815	441
Saran	2088	1700	724	835	226	45	446	544	271
Sheikhpura	359	320	123	201	44	34	184	92	169
Sheohar	301	207	167	168	46	4	119	172	48
Sitamarhi	1491	1477	1087	837	200	27	764	802	206
Siwan	1597	1540	189	729	184	36	284	401	324
Supaul	1111	1038	201	522	91	15	449	427	99
Vaishali	1630	1280	1249	813	271	19	723	629	177
All Districts	54931	48934	29563	25672	8909	1984	19869	18441	9742

Year : 2006-07									
Districts	Medical Check-up	Computer	Furniture for Students		Furniture for Teachers		Kitchen Shed	Water	Building
			All	Some	All	Some			
11	12	13	14	15	16	17	18	19	20
Araria	176	6	0	21	0	20	0	1109	1275
Aurangabad	270	64	100	344	920	573	87	1609	1652
Banka	156	58	119	509	801	553	65	1136	1440
Begusarai	307	53	66	446	507	472	111	1084	1123
Bhagalpur	272	51	194	795	722	527	154	1316	1335
Bhojpur	399	77	86	16	2151	13	103	1870	1909
Buxar	354	8	46	13	979	4	25	953	960
Darbhanga	219	56	89	436	1151	437	138	1717	1759
Gaya	665	13	12	53	49	26	5	2274	2644
Gopalganj	191	56	78	324	604	257	76	1217	1215
Jamui	232	19	215	553	639	242	111	868	910
Jehanabad	212	13	91	263	863	200	80	1047	1099
Kaimur (Bhabhua)	301	42	272	500	575	321	137	898	948
Katihar	138	13	5	164	6	165	3	1285	1335
Khagaria	191	22	27	310	196	465	34	636	668
Kishanganj	122	30	66	317	266	355	204	708	718
Lakhisarai	61	7	0	2	1	3	1	463	516
Madhepura	107	25	9	16	13	18	8	949	1035
Madhubani	181	11	135	626	1262	1112	201	2451	2550
Munger	214	29	163	470	421	388	47	719	827
Muzaffarpur	538	0	289	1279	1756	919	248	2470	2650
Nalanda	329	74	331	774	1140	660	235	1830	1877
Nawada	182	45	64	470	544	595	75	1007	1194
Pashchim Champaran	512	37	222	682	972	807	830	1740	1831
Patna	485	27	399	927	2136	945	341	2970	2905
Purba Champaran	208	132	96	706	1018	907	191	2049	2236
Purnia	176	34	36	849	45	846	49	1147	1237
Rohtas	413	69	251	1203	1005	603	161	1709	1741
Saharsa	184	21	40	231	219	405	49	749	773
Samastipur	367	109	111	531	913	532	138	1791	1848
Saran	251	106	200	564	1273	625	91	1935	2036
Sheikhpura	84	17	101	210	243	106	38	336	349
Sheohar	39	7	4	0	2	2	2	272	285
Sitamarhi	198	15	48	265	195	141	47	1341	1438
Siwan	162	14	121	519	1012	527	106	1520	1565
Supaul	130	66	18	45	37	52	28	978	1070
Vaishali	392	17	166	834	975	552	110	1401	1494
All Districts	9418	1443	4270	16267	25611	15375	4329	49554	52447

Source: DISE Data

Appendix IV

Details of Funds Available, Utilised and Physical Achievements under SGSY (Upto Dec; 07)

District	Details of funds Available/Utilised			Physical Achievements		
	Funds (Rs. lakh)		Rate of Utilisation (Percentage)	No. of SHGs formed during current year upto Dec.	No. of Women SHGs formed during the current year upto Dec.	Women SHGs (Percentage)
	Available	Utilised				
Araria	880.98	193.62	21.98	70	60	85.71
Arwal	160.57	12.04	7.50	25	11	44.00
Aurangabad	389.67	107.61	27.62	44	44	100.00
Banka	358.007	94.1	26.28	448	0	0.00
Begusarai	769.743	166.33	21.61	208	99	47.60
Bhagalpur	480.103	209.1	60.42	0	0	—
Bhojpur	488.393	219.5	44.94	274	102	37.23
Buxar	123.738	99.76	80.62	117	47	40.17
Darbhanga	993.563	755.23	76.01	405	395	97.53
E.Champaran	670.43	155.464	23.19	345	112	32.46
Gaya	701.88	317.54	45.24	90	56	62.22
Gopalganj	275.226	108.562	39.44	575	242	42.09
Jamui	551.313	253.015	45.89	199	199	100.00
Jehanabad	457.803	297.05	64.89	54	14	25.93
Kaimur	77.793	70.52	99.65	253	107	42.29
Katihar	277.573	144.67	52.12	134	51	38.06
Khagaria	361.026	121.915	33.77	250	230	92.00
Kishanganj	284.157	171.385	60.31	65	10	15.38
Lakhisarai	286.86	126.21	44.00	0	6	—
Madhepura	191.016	180.21	94.34	138	110	79.71
Madhubani	776.088	643.391	82.90	459	297	64.71
Munger	202.366	112.34	55.51	250	161	64.40
Muzaffarpur	1152.862	782.09	67.84	776	692	89.18
Nalanda	162.596	151.382	93.10	145	40	27.59
Nawada	462.73	294.613	63.67	244	311	127.46
Patna	297.673	203.61	68.40	360	76	21.11
Purnea	756.626	189.58	25.06	159	45	28.30
Rohtas	209.367	137.38	65.62	60	18	30.00
Saharsa	443.859	316.91	71.40	589	146	24.79
Samastipur	1523	654.272	42.96	316	0	0.00
Saran	461.137	280.31	60.79	21	21	100.00
Sekhpura	90.167	57.176	63.41	94	43	45.74
Sheohar	189.523	116.54	61.49	270	168	62.22
Sitamarhi	487.06	325.07	66.74	45	30	66.67
Siwan	57.296	32.285	56.35	95	57	60.00
Supaul	258.053	252.52	97.86	327	142	43.43
Vaishali	381.239	130.47	34.22	170	45	26.47
W.Champaran	647.248	407.79	63.00	160	130	81.25
Total	17338.73	8972.56	51.75	8234	4317	52.43

Source: Department of Rural Development, Government of Bihar

Appendix V

Training and Assistance Provided to SHGs and Individual Swarojgaris for Pursuing Economic Activities (Upto Dec. 07)

Name	No. of members of SHGs assisted for Economic Activities	No. of Individual Swarojgaris assisted for Economic Activities	% of Individual Swarojgaris assisted in total	No. of members of SHGs trained for Economic Activities	No. of Individual Swarojgaris trained for Economic Activities	% of Individual Swarojgaris trained for Economic Activities
Araria	871	392	45.01	2522	63	2.50
Arwal	250	74	29.60	10	2	20.00
Aurangabad	324	49	15.12	127	0	0.00
Banka	304	218	71.71	2059	0	0.00
Begusarai	401	354	88.28	1313	10	0.76
Bhagalpur	1692	380	22.46	393	0	0.00
Bhojpur	1340	166	12.39	360	87	24.17
Buxar	453	139	30.68	944	531	56.25
Darbhanga	361	17	4.71	205	0	0.00
E.Champaran	475	278	58.53	655	0	0.00
Gaya	748	229	30.61	748	2229	297.99
Gopalganj	327	355	108.56	1745	20	1.15
Jamui	91	274	301.10	91	274	301.10
Jehanabad	864	205	23.73	864	205	23.73
Kaimur	290	111	38.28	210	0	0.00
Katihar	868	244	28.11	72	0	0.00
Khagaria	732	80	10.93	0	0	—
Kishanganj	40	0	0.00	40	0	0.00
Lakhisarai	767	161	20.99	767	0	0.00
Madhepura	1180	62	5.25	986	62	6.29
Madhubani	4020	827	20.57	4020	827	20.57
Munger	642	147	22.90	2594	0	0.00
Muzaffarpur	3870	261	6.74	763	0	0.00
Nalanda	1252	81	6.47	224	0	0.00
Nawada	1525	468	30.69	2530	114	4.51
Patna	962	8	0.83	2580	8	0.31
Purnea	896	542	60.49	910	630	69.23
Rohtas	600	277	46.17	91	47	51.65
Saharsa	2058	450	21.87	7470	0	0.00
Samastipur	5200	53	1.02	510	0	0.00
Saran	1150	598	52.00	1147	0	0.00
Sekhpura	306	45	14.71	2321	0	0.00
Sheohar	800	15	1.88	165	5	3.03
Sitamarhi	2690	1148	42.68	5675	0	0.00
Siwan	575	325	56.52	604	81	13.41
Supaul	74	616	832.43	458	784	171.18
Vaishali	870	0	0.00	951	0	0.00
W.Champaran	2902	256	8.82	770	0	0.00
Total	42770	9905	18.8	47894	5979	11.10

Appendix VI

Loan Sanctioned by Banks to SHGs and Individual Swarojgaris (Upto December, 2007)

District	SHGs			Individual Swarojgaris		
	No. Of Loan Applications submitted to Banks	No. of Loans Sanctioned	% of Loan Applications sanctioned	No. Of Loan Applications submitted to Banks	No. of Loans Sanctioned	% of Loan Applications sanctioned
Araria	234	105	44.87	628	448	71.34
Arwal	39	39	100.00	234	136	58.12
Aurangabad	64	43	67.19	192	53	27.60
Banka	140	5	3.57	403	218	54.09
Begusarai	131	43	32.82	2228	416	18.67
Bhagalpur	285	186	65.26	693	428	61.76
Bhojpur	88	80	90.91	229	226	98.69
Buxar	56	41	73.21	769	183	23.80
Darbhanga	475	395	83.16	150	74	49.33
E.Champaran	281	111	39.50	4879	295	6.05
Gaya	297	174	58.59	8003	2703	33.77
Gopalganj	141	42	29.79	1659	996	60.04
Jamui	112	91	81.25	1470	274	18.64
Jehanabad	90	72	80.00	501	275	54.89
Kaimur	1220	580	47.54	369	111	30.08
Katihar	88	86	97.73	244	244	100.00
Khagaria	86	61	70.93	129	80	62.02
Kishanganj	92	92	100.00	0	0	—
Lakhisarai	155	74	47.74	2703	161	5.96
Madhepura	155	105	67.74	1754	62	3.53
Madhubani	554	477	86.10	1867	927	49.65
Munger	164	77	46.95	1628	212	13.02
Muzaffarpur	415	387	93.25	282	261	92.55
Nalanda	332	141	42.47	486	104	21.40
Nawada	252	141	55.95	2374	504	21.23
Patna	719	225	31.29	878	14	1.59
Purnea	218	70	32.11	1098	716	65.21
Rohtas	86	60	69.77	526	440	83.65
Saharsa	249	209	83.94	615	511	83.09
Samastipur	520	250	48.08	95	67	70.53
Saran	225	117	52.00	1978	602	30.43
Sekhpura	177	111	62.71	19	5	26.32
Sheohar	86	80	93.02	46	15	32.61
Sitamarhi	232	205	88.36	85	32	37.65
Siwan	810	390	48.15	2916	654	22.43
Supaul	74	74	100.00	892	616	69.06
Vaishali	121	121	100.00	0	0	—
W.Champaran	780	265	33.97	1626	259	15.93
Total	10243	5825	56.87	44648	13322	29.84

Department of Rural Development, Government of Bihar

Appendix VII

Employment generation Under NREGA during 2007-08 (Upto December, 2007) (Part 1)

District	No. of Hhds issued job cards upto Dec.	No. of Hhds. Demanding wage empl.	No. of Hhds. provided empl.	Cumulative no. of Hhds. which have completed 100 days of empl.	% of Hhds demanding empl. Among hhds, issued jobcards	% of Hhds provided empl. Among hhds, issued jobcards.
Araria	187281	78885	78885	15700	42.12	42.12
Aurangabad	130485	66856	66856		51.24	51.24
Bhabhua	101693	14028	14028		13.79	13.79
Bhojpur	163608	90230	90230	2	55.15	55.15
Darbhanga	263955	136000	136000		51.52	51.52
Gaya	230217	125034	125034	0	54.31	54.31
Jamui	133022	68486	68486	1016	51.48	51.48
Jehanabad	73221	57290	57290	854	78.24	78.24
Katihar	187420	104744	104744	0	55.89	55.89
Kishanganj	195205	34423	34423		17.63	17.63
Lakhisarai	118609	43047	43047		36.29	36.29
Madhubani	272345	11405	11405		4.19	4.19
Munger	131638	81619	81519	1927	62.00	61.93
Muzzafarpur	279952	105112	105112		37.55	37.55
Nalanda	288059	110920	110920		38.51	38.51
Nawada	129412	62319	62319	1486	48.16	48.16
Patna	291403	110962	110962	0	38.08	38.08
Purnea	235952	60601	60601	364	25.68	25.68
Rohtas	184204	49808	49808	308	27.04	27.04
Samastipur	290381	14821	14821		5.10	5.10
Sheohar	71035	12216	12216	424	17.20	17.20
Supaul	210959	42767	42767		20.27	20.27
Vaishali	240980	79416	79416		32.96	32.96
Arwal	33347	12571	12571		37.70	37.70
Banka	91712	86055	85847		93.83	93.60
Begusarai	143682	101190	101190		70.43	70.43
Bhagalpur	156296	19957	19957	0	12.77	12.77
Buxar	104512	15681	15681	963	15.00	15.00
E.Champaran	240856	90290	90290		37.49	37.49
Gopalganj	125975	28410	28410		22.55	22.55
Khagaria	71209	57815	53218		81.19	74.73
Madhepura	155139	60799	60799		39.19	39.19
Saharsa	192765	43235	43235		22.43	22.43
Saran	226429	101480	101190		44.82	44.69
Seikhpura	32325	29937	29937		92.61	92.61
Sitamarhi	175310	16000	16000		9.13	9.13
Siwan	157922	61220	56836		38.77	35.99
W.Champaran	221690	74962	74962		33.81	33.81
Total	6540205	2360591	2351012	23044	36.09	35.95

Appendix VIII

Employment Generated under NREGA during 2007-08 (Upto December, 2007) (Part 2)

District	Total Beneficiary Hhds	Persondays (in lakh)	No. of Land reform/ IAY	Total Fund (Rs. lakh)		Fund Utilisation (Percentage)
				Available	Utilised	
Araria	78885	15.42	5841	2594.18	1837.84	70.84
Aurangabad	66856	13.27	3707	2259.91	1731.64	76.62
Bhabhua	14028	6.51	842	1217.53	858.30	70.50
Bhojpur	90230	9.43	1179	1479.94	966.76	65.32
Darbhanga	136000	18.70	12	2937.41	2418.93	82.35
Gaya	125034	43.62	780	7630.39	5698.18	74.68
Jamui	68486	19.56	210	4670.60	2829.73	60.59
Jehanabad	57290	17.05	18673	3353.94	2302.67	68.66
Katihar	104744	16.81	17510	3449.73	2250.27	65.23
Kishanganj	34423	5.71	2976	948.20	690.79	72.85
Lakhisarai	43047	57.74	3072	2624.94	2146.04	81.76
Madhubani	11405	10.06		5001.64	1319.11	26.37
Munger	81519	24.92	29451	4593.81	3260.71	70.98
Muzzafarpur	105112	10.90	189	2845.92	1366.31	48.01
Nalanda	110920	7.82	557	3210.27	735.26	22.90
Nawada	62319	18.87		2505.83	2188.22	87.33
Patna	110962	15.01	90	5064.82	1701.45	33.59
Purnea	60601	5.72	3541	865.53	555.33	64.16
Rohtas	49808	11.15	341702	2066.94	1394.39	67.46
Samastipur	14821	11.81		4622.01	3229.49	69.87
Sheohar	12216	10.73	2920	2226.29	1401.47	62.93
Supaul	42767	19.17	98	2490.03	1568.72	63.00
Vaishali	79416	16.21	5816	3257.98	2020.57	62.02
Arwal	12571	1.63		2459.59	132.37	5.38
Banka	85847	6.33	804	4149.56	321.32	7.74
Begusarai	101190	7.05	521	6166.55	1038.64	16.84
Bhagalpur	19957	4.57	2395	4104.85	223.20	5.44
Buxar	15681	14.98	449	2491.81	1183.28	47.49
E.Champaran	90290	3.66		7039.66	694.49	9.87
Gopalganj	28410	6.07		3034.72	747.63	24.64
Khagaria	53218	1.32		3720.81	168.34	4.52
Madhepura	60799	7.19	113	4223.25	975.32	23.09
Saharsa	43235	10.88		4026.34	979.28	24.32
Saran	101190	7.83	19853	4524.28	751.52	16.61
Seikhpura	29937	1.78	4920	1680.08	170.66	10.16
Sitamarhi	16000	3.86	200	5569.27	535.69	9.62
Siwan	56836	17.37	3347	3960.87	1837.48	46.39
W.Champaran	74962	12.28	18	4640.65	731.34	15.76
Total	2351012	492.99	471786	133710.11	54962.31	41.11

Appendix IX

Physical and Financial Achievements under IAY (New+Upg.+C&S) Upto Dec. 2007

Name	Annual Target	Houses completed	Physical Achievement as percent of Annual Target	% Utilisation of Available funds
Araria	33812	11068	32.73	58.97
Arwal	1701	1629	95.77	63.39
Aurangabad	6422	2408	37.50	70.71
Banka	4715	1374	29.14	80.25
Begusarai	11766	5793	49.24	78.75
Bhagalpur	9637	2533	26.28	67.67
Bhojpur	7174	1332	18.57	81.42
Buxar	4368	2221	50.85	73.95
Darbhanga	22106	4754	21.51	66.57
E.Champaran	34142	5234	15.33	22.42
Gaya	13384	6352	47.46	88.69
Gopalganj	15872	7487	47.17	72.35
Jamui	4646	3661	78.80	90.44
Jehanabad	2419	1427	58.99	69.45
Kaimur	4188	1604	38.30	107.75
Katihar	23813	9195	38.61	36.94
Khagaria	9992	21	0.21	89.18
Kishanganj	13783	4153	30.13	27.55
Lakhisarai	2331	961	41.23	90.17
Madhepura	21645	7488	34.59	66.50
Madhubani	37122	4892	13.18	9.37
Munger	3725	1880	50.47	79.33
Muzaffarpur	34884	29556	84.73	74.39
Nalanda	6180	2075	33.58	76.96
Nawada	5533	1969	35.59	73.58
Patna	9414	2812	29.87	84.79
Purnea	38196	4769	12.49	62.48
Rohtas	6567	1742	26.53	71.30
Saharsa	18126	5032	27.76	77.48
Samastipur	23081	5224	22.63	22.77
Saran	14077	5920	42.05	68.53
Sekhpura	1256	594	47.29	72.22
Sheohar	7773	1999	25.72	91.51
Sitamarhi	23617	15695	66.46	87.84
Siwan	12701	7781	61.26	96.42
Supaul	26349	13867	52.63	75.16
Vaishali	18980	7359	38.77	62.45
W.Champaran	31674	7933	25.05	72.59
Total	567171	201794	35.58	61.60

Department of Rural Development, Government of Bihar

CHAPTER VI

BANKING AND ALLIED SECTORS

In the post-1991 globalisation scenario, Indian banks have shown remarkable resilience and growth potential. The dynamism and adaptability that have always been the hallmark of the Indian banks have ensured their continued growth during the last year also and, in this respect, banks in Bihar were no exception. However, as the analysis in this chapter will show, banking in Bihar has still to come of age and it would still take some more time and some proactive strategy for the banks in Bihar to compete with those in the other states. Also, it must not be forgotten that economic development and bank operations are closely intertwined, each serving as an input to the growth of the other.

To analyse the financial sector in Bihar, one may consider 3 kinds of institutions functioning in the state : (1) Banks that include Commercial Banks, Regional Rural Banks, Cooperative Banks as well as other Cooperative institutions, (2) State financial institutions and (3) National financial institutions. In addition, a number of non banking financial corporations (NBFC) are also operative in the state. However, in the absence of adequate data, their functioning has not been analysed in this chapter. Cooperative institutions largely look after the requirements of agriculture sector, commercial banks provide finance for industry as well as agriculture, State financial institutions help to promote industrial development in the state and national level institutions cater to the interest of corporate houses and provide large scale finance. In the following analysis, we shall try to cover all these aspects.

6.1 BANKING INFRASTRUCTURE

Commercial Banks

Table 6.1 shows the distribution of commercial bank branch offices in Bihar during 2002-03 to 2006-07 and their growth. As at the end of March 2007, 63.0 percent of the total 3,698 branches of commercial banks in Bihar were located in rural areas, 20.7 percent in semi-urban and 16.3 percent in urban areas. As regards growth in the total number of branches, one notes that it has picked up from 2003-04 onwards, before which there was hardly any growth in the total number of branches and there was neither any change in their distribution among various regions. From

Table 6.2, it can be noted that Bihar accounts for only 5.0 percent of all the bank branches in the country, although it accounts for 8.1 percent of the country's population. Obviously, Bihar is underserved in terms of banking facilities.

Table 6.1 : Distribution of Commercial Bank Branch Offices in Bihar (end March)

Years	Rural	Semi-urban	Urban	Total	Growth Rate %
2003	69.1	18.6	12.3	3609	-0.19
2004	68.7	18.9	12.4	3618	0.25
2005	68.0	18.9	13.1	3646	0.77
2006	63.6	20.6	15.8	3675	0.80
2007	63.0	20.7	16.3	3698	0.63

Source : Statistical Tables Relating to Banks in India, 2006-07, RBI

Table 6.2 : Distribution of Branches of Commercial Banks among States (2006-07)

States	Rural	Semi Urban	Urban	Total	% Share
India	41.4	22.3	36.3	100.0 (73836)	100.0
Bihar	63.0	20.7	16.3	100.0 (3698)	5.0
Madhya Pradesh	47.0	23.0	30.0	100.0 (3667)	5.0
Maharashtra	29.5	17.5	53.0	100.0 (7052)	9.6
Rajasthan	47.1	23.4	29.5	100.0 (3666)	5.0
Uttar Pradesh	52.2	17.0	30.8	100.0 (8863)	12.0
West Bengal	46.7	11.2	42.1	100.0 (4850)	6.6

Source : Statistical Tables Relating to Banks in India, 2006-07, RBI

Cooperative Banks

Data for the State and the District Central Cooperative Banks are shown in Table 6.3, from which it is to be noted that there has practically been no growth in this sector during the period 2004-06.

Table 6.3 : Number of Offices (Branches) of State and District Central Cooperative banks

	Cooperative Banks					
	State		District		Total	
	2004-05	2005-06	2004-05	2005-06	2004-05	2005-06
India	898	910	11527	12613	13425	13523
Bihar	14	14	279	279	293	293
Madhya Pradesh	22	22	834	834	856	856
Maharashtra	53	53	3727	3704	3780	3757
Rajasthan	13	13	390	390	403	403
Uttar Pradesh	29	29	1277	1277	1306	1306
West Bengal	41	45	253	261	294	306

Source : Statistical Tables Relating to Banks in India, 2006-07, RBI

Regional Rural Banks (RRBs)

Table 6.4 : Branches and Deposits per Branch of Regional Rural Banks

	2003-04		2004-05		2005-06	
	No. of branches	Per Branch Deposit (Rs Cr)	No. of branches	Per Branch Deposit (Rs Cr)	No. of branches	Per Branch Deposit (Rs Cr)
India	14663	3.8	14645	4.2	14607	4.8
Bihar	1489	3.4	1487	3.7	1476	4.2
Madhya Pradesh	1069	3.5	1064	3.9	1050	4.7
Maharashtra	593	2.7	588	2.9	580	3.5
Rajasthan	1032	3.4	1027	3.7	1026	4.3
Uttar Pradesh	2878	4.5	2869	5.0	2871	5.6
West Bengal	894	4.4	897	4.6	898	5.1

Source : Money and Banking, August 2006, CMIE

Data for Regional Rural Banks are shown in Table 6.4 for the period 2003-04 to 2005-06. This table shows that the deposit per branch of the Regional Rural Banks (RRBs) in Bihar increased from Rs. 3.4 crore in March 2004 to Rs. 4.2 crore in March 2006. Given that the number of RRB branches in Bihar is close to 1500, this means an increase in deposits to the tune of Rs. 1200 crore from the rural economy of Bihar during these 3 years, at an average of Rs. 400 crore every year. The total deposits of RRBs constitute about 56 percent of the total rural deposits of the scheduled commercial banks (Table 6.5); the rural deposits of the scheduled commercial banks constitute only one-third of the total bank deposits in Bihar. Bihar accounted for 6.0 percent of all rural deposits of the scheduled commercial banks in the country in 2005-06 and the total amount of

rural deposits of such banks in Bihar amounted to Rs. 13477.2 crore. But overall, we do not see much difference, either in terms of number of offices (branches) or in terms of deposits over the period considered.

Table 6.5 : Rural Deposits of Scheduled Commercial Banks (Rs. crore)

	2002-03	2003-04	2004-05	2005-06	% Share of States 2005-06
India	176502.4	195081.7	213104.1	226061.2	100.0
Bihar	11106.9	12271.3	13328.1	13477.2	6.0
Madhya Pradesh	6662.8	7450.1	8042.4	8819.0	3.9
Maharashtra	8228.1	9381.8	9831.5	10718.8	4.7
Uttar Pradesh	28823.3	31345.1	34477.3	35616.0	15.8
West Bengal	12903.6	14047.4	15179.2	17013.5	7.5

Statewise Distribution of Employees of Scheduled Commercial Banks

From Table 6.6, it can be seen that, with 30,817 bank employees, Bihar accounts for only 3.42 percent of all the employees of scheduled commercial banks in India. Number of employees per branch of scheduled commercial banks was only 8 in Bihar compared to the all India average of 12. States like Maharashtra and West Bengal had 20 and 15 employees per branch respectively.

Table 6.6 : Distribution of Employees of SCBs as on March 31, 2006

State	Officers	Others	Total	Share (%)	No. of Employees per Branch
Bihar	10919	19898	30817	3.42	8
MP	13401	23130	36531	4.06	10
Maharashtra	53030	85398	138428	15.38	20
Rajasthan	12416	19540	31956	3.55	9
UP	30838	55475	86313	9.59	10
West Bengal	21552	51463	73015	8.11	15
All India	330093	570031	900124	100	12

Source : Statistical Tables Relating to Banks in India, 2006-07, RBI

Per Capita Deposits and Credits of Scheduled Commercial Banks

Table 6.7 shows the per capita deposits and credits of scheduled commercial banks in Bihar vis-à-vis other states. The shares of these states in the total credit of scheduled commercial banks are shown in Table 6.8. From these two tables, it is seen that while there has been significant growth

in total deposits in Bihar during the years 2005-06 to 2006-07, Bihar's share in the total credit of scheduled commercial banks has remained practically the same; in fact, it has declined marginally during 2005-06 and thereafter remained unchanged. Analysed from another angle, in 2007, the per capita deposit in Bihar (Rs. 5,035) was 21.5 percent of the All India figure (Rs. 23,382). In contrast, per capita credit in Bihar (Rs. 1,518) was only 8.7 percent of the national average (Rs. 17,541).

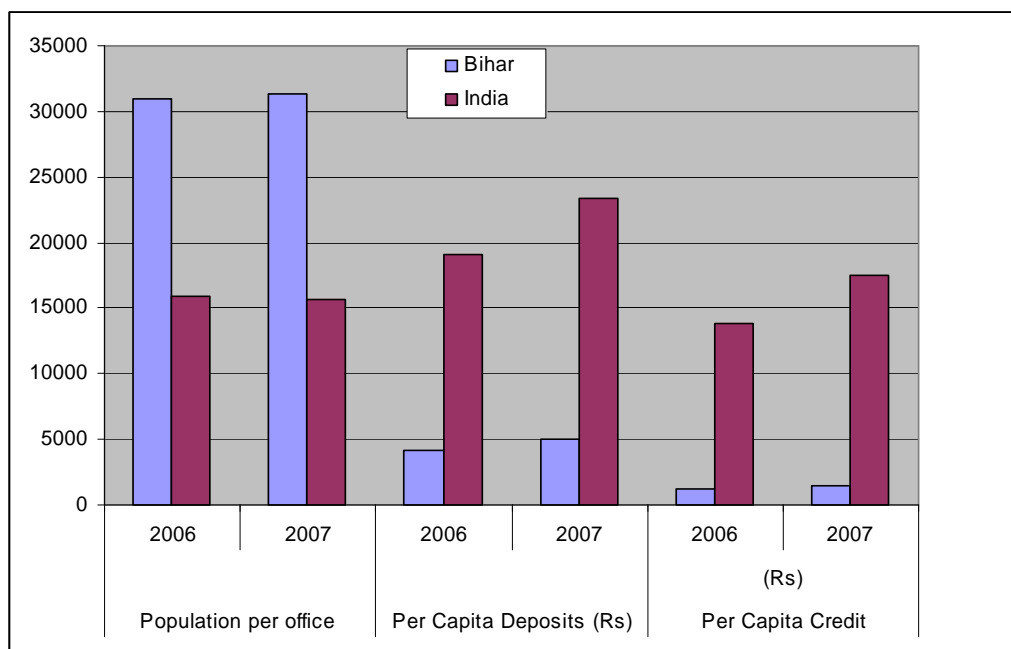
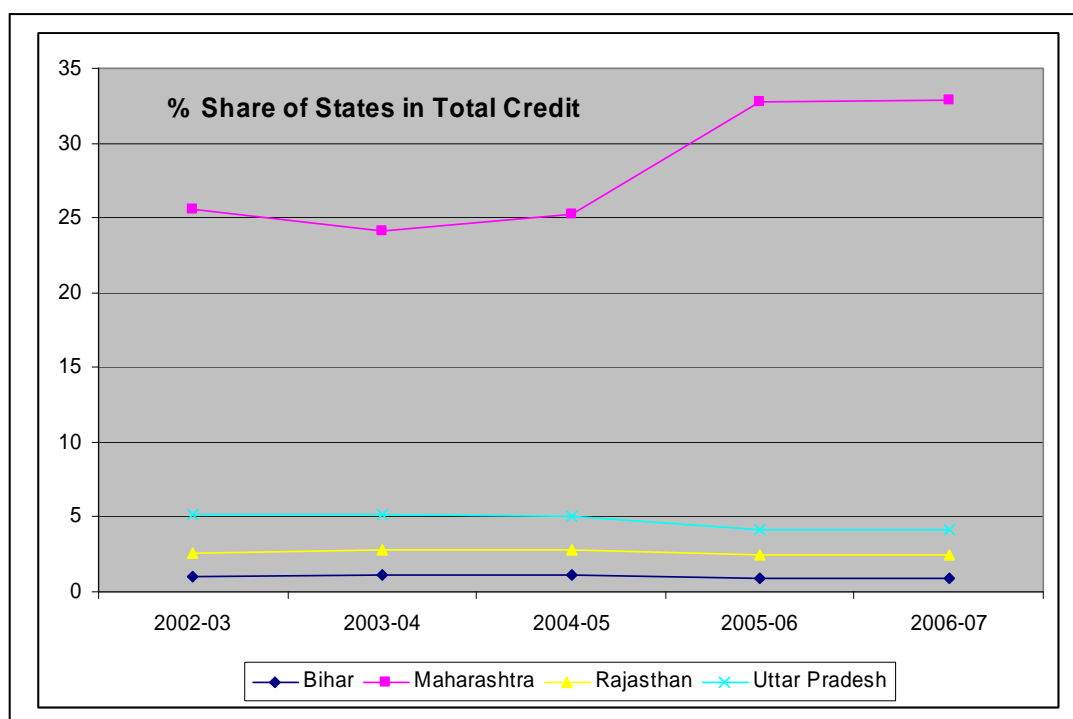


Table 6.7 : State-wise Per Capita Deposits of Scheduled Commercial Banks

	Population per office		Per Capita Deposits (Rs)		Per Capita Credit (Rs)	
	2006	2007	2006	2007	2006	2007
Bihar	31011	31350	4190	5035	1266	1518
Madhya Pradesh	25489	25502	6268	7265	3761	4519
Maharashtra	14998	14791	50327	66563	51067	65219
Rajasthan	17406	17190	8192	9699	6421	8002
Uttar Pradesh	23256	23152	7803	9128	3279	4120
West Bengal	18729	18615	14772	17381	8454	10879
India	15931	15718	19130	23382	13869	17541

Table 6.8 : Percentage Share of Selected States in Total Credit of Scheduled Commercial Banks

	2002-03	2003-04	2004-05	2005-06	2006-07
India	100	100	100	100	100
Bihar	1.0	1.1	1.1	0.9	0.9
Madhya Pradesh	2.6	2.5	2.6	2.2	2.1
Maharashtra	25.6	24.1	25.2	32.8	32.9
Rajasthan	2.6	2.8	2.8	2.5	2.5
Uttar Pradesh	5.2	5.2	5.0	4.2	4.2
West Bengal	5.7	5.9	5.5	4.8	4.8



6.2 SECTORAL SHARE IN BANK ADVANCES

Achievement under Annual Credit Plan (ACP)

Under the Annual Credit Plan of banks in Bihar, the total credit flow in Bihar has gone up to Rs. 8738 crore in 2006-07 from Rs. 6055 crore in 2005-06, indicating an impressive 44 percent growth in credit flow. The total credit flow in Bihar during the past four years is shown in the Tables 6.9 and 6.10.

Table 6.9 : ACP Achievement - All Banks

Year	Target (Rs. crore)	Achievement (Rs. crore)	Achievement (percentage)
2003-04	4842	4287	88.53
2004-05	6022	5041	83.71
2005-06	7334	6055	82.57
2006-07	10000	8738	87.37

Source : Data Collected from the State Level Bankers' Committee

Table 6.10 : Agency wise analysis of ACP Achievement (March 2007)

Agencies	Target (Rs. crore)	Achievement (Rs. crore)	Achievement (percentage)
Comm. Banks	7697.24	7099.96	92.24
Co-op Banks	568.32	272.73	47.99
RRBs	1735.334	1365.44	78.68
Total	10000.90	8738.13	87.37

Source : Data Collected from the State Level Bankers' Committee

Table 6.11 : Sectoral Share of Advances (2006-07)

Sector	ACP Target (Rs. Crore)	Achievement (Rs. Crore)	% Achievement	% Share in Total Advances
Agriculture	3722.37	2985.40	80.20	34.1
Small Scale Industries	665.08	376.11	56.55	04.3
Other Priority Sector Advances	2150.61	2139.29	99.47	24.3
Total Priority Sector Advances	6538.06	5500.80	84.14	63.0
Non Priority Sector Advances	3462.84	3237.33	93.49	37.0
Total	10000.90	8738.13	87.37	100.0

Source : Data Collected from the State Level Bankers' Committee

It can be seen from Table 6.11, presenting the sectoral profile of credit deployment in 2006-07, that the priority sector advances constituted 63 percent of the total advances of which agriculture claimed 34.1 percent. It can also be seen that the advances made to the small scale industries have not been substantial. For augmenting credit flow to this sector, development of infrastructure in power and roadways would be necessary along with the revival of the Industrial Estates.

The Annual Credit Plan for the current fiscal (2007-08) envisaged an ambitious target aggregating Rs. 13,100 crore for all the districts in Bihar, over the target of Rs. 10000.90 crore last year. Bihar being primarily an agricultural state, the major portion of the credit i.e. Rs. 4879.67 crore (37.25 percent) was earmarked for the agriculture sector. The shares of the industries, other priority sectors and non-priority sectors were Rs. 913.06 crore (6.96 percent), Rs. 2687.64 crore (20.51 percent) and Rs. 4619.63 crore (35.26 percent) respectively.

As per directions of the Government of India, the credit flow to agriculture is to double over the three year period from 2004-05 to 2007-08. The progress achieved by the banks in Bihar in this regard is shown in the Tables 6.12.

Table 6.12 : Outstanding Agricultural Advances

Year	Outstanding Agricultural Advances (Rs. crore)				Growth (Percentage)	Cumulative Growth (Percentage)
	Commercial banks	RRBs	Cooperative & LDBs	Total		
2003-04	1829	481	480	2790	—	—
2004-05	2580	854	422	3856	38.20	38.20
2005-06	3506	1195	379	5080	31.74	82.07
2006-07	4257	1694	272	6223	22.50	123.04

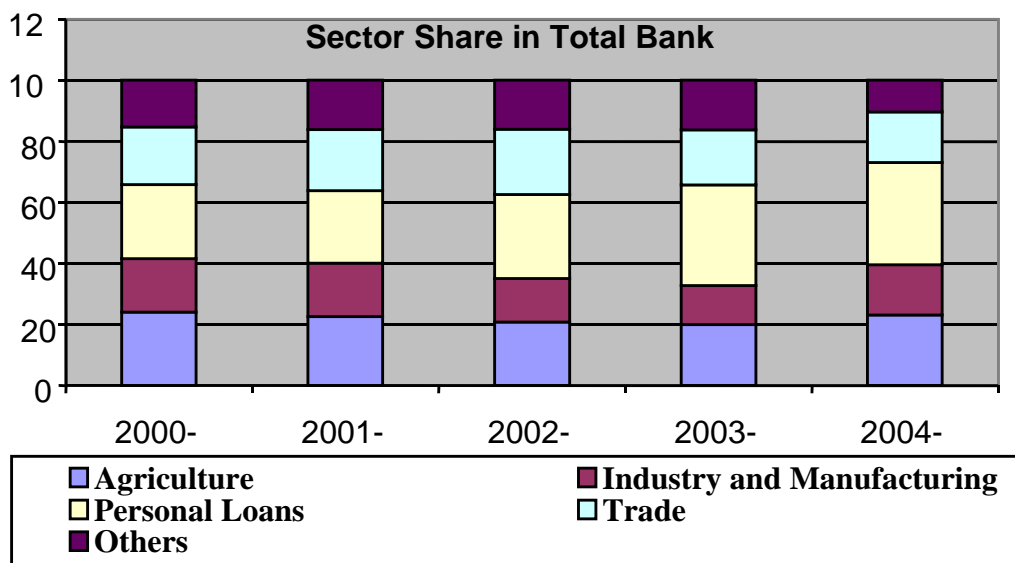
Source: Data Collected from the State Level Bankers' Committee

Industry Share in Total Bank Credit

Table 6.13 shows the percentage share of different sectors of economy in the total credit of scheduled commercial banks in Bihar for the period between March, 2003 and March, 2006. As on March 2006, agriculture accounted for about 22.7 percent of the total credit, industry and manufacturing accounted for about 22.2 percent, personal loans 31.8 percent, trade 14.8 percent and the rest 8.5 percent was accounted for by loans to professional and other services, finance and miscellaneous activities. The inter se distribution of credit among the different sectors showed minor variations.

Table 6.13 : Sector Share of Credit of Scheduled Commercial Banks in Bihar

Sectors	Percentage share of credit			
	2002-03	2003-04	2004-05	2005-06
Agriculture	20.9	19.9	23.1	22.7
Industry and Manufacturing	14.2	12.8	16.5	22.2
Transport Operators	2.4	1.7	1.5	1.1
Personal Loans	27.5	33.0	33.5	31.8
Professional & Other services	2.8	2.7	2.7	2.9
Trade	21.4	18.1	16.6	14.8
Finance	0.8	0.5	0.6	0.3
Miscellaneous	9.9	11.3	5.5	4.2
Total Bank Credit	100.0	100.0	100.0	100.0



6.3 CREDIT DEPOSIT RATIO

Credit Deposit Ratio of Scheduled Commercial Banks

Tables 6.14, 6.15 and 6.16 depict respectively the outstanding deposits, credits and the credit-deposit (CD) ratios, three important financial indicator of the performance of banking operations in selected states, including Bihar. The CD ratio of the commercial banks depends mostly on the level of economic activity and the credit absorption capacity of a particular state and is an indicator of the involvement of the banks in the economic development of the state. Till the 1990s, CD ratio in Bihar was one of the lowest in the country and there was no increase in the CD ratio in the state. After 2000-01, however, there has been some improvement in the CD ratio, but even in

2006-07, it is still one of the lowest in the country. The CD ratio of Bihar currently stands at 31.1 percent, far below the national average of 75 percent, and way behind the CD ratios of states like Maharashtra (98 percent), Rajasthan (82.5 percent), West Bengal (62.6 percent) or even Madhya Pradesh (62.2 percent).

The poor CD ratio of the state can be attributed to a number of factors such as poor bank presence (both in terms of numbers of branches and employee strength), poor credit absorption capacity, poor basic infrastructure, apart from higher incidence of NPA (Non Performing Assets) accounts. If the CD ratio is to be increased to a reasonable 40 percent by March, 2008, it would need large investments for infrastructure development such as urban development, transport and civil aviation need to be accelerated. There is also a need for the banks to expand their infrastructure and credit provision.

Table 6.14 : Deposits of Scheduled Commercial Banks by States (Rs. Crore)

States	2002-03	2003-04	2004-05	2005-06	2006-07	Percentage Share (2006-07)
India	1276195	1511273	1746814	2093040	2598822	100.0
Bihar	32931	36000	41007	46543	56916	2.2
Madhya Pradesh	37590	44073	47951	55521	65498	2.5
Maharashtra	249667	318335	382209	489794	655402	25.2
Rajasthan	34930	38839	42823	48866	58973	2.3
Uttar Pradesh	108684	119662	135360	151462	181006	7.0
West Bengal	86048	96084	111919	126100	150412	5.8

Source : Statistical Tables Relating to Banks in India, 2006-07, RBI

Table 6.15 : Outstanding Credits of Scheduled Commercial Banks by States (Rs. Crore)

States	2002-03	2003-04	2004-05	2005-06	2006-07	Percentage Share (2006-07)
India	755968	880312	1152467	1517497	1949568	100.0
Bihar	7802	9667	12868	14062	17156	0.9
Madhya Pradesh	19445	22072	29359	33315	40737	2.1
Maharashtra	193348	211751	290100	496997	642170	32.9
Rajasthan	19307	24400	32759	38304	48656	2.5
Uttar Pradesh	39083	45452	57181	63656	81699	4.2
West Bengal	43061	51673	63560	72167	94142	4.8

Source : Statistical Tables Relating to Banks in India, 2006-07, RBI

Table 6.16 : Credit Deposit Ratio of the Scheduled Commercial Banks

States	2002-03	2003-04	2004-05	2005-06	2006-07	Change (2002-07)
India	59.2	58.2	66.0	72.5	75.0	15.8
Bihar	23.7	26.9	31.4	30.2	31.1	7.4
Madhya Pradesh	51.7	50.1	61.2	60.0	62.2	10.5
Maharashtra	77.4	66.5	75.9	101.5	98.0	20.6
Rajasthan	55.3	62.8	76.5	78.4	82.5	27.2
Uttar Pradesh	36.0	38.0	42.2	42.0	45.1	9.1
West Bengal	50.0	53.8	56.8	57.2	62.6	12.6

According to the data provided by the State Level Bankers' Committee of Bihar, chaired by the State Bank of India, however, the CD ratio of Bihar as on March 31, 2007 was 34.38 percent. This takes into account all banks, other than commercial bank, as shown in Table 6.17

Table 6.17 : Credit Deposit Ratio in Bihar for All Banks (March 31, 2007)

Bank	Deposit (Rs. Cr)	Credit (Rs. Cr)	CD Ratio
Comm. Banks	48247	14980	31.05
Co-op Banks	885	663	34.91
RRBs	7210	3406	47.24
Total	56342	19048	33.81
RIDF	—	325	—
Grand Total	56342	19372	34.38

As on March 2007, the aggregate deposits of all scheduled commercial banks in Bihar were Rs. 56,916 crore, against a credit of Rs. 17,156 crore, giving a CD ratio of 31.1 percent, up from a pitiable 23.7 percent in 2002-03. Even before the process of liberalisation began in the early 1990s, the CD ratio of Bihar used to be around 40 percent. The deposits and credits of the scheduled commercial banks in Bihar constitute respectively 2.2 percent and 0.9 percent of the total deposits and the total credits in the country, one of the lowest among the major Indian states (Table 6.18). In 2002-03, the CD ratio was as low as 23.7 percent. Then it had increased to 31.4 percent in 2004-05, but thereafter, it has practically been stagnant at that low level.

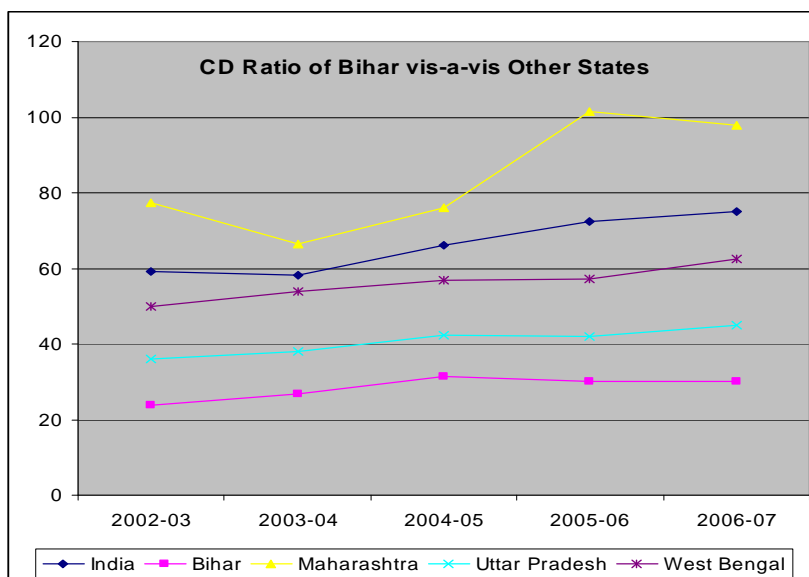


Table 6.18 : Percentage Share Selected States in Total Deposits of Scheduled Commercial Banks

	2002-03	2003-04	2004-05	2005-06	2006-07
India	100	100	100	100	100
Bihar	2.6	2.4	2.3	2.2	2.2
Madhya Pradesh	3.0	2.9	2.8	2.7	2.5
Maharashtra	19.6	21.1	21.9	23.4	25.2
Rajasthan	2.7	2.6	2.5	2.3	2.3
Uttar Pradesh	8.5	7.9	7.8	7.2	7.0
West Bengal	6.7	6.4	6.4	6.0	5.8

In absolute terms, it means that if the current CD ratio of about 30 percent in the state were to increase to the national level of around 75 percent, investments in the state would go up by a Rs. 25,000 crore, which is much more than the current annual plan outlay of the state and would provide the much-needed impetus to economic activities. Even a modest 50 percent CD ratio would boost investments by Rs. 11,000 crore.

The low disbursement of credit also indicates that the credit requirements of the state are being met at higher rates of interest from private lending agencies, eating into the profitability of enterprises in the state. This naturally is a serious hindrance to industrial growth in the state. Further, this also indicates flight of capital away from the state.

Investment Plus Credit to Deposit (ICD) Ratio

Banks assist the economy not simply by giving credit, but also by investing a large part of their investible funds in state Government securities and in shares and bonds of State Undertakings, Quasi-Government bodies and Joint Stock companies. Therefore, the total involvement of the banks in the economic activities of a state is truly reflected not only by the CD ratios, but by the

Investment plus Credit to Deposit (ICD) ratios. From Table 6.19, one notices that the inter-state differences with respect to ICD ratios are lesser than for the CD ratios. The ICD ratios of Bihar or, in general, those of less developed states were substantially higher than their respective CD ratios, whereas for the developed states, the differences were not as much. As of March 2006, Bihar had an ICD ratio of 52.1 percent, compared to its CD ratio of around 30.2 percent. Nevertheless, even the ICD ratio of Bihar is much lower as compared to that of comparable states like Rajasthan (102.9 percent), Madhya Pradesh (78.6 percent) and Orissa (92.9 percent) as well as the national average of 78.3 percent.

Table 6.19 : CD and ICD Ratios of Scheduled Commercial Banks

States	Credit Deposit Ratios				Investment plus Credit Deposit Ratio			
	2003	2004	2005	2006	2003	2004	2005	2006
Punjab	43.4	45.7	49.7	56.3	49.0	52.9	57.2	63.0
Rajasthan	55.3	62.8	76.5	86.0	76.3	86.0	97.4	102.9
Bihar	23.7	26.9	31.4	30.2	39.8	43.6	46.3	52.1
Jharkhand	30.9	26.9	30.6	31.6	34.2	31.7	35.8	36.1
Orissa	56.9	58.6	74.7	78.7	81.2	82.8	93.2	92.9
West Bengal	50.0	53.8	56.8	61.4	58.9	64.4	67.8	70.8
Chattisgarh	43.8	44.9	49.9	52.5	48.7	51.2	56.6	57.7
Madhya Pradesh	51.7	50.1	61.2	67.2	65.8	65.0	74.8	78.6
Uttar Pradesh	36.0	38.0	42.2	46.3	47.8	50.9	54.2	56.7
Uttaranchal	21.4	23.4	29.1	30.9	26.7	34.0	39.0	39.4
Gujarat	56.0	54.8	60.9	75.3	61.9	64.1	69.6	82.7
Maharashtra	77.4	66.5	57.9	81.3	80.1	69.9	78.8	83.5
Andhra Pradesh	69.3	70.9	83.3	86.2	80.1	84.7	94.4	95.3
Tamil Nadu	93.1	96.1	105.4	109.3	100.2	103.9	112.7	115.4
India	59.2	58.2	66.0	72.4	66.4	66.5	73.4	78.3

Source : Report on Trend and Progress of Banking in India 2005-06, RBI

CD Ratio of Districts in Bihar

Tables 6.20 depicts the deposits, credits and CD ratios of all scheduled commercial banks as well as the Regional Rural Banks in all the 38 districts of Bihar as on June 2007. This table brings out several interesting points :

- (i) CD ratios across districts show wide variations, from 18.8 percent in Siwan to 57.7 percent in neighbouring West Champaran;
- (ii) CD ratios of RRBs also show similar variations across different districts with an even wider range, the highest being 63.3 percent for Katihar and the lowest being 19.9 percent for Jehanabad;

- (iii) CD ratios of RRBs in nearly all cases are higher than the corresponding CD ratios of SCBs. The overall CD ratio of nearly 40 percent of RRBs for the entire state is also much higher than the overall CD ratio of nearly 31 percent of SCBs in the entire state

Table 6.20 : Districtwise CD Ratio in Bihar (As on 31.06.2007)

Sl. No.	Name of District	Scheduled Commercial Banks			Regional Rural Banks		
		Total Deposit (Rs. crore)	Total Credit (Rs. crore)	CD Ratio	Total Deposit (Rs. crore)	Total Credit (Rs. crore)	CD Ratio
1.	Araria	1244	672	54.0	101	58	57.4
2.	Arwal	549	114	20.8	74	17	23.0
3.	Aurangabad	2090	504	24.1	199	73	36.7
4.	Banka	1042	454	43.6	64	25	39.1
5.	Begusarai	2511	1036	41.3	97	54	55.7
6.	Bhagalpur	3666	1304	35.6	60	31	51.7
7.	Bhojpur	3496	850	24.3	324	123	38.0
8.	Buxar	1895	579	30.6	174	92	52.9
9.	Darbhanga	3252	942	29.0	298	101	33.9
10.	Gaya	4544	1258	27.7	315	96	30.5
11.	Gopalganj	2508	702	28.0	362	112	30.9
12.	Jamui	1194	344	28.8	109	38	34.9
13.	Jehanabad	1021	246	24.1	146	29	19.9
14.	Kaimur (Bhabhua)	1161	544	46.9	102	53	52.0
15.	Katihar	1720	982	57.1	120	76	63.3
16.	Khagaria	1072	379	35.4	96	41	42.7
17.	Kishanganj	710	377	53.1	97	56	57.7
18.	Lakhisarai	894	236	26.4	102	30	29.4
19.	Madhepura	1022	415	40.6	106	53	50.0
20.	Madhubani	2464	777	31.5	347	88	25.4
21.	Munger	2222	494	22.2	147	48	32.7
22.	Muzaffarpur	5190	1859	35.8	258	100	38.8
23.	Nalanda	2707	679	25.1	342	101	29.5
24.	Nawada	1342	350	26.1	155	72	46.5
25.	W. Champaran	2027	1170	57.7	250	135	54.0
26.	Patna	31008	7775	25.1	139	59	42.4
27.	E. Champaran	3064	1202	39.2	325	160	49.2
28.	Purnea	1820	952	52.3	189	107	56.6
29.	Rohtas	2836	1086	38.3	296	157	53.0
30.	Saharsa	1238	436	35.2	141	58	41.1
31.	Samastipur	3076	1196	38.9	275	130	47.3
32.	Saran	4444	1097	24.7	270	114	42.2
33.	Shiekhpora	576	154	26.7	67	30	44.8
34.	Sheohar	277	76	27.4	32	12	37.5
35.	Sitamarhi	1803	708	39.3	113	69	61.1
36.	Siwan	4073	766	18.8	495	143	28.9
37.	Supaul	1242	383	30.8	122	46	37.7
38.	Vaishali	3023	914	30.2	272	77	28.3
	Total for Bihar	110023	34012	30.9	7181	2864	39.9

Source : Quarterly Statistics Deposits and Credits of Scheduled Commercial Banks, June 2007, RBI

Taking into account the scheduled commercial banks (SCB), CD ratios are less than 25 percent in Arwal, Aurangabad, Bhojpur, Jehanabad, Munger, Saran and Siwan; for the RRBs, there are only 2 such districts (Arwal and Jehanabad). For the SCBs again, CD ratios are above 50 percent in Araria, Katihar, Kishanganj, Purnea and West Champaran; for the RRBs, there are as many as 12 such districts. In case of Sitamarhi and Rohtas districts, the wide difference between the two CD ratios is indeed striking. The high CD ratios in many districts are, however, related to high accumulated interests on previous loans; they do not reflect the banks' willingness to increase the ground level credit flow.

6.4 REGIONAL RURAL BANKS (RRBS)

There are 5 RRB's in Bihar, each serving a particular zone: *Madhya Bihar Kshetriya Gramin Bank* sponsored by Punjab National Bank, *Samastipur Kshetriya Gramin Bank* sponsored by State bank of India, *Uttar Bihar Kshetriya Gramin Bank* and *Kosi Kshetriya Gramin Bank*, both sponsored by the Central Bank of India and *Bihar Kshetriya Gramin Bank* sponsored by United Commercial Bank. These banks employed a total of 6,141 staff members in their 1,487 branches, nearly 86 percent of which are located in rural areas. Their total accumulated losses run into about Rs. 583 crore as on March, 2007. Table 6.21 shows the CD ratio and the ID (Investment : Deposit) ratios of these 5 banks and Table 6.22 depicts the amount of loan given during 2005-06 and 2006-07. *Kosi KGB* has the highest CD ratio of nearly 53 percent. The ID ratio is the highest for the *Madhya Bihar KGB* which also has the highest share of loans among all the 5 RRBs.

Table 6.21 : CD and ID Ratios of RRBs

RRBs	CD Ratio			ID Ratio		
	2005-06	2006-07	30/09/07	2005-06	2006-07	30/09/07
Madhya Bihar KGB	32.51	39.42	39.83	62	63	62
Samastipur KGB	42.80	44.68	47.04	51	57	54
Kosi KGB	48.36	52.20	52.70	53	54	49
Uttar Bihar KGB	34.84	37.51	36.56	59	57	59
Bihar KGB	34.94	38.24	39.57	57	58	53
Total	35.99	40.26	40.26	56	58	55

Table 6.22 : Loans Disbursed by RRBs

	Total loans (Rs. cr)			Agricultural loans (Rs. cr)		
	2005-06	2006-07	% share	2005-06	2006-07	% share
Madhya Bihar KGB	247	560	40.88	172	359	45.44
Samastipur KGB	49	62	4.53	25	38	4.81
Kosi KGB	102	173	12.63	67	99	12.53
Uttar Bihar KGB	264	484	35.33	155	256	32.41
Bihar KGB	77	91	6.64	31	38	4.81
Total	739	1370	100.00	450	790	100.00

6.5 FINANCIAL INSTITUTIONS

There are State financial institutions as well as Central financial institutions working in the state that provide a variety of financial services to boost its industrial growth in particular and economic development in general. At the national level, there are 6 development banks (IDBI, IFCI, ICICI, SIDBI, IIBI and IDFC), 2 specialised financial institutions (NABARD and EXIMBANK) and 3 investment institutions (LIC, UTI and GIC), working in different states; some of them also working in Bihar. At the state level, there are only 2 functional Government Companies/Corporations working in the financial sector — Bihar State Financial Corporation (BSFC) and Bihar State Credit and Investment Corporation (BISCICO). BSFC, originally established in 1954, was revived in 2004-05. BISCICO was established in 1975. Their working results based on their latest available accounts are shown in Table 6.23. BSFC has arrears of accounts for 1 year while the BISCICO has four years' arrears in accounts. BSFC has been earning some profits; in case of BISCICO, the losses have been reduced somewhat. Given the current level of their activities, the manpower deployed by BSFC may need review.

Table 6.23 : Financial and Operational Performance Indicators of State Level Finance Institutions in Bihar

(Rs Crore)

Indicators	BSFC		BISCICO	
	2004-05	2005-06	2000-01	2001-02
Total Assets	762.04	736.33	-----	-----
Paid-Up-Capital	77.84	77.84	15.12	15.12
Borrowings	235.14	200.16	-----	-----
Return on Capital Employed (%)	4.45	6.62	-----	4.87
Loans and Advances Outstanding	286.68	299.19	59.44	58.59
Income (Mainly Interest on Loans + Other Income)	8.58	16.38	-----	-----
Expenses	25.03	19.83	-----	-----
Profit	0.53	17.34	-27.35	-9.03
Accumulated Loss	454.87	437.53	100.23	126.49
Manpower Employed	386	367	64	67
Debt:Equity Ratio	3:68:1	3.84:1	3.93:1	3.87:1

Source : Report of the Comptroller and Auditor General of India for the Government of Bihar (Commercial), 2006-07

National Bank for Agriculture and Rural Development (NABARD)

NABARD has a mandate for facilitating credit flow for development of agriculture, agro-industries, village and cottage industries, handicrafts and other rural crafts by providing refinance to lending institutions in rural areas. It also coordinates the operations of rural credit institutions and by offering training and research facilities. In addition, it manages the Rural Infrastructure Development Fund (RIDF), created to compensate for the shortfall in commercial banks' lending to strengthen rural infrastructure and to provide loans to state government for projects relating to irrigation, soil conservation, watershed management, drinking water supply, cold storage chains and other rural infrastructure projects. Till December 2007, NABARD had sanctioned 9,372 projects in the state under the RIDF, of which as many as 7,951 are related to minor irrigation. It has disbursed Rs. 540 crore in the state out of the total sanctioned amount of Rs 1723.70 crore. The total credit disbursed by NABARD by way of refinancing the banks amounted to Rs 156 crore during 2006-07, details of which are given in Table 6.24.

Table 6.24 : Sectorwise Refinancing by NABARD

(Rs. crore)

Sl. No.	Purpose	2004-05	2005-06	2006-07
1	Minor Irrigation	96.84	55.55	11.52
2	Farm Mechanisation	1.19	0.06	30.48
3	Swarn Jayanti Gram Swarojgar Yojna	69.37	51.49	24.62
4	Dairy	0	0.08	2.21
5	SC/ST Action Plan	0	1.27	4.8
6	Self Help Groups	2.99	5.9	8.64
7	Pradhan Mantri Rojgar Yojana	0	0.9	3.22
8	Rural Non-Farm Sector	5.09	1.88	15.22
9	Others	0.97	0.08	55.76
	Total	176.45	117.21	156.47

Source : NABARD

6.6 MICRO FINANCE

Many third world countries are increasingly realizing that the conventional Government run anti-poverty programmes cannot make a serious dent on poverty, especially the kind of poverty caused by the absence of strong rural infrastructure. This is particularly true in Bihar where these programmes help only a fraction of the poverty-stricken population. In this scenario, microfinance is a potent alternative for poverty alleviation. To succeed, microfinance should combine an innovative credit delivery mechanism that ensures viable financial services for the needy with a realistic assessment of the micro-enterprise opportunities in the state. However, creating adequate

awareness among the potential beneficiaries for this is the first prerequisite for the success of any such programmes. The Self Help Groups (SHGs) and the SHG-Bank Linkage Programme, implemented by commercial banks, RRBs and cooperative banks, have emerged as the major microfinance programme in the country. Bihar is gradually catching up with other states in SHG-Bank Linkages. As on March 31, 2007, a cumulative number of 72,638 SHGs were credit-linked to banks and the total credit flow to these SHGs was Rs. 202.98 crore. The yearwise progress made in credit linking of SHGs is shown in Table 6.25.

Table 6.25 : Microfinancing in Bihar

Year	No. of SHGs with bank linkage	Amount of credit (Rs. crore)
Up to 2004	16246	51.82
2004-05	11769	37.42
2005-06	18206	31.20
2006-07	26417	82.54
Total	72638	202.98

Source : Data Collected from the State Level Bankers' Committee

The State Focus Paper 2006-07, prepared by NABARD, has estimated that has a potential for formation of around 5 lakh SHGs, 1.5 lakh of which can be credit linked by 2006-07. Major handicaps in the spread of SHG-Bank Linkage Programme include the absence of reputed NGOs and low awareness of SHG lending among the stakeholders. It is expected that, for the sensitization programme, initiatives taken by NABARD and other implementing banks shall result in creating a favourable environment towards the SHGs movement in the state. Performance of RRBs in this area during 2006-07 is shown in Table 6.26.

Table 6.26 : Microfinancing by RRBs

RRBs	Number of SHGs with bank-linkage	Amount of credit (Rs. crore)
Madhya Bihar KGB	6456	6.44
Samastipur KGB	541	1.85
Kosi KGB	1597	9.18
Uttar Bihar KGB	3404	25.63
Bihar KGB	1038	4.57
Total 2006-07	13036	47.67
Total 2005-06	10497	25.31

Source : Data Collected from the State Level Bankers' Committee

6.7 EVALUATION OF SELECTED GOVERNMENT SCHEMES

Pradhan Mantri Rojgar Yojana (PMRY)

The scheme was first launched on October 2, 1993 to provide sustainable self-employment opportunities to 1 million educated unemployed youth in the country during the Eighth Plan Period. Under the scheme, loans upto Rs. 1.00 lakh for business sector and Rs. 2.00 lakh for other activities are to be provided by banks for all economically viable activities, including agriculture and allied activities, but excluding direct agricultural operations like raising crops, purchase of manure etc. In Bihar, the average amount of loan per beneficiary is Rs. 91,678. The achievement under the scheme during the last 6 years are given in the Table 6.27.

Table 6.27 : Target and Achievement of PMRY

Year	Target (No.)	Achievement (No.)	% Achievement
2001-02	18,000	8,204	45.57
2002-03	18,100	9,366	51.74
2003-04	14,400	9,812	68.13
2004-05	16,000	10,119	63.24
2005-06	25,000	14,191	56.76
2006-07	11,400	8,671	79.60

Swarnjayanti Grameen Swarozgar Yojna (SGSY)

Among the different schemes for rural poverty alleviation, SGSY is the most important anti-poverty programme in the state. The financial achievements during the last four years were Rs. 214 crore (2003-04), Rs. 284 crore (2004-05), Rs. 249 crore (2005-06) and Rs. 281.95 crore (2006-07). As on 31.3.2007, against the target of Rs. 354.41 crore, all banks taken together sanctioned Rs. 281.95 crore under the scheme, implying an achievement of 79.6 percent.

Table 6.28 : Loans Sanctioned and Disbursed under SGSY

	Sanctioned		Disbursed	
	No	Amount	No.	Amount
Individual	46748	121.54	45648	114.12
SHGs	16452	160.41	12230	117.86
Total	—	281.95	—	231.98

One of the problems plaguing the priority sector advances is the low rate of recovery of these advances. This also affects the financial viability of the banks. A recovery rate of 46.53 percent in priority sector advances by the banks in Bihar implies large non-performing assets that seriously affect the viability of banks. The recovery position in government sponsored schemes is even lower in comparison with priority sector advances, which is a major source of worry for the banks. For SGSY and PMRY schemes, the recovery rates are only 31.12 and 24.69 percent respectively.

During 2006-07, the banking infrastructure in Bihar did not register any appreciable growth. With a share of only 5 percent of the total number of bank branches in India, 3 percent of total employees of scheduled commercial banks, and with only 2 percent share of total deposits and less than 1 percent share of the total bank credits in the country, Bihar remains one of the disadvantaged states in the country in banking. The per capita deposits and credits also remain one of the lowest in the country. The priority sector advances made by the banks in the state constituted 63 percent of the total advances during 2006-07, with agriculture sector alone claiming a share of 34 percent; but the recovery of the priority sector advances was abysmal with more than half of the advances remaining unrecovered. The CD ratio also remains one of the lowest at 30 percent and is way behind the national average of 75 percent. Even the other disadvantaged states like Uttar Pradesh, Rajasthan and Madhya Pradesh had achieved far higher CD ratios. The ICD ratios, though higher than the CD ratios, still fall far short of the national average of 73.4 percent. The CD ratios across districts showed wide variations from as low as 19 percent to as high as 58 percent : there are seven districts with CD ratios less than 25 percent. The achievement of the Regional Rural Banks (RRBs) in this area was better than the scheduled commercial banks. The persistently low CD ratio is a cause for serious concern and needs urgent correction through higher investment in the state.

The state level financial institutions need revitalisation. Among the national level financial institutions, NABARD's disbursement of loans under the RIDF was not even one-third of the total sanctioned amount. Microfinancing in the state has made a good beginning and there is immense scope for microfinance to make significant inroads into rural economy. Achievements made under anti-poverty schemes like PMRY, SGSY and MSTP were annulled by the extremely low rate of recovery. Overall, it would seem that the banking in Bihar is yet to take off in a meaningful way so as to create a real impact on the living standards of people.

CHAPTER VII

PUBLIC FINANCE

Public finance is about prudent fiscal management and it is one of the ways of generating future optimism so essential for economic revival. It encompasses a host of areas, including strengthening government capacity for policy development, designing an efficient delivery mechanism for various development programmes, reform of civil service, increasing accountability in the administrative machinery, improving performance of the public sector, developing infrastructure, human resources development, training for sustainable development and protection of environment. In revenue collection, reforms encompass measures for improving efficiency of tax collection and reduction of arrears while reducing the tax burden on individual tax payers. In expenditure, reforms constitute differentiating between essential and unproductive activities, allocation of resources strictly according to economic and social priorities, reducing cost of services and monitoring outcomes of different development programmes.

The need for fiscal adjustment and continued fiscal consolidation by lowering borrowing to meet the FRBMA targets have been recognized by the state, and it has also initiated a number of steps in that direction. During 2007-08, reforms were carried out earnestly and, as a result, today the state is in a much better position. The key concern of the state government is not only the overall deficit, but addressing the pressing need to improve the state of public services, especially in the social sectors and physical infrastructure. Even though the state government has increased allocation to these sectors, it alone cannot fill up the infrastructural gap. The private sector also needs to step in to form public private partnerships for strengthening social and physical infrastructure. Development can only be ensured through efficient use of the allocated funds, the bottom line being that economic growth must be translated into human wellbeing. It also must be remembered that investments always take time to translate into capacities. This time can be shortened by improving infrastructure, expanding markets, upgrading skills and improving efficiency and accountability in Government offices through proper accounting, auditing and vigilance control.

The resources available to the state government consist of tax and non-tax revenues, capital receipts, share of central taxes assigned to the state, loans and grants from the central government, borrowings from the open market, and collections from the Provident Fund and other deposits kept within the state government account. These resources are utilized either for plan expenditure for development purposes or for non-plan expenditure. The latter category includes expenditure for administration, payment of interests and servicing of outstanding debt, providing grants and loans to local bodies, government companies and corporations, and advances for various purposes to government servants.

As per the provisions of Article 266 of the Constitution, all revenues received by the state government, all loans raised by it by issue of treasury bills, loans or ways and means advances and all money received by it as repayment of loans are credited to the Consolidated Fund of the state. No money can be spent out of the Consolidated Fund except with the approval of the Legislature. Other than this, there are two separate funds managed by the state Government — a Contingency Fund and a Public Account. The Contingency Fund is of the nature of an imprest with a fixed corpus, created by the Legislature under Article 267 of the Constitution to meet unforeseen expenditure, pending their subsequent authorization of the Legislature and recoupment from the Consolidated Fund. All other money received by or on behalf of the state government are credited to the Public Account under Article 266(2) of the Constitution. No legislative authorization is required to withdraw any money from the Public Account, the balance of which is not held separately, but stands merged with the cash balance of the state government. The gross fiscal deficit of the state government after borrowings on the Consolidated Fund is met by drawing from the Public Account.

The financial and fiscal performance of the state government have been analysed first by summarizing the receipt and expenditure of the state government as shown in Table 7.1, and then by taking a set of ten major performance indicators relating to public finance. The second part of the analysis compares these indicators from Bihar during the six year period from 2002-03 to 2007-08 with 6 major Indian states : Maharashtra and Punjab (two prosperous states), Madhya

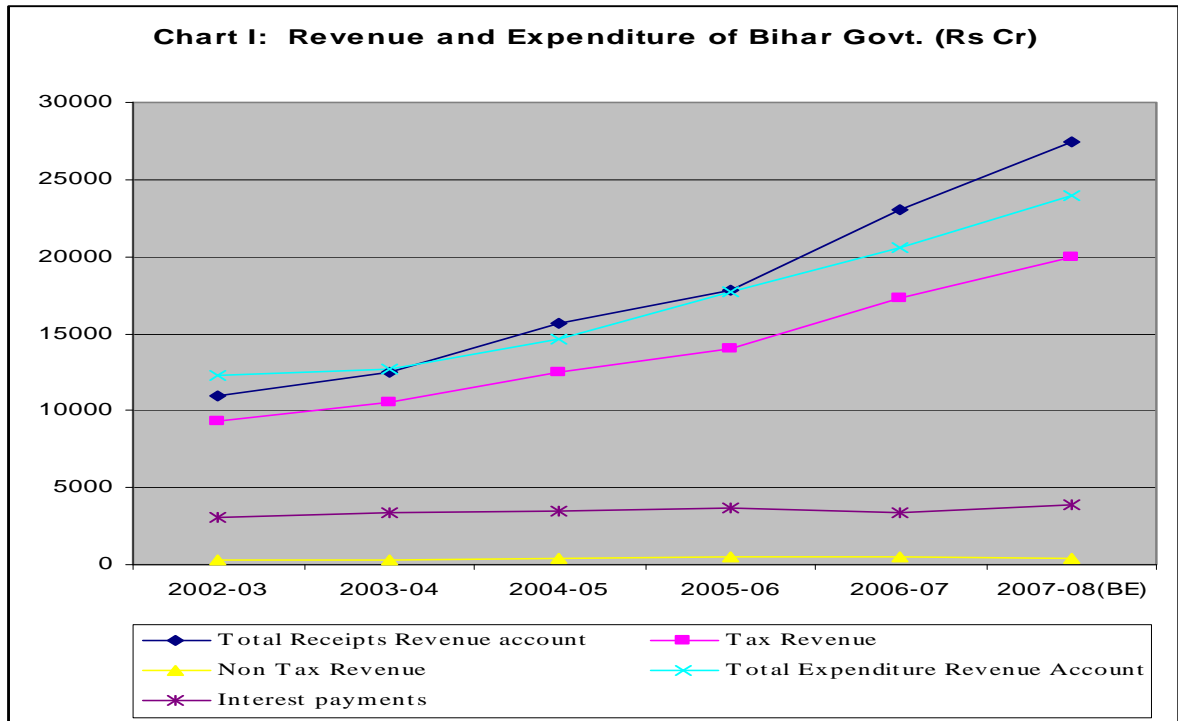
Pradesh, Rajasthan and Uttar Pradesh (three states from the Hindi heartland) and West Bengal (a neighbouring state with a common agrarian and administrative history). Figures for 2002-03 to 2005-06 are actual accounts figures taken from the Finance Accounts of all the states prepared by the Comptroller and Auditor General of India. For the year 2006-07, the revised estimates have been considered for the states of Madhya Pradesh, Rajasthan, Punjab and Maharashtra and the actual accounts figures for the remaining states. For 2007-08, for all states, budget estimates have been used. Table 7.2 presents all these figures for ten major performance indicators.

7.1 Overview of the Financial Position

Table 7.1 unravels the story of Bihar's gradual financial turnaround. Till 2003-04, the state government had a deficit in its revenue account, but it had a surplus of more than Rs. 1000 crore in the revenue account for the first time in 2004-05. This surplus has been increasing continuously since then and is poised to increase to about Rs. 3500 crore at the end of 2007-08. This has been made possible by increasing revenue, especially since 2005-06, and by containing expenditure, especially by efficient debt management. For example, the interest payments was contained at below Rs. 4000 crore on an outstanding debt of over Rs. 47600 crore. On the expenditure side also, since 2004-05, the state government's spending on social and economic services has substantially picked up, though expenditure on general services increased substantially only during the last year due to larger government spending on district administration, police and public works. The gap between plan and non-plan expenditure has also been closing since 2005-06; for 2007-08, the non-plan expenditure is less than twice the plan expenditure, compared to about four times six years ago. After 2003-04, the Gross Fiscal Deficit (GFD) has never been allowed to go beyond Rs. 4000 crore, i.e., about 6 percent of the GSDP. Thus the state has already achieved the FRBMA target of eliminating revenue deficit far ahead of the target year of 2008-09. The state is now well poised to achieve the FRBMA target of containing the GFD within 3 percent of GSDP; in 2007-08 BE, it was contained at 3.03%.

Table 7.1 : Receipts and Expenditure of the Bihar Government

Sl. No.		2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
1	Total Revenue Receipts	10968	12456	15714	17838	23083	27441
a	Tax Revenue	9310	10518	12465	13983	17325	20001
b	State Own Tax Receipts	2784	2919	3342	3561	4032	4969
c	State's Own Non-Tax Receipts	261	320	418	522	511	396
2	Total Revenue Expenditure	12255	12711	14638	17756	20585	23958
a	General Services, of which	6574	7175	7803	8523	8643	10291
b	Interest payments	3022	3343	3474	3649	3416	3909
c	Social Services	3916	4033	4795	6862	7917	8978
d	Economic Services	1763	1498	2036	2367	4021	4689
3	Revenue Deficit	1287	255	-1076	-82	-2498	-3483
4	Capital Receipts	4213	7930	7641	3821	2365	5802
a	Public Debt	4197	7920	7626	3770	2358	5776
b	Recovery of Loan and Advances	16	10	15	51	7	26
5	Capital Expenditure	3250	9771	5420	4812	6551	9299
a	Capital Outlay	970	1549	1205	2083	5211	6389
b	Repayment of Public Debt	1533	5653	3087	981	1025	2631
c	Loans and Advances Disbursed	747	2569	1128	1748	315	280
6	Total Expenditure	15505	22482	20058	22568	27136	33257
a	Plan Expenditure	3071	5202	3476	4899	9397	11966
b	Non Plan Expenditure	12434	17280	16581	17670	17740	21291
7	Debt Outstanding	32016	34401	39344	42498	44226	47621
8	Gross Fiscal Deficit	2988	4363	1242	3700	3021	3159
9	Primary Deficit	-34	1020	-2232	51	-395	-750
10	GSDP	65117	66960	73791	79682	94251	104148
a	GSDP Growth		2.83	10.20	7.98	18.28	10.50
	(As percentage of GSDP)						
1	Total Revenue Receipts	16.84	18.60	21.30	22.39	24.49	26.35
a	Tax Revenue	14.30	15.71	16.89	17.55	18.38	19.20
b	State Own Tax Receipts	4.28	4.36	4.53	4.47	4.28	4.77
c	State's Own Non-Tax Receipts	0.40	0.48	0.57	0.66	0.54	0.38
2	Total Revenue Expenditure	18.82	18.98	19.84	22.28	21.84	23.00
a	General Services, of which	10.10	10.72	10.58	10.70	9.17	9.88
b	Interest payments	4.64	4.99	4.71	4.58	3.62	3.75
c	Social Services	6.01	6.02	6.50	8.61	8.40	8.62
d	Economic Services	2.71	2.24	2.76	2.97	4.27	4.50
3	Revenue Deficit	1.98	0.38	-1.46	-0.10	-2.65	-3.34
4	Capital Receipts	6.47	11.84	10.35	4.80	2.51	5.57
a	Public Debt	6.45	11.83	10.33	4.73	2.50	5.55
b	Recovery of Loan and Advances	0.02	0.02	0.02	0.06	0.01	0.02
5	Capital Expenditure	4.99	14.59	7.34	6.04	6.95	8.93
a	Capital Outlay	1.49	2.31	1.63	2.61	5.53	6.13
b	Repayment of Public Debt	2.35	8.44	4.18	1.23	1.09	2.53
c	Loans and Advances Disbursed	1.15	3.84	1.53	2.19	0.33	0.27
6	Total Expenditure	23.81	33.57	27.18	28.32	28.79	31.93
a	Plan Expenditure	4.72	7.77	4.71	6.15	9.97	11.49
b	Non Plan Expenditure	19.09	25.81	22.47	22.18	18.82	20.44
7	Debt Outstanding	49.17	51.38	53.32	53.33	46.92	45.72
8	Gross Fiscal Deficit	4.59	6.52	1.68	4.64	3.21	3.03
9	Primary Deficit	-0.05	1.52	-3.02	0.06	-0.42	-0.72



7.2 Fiscal Performance

Revenue deficit and capital deficit represent the excess of expenditure over receipts under the revenue and capital accounts respectively. The conventional budget deficit is the algebraic sum of the revenue and capital deficits, but this does not actually show the total resource gap in the economy, as it includes the borrowings under the capital receipts. The overall resource gap is reflected by the Gross Fiscal Deficit (GFD) which is to be bridged by borrowings of one sort or another. For analyzing the fiscal performance of the state Government, the present analysis has used the following 10 indicators:

- (i) Ratio of Revenue Deficit to GFD.
- (ii) Ratio of Capital Outlay to GFD.
- (iii) Ratio of Net Lending to GFD.
- (iv) Ratio of Non-Development Expenditure to Aggregate Expenditure.
- (v) Ratio of Non-Development Expenditure to Revenue Receipt.
- (vi) Ratio of Interest Payment to Revenue Expenditure.
- (vii) Ratio of State's Tax Revenue to Revenue Expenditure.

- (viii) Ratio of State's Non-Tax Revenue to Revenue Expenditure.
- (ix) Ratio of Gross Transfer from Central Government to Aggregate Expenditure.
- (x) Ratio of Debt Servicing Expenditure to Gross Transfer from the Central Government.

Ratio of Revenue Deficit to GFD : This ratio indicates the extent to which revenue deficit contributes to GFD. Ideally, the revenue account should leave a surplus for creation of capital assets. In Bihar, there were surpluses in the revenue account since 2004-05 that enabled the capital expenditure to be increased continuously, especially on water supply and sanitation as well as on irrigation and flood control.

Ratio of Capital Outlay to GFD : As an obvious consequence of the improvements in its revenue accounts, Bihar has a high Capital Outlay to GFD ratio of close to 200 percent during the last two years.

Ratio of Net Lending to GFD : A part of the GFD is contributed by the net lending of the state government, mainly to the Public Sector Undertakings. The ratio between Net Lending and GFD was very low in Bihar. It presently stands at 8 percent for Bihar.

Ratio of Non-Development Expenditure to Aggregate Expenditure : The non-development expenditure, incurred mainly for administrative services, should preferably be a small proportion of the total disbursements. In Bihar, the non-developmental expenditure, mainly in the form of non-plan expenditure, constituted 37.8 percent of the total expenditure during 2005-06, after which there was a marked improvement. The ratio presently stands at about 30 percent. Most of the other states have returned comparable figures.

Ratio of Non-Development Expenditure to Revenue Receipts : This ratio indicates the extent to which the revenue receipts of the state government could not be utilized for developmental purposes and it should preferably be low. For Bihar, this ratio has steadily fallen from 48 percent in 2005-06 to 37.5 percent in 2007-08. It should, however, be noted here that this decline is more due to a steady increase in revenue receipts, rather than any reduction of expenditure.

Ratio of Interest Payment to Revenue Expenditure : Interest payments constitute a perennial burden on the state government's finances because of heavy loans. Such interest payments have been going up steadily over the years, from about Rs. 3000 crore in 2002-03 to Rs. 3900 crore in 2007-08. But, interest payments have been declining significantly since 2003-04 as a proportion of the revenue expenditure. For 2007-08, the budget estimates report it to be only 16 percent. A perceptible decrease in the ratio has taken place after 2005-06. Other states also show similar ratios, except West Bengal for which the ratio is substantially higher at around 30 percent.

Ratios of State's Own Tax and Non-Tax Revenue to Revenue Expenditure : These ratios indicate the self-sufficiency of the state government vis-à-vis its revenue expenditure needs. For the period from 2002-03 to 2007-08, state government's own tax and non-tax revenue receipts together covered barely one-fourth of its total revenue expenditure and this proportion has been actually on the decline. The position of other states is better on this count which raise more than 40 percent of their total revenue expenditure. Maharashtra is best placed in this regard with close to 73 percent of its revenue expenditure coming from its own tax and non-tax sources. The revenue generating capacities of the state must be read in the wider context of the level of economic development.

Ratio of Gross Transfers from Central Government to Aggregate Expenditure : This ratio brings out the state government's dependence on external resources. For Bihar, such dependence on central government is extremely high. From around 40 percent in 2003-04, this ratio has increased steadily to 66 percent in 2007-08, indicating that two thirds of Bihar's expenditure needs are met from transfers from the central government. This dependence on central transfers however should not be interpreted as a negative comment on the state. The transfers from the Centre are part of Bihar's entitlements based on the Finance Commission formulae and reflect the economic reality of the state.

Ratio of Debt Servicing to Gross Transfers from Central Government : Till 2003-04, debt servicing used to consume a very substantial portion of the gross transfer from the central government. However, due to better debt management, this ratio has been brought down from more than 100 percent in 2003-04 to only 27 percent in 2006-07, and in 2007-08, it was a little higher at 33 percent. The performance of Bihar in this respect is significantly better compared to the other states. Maharashtra, Punjab and West Bengal have ratios which are more than 100 percent.

Table 7.2 : Major Fiscal Indicators

(all figures in percent)

State	A. Revenue Deficit : GFD			B. Capital Outlay: GFD		
	2005-06	2006-07	2007-08 (BE)	2005-06	2006-07	2007-08 (BE)
Bihar	-2.21	-82.70	-110.25	56.30	172.50	202.22
Maharashtra	21.8	-75.68	28.38	57.16	133.16	59.99
Punjab	46.72	57.81	37.15	57.15	39.84	64.35
Rajasthan	12.8	-3.05	-7.27	83.37	109.13	99.52
UP	1.06	-174.10	289.20	144.89	255.20	-179.74
MP	12.58	-369.42	-206.21	86.43	322.21	226.07
West Bengal	76.97	61.53	70.56	17.21	25.07	13.73

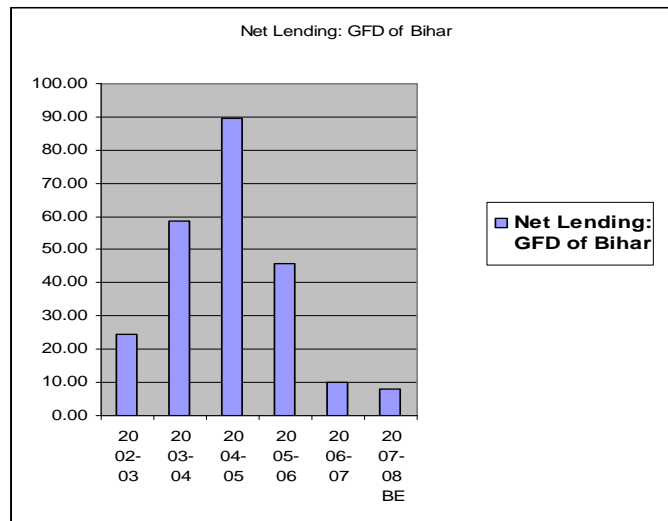
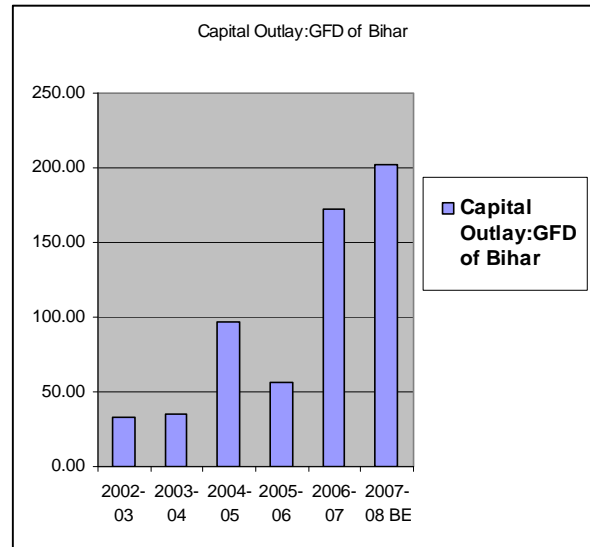
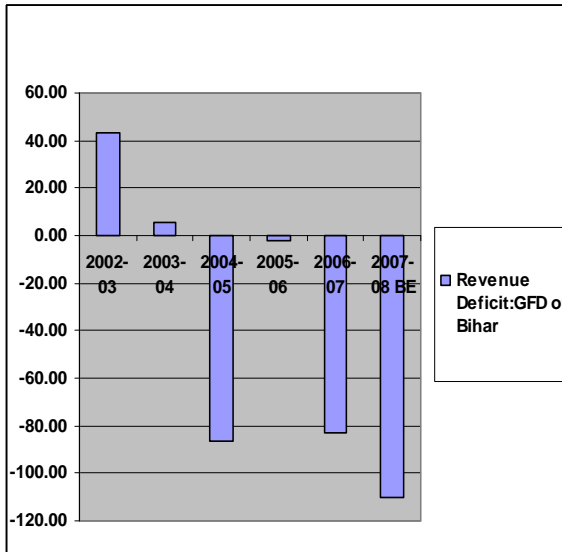
State	C. Net Lending: GFD			D. Non-Dev Exp:Agg Disbursements		
	2005-06	2006-07	2007-08 (BE)	2005-06	2006-07	2007-08 (BE)
Bihar	45.91	10.20	8.04	37.76	31.85	30.94
Maharashtra	21.04	42.52	11.64	31.64	20.56	20.75
Punjab	-3.87	2.34	-1.50	48.23	49.33	47.17
Rajasthan	3.83	-6.08	7.76	32.03	34.55	34.62
UP	45.95	18.90	-9.46	35.84	34.87	30.70
MP	0.99	147.21	80.14	NA	31.08	30.83
West Bengal	5.82	13.40	15.71	39.25	43.23	40.64

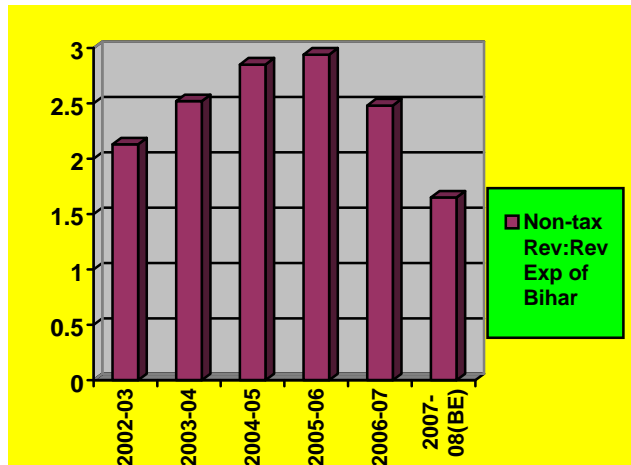
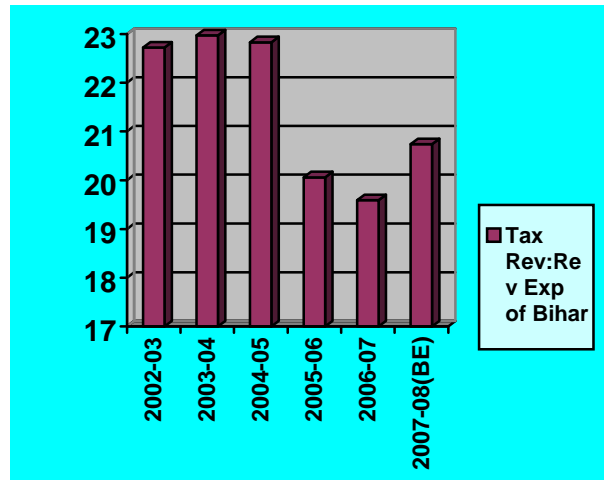
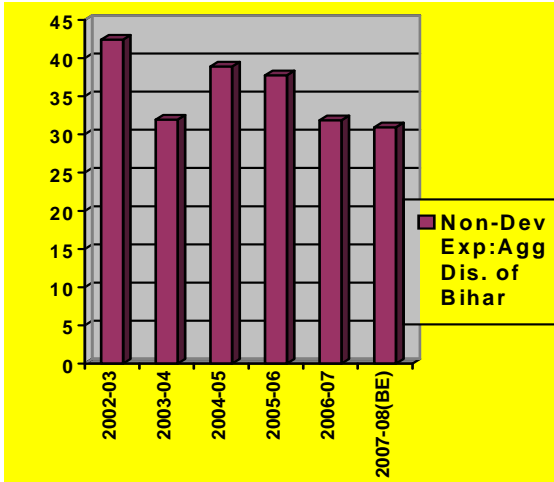
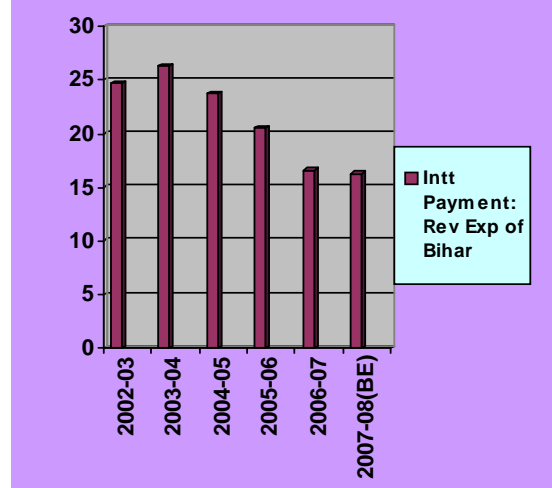
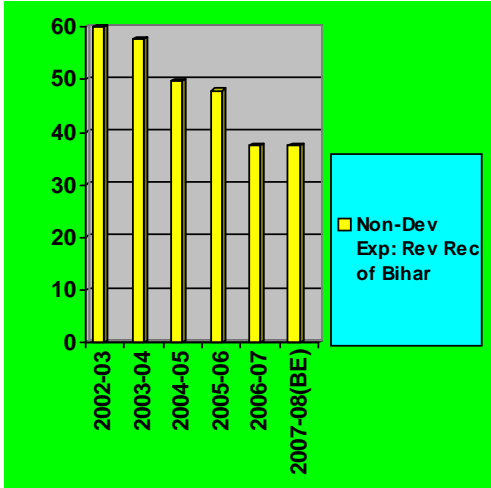
State	E. Non-Dev Exp: Rev. Receipts			F. Interest Payment : Rev Expenditure		
	2005-06	2006-07	2007-08 (BE)	2005-06	2006-07	2007-08 (BE)
Bihar	47.78	37.44	37.50	20.55	16.59	16.32
Maharashtra	43.18	23.82	25.18	17.38	21.62	17.93
Punjab	60.39	62.92	58.62	20.42	19.44	17.72
Rajasthan	43.12	41.61	40.78	24.18	22.55	21.58
UP	47.60	40.10	35.79	20.26	18.81	16.30
MP	NA	35.50	36.00	NA	17.74	16.37
West Bengal	39.25	63.29	61.54	30.40	36.32	30.36

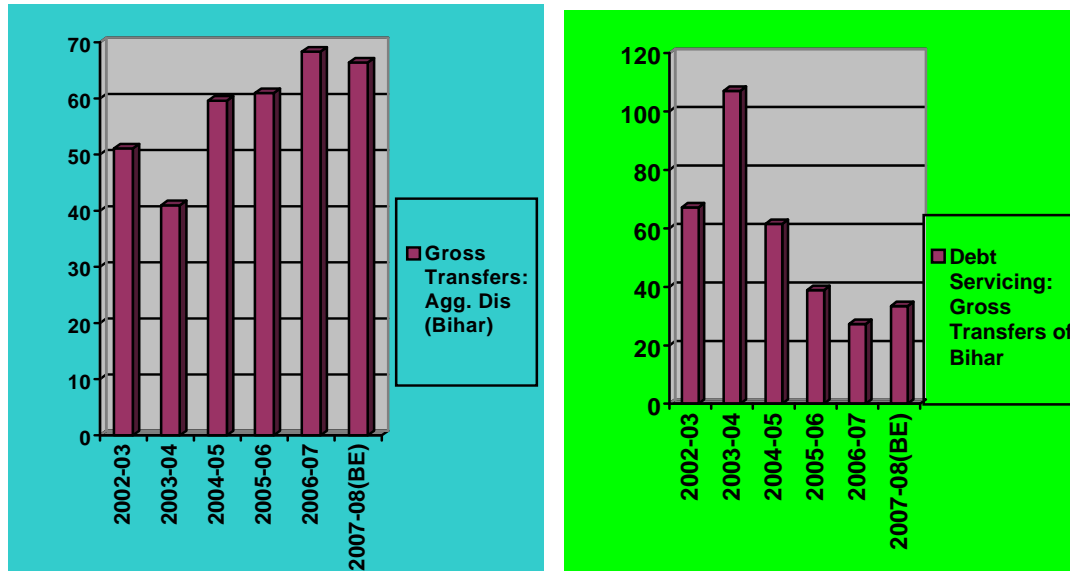
State	G. State's Tax Rev : Rev Exp			H. State's Non-Tax Rev : Rev Exp		
	2005-06	2006-07	2007-08 (BE)	2005-06	2006-07	2007-08 (BE)
Bihar	20.06	19.59	20.74	2.94	2.48	1.65
Maharashtra	77.61	70.91	64.90	19.75	9.36	8.13
Punjab	50.21	44.22	44.23	41.06	26.64	26.11
Rajasthan	69.52	44.65	45.49	26.47	12.57	11.92
UP	76.38	41.29	40.96	17.33	11.73	10.05
MP	NA	58.70	45.08	NA	0.50	0.24
West Bengal	53.47	33.45	37.69	20.67	4.06	3.43

Table 7.2 (Contd.)

State	I. Gross Transfers : Agg Dis.			J. Debt servicing : Gross Transfers		
	2005-06	2006-07	2007-08 (BE)	2005-06	2006-07	2007-08 (BE)
Bihar	60.94	68.32	66.38	26.53	27.28	33.42
Maharashtra	13.59	20.95	20.12	101.71	115.07	109.85
Punjab	21.33	16.72	19.68	88.97	144.75	103.10
Rajasthan	NA	35.70	36.51	NA	66.12	66.29
UP	40.34	44.59	45.64	45.09	52.75	63.12
MP	NA	41.60	42.37	NA	56.05	57.28
West Bengal	29.94	31.74	32.54	115.55	113.23	115.06







7.3 Sustainability, Flexibility and Vulnerability of State Finances

The analysis in the preceding section can be extended further to identify the factors that make a state financially healthy and ensure its development. For development, it is necessary to know whether the means of financing the state's activities are sustainable, i.e., they meet the increased expenditure needs without substantially adding to the debt burden of the state government. If the government wishes to expand the level of its activity, it would be pertinent to examine the flexibility of the means of financing (by increasing the revenue or by borrowing) and whether such financing exposes the state government to more risks and make it vulnerable to the sources of funding. The state governments generally increase their levels of activity primarily through the Five Year Plans which translate into annual development plans and are provided for in the state budgets. Thus, it can be broadly stated that non-plan expenditure represents the maintenance of the existing levels of activity, while plan expenditure entails expansion in the level of activity. Some of the factors which measure the sustainability, flexibility and vulnerability of Bihar Government (Table 7.3) are considered here.

Balance of Current Revenue (BCR) : This is calculated as state's Own Revenue Receipts, plus share of Central Taxes, plus Non-Plan Grants, minus Non-Plan Revenue Expenditure. A positive BCR shows that the state government has surplus funds from its revenues for meeting plan

expenditure. Bihar has a positive BCR since 2005-06 and its BCR stood at a comfortable level of Rs. 3000 crore as at the end of March, 2007.

Interest Ratio : This is calculated as (Interest payment-Interest receipt) / (Total Revenue-Interest receipt). A higher ratio indicates a lower ability of the state government to service any fresh debt and meet its revenue expenditure from its revenue receipts. For Bihar, this ratio has continuously declined from 31 percent in 2002-03 to 19 percent as per the budget estimates of 2007-08.

Capital Outlay/Capital Receipts : This ratio indicates to what extent the capital receipts are applied for capital formation. A ratio of less than 100 percent would not be sustainable in the long run, as that would indicate that capital receipts are utilized for revenue expenditure. For the first time in 2006-07, the ratio has touched a comfortable figure of 220 percent. The positive trend was sustained in 2007-08, though the ratio has come down to 110 percent.

State Tax Receipts/GSDP : This is an important indicator of the gap between the state's tax efforts and its tax potential. A low ratio also indicates low tax compliance. Further, the gap between this ratio and the ratio of Total Tax Receipts/ GSDP indicates the extent to which a state is dependent on the share of central taxes. For Bihar, the ratio of Total Tax Receipts to GSDP consistently increased from 14 to 19 percent, while the ratio of state's Own Tax Receipt to GSDP remained almost the same in the range of 4-5 percent during the last 5 years. Thus, the tax potential of Bihar remains largely untapped. It also should be noted that about 30 percent of its revenue (about Rs. 1000 crore) remain uncollected, because there are arrears in revenue collection.

Debt Outstanding/GSDP : This ratio indicates whether the state government has fallen into a debt trap from which it may not be able to come out on its own. A high ratio leaves little room for the state government for financial maneuvering and indicates lack of flexibility in its finances. It can be noted here that the total debt constitutes about 46 percent of the GSDP. However, the positive aspect is that the ratio has been brought down from a peak of 53 percent that prevailed during 2004-05 and 2005-06 to less than 46% during the next two years.

Primary Deficit : This is the GFD minus interest payments. It measures the impact of finances of the state government's current policies, without consideration of the liabilities created in the past,

for which interest has to be paid now. Except in 2003-04, Bihar mostly had a primary surplus which has been increasing since the last two years.

Asset/Liability Ratio : This indicates the solvency of the state government and its risk exposure and vulnerability. Given the fact that the ratio was earlier about 75 percent, there is no room for complacency on this account. There has been a marginal improvement in this ratio and, in 2006-07, it stood at 86 percent.

Return on Investment : This had all along remained negligible at less than Rs. 1 crore throughout the period 2002-03 to 2006-07.

Buoyancy of State's Tax and Non-Tax Revenues : Tax receipts of the state government were moderately buoyant in 2007-08 with respect to GSDP, but the non-tax receipts showed no relation to GSDP. However, it is heartening to note here that the growth of its revenue receipts (including the share of central taxes and central grants) has been much higher than the growth in outstanding liabilities since 2003-04. This has given an element of security to the state finance against a possible debt trap. But to improve financial security further, the state government needs to augment its own revenues, both tax as well as non-tax components.

Capital Repayment / Capital Borrowings : This ratio indicates the extent to which the debt receipts, which are taken mainly for capital purposes, could not be utilized for asset creation. A higher ratio would indicate that a higher percentage of capital receipts has been used for capital repayment, and thereby, the state has been deprived of additional asset creation. For Bihar, this ratio declined from more than 70 percent in 2003-04 to about 45 percent in 2007-08, indicating that more than 50 percent of the capital receipts are actually going towards additional asset creation.

Summarising, we see that the fiscal position of the state government had started showing improvements since 2004-05 as reflected by the parameters discussed above. However, there was a distinct turnaround in its fiscal position in 2006-07 due mainly to substantial increases in the central grants and share of taxes and also partly due to better expenditure and debt management. The sustainability parameters have improved significantly, though the tax potential remains substantially untapped. Buoyancy ratios are also very low. The state government has also shown

increased flexibility over the years and is now at a much better position to direct its resources towards improving the standards of social and economic services and in improving infrastructure. In terms of vulnerability, however, the state government still remains overwhelmingly dependent on the external resources.

Table 7.3 : Fiscal and Financial Performance Indicators

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
A. Sustainability						
Balance from Current Revenue (Rs Crore)	-1039	-638	924	685	2999	3579
Interest Ratio	31.19	30.7	26.54	24.02	18.35	18.93
Capital Outlay / Capital Receipts	23.02	19.53	15.76	54.51	220.32	110.11
State Tax Receipts / GSDP	4.28	4.36	4.53	4.47	4.28	4.77
Buoyancy of Tax Receipts w.r.t. GSDP	1.39	1.68	1.37	0.83	0.76	1.98
Buoyancy of Non-Tax Receipts w.r.t. GSDP	-0.88	6.75	2.52	2.71	-0.14	-3.05
Return on Investment (Rs Crore)	0.02	0.04	0.04	0.04	0.04	NA
Growth in outstanding liabilities	9.8	7.45	14.37	8.02	4.07	7.68
Growth in total revenue receipts	9.45	14.63	23.85	13.78	28.72	16.76
B. Flexibility						
Capital Repayment / Capital Borrowings	36.54	71.38	40.48	26.01	43.47	45.54
Tax Revenue / GSDP	14.30	15.71	16.89	17.55	18.38	19.20
Average Interest Rate on Government Borrowing	9.00	9.00	9.59	8.20	7.15	NA
Debt Outstanding / GSDP	49.17	51.38	53.32	53.33	46.92	45.72
C. Vulnerability						
Revenue Deficit (Rs Crore)	1286.61	255.23	-1075.78	-81.6	-2498.16	-3483.36
Fiscal Deficit (Rs Crore)	2988.06	4362.91	1241.8	3700.14	3020.93	3159.43
Primary Deficit (Rs Crore)	-33.73	1019.87	-2232.1	51.25	-395.15	-749.98
Primary Deficit / Fiscal Deficit	-0.05	1.52	-3.02	0.06	-0.46	-0.81
Revenue Deficit / Fiscal Deficit	43.06	5.85	-86.63	-2.21	-82.7	-110.25
Assets / Liability	72	72	78	80	86	NA
Arrears of Revenue (Rs Crore)	1485	1357	1101	NA	NA	NA
Arrears of Revenue/Total Own Revenue (%)	49	42	29	NA	NA	NA

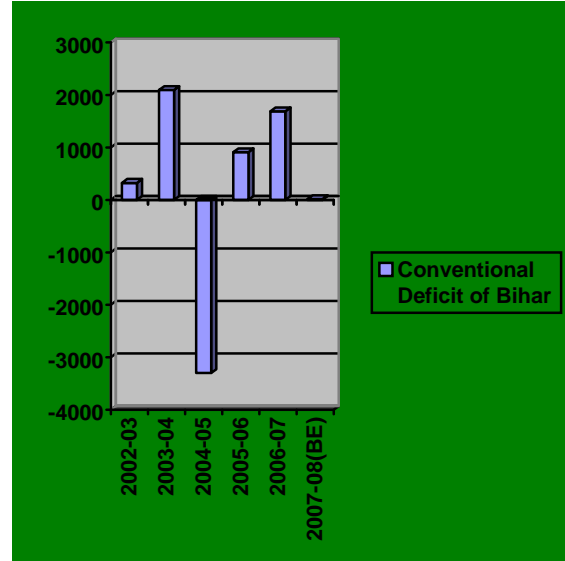
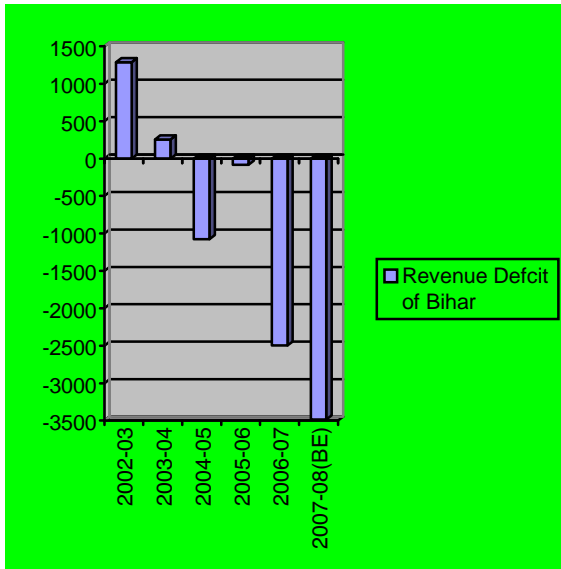
7.4 Deficit Management

Table 7.4 shows the position in the revenue account as well as the combined position of the revenue and capital accounts of some major states for the years 2002-03 to 2007-08. As noted earlier, the revenue deficit of Bihar was controlled effectively and, from 2004-05 onwards, there was a substantial surplus in the revenue account. In the combined revenue and capital accounts, the budget deficit could also be contained in 2007-08 due to this large surplus in the revenue account.

Table 7.4 : Deficit/Surplus position of States

(Rs. Crore)

State	Revenue Deficit (+)/ Surplus(-)			Conventional Deficit (+) / Surplus(-)		
	2005-06	2006-07	2007-08 (BE)	2005-06	2006-07	2007-08 (BE)
Bihar	-82	-2498	-3483	910	1688	14
Maharashtra	-1419	-3402	2386	3875	-10234	-371
Punjab	-1710	2191	1429	1890	913	-196
Rajasthan	-865	-96	-215	15713	-1868	-2728
UP	-3132	-4901	-6146	-477	-3703	-13408
MP	-----	-2821	-2007	-----	1017	0
West Bengal	-8598	4955	7168	227	727	133



As observed earlier, GFD of a state government is a fairly sensitive indicator of its financial performance as it reflects the total resource gap in its economy. Table 7.5 presents the GFD of a few major states. Bihar had a high GFD exceeding Rs. 4,000 crore or about 6.5 percent of the GSDP in 2003-04. It now stands at very marginally above 3 percent, almost within reach of the FRBMA target of 3 percent to be achieved by 2008-09. The position of the other states except Maharashtra and West Bengal are more or less the same; UP had projected a fiscal surplus in the budget estimates of 2007-08.

Table 7.5 : Gross Fiscal Deficit

(Rs. crore)

State	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Bihar	2988	4363	1242	3700	3021	3159
Maharashtra	14290	17929	18620	17631	4495	8408
Punjab	4410	4880	4115	2654	3789	3848
Rajasthan	6114	7367	6146	5150	3164	2953
UP	9497	16648	12997	13167	2815	-2125
West Bengal	10569	12869	10652	9602	8053	10158

Table 7.6 shows the composition of the GFD of Bihar, from which one can find that capital outlay and net lending have together contributed most to GFD during the years 2002-03 through 2007-08. The GFD / GSDP ratio reached a peak of 6.52 percent in 2003-04 after which it was successfully brought down and now stands at only 3.03 percent.

Table 7.6 : Composition of Gross Fiscal Deficit of Bihar

(Rs. crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 BE
Revenue Deficit	1287	255	-1076	-82	-2498	-3483
Capital Outlay	970	1549	1205	2083	5211	6389
Net Lending	732	2558	1113	1697	308	254
GFD	2988	4363	1242	3700	3021	3159
GSDP	65117	66960	73791	79682	94251	104148
GFD: GSDP ratio(%)	4.59	6.52	1.68	4.64	3.21	3.03

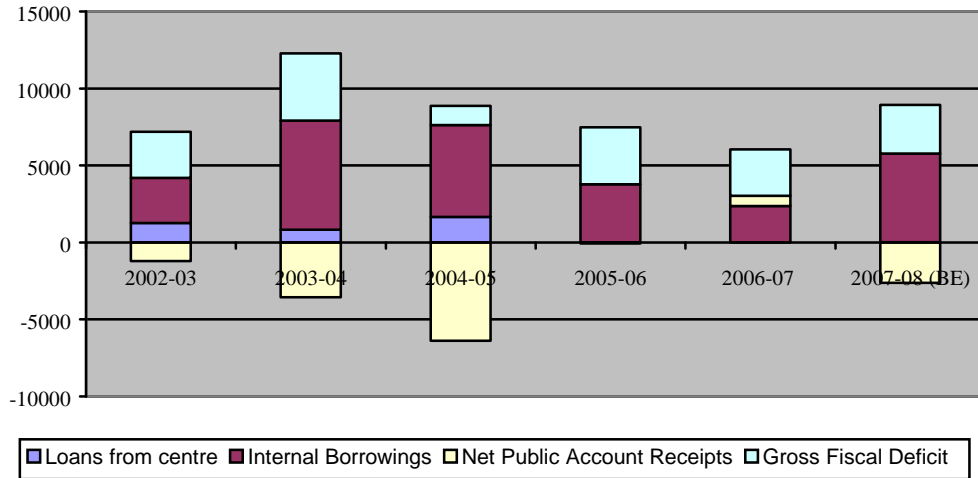
Table 7.7 shows how the GFD was financed during all these years. It can be readily seen that the internal market borrowings of the state government mainly financed its GFD, apart from the Public Account receipts from small savings, provident funds etc. From 2005-06 onwards, loans from the central government had no role in the financing of the GFD.

Table 7.7 : Financing of Gross Fiscal Deficit of Bihar

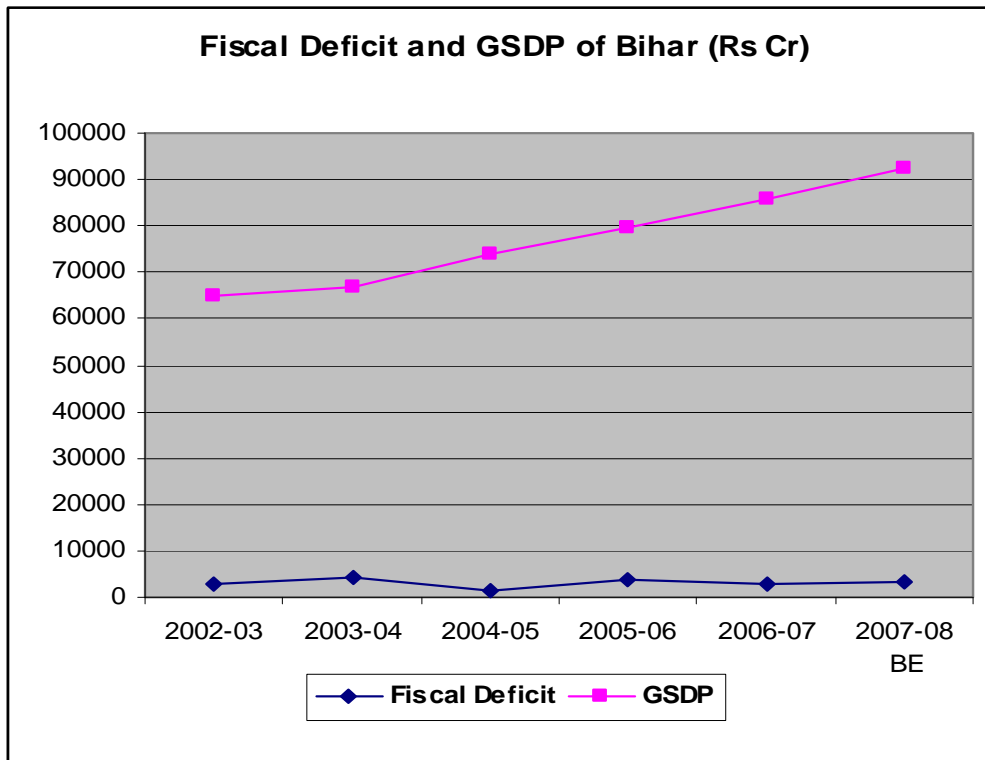
(Rs. crore)

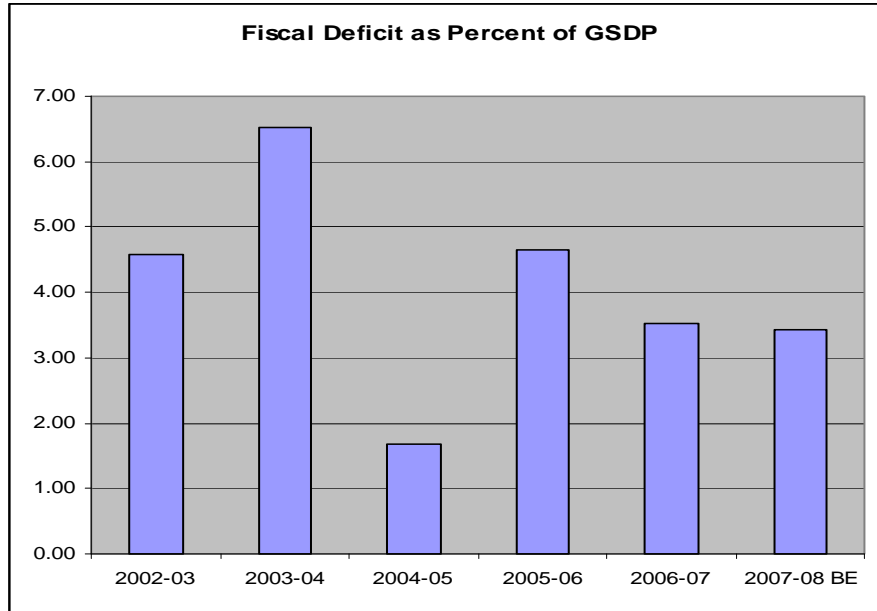
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Loans from centre	1255	820	1654	2	3	7
Internal Borrowings	2942	7100	5972	3769	2355	5770
Net Public Account Receipts	-1209	-3557	-6384	-71	663	-2618
Gross Fiscal Deficit	2988	4363	1242	3700	3021	3159

Financing of GFD of Bihar (Rs Cr)



Fiscal Deficit and GSDP of Bihar (Rs Cr)





7.5 Receipt and Expenditure in Revenue Account

The summary of revenue receipts and expenditure of the state government is shown in Table 7.8. From 2002-03 to 2007-08, both revenue receipt and expenditure have grown steadily, with receipt outgrowing expenditure during the last 4 years resulting in revenue surpluses. The state government's own revenue, tax and non-tax combined, barely meets 22 percent of its total expenditure, and the rest has to come from its share of taxes and grants from the central governments. While the total revenue of the state government has grown by 150 percent during the last 5 years (from Rs. 10968 crore to Rs. 27441 crore), its own total revenue, tax and non-tax combined, has grown only by 76 percent (from Rs. 3045 crore to Rs. 5365 crore).

In Table 7.8, some more parameters of the state finance are considered through a comparison of the state government's own revenue (tax and non-tax) with its total revenues (tax and non-tax). The total tax revenue of the state government consists of its own revenues as well as its share from the divisible pool of central taxes, mainly Income Tax and Union Excise Duties. The share of state government's own revenue in total revenue has decreased over the years (from 28 percent in 2002-03 to 20 percent in 2007-08). This reinforces dependence on the central government and makes it vulnerable to changes in central policies.

Table 7.8 : Revenue Account of Bihar

(Rs. crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Revenue Receipt	10968	12456	15714	17838	23083	27441
Revenue Expenditure	12255	12711	14638	17756	20585	23958
Revenue Deficit	1287	255	-1076	-82	-2498	-3483
State's own tax + non-tax revenue	3045	3239	3760	4083	4543	5365
State's own revenue as % of total revenue	28	26	24	23	20	20
State's own revenue as % of revenue expenditure	25	25	26	23	22	22

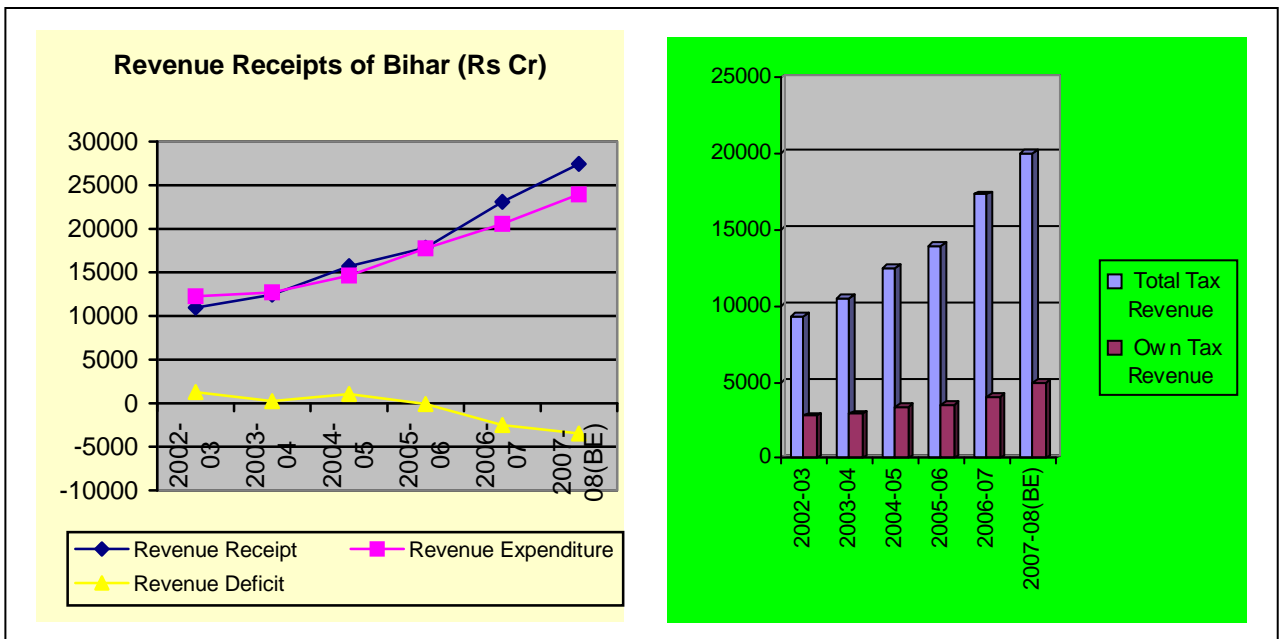
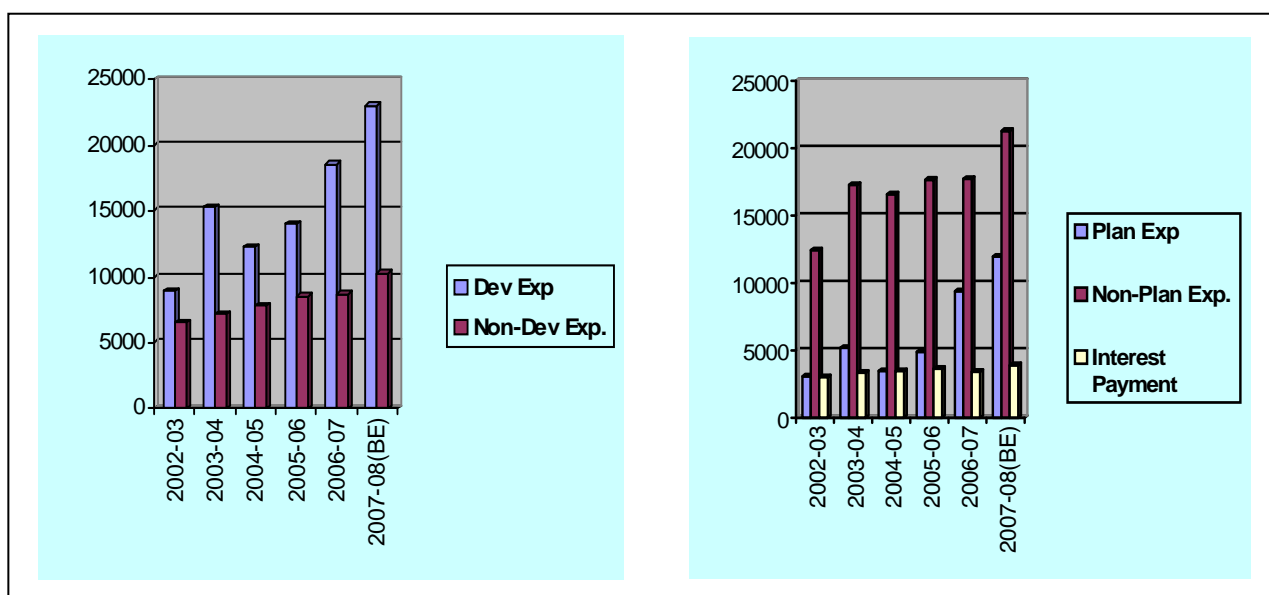


Table 7.9 : Expenditure of Bihar Government

(Rs. crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Developmental Expenditure	8929.40	15302.62	12250.14	14041.44	18489.34	22966.26
Non-Developmental Expenditure	6574.10	7175.42	7803.45	8522.74	8642.99	10290.67
Total Expenditure	15505.32	22481.80	20057.86	22568.38	27136.33	33256.95
Dev Expenditure as % of Total Expenditure	57.59	68.07	61.07	62.22	68.14	69.06
Plan Expenditure	3071.00	5202.00	3476.00	4898.74	9397.00	11965.82
Non-Plan Expenditure	12434.00	17280.00	16581.00	17669.74	17740.00	21291.26
Interest Payments	3021.79	3343.04	3473.90	3648.89	3416.00	3909.41

Table 7.9 shows the total expenditure of state government for developmental and non-developmental as well as for plan and non-plan purposes. Plan expenditure is mostly developmental, while non-plan expenditure is mostly non-developmental. All expenditure under non-developmental heads are non-plan expenditure, but development expenditure may have a non-plan component. This analysis of the expenditure, however, is restricted to the conventional definition of the terms. Referring to Table 7.9, one may note that while the developmental expenditure of Bihar has constituted about 60-70 percent of the total expenditure during all the years, it has more than doubled over the years, except a marginal decline in 2004-05. The non-



developmental expenditure, on the other hand, has increased at a slower rate. As already noted, plan expenditure is incurred for taking up new development projects. In case of Bihar, about 80 percent of the total expenditure of the state government has been non-plan expenditure during all these years, and only 20 percent were spent for plan purposes. Almost half of the non-plan expenditure is non-developmental in nature, and almost a quarter is solely due to interest payment on outstanding loans. In fact, the interest payments increased from Rs 3000 crore in 2002-03 to Rs 3900 crore in 2007-08. The total non-plan expenditure as well as the plan expenditure increased by almost the same amount during this period from 2002-03 to 2007-08, i.e. by Rs 8800 crore and Rs 8900 crore respectively.

Considering the crucial issue of interest payment, it is seen from Table 7.10 that the difference between the gross and net interest payments is very small, as the recovery of interest on the loans given to public sector enterprises and autonomous bodies is very poor. For many of these public enterprises, their accumulated losses have completely wiped out their equity bases including reserves. Interest receipts, however, showed more than a nominal increase, mainly from the investments of cash balances (Table 7.11). Nevertheless, this increase is too small to offset the ever-widening gap between interest payments and interest receipts. Interest payments consume about 20 percent of the total revenue expenditure; but the positive outcome is that while revenue expenditure grew by as much as 95 percent during the period, interest payments increased by only 29 percent. Also, the interest payments have decreased as a percentage of the revenue expenditure over the entire period, from about 25 percent in 2002-03 to 16 percent during 2006-07 and 2007-08. From Table 7.12, it must be noted that capital outlay has substantially increased from 6.25 percent of total expenditure in 2002-03 to 19.21 percent in 2007-08. This was largely due to the substantial surplus in the revenue account.

Table 7.10 : Interest Payment and Receipt

(Rs. crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
<i>Gross Interest Payment</i>	3021.79	3343.04	3473.90	3648.89	3416.08	3909.41
Net Interest Payment	2968.78	3319.96	3398.85	3432.82	3240.09	3850.52

Table 7.11 : Cash Balance of Bihar

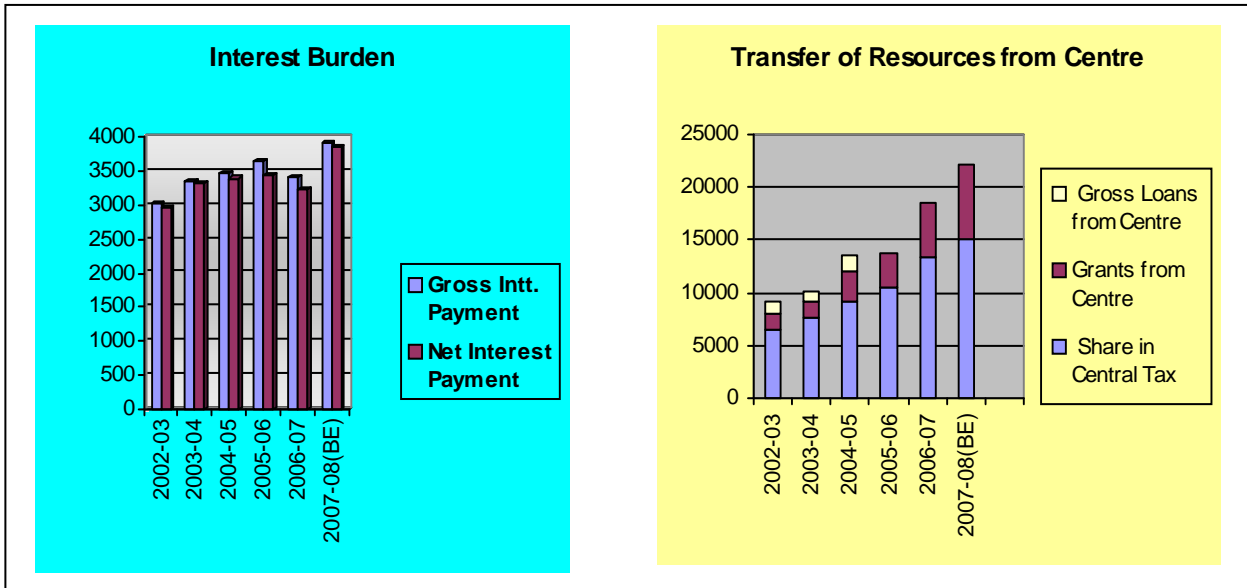
(Rs. Crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Balance in Cash Investment Account	-472.93	-930.28	-747.99	-1424.47	-1125.59	50.00
Increase in Closing Cash Balance		182.29	-676.48	298.88	97.01	NA

Table 7.12 : Other Parameters of Expenditure

(Rs. crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Total Tax Revenue	9310.25	10517.55	12464.52	13982.52	17324.79	20001.12
Own Tax Revenue	2784.16	2919.02	3342.48	3561.09	4032.24	4968.98
Total non-tax Revenue	260.77	320.33	417.72	522.26	511.18	396.27
Own non-tax Revenue	260.77	320.33	417.72	522.26	511.18	396.27
Actual Capital Outlay	969.69	1549.16	1204.51	2083.00	5211.10	6388.90
Capital Outlay as % of Total Expenditure	6.25	6.89	6.01	9.23	19.20	19.21



The exact nature of the state government's dependence on central resources can be seen from Table 7.13 which shows the gross transfer of resources to Bihar during the period from 2002-03 to 2007-08. The gross transfer of resources includes the state's share in central taxes, grants-in-aid from the centre, as well as loans. The gross transfer of resources to Bihar increased steadily from 51 to 66 percent of the aggregate disbursements. More than 80 percent of the gross transfer to the state government came from its share of central taxes and the rest from grants and loans. There is not much difference between the gross and net figures of resource transfer, as the state government received only small amount of loan from the centre during the last 3 years.

Table 7.13 : Transfer of Resources from Centre to Bihar

(Rs. crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Share in Central Tax	6526	7599	9122	10421	13293	15032
Grants-in-Aid from Centre	1397	1618	2832	3333	5247	7044
Gross Loans from Centre	1255	820	1654	2	3	7
Gross transfer of Resources	7923	9216	11954	13754	18540	22076
Net Loans from Centre	-126	-1560	-1069	-486	-314	-422
Net Transfer of Resources	7797	7656	10885	13268	18226	21654

Table 7.14 shows the outstanding debt liabilities of the state government. The outstanding liability as a percentage of GSDP had increased from 49 percent in 2002-03 to 53 percent in 2004-05 and 2005-06, after which it has been successfully brought down to less than 46 percent during the next two years. This reflects the state government's ability to contain the borrowings. The ratio was 45.72% in 2007-08 BE and at this level is not at a level that should cause any alarm.

To understand the full import of the data presented in Table 7.14, one needs to look at net amount of debt raised (Table 7.15) and net amount of debt discharged (Table 7.16) by the state government. It must be noted that, for 2007-08, the total internal debt includes Ways and Means advances of Rs. 1000 crore, and total discharge of internal debt also includes the same amount. The total public debt of the state government, as can be seen from Table 7.14, has mounted to Rs. 47600 crore as at the end of 2007-08, which is 46 percent of the GSDP. This figure is the accumulated effect of past borrowings, growing at an average annual rate of about 8 percent since 2002-03. The total growth of outstanding liabilities since 2002-03 has been 48 percent. The major part of this huge debt (64 percent) is due to the internal loans raised by the state government from the market, and about 16 percent from the central government. One significant feature of the composition of outstanding debt is that the loans from the central government has been continually reducing since 2002-03, from Rs. 11665 crore in 2002-03 to Rs. 7815 crore in 2007-08.

Table 7.14 : Outstanding Liabilities

(Rs. crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Internal Debt	12471.62	16298.48	21905.88	25181.52	26828.56	30395.98
Central Loans	11665.58	10105.59	9037.05	8551.00	8236.84	7815.08
Total Public Debt	24137.20	26404.07	30942.93	33732.52	35065.40	38211.06
Public Account	7879.24	7997.21	8400.72	8765.73	9160.78	9410.38
Total	32016.44	34401.28	39343.65	42498.25	44226.18	47621.44
Outstanding Liability as % of GSDP	49.17	51.38	53.32	53.33	46.92	45.72

Public debt is a useful instrument of income generation if it is utilised for the creation of productive assets. As one can see from Table 7.15, the debt resources could not be fully utilised for creation of any productive asset and these resources were mostly used to discharge the existing debt obligations. The net accrual to the state exchequer on this account was in fact negative. Thus, out of a total of Rs. 6864 crore borrowed during 2007-08, as much as Rs. 3469 crore were used for repayment of the existing debt, and Rs, 3909 crore for interest payments, leaving nothing of the total amount borrowed for use by the state government. Of course, a part of the high cost old debt has been substituted by cheaper fresh borrowings. Taking into account the small amounts recovered on its own loans given to various undertakings and the interest receipts, there was a net outgo of Rs. 488 crore from its own resources. The share of net borrowings available to the state government was only 17 percent in 2004-05. In all other years, it was negative indicating net outflow of scarce resources for discharge of debt obligations. However, the negative figure has been substantially reduced from -50 percent in 2006-07 to only -7 percent in 2007-08.

Table 7.15 : Net Debt Received

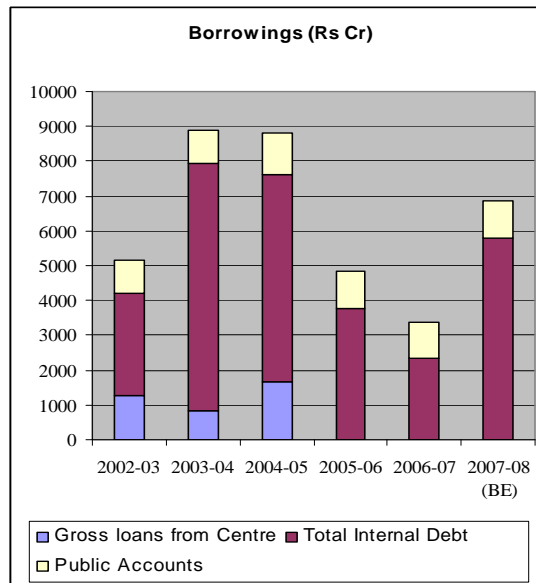
(Rs. crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Gross loans from Centre	1255	820	1654	2	3	7
Total Internal Debt	2942	7100	5972	3769	2355	5770
Small Savings, Provident Fund etc.	963	987	1198	1088	1012	1088
Total Borrowing	5160	8907	8824	4858	3370	6864
Recoveries of Loans/ advances/ Interest	16	10	15	51	7	26
Total Debt Servicing	5323	9865	7356	5352	5058	7378
Net Debt Received	-148	-948	1483	-443	-1681	-488
Net Debt Received as % of Total Borrowing	-2.86	-10.64	16.81	-9.13	-49.87	-7.11

Table 7.16 : Repayment Liabilities

(Rs. crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Discharge of internal debt	152	3273	365	493	708	2202
Repayment of loans to Centre	1381	2380	2723	488	317	429
Discharge of other liabilities	768	869	795	723	617	838
Total Repayment	2302	6522	3882	1703	1642	3469
Total Interest Payment	3022	3343	3474	3649	3416	3909



7.6 Resource Mobilisation

Revenue receipt of the state government come from both tax and non-tax revenues. Tax revenue of a state government consists of its own tax revenues and its share in the divisible pool of taxes and duties of the central government. Similarly, the non-tax revenues consist of the state government's own non-tax revenue as well as central grants for plan and non-plan purposes. The own tax revenues of the state government are classified into :

- (i) Taxes on income which include agricultural income tax, taxes on trades;
- (ii) Taxes on property and capital transactions which include land revenues, stamp and registration fees, taxes on urban immovable property; and

- (iii) Taxes on commodities and services which by far are the most important sources of the state government's own tax revenue and include a variety of taxes like sales tax, turnover tax, state excise duty, taxes on vehicles, goods and passengers, electricity duty, taxes on entertainment etc.

Share of central taxes consists mainly of the shares of Income tax, Union Excise duty and additional excise in lieu of Sales Tax on certain commodities.

The own non-tax revenues of the state government are again classified into interest receipts from loans and advances to various government companies, public sector and quasi-commercial undertakings and other bodies, dividends and profit from them, receipts from various services (general, social and fiscal) which are not very significant, and from economic services. Economic services contribute much more significantly to the state exchequer than other services. The grants from central government are for both plan and non-plan purposes. Within the plan grants, there are separate grants for the state's own plan schemes, central plan schemes and also for the centrally sponsored schemes. The non-plan grants include the statutory grants as well as relief on natural calamities and other public purpose grants.

Table 7.17 shows the revenue receipts of the state government during the 6 years from 2002-03 to 2007-08. The receipts from the major taxes in Bihar during this period are shown in Table 7.18. From these two tables, one can see that, during all these years, about 75 percent of the total receipts of the state government came from the central government by way of grants-in-aid and state's share of divisible pool of taxes. While the own tax revenue of the state government has grown by 78 percent from Rs 2784 crore in 2002-03 to Rs 4969 crore in 2007-08, the non-tax revenue has grown by 52 percent from Rs. 261 crore to Rs. 396 crore during the same period. The state government's own total revenue (tax plus non-tax) has registered an increase of 76 percent during this period. The total revenue of the state government, including all transfers from the central government, increased from Rs. 10968 crore in 2002-03 to Rs. 27441 crore 2007-08, an increase of 150 percent in 6 years. However, the state government's own share in the total revenue receipts is steadily decreasing and, in 2006-07 and 2007-08, it was below 20 percent, as compared to 28 percent in 2002-03.

Table 7.17 : Revenue Receipts of the State

(Rs. Crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
I. State's Own Revenue	3044.93	3239.35	3760.2	4083.35	4543.42	5365.25
a) Tax Revenue	2784.16	2919.02	3342.48	3561.09	4032.24	4968.98
b) Non-Tax Revenue	260.77	320.33	417.72	522.26	511.18	396.27
II. Receipts from Centre	7923.40	9216.15	11953.87	13754.15	18539.65	22075.76
a) Share of Divisible taxes	6526.09	7598.53	9122.04	10421.43	13292.55	15032.14
b) Grants-in-aid	1397.31	1617.62	2831.83	3332.72	5247.1	7043.62
III. Total Receipts	10968.33	12455.50	15714.07	17837.50	23083.07	27441.01
State's Own Revenue as % of Total Receipts	27.76	26.01	23.93	22.89	19.68	19.55

Among the direct taxes of the state government are included Stamp and Registration Fees, Taxes on Vehicles, Taxes and Duties on Electricity, Land Revenue and Taxes on Agricultural Income, the last one being rather insignificant. Among the indirect taxes which are far more important than the direct taxes, there are taxes on sales, trade, state excise, taxes on goods and passengers and other taxes and duties on commodities and services. The details of receipts from these taxes from 2002-03 to 2007-08 are shown in Table 7.18.

Table 7.18 : Tax Revenue of Bihar Government

(Rs. Crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Taxes on Sales, Trade etc.	1647.61	1637.23	1890.54	1733.59	2081.48	2879.93
Stamp and Registration Fees	348.20	417.55	429.14	505.29	455.02	720.00
Taxes on Goods and Passengers	262.90	305.83	472.88	613.38	783.01	381.33
State Excise	241.95	240.01	272.47	318.59	381.93	500.00
Taxes on Vehicles	177.98	209.50	212.78	302.44	181.38	375.00
Land Revenue	36.15	33.80	33.39	55.02	74.65	74.64
Other Taxes and Duties on Commodities and Services	55.07	57.48	21.74	14.72	11.93	18.39
Taxes & Duties on Electricity	14.30	17.62	9.54	18.06	62.84	19.69
Taxes on Agricultural Income	0.00	0.00	0.00	0.00	0.00	0.00
Total	2784.16	2919.02	3342.48	3561.09	4032.24	4968.98

**REVENUE COLLECTION UNDER REGISTRATION, EXCISE AND
ALCOHOL PROHIBITION (2007-08, UPTO DEC., 2007)**

	Items of Revenue	Revenue (Rs. lakh)
Country Liquor (Rs.)	License Fee	18725.11
	Security Amount	317.84
	Advance License Fee	272.65
	Issued Fee	67.95
	Other Fee	1195.04
	Total	20578.59
Foreign Liquor (Rs)	License Fee	3560.14
	Security Amount	211.90
	Advance License Fee	181.76
	Issued Fee	45.30
	Duty	11186.07
	License Fee of Bar/Restaurant/ Canteen/Club	311.10
	Export Fee	75.19
	Import Fee	258.34
	Assessed Fee	1.27
	Label Registration and Renewal Fee	49.90
	Movement Fee	41.83
	License Fee of 19C License	3.00
	Total	15925.80
	Spiced Country Liquor	License Fee
From Other Taxes		46.81
Total		71.20
Commercial Denatured Spirit	License Fee	0.95
	From Other Taxes	13.60
	Total	14.55
Alcohol / Opium Related Medicines / Cosmetics	License Fee	19.18
	From Other Taxes	36.55
	Total	55.73
Molasses	License Fee	0.12
	Adm. Fee/ Molasses Control/ Adm. Expr.	380.90
	Receipts from the sale of Molasses	47.95
	Total	428.96
Fine on Seizures	Compound Fee	17.75
	Fine on Seizures	56.68
	Penalty	118.98
	Penal Duty	.09
	Total	193.50
	Receipts from Privilege Fee from B.S.B.C.L.	1000.00
	Export Fee from Distillery	33.08
	Others	85.68
	Receipts from all Heads	38387.10

Note : The target for revenue collection in 2007-08 was Rs. 700.00 crore. The collection upto December, 2007 (Rs. 383.87 crore) is 38.6 percent more than the collection in the corresponding months in 2006-07

REVENUE FROM SALES TAX IN BIHAR

Sl. No.	Commodity	No. of Dealers (2006)	Tax Deposit 2005-06 (Rs. crore)	No. of Dealers (2007)	Tax Deposit 2006-07 (Rs. crore)	Tax Deposit (2007-08) Upto Nov' 07 (Rs. crore)	Growth (%)
Commodities for which there has been positive growth in Sales Tax							
1	Consumer Durables	321	5716.74	-	-	-	-
2	Works Contract	2	1.30	162	38.65	65.02	3151.00
3	Pan Masala	105	118.04	499	1404.42	2175.19	464.66
4	Coal	53	166.13	46	205.60	170.02	216.91
5	Supply Contract	-	-	54	0.00	0.33	100.00
6	Electricity Duty	-	-	29	0.00	0.02	100.00
7	Vanspati	80	381.97	316	729.65	673.31	82.46
8	Condur	-	-	154	8712.80	8007.44	80.43
9	Jute	52	311.99	71	213.55	121.56	72.45
10	Cycles	250	270.45	690	445.64	326.47	67.36
11	Hotel	316	529.36	564	898.01	735.30	61.64
12	Computer and Peripherals	236	501.51	139	724.22	557.31	39.70
13	Miscellaneous	10090	19099.95	42	17489.66	13386.15	39.49
14	Tires and Tubes	139	2334.14	2	2926.14	2179.99	36.17
15	All Kinds of Furniture	288	95.28	107	104.85	76.13	33.28
16	Beverages	82	1308.93	463	1538.19	1276.06	30.27
17	Foreign Liquor (IMFL)	250	8718.57	213	12675.47	8218.37	29.99
18	PVC Pipe	133	174.49	25	203.21	145.39	29.10
19	Mustard Oil	179	451.25	1028	655.46	451.69	27.98
20	Sanitary goods & Fittings	175	313.05	134	451.43	313.03	27.20
21	Paper	337	561.96	200	572.26	428.01	26.28
22	Firework	61	40.56	91	36.94	26.33	26.04
23	Iron and Steel	406	3025.47	150	4260.30	2705.43	23.94
24	Jewellery	1063	89.08	270	129.36	85.73	21.93
25	Biscuits	259	1831.69	2687	2978.85	2058.39	20.54
26	Plywood and Board	220	229.42	212	274.15	178.12	20.12
27	Fastfoods	243	1367.30	5257	1484.62	971.16	18.82
28	Petro Products	506	98636.95	677	109160.00	61934.84	18.37
29	Crockery, Cutlery and Glassware	136	206.43	244	222.16	136.40	18.01

...CONTD.

REVENUE FROM SALES TAX IN BIHAR (CONTD.)

Sl. No.	Commodity	No. of Dealers (2006)	Tax Deposit 2005-06 (Rs. crore)	No. of Dealers (2007)	Tax Deposit 2006-07 (Rs. crore)	Tax Deposit (2007-08) Upto Nov' 07 (Rs. crore)	Growth (%)
30	Cement	1212	12248.05	104	17424.82	11316.61	17.10
31	Footwear	462	472.04	1	446.74	264.46	16.09
32	Marble, Mosaic and Stone	356	173.37	988	189.96	128.76	15.43
33	Paints	182	1318.36	171	1377.37	1102.13	15.38
34	Hardware	1003	391.98	84	354.47	211.07	14.41
35	Moulded Luggage	52	222.03	187	272.28	206.41	12.50
36	Tractor	238	737.36	985	1745.61	1010.85	11.33
37	Fertilizers	1132	4022.89	780	5097.96	2893.55	11.28
38	Battery	174	2296.36	154	2442.25	1762.89	10.55
39	2 and 3 Wheelers (Automobiles)	267	10259.08	163	16655.32	8861.27	9.50
40	Electrical Goods	960	7702.87	16	16469.47	6234.35	9.49
41	Tea and Coffee	142	223.85	151	184.19	96.32	8.73
42	Readymade and Hosiery	1599	842.70	222	1085.35	615.22	8.32
43	Crude Oil	7	10983.93	34	13155.97	8180.45	5.50
44	Insecticide and Seeds	202	1870.34	139	950.99	553.72	2.76
45	Medicine	6940	7145.83	4	11361.37	7358.86	1.57
46	FMCG	725	9622.82	26	12769.30	8074.70	1.25
47	Kirana and Agarbati	1728	606.40	753	714.35	408.44	0.04
	Total	33363.00	217622.27	19488.00	271233.36	166683.25	20.65
Commodities for which there has been decline in Sales Tax							
1	Hide and Skins	25	68.98	123	78.69	41.58	-0.88
2	Entertainment	107	387.02	115	406.93	236.68	-3.14
3	Diesel Engine	315	313.53	193	400.78	198.56	-5.16
4	LPG	251	730.22	78	322.41	163.67	-6.22
5	Bricks and Minerals	1226	375.70	93	640.04	244.32	-6.66
6	Kerosene Oil	236	274.39	103	314.90	178.26	-7.86
7	Timber	662	255.49	126	265.84	126.25	-11.63
8	Auto Parts	877	1220.26	10	1758.48	887.48	-14.32
9	Plastic Goods	217	347.14	129	445.07	205.23	-17.85
10	Food grains	1594	5598.93	330	3045.69	1573.34	-23.15
11	Essentials	67	49.29	72	65.77	33.30	-43.03
12	Utensils	261	86.80	94	48.48	28.01	-51.00
	Total	5838	9707.75	1466	7793.08	3916.68	-16.96

CONCLUDED

An analysis of the tax receipts of the state government reveals that its major sources of taxes are sales tax, stamp and registration fees, excise duty of the state, taxes on goods and passengers and taxes on vehicles. These 5 taxes together make up more than 95 percent of the total tax receipts of the state government. Of these, sales tax alone comprises more than 50 percent of the total tax receipts, followed by Stamp and Registration Fees (15 percent). These taxes are highly buoyant and their yields increase automatically with the general increase in the income level as reflected by the GSDP. The composition of the state's tax revenue is shown in Table 7.19 and their growth rates in Table 7.20. In case of taxes on vehicles, there was a major drop between 2005-06 and 2006-07. However, it has again picked up in 2007-08, experiencing a 100 percent growth. 'Taxes on Goods and Passengers' and 'Taxes & Duties on Electricity' have experienced a substantial drop during 2007-08. But 'Taxes & Duties on Electricity' had showed an exceedingly high growth of about 250 percent during 2006-07. Taxes pertaining to all major heads have made substantial growth during 2002-03 to 2007-08. From Table 7.21, one can see that direct taxes contribute almost 25 percent of the own total tax revenue of the state, indirect taxes contributing the rest 75 percent.

Table 7.19 : Composition of Tax Revenue of Bihar Government (%)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Taxes on Sales, Trade etc.	59.18	56.09	56.56	48.68	51.62	57.96
Stamp and Registration Fees	12.51	14.30	12.84	14.19	11.28	14.49
Taxes on Goods and Passengers	9.44	10.48	14.15	17.22	19.42	7.67
State Excise	8.69	8.22	8.15	8.95	9.47	10.06
Taxes on Vehicles	6.39	7.18	6.37	8.49	4.50	7.55
Land Revenue	1.30	1.16	1.00	1.55	1.85	1.50
Other Taxes and Duties on Commodities and Services	1.98	1.97	0.65	0.41	0.30	0.37
Taxes & Duties on Electricity	0.51	0.60	0.29	0.51	1.56	0.40
Taxes on Agricultural Income	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00

Table 7.20 : Growth of Tax Revenue of Bihar Government (%)

	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)	Overall Growth (2002-08)
Taxes on Sales, Trade etc.	-0.63	15.47	-8.30	20.07	38.36	74.79
Stamp and Registration Fees	19.92	2.78	17.74	-9.95	58.23	106.78
Taxes on Goods and Passengers	16.33	54.62	29.71	27.65	-51.30	45.05
State Excise	-0.80	13.52	16.93	19.88	30.91	106.65
Taxes on Vehicles	17.71	1.57	42.14	-40.03	106.75	110.70
Land Revenue	-6.50	-1.21	64.78	35.68	-0.01	106.47
Other Taxes and Duties on Commodities and Services	4.38	-62.18	-32.29	-18.95	54.15	-66.61
Taxes & Duties on Electricity	23.22	-45.86	89.31	247.95	-68.67	37.69
Taxes on Agricultural Income						
Total	4.84	14.51	6.54	13.23	23.23	78.47

Table 7.21 : Structure of Taxation in Bihar (%)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Share of Direct Taxes in State's Own Tax Revenue	20.71	23.24	20.49	24.73	19.19	23.94
Share of Indirect Taxes in State's Own Tax Revenue	79.29	76.76	79.51	75.27	80.81	76.06

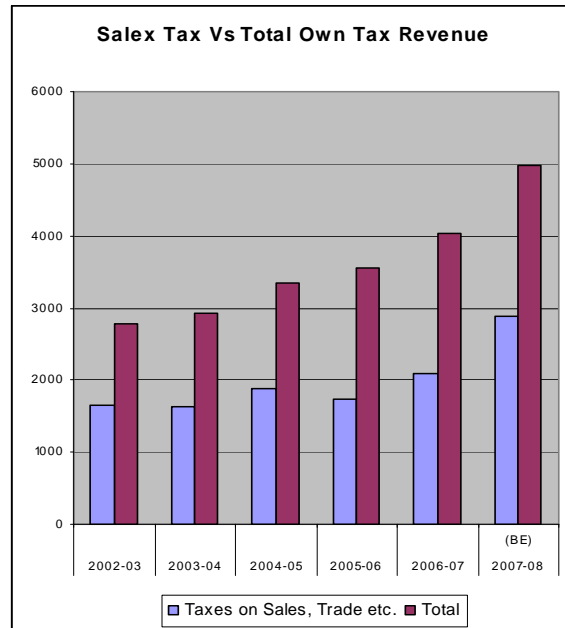
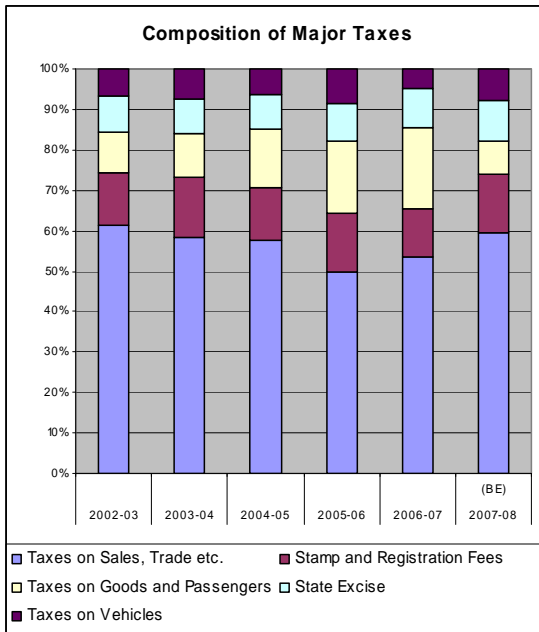


Table 7.22 shows the major non-tax revenues of the state government and Table 7.23 shows their composition. The most important element of the state government's non-tax revenue is the royalty from mines and minerals, the other important source being the interest receipts. The receipt from these two together constitute about 40 percent of the total non-tax receipts. The steep increase in the interest receipts in 2005-06 was due to the investment of huge balance of idle cash in the Cash Balance Investment Account. Thereafter, there has been a steady drop in collections under this head. The royalty from mines and minerals has grown steadily in the past, but during 2007-08, the yield from this had declined marginally. Overall, the growth of non-tax revenues has been quite erratic. In 2006-07, due to the decline in interest receipts, the receipt from total own non-tax revenues had actually declined (-2 percent growth). The problem was further compounded in 2007-08 when there was a negative growth of -22 percent in the own non-tax revenues of the state government, mainly owing to a drop in the collection of revenue from non-ferrous mining and metallurgical industries coupled with a drop in interest receipts. The above analysis brings out the importance of sales tax in the tax revenue and royalty on mines and minerals in the non-tax revenue of the state government.

Table 7.22 : Major Non-Tax Revenues of Bihar

(Rs. Crore)

Sources of Revenue	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Non-Ferrous Mining and Metallurgical Industries	61.20	73.34	80.09	100.90	127.65	102.93
Interest Receipts	53.01	23.08	75.05	216.07	175.99	58.89
Other Rural Development Programmes	8.68	21.26	24.67	10.16	13.80	10.16
Major Irrigation	15.43	26.22	0.00	1.62	1.95	25.00
Other Administrative Services	15.19	80.72	107.98	34.21	20.28	32.64
Medical and Public Health	13.92	11.97	12.66	15.10	17.51	15.73
Police	22.70	16.85	13.72	6.00	10.53	23.83
Roads and Bridges	10.42	10.62	8.42	12.05	16.75	12.89
Social Security and Welfare	13.73	10.59	8.30	14.75	18.79	10.02
Education, Sports, Arts and Culture	8.35	4.11	7.34	32.99	27.57	30.76
Others	38.14	41.57	79.49	78.41	80.36	73.42
Total	260.77	320.33	417.72	522.26	511.18	396.27

Table 7.23 : Composition of Non-Tax Revenues of Bihar (%)

Sources of Revenue	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Non-Ferrous Mining and Metallurgical Industries	23.47	22.90	19.17	19.32	24.97	25.97
Interest Receipts	20.33	7.21	17.97	41.37	34.43	14.86
Other Rural Development Programmes	3.33	6.64	5.91	1.95	2.70	2.56
Major Irrigation	5.92	8.19	0.00	0.31	0.38	6.31
Other Administrative Services	5.83	25.20	25.85	6.55	3.97	8.24
Medical and Public Health	5.34	3.74	3.03	2.89	3.43	3.97
Police	8.70	5.26	3.28	1.15	2.06	6.01
Roads and Bridges	4.00	3.32	2.02	2.31	3.28	3.25
Social Security and Welfare	5.27	3.31	1.99	2.82	3.68	2.53
Education, Sports, Arts and Culture	3.20	1.28	1.76	6.32	5.39	7.76
Others	14.63	12.98	19.03	15.01	15.72	18.53
Total	100.00	100.00	100.00	100.00	100.00	100.00
Growth rate of Total Non-Tax Revenues	-	22.84	30.40	25.03	-2.12	-22.48
Growth rate of Non-Ferrous Mining and Metallurgical Industries	-	19.84	9.20	25.98	26.51	-19.37
Growth rate of Interest Receipts	-	-56.46	225.17	187.90	-18.55	-66.54
Growth rate of receipts from Major Irrigation	-	69.93	-100.00	---	20.37	1182.05

The state government has already shifted to a VAT regime from April 2005 by substituting the sales taxes with VAT. VAT is more efficient than the sales tax, but may also be counter productive as many related issues are yet to be sorted out. In 2005-06, the state government undertook a number of reform measures of the tax system. VAT rates were substantially reduced from 12.5 percent to 4 percent in respect of LPG, tea, coffee, diesel, tractor, plastic appliances etc. VAT rates have been substantially reduced in respect of as many as 150 items. In respect of all foodgrains, the VAT rate has been reduced to 1 percent from 4 percent. The state government lost some revenue because of these and other reform measures introduced during 2006-07 both in respect of tax as well as non-tax items. However, these measures are expected to generate additional resources for the state government in coming years.

Next to sales tax, the other important taxes are the taxes on property and capital transactions, i.e. stamp and registration fees, taxes on goods and passengers, taxes on vehicles and state excise duty. The registration rates in Bihar were high and they have been brought down in 2006-07 to improve compliance. It has been reduced from 15.4 percent to 8 percent in urban and from 8.4 percent to 6 percent in rural areas. One tax that needs to be explored is the professional tax, from which the yield in other comparable states like West Bengal is much more. The Bihar government has delegated its collection and management to local bodies.

Turning to the assessments of revenue, one may note some discrepancy between the budget estimates and the actual realisation of revenues in respect of the individual taxes, though the overall deviation from the estimates has been contained to only 4 percent (Table 7.24). The deviation in respect of individual taxes ranged between a maximum of 420 percent to a minimum of (-) 48 percent. There was a substantial variation of nearly 50 percent in case of the Non-Tax Receipts. In respect of Social Security and Welfare, the actual collections were more than double the estimates.

Table 7.24 : Variation between the Estimated and Actual Realisation of Tax and Non-Tax Revenue of Bihar Govt-2006-07 (Rs Crore)

Tax Revenue	BE	Actual Receipts	% Variation Excess (+), shortfall (-)
Taxes on Sales, Trade etc.	2364.67	2081.48	-11.98
State Excise	400.00	381.93	-4.52
Stamp and Registration Fees	700.00	455.02	-35.00
Taxes on Vehicles	350.00	181.38	-48.18
Taxes & Duties on Electricity	12.07	62.84	420.63
Land Revenue	72.42	74.65	3.08
Other Taxes and duties on Commodities and Services	18.78	11.93	-36.47
Taxes on Goods and Passengers	603.64	783.01	29.71
Total Tax	16679.12	17324.79	3.87
Non Tax Revenue			
Non-Ferrous Mining and Metallurgical Industries	95.00	127.65	34.37
Forestry and Wildlife	7.59	6.35	-16.34
Social Security and Welfare	6.25	18.79	200.64
Total Non Tax	342.38	511.18	49.30

The cost of collection of different taxes is shown in Table 7.25. The cost of collection was insignificant compared to the total collection for all major taxes, except for Stamp and Registration Fees where it was more than 8 percent of total collection.

Table 7.25 : Cost of Collection of Taxes (Rs.Crore) as % of Gross Collection

Tax Revenue	2006-07 Cost of Collection	2006-07 Actual Collection	Cost of Collection of Taxes as % of Gross Collection
Taxes on Sales, Trade etc.	27.30	2081.48	1.31
State Excise	18.30	381.93	4.79
Stamp and Registration Fees	36.85	455.02	8.10
Taxes on Vehicles	6.03	181.38	3.32
Electricity Duty	0.49	62.84	0.78

Table 7.26 shows the state government's own tax and non-tax revenues as percentage of GSDP which is a measure of a state's capacity to raise further resources. The tax and non-tax revenue of Bihar together constitute only about 5 percent of its GSDP which is too low, even at the existing level of poverty. By examining the buoyancy ratios (Table 7.27), it can be seen that the values of buoyancy are quite high, since the total revenue of the state as well as its own revenue are rising faster than the change in its GSDP. Thus, it can be expected that the tax-GDP ratio will rise more rapidly in future. From Table 7.28, we note that the buoyancy of sales tax, stamp and registration fees and taxes of vehicles are more than the buoyancy of total tax revenues. Thus, the future prospects of increasing yield from these taxes, given a healthy growth rate of nearly 10 percent in the GSDP, seems to be very bright. However, the same cannot be said about the major sources of non-tax revenues.

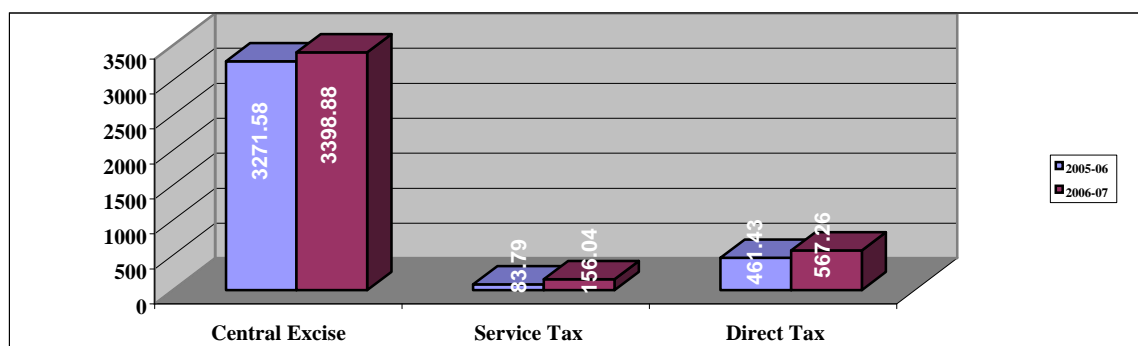
Table 7.26 : Tax and Non-tax Revenue as Percentage of GSDP

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Own Tax Revenue as % of GSDP	4.28	4.36	4.53	4.47	4.28	4.77
Own Non-Tax Revenue as % of GSDP	0.40	0.48	0.57	0.66	0.54	0.38
Total Revenue as % of GSDP	4.68	4.84	5.10	5.12	4.82	5.15
Buoyancy of Total Revenue (Ratio)	0.92	4.34	2.24	1.61	1.47	1.67
Buoyancy of State's Own Taxes (Ratio)	1.39	1.68	1.37	0.83	0.76	1.98
Buoyancy of State's Own Taxes w.r.t. Total Revenue (Ratio)	1.51	0.39	0.61	0.52	0.51	1.19
GSDP Growth (%)	12.65	2.83	10.20	7.98	18.28	10.50

Table 7.27 : Buoyancy of Important Tax and Non-Tax Revenue Sources

	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Major Sources of Tax Revenues					
Taxes on Sales, Trade etc.	-0.06	5.36	-1.06	2.67	1.98
Stamp and Registration Fees	1.52	1.08	1.76	-1.77	2.63
Taxes on Goods and Passengers	1.29	14.14	2.67	3.47	-7.53
State Excise	-0.07	4.77	1.69	2.65	1.69
Taxes on Vehicles	1.38	0.62	3.46	-10.68	3.69
Major Sources of Non-Tax Revenues					
Non-Ferrous Mining and Metallurgical Industries	1.52	3.37	2.41	3.35	-1.72
Interest Receipts	-11.87	27.71	7.61	-3.64	-14.21

COLLECTION OF CENTRAL TAXES IN BIHAR



Tax Heads		2005-06	2006-07	2007-08 (upto Dec., 2007)
Central Excise		3271.58	3398.88	2832.89
Service Tax		83.79	156.04	117.65
Direct Tax				
1	Corporate Tax	88.60	121.10	65.51
2	Income Tax	368.00	438.61	419.30
3	Fringe Benefit Tax	4.46	7.04	3.49
4	Securities Transaction Tax	0.00	0.00	0.00
5	Banking Cash Transaction Tax	0.05	0.03	0.06
6	Hotel Receipt / State Duty Tax	0.00	0.00	0.00
7	Interest / Expenditure Tax	0.12	0.18	0.43
8	Wealth / Gift Tax	0.20	0.30	0.10
9	Total	461.43	567.26	488.89
Customs Duty				
1	Total Basic Duty		0.56	0.46
2	Total Additional Duty of Customs (CVD)		152.40	139.96
3	Total Special CVD		37.58	2.49
4	Total Special Addl. Duty of Customs			
5	Addl. Customs Duty (Cess) on HSD			
6	Addl. Customs Duty (Cess) on MS			
7	Surcharge on Petroleum Goods on MS			
8	National Calamity Contingent Duty (N C Duty)		0.55	0.41
9	Education Cess		3.30	3.67
10	Cess on Secondary and Higher Education			2.86
11	Others			5.30
12	Total Export Duty			
13	Total Cess on Export		1.03	0.01
14	Total Other Receipts		4.48	2.06
15	Total Gross Revenue (1 to 14)		199.92	157.24
16	Refunds		0.22	0.74
17	Drawback (Customs)		46.8	65.20
18	Total Net Revenue (15-16-17)		152.83	91.97

Note : For Income Tax, the number of assesses in Bihar Territorial Region, as on December, 2007 was 4,55,680. The break-up is as follows : CCIT-I (2,09,197), CCIT-II (2,46,029) and DGIT (Inv.) (454).

To conclude the discussion on resource mobilization, Table 7.28 shows grants and contributions from the central government, from which it is seen that the total grants now stand at more than Rs. 5000 crore. Out of this, about 50 percent are grants for state plan schemes, followed by non-plan grants. The total grants have increased 4 times during the 5 years from 2002-03 to 2006-07, largely because of timely submission of utilisation certificates.

Table 7.28 : Grants and Contributions from the Central Government

(Rs. Crore)

	2002-03	2003-04	2004-05	2005-06	2006-07
Total Grants	1397.32	1617.62	2831.83	3332.72	5247.11
Grants for State Plan Schemes	670.05	1169.28	1642.90	1555.66	2445.24
Grants for Central Plan Schemes	436.95	45.95	10.33	89.99	144.29
Grants for Centrally Sponsored Schemes	----	250.83	494.61	485.99	974.17
Non-plan Grants	290.32	151.56	683.99	1201.08	1683.41

7.7 Expenditure Management

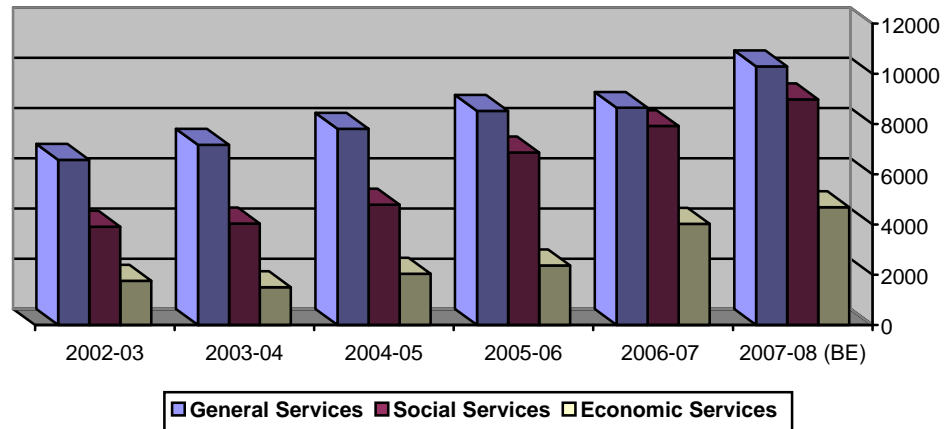
As mentioned earlier, revenue expenditure and capital expenditure are the two components of the state government's total expenditure. The expenditures of the state governments are classified under three major categories — general services, social services and economic services. Apart from these, the other areas of spending are capital outlay, repayment of loans and advances, and grants to local bodies and autonomous institutions as well as public commercial undertakings and government companies. It is to be noted that while the repayment of principal amounts of loans are made from the capital account, interest payment is made from the revenue account of expenditure, under the general services.

Table 7.29 presents the expenditure from Consolidated Fund of the state government. Table 7.30 shows the structure of expenditure from the Consolidated Fund while Table 7.31 depicts the growth of expenditure from the Consolidated Fund. These three tables together give an insight into the expenditure patterns of the state government.

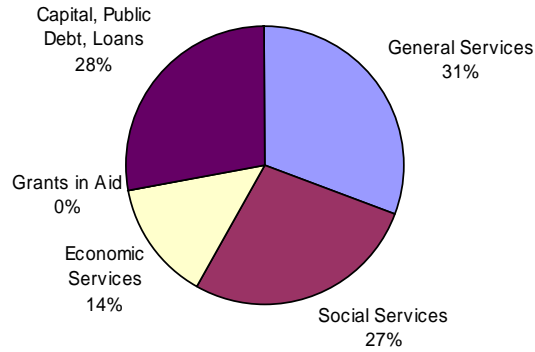
Table 7.29 : Expenditure from Consolidated Fund (Rs. Crore)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
General Services	6574	7175	7803	8523	8643	10291
Social Services	3916	4033	4795	6862	7917	8978
Economic Services	1763	1498	2036	2367	4021	4689
Grants in Aid	2	4	4	4	4	0.02
Capital, Public Debt, Loans	3250	9771	5420	4812	6551	9299
Capital Outlay	970	1549	1205	2083	5211	6389
Total Consolidated Fund	15505	22482	20058	22568	27136	33257

Expenditure from Consolidated Fund (Rs Cr)



Expenditure from Consolidated Fund, 2007-08 (BE)



The structure of expenditure of the state government, as shown in Table 7.30 indicates that general services constitutes the bulk of expenditure from the Consolidated Fund (31 percent), followed by social services (27 percent) and economic services (14 percent) in 2007-08. The state government has accorded high priority to social sectors, in view of the low levels of education and health indicators in the state. Capital expenditure that has the potential of generating income and employment also needs to be given higher priority, in view of the high poverty ratio and high unemployment in the state. This is possible only by containing, if not curtailing, the expenditure on general services.

Table 7.30 : Structure of Expenditure from Consolidated Fund (%)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
General Services	42.40	31.92	38.90	37.76	31.85	30.94
Social Services	25.25	17.94	23.91	30.40	29.18	27.00
Economic Services	11.37	6.66	10.15	10.49	14.82	14.10
Grants in Aid	0.01	0.02	0.02	0.02	0.01	0.00
Capital, Public Debt, Loans	20.96	43.46	27.02	21.32	24.14	27.96
Total Consolidated Fund	100.00	100.00	100.00	100.00	100.00	100.00

Table 7.31 : Growth of Expenditure from Consolidated Fund (%)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
General Services	3.97	9.15	8.75	9.22	1.41	19.06
Social Services	10.86	3.01	18.88	43.11	15.38	13.40
Economic Services	35.40	-15.04	35.88	16.28	69.86	16.62
Grants in Aid	0.00	106.59	13.56	-1.64	-4.76	-99.50
Capital, Public Debt, Loans	-57.91	200.61	-44.53	-11.20	36.13	41.94
Total Consolidated Fund	-17.88	44.99	-10.78	12.52	20.24	22.56

In the constituents of general services, there are certain items on which there is no possibility of any control. These are mostly items of charged expenditure, like pension, interest payment etc, on which the expenditure has been rising steadily. The expenditure on administrative services has also been growing steadily since 2003-04, mainly because of increased expenditure on police, jail and judiciary. The expenditure on social services has been increasing steadily over the year. Among the social services, the revenue expenditures on education and health and family welfare show steady increase over the years, as was observed for the general services. The social sector

expenditure will be analysed in greater details later. Capital outlay which was stagnating prior to 2005-06, has now been accorded high priority. From the level of Rs. 2000 crore in 2005-06, it has been raised to Rs. 6400 crore in 2007-08. The infrastructure sector, so vital for economic development, is now being given due attention by the state government.

7.8 Revenue Expenditure

Table 7.32 depicts the details of revenue expenditure of the state government during the period from 2002-03 to 2007-08 (BE). It will be readily seen that revenue expenditure constitutes the bulk of total expenditure amounting to more than 70 percent of the total expenditure. Revenue expenditure is incurred to maintain the present level of activities and payments, and cannot thus make any addition to the existing infrastructure or services. Within revenue expenditure, the non-plan component again consumes the bulk of expenditure (56 percent of total expenditure). As much as 82 percent of total expenditure of the state government is met by its revenue receipts including transfers from the central government excluding loans, the rest are met from loans. From the buoyancy ratios, it is seen that revenue expenditure is increasing faster than GSDP, and also faster than the revenue receipts.

Table 7.32 : Details of Revenue Expenditure (Figures in Rs Crore and in percent)

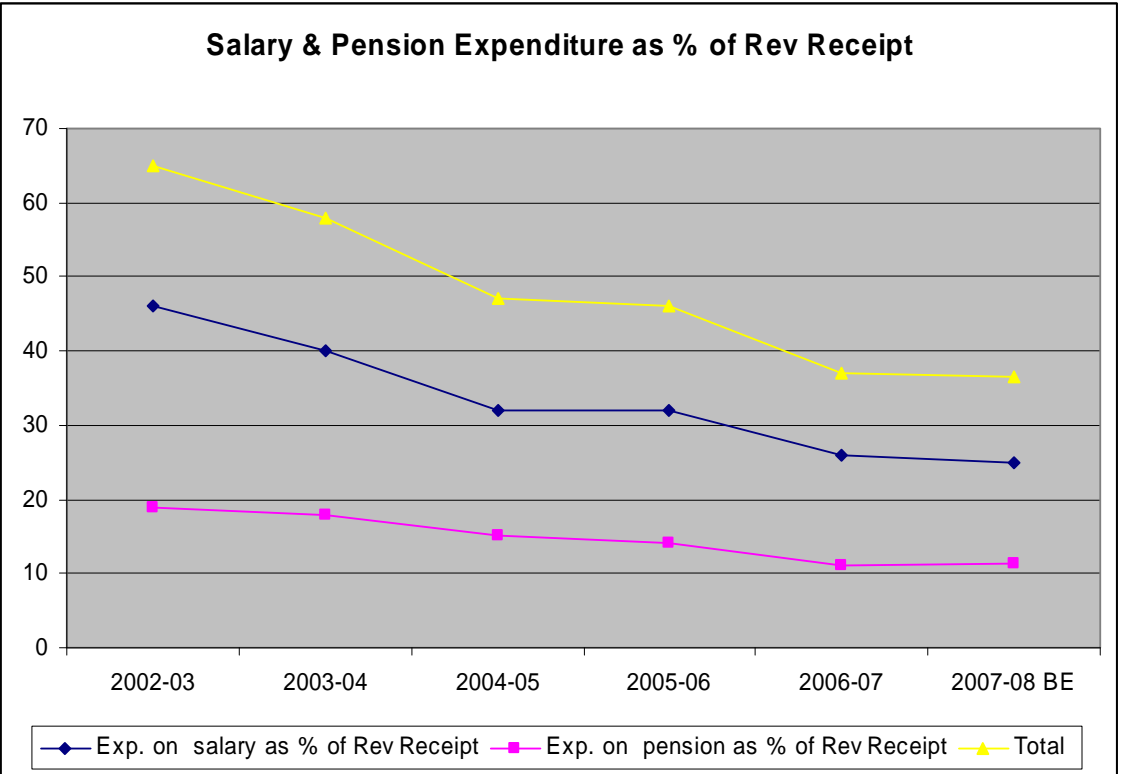
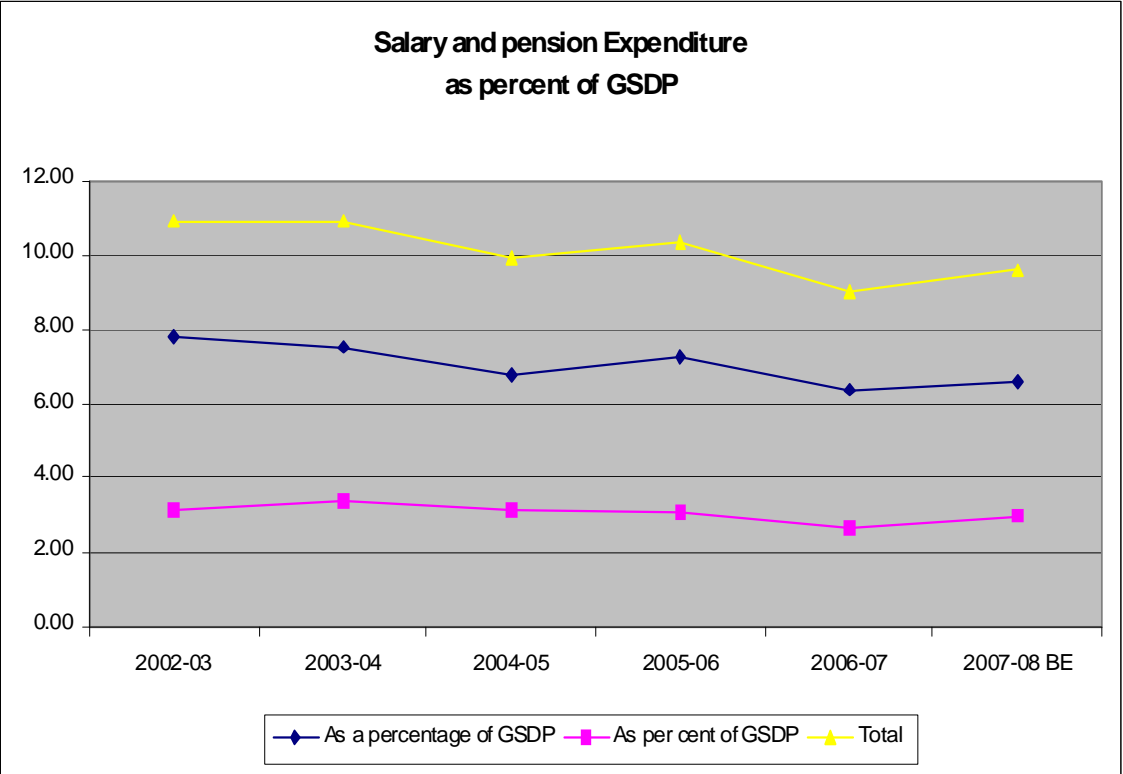
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (BE)
Revenue Expenditure (RE)	12,255	12,711	14,638	17,756	20,585	23,958
Capital Expenditure (CE)	3,250	9,771	5,420	4,812	6,551	9,299
Total Expenditure (TE)	15,505	22,482	20,058	22,568	27,136	33,257
Non Plan Expenditure	12,434	17,280	16,581	17,670	17,740	21,291
Revenue A/c (NPRE)	10,901	11,627	12,642	15,020	16,520	18,543
Capital A/c	1,533	5,653	3,939	2,650	1,220	2,748
Plan Expenditure	3,071	5,202	3,476	4,899	9,397	11,966
Revenue A/c (PRE)	1,354	1,084	1,996	2,736	4,065	5,414
Capital A/c	1,717	4,118	1,480	2,163	5,332	6,552
Rate of growth of NPRE (%)		6.66	8.73	18.81	9.99	12.25
Rate of growth of PRE (%)		-19.94	84.13	37.07	48.57	33.19
RE/TE(%)	79.00	56.54	72.98	78.68	75.86	72.04
NPRE/TE (%)	70.00	51.72	63.03	66.55	60.88	55.76
TE/GSDP(%)	23.81	33.58	27.18	28.32	28.79	31.93
NPRE/GSDP(%)	16.74	17.36	17.13	18.85	17.53	17.80
Revenue Receipt (RR) / TE (%)	70.74	55.40	78.34	79.04	85.06	82.51
NPRE/RR(%)	99.39	93.35	80.45	84.20	71.57	67.58
Buoyancy of RE w.r.t. GSDP		0.33	5.27	2.05	2.20	1.01
Buoyancy of RE w.r.t. RR		2.34	5.09	-0.91	2.17	3.59

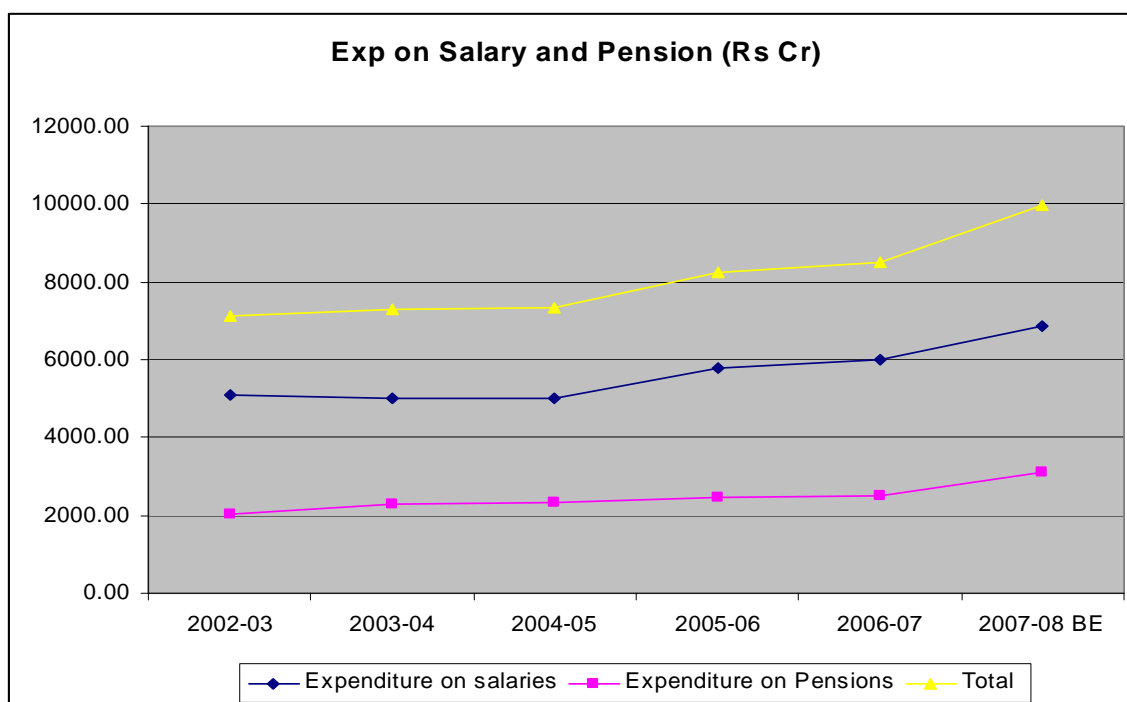
7.9 Expenditure on Salary and Pension

The expenditure on salary and pension are both committed expenditures and constitute the two most important items of expenditure for all governments. The trends in expenditure on salaries, both under plan and non-plan heads, as well as expenditure on pension are presented in Table 7.33. Salary alone accounted for one quarter of the revenue receipt of the state government and about 29 percent of its revenue expenditure. During the last 6 years, however, this proportion has come down. In 2002-03, salaries accounted for 46 percent of revenue receipt and 41 percent of revenue expenditure. However, this decline is not because of any decrease in absolute terms in expenditure on salary and pension, but due to significant increases in both revenue receipt and revenue expenditure. The salary expenditure under non-plan head increased from Rs. 4,748 crore to Rs. 6369 crore during the same period. Under Plan head, it increased from Rs. 325 crore to Rs. 496 crore.

Table 7.33 : Expenditure on Salaries and Pensions (Rs Crore)

Heads	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 BE
Expenditure on salaries	5073	5020	5005	5783	6016	6865
of which						
Non-Plan Head	4748	4468	4564	5153	5539	6369
Plan Head	325	552	441	631	478	496
As a percentage of GSDP	7.79	7.50	6.78	7.26	6.38	6.59
As a percentage of RR	46	40	32	32	26	25
As a percentage of RE	41	39	34	33	29	29
Expenditure on Pensions	2049	2269	2325	2456	2497	3124
Rate of Growth	-10	11	2	6	2	25
As per cent of GSDP	3.15	3.39	3.15	3.08	2.65	3.00
As per cent of RR	19	18	15	14	11	11
As per cent of RE	17	18	16	14	12	13
Total expenditure on Salary and Pension as a percentage of GSDP	10.94	10.89	9.93	10.34	9.03	9.59





Along with salaries, pension payments increased from Rs. 2,049 crore in 2002-03 to Rs. 3124 crore in 2007-08. The growth rate of pension payments during 2007-08 was as high as 25 percent from Rs. 2497 crore in the previous year, due to the two years' moratorium on retirement coming to an end in March 2007. The state government has now implemented the new contributory pension scheme on the pattern of the central government to reduce the long term liabilities on pension account. This scheme is applicable to the employees joining on or after 1 September 2005. Pension and salary payments together constitute more than 42 percent of revenue expenditure of the state government.

7.10 Quality of Expenditure

Quality of expenditure can be judged by the proportion of expenditure devoted to creation of capital assets for developing social and physical infrastructure, expenditure on social and economic services as opposed to expenditure on general services. It can also be judged in terms of proportion of plan expenditure as opposed to non-plan expenditure. Thus we shall consider the following parameters to judge the quality expenditure (i) ratio of capital outlay to total expenditure; (ii) the ratio of capital outlay to GSDP; (iii) the proportion of revenue expenditure being spent on social and economic services and (iv) ratio of plan and non-plan expenditure. The

higher the ratio of these components to total expenditure and GSDP, the better would be the quality of expenditure. Table 7.34 shows these ratios for the last six years. Going by all the parameters, it is clear that the quality of expenditure in Bihar has undergone significant improvement over the recent years. For example, the capital outlay has increased from a meager 6 percent to nearly 20 percent of total expenditure, while the revenue expenditure has gradually declined from 79 percent to 76 percent (the rest accounted for by discharge of public debt and loans and advances made by the state government). Salary component of developmental revenue expenditure has declined from 45 percent to only 24 percent whereas the non-salary component has gone up from 55 percent to 76 percent of total developmental expenditure. Finally, the share of plan expenditure in total expenditure has also increased from 20 percent to 35 percent. In absolute terms, capital outlay has become nearly four fold during the period. From barely 1.5 percent of GSDP, it has now increased to 5.53 percent of GSDP. All these ratios show that public finances in Bihar are moving in the direction of consolidation and better fiscal management.

Table 7.34 : Quality Parameters of Expenditure (Rs Crore & Percentage)

	2002-03	2003-04	2004-05	2005-06	2006-07
Capital Outlay (Rs Cr)	970	1549	1205	4912	5211
Revenue Expenditure (Rs Cr)	12,255	12,711	14,638	17,756	20,585
Of which Social and Economic Services with	6,568	7,058	7,968	11,241	16,994
(i) Salary Component (Rs Cr)	2,934	3,824	3,699	4,304	4,110
Percentage of salary component (%)	45	54	46	38	24
(ii) Non salary component (Rs Cr)	3,634	3,234	4,269	6,937	12,884
Percentage of non-salary component (%)	55	46	54	62	76
Capital Outlay/ Total Expenditure (%)	6.25	6.89	6.01	9.23	19.20
Revenue Expenditure / Total Expenditure (%)	79.04	56.54	72.98	78.68	75.86
Revenue Expenditure /GSDP (%)	18.82	18.98	19.84	22.28	21.84
Capital Outlay /GSDP (%)	1.49	2.31	1.63	2.61	5.53
Plan Expenditure / Non-Plan Expenditure (%)	24.70	30.10	20.96	27.72	52.97
Plan Expenditure / Total Expenditure (%)	19.81	23.14	17.33	21.71	34.63

7.11 Sectoral Expenditure

Expenditure on Social Services

Expenditure on social services is meant to improve the human development levels in the state. Providing better access to basic education, health services, safe drinking water, sanitation, housing etc. are important components to establish a strong linkage between economic growth and human welfare. Table 7.35 examines the details of expenditure incurred by the state government in

expanding and strengthening social services during 2002-07. The increase in the overall allocation to social sector from Rs. 4058 crore in 2002-03 to Rs. 8513 crore in 2006-07 reflects the

Table 7.35 : Expenditure on Social Services

	2002-03	2003-04	2004-05	2005-06	2006-07
Education, Sports, Arts & Culture					
Total Expenditure (Rs Crore)	2750	2876	3160	4423	5359
Revenue Expenditure (Rs Crore)	2704	2822	3142	4394	5253
(a) Salary component (%)	64	75	68	53	45
(b) Non-salary component (%)	36	25	32	47	55
Capital Expenditure (%)	2	2	1	1	2
Health and Family Welfare					
Total Expenditure (Rs Crore)	572	539	629	1015	1153
Revenue Expenditure (Rs Crore)	553	534	607	877	985
(a) Salary component (%)	54	89	76	71	60
(b) Non-salary component (%)	46	11	24	29	40
Capital Expenditure (%)	3	1	3	14	15
Water Supply, Sanitation, Housing and Urban Development					
Total Expenditure (Rs Crore)	294	276	321	532	766
Revenue Expenditure (Rs Crore)	219	200	251	407	514
(a) Salary component (%)	25	36	29	20	18
(b) Non-salary component (%)	75	64	71	80	82
Capital Expenditure (%)	26	27	22	23	33
Other Social Services					
Total Expenditure (Rs Crore)	442	506	822	1221	1235
Revenue Expenditure (Rs Crore)	440	477	794	1184	1166
(a) Salary component (%)	25	40	27	28	14
(b) Non-salary component (%)	75	60	73	72	86
Capital Expenditure (%)	0	6	3	3	6
Total (Social Services)					
Total Expenditure (Rs Crore)	4058	4197	4932	7190	8513
Revenue Expenditure (Rs Crore)	3916	4033	4795	6862	7917
(a) Salary component (%)	56	71	60	49	40
(b) Non-salary component (%)	44	29	40	51	60
Capital Expenditure (%)	4	4	3	5	7

state government's commitment to improve the standards of social services. In 2006-07, the total expenditure on social services was one third of the total expenditure and 50 per cent of development expenditure. Overall, the non-salary component of expenditure worked out to be 60 percent in the social services.

For improving the quality of education and health services, the Twelfth Finance Commission had recommended that, under the non-plan heads, the salary expenditure under education and health and family welfare should increase by only 5-6 percent, while non-salary expenditure should increase by at least 30 percent per annum. During the last two years, the salary component of revenue expenditure had actually increased by 9.3 percent and 1.3 percent, while the non-salary component had increased by 104 percent. In health and family welfare, increases in the salary component were 35 percent in 2005-06, followed by a small 5 percent decrease in the next year, while the non-salary component increased by 74 percent and 54 percent respectively during these two years. Thus the expenditure pattern both in education and health services were broadly at par with the recommendations of the Twelfth Finance Commission.

Expenditure on Economic Services

Table 7.36 shows the analysis of expenditure on economic services. This expenditure is meant to promote productive capacity in the economy. The expenditure on economic services in 2006-07 accounted for about one third of the total expenditure and about half of the developmental expenditure. Agriculture and allied activities, irrigation and flood control, energy and transport together accounted for more than 60 percent of the expenditure on economic services. More than half the total expenditure on economic services was made on capital account, especially in transport (80 percent) and irrigation and flood control (53 percent). Also, as much as 77 percent of the total revenue expenditure was incurred on non-salary components. All these indicate an improvement in expenditure patterns in state finances during the recent past.

Table 7.36 : Expenditure on Economic Services

	2002-03	2003-04	2004-05	2005-06	2006-07
Agriculture and Allied Activities					
Total Expenditure (Rs Crore)	255	254	407	504	596
Revenue Expenditure (Rs Crore)	249	249	397	410	585
(a) Salary component (%)	51	70	44	47	39
(b) Non-salary component (%)	49	30	56	53	61
Capital Expenditure (%)	2	2	3	19	2
Irrigation and Flood Control					
Total Expenditure (Rs Crore)	667	840	916	1074	1067
Revenue Expenditure (Rs Crore)	357	319	473	483	435
(a) Salary component (%)	53	78	51	55	68
(b) Non-salary component (%)	47	22	49	45	32
Capital Expenditure (%)	46	62	48	55	59
Energy and Power					
Total Expenditure (Rs Crore)	37	302	28	303	1514
Revenue Expenditure (Rs Crore)	37	1	2	1	1081
(a) Salary component (%)	0	0	0	0	0
(b) Non-salary component (%)	100	100	100	100	100
Capital Expenditure (%)	0	100	94	100	29
Transport					
Total Expenditure (Rs Crore)	285	266	369	560	2076
Revenue Expenditure (Rs Crore)	194	205	225	285	414
(a) Salary component (%)	98	42	37	38	25
(b) Non-salary component (%)	2	58	63	62	75
Capital Expenditure (%)	32	23	39	49	80
Other Economic Services					
Total Expenditure (Rs Crore)	1267	1199	1316	1609	3227
Revenue Expenditure (Rs Crore)	1267	1199	1316	1609	3227
(a) Salary component (%)	7	39	21	21	19
(b) Non-salary component (%)	93	61	79	79	81
Capital Expenditure (%)	27	40	29	26	53
Total (Economic Services)					
Total Expenditure (Rs Crore)	2510	2862	3035	4051	8481
Revenue Expenditure (Rs Crore)	1763	1498	2036	2367	4021
(a) Salary component (%)	33	53	34	34	23
(b) Non-salary component (%)	67	47	66	66	77
Capital Expenditure (%)	30	48	33	42	53

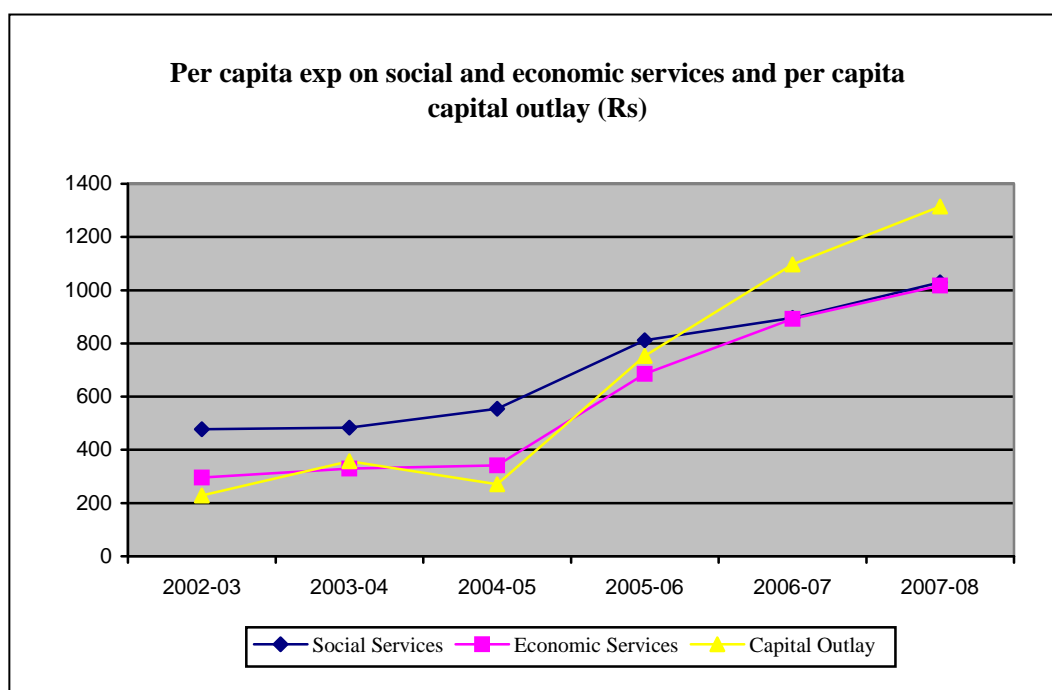
Per Capita Expenditure on Social and Economic Services

Table 7.37 shows the per capita expenditure on social and economic services for different years. Per capita capital outlay has continuously been rising since 2004-05 and now stands at Rs. 1315. The per capita expenditure on social and economic services are Rs. 1030 and Rs. 1017 respectively. However, the per capita expenditure on medical and public health (Rs. 117) as well

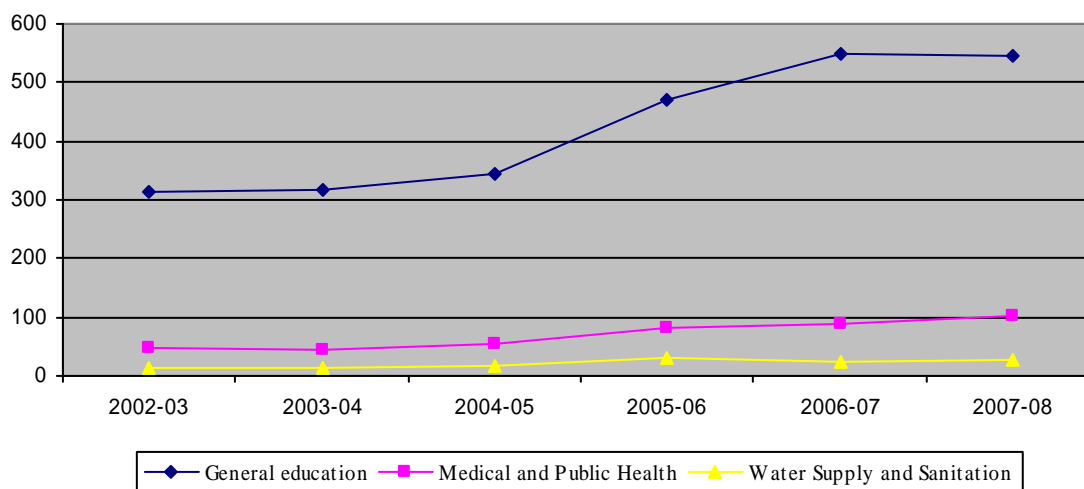
as drinking water supply and sanitation (Rs. 98) are still very low. Per capita expenditure on general education (i.e. primary, secondary and higher education) has increased from 2004-05 and stood at Rs. 545 at the end of 2007-08.

Table 7.37 : Per Capita Expenditure on Social and economic Services

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Population (Crore)	8.49	8.68	8.88	9.29	9.50	9.72
Total Expenditure (Rs Crore)						
General education	2673	2778	3092	4337	5204	5302
Medical and Public Health	403	388	504	760	848	999
Water Supply and Sanitation	127	125	142	292	230	254
Social Services	4058	4197	4932	7541	8513	10008
Economic Services	2510	2862	3035	6369	8481	9883
Capital Outlay	1939	3098	2409	6995	10422	12778
General Services	6655	7198	7871	8753	8798	10455
Per Capita Expenditure (Rs) on						
General education	314	317	344	470	550	545
Medical and Public Health	47	44	56	82	90	103
Water Supply and Sanitation	15	14	16	32	24	26
Social Services	478	484	555	812	896	1030
Economic Services	296	330	342	686	893	1017
Capital Outlay	228	357	271	753	1097	1315
General Services	784	829	886	942	926	1076



Per Capita Expenditure (Rupees) on Education, Health, Water Supply and Sanitation



7.12 Debt Management

Earlier in Section 7.6 and Tables 7.14 - 7.16, the outstanding liabilities and interest burden of the state government have been discussed. Here a micro level analysis of debt data is presented based on the composition of outstanding liabilities. In Table 7.38, data on the composition of debt liabilities of the state Government have been presented according to the sources of debt. As noted earlier, internal debt constitutes more than 60 percent of the total outstanding liabilities of the state government, followed by loans from small savings, provident funds etc. (21 percent), the rest 19 percent being on account of loans and advances from the central government. Market loans constitute about 40 percent of the internal loans, loans from financial institutions and others account for 10 percent, and special securities issued to the National Small Savings Fund of the central government account for about 50 percent of the total internal loans.

The loans and advances from the central government is constituted mostly of block loans including share of small savings collections and loans taken before 1984-85 (98 percent). These block loans amounted to Rs. 7866 crore and Rs. 7564 crore respectively during 2005-06 and 2006-07. These block loans are due to the consolidation of small savings loans and loans taken by the state government before 1984-85.

Market loans constitute most of the outstanding liabilities of the state government. It can be seen from Table 7.38 that, out of the total annual interest liability of about Rs. 900 crore on market

loans, loans bearing interest rates of more than 10 percent (high cost loans) have an annual interest liability of Rs 400 crore. The details of these loans are shown in Table 7.39. Even though most of these loans were raised prior to 1998-99, some of these are yet to be discharged. Since these loans carry interest rates far higher than those prevailing in the present day market, the state government is shifting to a policy of raising fresh loans at lower rates to discharge these loans and save on interest payments.

Table 7.38 : Detailed Statement of Debt and Other Obligations of the Government
(Rs. Crore)

	Balance as on	
	01-04-2006	01-04-2007
Internal Debt the State Govt.		
Market Loans	10805	10393
Loans from Financial Institutions and Others	2279	2298
Of which, NABARD	121	336
Compensation and other Bonds	2102	1894
Of which 8.5% tax free special power bonds	2076	1868
Special Securities issued to the National Small Savings Fund of the Central Government	12089	14130
Other Loans	7	7
Total Internal Debt of the State Govt.	25182	26829
Loans and Advances from the Central Govt.		
Non-Plan Loans	101	98
State Plan Schemes, of which	8377	8065
Block Loans incl. Share of Small Savings Collections and pre 1984-85 loans	8377	8065
Total Loans for Central Plan Schemes	9	9
Total Loans For Centrally Sponsored Plan Schemes	17	18
Total W&M Advances	43	43
Other Loans	8	8
Total Central Loans and Advances	8551	8237
Small Savings PF etc		
GPF	9024	9425
Other Civil PF	8	44
Other PF	-32	-40
State Government EGIS	-234	-269
Total Small Savings PF etc	8766	9160
Total Outstanding Liability	42499	44226

Table 7.39 : Analysis of Market Loans

(Rs. Crore)

Type of Market Loans	Outstanding Liability		Interest Liability		Average Interest Rate (%)
	End of March 2006	End of March 2007	2005-06	2006-07	
Bihar State Development Bond Bearing Interest					
Less than 8%	6083	6083	408	408	7
Between 8-10%	946	946	81	81	9
Between 10-12%	1794	1794	199	199	11
More than 12%	1801	1569	229	197	13
Non- Interest- Bearing Loans	181	0	0	0	0
Total	10805	10393	916	884	

Table 7.40 : Analysis of High Cost Development Bonds (more than 12% interest)

High Cost State Development Bonds	Balance as at	
	end March 2006	end March 2007
Bihar State Development Loan 12% 2010 raised 2000-01	60	60
Bihar State Development Loan 12% 2011 raised 1991-92	182	182
Bihar State Development Loan 12.3% 2007 raised 1997-98	331	331
Bihar State Development Loan 12.5% 2008 raised 1998-99	548	548
Bihar State Development Loan 13% 2007 raised 1992-93	299	299
Bihar State Development Loan 13.05% 2007 raised 1997-98	149	149
Bihar State Development Loan 13.85% 2006 raised 1996-97	232	0
Total	1801	1569

7.13 State Budget for 2007-08

The budget for 2007-08 has attempted to give a direction towards development while embarking on a path of reforms. In this section, budget for 2007-08 has been analysed to see if any structural change has been introduced in the expenditure patterns of the state government.

From the summary of the budget for 2007-08, presented in Table 7.41, one can see that there is a deficit of only Rs. 14 crore in the Consolidated Fund, in place of an actual deficit of Rs. 1688 crore in the previous year. However, there was an actual surplus of Rs. 1785 crore in the Public Account in 2006-07, the net effect being an increase in the cash balance of the state government by Rs. 97 crore. In the budget estimates of 2007-08, however, the small deficit of Rs. 14 crore in the Consolidated Fund is balanced by an equal amount of surplus in the Public Account. The revenue surplus is also projected to increase substantially, from Rs. 2498 crore in 2006-07 to Rs. 3483 crore in 2007-08. In the capital account, the deficit is projected to decrease from Rs. 4186 crore in 2006-07 to Rs. 3497 crore in 2007-08.

The structure of receipts into and expenditure from the Consolidated Fund is presented in Table 7.42. From this table, it can be seen that the tax revenue as a percentage of the receipts in the Consolidated Fund is projected to decrease by 8 percent during 2007-08. The deficit, however, is proposed to be met by a corresponding increase in the Public Debt receipts into the Consolidated Fund. Except for this, there has not been any structural shift in the receipts.

As regards expenditure, the earlier trend of rising revenue expenditure continues. The trend of higher increase of expenditure in social services compared to that in economic services, a characteristic of the state finance in the earlier years, has been reversed. In fact, there has been a minor drop in the shares of all the three services. Although the decreases have been marginal for all the three services, the drop for social services has been the highest. This reduction became necessary to offset the effect of higher discharge of public debt. The state government has not compromised in the matter of capital outlay; there has been no change in the share of capital outlay in the expenditure from the Consolidated Fund. In absolute terms, capital outlay has increased by nearly Rs. 1200 crore over the level of previous year.

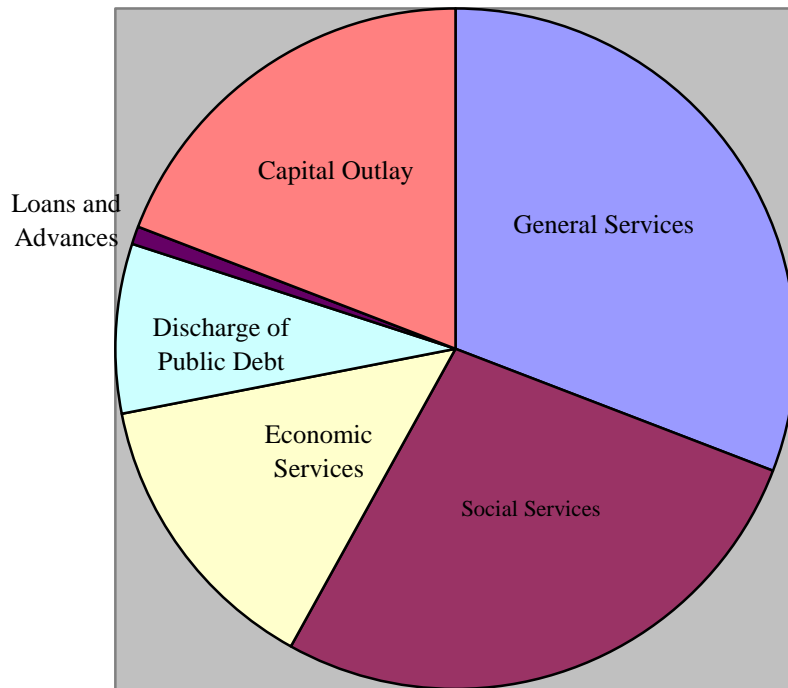
Table 7.41 : Summary of Budget, 2007-08 (Surplus -, Deficit +) Rs. Crore

Revenue Account	2006-07	2007-08 (BE)	Capital Account	2006-07	2007-08 (BE)
Receipts			Receipts		
Tax revenues	17,325	20,001	Public Debt	2,358	5,776
Non-Tax Revenues	511	396	Recovery of Loans and Advances	7	26
Grants and Contributions	5,247	7,044			
Total Revenue Receipts	23,083	27,441	Total Capital Receipts	2,365	5,802
Expenditure			Expenditure		
General Services	8,643	10,291	Capital Outlay	5,211	6,389
Social Services	7,917	8,978	Public Debt	1,025	2,631
Economic Services	4,021	4,689	Loans and advances	315	280
Grants and Contributions	4	0			
Total Revenue Expenditure	20,585	23,958	Total Capital Expenditure	6,551	9,299
Deficit Revenue A/c	-2,498	-3,483	Deficit Capital Account	+4186	3497
Consolidated Fund Receipts	25,448	33,243	Consolidated Fund Expenditure	27,136	33,257
Net Consolidated Fund	1,688	14			
Contingency Fund					
Income	0	0	Expenditure	0	0
Contingency Fund Total	0	0	Contingency Fund Total	0	0
Public Account			Public Account		
Receipts			Disbursements		
Small Savings, PF etc.	1,012	1,088	Small Savings, PF etc.	617	838
Reserve Funds	0	191	Reserve Funds	0	158
Deposits and Advances	3,014	2,050	Deposits and Advances	2,145	2,319
Suspense and Misc.	80,582	0	Suspense and Misc.	79,998	0
Remittances	5,038	0	Remittances	5,101	0
Total Receipt	89,646	3,328	Total Disbursements	87,861	3,314
Net Results Public Account	-1,785	-14			
Net Result (All Accounts)	-97	0			

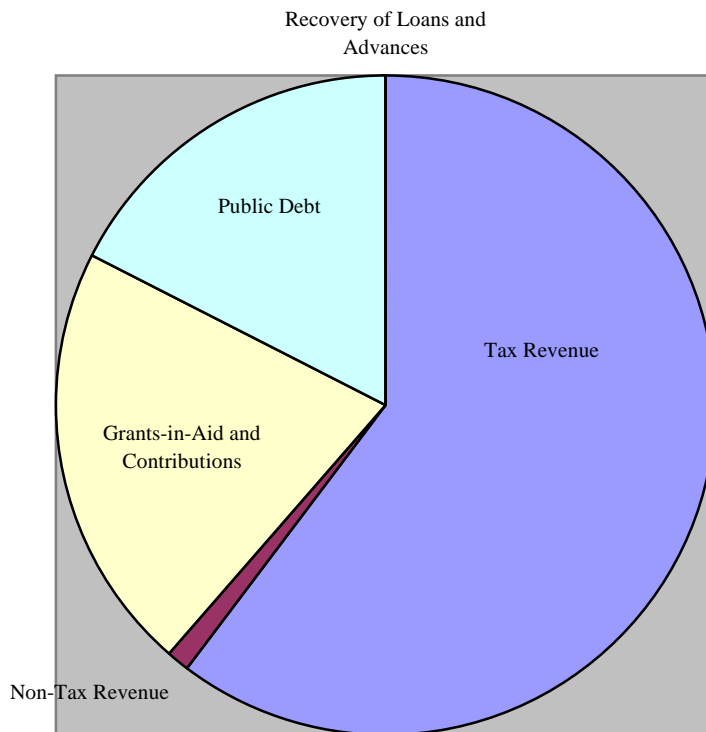
Table 7.42 : Structure of Receipts and Expenditure of Consolidated Fund (%)

Receipts	2006-07	2007-08 (BE)	Expenditure	2006-07	2007-08 (BE)
Revenue Account			Revenue Account		
Tax Revenue	68.08	60.17	General Services	31.85	30.94
Non-Tax Revenue	2.01	1.19	Social Services	29.18	27.00
Grants-in-Aid and Contributions	20.62	21.19	Economic Services	14.82	14.10
Capital Account			Discharge of Public Debt	3.78	7.91
Public Debt	9.27	17.38	<i>Loans and Advances</i>	1.16	0.84
Recovery of Loans and Advances	0.03	0.07	Capital Account	19.20	19.21
Total	100.00	100.00	Total	100.00	100.00

Expenditure from Consolidated Fund: 07-08 BE



Receipts into Consolidated Fund: 07-08 BE



7.14 Centre State Financial Relations

In recent years, there has been a distinct change in the pattern of centre-state financial relations. The number of centrally sponsored schemes for social sector development has increased substantially and an increasing amount of funds from the central government is being transferred directly to the autonomous state societies and District Rural Development Authorities (DRDAs). In Table 7.43, we have estimated the funds that have been transferred to autonomous bodies from the central government in 2006-07. The choice of year is informed by two reasons — (i) the autonomous societies had completed the transition phase and were fully operational in this year, and (ii) financial data was available for the full year. The relevant data has been procured from the three major societies to which central government funds are directly transferred for the following major programmes :

- (a) Bihar Education Project (BEP) for Sarva Shikshya Abhiyan (SSA)
- (b) State Health Society for all components of National Rural Health Mission (NRHM)
- (c) District Rural Development Authority (DRDA) for National Rural Employment Guarantee Programme (NREGP), Swarnjayanti Grameen Swarozgar Yojana (SGSY), Sampoorna Grameen Rozgar Yojana (SGRY), Indira Awas Yojana (IAY), Drought Prone Area Programme (DPAP), Member of Parliament Local Area Development Scheme (MPLADS), Provision of Urban Amenities to Rural Areas (PURA), Integrated Wasteland Development Project (IWDP) and funds for DRDA Administration.

Table 7.43 : Details of Central Funds Bypassing the State Budget 2006-07 (Rs. crore)

Name of Programme	GOI Share Bypassing State Budget (Actual Releases)
SSA	1026.29
NPEGEL	55.44
KGBV	16.84
Total (SSA)	1098.57
Total NRHM-A	207.55
Total NRHM-B	27.94
Total NRHM-C	56.27
NRHM-D	14.23
Total (NRHM)	305.98
NREGP	485.81
SGSY	124.46
SGRY	127.80
IAY (New)	585.69
IAY (Upgradation)	146.42
IAY (Credit Cum Subsidy)	0.00
IAY (Flood Affected)	0.00
IAY (5%)	0.56
IAY (Kala Azar Affected)	12.04
Haryali (DPAP)	9.5141
MPLADS	36.6268
PURA	3.03451
IWDP	9.5141
DRDA (Admin)	11.39974
Total (DRDA)	1552.87
Total of GOI funds bypassing State Budget	2957.43
Budget Receipts of GOB (2006-07)	25448
Percentage of Central Funds bypassing the State Budget (2006-07)	12
Expenditure Budget GOB (2006-07)	27136
Percentage of Central Funds bypassing the State Budget (Expenditure) (2006-07)	11
Central Funds bypassing GOB budget as a percentage of Total Central Grants	56

From Table 7.43, it is to be noted that a total of Rs. 2957.43 crore was routed directly to autonomous societies in 2006-07. This accounts for 12 percent of the receipts of the state government and 11 percent of its expenditure. Moreover, the plan grants of the state government for State Plan Schemes, Central Sector Plan (CSP) and Centrally Sponsored Schemes (CSS) for 2006-07 was Rs. 2131.64 crore. This accounts for 72 percent of the central government funds of Rs. 2957.43 crore bypassing the state budget. Thus, the transfers from the central government

bypassing the state budget is by no means a negligible amount. This has an adverse effect on centre-state financial relations in particular and fiscal accountability in general due to the following reasons :

- (i) The state government has no direct control over the process of fund utilisation as the bulk of these funds do not pass through its accounts. Thus its status as a monitoring authority has no financial backing, in spite of an increasing share of state expenditure on these schemes.
- (ii) Apart from the fact that the funds are being transferred outside the state budget, the nature of the schemes dictate the tying of funds to specific components. This centralized framework limits the possibilities of adapting the expenditure to state-specific goals. Further, it fails to create a synergy between the components of the state plan and the targets laid down by the central government.

In an overall framework of decentralization, fiscal devolution should start from the central government to the state government and from the state government to district and panchayat levels. Bypassing the state government goes against the spirit of devolution and actually leads to centralization of financial management at the all India level and inefficient use of resources at the district level. Indeed, low utilisation of funds in CSS has been a major issue for Bihar. It had been argued that funds transferred to autonomous societies would lead to higher and more efficient utilisation. However, this assumption has limitations. For example, the transition from Reproductive and Child Health (RCH) Programme Phase I to Phase II coincided with the setting up the State Health Society for implementation of all health-related programmes. In the transition period, 2004-05 and 2005-06, fund utilisation actually declined from around 50 percent at the end of RCH Phase I to less than 1 percent in the first year of RCH Phase II.

National Rural Health Mission (NRHM)

The overall fund utilisation has been 33.6 percent in the NRHM programme. Utilisation in NRHM-A which has training, monitoring and programme management components, apart from the functional areas of family planning and maternal health, has seen a very low utilisation of 10.6 percent. However, utilisation has been much higher in NRHM-B at 35.1 percent. The components in this part mainly deal with physical infrastructure. Development of these had to be prioritised for obvious reasons. Utilisation for pulse polio and routine immunization, the main components of

NRHM-C exceeded 100 percent while 75.9 percent of NRHM-D funds were utilized. Thus, the overall low utilisation is explained by low spending capability in specific areas like training, monitoring and programme management. These are areas in which the state has started making progress in 2007-08 with the use of the 'flexible pool' funds, over and above the allocated funds to prioritise recruitment and training at the block level.

Table 7.44 : Financial Performance in 2006-07 : NRHM (Rs. Crore)

	Funds Received	Expenditure	Expenditure as a Percentage of Receipts
NRHM-A	207.55	21.93	10.6
NRHM-B	27.94	9.81	35.1
NRHM-C	56.27	60.40	107.3
NRHM-D	14.23	10.80	75.9
Total NRHM	305.98	102.95	33.6

Sarva Shiksha Abhiyan (SSA)

Fund utilisation capabilities are much higher in SSA in Bihar. One reason is that the implementing authority (Bihar Education Project) has existed as a functioning institution for several years, providing a ready institutional infrastructure for the programme. From Table 7.45, we note that 96.7 percent of released funds were utilized in 2006-07. A componentwise break up shows that utilisation capacity has been 99 percent of released funds for the general component of the SSA. However, for the gender specific components, the utilisation was 52.5 percent (National Programme for Education of Girls at Elementary Level) and 58.8 percent (Kasturba Gandhi Balika Vidyalaya). The gender specific component is less than 4 percent of the total planned allocation. It should be noted here that although 96.7 percent of the fund released was utilised, the position with respect to releasing of funds was not satisfactory. In 2006-07, only 65.6 percent of the approved budget was released.

Table 7.45 : Financial Performance in 2006-07 : SSA (Rs. Crore)

	Approved AWP&B	Share of GOI	Share of GOB	Total Funds Released	Total Expenditure	Percentage of Expenditure against Fund	Percentage of Expenditure against AWP&B
SSA	2340.15	1026.29	538.50	1564.79	1549.59	99.0	66.2
NPEGEL	70.93	55.44	9.23	64.68	33.93	52.5	47.8
KGBV	22.45	16.84	5.61	22.45	13.21	58.8	58.8
Total	2433.52	1098.57	553.34	1651.91	1596.73	96.7	65.6

District Rural Development Authority (DRDA)

The DRDAs in the state are responsible for implementation of most of the flagship programmes for poverty alleviation. One finds that 63.7 percent of funds released were utilized by DRDAs in 2006-07. Fund utilisation was above 80 percent in SGRY and IAY (New). Fund utilisation was more than 50 percent for NREGP and SGSY. However, fund utilisation for IAY in Kala Azar affected areas was very low at 2.3 percent. The DPAP also showed very low utilisation at 17.9 percent. Thus capacity of fund utilisation has varied among the programmes, even though they are all administered by the same autonomous authority. The reasons for these are many, but one of the main parameters which determine the effective implementation is the extent of devolution and meticulousness of the planning process. Most of these programmes are based on targeted identification of beneficiaries. This process has proved to be cumbersome and prone to disputes. This has further slowed down the efficacy of the programmes.

Table 7.46 : Financial Performance in 2006-07 : Schemes under DRDA (Rs. crore)

Schemes under DRDA	Financial Target	Spillover from 2005-06	Share of GOI (Released)	Share of GOB (Released)	Total (GOI and GOB)	Other Funds	Total Funds Available	Total Exp.	Percentage of Exp. against Fund	Percentage of Exp. against Financial Target
NREGP		534.48	485.81	79.08	564.90	129.56	1228.94	718.27	58.4	
SGSY	186.64	117.35	124.46	36.00	160.46	3.11	280.92	155.23	55.3	83.2
SGRY	277.06	69.46	127.80	46.34	174.13	15.96	259.56	223.80	86.2	80.8
IAY (New)	1020.87	427.46	585.69	320.06	905.75	10.26	1343.47	1074.66	80.0	105.3
IAY (Upgradation)		87.45	146.42	80.01	226.44	0.00	313.89	106.23	33.8	
IAY (Credit Cum Subsidy)		8.83	0.00	0.00	0.00	0.00	8.83	3.81	43.1	
IAY (Flood Affected)		216.71	0.00	0.00	0.00	0.00	216.71	64.11	29.6	
IAY (5%)		0.69	0.56	0.19	0.75	0.00	1.44	0.82	56.7	
IAY (Kala Azar Affected)		0.00	12.04	4.01	16.05	0.00	16.05	0.37	2.3	
Haryali (DPAP)		12.85509	9.5141	0.7425	10.26	0.02079	23.13	4.15202	17.9	
Total		1475.29	1492.30	566.43	2058.73	158.91	3692.94	2351.45	63.7	

7.15 Expenditure on Health and Education across Districts

So far, the analysis of public finance was concerned with macro-level state data on different sectors. However, it would be worthwhile to take a look at the facets of public finance across the districts in the state. For this purpose, two sectors are taken from the social services — general education and medical and public health. Treasurywise data were taken to ascertain accurately the expenditure made by the state government in the districts on these sectors.

From Table 7.47, we can see that, in 2006-07, 63 percent of the total state government expenditure on education is made on primary education, followed by 20 percent in secondary education and 16 percent on university and higher education. This signifies the priorities of the state government in the sphere of education. In medical and public health, 46 percent of the total expenditure is made on rural areas, whereas 38 percent is made on urban areas. Further, 10 percent of the total expenditure is incurred on medical training and research and the rest 6 percent on public health. This again reflects the state Government's priorities in the sphere of healthcare.

Table 7.47 : Government Expenditure on Health and Education (% of total expenditure on these sectors respectively)

	2005-06	2006-07
General Education	100	100
Primary	64	63
Secondary	16	20
Higher Education and Others	18	16
Others (Adult Education etc)	1	1
Medical and Public Health	100	100
Urban	37	38
Rural	49	46
Public Health	4	6
Medical Research and Training	10	10

Tables 7.48 through 7.51 show the districtwise expenditure on education and health for the years 2005-06 and 2006-07, along with the per capita expenditure in the different districts. While no major structural shift is noticed in the patterns of expenditure between the two years, the extent of disparity between the per capita expenditure in Patna and other districts of Bihar is found to be very large. From Tables 7.48 and 7.49, it is noted that the per capita expenditure on education in Patna district during the two years 2005-06 and 2006-07 was Rs. 4177 and Rs. 5633 respectively. The enormous advantage of Patna district is reflected through the fact that the next highest per capita expenditure was only Rs. 357 in Munger (2005-06) and Rs. 461 in Jehanabad (2006-07). But these figures are less than 10 percent of the figure at Patna. The expenditure on university and higher education in Patna was obviously much higher than in the other districts, Rs. 821 crore and Rs. 881 crore in 2005-06 and 2006-07 respectively. But even these accounted for only Rs. 1555 and Rs. 1631 in the per capita terms. Thus the per capita expenditure on education in Patna exceed all other districts even for primary and secondary education. This disparity is very large when we consider that the lowest per capita expenditure was only Rs. 181 (2005-06) and Rs. 126 (2006-07) in Araria, compared to Rs. 4177 (2005-06) and Rs. 5633 (2006-07) for Patna.

A similar scenario is also revealed in case of expenditure on Medical and Public Health (Tables 7.50 and 7.51). During 2005-06 and 2006-07, the per capita expenditure in medical and public health services in Patna district was Rs. 553 and Rs. 674 respectively. The overall per capita expenditure in the state during both these years was less than Rs 100, which itself is a meagre amount. But in 27 of the 38 districts, it was less than a paltry Rs. 50 in 2006-07. Only in 3 districts (Bhagalpur, Jehanabad and Muzaffarpur), it was more than Rs. 100. The per capita expenditure was as low as Rs. 19 in Araria and Rs. 21 in Supaul during 2006-07. Such high levels of disparity in per capita outlay translates into high levels of disparity in terms of development outcomes. An outlays to outcomes approach may be used to reduce regional disparity.

Table 7.48 : District-wise Expenditure on Education : 2005-06

Districts	Population	Primary	Middle	Others	Total	Per Capita Expenditure
	Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs.
Aurangabad	23	4650	1,586	23	6,259	278
Araria	24	3751	608	19	4,378	181
Arwal	7	1080	687	0	1,767	269
Bhabua	14	2373	794	7	3,174	220
Bhagalpur	27	5,094	2,173	89	7,356	271
Begusarai	26	5071	1,531	22	6,624	252
Bhojpur	25	5184	2,339	58	7,581	302
Banka	18	3550	929	12	4,491	249
Buxar	16	3025	1,511	18	4,554	290
Darbhanga	37	6177	1,699	113	7,989	217
East Champaran	44	7250	1,567	57	8,874	201
Gopalganj	24	4217	1,382	197	5,796	241
Gaya	39	5,674	2,079	53	7,806	201
Jamui	16	2497	599	14	3,110	199
Jehanabad	10	2,201	897	50	3,148	303
Khagaria	14	3184	534	18	3,736	261
Kishanganj	15	2,020	389	13	2,422	167
Katihar	27	4596	862	53	5,511	206
Lakhisarai	9	1460	931	0	2,391	266
Madhubani	40	7,682	2,230	28	9,940	248
Madhepura	17	3712	813	27	4,552	266
Munger	13	2886	1,583	73	4,542	357
Muzaffarpur	42	8428	2,536	147	11,111	265
Nalanda	27	6,758	2,052	40	8,850	334
Nawada	20	3687	1,185	21	4,893	242
Purnea	28	4826	897	34	5,757	202
Patna	53	117,701	20,761	82,108	220,570	4177
Rohtas	27	5578	2,097	42	7,717	281
Saharsa	17	3316	808	43	4,167	247
Sheohar	6	974	161	0	1,135	197
Sheikhpura	6	1104	486	0	1,590	270
Sitamarhi	30	4912	1,091	1,046	7,049	235
Supaul	19	3,640	811	22	4,473	231
Saran	36	6971	2,786	72	9,829	270
Samastipur	38	6,919	2,373	45	9,337	246
Siwan	30	5427	1,978	26	7,431	245
Vaishali	30	6,069	1,724	30	7,823	257
West Champaran	34	5,852	1,129	25	7,006	206
Total for Bihar	929	279,496	70,598	84,645	434,739	468

Table 7.49 : District-wise Expenditure on Education : 2006-07

Districts	Population	Primary	Middle	Others	Total	Per Capita Expenditure
	Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs.
Aurangabad	23	3331	1052	20	4,403	191
Araria	25	2,664	434	8	3,106	126
Arwal	7	1118	588	0	1,706	254
Bhabua	15	2134	918	10	3,062	208
Bhagalpur	28	4,993	2,232	83	7,308	263
Begusarai	27	5029	1586	20	6,635	247
Bhojpur	26	5,226	2,394	56	7,676	299
Banka	18	3666	889	10	4,565	248
Buxar	16	3,011	1,621	21	4,653	290
Darbhanga	38	6,568	1,724	101	8,393	222
East Champaran	45	7,152	1,539	54	8,745	194
Gopalganj	25	4,133	1,433	17	5,583	227
Gaya	40	5,841	2,363	53	8,257	208
Jamui	16	2,486	607	848	3,941	246
Jehanabad	11	3,491	1,382	25	4,898	461
Khagaria	15	2,791	689	16	3,496	239
Kishanganj	15	3,293	600	23	3,916	264
Katihar	27	4,695	989	46	5,730	209
Lakhisarai	9	1,689	745	0	2,434	265
Madhubani	41	7,729	2,141	43	9,913	242
Madhepura	17	3,600	790	23	4,413	253
Munger	13	2,923	1,395	79	4,397	338
Muzaffarpur	43	8,690	2,640	162	11,492	268
Nalanda	27	6,939	2,231	66	9,236	340
Nawada	21	3,756	1,098	20	4,874	235
Purnea	29	4,804	916	38	5,758	198
Patna	54	164,001	52,133	88145	304,279	5633
Rohtas	28	5,614	2185	43	7,842	280
Saharsa	17	3,248	782	66	4,096	237
Sheohar	6	976	176	0	1,152	195
Sheikhpura	6	1,091	455	0	1,546	257
Sitamarhi	31	4,573	1046	15	5,634	183
Supaul	20	2,653	604	14	3,271	165
Saran	37	7,158	2,783	71	10,012	269
Samastipur	39	6,950	2,295	57	9,302	239
Siwan	31	5,524	2113	18	7,655	246
Vaishali	31	6,368	2,007	29	8,404	270
West Champaran	35	7,139	1,280	28	8,447	242
Total for Bihar	950	327,047	102,855	90328	520,230	548

Table 7.50 : District-wise Expenditure on Medical and Public Health : 2005-06

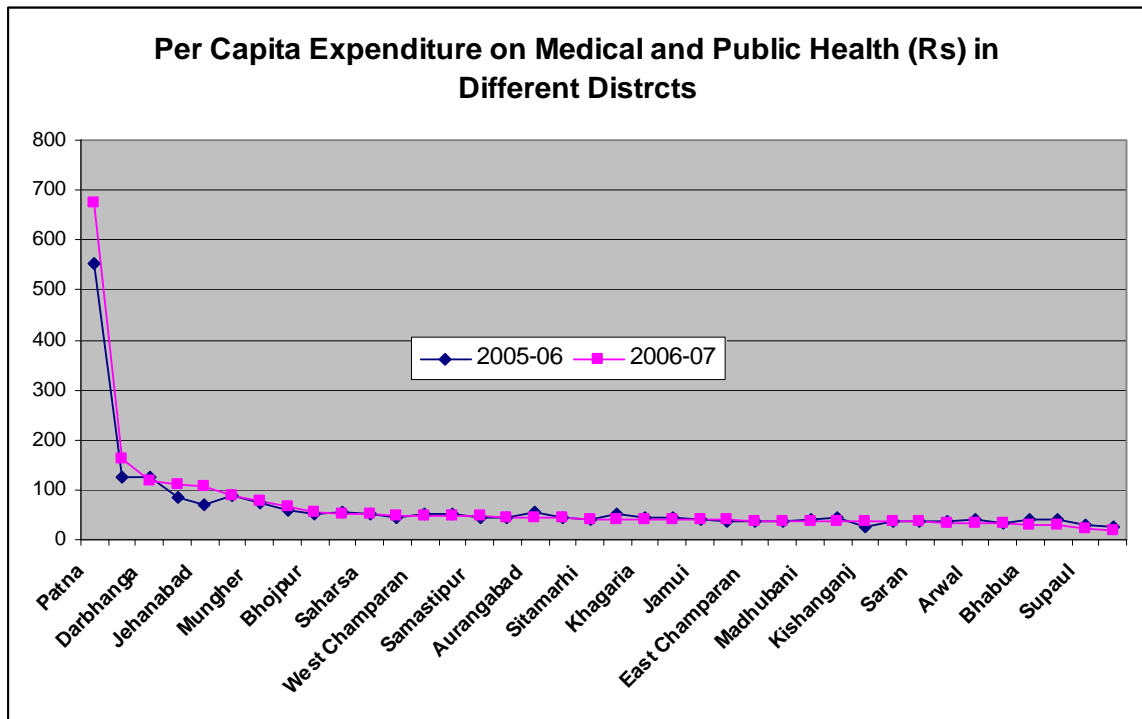
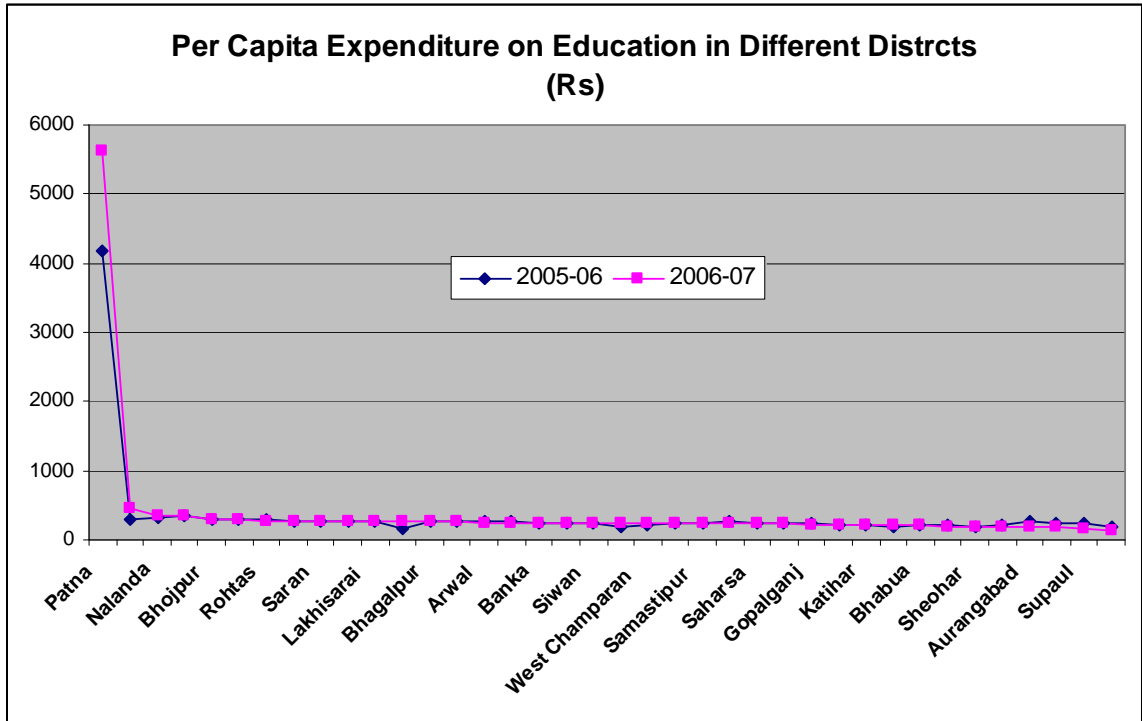
Districts	Population	Urban	Rural	Others	Total	Per Capita Expenditure
	Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs.
Aurangabad	23	218	960	47	1,225	54
Araria	24	647	0	16	663	27
Arwal	7	9	256	0	265	40
Bhabua	14	122	437	7	566	39
Bhagalpur	27	1,683	1,014	751	3,448	127
Begusarai	26	260	764	183	1,207	46
Bhojpur	25	356	847	113	1,316	52
Banka	18	147	614	18	779	43
Buxar	16	150	437	84	671	43
Darbhanga	37	2,288	968	1,432	4,688	127
East Champaran	44	311	1,239	113	1,663	38
Gopalganj	24	217	660	39	916	38
Gaya	39	1,465	1,269	759	3,493	90
Jamui	16	179	442	6	627	40
Jehanabad	10	215	485	33	733	71
Khagaria	14	179	442	6	627	44
Kishanganj	15	75	306	3	384	26
Katihar	27	220	729	70	1,019	38
Lekhisarai	9	430	7	11	448	50
Madhubani	40	324	1,208	112	1,644	41
Madhepura	17	218	452	5	675	40
Munger	13	339	471	137	947	74
Muzaffarpur	42	1,489	1,085	1,028	3,602	86
Nalanda	27	373	941	115	1,429	54
Nawada	20	238	761	61	1,060	52
Purnea	28	283	630	94	1,007	35
Patna	53	12,673	11,801	4,717	29,191	553
Rohtas	27	340	784	104	1,228	45
Saharsa	17	299	475	87	861	51
Sheohar	6	181	7	4	192	33
Sheikhpura	6	65	274	8	347	59
Sitamarhi	30	296	895	63	1,254	42
Supaul	19	76	489	16	581	30
Saran	36	225	1,029	105	1,359	37
Samastipur	38	410	1,229	73	1,712	45
Siwan	30	209	865	56	1,130	37
Vaishali	30	284	916	94	1,294	43
West Champaran	34	717	931	74	1,722	51
Total for Bihar	929	28,210	37,119	10,644	75,973	82

Table 7.51 : District-wise Expenditure on Medical and Public Health : 2006-07

Districts	Population	Urban	Rural	Others	Total	Per Capita Expenditure
	Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs.
Aurangabad	23	268	684	46	998	43
Araria	25	110	355	11	476	19
Arwal	7	0	227	0	227	34
Bhabua	15	112	330	4	446	30
Bhagalpur	28	2,442	1,114	918	4,474	161
Begusarai	27	330	701	239	1,270	47
Bhojpur	26	461	737	239	1,437	56
Banka	18	226	554	10	790	43
Buxar	16	236	349	77	662	41
Darbhanga	38	2,275	872	1343	4,490	119
East Champaran	45	437	1,160	129	1,726	38
Gopalganj	25	373	538	32	943	38
Gaya	40	1,568	1,058	942	3,568	90
Jamui	16	104	525	10	639	40
Jehanabad	11	350	741	36	1,127	106
Khagaria	15	240	356	10	606	41
Kishanganj	15	123	400	10	533	36
Katihar	27	356	665	72	1,093	40
Lekhisarai	9	83	297	6	386	42
Madhubani	41	394	1,019	133	1,546	38
Madhepura	17	190	311	18	519	30
Munger	13	448	396	175	1,019	78
Muzaffarpur	43	2,753	870	1073	4,696	109
Nalanda	27	476	811	112	1,399	52
Nawada	21	287	608	67	962	46
Purnea	29	329	550	110	989	34
Patna	54	13,732	15,932	6768	36,432	674
Rohtas	28	471	693	123	1,287	46
Saharsa	17	394	381	92	867	50
Sheohar	6	75	113	4	192	33
Sheikhpura	6	124	261	9	394	65
Sitamarhi	31	395	839	61	1,295	42
Supaul	20	125	274	9	408	21
Saran	37	328	866	118	1,312	35
Samastipur	39	550	1,171	72	1,793	46
Siwan	31	341	733	42	1,116	36
Vaishali	31	311	764	94	1,169	38
West Champaran	35	599	927	92	1,618	46
Total for Bihar	950	32,416	39,182	13306	84,904	89

Table 7.52 : Districts Arranged according to per Capita Expenditure in 2006-07 (Rs.)

Medical and Public Health			General Education		
	Per Capita Expenditure			Per Capita Expenditure	
	2005-06	2006-07	*	2005-06	2006-07
Patna	553	674	Patna	4177	5633
Bhagalpur	127	161	Jehanabad	303	461
Darbhangha	127	119	Nalanda	334	340
Muzaffarpur	86	109	Munger	357	338
Jehanabad	71	106	Bhojpur	302	299
Gaya	90	90	Buxar	290	290
Munger	74	78	Rohtas	281	280
Sheikhpura	59	65	Vaishali	257	270
Bhojpur	52	56	Saran	270	269
Nalanda	54	52	Muzaffarpur	265	268
Saharsa	51	50	Lakhisarai	266	265
Begusarai	46	47	Kishanganj	167	264
West Champaran	51	46	Bhagalpur	271	263
Nawada	52	46	Sheikhpura	270	257
Samastipur	45	46	Arwal	269	254
Rohtas	45	46	Madhepura	266	253
Aurangabad	54	43	Banka	249	248
Banka	43	43	Begusarai	252	247
Sitamarhi	42	42	Siwan	245	246
Lekhisarai	50	42	Jamui	199	246
Khagaria	44	41	West Champaran	206	242
Buxar	43	41	Madhubani	248	242
Jamui	40	40	Samastipur	246	239
Katihar	38	40	Khagaria	261	239
East Champaran	38	38	Saharsa	247	237
Gopalganj	38	38	Nawada	242	235
Madhubani	41	38	Gopalganj	241	227
Vaishali	43	38	Darbhangha	217	222
Kishanganj	26	36	Katihar	206	209
Siwan	37	36	Gaya	201	208
Saran	37	35	Bhabua	220	208
Purnea	35	34	Purnea	202	198
Arwal	40	34	Sheohar	197	195
Sheohar	33	33	East Champaran	201	194
Bhabua	39	30	Aurangabad	278	191
Madhepura	40	30	Sitamarhi	235	183
Supaul	30	21	Supaul	231	165
Araria	27	19	Araria	181	126
For the Entire State	82	89		468	548



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Note :

- All data on public finance have been tallied with the Finance Department and Directorate of Statistics and Evaluation, Government of Bihar and CAG report for Bihar 2006-07.
- Any table not mentioning source has been generated by the authors of the report from various primary documents.
- Charts that are unnamed or unnumbered pertain to adjoining tables which are self-explanatory.

Glossary of Technical Terms and Abbreviations

ACP	Annual Credit Programme
ADB	Asian Development Bank
AIBP	Accelerated Irrigation Benefit Programme
ANM	Auxiliary Nurse and Mid Wife
APMB	Agricultural Produce Marketing Board
APMC	Agricultural Produce Marketing Cooperative
APDRP	Accelerated Power Development and Reforms Programme
AREP	Accelerated Rural Electrification Programme
ASI	Annual Survey of Industries
ASHA	Accredited Social Health Activist
ATMA	Agricultural Technology Management Agency
AWC	Anganwadi Centre
AWW	Anganwadi Worker
BAPMC	Bihar Agricultural Produce Marketing Corporation
BADP	Border Area Development Programme
B2C	Business to Citizen
BDRM	Bihar Disaster Risk Management
BHEL	Bharat Heavy Electricals Limited
BISWAN	Bihar State Wide Area Network
BRAIN DC	Bihar Revenue and Integrated Data Centre
BREDA	Bihar Renewable Energy Development Agency
BSSC	Bihar State Sugar Corporation
BSHPC	Bihar State Hydro Electric Power Corporation
BSEB	Bihar State Electricity Board
BSLIDC	Bihar State Leather Industry Development Corporation
BSTDC	Bihar State Tourism Development Corporation
BISCICO	Bihar State Credit and Investment Corporation
BIADA	Bihar Industrial Area Development Authority
BSFC	Bihar State Financial Corporation
CSS	Common Service Centre
CBR	Crude Birth Rate
CDR	Crude Death Rate
CD	Credit Deposit
CDPO	Child Development Project Officer
CEP	Continuing Education Programme

CEC	Continuing Education Centre
Cr.PC	Criminal Procedure Code
CRF	Calamity Relief Fund
CRF	Central Road Fund
CSO	Central Statistical Organisation
CEA	Central Electrical Authority
DFID	Department for International Development
DME	Directorate of Mass Education
GDDP	Gross District Domestic Product
GSDP	Gross State Domestic Product
G 2 C	Government to Citizen
GFD	Gross Fiscal Deficit
IAY	Indira Awas Yojna
ICD	Investment Plus Credit to Deposit
ICICI	Industrial Credit and investment Corporation of India
ICDS	Integrated Child Development Services
IDBI	Industrial Development Bank of India
ID	Investment : Deposit
IFCI	Infrastructure Finance Corporation of India
IPD	In-patient Department
IT	Information Technology
ITI	Industrial Training Institute
IMR	Infant Mortality Rate
IWDMS	Integrated Work Flow and Document Management Software
IWAI	Inland Waterways Authority of India
JBSY	Janani Evam Bal Suraksha Yojna
KCC	<i>Kisan Credit Cards</i>
KSY	<i>Kisan Samman Yojna</i>
KVK	Krishi Vigyan Kendra
MDMS	Mid Day Meal Scheme
MMR	Maternal Mortality Rate
MMSNY	Mukhya Mantri Setu Nirman Yojna
NABARD	National Bank of Agricultural and Rural Development
NCEC	Nodal Continuing Education Centre
NDMA	National Disaster Management Authority
NHPC	National Hydro Power Corporation
NREGS	National Rural Employment Guarantee Scheme

NLM	National Literacy Mission
NPA	Non Performing Assets
NSDP	Net State Domestic Product
NHM	National Horticulture Mission
NSSO	National Sample Survey Organisation
NTPC	National Thermal Power Corporation
OFPPC	On Farm Primary Processing Centre
OPD	Out Patient Departments
PACS	Primary Agricultural Cooperative Societies
PGCIL	Power Grid Corporation of India Limited
PMRY	Prime Minister's Rozgar Yojana
PLF	Plant Load Factor
PLP	Post Literacy Programme
QE	Quick Estimates
RRB	Regional Rural Bank
RGGVY	Rajeev Gandhi Gramin Vidyutikarn Yojna
RIDF	Rural Infrastructure Development Fund
RSVY	Rashtriya Sam Vikas Yojna
SCA	Service Centre Agency
SFC	State Food Corporation
SGSY	Swarnajayanti Gramin Swarojgar Yojana
SHGs	Self Help Groups
SIPB	State Investment Promotion Board
SIDBI	Small Industries Development Bank of India
SRR	Seed Replacement Ratio
SSI	Small Scale Industry
TLC	Total Literacy Campaign
UNDP	United Nations' Development Programme
VPGCL	Vaishali Power Generating Company
VTF	Village Task Force
VDA	Variable Dearness Allowance