Government of Bihar

Report on the Bihar State Strategic Statistical Plan

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ACKNOWLEDGEMENTS

CHAPTER 1
INTRODUCTION

1.1 The New State of Bihar

1.1.1 The state of new Bihar came into existence in 2000 and the new state of Jharkhand was carved out comprising of the Chhota Nagpur plateau of old Bihar. Located in the eastern part of India Bihar now lies mid way between humid West Bengal in the east and the sub humid Uttar Pradesh in the west. It is bounded by Nepal in the north and by Jharkhand in the south. The Bihar plain is divided into two unequal halves by the holy river Ganga which flows through the middle from west to east. Bihar is mainly a vast stretch of very fertile land. It has several rivers namely Ganga, Sone, Bagmati, Kosi, Budhi Gandak etc. Central parts of Bihar have some small hills, for example, the Rajgir Hills. The Himalayan Mountains are to the north of Bihar in Nepal. To the south is the Chhota Nagpur plateau of the state of Jharkhand.

1.1.2 The total geographical area of the state is 94,163 sq. km. And the state is located between $24^0 20'10''$ N $27^0 31'15''$ N latitude and between $83^0 19'50''$ E $88^0 17'40''$ E longitude. Its average elevation above sea level is 173 feet. Bihar enjoys a continental monsoon type of climate with average annual rainfall of 1200 mm. Rainfall is the most significant factor in determining the nature of vegetation in the state. The topography of Bihar can be described as a fertile alluvial plain occupying the Gangetic Valley with rich farmland and lush orchards. The major crops grown are paddy, wheat, lentils, sugarcane, and jute. The principal fruits are mangoes, bananas, guava, litchi and jack fruit.

1.2 State at a Glance

1.2.1 As described above Bihar is a landlocked state situated in the eastern most part of the north Indian politico-geographical zone. Bihar is 12th largest state in terms of geographical area (94,163 sq. km.) and 3rd largest by population (8.28 crores) in the country. The state is well known for its abundant natural resources, perennial rivers, fertile lands and a long glorious history.

1.2.2 One of the long standing problems in Bihar's economy has been lack of economic diversification; more than 80% of the rural population is engaged in the agriculture sector. A number of measures have been taken by the state government for accelerated growth of the rural non farm sector but a poor investment climate has discouraged prospective investors from selecting rural Bihar. The NSSO data show that wage employment in agricultural labour in Bihar is around 40% and constituted the dominant occupation in rural areas of Bihar implying that there is still very limited occupational opportunity outside the agricultural sector in rural Bihar. **Lack of accurate and latest Statistics relating to the state's economy is a major bottleneck in assessing the real economic situation of the state.**

1.2.3 In spite of all these conditions, the state has remained one of the poorest states in the country; after its division in 2000 the new Bihar retained almost 75 % of the old Bihar's population, while left with only 54% of the land and a lot of strain on resources. Following table gives some important latest statistics for the state

Table 1: Selected socio economic indicators for Bihar

Item/Indicators	Value
Geographical Area(sq. kms.)	94,163
Number of Adm. Divisions	09
Number of Adm. Districts	38
Number of Sub Divisions	101
Number of blocks	534
Number of Panchayats	8,463
Number of inhabited villages	39,015
Number of Towns (2001 Census)	130
Number of Households (2001 Census)	13,744,130
Total Population (2001 Census)	82,998,509
Density of population(persons per sq. km)	881
Urban Population (Census 2001)	8,681,800
Sex Ratio (females per 1000 males)	919
Birth Rate (SRS 2009)	28.9
Death Rate (SRS 2009)	7.3
Infant Mortality Rate (SRS 2009)	56
Literacy Rate (Census 2001)	47.5
Female literacy rate (Census 2001)	33.6
Work participation rate (Census 2001)	42.3
Female Work participation rate (Census 2001)	26.8
State Domestic Product (SDP) (in Lakhs of Rs.)	14250396
SDP growth rate (CAGR.w.r.t. 1999 – 2000 at current price)	12.30
Per capita income(per capita SDP)(Q) (in Rs.)	15084

Map of Bihar

Administrative structure of Bihar is given in the following table

Table 2: Administrative Structure of Bihar

Administrative unit	Number
Revenue Divisions	9
Districts	38
Sub Divisions	101
CD Blocks	534
Panchayats	8471
Police Stations	810
Inhabited Villages	39,015
Towns	130

CHAPTER 2

THE STATISTICAL SYSTEMS IN INDIA AND BIHAR

2.1 Introduction

2.1.1 The importance of statistics for planning, monitoring and evaluation is now very well recognized. Accurate and up to date statistics are essential for obtaining an objective picture of a country's/state's economic and social condition. Statistics play a crucial role in supporting development policies and in measuring the impact of government interventions. Accurate statistics emerge as the base for planning, be it for the government or the private sector. Flawed statistics may lead to flawed decision-making, including vital ones involving expenditure and investment, which may lead to unanticipated and undesirable outcomes. Therefore, it is important to ensure the accuracy and reliability of statistics, mainly the official statistics.

2.1.2 For understanding the development process of any state or any well defined geographical area in any country there is need for a reliable and efficient official statistical system capable of generating statistics for different sectors of the economy which is very much needed for a state like Bihar

2.1.3 Even though statistics are often quoted and used to draw conclusions and are facilitate the decision process, Statistics as a scientific discipline has remained mysterious and largely misunderstood by the general public and even by administrators and policy planners. Statistical numbers are often termed as official statistics. Such statistics are often required by the Government for informed debate, decision making and research both within government and by the community. Objective, accurate, reliable, timely and accessible official statistics with complete coverage are critical in democratic societies to ensure public confidence in the integrity of the governance and public decision making. Hence integrity of official statistics becomes important in shaping the perceptions regarding the quality of governance.

2.1.4 Relevant, timely, easily comprehensible and accessible good quality official statistics are of paramount importance, if national development efforts are to be designed and targeted well and implemented effectively. In the absence of such good statistics, objective and realistic public policy goals and targets cannot be set and the progress accruing cannot be measured or monitored, when one wishes to assess the extent of success or otherwise of various governmental initiatives in terms of developmental programmes. Again, in a scenario characterized by either non-availability or else inadequate availability of relevant official statistics, it would not be feasible to determine the effects and impacts of such government programmes vis-à-vis the envisaged objectives/goals and targets under such programmes. The demand for official statistics data stems from a variety of requirements for formulation, implementation, monitoring and evaluation of economic and social development policies and programmes. Policy makers need such statistical data to formulate, review and revise their policies. The implementing agencies and service providers require statistical data to be able to deliver their services efficiently and effectively, besides assessing optimality of resource allocations and utilization. The researchers and academicians also need coherent and well presented statistical data for undertaking analytical pursuits, while the prospective investors also require data in appropriate sectors to make prudent investment decisions.

2.1.5 Although Governments are usually the major users of official statistics, the public themselves are also potential consumers of such statistics, provided of course that these are made available to them in a timely, easily accessible and relatively inexpensive (if not altogether free) manner. Also, for individual citizens as well, such official statistics can provide them with the required information/basis needed for them to be able to assess their own levels of well being and welfare and enable them to make rational choices and decisions about various facets of their own lives, besides providing them with an objective method to assess the performance of the Government or for that matter, of other service providers working on public services and serving public good.

2.1.6 The process of planning for economic development initiated soon after that historic event called for detailed information on a wide ranging and ever increasing set of socio-economic variables. Efforts to meet these needs, pioneered primarily by the vision of Prof. P.C. Mahalanobis, led to the establishment of a complex and enormous data collection, processing and analysing frame-work, which is essentially on a decentralized model, with the Union and the States playing their respective roles and the various ministries/departments and offices within each making their contributions. The Central Statistical Organisation (CSO) performs the nodal and coordinating role in the Central Government, while the Directorates of Economic and Statistics in the States are responsible for similar functions at the State level.

2.1.7 One of the weaknesses of the **Indian Statistical System** has been the low priority given to the administrative statistics, which forms its core. Weakness of the administrative statistics is in itself not an isolated issue, as this is the result of a host of other interconnected issues. The key reason for the deterioration of the administrative statistics has been the very low priority given to the primary statistical activities in public administration and in the scheme of governance at the Centre and the states and the apathetic attitude to administrative statistics on the part of main users, both in and outside the government. While this deterioration has been taking place for some time, there has been a significant jump in the demand for credible, complete and timely data most of which has necessarily to emanate from the official sources. With significant domestic liberalization and progressive integration of the Indian economy with the global economy, this need is now also being felt at sub-national levels, as the states are competing to attract private domestic and foreign investment. Therefore the time is most appropriate not just to take a hard look at the official statistics to correct the priorities but also to make the necessary investment to make the official statistics meet the demands of the present and future. The decentralized system in the country makes it imperative that improvements of the State Statistical System should be of paramount importance in any scheme of improving the Indian Statistical System.

2.2 Administrative Statistics

2.2.1 Statistics compiled from administrative records are often termed as Administrative Statistics and are generally collected by the Central/State Governments comprising of statutory administrative returns and data derived as a by-product of general public administration. Administrative Statistics are often critically needed and utilized for the effective planning of Censuses and Surveys. The health of the Indian Statistical System depends, to a large extent, upon the state of functioning of the administrative statistical system. It is necessary to put in place appropriate internal procedures and communication channels in regard to administrative records so as to enable their transformation into administrative statistics beginning with primary

recording of data that is computer compatible, mechanisms of sample validation of administrative statistics, their efficient storage at various geographical levels and setting up retrieval procedures for their aggregation, tabulation and dissemination, while meeting the criteria of timeliness, reliability, quality and completeness. In this context, the tasks of computerization of administrative statistics and development of appropriate mechanisms within these computerized systems to feed the DES with the necessary data assume a special significance and sense of urgency. However, in the case of system of direct data collection through Sample Surveys, a major source of dissatisfaction has been with respect to the timely processing of the data collected and the subsequent release of results accruing there from. Effective computerization can certainly go a long way in dealing with the problem of inordinate delays in the publication of the results flowing from Sample Surveys.

2.2.2 The major weakness in timely availability and release of quality data witnessed over the years has been on account of the shortcomings of the administrative recording system for which Statisticians do not have any role in most of the cases thereby leading to weakening record based official statistics. It is commonly reckoned that the improvement of quality and timeliness of the administrative statistical system lies in the quality improvement of the administrative machinery of the government and to appreciate the need for statistics and to overcome a) incomplete coverage; b) delays in the availability of information; and c) unsatisfactory quality. There are significant advantages of statistics collected through the administrative set-up, especially in view of the fact that the collection of data is much less costly compared to that collected through specially designed sample surveys or censuses. Over the years, unfortunately, for a variety of reasons, the administrative recording system in India has been getting weakened for Statistical purposes.

2.3 Overview of the Indian Statistical System

2.3.1 The Indian Statistical System (ISS) functions within the overall administrative set up of the country. In accordance with the federal structure of the Government, the ISS is largely decentralised with elements of central supervision. All-India large-scale statistical operations, such as Population Census, Economic Census, Agriculture Census, Livestock Census, and nation-wide sample surveys, including the Annual Survey of Industries and the Socio-Economic Surveys of the NSSO, as well as compilation of macro-economic aggregates like national accounts, All India Price Indices and industrial production, are mainly central activities, with significant involvement of State statistical agencies in data collection. The State Governments and statistical organisations of the States also collect and generate data on a number of variables. The Central Government acts as the coordinating agency for presentation of statistics on an all-India basis even in areas where the States have the primary authority and responsibility for collection of statistics. The Ministry of Statistics and Programme Implementation (MOSPI) is the nodal agency for all statistical activities at all-India level. The State Directorates of Economics and Statistics (DES) carry out the responsibility of coordination of all statistical activities at the State level and keeping liaison with the MOSPI for the purpose of coordination at all-India level, and for maintaining norms and standards in the field of official statistics.

2.3.2 The Indian Official Statistical System is decentralized and consists of the **National Statistical System** involving mostly national level estimates/aggregates and the **State Statistical System (SSS)** involving mostly State and UT level estimates/aggregates. The federal structure of the country has influenced the

organization of the Indian Statistical System. The collection of statistics for different subject-specific areas like Agriculture, Industry, Finance, Labour etc. vests with the corresponding administrative Ministries and regulatory bodies of the Government of India. Much of the statistical information is collected as a by-product of administration and regulation or for monitoring the progress of specific programmes. The subject Ministries / Departments in the Central and State Governments have their own statistical organizations, units or cells depending on the need and extent of development of statistics in the relevant fields. These statistical offices are independent in the sense that the programmes and budgets are controlled by their own Ministry / Department. However, the **Central Statistical Office (CSO)** is, bestowed with the responsibility of statistical co-ordination, standard setting and training. It is the nodal agency for a planned development of the statistical system in the country. The **National Sample Survey Office (NSSO)** is responsible for large scale statistical surveys covering the entire country. The CSO & NSSO are two wings of the **National Statistical Organisation (NSO)** in the Ministry of Statistics and Programme Implementation, Government of India.

2.3.3 **State Statistical System (SSS)** is an integral part of the Indian Official Statistical System and there exists two-way dependence between the two systems so that improvements in State Statistical Systems are critical to the improvements in National Statistical System and vice-versa. The Statistical System in the States is almost similar to that at the Centre. It is generally decentralized over the departments of the State/UT Governments. At the apex level, there usually exists a Directorate (or a Bureau) of Economics and Statistics, which is responsible for the coordination of the statistical activities in the State. The DESs have, besides their Head Quarter Office at the State Capital, statistical offices in the districts. In general, the statistical activities of the State DESs are more or less similar, although scope of activities varies considerably from state to state. There are, however, significant differences in the technical and institutional capacities of the state statistical systems and also in the degree of importance and priority accorded to them by the state governments. Consequently, the level and quality of functioning of the DESs vary widely among states.

2.3.4 Although the **CSO** at the Centre and the **DES**s in the states are expected to perform the statistical coordination functions, in reality there is a much closer organic relationship between the line Ministries at the Centre and their counterpart line Departments in the states especially in respect of Social Statistics & Agriculture Statistics. Since the line departments in the states are responsible for implementing the development programmes of the Central ministries, the design of the record-keeping system is usually dictated by administrative requirements, with little consideration of the needs of the statistical agencies.

2.4 Review by Rangarajan Commission

2.4.1 A Commission under the Chairmanship of Dr. C. Rangarajan was appointed by the Government of India in January 2000 to examine critically the deficiencies in the statistical system and to recommend measures for its systematic revamping. The Commission known as the Rangarajan Commission, in its report submitted to the Government of India in September 2001 listed several data gaps and deficiencies in the statistical system.

2.4.2 The National Statistical Commission (NSC) had noted the following crucial deficiencies in the Statistical System of India:

a)   Existence of gaps in the availability of needed information;
b)   Delays in publication of results;
c)   Large and frequent revisions of published results;
d)   Gross discrepancies in official statistics from different sources; and
e)   Lack of transparency in statistical operations.

2.4.3 These deficiencies, as noted by the NSC, have led to a serious loss of credibility of official statistics, arising on account of following reasons:

a)   There is lack of a system of assurance of quality of the statistics that are disseminated by the official statistical system;
b)   Over the years, the system of statutory administrative returns, which form the major sources of official statistics, has seriously weakened;
c)   Time tested methods of coordination with various agencies of the decentralized statistical system such as Technical Working Groups, Advisory Committees, Conference of Central and State Statistical Organizations (COCSSO) etc. have not been functioning satisfactorily;
d)   Absence of a Human Resource Development Policy has been responsible for a marked lack of motivation of official statisticians in India and
e)   Absence of an explicit Citizen's Charter or Mission Statement without which the rising expectations of the citizens from the statistical system cannot be fulfilled.

2.4.4 The two basic reasons identified by the Rangarajan Commission for the existence of some of the major deficiencies were (i) absence of an effective co-ordination mechanism for determining statistical priorities, standardization of concepts and definitions, and (ii) absence of a mechanism to ensure credibility of statistics in the existing decentralized statistical system.

2.5 The Statistical System in Bihar

2.5.1 The Statistical System in Bihar is decentralized with the Directorate of Economics and Statistics (till recently the Directorate of Statistics and Evaluation) as the key agency for collection and dissemination of statistics. The individual line departments are responsible for collection, compilation, processing and release of the data in their own subject fields The DES has not yet been declared as the Nodal statistical agency. Departments with statistical cells are functioning independently through their own staff. Each department recruits its own staff as there is no common statistical cadre. However, in number of line departments staff has been provided by DES. Many of the departments do not have any statistical cell and statistical staff.

2.5.2 The Directorate of Economics and Statistics (DES) functions under the administrative control of the Department of Planning and Development. The DES has district offices in 16 of the 38 districts headed by the District Statistical Officer (DSO) and has presence in each of the Community Development Block by way of Block Statistical Supervisor (BSS) placed in each block to cater to the statistical requirements of the block and functions under the technical control of the concerned DSO. Most of the line departments in the State Government collect, compile, process and analyse all statistical data pertaining to the field of their responsibility.

2.5.3 **The key statistical functions performed by the DES are given below**:

(i)   Estimation of State Domestic Product (SDP) & District Domestic Product (DDP);
(ii)   Capital Formation and Savings;
(iii)   Estimation of Crop-wise Area and Production and Land Utilisation;
(iv)   Timely Reporting Scheme (TSR) for Crop Cutting Experiment;
(v)   Collection of Prices and compilation of Consumer Price Index Numbers;
(vi)   Wholesale Piece Index Numbers for Agricultural Commodities;
(vii)   Participation in surveys of the National Sample Survey; and
(viii) Civil Registration of Births and Deaths.

2.5.4 Other statistical activities of the DES are:

(i)   Quinquennial Economic Census;
(ii)   Collection of Rainfall data;
(iii)   Area and Production of Horticulture Crops;
(iv)   Irrigation Statistics;
(v)   Census of Minor Irrigation;
(vi)   Transport Survey;
(vii)   Jail and Crime Statistics, and
(viii) Compilation of Official Statistics

CHAPTER 3

NEED FOR A STATE STRATEGIC STATISTICAL PLAN

3.1 Statistical and political background

3.1.1 The National Statistical Commission (NSC) was set up in the year 2000 by the Government of India. The NSC undertook a thorough and in depth study of the Indian statistical system in order to identify the administrative, legislative and technical measures and strategies to be deployed to upgrade the statistical system and enable it to satisfy the various statistical needs of the public and private sectors, academicians, researchers and other users. The Commission came out with a number of useful recommendations and has stressed upon the need to have national and state level strategic statistical plans for the improvement of the national and state statistical systems. In accordance with this recommendation, the Ministry of Statistics and Programme Implementation (MOSPI) has initiated the **India Statistical Strengthening Project (ISSP)** with the assistance of the World Bank. The focus of the project is on the strengthening of the statistical capacity of all the 35 States and Union Territories, particularly with regard to the collection, compilation and dissemination of statistics, in accordance with the relevant recommendations contained in the NSC Report (August, 2001). The NSC report has underlined the crucial role which all the States/UTs have to play in generating the data for a wide range of national and state level statistics and for providing appropriate and adequate data in a timely manner for meeting the requirements of policy and planning at the state and sub-state levels.

3.1.2 The proper development of the statistical system in recent years has received the highest attention at the political level, as reflected in the Hon'ble Prime Minister suggesting the birthday of Late Prof. P.C.Mahalanobis to be observed as the **Statistics Day on 29th June** every year and exhorting the statisticians to rise to the needs of good governance. The national conference of state ministers in charge of statistics held on 9th September 2008 at New Delhi. This has given a fillip to the formulation of the **SSSPs**.

3.1.3 The 16th conference of Central and State Statistical Organisations, held at Shimla on 4th and 5th December 2008 also came out with various recommendations with regard to the formulation of a **State Strategic Statistical Plan (SSSP)** with the aim of enhancement of the credibility of the Indian statistical system.

3.1.4 It is against this background that the Government of India requested the state governments to communicate their willingness to participate in the ISSP. **The Government of Bihar** decided to participate in the ISSP and conveyed its interest in its letter addressed to the Government of India on 28.5.2008. While doing so the State Government agreed to subscribe and confirm to the national vision and strategic policy frame work of the National Strategic Statistical Plan (NSSP), formulate the State Strategic Statistical Plan (SSSP) on the basis of the broad guidelines issued by the MOSPI and to enter into an appropriate Memorandum of Understanding with the Government of India to make this project successful and to deliver the desired outcomes. In accordance with the Letter of Participation, the State government has constituted a high level **Steering Committee** under the chairpersonship of the **Development Commissioner**, Government of Bihar and has also appointed a Consultant for the preparation of the SSSP for Bihar with the State **Directorate of Economics and**

Statistics (DES) as the nodal agency to co-ordinate with all participating agencies of the State government in the process of formulation and implementation of the SSSP. The key performance yardstick for the project is the extent to which the State and UT governments participating in the ISSP are able to meet effectively, adequately and systemically the national minimum standards in regard to the **20 key statistical activities** listed below**.**

1. State Domestic Product Estimates
2. Estimates of capital formation and savings.
3. Estimates of district domestic product
4. Estimates of contribution of local bodies.
5. Data on major fiscal variables.
6. Annual survey of industries.
7. Index of industrial production
8. Crop area and production statistics.
9. Whole sale price index
10. Consumer price index
11 Health, Morbidity, Mortality and Family Welfare statistics
12 Education and literacy statistics
12A. Statistics on educational institutions
12B. School enrolment data
13. Labour and employment statistics
13A. Labour statistics
13B. Employment statistics
13C. Child labour statistics (new)
14. Housing
15. Birth and death registration statistics and population
16. Electricity production and distribution statistics
17. Environment and Forestry statistics
17A. Forestry statistics
17B. Water supply and sanitation statistics
18. Participation in the surveys of National Sample Survey Office (NSSO)
19. Transport statistics
19A. Motor Vehicle registration statistics
19B. Road statistics
19C. Traffic Accident statistics
19D. Passenger traffic statistics
20A. Statistics for local area planning
20B. Monitoring and Evaluation (new)

3.1.5 The activities at 13C, and 20B are the additional key statistical activities proposed to be taken up by the State government over and above the 20 key statistical activities of ISSP.

3.2 India Statistical Strengthening Project (ISSP)

3.2.1 A major initiative taken up by the Government of India to reform the statistical system of the country is now known as the "India Statistical Strengthening Project". It is aimed at strengthening the information base for policy formulation and planning by improving the reliability, credibility, timeliness and coverage of the statistical system. The project is being implemented in two Tiers with the assistance of the World Bank. In the first tier, certain exploratory studies were taken up which would

provide inputs for further action for creation and maintenance of a business register, for the improvement of service sector statistics, for assessing the survey capabilities in the private sector and for identifying the specific requirements of strengthening the Directorates of Economics and Statistics of State Governments. Tier-II of the project has been included in the 11th Five Year Plan, with focus on strengthening of the State Statistical System.

3.2.2 In the scheme of federal political structure and decentralized statistical system, state **Directorates of Economics and Statistics (DES)** have a very important role to play because national statistics are no more than aggregation of state level data with responsibilities of collection administratively divided between the Centre and the States. Given the large regional diversities that characterize the continental country like India, the state statistical bureaus also differ in terms of their role, their functions and their powers in the state statistical systems as also their organizational structure, physical infrastructure, human resources and information technology. This leads to diversity in the statistical products that they generate as also in their quality.

3.2.3 The weaknesses that have crept in and developed over the years in the State Statistical System (SSS) in terms of the crucial function of lateral coordination has become another area of major and serious concern, demanding urgent appropriate remedial measures being taken on a systematic and systemic basis to effectively address this issue. In many states, the DESs have not been granted the requisite authority to effectively perform the coordination function. To make matters worse, Statistical Officers posted at the sub-state level to coordinate, collate and supervise primary data originating from the field functionaries of the line departments are saddled with other responsibilities and their statistical functions receive very low priority.

3.2.4 The consequences of such weak lateral coordination are often significant duplication of efforts and lack of integration between different data sources. There is also no mechanism to ensure that the primary data collectors adhere to the norms and standards laid down by their controlling departments, which adversely affects data quality.

3.2.5 The steps taken in terms of improvement of lateral coordination in statistical matters at the centre between the CSO and the other Government of India Ministries/ Departments are in accordance with "Allocation of Business Rules" which may also be adapted as a model for improvement of lateral co-ordination at the State/UT level between the State DESs and the other line ministries/departments of the States/UTs. For this purpose, the rank of the Heads of DES needs to be elevated within the administrative structure of the states and preferably be equivalent to the rank of Statistical Advisors/Deputy Director General (DDG) of the Indian Statistical Service (ISS) in the MOSPI of the Central Government. Moreover, **the DES needs to be declared as nodal statistical agency**, if not already done, within the state as recommended by the NSC (2001). This will empower the DES in all Statistical matters in the States/UTs and the coordination functions get widened to cover entire State Statistical system. There is an imperative and urgent need for enhancing the usefulness of the SSS to the State Government. The SSS will have to change the way in which the production of statistics is done using the 'current fixed-product' approach. This in-turn requires sharing of data maintained by one department with other departments through agreed upon protocols, central storehouse of unit level data of all departments and identification of essential common data elements in all data collection forms used by various administrative agencies.

3.2.6 The World Bank is assisting the country in the formulation and effective implementation of the India Statistical Strengthening Project (ISSP). The MOSPI proposes to operationalise the national vision for India in terms of its statistical systems and organizations with the following principles and practices, keeping in view the necessity for ensuring the neutrality, objectivity, reliability and timeliness of Official Statistics. Data/information need not be treated just as a raw material; instead, they should be viewed as a precious resource and hence, there is urgent need for timely processing, value addition and user friendly dissemination without compromising neutrality and objectivity. Statistical Organizations are now expected to develop sustainable methods to improve the quality and exploit more the administrative statistics to reduce reliance on new sample surveys and also enhance the scope and coverage of existing surveys to meet demands. Statistical activities are to be critically reviewed and statistical products should identify and eliminate avoidable redundancies and duplications so that the additional resources are redirected towards new activities. Time has now come to effectively address the problems of respondent burden and more user friendly data collection instruments in data collection processes.

3.2.7 Statistics produced and Disseminated must be, as far as possible, policy relevant and administrator-friendly, in particular and user-friendly, in general while maintaining their professional integrity, reliability and timeliness. Statistical organizations are to improve their levels of visibility through effective interactions with stake holders. The statistical organizations would need to critically pay attention to the issues relating to inadequate IT hardware and software and IT skills, IT absorption, including Networking and Connectivity. Develop effective mechanisms for consultation with stake-holders in statistical organizations.

3.2.8 The focus of the ISSP is on strengthening of the statistical capacity of the 35 States and Union Territories, especially with regard to the collection, compilation and dissemination of statistics, in line and in accordance with the relevant recommendations contained in the NSC Report, which has underlined the crucial role which all the States/UTs have to play in generating the data for a wide range of national level statistics and providing appropriate and adequate data, that too in a timely manner for meeting the requirements of policy and planning at the state and sub-state levels.

3.2.9 The ISSP aims to facilitate the process of enhancing the role of the State DESs to provide for more effective coordination of statistical activities within the States as also to assist the line ministries and data agencies of both the Government of India and the State level line Ministries/Departments to improve the quality and coverage of the data that they collect and to promote their utilization at the State, District and Block levels. The key performance yardstick for the project would be determined based on the extent to which the State and UT Governments participating in the project are able to meet effectively, adequately and in a systemic manner the national minimum standards in regard to the **20 key statistical activities** already listed .

3.2.10 Based on the outputs from Tier 1, the Government of India prepared a concept paper for the India Statistical Strengthening Project (ISSP), which was approved as a centrally sponsored scheme by the National Statistical Commission and the Planning Commission and has been included in the eleventh Five-Year Plan.

3.2.11 The **objective of the ISSP**, in short, is to strengthen the capacity and operations of the Indian Statistical System in line with the NSC recommendations, by strengthening the capacity of the State Statistical Systems. In particular, the project would be designed to give effect to those NSC recommendations that concern the

States/UTs, by strengthening the role of the State DESs. The project is also designed to help build the required capacities at the States/UTs level to collect, compile and disseminate relevant and reliable official statistics, to serve the twin objectives of planning and policy making at the state and local levels and to provide the data that would be required at the national level in respect of the identified 20 statistical activities. The project, which is essentially based on the outcomes of 35 detailed state/UT reports with regard to "Identifying the Specific Requirements for Strengthening of State Statistical Bureaus" is also designed to support the objective of reorganization of the State/UT level DESs in the manner required and the development for the more effective coordination of statistical activities within the states. It will also help to develop structures to assist the line ministries and other data agencies to improve the quality and coverage of the data they collect and to promote their usage at the State/District and Block levels.

3.2.12 The ISSP will be implemented in a number of stages with states setting the goals and targets to be achieved in order to progress from one stage to the next. In the first stage a **State Strategic Statistical Plan (SSSP)** is being prepared by all the participating States. The States will also undertake a limited number of short-term reforms and other data quality enhancing measures. Goals and targets for each subsequent stage will be determined by the priorities as set out in the state strategic statistical plans.

3.2.13 The SSSPs will also aim to establish a structure and a capacity for the state statistical system that will be flexible enough to meet the needs of the state by 2012 and which can develop to meet the needs in future years. In relation to 20 statistical activities, the States will progressively be expected to meet the national minimum standards as determined by the National Statistical Commission from time to time. By the end of the eleventh Five-Year Plan, the quality of the different activities will be classified as medium or high.

3.2.14 The **State Strategic Statistical Plan (SSSP)** is expected to provide the State with a strategy for strengthening statistical capacity across the entire **State Statistical System (SSS)**. The preparation of a SSSP provides the opportunity for all stakeholders to assess the current status of statistics, to review data needs, provide a vision for where the SSS should be in five to ten years and set out strategies for getting there. The Plan should set out a viable, technically sound and user-oriented work program with planned actions, including inter-alia budget lines and time lines covering capacity building for institutional, data production, dissemination and other reforms aimed at achieving the desired improvements. It should present a framework for continual assessment of user needs and priorities for statistics. It should also provide a framework for mobilizing resources (both state and national through the **India Statistical Strengthening Project (ISSP)**), and a framework for monitoring achievement of the Plan. It should also ensure that statistical activities are being developed and managed in as coordinated, efficient and effective a manner as possible.

3.2.15 The **State Strategic Statistical Plan (SSSP or Plan)** is an opportunity to strengthen the statistical capacity of the Bihar State Statistical System (BSSS). The preparation of the SSSP provides a chance for all stakeholders to assess the current status of statistics, to review data needs, to develop a vision for State's statistical system and to formulate strategies for achieving the vision. The objective of the SSSP is to develop a viable, technically sound and user-oriented work program with planned actions, including budget lines and time lines, for data production, analysis and dissemination. It should include a mechanism for continuous assessment of user needs and priorities with

regard to data, provide a framework for mobilizing resources (both state and national through the **India Statistical Strengthening Project (ISSP).**

3.2.16 The process of formulation of the **Bihar Strategic Statistical Strengthening Plan (BSSSP)** commenced with the constitution of the Project Management Team, under the chairmanship of the Director, Director of Economics and Statistics, which was required to prepare the draft BSSSP after discussions with stake holders, discussions in seminars and workshops and after individual consultations.

3.2.17 The identification of goals as well as strategies will enable determination of the specific activities which are to be incorporated in the implementation and finance plans. A time line of 5 to 10 years will be required for the implementation of the various activities. In order to adhere to the proposed timeline and to attain the deliverable outputs/outcomes, monitoring and performance indicators will have to be developed and incorporated in the plan.

CHAPTER 4

PRESENT STATUS OF STATISTICAL ACTIVITIES IN BIHAR

4.1. Historical importance

4.1.1 The State of Bihar was the play ground of statistical experimentations by the world renowned Statistician, late Prof. P.C.Mahalanobis in the field of Agricultural statistics. The Agricultural Statistics organisation was in existence before independence. This organisation used to collect, compile and analyse the Agricultural Statistics under the administrative control of the State Revenue Department. In accordance with the recommendations of the Joint Conference of Central and State Statisticians and the Agricultural Prices Enquiry Committee (1957), a scheme was mooted for setting up statistical machinery for agriculture statistics at district level. Accordingly, the Agriculture Statistical Unit at the district level came into being in the State and continues to exist in the same form even today.

4.1.2 Before independence there were two organisations for data collection in the State – (i) Bureau of Economics & Statistics, and (ii) Agricultural Statistics Organisation. After independence the State Government established a Bureau of Economics and Statistics in September 1949 under the administrative control of the Department of Finance. The amalgamation of Bureau of Economics and Statistics with the Agricultural Statistics Organisation materialised in 1960. The Directorate of Statistics was thus formed and put under the administrative control of Finance Department. Again in 1964, the Directorate of Evaluation having a separate entity in the Department of Planning and Statistical cell in the Community Development Department, Health Department etc were merged with the Directorate of Statistics and it was renamed as "Directorate of Statistics & Evaluation" (DSE) of Bihar under the administrative control of Finance Department. The very purpose of this merger was to deal with the entire statistical task through one organisation. In 1968, this Directorate was brought under the administrative control of the Department of Planning & Development. The Directorate has now been renamed as the Directorate of Economics & Statistics (DES) after the transfer of the Evaluation wing of the DSE to the Planning Department.

4.2 The Current Statistical System

4.2.1 The statistical system of Bihar, as in many other states, is decentralised with the **Directorate of Economics and Statistics (DES)** as the key agency for collection and dissemination of statistics on Bihar and the individual line departments responsible for collection, compilation, processing and release of the data in their own subject fields. The DES is the main organisation for collection and dissemination of data relating to the state. However, DES has not been declared as a Nodal statistical agency and departments with statistical cells are functioning independently through their own staff. For example, the departments of Agriculture, Health, Education, and Forest are functioning independently of DES for collection, compilation, analysis and publication of departmental data. Each department recruits its own staff as there is no common statistical cadre. However, in a number of line departments statistical staff has been provided by DES. Many of the departments do not have any statistical cell and statistical staff.

4.2.2 The DES has divisional and district level offices and statistical personnel are made available at the block level also. The DES has presence in all the nine Divisions whose respective jurisdictions are given in the table below:

Table 3: Jurisdiction of DES's Divisional Offices

Sl. No.	Division	Districts
1	Patna	Patna, Nalanda, Bhojpur, Bhabua, Rohtas, Buxar
2	Magadh	Nawada, Jahanabad, Aurangabad, Gaya, Arwal
3	Saran	Saran, Siwan, Gopalganj
4	Tirhut	Muzaffarpur, Vaishali, Purbi Champaran, Pashchimi, Champaran, Sitamarhi, Sheohar
5	Darbhanga	Darbhanga, Samastipur, Madhubani
6	Munger	Munger, Lakhisarai, Sekhpura, Jamui, Khagaria, Begusarai
7	Bhagalpur	Bhagalpur, Banka
8	Kosi	Saharsa, Supaul, Madhepura
9	Purnia	Purnia, Katihar, Kishanganj, Araria
Total	9	38

4.2.3 The DSE has District Offices in 16 of the 38 districts headed by the District Statistical Officer. DES has presence in each community development block by way of Block Statistical Assistant (BSS) placed in each Block to cater to the statistical requirements of the Block. The Block Statistical Supervisor functions under the technical control of the concerned district statistical officer.

4.2.4 Line departments have their own District and below formations.

4.3 Functions of the DES

4.3.1 The DES is responsible for providing the necessary data base for planning in the State. Statistical data on diverse socio-economic activities of the State are collected, processed and published by the DES from time to time. While DES is responsible for collecting the required data directly through its own functionaries, a major part of the statistical information is compiled and made available by the statistical units/sections/divisions of the line departments.

4.3.2 The main functions of DES are:

1) Collection, classification, tabulation, analysis and presentation of data on various socio-economic aspects of the State in a systematic manner and dissemination of the same through periodic publications.
2) Conducting sample surveys and other adhoc field enquiries etc. on various aspects of socio-economic development.
3) Co-ordinating the statistical activities of various departments of the State Government and rendering them technical guidance.
4) Organisation of post recruitment training to statistical personnel, and
5) Liaison with the statistical organisations of the Government of India and other State Governments.

4.3.3 The DES has six divisions, besides the Administrative and Computer section, with responsibilities and functions as designated in the table below.

Sr. No.	Division	Subject/Activities
1	Agriculture Division	Estimation of Area, Production and Yield of Crops, Rainfall etc.
2	State Income	GSDP/GDDP, Capital Formation etc.
3	NSS and other Surveys	
4	Civil Registration	Vital Statistics, SRS etc.
5	Price Statistics	
6	Miscellaneous Statistics	
All		

4.4 Major activities of DES:

4.4.1 The DES is directly responsible for the entire domain of agricultural statistics including crop insurance and rain fall, conduct of agricultural and economic census, estimation of state and district domestic product, computation of indices of industrial production and prices, participation in the socio economic surveys conducted by the NSSO, implementation of the Timely Reporting Scheme, Improvement of Crop Statistics, Crop Estimation Survey and Crop insurance Scheme and the implementation of the Registration of Births and Deaths Act 1969. The DES in addition is supportive in the decennial population census and quinquennial live stock census. The Director, DES is designated Commissioner for Agricultural and Economic Census and is the Chief Registrar of Births and Deaths.

4.4.2 The District Statistical Offices are mainly engaged in collection and collation of the data required by the Directorate of Economics and Statistics for fulfilling its functions. The district and taluk level staff of the District Statistical Offices are not only engaged in the field work relating to the surveys entrusted to them, but also in the collection of various types of data emanating from other departments which is required by the Directorate of Economics and Statistics (i.e., secondary data on education, co-operation, health, etc.).

Budget: There is a provision of Rs.17.16 crore during 2009-10 to meet the salaries and other office expenses of DES.

4.5 Statistical Activities of DES

4.5.1 The key statistical activities performed by DSE are summarised below

1. State Domestic Product Estimate

4.5.2 The Government of Bihar makes regular estimate of State Gross and Net Domestic Products and related outputs like Net Domestic Product, per capita, and sectoral composition of GSDP etc. These estimates are being prepared since 1948-49 till date. The agency responsible for collection, compilation and analysis of GSDP and other allied subject is the DES. The outputs are generated annually and include the following:

(i) Gross/Net State Domestic Product at current prices

(ii) Gross/Net State Domestic Product at constant prices (1999-2000)

(iii) GSDP by economic activity at current prices

(iv) GSDP by economic activity at constant prices

(v) NSDP by economic activity at current prices

(vi) NSDP by economic activity at constant prices

4.5.3 Although these estimates are produced annually, they are released in 4 stages, namely, Advanced, Preliminary, Provisional and Final

4.5.4 The **methodology** adopted for estimation of GSDP from various sectors is broadly on the lines prescribed at the national level by the Central Statistical organisation (CSO). The estimates are based on the concept of income originating within the geographical boundaries of the State. Under each industry group of income origin, estimates of Gross Domestic Product are derived first and then Net State Domestic Product (NSDP) are obtained by adjusting the value of Financial Intermediation Services Indirectly Measured (FISIM) and consumption of fixed capital (CFC) for each industry group supplied by CSO. Estimates of GSDP and NSDP are made both at current prices and at constant 1993-94 prices

4.5.5 The time lag in dissemination of estimates of SDP is as follows:

• Quick Estimates – 6 months

• Provisional Estimates – 12 months

• Final Estimates – 24 months

4.5.6 For the estimation of the SDP and related activities the DES interacts with various offices of State Government on regular basis for obtaining the data. It also interacts with CSO to obtain required rates and ratios as well as data on contribution of Supra Regional Sectors.

4.5.7 The estimates of SDP and related indicators are prepared with the help of Personal Computers (PC). The following IT tools are used for estimation of SDP in the State.

• PC (P-IV) - 5

• Scanner - 1

• Laser Printer - 1 (out of use due to non availability of toner)

• UPS - 2 KV

4.5.8 The Statistical returns used for obtaining such estimates are annual and are non-statutory. Some of the important offices from which the required data are collected are

(a) Director of Agriculture; Department of Animal Husbandry, Dept of Fishers etc.

(b) Principal Chief Conservator of Forests

(c) Municipalities & Local Bodies

(d) Industries Department, Mining Department etc.

4.5.9 The **quality of estimates** of SDP suffers on account of applying old rates/ ratios to current data, and non availability of required data in respect of some important parameters like income from services sector, production of bye products of agricultural sector et al. For example, production of agricultural bye products and minor crops have to be estimated on the basis of some studies done earlier, or by using all India ratios. Although these ratios are provided by CSO to the State DES, they do not reflect the state-specific realities as a result of which inaccuracies creep in the estimates of SDP. Thus, the State DES should undertake type studies to determine state-specific ratios.

2 Capital Formation and Savings

4.5.10 Estimates of Gross Fixed Capital Formation are compiled only for the Government sector and departmental commercial undertaking. Municipalities, Universities, and NDCUs are not included in estimation of GFCF. Like the SDP, the estimates of Capital Formation and Savings for the State sector and DCUs are prepared by the DES. The principal output generated is data on estimates of Gross Fixed Capital Formation and Savings pertaining to the state sector.

4.5.11 Estimates of Gross Fixed Capital Formation (gross addition to fixed assets in stock during the accounting year) are made as per methodology provided by C.S.O. However, for the measurement of GFCF at the state level, only the expenditure approach is adopted and the whole economy is classified into 13 categories by user industries along the same lines as for SDP. Additions to non-productive tangible assets such as land, mineral deposits and the natural growth of the standing timber are not included. However, outlays on improvement of land and development or extension of mining sites, timber, teaks and plantations are taken as part of Capital formation. Outlays on incomplete constructive works incurred during the year are included. No net capital

formation is prepared since there is no provision for depreciation in the budgets of the State Government Departments.

4.5.12 The data sources for the three GFCF estimates are:

• *State Government Departments and Departmental Undertakings:* the budget document of the State Government.

• *Non-Departmental Commercial Undertakings:* companies in which not less than 51% of the paid up capital is held by the Government.

• *Local Bodies:* Municipal Corporation and Municipalities.

4.5.13 The DES interacts with all the public sector undertakings annually including the Municipalities and non-departmental undertakings to obtain the data, namely the statistical returns, which are the document on financial transaction of various offices given in State Budget. No other statistical returns are used.

4.5.14 The estimates of the GFCF are produced annually. The time lag in dissemination of data on GFCF is 24 months. The DES has brought out a publication on Gross Domestic Capital Formation for years 1990-91 to 1994-95. However estimates of capital formation have been prepared up to 2003-04. No separate publication for Capital Formation is brought out.

4.5.15 The data quality used for estimation of the GFCF suffers due to:
(i)   follow-up surveys of the enterprises do not provide data for actual addition to fixed assets but provide data only for gross assets, which do not satisfy the definition;
(ii)   the reporting of data by controlling authorities and also its quality is poor in respect of such activities as mining, construction, cooperatives, etc.;
(iii)   data on type of assets is not available in many cases, so estimates by type of assets cannot be attempted for the supra-regional and private sectors;
(iv)   latest data in some of the sectors is not available as a result of which available data has to be moved with the help of some suitable indicators, e.g., in railways and communications, the estimates were moved to the latest year by GVA in corresponding sectors; and
(v)   exclusion of the private sector and (v) Savings are not estimated.

3 District Domestic Product

4.5.16 DES is also responsible for preparing and releasing estimates of District Domestic Product. The various indicators of the district level estimates are:

(i) Gross District Domestic Product at current prices
(ii) Gross District Domestic Product at constant prices
(iii) Net District Domestic Product at constant and current prices
(iv) Per capital Net DDP at current and constant prices
(v) Contribution of DDP by households

The frequency of data collection is annual.

4.5.17 The **methodology** followed in computation of DDP is the same as suggested by the C.S.O. The estimates of district income for various sectors are prepared by allocating the State Income among the districts using appropriate indicators. The major problem are

availability of data at district level while for commodity producing sectors like agriculture and animal husbandry, fisheries, district level data is available, but for other sectors it is not available. Wherever district level data are not available, the allocation method is followed for district by using appropriate indicators. In certain cases State ratios are adopted and for a number of sub– sectors, the data available in DES are made use of.

4.5.18 The DES collects information district – wise from the line departments. Data on ASI, contribution of supra – regional sectors are obtained from C.S.O.

4.5.19 The estimates are prepared annually and the lag in dissemination of final estimates is 36 months. There is no separate publication for District Domestic Product. The DSE and DSOs interact with District Level Government Offices, local bodies, production units in the private sector, and shops, among others for obtaining district wise production estimates. The DES also interacts with the C.S.O. in the preparation of such estimates. The statistical returns used are collected in the form of booklet or brochure available with the concerned department.

4.5.20 The data quality suffers as the required data for secondary and tertiary sectors are not available. Also, the data quality suffers as no DDP-specific training has been provided to any staff although they have been provided with CSO manuals detailing the methodology and all the related processes to be followed.

Contribution of Local Bodies in GSDP

4.5.21 The DES, while working out SDP estimates, are estimating contribution of local bodies. The estimates of contribution of local bodies towards GSDP is prepared using income approach. The compensation to employees is the only factor income that is considered. The budgets of local bodies (Municipality / Municipal Corporations) are collected by DSO's. This provides estimates of expenditure by local bodies under various purpose categories. No separate statistical returns are prescribed. Budgetary data is obtained annually from the local bodies.

4.5.22 The time lag in dissemination of data on contribution of local bodies to SDP is as follows:

• Quick Estimates – 6 months

• Provisional Estimates – 12 months

• Final Estimates – 24 months

4.5.23 DES also interacts with various urban local bodies for obtaining data about their budget. This information is collected through the District Statistical office. For rural institution, information is collected from Zilla Parishad, again through DSO.

4.5.24 The quality of data suffers due to (i) poor and inadequate accounting and book-keeping systems of local bodies, (ii) expenditure of local bodies on outsourced services and activities is not provided by the local bodies to DSOs and DES; and (iii) Zila Parishad, Panchayat Samities and Gram Panchayats are excluded.

Annual Survey of Industries

4.5.25 The state does not participates in the field of survey of ASI . The state also does not collect data for factories located in the State and surveyed by NSSO

Index of Industrial Production

4.5.26 The DES is as of now not compiling index of industrial protection. The state used to prepare IIP for the state till the year 1987-88/1990-91. Thereafter the base year was revised to 1993-94 and again to 1999-2000 after the division of the State. The weighting diagram using the revised base year has been sent to CSO for approval which is awaited. Meanwhile, the State has discontinued compilation of IIP.

Wholesale Price Index

4.5.27 Wholesale Price Index for the state is not compiled by any agency. However, Wholesale price index of agricultural commodities for Patna with Base 1991-92=100 is being compiled by the DES. The index is prepared monthly. Weekly prices for agricultural commodities are collected from Agricultural Marketing Board. For salt the prices are collected from District Supply officer. The wholesale price index numbers are issued with a time lag of about 3 months.

Consumer Price Index (CPI)

4.5.28 Various agencies are involved in compilation of Consumer Price Index for various categories of population. The DES compiles CPI for Patna/ with base 1939=100 and the Labour Bureau Shimla compils CPI for Munger with base 1982=100 for Industrial Workers. Labour Bureau Shimla also compils CPI for Agricultural Labourers of Bihar with base 1986-87=100.

4.5.29 These CPI are both monthly and annual; the release is for selected districts and include the following:
   i)   Monthly Index for CPI, Patna/Muzafarpur and Dehri on-son

   ii)   Monthly Index for CPI for Industrial workers with base 1982=100.

   iii)   Monthly Index for CPI for Agricultural Labourers of Bihar with base 1986-87=100.

4.5.30 For calculation of these CPIs weekly prices are collected by the DES from Patna, Muzafarpur and Dehri–on-Sone markets from selected two shops for specified commodities of the selected basket of goods and services on which the middle class employees spend their incomes. In practice, only a fixed basket of goods and services generally derived by conducting a family budget survey of the population group concerned is taken over time and its cost at different periods is compared to its cost in base period (1939). The goods and services consisting of specified commodities are broadly classified into the following groups: Food, Beverages and Tobacco, Fuel and Lighting, Housing, Clothing and Footwear and Miscellaneous.

4.5.31 The other Index numbers are prepared by Labour Bureau, Shimla. For Index Number of Industrial workers, the prices are collected by DSOs and sent to the

Labour Bureau. For the Index Number of Agricultural Labourers the prices are collected by NSSO for 30 rural centres and 2 urban centres viz Patna and Muzafarpur and sent to the Labour Bureau, Shimla.

4.5.32 For preparation of these indices the DES interacts with the Labour Bureau Shimla and NSSO for compilation of the above indices. Non statutory returns are used for collection of prices on a regular basis from the selected markets/shops. These monthly index is disseminated with a time lag of 3 months. There is no separate publication is for these Index Numbers.

4.5.33 The quality of data suffers due to use of old base year – 1938-39. Some of the items listed in the item basket are not even available now.

Agriculture Statistics

Crop Area and Production Statistics

4.5.34 Director of DES has been declared as the State Agriculture Statistics Authority. Thus, DES is responsible for compilation and release of data related to Crops Area & Production and yield rates of principal crops.

4.5.35 The principal agricultural crops are rice, paddy, wheat, jute, maize and oil seeds. Cauliflower, cabbage, tomato, radish, carrot, beat etc. are some of the vegetables grown in the state. Sugarcane, potato and barley are some of the non-cereal crops grown. The entire agricultural operations is divided into two crop seasons Kharif and Rabi. The Kharif season starts from the third week of May and lasts till the end of October followed by the Rabi season .

4.5.36 The various indicators pertaining to the Agriculture Sector of the State Economy are the following:

i)   Estimates of area under crops in Bhadai season, Agahami season, Rabi season and Garma season at tehsil, district and state level
ii)   Estimates of average yield for various crops.
iii)   Estimates of production of various agricultural crops.
iv)   Estimates of land utilization pattern.
v)   Estimates of irrigated area in each season.
vi)   Index of Area, Production & Productivity
vii)   Collection of Rain fall Data.
viii)   Weekly weather & Crop report and
ix)   Issue of 71 forecasts for 39 Agricultural Crops.

4.5.37 The frequency of data collection is seasonal (Bhadai, Agahani, Rabi and Garama) and then annual).

4.5.38 **Methodology for Area Estimates***: Estimates of area are prepared on the basis of 100% sample selected under the Timely Reporting Scheme covering all the villages in 5 years. The field work i.e, collection of data is done by *Halka Karamchari*

on priority basis for the selected villages. The data collected by *"Halka Karmachari"* is forwarded to the Circle Officers. After compilation at Circle Level, the compiled reports are sent to the District Statistical Office from where compiled reports for the districts are sent to DES. Area estimates are prepared district wise by DES based on these data. In addition, *Halka Karamachari* conducts Girdawari in all the villages of the State and sends consolidated statements, Tehsil wise. The estimates for area and production are prepared at Gram Panchayat level for paddy and wheat. The due dates for reporting of area under TRS villages has been fixed by the Ministry of Agriculture and forwarded to Circle Officers.

4.5.39 Methodology for Yield Estimates*:* For estimating yield, crop cutting experiments are conducted by Circle Inspector, Block Agriculture officers and Block Statistical Supervisor. These experiments are supervised by ASO, DSO, District Agriculture Officer and NSSO. For crop insurance purpose, the yield estimates for rice and wheat are prepared at Anchal level and for other crops at the district / state level. Besides the staff at the headquarters, the staffs of DSO, Block statistical supervisor and Karmchari of Revenue and land reform are also engaged in this activity.

4.5.40 There is no separate I.T. facility for Agricultural Statistics in the DES. The Compilation of Agricultural Statistics is done in the centralised computer cell.

4.5.41 The following publications provide data on crop area and production:

Publications Reporting on Crop Cutting Experiment

Publications	Periodicity	Latest
1. Bihar at a glance	Annual	2004
2. Statistical Abstract	Annual	1982
3. Season and Crop Report	Annual	1979-80

4.5.42 The DES interacts with the departments of Revenue and Agriculture, and Block Development Office, in addition to the District Statistical Office for conducting Crop Cutting Experiments and its Supervision. There is a time lag of 24 months in release of final estimates of crop area and production.

4.5.43 The quality of crop area statistics is good. It has been certified by the Improvement of Crop Statistics (ICS) that the area forecasts have accuracy of 95%. The quality of crop production statistics is adequate due to (i) intensive and extensive supervision of crop cutting experiments by the staff of the Revenue Department, Agriculture Department, NSSO and DSO, and (ii) electronic compilation and tabulation of results of crop cutting experiments.

Housing Statistics

4.5.44 There is no state government agency compiling comprehensive statistics on housing and investments in housing. Data on number of houses are collected through the population census. The DES releases housing statistics for the State on the basis of census data.

4.5.45 The DES, however, collects annually data on housing stock from State Housing Board; Municipalities and Corporations; State PWD for housing projects costing Rs. 50000 or more; the Regional Development Authorities; and Rural

Development Dept, for housing activities in Rural areas. The housing data received from municipalities, and State/Regional Development Authorities, and housing projects are neither compiled nor released by DES, but are transmitted in original, to the NBO, GOI.

Births and Deaths Registration Statistics

4.5.46 Births and Deaths related statistics are available from i) Civil Registration System ii) Sample Registration System. The DES is responsible for Civil Registration System (CRS) and the Registrar General of India for the Sample Registration Scheme (SRS). For the **Civil Registration System (CRS)** the Director of the DES has been designated as the Chief Registrar of Births and Deaths. The registration system is given below:

Civil Registration System

State Level	District Level	Peripheral Level	
Urban Area		**Rural Area**	
1. Chief Registrar of Births & Deaths. (Director, Statistics Evaluation)	1) District Registrar of Births & Deaths (District Magistrate)	1) Registrar for urban local bodies. (Medical Officer/ Executive Officer, Special officer / Chairman /Vice Chairman/ Deputy Chairman	1) Registrar for Rural Areas
2. Joint Chief Registrar, Joint Director DSE vital statistics	2. Additional District Registrar (DSO)	2. Registrar (Deputy Superintendent of Medical Colleges, District, Hospital, Sub divisional Hospital and in charge of the Referral hospital	
3. Deputy Chief Registrar (Dy Director Statistics)			

4.5.47 The Sample Registration Scheme (SRS) is being implemented in the State by the Registrar General of India through Director, Census operation. The total number of samples is 361, out of which 208 are rural samples and 53 urban samples.

4.5.47 Under the civil registration scheme, births and deaths are reported from the place of occurrence to the nearest designated births and deaths registration authority. The data from rural areas on registered events of births, deaths and still births are submitted by the rural registrar (Secretary of Gram Panchayat). He submits the information to the Block Development Officer, who after consolidation for all the Gram Panchayats under his charge sends it to Additional District Registrar (DSO). Who consolidates the data at the District level and sends it to the Deputy Chief Registrar (Dy. Director DES) where it is consolidated for the State giving district – wise break ups and submits its to the Chief Registrar of Births & Deaths (DES) for approval.

4.5.48 Village registrars are appointed at Gram Panchayat and the returns are up dated every month after receiving reports from village level informers. Besides identification particulars, the birth register contains such details as sex of child, age of mother, order of birth, type of delivery, religion, education of mother, occupation etc. In

death register, information is recorded on sex of deceased, age, religion, nationality, cause of death type of medical attention at the time of death.

4.5.49 In case of urban areas, the local registrar sends monthly report. The reports are prepared by the Registrar for urban local bodies and Registrar. Dy. Superintendent of Medical College, District Hospital, sub – district hospital, in charge of the referral hospital are sent to Additional District Registrar (DSO). He consolidates the report at the district level and sends it to the Deputy Chief Registrar (Dy. Director, Statistics) who after consolidation at the state level submits it to Chief Registrar (Director, DES). These reports are sent to the Registrar General of India.

4.5.50 The frequency of data collection in respect of CRS, the medical certification of causes of Death and the SRS is monthly. Under the Medical Certification of Causes of Death which is through the CRS, only six Medical Colleges are required to report the cause of death. Causes for stillbirth are not required to be reported. The time lag in release of data is 10 months.

4.5.51 For the CRS the DES and the Director Health Services is in regular interaction with the Registrar General of India and also with District Registrars. The District Registrars in turn interact closely with the Registrars and Sub-Registrars.

4.5.52 For the scheme of Medical Certification of Cause of Death (MCCD) the registration units are the medical institutions and health care centres and for this scheme the DES interacts with the State Director Health Services.

4.5.53 The CRS functions under the Registration of Births and Deaths Act (RBD Act of 1969) under which there are statutory returns for Births and Deaths registration under the Registration of Births & Deaths, Act/Rules.

4.5.54 The quality of data on births and deaths suffers due to incomplete coverage by the Civil Registration System. The Registration of vital events is still not complete. The recording efficiency, in terms of registrations as a percentage of SRS estimates, is low. The situation is better in urban areas as compared to rural areas, but in tribal regions the situation about Civil Registration is very poor. This is a result of several factors including a general lack of awareness in the public about the statutory requirements and procedures of registration, lack of adequate numbers of birth and death certificates in rural areas, and high percentage of domiciliary deaths and births with the household becoming responsible for statutory reporting of events. To improve awareness about births and deaths registration, the District Statistical Offices, who are also the District Registrars, are taking at least one camp in urban areas to distribute Births & Death certificates to the households, who have got the event registered. Further, while reliable estimates of birth and death rates, and infant mortality rates at the state level are obtained from the Sample Registration Scheme, district-wise vital rates are not available. Another factor impacting adversely on quality of data on vital events is considerable delay in reporting of statistics from the local registrars that eventually delays the compilation of vital statistics at the State level. This delay is due to inordinately long time taken for intermediate tabulation at the district and town/municipality levels because of inadequate staff. For the scheme of Medical Certification of Cause of Death (MCCD), the reports are not received regularly and from all indented hospitals.

4.5.55 In the absence of reliable and usable vital rates, the scheme of the Sample Registration Scheme (SRS) is being implemented in the State by the Registrar General of India through the Director, Census operation. The total number of samples is 361, out

of which 208 are rural samples and 53 urban samples. The SRS provides reliable estimates of Birth Rte, Death Rate and Infant Mortality Rate (IMR) at the state level separately for rural and urban areas. The SRS also now provides state level estimate of Maternal Mortality Rate (MMR). Estimates of IMR and MMR are also provided by the National Family Health Surveys (NFHS). However, as the incidence of maternal mortality being low, deriving reliable sample estimates requires a very large sample size.

Participation in National Sample Surveys

4.5.56 Field survey for central samples is done by NSSO, GOI, while for state sample the field survey is conducted by the DES, on a matching basis. Different subjects of studies are taken up during different rounds, and is expected that complete state estimates would emerge after compilation & analysis of the data. The only available data related to household consumer expenditure. The expected frequency of estimates is annual as per NSSO's programme.

4.5.57 The NSSO conducts field survey and after checking the filled-in schedules, sends them to central compilation unit, for compilation, analysis and report writing.

4.5.58 The DES conducts field survey on state samples. Questionnaires, concept and various instructions utilised by DES are the same, as adopted by central NSSO. The DES manually tabulates the consumer expenditure part of the data collected through NSSO surveys.

Economic Census

4.5.59 This is a centrally sponsored scheme undertaken by the CSO with active participation of the DES. Economic census is the official count of all entrepreneurial units located within the State, involved in any economic activity of either agriculture (excluding crop, crop production and plantations) or non-agricultural sectors of the economy engaged in the production or distribution of goods or services not for the sole purpose of own consumption.

4.5.60 The information during the census is uniformly collected through three schedules: House list, Enterprise form and the Address slip; all these schedules are canvassed both in urban and rural areas.

4.5.61 This survey is carried out quinquennially with a view to fill up the data gaps, specially in the unorganized segment of different sectors of the economy and in non-agricultural sector in particular. The results of these surveys provide basic data for purpose of planning, development, administration and for improving the estimation of National/ State Income and related aggregates from time to time.

Statistics for Local Area Planning

4.5.62 Local area planning is not practised in the State - no decentralized district plans have been attempted and there is no organization for preparation and implementation of District Plans. Since District Planning has not been introduced in the state, no attempts are being made to prepare village level and block level statistics.

4.5.63 However, some District level statistics are compiled by DSOs and other agencies. Block level data are not compiled despite one Block Statistical Supervisor located in

each block. However, the Rural Development Department does identify BPL families at Gram Panchayat level.

Other statistical Activities of the DES

4.5.64 The activities of DES other than those discussed above are as follows:

• Conduct of annual census of State Government and Local Bodies employees.

• Economic Census (quinquennial)

• Compilation of official statistics

• Collection of Rainfall Data

• Area & Production of Horticulture Crops

• Irrigation Statistics

• Census of Minor Irrigation

• Jail & Crime Statistics

• Evaluation of Selected Plan Schemes

Status of Statistical Activities in Bihar

The present status of the **20 core statistical activities** identified to be included in the SSSP is given below

SN	Activity	Agency/ Department Responsible	Base Year where applicable	Frequency of data collection	Periodicity of release of estimates	Year for which Data are Available	Time Lag in Data Dissemination in Months
1	State Domestic product	DSE	1993-94	Annual	Annual	FY2002-03 (Final)	12-quick 24-provisional 36-final
2	Capital formation	DSE	-	Annual	Annual	FY2002-03	36
3	District Domestic Product	DSE	-	Annual	Annual	FY2002-03	36
4	Contribution of Local Bodies	DSE	-	Annual	Annual	FY2002-03	12-quick 24-provisional 36-final
5	Major fiscal data	Finance Deptt	-	Monthly/Annual	Annual	FY2005-06	>1
6	Annual Survey of Industries	Not undertaken					
7	Index of Industrial Production	Not undertaken					

8	Crop area and production statistics	Revenue DSE	-	Seasonal/Annual	Seasonal/Annual	AY2003-04	24
9	Wholesale Price Index	Not undertaken					
10	Consumer Price Index	DSE	1939	Monthly/Annual	Monthly/Annual	Feb,2006	3
11	Health, Morbidity, Mortality and family welfare statistics	Health & FW	-	Monthly/Annual	annual	CY2000	72
12				Education and Literacy Statistics			
12 A	Institutional	Director Education	-	Annual as on 30/9	Annual	EY 2002-03	24
12B	Enrolment Data	Director Education	-	Annual as on 30/9	Annual	EY2002-03	24
13				Labour and Employment Statistics			
13 A	Labour Statistics	Labour Deptt.	-	Monthly	Annual	FY2004-05	12
13 B	Employment Statistics	Director Employment	-	Monthly/Quarterly	Annual	FY2004-05	12
14.	Housing Statistics	Housing Board, Census Rural Development	-	Monthly/Decadal	Annual / Decadal	CY2001	36 Months after Census
15	Birth and Death Registration Statistics	DSE	-	CRS Monthly SRS annual	Annual ,,	CY2005 CY2005	10 10
16	Electricity Production and Distribution Statistics	B.S.E.B.	-	Daily/Monthly	Annual	Data not published after 1999-2000	60
17				Environmental Statistics			
17.A	Forestry Statistics	PCCF	-	Monthly	Annual	FY2004-05	12
17.B	Water Supply and Sanitation Statistics	Drinking Water & Sanitation	-	Monthly	Annual	FY2004-05	12
18	Participation in National Sample Survey	DSE	-	Annual	Not Tabulated		
19				Transport Statistics			
19.A	Motor Vehicle Registration	Transport Deptt.	-	Monthly	Annual	FY2004-05	12
19.B	Road Length	PWD	-	Annual	Annual	FY2004-05	12
19.C	Road Accidents	Police Deptt.	-	Monthly	Annual	FY2003-04	24
19.D	Passenger and Goods Traffic	Not Done					
20	Statistics for Local Area Planning	Local Area Planning not done					

4.6 Common Statistical Cadre

4.6.1 There is no common statistical cadre in the State. The DSE controls its own statistical posts and also DSE staff posted in line departments. The selection Authority is the Bihar Subordinate Service Commission for the posts of Junior Field Inspector, Compiler and Junior Statistical Assistant / Block Statistical Supervisor. The post of Assistant Director is selected by the Bihar Public Service Commission. So far service rules have not been framed. The preparation of service rules is in process. After the bifurcation of Bihar State into Bihar and Jharkhand, the cadre strength for the State of Bihar remains to be finalised.

4.7 Statistical Activities of major Line Departments

4.7.1 Administrative statistics are required for assessing the performance in respect of various schemes/development programmes initiated by the line departments. As such most of the Line Departments in the State Government collect, compile, process and analyze statistical data pertaining to the field of their responsibility. The important Line Departments where the DES officials have been deployed are as follows:

Deployment of DES Staff in Line Departments

Sl. No.	Designation	No. of DES staff	Department in which working
1	Assistant Director	1	Rural Development Department
2	Assistant Director	1	Finance Department
3	Asst. Stat. Officer	1	State Election Commission
4	Asst. Stat. Officer	2	Finance Commission
5	Asst. Stat. Officer	1	Bureau of Public Enterprises
6	Asst. Stat. Officer	1	20 Point Programme
7	Asst. Stat. Officer	1	Home Special
8	Asst. Stat. Officer	1	Fisheries Department
9	Asst. Stat. Officer	2	Revenue & Land Reforms Dept.
10	Jr. Statistical Assistant	2	Rural Development Department
11	Jr. Statistical Assistant	2	Welfare Department
12	Jr. Statistical Assistant	1	Fisheries Department
13	Jr. Statistical Assistant	4	Bureau of State Family Welfare
14	Jr. Statistical Assistant	1	Forest & Environment Dept.
15	Jr. Statistical Assistant	1	Revenue & Land Reforms Dept.
16	Jr. Statistical Assistant	1	Agriculture Census
17	Jr. Statistical Assistant	1	Excise & Customs
18	Jr. Statistical Assistant	1	State Election Commission
25			

4.8 Major Line Departments generating Statistics for their use

4.8.1 Major departments having departmental statistical divisions are given below.

1. Agriculture
2. Horticulture
3. Animal Husbandry and Veterinary Services
4. Fisheries Department
5. Rural Development
6. Health and Family Welfare
7. Public Works
8. Urban Development
9. Water resources
10. Minor Irrigation
11. Education
12. State Excise/Commercial Taxes
13. Forest
14. Industry
15. Social Welfare
16.Crime and Jail

4.8.2 The core statistical activities of some of the important line departments are briefly described below.

1. Fisheries Department

4.8.2 The work relating to statistics for Fisheries is done by the statistical cell under a Deputy Director rank officer not belonging to the state statistical cadre. The main activity is collection and compilation of statistics relating to fish and fingerlings. The data is collected monthly from District Fisheries Officers. The information is collected regarding fish production, average productivity, market price, production parameters and fish seed production. At present there are 33 District Fisheries Officers who are looking after the work in 38 districts. There are 33 Fish Farmers Development Agencies in the state. Data up to March 2008 has been released.

4.8.3 The staff strength of the Department's statistical cell at the headquarters includes one Assistant Director which is vacant and one Assistant Statistical Officer.

2. Animal Husbandry Department

4.8.4 The Department collects data regularly on monthly basis from veterinary hospitals, dispensaries, stock-man, artificial insemination centres and sub-centres, mobile dispensary. The Department also conducts **Livestock Census** as per the guidelines of the Union Ministry of Animal Husbandry but on an irregular basis. The last Livestock Census was conducted in 2002, and prior to this, the Census was conducted in 1982.

4.8.5 An **integrated Livestock Survey** is also conducted for estimation of production of major livestock products such as milk, egg, meat and wool and also to study the attendant practise in the State. The production of data pertaining to these livestock products has assumed special importance in the context of meeting nutritional level of population.

4.8.6 There is a statistical cell in the Department headed by a Joint Director and supported by a Deputy Assistant Director and other statistical staff both at the headquarter and at district levels. No IT tools are provided to the statistical cell and tabulations are done manually.

4.8.7 The Department's publications giving statistical information are included in publications such as 1) Annual Administration Report, 2) Annual Progress Report of Animal Husbandry Activities and 3) in the ad hoc booklets and pamphlets regarding Animal Husbandry activities, diseases and their prevention, feed and fodder etc.

3. Relief and Rehabilitation Department

4.8.8 A statistical cell has been created for disaster management under the centrally sponsored scheme for natural calamities. The cell collects data on households affected by floods and other natural disasters. The staff strength of the unit is one Statistical Officer, one Assistant Statistical Officer and one statistical assistant. Compilation of data and publication is done on annual basis with the help of PCs and related IT tools.

4. Rural Development Department

4.8.10 The data relating to Rural Development sector are collected in the districts. The compilation and analysis is done and released on monthly basis for each district. The processing of data for Rural Employment are prepared and released every month with a time lag of 5/6 months. The data under the schemes of SGSR, SGRY, NFFWP, DPAP, IWDP, MPLADS and DRDA are collected in the forms prescribed by Central Ministries and are published in the Annual Report. The staff strength of the statistical unit consists of one Joint Director, 2(one vacant) and 7 Assistant Statistical Officer (4 are vacant). The department has good IT support with adequate number of Computers and other accessories.

5. Directorate of Welfare

4.8.11 This department looks after, Social Welfare and Child Development. The Welfare Department also caters to the interest of SC/ST/OBC for educational, economic and social development. The department is constructing hostels and also residential schools for SC/ST/OBC. They also provide monthly stipends to the students of SC/ST/OBC community at the rate of Rs. 15 per month for classes 1 to 4, Rs. 30 per month for classes 5 and 6 and Rs. 55 per month for classes 7 to 10. The department also provides stipends to students of colleges and university. Relief for atrocities on SC/ST persons are also provided.

4.8.12 The Social Welfare department looks after the following main activities: Juvenile Courts, Disabled people, Inter-caste marriage subsidy scheme, Schools for blind, deaf and dumb students.

4.8.13 The ICDS division looks after the following programmes: Nutrition for Children and Pregnant women, CARE programme and CANDY Programme.

4.8.14 The statistical cell in the Welfare Department consist of one statistical officer and 4 statistical Assistants. The post of statistical officer is lying vacant for several years. There are 8 administrative division and 8 posts of SA are sanctioned. 7SA are posted in administration divisions and one SA is posted in the Scheduled Caste Development Corporation. For the 26 Administrative districts 26 posts of SA has been sanctioned of which 10 posts are vacant.

4.8.15 The statistical outputs include Monthly progress report of expenditure which are received from Divisional Deputy Director, Welfare and District Welfare officer. The returns are non-statutory and the Annual Administrative Report of the department is prepared on PCs based on these monthly returns.

6. Revenue and Land Reforms Department

4.8.16 The work of Agricultural Census is looked after by this department. This is an important centrally sponsored scheme financed by Government of India and implemented by the State Government quinqennially. Under this scheme the number and area of operational holdings are classified by size of land holding separately for irrigated and unirrigated areas. It provides information about the number and area of agricultural holdings according to marginal, small, medium and large holdings. The data for the census of 2000-01 is under processing. Along with this the Input schedules are also canvassed by Anchal Adhikari/Block Development officer through District Statistical officer.

4.8.17 The publication of State Agriculture Census Table Bihar has been published for 1985-86. The work for the report of 2000-01 is in progress.

4.8.18 The staff for statistical work for this scheme includes one Deputy Director, one Assistant Director, 2 ASO, 2 Statistical Assistant and supporting administrative staff.

7. Health, Morbidity, Mortality and Family Welfare Statistics

4.8.19 The Department of Health and Family Welfare is responsible for health and family welfare statistics. Health facilities are being provided through a net-work of Hospitals, Dispensaries in urban areas and, through Primary Health Centres, Additional PHC and Health sub centres in rural areas. Statistics are collected from the field offices through **monthly returns**. The monthly reports and returns from the field units form the basic source of information. Data are collected from the field through the programme implementing network. The data collected by health sub- centers are sent to PHC / Additional PHC. The collected data is then aggregated at the PCH / Additional PHC level, urban health centers. District Health offices and sent to Director General, Health services through regional Health officers (Dy. Director). On the basis of the collected data various outputs are derived by application of appropriate rates and ratios. The ANM's in the sub – center (10332) furnish their report to their PHC or urban Health Centres who in turn furnish consolidated report to the District Chief Medical Officer furnish their consolidated reports to the Director General Health Services through Regional Medical Officers and at the level of Director General, Health Services the requisite statistical outputs are derived.

4.8.20 The **statistical outputs** pertaining to Health and Family Welfare include the following information at district level:

i) Number of various government health institutions functioning in the state, ii) Number of Indoor & Out door patients, iii) Various vital rates, which are obtained through the SRS and other Health Surveys, iv) Number of HIV positive cases, v) Anti natal care, vi) Natal care, vii) Pregnancy output, viii) Post – natal care, ix) Maternal death, x) Immunization, xi) Vitamin A deficiency, xii) Childhood diseases, xiii) Infant and child deaths, xiv) Contraceptive services, xv) Abortions, xvi) Facilities including availability of transport, X-rays machines and cold chain equipments.

4.8.21 Statistics on Family Welfare, Reproductive Child Health and demography are looked after by family welfare department under the Director General of Health Services. The family welfare department compiles the data relating to FW service, RCH programme etc. Here also the basic unit of reporting in sub – centre. The data generated at sub–center flows to PHC / Additional PHC to Chief Medical & Health Officer to Director General Health Services through Regional Medical & Health Officer. The consolidated report is then prepared. The data collected also covers the program achieved under national programmes viz tuberculosis, malaria, leprosy, blindness, disabilities and family welfare. The death occurred due to tuberculosis, malaria, diarrhea, snake bites etc. are also collected on a monthly basis. Statistics relating to HIV / AIDS are collected by District AIDS Society / State level AIDS Society. The prevalence rates and deaths due to HIV/ AIDS are forwarded to the State Government and the Government of India.

4.8.22 The Department interacts with MOH & FW, GOI for matters related to compilation of health and family welfare statistics.

4.8.23 The time lag in data dissemination is 72 months. The latest available data relates to 2004-2005. There are no regular publications reporting on health and family welfare statistics. The last publication was for 2004-2005.

4.8.24 The statistical cell is headed by a "State Demographer" who is assisted by one ASO, 3 JSAs and one clerk. One PC has been provided to the demographer, without any IT staff. The PC is used by the staff of the cell.

4.8.25 The quality of the statistical returns suffers due to poor response rate on many health parameters. Also, there are some exclusions, for example, medical practitioners in private sector and voluntary/non-government organizations are excluded from the list frame for data collection on morbidity, mortality, pre-natal and post-natal health care services. Further, the absence of benchmark surveys with respect to prevalence of diseases in the community limits the utility of data generated.

8. Education & Literacy Statistics

4.8.26 The Directorate of Primary Education and the Directorate of Secondary Education, are responsible for collection and compilation of education statistics which include the following information: i) Number of educational institutions, primary, middle, High Schools & Higher Secondary, ii) Number of enrolments in these institution, iii) Number of teachers, iv) Number of students from SC&ST categories, v) Condition of school buildings (government only), vi) Drop out rates

4.8.27 The basic reporting unit is the school. The Block Education Officer (BEO) collects annual data from the primary and middle schools in the block, compiles it for the

block, and transmits it to the DEO. High schools and the HSS remit their annual data directly to the DEO. At DEO level, compilation for the district takes place and the district wise compiled data is sent to the state headquarter. Data covers only the government and the aided institution. No attempts are made to cover private unaided institutions, which are coming up in bigger cities.

4.8.28 Two types of information are collected annually. The first relates to numerical data on enrolment in different classes by gender, number of teachers, etc. This is collected so as to relate to 30 September of each year. The other part relates to school finances, such as pay and allowances, buildings, etc. The financial data are collected as on 31 March of the year.

4.8.29 The time lag in data dissemination is 24 months. No publications are brought out by the Education Department. The compiled statistics are utilised for office use, and also sent to the Director Statistics & Evaluation who publishes it in their annual publication viz, "Bihar Ek Jhalak".

4.8.30 The Statistical Cell is headed by a Deputy Director who is assisted by 2 Assistant Directors, and other field level statistical personnel. The entire compilation of statistical data from Block level, to District and state level is done manually. No IT facilities are provided.

4.8.31 The Statistical Cell maintains registers, where the data received from DEO is posted in various columns. This posting is checked, and district wise – State wise totals are worked out through calculators. These totals are again checked before release of data. Educational statistics are also collected separately under the Sarva Siksha Abhiyan. Under Sarva Siksha Abhiyan, infrastructure is provided to the primary and middle level educational institutions. For this, another department viz. "Bihar Education Project" has been created.

4.8.32 The following statistical returns are used:

i) ES-I(S) Numerical data (school education), ii) ES-II (S) Financial data school education, iii) ES-III Examination results-school and higher education,
iv) ES-IV (S) School educational statistics for SC/ST, v) ES-I (C) Numerical data in respect of higher education, vi) ES-II (c) Financial data for higher education,
vii) ES-IV (c) Numerical data for higher education of SC/ST

4.8.33 The frequency of data collection is annual and the India Education Survey is conducted at five yearly interval. Statistical reporting under Sarva Siksha Abhiyan is monthly. For statistical purposes, the Department mostly interacts with its District Education Officers.

4.8.34 The quality of education data, like enrolment, suffers on account of: (i) inadequate data checking and validation mechanism; (ii) manual compilation of data at Block and District levels; (iii) institutional records (such as admission registers, attendance registers and stock registers) are not properly maintained at the institutions, as a result of which correct information based on records cannot always be given; (iv) the tendency to give distorted information when it suits the school heads and the administrators; and (v) exclusion of private unaided institutions.

9. Labour and Employment Statistics

4.8.35 Following agencies are collecting data on Labour and Employment in the state:

4.8.36 **Labour Statistics***:* The Office of the Labour Commissioner is responsible for collecting and disseminating labour statistics. The State Labour Commissioner is responsible to collect statistics on statutory basis under different Labour Act and Laws such as Industrial Disputes Act, Minimum Wages Act, Contract Labour Act, Motor Transport Workers Act etc. The data at the field level is collected monthly on closure, retrenchment and lay off, industrial disputes including work stoppages besides implementation of various Labour Act by the Labour inspector and sent to Labour Superintendent at the District level, who in turn send the information through Regional Deputy Labour Commissioner (9) to the Labour Commissioner. The data received from 38 Labour districts and 9 regions are compiled at the state level giving district – wise / region wise break ups by the office of the Labour Commissioner and the state consolidated report is sent to the Ministry of Labour & Employment, Government of India.

4.8.37 **Employment Statistics***:* This is the responsibility of the Directorate of Employment and Training. Employment data is also generated by the Population Census and NSSO Employment and Unemployment Surveys. The employment statistics are maintained by the Directorate of Employment. The data relating to the number of candidates registered and placement by category of employment, industries, public and private sector by sex is collected at the district level by the District employment officer and then consolidated district report are sent to Director Employment through Regional Employment Officer. These reports are processed and analyzed at the Directorate of Employment and various tables are generated providing detailed data. Among others, on registration, placements, and sponsoring of job seekers by category and qualification, vocational guidance activities, registration and placements of SC / ST / OBC and physically handicapped persons. Information on employment is also generated through employment survey and statutory returns received under Factories Act for all registered factories with the Chief Inspector of factories.

4.8.38 The time lag in dissemination of labour and employment statistics is 12 months. Labour and employment statistics are published in the Annual Progress Report of the Department of Labour. The latest publication provides data for 2004-05

4.8.39 All returns used for collection of employment data and Labour statistics, are statutory and prescribed under various labour Acts. However the questionnaires prescribed for collection of census & NSSO data are non-statutory.

4.8.40 Manpower employed for compilation of Labour and Employment statistics includes Assistant Directors, Statistical supervisors, Statistical Assistants and Research Assistants. One JSA is provided in each of the 20 functional Employment Exchanges in the State.

4.8.41 Except for the census data, no IT tools are used for compilation of statistical data. All compilation and tabulation is done manually and no IT trained staff is provided.

4.8.42 The data quality suffers due to (i) errors in the list frame of factories which includes a number of closed factories that are not deleted till they get de- registered, and exclusion of new factories as the list frame is not regularly undated. (ii)) non response

from establishments (iv) exclusion of private sector establishment employing 10 to 20 employees and (v) delays in processing data in the organised sector collected and compiled by Directorate of Employment.

10. Housing Statistics

4.8.43 There is no state government agency compiling comprehensive statistics on housing and investments in housing. Data on number of houses are collected through the population census. DES releases housing statistics for the State on the basis of census data. Also, DES annually collects data on housing stock from State Housing Board; Municipalities and Corporations; State PWD for housing projects costing Rs. 50000 or more; the Regional Development Authorities; and Rural Development Dept, for housing activities in Rural areas. The housing data received from municipalities, and State/Regional Development Authorities, and housing projects are neither compiled nor released by DES, but are transmitted in original, to the NBO, GOI. Only one Junior Statistical Assistant, under overall control of an Assistant Director (SDP) is looking after the collection of housing statistics.

11. Electricity Production and Distribution

4.8.44 The agency responsible for electricity production and distribution statistics is the Bihar State Electricity Board which compiles the following types of data:

i) Installed power generation capacity, ii) Electricity production, iii) Distribution of energy, iv) Number of villages electrified, v) Number of consumers of electricity category wise, vi) Details of Transformers, vii) Energisation of pump set, viii) Harijan bastis electrified

4.8.45 Data on the installed capacity and actual generation is reported by individual generating stations to the Bihar State Electricity Board (BSEB). The data is collected from all power houses regarding the generation of electricity. The various details like units generated, units sent out, units purchased, units sold and revenue realized, number of consumers, line data for high tension and low tension, details of transformers etc are also collected. The data on purchase of electricity is shown separately by BSEB. Rural Electrification is being implemented by the Rural Energy Development Corporation. Data is collected monthly/ annually and passed on to BSEB regarding the villages electrified, pump sets energized and harijan basties electrified etc. The frequency of data collection is monthly and annual. The latest publication on power statistics relates to 1999-2000. No publication has been brought out since bifurcation of Bihar State. All the returns prescribed for collection of data are statutory and are prescribed under the Electricity Act.

4.8.46 For data transmission the Bihar State Electricity Board interacts regularly with NTPC, Energy Department, Government of India and Rural Electricity Corporation. All data collected is supplied to the Central Electrical Authority, Government of India.

4.8.47 No separate statistical personnel are available for data collection, compilation and analysis. However, the quality of data on electricity generation and consumption is accurate and reliable

Environment and Forestry Statistics including Water Supply and Sanitation

12. Forestry Statistics

4.8.48 The Principal Chief Conservator of Forests is responsible for forestry statistics which are collected monthly and annually.

4.8.49 Some of the important forestry statistics are:

i) Classification of forest area by management and legal status, ii) Area under silviculture,

iii) Area under plantation, iv) Revenue and expenditure data, v) Forest buildings and roads.

4.8.50 The above data included as the Forest Statistics are collected by Forest Guard and sent to the Range Forest Officer through Forester, where range level data are compiled and sent to the sub − division headed by an Assistant Conservator of Forests (ACF). Statistics at the sub − division level are compiled by the ACF and transmitted to the division headed by a Deputy Conservator of Forest (DCF). After compilation of data at the division levels the same is sent to the circle headed by a Conservator of Forest (CF). The data is scrutinized and compiled for the circle by the office of CF and sent to the Principal; Chief Conservator of Forests (PCCF), where compilation of state level statistics is done. The Depots are required to submit monthly report to the Deputy Conservator of Forest on stocks at the beginning of the month, arrivals of forestry produce in the depot during the month and sales during the month. Details of stocks and arrivals are given in physical terms, while that of sales are provided both in physical and financial terms. The procedure of sending the consolidated report is as per forestry statistics. The Principal Chief Conservator of Forests interacts with the Forest and Environment Ministry, Government of India and the Forest Research and Development Institute, Dehradun, and DES for purposes of collection of forestry statistics.

4.8.51 The time lag in data dissemination is 12 months. The data is published in the Annual Administration report of Forest Department. The latest report relates to 2004-05. The data are collected through number of non-statutory returns. The Central Ministry of Forest and Environment has also prescribed certain returns. Unfortunately there is no statistical staff in this department and no IT tools are available for compilation of forestry statistics.

4.8.52 The quality of forestry statistics suffers because of (i) inadequate supervision of data collection operations at the Forester level; the virtual absence of full scrutiny and validation of data at the range (ACCF) and circle levels (DCF); inadequate coverage as some relevant social forestry linked parameters like head loads of firewood, wood used as cooking fuel, among others are excluded; and manual compilation of statistics.

13. Drinking Water and Sanitation

4.8.53 The agency responsible for collecting and disseminating data on water supply and sanitation is the Drinking Water and Sanitation Department. The statistics compiled include the following information:

i)   Number of villages covered by water supply, ii) Number of villages by source of water supply, iii) Number of villages by source of water supply, iv) Monthly

physical and financial progress reports on water supply and sanitation in 20 point programme, and v) Piped water supply in Towns.

4.8.54 The data are collected monthly and reports are prepared on monthly/annual basis. The publication reporting on water supply and sanitation statistics is the Annual Administrative Report of the Department. The latest available publication relates to 2004-05. Time lag in data dissemination is 12 months.

4.8.55 For collection of data, non-statutory returns have been prescribed by the Department. No statistical staff is working in the Department and no IT tools are used.

4.8.56 Some ad hoc surveys are conducted to know the status of the villages and households having access to safe drinking water facility as well as households having toilet facilities. In the case of rural areas, statistics on drinking water and sanitation are collected through monitoring of implementation of several schemes that are currently under way in the State and ad hoc surveys conducted from time to time. Junior Engineer at the block level who are in charge of project implementation collect information on available assets in villages and works under way. Supervision is done by Assistant Engineer to whom all data / information is submitted for compilation at the sub – division level and onward transmission to the Executive Engineer at the District level. This is scrutinized and sent to the Superintending Engineer in the concerned division. The data for the division is compiled and sent to the Chief Engineer. Statistics on drinking water and sanitation are also generated through the monitoring of school specific schemes by Gram Panchayat.

4.8.57 As concerns urban areas, the process of collection and compilation of statistics at the District level is similar to that of rural areas as described above. The data compiled at the District level is sent to the project division headed by Superintending Engineer. This data is scrutinized and tabulated separately for Municipalities / Municipal Corporation and sent to the Chief Engineer. The department interacts with the Water Works and Planning Department, DSE and also the Water Resources Ministry, Govt of India for purposes of data collection and dissemination.

4.8.58 The quality of data generated on drinking water and sanitation is of low quality due to limited scrutiny and supervision of village surveys through which data is collected; delays in data availability caused by multiple layers through which the survey data is sent to the Department without significant value addition by the intervening functionaries – Assistant Engineer, divisional Executive Engineer and the Circle Superintending Engineer; and manual compilation of data.

14. Transport Statistics

4.8.59 The agencies responsible for transport related statistics are:
Statistics on Motor Vehicle Registration, Taxes and fees: Transport Commissioner has the responsibility for collecting data on motor vehicle registration, taxes and levies.
Statistics on Roads: The agency reasonable for collecting data on road lengths is PWD.
Statistics on Road Accidents: Department of Police.

4.8.60 The statistical data compiled include the following information:

   i)   Number of registered motor vehicles by type, ii) Number of newly registered vehicles, iii) Number of licenses issued for drivers and conductors, iv)

Revenue through taxes and fees, v) Length of Roads by categories and type of surface, vi) Number of bridges and culverts constructed, and vii) Number of Road accidents and deaths due to accidents.

4.8.61 The frequency of collection of statistics relating to registration of vehicles etc, road length, and road accidents is monthly.

4.8.62 The data on registered vehicles, and other related parameters are compiled by the District Transport Officer (38) and sent every month to the Regional Transport Commissioner (9). The consolidated data for the region giving district wise break up are prepared and sent to the Transport Commissioner's office. Besides the registration of vehicles (DTO) data the department also collects information about licenses issued to drivers / conductors, collection of revenue through taxes and fees at the district level. The consolidated information is sent to the Transport Commissioner through Range Transport Officers.

4.8.63 Data on Road Accidents are collected by Police Stations and District SP Office. These data are forwarded to the office of Director General Police where it is consolidated and released district wise.

4.8.64 The data on Road length of State Highway, Major District Road, other district road and rural roads for which PWD is responsible are collected and compiled by the Assistant Engineer of the department posted in the sub – division. The consolidated data is then sent to Executive Engineer posted in the district for scrutiny of the data and transmitted the same to SE. The consolidated data SE level, district wise is sent to the Chief Engineer. He also collects data about National Highways, Culverts and Bridges.

4.8.65 The time lag in release of the road transport data is 12 months for motor vehicle registration statistics, 24 months for road statistics, and 24 months for road accidents.
4.8.66 There are no exclusive publications relating to Transport Statistics. However transport statistics are published in the Annual Administration Report of the departments. The information is also supplied to DES for publication in different publication brought out by them. The latest Reports of the Transport Department and PWD relate to 2004-05 and 2003-04 respectively

4.8.67 Transport Department interacts with DES on all aspects of data collection and compilation. The CE PWD (Roads) interacts will all other agencies who are engaged in construction/maintenance of roads. The Transport Commissioner's office interacts with DSE and Ministry of Transport GoI. The PWD department also interacts with DES & Ministry of Transport GoI.

4.8.68 The collection of data is in statutory forms under the Motor Vehicles Registration Act. For Transport department & Police department, the data is collected in statutory forms. The data collection by PWD is in non – statutory form.

4.8.69 Registration of vehicles is on line. Data are sent by DRTOs to RTOs and by RTOs to the Commissionerate by normal mail. Processing of data is done on PCs in the Commissionerate. No statistical personnel are employed by any of the departments responsible for generation of transport statistics.

4.8.70 The quality of data on vehicle registration, driving licenses, revenue through taxes and fees, these are reliable and accurate. Road length statistics compiled by PWD and

road accident statistics compiled by the Police Department are satisfactory. However, the data related to road accidents is poor as the police records of road accidents are not comprehensive, and the transmission of information from district levels to headquarters is not timely. The coverage of data on passenger traffic sector is inadequate as no data is compiled on several transport related parameters like transport of passengers by private sector transporters, goods transport, rental of commercial vehicles with operator, maintenance and repair of road transport equipment, supporting services for road transportation services, services auxiliary to all modes of transport, cargo-handling services, storage and warehouse services, among others.

CHAPTER 5

DATA GAPS AND WEAKNESSES OF THE EXISTING STATISTICAL SYSTEM IN BIHAR

5.1 Data Gaps

5.1.1 There are several data gaps in the existing statistical system. Some of these gaps are described below for important core statistics.

1. GSDP Estimates

5.1.2 Data gaps with respect to estimation of GSDP are several including: wholesale price index; statistics on by-products of agricultural and livestock products; index of agricultural production; expenditure data on new constructions and repairs of residential buildings; transportation of own products of ancillary activities.

2.   Estimate of Capital formation & Savings

5.1.3 Savings are not estimated and private sector is excluded from the estimation of GFCF. Data is available only for gross assets and not for actual addition to fixed assets, which do not satisfy the definition.

3.   Estimates of District Domestic Product

5.1.4 Required statistics at the district level in respect of most sectors for estimation of DDP are not available. For example, production data of crops including horticultural and floricultural crops not covered under CCE are not available.   Similarly, value of certain inputs used in primary sector (feed of livestock, irrigation charges, marketing charges, etc.) is not available. Also, service sector data is not available.

4.   Contribution of Local Bodies

5.1.5 Data in respect local bodies on outsourced services and activities is not provided by the local bodies to DSOs and DSE; and Zila Parishad, Panchayat Samities and Gram Panchayats are excluded.

5.   Construction of Consumer Price Index

5.1.6 The coverage is only Patna district and the base year is also obsolete and very old and of no relevance. Use of old base year 1938-39 and the CPI is constructed only for Patna.

6.   Health, Morbidity and Family Welfare Statistics

5.1.7 There is no mechanism of data collection on morbidity, mortality, pre-natal and post-natal health statistics from the private medical practitioners and voluntary and non government organizations. Also, data is not available on percentage of children fully immunized.

7.   Education and Literacy Statistics

5.1.8 For literacy rates and adult literacy rates, the source is decadal population census. For intermittent years the rates are not available for the State, district and below. Also, data for the State and districts is not available with respect to children out of school classified by gender and castes, attainment levels, attendance data and drop outs.

8. Labour and Employment Statistics

5.1.9 Employment Statistics: The data on employment of child and migrant labour is not available. Also, employment data is not available in respect of agriculture and allied occupations in the private sector, and household establishments. Labour Force data are available from the central sample of the NSS and there is urgent need to utilise the state sample data on labour and employment status of the population of the state and the districts.

9. Housing Statistics

5.1.10 The source of housing statistics is the population census which is decennial. Limited housing data is available from official statistics generated by PWD and various housing schemes.

10. Environmental Statistics - Forest and Water and sanitation Statistics

5.1.11 Forest Statistics: Inadequate data on activities related to afforestation, which is an important activity considering the fact that the limited forest area is largely degraded. *Water and Sanitation:* Data is not available on households without safe drinking water and sanitation.

11. Participation in the surveys of National Sample Survey Office (NSSO)

5.1.12 There is urgent need to get the state sample data processed and compiled to get better estimates of various socio economic indices pertaining to the state and the districts.

12. Transport Statistics

5.1.13 No data is generated on several transport related parameters like transport of passengers by private sector transporters, rental of commercial vehicles with operator, maintenance and repair of road transport equipment, supporting services for road transportation services, services auxiliary to all modes of transport, cargo-handling services, storage and warehouse services, among others.

13. Statistics for local area planning

5.1.14 Limited local level data is collected from secondary sources for preparation of District plans. There is urgent need to collect local area statistics for balanced regional development.

CHAPTER 6

EXISTING HUMAN, IT AND INFRASTRUCTURAL RESOURCES

6.1 Present Structure of staffing in the DES

6.1.1 The Recruitment Rule (RR) for the post of Director of the Directorate of Economics & Statistics (DES) requires a person with post graduate in Statistics with sufficiently rich/longer experience in the field of official statistics. The post is, unfortunately vacant for the last several years due to administrative apathy. The day to day functions of the DES is presently being looked after by the senior most Joint Director in the DES. As has been mentioned in the previous chapter more than 40/45 percent of the sanctioned posts in the headquarters and in field level offices of the DES are vacant including the post of the Director. At the State level, the Directorate works under the administrative control of the Planning Department headed by the Principal Secretary, a very senior level officer of the Indian Administrative Service to whom the Director or the senior most Joint Director reports. There are four Joint Directors for various statistical Schemes of the 5 Divisions, viz., Agricultural Statistics, State Income, Prices and Industrial Statistics, Vital Statistics, NSS and others Statistics and Miscellaneous Statistics and a Joint Director for Administration from the Bihar Administrative Service.. They all report to the Director/Senior most Joint Director. The total number of officers presently in position in the DES consists of one senior Joint Director, 3 Joint Directors, 6 Deputy Directors, 25 Assistant Directors and 23 Assistant Statistical Officers who are assisted by 132 Junior Statistical Assistants, 43 Compilers and 30 Junior Field Investigators.

6.1.2 At field level, there are 9 divisional offices of the Directorate of Economics and Statistics having their headquarters at Jurisdiction of the divisions vary from 3 districts to 6 districts. Presently these divisional offices are headed by a Deputy Director level officer who is supported by a team of statistical staff of Assistant Statistical Officers and other non gazetted field staff of Junior Field Investigators and administrative staff,

6.1.3 Jurisdiction of the 9 Divisional Offices of the DES are as given below

Division	Number of Districts
Patna	6
Magadh	5
Saran	3
Tirhut	6
Darbhanga	3
Munger	6
Bhagalpur	2
Kosi	3
Purnia	4
All	38

Number of all posts sanctioned and filled in the DES and the Line Departments in Bihar are given in the next few pages.

6.2 Present Status of Statistical Personnel in the DES and the Line Departments in Bihar

1. Directorate of Economics & Statistics, Bihar.

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Director (16400 – 20000)	1	0	1	100
2	Senior Joint Director (14300 - 400- 18300)	1	0	1	100
3	Joint Director (12000-375-16500)	3	3	0	0
4	Deputy Director (10000-325-15200)	15	9	6	40
5	Asst. Director/Dist. Statistical Officer (6500-200-10500)	62	21	41	66
A. Total number of Gazetted Posts		**82**	**33**	**49**	**72**
6	Asst. Statistical Officer (5500-175-9000	148	118	30	20
7	Sr. Statistical Asst./ Jr. Statistical Asst. / Block Statistical Supervisor / Investigator / (5000-150-8000)	866	390	476	55
8	Compiler (4000-100-6000)	122	44	78	64
9	Jr. Field Investigator (3050-75-4300)	235	11	224	95
B. Total number of non-Gazetted posts		**1371**	**563**	**808**	**59**
All Statistical posts (Total of A and B)		**1453**	**596**	**857**	**59**

2. Planning & Development Department.

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Asst. Statistical Officer (5500-175-9000)	42	0	42	100
2	Sr. Statistical Asst./ Jr. Statistical Asst. / Block Statistical Supervisor / Investigator / (5000-150-8000)	72	58	14	19

3	Compiler (4000-100-6000)	27	0	27	100
Total		**141**	**58**	**83**	**59**

3. Bihar State Planning Board

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Asst. Director/Dist. Statistical Officer/Statistical Officer (6500-200-10500)	1	0	1	100
A. Total post of Gazetted		**1**	**0**	**1**	**100**
2	Research Assistant/Assistant Investigation Officer (5000-150-8000)	3	3	0	0
B. Total post of Non-Gazetted		**3**	**0**	**0**	**0**
Grand Total(A+B)		**4**	**3**	**1**	**25**

4. Integrated Child Development Directorate

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Statistical Supervisor (5000-150-8000)	546	91	455	83
Total post of Non-Gazetted		**546**	**91**	**455**	**83**
Total		**546**	**91**	**455**	**83**

5. Health Department

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	State Demographer (10000-325-15200)	1	0	1	100
2	Lecturer (6500-200-10500)	6	0	6	100
A. Total post of Gazetted		**7**	**0**	**7**	**100**
3	Assistant Statistical Officer (5500-175-9000)	1	0	1	100
4	Statistical Assistant/Statistician (5000-150-8000)	54	22	32	59

5	Compiler (4000-100-6000)	407	314	93	23
B. Total post of Non-Gazetted		**462**	**336**	**126**	**27**
Grand Total(A+B)		**469**	**336**	**133**	**28**

6. Directorate of Vetenerary

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Joint Director (12000-375-16500)	1	0	1	100
2	Assistant Director (6500-200-10500)	20	8	12	60
A. Total post of Gazetted		**21**	**8**	**13**	**62**
3	Statistical Officer 5500-175-9000)	29	25	4	14
4	Sr. Statistical Assistant/Statistical Supervisor/Statistical Assistant (5000-150-8000)	35	33	2	6
5	Statistical Ganak/Progress Assistant (4000-100-6000)	109	69	40	37
6	Ganak (3050-75-4300)	5	4	1	20
B. Total post of Non-Gazetted		**178**	**131**	**47**	**26**
Grand Total(A+B)		**199**	**139**	**60**	**30**

7. Agriculture Department

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Joint Director (12000-375-16500)	1	0	1	100
2	Dy. Director (10000-325-15200)	5	0	5	100
3	Assistant Director (6500-200-10500)	34	5	29	85
A. Total post of Gazetted		**40**	**5**	**35**	**87**
4	Statistical Assistant (5000-150-8000)	111	47	64	58
5	Computor (4000-100-6000)	17	2	15	88
B. Total post of Non-Gazetted		**128**	**49**	**79**	**62**
Grand Total(A+B)		**168**	**54**	**114**	**68**

8. Industry Department

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Economic Investigator (5500-175-9000)	63	30	33	52
2	Jn. Statistical Assistant	33	13	20	61

		(5000-150-8000)				

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
3	Enumerator (3200-85-4700)	8	0	8	100
Total post of Non-Gazetted		**104**	**43**	**61**	**59**
Total		**104**	**43**	**61**	**59**

9. Co-operative Department

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Dy. Director (10000-325-15200)	1	0	1	100
2	Statistical Officer (6500-200-10500)	7	0	7	100
A. Total post of Gazetted		**8**	**0**	**8**	**100**
3	Sr. Statistical Assistant (5000-150-8000)	40	18	22	55
B. Total post of Non-Gazetted		**40**	**18**	**22**	**55**
Grand Total(A+B)		**48**	**18**	**30**	**62**

10. S.C. & S.T. Welfare Department

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Statistical Officer (6500-200-10500)	1	0	1	100
A. Total post of Gazetted		**1**	**0**	**1**	**100**
2	Statistical Assistant (5000-150-8000)	38	33	5	13
B. Total post of Non-Gazetted		**38**	**33**	**5**	**13**
Grand Total(A+B)		**39**	**33**	**6**	**15**

11. Human Resources Development Department

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Dy. Director (10000-325-15200)	1	1	0	0
2	Asst. Director (6500-200-10500)	3	0	3	100
A. Total post of Gazetted		**4**	**1**	**3**	**75**
3	Statistical Supervisor (5000-150-8000)	32	31	1	3
B. Total post of Non-Gazetted		**32**	**31**	**1**	**3**
Grand Total(A+B)		**36**	**32**	**4**	**11**

12. Director, Training & Employment

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Research Assistant/Investigator-cum-Analyst (5000-150-8000)	27	4	23	85
2	Computor (4000-100-6000)	1	0	1	100
Total post of Non-Gazetted		**28**	**4**	**24**	**86**
Total		**28**	**4**	**24**	**86**

13. Office of Labour Commissioner

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Statistical Authority (10000-325-15200)	1	0	1	100
2	Asst. Director (6500-200-10500)	2	0	2	100
A. Total post of Gazetted		**3**	**0**	**3**	**100**
3	Jr. Statistical Assistant/Research Assistant/ Investigator-cum-Analyst (5000-150-8000)	20	7	13	65
4	Computor (4000-100-6000)	3	2	1	33
B. Total post of Non-Gazetted		**23**	**9**	**14**	**61**
Grand Total(A+B)		**26**	**9**	**17**	**65**

14. Rural Development Dept.

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Joint Director (12000-375-16500)	1	0	1	100
2	Dy. Director (10000-325-15200)	1	0	1	100
3	Assistant Director (6500-200-10500)	2	0	2	100
A. Total post of Gazetted		**4**	**0**	**4**	**100**
4	Assistant Statistical Officer (5500-175-9000)	3	0	3	100
5	Statistical Assistant (5000-150-8000)	6	3	3	50
B. Total post of Non-Gazetted		**9**	**3**	**6**	**67**
Grand Total(A+B)		**13**	**3**	**10**	**77**

15. Agriculture Census, Revenue & Land Reforms Department

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Dy. Director (10000-325-15200)	1	1	0	0
2	Asst. Director (6500-200-10500)	3	0	3	100
A. Total post of Gazetted		**4**	**1**	**3**	**75**
3	Asst. Statistical Officer (5500-175-9000)	2	0	2	100
4	Statistical Assistant (5000-150-8000)	1	1	0	0
B. Total post of Non-Gazetted		**3**	**1**	**2**	**67**
Grand Total(A+B)		**7**	**2**	**5**	**71**

16. Minor Water Resources Dept. (Directorate)

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Dy. Director (10000-325-15200)	1	0	1	100
A. Total post of Gazetted		**1**	**0**	**1**	**100**
2	Sr. Statistical Assistant (5000-150-8000)	2	1	1	50
3	Computor (4000-100-6000)	3	3	0	0
B. Total post of Non-Gazetted		**5**	**4**	**1**	**20**
Grand Total(A+B)		**6**	**4**	**2**	**33**

17. Directorate of Fishery

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Dy. Director (10000-325-15200)	1	0	1	100
2	Asst. Director(6500-200-10500)	1	0	1	100
A. Total post of Gazetted		**2**	**0**	**2**	**100**
3	Asst. Statistical Officer (5500-175-9000)	1	1	0	0
4	Sr. Statistical Asst. (5000-150-8000)	2	0	2	100
B. Total post of Non-Gazetted		**3**	**1**	**2**	**67**
Grand Total(A+B)		**5**	**1**	**4**	**80**

18. Water Resources Department

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6

1	Asst. Director /Statistical Officer (6500-200-10500)	2	0	2	100
A. Total post of Gazetted		**2**	**0**	**2**	**100**
Total		**2**	**0**	**2**	**100**

19. Registration Excise Dept.

Srl. No.	Name of the Post	Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Jr. Statistical Assistant (5000-150-8000)	1	1	0	0
A. Total post of Non Gazetted		**1**	**1**	**0**	**0**
Total		**1**	**1**	**0**	**0**

Status of all Statistical Personnel in DES and Line Departments in Bihar

Srl. No.	Name of the post	Status of statistics Personnel in Departments/ Directorate			
		Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Director (16400 – 20000)	1		1	100
2	Sr. Joint Director (14300 - 400-18300)	1	0	1	50
3	Joint Director (12000-375-16500)	6	2	4	67
4	Dy. Director /Statistical Authority / State Demographer (10000-325-15200)	30	16	14	47
5	Asst.Director/Dist.Statistical Officer/Statistical Officer/ Lecturer (6500-200-10500)	153	22	131	86
Total (Gazetted)		**192**	**41**	**151**	**79**
6	Asst. Statistical Officer/ Statistical Officer / Economic Investigator (5500-175-9000)	297	184	113	38
7	Sr. Statistical Asst./ Jr. Statistical Asst. / Block Statistical Supervisor / Investigator / Statistical	1863	773	1090	59

	supervisor/ Research Asst./ Statistical Asst. /Investigator cum Analyst / Asst. Investigation Officer (5000-150-8000)				
8	Compiler/ Statistical Ganak/Computer (4000-100-6000)	689	441	248	36
9	Enumerator (3200-85-4700)	8	0	8	100
10	Jr. Field Investigator /	240	56	184	77

The District Statistical Offices are headed by the DSOs who are in position in only 17 of the 38 district offices. There is acute shortage of officers and supporting staff both in the

Sanctioned and filled up posts location wise											
Designation	Pay Scale	Head Quarter		Division			Dist.	Blocks		Total		Empty in %
		Sanctioned	Filled Up	Sanctioned	Filled Up	Sanctioned	Filled Up	Sanctioned	Filled Up	Sanctioned	Filled Up	
Director	16000	1	0	-	-	-	-	-	-	1	0	100 %
Sr. Joint Director	14300 -18300	1	0	-	-	-	-	-	-	1	0	100 %
Joint Director	12000 -16500	3	3	-	-	-	-	-	-	3	3	0%
Dy. Director	10000 -15200	6	6	9	3	-	-	-	-	15	9	40%
Asst. Director	6500 -10500	24	4	-	-	38	17	-	-	62	21	66%
A.S.O.	5500 -9000	32	14	18	13	98	91	-	-	148	118	20%
J.S.A./ Investigator	5000 -8000	130	34	21	10	181	77	-	-	332	121	64%
Compiler	4000 -6000	43	7	-	-	79	37	-	-	122	44	64%
J.F.I.	3450 -4590	31	3	-	-	204	8	-	-	235	11	95%
B.S.S.(Block)	5000 -8000	-	-	-	-	-	-	534	269	534	269	50%
Total		**271**	**71**	**48**	**26**	**600**	**230**	**534**	**269**	**1453**	**596**	**41%**

headquarters of the DES as well as in the field offices.

6.3 Directorate of Economics and Statistics - Organization and Functions

Organisational Structure of DES

6.3.1 The Directorate of Economics and Statistics (DES) functions under the administrative control of the Department of Planning and Development headed by a senior IAS Officer of the rank of Principal Secretary in the State Government.

6.2.2 The present Organisational chart and the staff strength (sanctioned and in position) of the Directorate of Economics and Statistics are given below:

Flow of Data and co-ordination between DES and other organizations.

Data Sources

Nodal Statistical Officers

| Central Ministries /Organization/ |

| State Govt./ other officers/ Undertakings |

| HOD of State Govt. |

| Divisional officers to HOD |

| Divisional Office Of HOD |

| Block Level Officers |

| Gram Panchayat |

| Villagers |

| Informatics |

| C S O / N S SO |

D E S

| Division officers of DES |

| District Statistical officers |
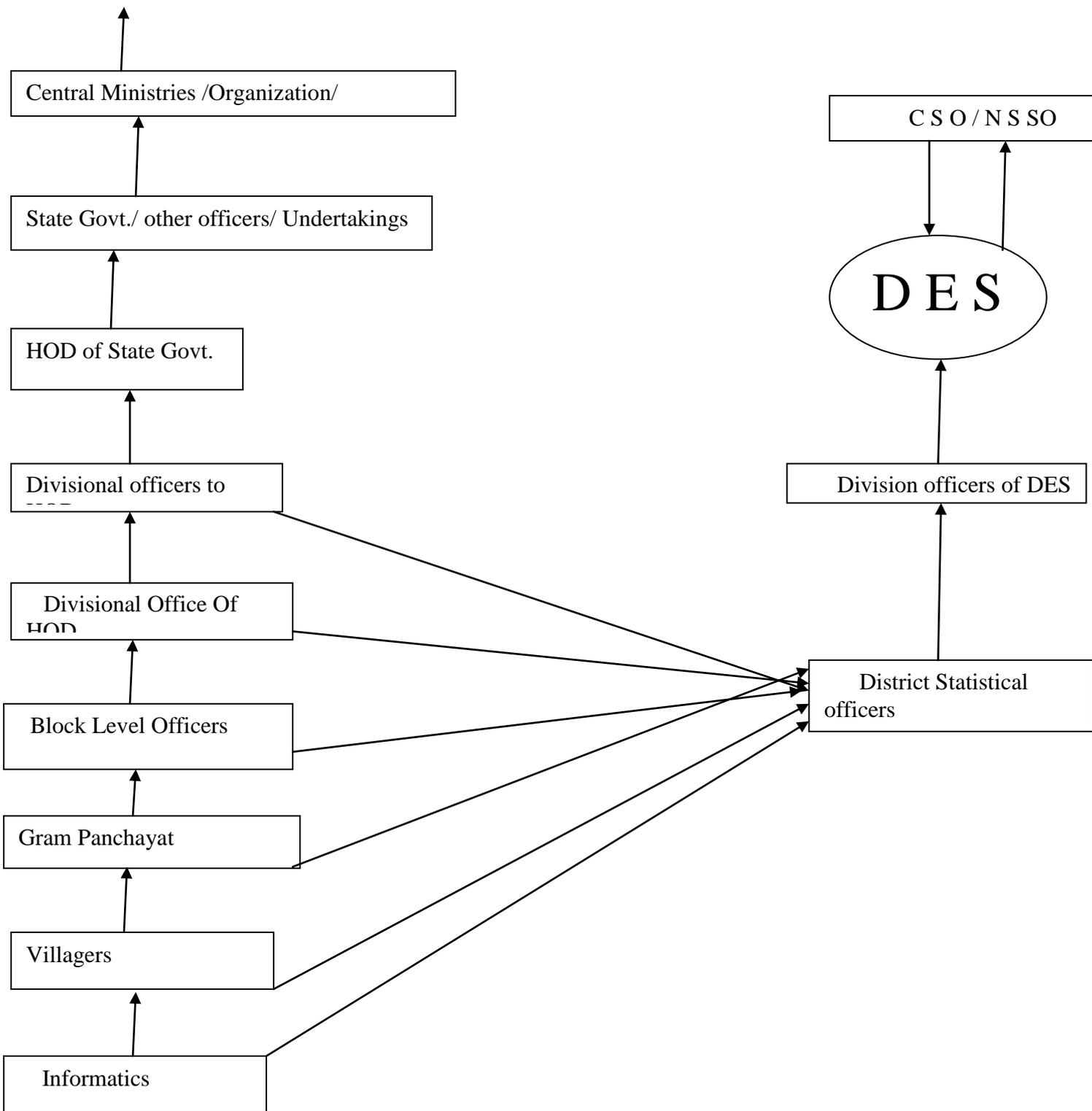
Organization Chart of DES, Bihar (Field)

| **DES** |

| ASO | JSA/INVESTIGATOR | COMPILOR | JFI | ACCOUNTAN | LDC |
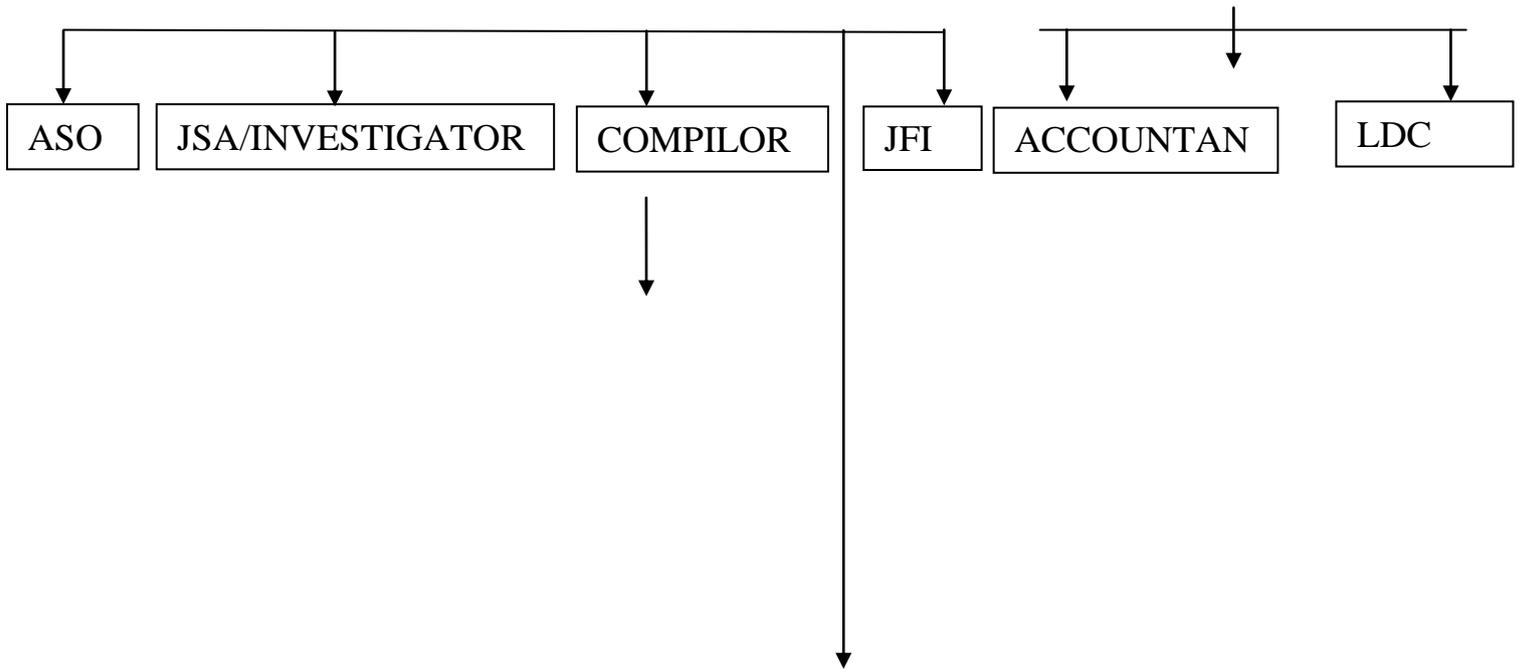
Organisation of D.E.S. Organisational Chart

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            Principal Secretary
    Planning & Development Department
                   |
                Director
                   |
        ┌──────────┴──────────┐
  Technical Division    Administrative Division
```
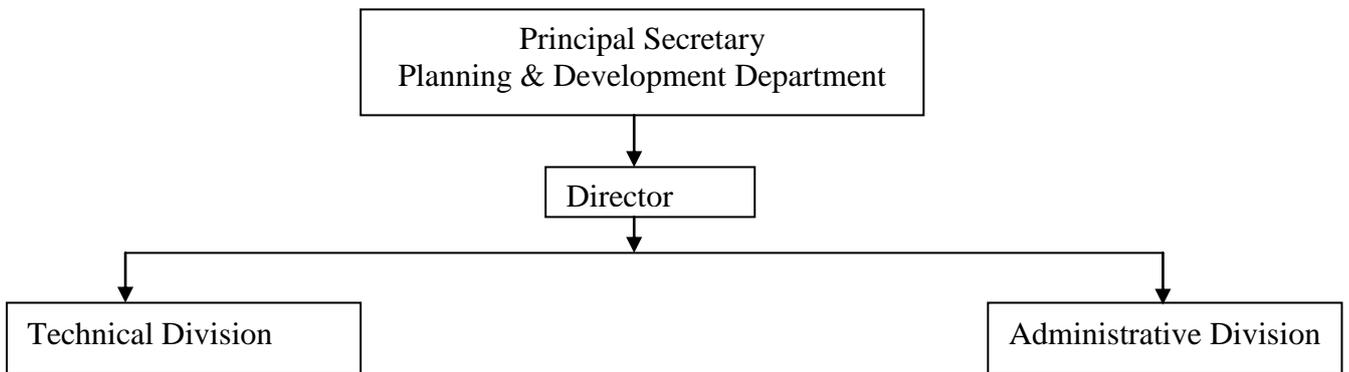
Sr. No.	Name of the Post	Sanctioned Post
1	Sr. Joint Director	1
2	Joint Director	3
3	Dy. Director	15
4	Assistant Director	62
5	A.S.O.	148
6	J.S.S./B.S.S./Investigator	866
7	Compilor	122
8	J.F.I.	235

Sr. No.	Name of the Post	Sanctioned Post	Filled Up Post
1	Joint Director(Adm.)	1	1
2	Section Officer	2	1
3	Assistant	14	8
4	Personal Assistant	2	2
5	Private Secretary	1	1
6	Typist(U.D.C.)	14	4
7	Stenographer	6	2
8	Stationery Assistant	1	0
9	Rain Fall Assistant	1	0
10	Routin Clerck	5	2
11	Assistant	103	63

12	Bill Clerck	2	2
13	Cashier	1	0
14	Sub Accountant	1	0
15	Accountant	1	0
16	Libration	1	1
17	Peon (H.Q.)	54	23
18	Peon (Field)	91	59
19	Driver (H.Q.)	3	3
20	Driver (Field)	26	13
21	Draft Man	1	0
22	Sub Draft Man	1	0
23	Cartographer	1	0
24	Camera Operater	1	0
25	Daftari	1	0
26	Documants Carreir	1	1
27	Machine Boy	1	0
28	Cutter Winder	1	1

6.4 The Present status of IT Resources

Web-site and Web-servers

6.4.1 None of the computers in the Directorate are networked. There is no website or web server. The Directorate has very limited exposure to internet facility.

Data Volume and Storage

6.4.2 No records have been maintained about data volume and storage. The backup is being stored on CD's or floppies in some cases. There is no adequate system for the offline or online data backup. Most of the data comes on hard copies because there are no proper IT infrastructures in the district / block offices.

Availability of IT staff

6.4.3 There is no IT technically qualified person in the Directorate. There is an acute shortage of computer operators. Currently there are only two technically sound computer operators along with one or two other staff members who can manage to do limited work on computers. Most of these people have limited computer knowledge and can only perform their routine jobs. As a result of virtual absence of computer literate staff, most of the computers are kept idle all the time or at best used as typewriters.

IT Training to Staff

6.4.4 No formal IT training has been provided to any staff. However, some staff have acquired (self taught) skills in Word Processing (four staff); Spreadsheet (two staff); and other software applications (2). There is no IT technically qualified person in the Directorate. There is an acute shortage of computer operators. Currently there are only two

technically sound computer operators along with one or two other staff members who can manage to do limited work on computers. Most of these people have limited computer knowledge and can only perform their routine jobs. As a result of virtual absence of computer literate staff, most of the computers are kept idle all the time or at best used as typewriters.

Maintenance of IT Assets

6.4.5 Due to lack of an annual maintenance contract, the PCs are not maintained and the Directorate has started junking the non-working computers and is not making any efforts to rectify even small hardware problems.

6.5 Physical infrastructure

6.5.1 The DES has inadequate infrastructure. The current office building is located in the main secretariat complex in old dilapidated barracks, and all the sections of the DES are not housed in one premise but are scattered in the barracks. It is inadequate for the growing needs of DES. **Immediate action is needed to relocate/shift the DES to a new building in the Secretariat building itself or else the existing barracks need be demolished and a new modern building be built by the state PWD exclusively for the DES and the Planning and Development Department which can house the Planning Board also.**

6.5.2 Since the Directorate's office is in barracks, the rooms are very hot and humid. In the rainy season it gets very muddy and there is seepage in the computer room. In the summers it is very hot - the temperature rises to more than 45 degrees at times. Clearly IT equipments cannot function efficiently under such an environment.

6.5.3 As regards the DSOs, the offices of all the existing 16 DSOs are dilapidated and largely dysfunctional with inadequate space. There is, therefore, a need to provide all the 38 DSOs with appropriate office space for as DES has to take action to set up DSOs in the remaining 22 Districts for which adequate budgetary provisions should be made.

6.5.4 **Office Automation Equipment***:* DES has inadequate office equipments INCLUDING PCs/Computers both in the headquarters and DSOs. There is a need to provide photocopying machines and fax machines in all the DSOs to enhance the efficiency of raw data transmission, and dissemination of data.

6.5.5 **Transport Vehicles:** The DES, Divisional Offices, and DSOs do not have adequate number of vehicles that constrains field operations and supervision. Further, nearly all the current stock of vehicles is old and some are beyond repair.

6.6 Statistical infrastructure:

 6.6.1 The statistical infrastructure in terms of business registers, data frames, sampling frames is not sufficient for the existing work load both in terms of quality and quantity for all surveys except for horticulture crops in respect of fruits and vegetable surveys and list of industries for IIP.

6.7 Funding

6.7.1 The present level of funding for SSS activities as a whole is not adequate for the existing level of functions and activities. Nevertheless as there is need to expand

activities such as type studies, to take up new surveys and do web based transmission of data by updating the existing ICT infrastructure, there is need for considerable additional funding.

CHAPTER 7

MANPOWER AND PHYSICAL SPACE REQUIREMENTS OF THE DES AND STATISTICAL DIVISIONS OF THE LINE DEPARTMENTS

7.1 Need for Restructuring of the Directorate of Economics and Statistics

7.1.1 As mentioned earlier the DES was in existence as the Directorate of Statistics in 1964, and after merger of the Directorate of Evaluation became as the "Directorate of Statistics & Evaluation", under the administrative control of Finance Department. The very purpose of this merger was to deal with the entire statistical task through one organisation. In 1968, this Directorate was brought under the administrative control of the Department of Planning & Development and has now been renamed as the Directorate of Economics and Statistics.

7.1.2 Though the total number of staff in this Directorate is 1453, the Supervisory Officers from the level of Assistant Director and above are only 33. Such very wider span of control will naturally dilute the quality of work. Also, there is a huge stagnation at the level of Statistical Inspector who can expect his promotion as Statistical Officer only after 18-20 years of service which causes a frustration among the staff. Further, in other co- working departments like Agriculture, Horticulture, etc., the heads of district level unit are in the cadre of Joint Directors and block level functionaries are at the level of Assistant Directors but in this Directorate the head of the district unit is only at the level of Assistant Director. This status gap creates a hurdle in the co-ordination with line departments in the day-to day activities. Particularly for the implementation of ISSP, this anomaly need be looked into and the number of supervisory officers in this Directorate be increased.

7.2 Proposed restructure of the Directorate of Economics and Statistics

7.2.1 Although the Director of the DES has been given the administrative and financial powers of a Head of a Department (HOD), for more efficient and fast track decisions, it is necessary to enhance the status of the DES to the level of an **independent Department of the state government.** Co-ordination with other heads of departments like Agriculture, Horticulture, Revenue, Environment and other such line departments will be effective only if the status of the Director of the DES is upgraded **to the Senior Administrative Grade (SAG) i.e. to the level of Deputy Director General (DDG) of the Indian Statistical Service of the Union Ministry of Statistics and Programme Implementation(MOSPI).**

7.2.2 The proposed structure of the **headquarters** of the Directorate of Economics and Statistics is as follows:

Post/Position	Pay Scale	Number of posts

Director	₹ 37400---67000+Grade Pay ₹10000	1
Addl. Director	₹37400---67000+Grade Pay ₹ 8900	5
Joint. Director	₹37400---67000+Grade Pay ₹ 8700	11
Sr. Dy. Director	₹15600---39100+Grade Pay ₹ 7600	20
Dy. Director	₹15600---39100+Grade Pay ₹ 6600	20
Assistant Director	₹ 9300---34800+Grade Pay ₹ 5400	20
Statistical Officer	₹9300---34800+Grade Pay ₹ 4800	20
Statistical Assistant	₹9300---34800+Grade Pay ₹4200	20

The enhanced structure of the officers at the head quarter may be made operational through surrender of sub ordinates anfractuous posts of the directorate.

7.2.3 For improvement of the quality and content/coverage of the statistical data there is an urgent need to strengthen the set up of the headquarters of the DES. The subject matter divisions of the Directorate should be increased to five each to be headed by an Additional Director level Officer dealing with subjects such as 1) Agricultural and related Statistics; 2) State Income Statistics and Prices; 3) Industrial Statistics/ASI/IIP; 4) Social Statistics; and 5) Administration, Information Technology (IT), Data Bank and Data Dissemination. All these 5 divisions namely the State Income, Agriculture, Industrial Statistics, Social Statistics and the Administration Divisions need 2 Joint Directors each supported by 4 Sr. Deputy Directors,4 Deputy Directors, 4 Assistant Directors, 4 Statistical Officers and 4 Assistants Statistical Officers. The other two divisions are recommended to have one Joint Directors, 2 Sr. Deputy Directors, 2 Deputy Directors, 2 Assistant Directors, 2 Statistical Officers and 2 Assistants Statistical Officers each. Sr. Dy Director will be supposed to under taken analysis and research work in the respective divisions, Dy. Director would look after normal data collection and compilation   Since an IT Division is proposed to undertake most of the tabulations there need be only limited numbers of Statistical Compilers/Computers who can also undertake data entry work with minimum manual tabulations/compilations.

7.2.4 The Directorate of Economics and Statistics (DES) presently works as only a data collecting agency and no much attention has been given to research publications and analytical reports. Most of the officers are engaged in planning, execution and supervision of various schemes under their control and so far not given attention to research and statistical analysis. A sufficiently senior level officer of Joint Director rank need be given full time charge of research and analysis activities and work directly under the Director of the DES.

7.2.5 The Director of the DES has to Co-ordinate and guide the Additional Directors of the directorate and also to regulate the timing and priority of the field work. Manpower Administration of the department is at presently carried out by the Joint Director Administration. There is need for better coordination between the Administrative head and the Director who is expected to have the knowledge about the capabilities of individuals and requirement of various posts that help the Head of the

Department in manpower administration and strategic decisions relating to the Department. The Director has also to take necessary steps for improvement of technical and managerial capabilities of the officers of the Directorate for which training activities are to be increased significantly and a Joint Director level officer be made as the training in charge.

7.2.6 Modernisation and computerisation have to be taken up on a priority basis in all the divisions of the head office and all regional, district, divisional and Block level statistical units of the directorate which will be the responsibility of the Director who should also undertake reviews/monthly Appraisals of Additional Directors, Regional Joint Directors, etc.

Need to have an Additional Director for Agricultural Statistics

7.2.7 Agricultural Statistical Division in the Directorate of Economics and Statistics is at present headed by Joint Director. This division is responsible for about 8000 General crop cutting experiments, 70000 crop cutting experiments under National Agricultural Insurance Scheme, Timely Reporting Scheme on Area and productivity, Improvement of Crop Statistics, Crop cutting experiments on Fruits and vegetables, Collection of Agricultural Wages and working out indices, crop cutting experiments on Minor Crops, compilation village level crop area and land use data furnished by Revenue Department, conducting meetings and finalising the crop area forecasts to be sent to Government of India, Rainfall and Irrigation Statistics and crop cutting experiments on medicinal and special crops. At present, as scheme head, the Joint Director is representing the State in frequent scheme meetings at CSO, New Delhi and other Ministries. If an officer with a higher status participates in those meetings at New Delhi, representation will be more effective and fruitful. Expediting field data by an Additional Director will be more effective, smooth and timely reporting where the District level Officers are in the cadre of the Joint Directors and Deputy Directors. He can co-ordinate with Joint Directors of Agriculture and Deputy Directors of Horticulture through monthly meetings and ensure all results are submitted to department in time. Additional Director can effectively coordinate with his counterpart in the Directorate of Agriculture and other related line Departments. Better co-ordination with District Collectors and District Revenue Officers on Agricultural Census can be ensured if it is handled by higher status officer like an Additional Director.

Need to have an Additional Director for National Sample Surveys and other related activities.

7.2.8 This division may be the Social Statistics Division comprising of National Sample Surveys, Annual Survey of Industries, Computation of Monthly Index of Industrial Production, Housing statistics as sponsored by National Building Organization. etc. As scheme head, presently the Joint Director is representing the state in frequent scheme meetings at National Sample Survey Organisation, New Delhi and other Ministries. If an officer with a higher status participates in those meetings at New Delhi, representation will be more effective, fruitful and beneficial to the State. Expediting data by an Additional Director from the line departments will be smooth, more effective and timely. He can co-ordinate effectively with other line department officers in expediting the data for various periodical publications like Statistical Handbook etc. Additional Director can effectively co-ordinate with his counterpart in the Central Statistical Organisation, Industrial Statistics wing, Kolkatta, Ministry of Statistics and Programme Implementation, etc.

Need to have an Additional Director for State Income Statistics

7.2.9 State Income Statistics in head office comprises of State Income, State Accounts in which accounts of local bodies are collected and compiled, Capital Formation, Prices Statistics, Wholesale Price Index Numbers, Consumer Price Index Numbers, etc. As scheme head, the Joint Director is representing the State in frequent scheme meetings at National Accounts Division, Central Statistical Organisation, New Delhi and other Ministries. If an officer with a higher status participates in those meetings at New Delhi, representation will be more effective, fruitful and beneficial to the State. State Income estimates are time bound. Expediting data by an Additional Director from the line departments will be smooth, more effective and timely. Interaction by an Additional Director with other stakeholders of state income in the state viz., State Planning Board, Finance Department in Secretariat will be more effective. Additional Director can effectively coordinate with his counterpart in the Central Statistical Organisation, Ministry of Statistics and Programme Implementation.

Need to have an Additional Director for Administration, Information Technology, ISSP and Monitoring

7.2.10 Besides regular administrative and related activities of the directorate the implementation of the India Statistical Strengthening Project (ISSP) is expected provide the following infrastructural and training assistance to the Directorate to a value of Rs. Crore.

7.2.11 As ISSP is a high investment project, a senior officer at the level of an Joint Director is exclusively necessary to plan and execute its implementation.

7.2.12 Frequent Meetings on ISSP, familiarisation workshops, meetings at World Bank, etc., has to be attended by a senior officer from the Department viz., an Additional Director. Planning, Procurement and execution of all items proposed have to be completed on a time bound manner and according to World Bank Guidelines. Additional Director ISSP has to initiate actions towards the meetings of steering Committee headed by the Development Commissioner. Apart from ISSP, various monitoring schemes and Statistical Audit etc. are to be managed as per prescribed guidelines and Formats for inspections etc. are to be attended by the Additional Director.

7.3 Field Level upgradation

7.3.1 The 9 Divisional offices need be headed by a Joint Director level officer supported by 2 Dy. Directors and 2 Asstt. Directors and other statistical/administrative staff.

Need for posting of Joint Directors for the Divisional Offices

7.3.2 The divisional officer has to visit districts, take up scheme inspections, co-ordinate with District Collector, District Revenue Officer, Joint Director of Agriculture and district level functionaries of other departments. Now the district level posts in Agriculture and Horticulture have been made as Joint Director and Deputy Director. But this Department has got only an Assistant Director at the district level and a Deputy Director at the Divisional Level. Two level down cadre gap dilutes the co-ordination with other department officers.

7.3.3 Besides, certain important schemes like Market Intelligence, National Sample Survey, Prices collection, Crop Estimation Survey on Food and Non-food Crops, National Agricultural Insurance Scheme, Agricultural Census, Economic Census, Industrial Statistics, Housing Statistics etc., have to be inspected by a senior officer. In many occasions, the Joint Director has to visit the fields for verifications and spot inspections. If Divisions are headed by Joint Directors, besides their inspections all field problems will be attended by them. If the level is increased, they can freely interact with the District Collectors, District Revenue Officers and senior officers of other departments. Therefore, it is necessary to upgrade the level of Divisional Officers from Deputy Director to Joint Director.

Need for upgrading the level of District Officers and Divisional Officers in the Directorate of Economics and Statistics.

7.3.4 At present the district units of this Department are headed by Assistant Directors and one Statistical supervisor is working in each Revenue Block. Under ISSP, sectors of data collection are being increased and an on-line data transmission from the Block to District, District to State and State to Central Statistical Organisation is envisaged. Strength of the proposed **BRSWAN (Bihar State Wide Area Network)** should be fully used in data transmission.

1. Directorate of Economics and Statistics is the implementing agency of various schemes of Central and State Governments in the field of Agriculture, Industries, Market Intelligence, National Sample Survey, etc.

2. For implementing agricultural schemes such as Crop Cutting Experiments under General, National Agricultural Insurance Schemes, Fruits and Vegetables, Minor Crops, the DES fully depends not only on the land records maintained by the revenue officials but also physical co-operation to achieve the target within the predetermined time.

3. The monthly Crop Area Forecast meetings are being conducted in the districts of the State in every month to finalize the area under cultivation of all major crops in the Districts in which officials from departments of Agriculture, Revenue, Horticulture, Sericulture, and Statistics take part.

4. District Collectors are the Census Officers for Agriculture Census, Economic Census sponsored by Government of India which mainly depends on statistical staff of the district.

5. For estimating the State Income, various data are being collected from Local Bodies departments.

6. All the Statistical activities being implemented by the DES are technically monitored by the Central Statistical Office, National Sample Survey Office, Ministry of Agriculture, Ministry of Statistics and Programme Implementation, All India Technical Education Council, etc.

7. Co-operation of officers from other departments are necessary for the Statistical Officers in data collection, compilation of crop area statistics, conducting of crop cutting experiments, conducting meetings of various reconciliations at the District

level and below. The ranks of District level officers in Agriculture, Revenue, etc. with whom Statistical Officers are to co-ordinate are in the ranks of Joint Directors. Co-ordination of Statistical Officer in the level of Assistant Director at District level and Statistical supervisor at Division level may not fully effective because of the status gaps. Therefore, it is necessary that the rank of the head of the district unit has to be elevated to the rank of Deputy Director of Statistics and the rank of the Divisional Statistical Officer has to be upgraded as Joint Director.

7.4 Need for proposing New Wings at Headquarters of the DES

7.4.1 Directorate of Economics and Statistics has been declared as the "Nodal Agency" for all Statistical activities in the State. Under India Statistical Strengthening Project (ISSP), twenty key areas have been identified for which the DES has to collect and maintain the minimum data set sharable with Government of India among them the following disciplines are coming afresh under the purview of the Directorate of Economics and Statistics:

      I.   **Health, Morbidity, Mortality and Family Welfare Statistics.**
     II.   **Education and Literacy Statistics.**
   III.   **Labour and Employment Statistics.**
   IV.   **Electricity Production and Distribution Statistics.**
    V.   **Environment and Forestry Statistics.**
   VI.   **Transport Statistics.**
  VII.   **Statistics for Local Area Planning.**
 VIII.   **ISSP**

All the proposed new wings will fall under one of the five Divisions listed in section 7.2.3

7.4.2 Besides these, so far the orientation of the DES was mainly as a data collection agency. More attention is now required to be given on research, special studies and preparation of analytical reports.

7.4.3 India Statistical Strengthening Project (ISSP) is a major infrastructure project involving a proposed investment of Rs. 22.79 Crore which needs to have special attention. A separate Section is required to implement this project.

7.4.4 Monitoring and review system needs to be strengthened to ensure quality of the field data. Computer applications are increasing in the wake of India Statistical Strengthening Project (ISSP) implementation. Therefore, the computer division needs to be strengthened to suit the future requirement. Web publishing and web administration is proposed to increase the public access to the data generated through various surveys and schemes of this department. Therefore, it has become necessary to have the New Divisions viz., **(i) Research, (ii) Monitoring and (iii) Computerisation** at the headquarters of the DES with individual schemes.

7.4.5 Under the present circumstances immediate restructuring of the staffing pattern in the DES need be undertaken by the state government and the proposed structure is to be implemented to strengthen the supervisory system of the DES. This structure does not propose any change for Block Statistical Officer (when posted in block) and Assistant Statistical Officers (when in state / division/ district HQ). By this structure, at the field level, the Divisions will be headed by Joint Directors and the

District units will be headed by Deputy Directors. Similarly, the head office of this Department will have 20 Assistant Directors, 20 Deputy Directors, 20 Sr. Dy. Director, 11 Joint Directors, 5 Additional Directors and 1 Director under the Principal Secretary.

The sub-ordinates field level functionaries at the entrance level i.e. BSO/ASO should be encouraged for capacity building through training and self innovation and should regarded higher post through proper scrutiny

# Proposed Organizational Set up of the Directorate of Economics and Statistics, Bihar
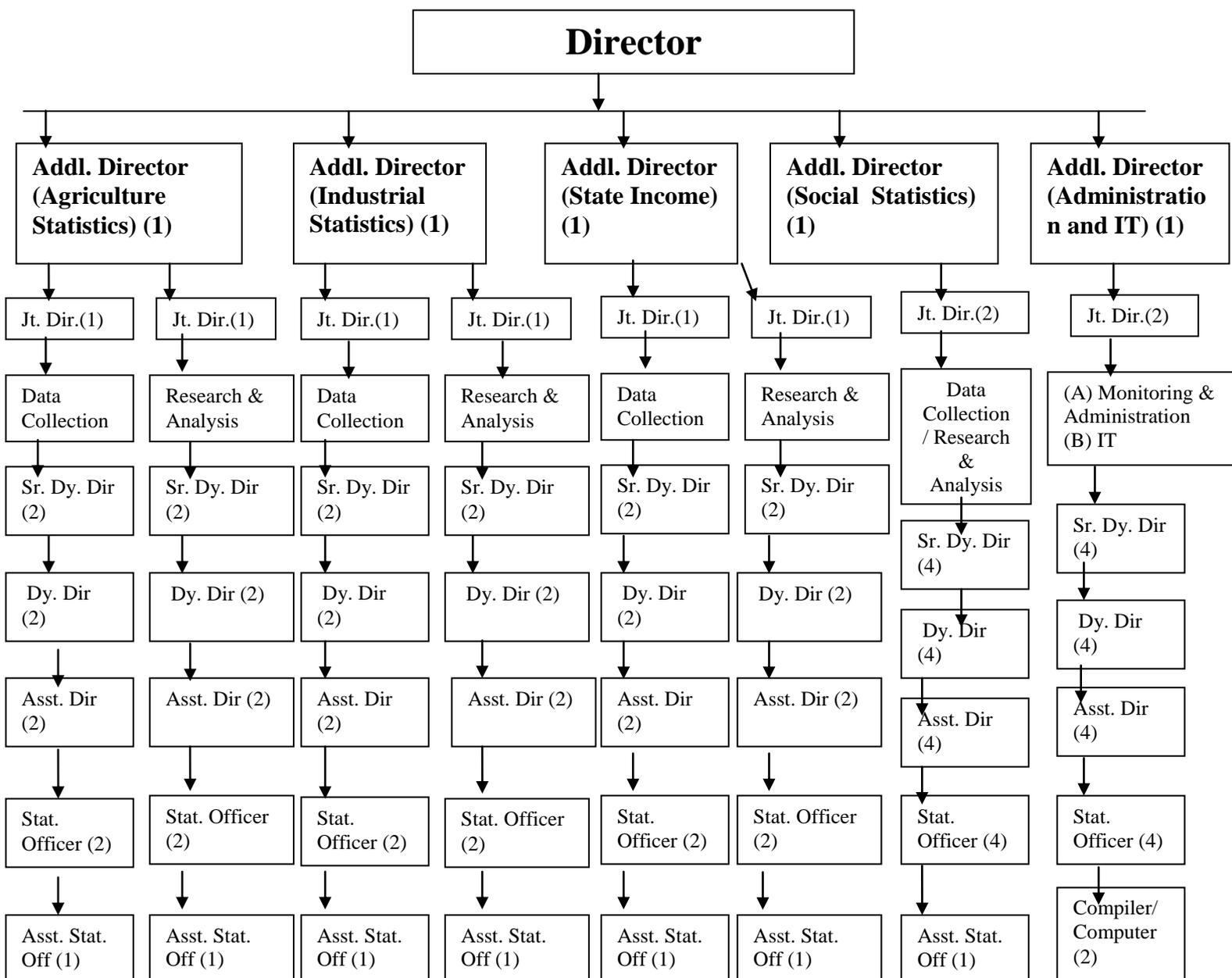
1. Season & Crop Forecast, Agri., wages, Marketable surplus, Rainfall, Irrigation. 2. CES, Minor Crops, C& A. 3. NAIS. 4. F&V, T.R.S., I.C.S., Agricultrural Census.	1. State Income & Dist. Income State Accounts. 2. Transport, Labour& Plantation Labour, 3. Consumption studies and capital formation, health, Demography & Education 4. Prices, MI, Consumer Price Index, Wholesales Price Index 5. Environmental & Forestry Statistics, Water supply & sanitation, Disaster Mang.. 6. Publication, Local Area Planning, Electricity Statistics	1. Housing, building cost Index. 2. A.S.I., I.I.P. 3. N.T.M.I.S., Man Power & Employment 4. N.S.S., Handloom, Foreign Trade.

PROPOSED ORGANISATIONAL SET UP OF A DIVISIONAL OFFICE (9)

Jt. Director

Dy. Director (Data Collection & Analysis) — Dy. Director (Admt.& IT)

Asst. Director (3) — Asst. Director (1)

Stat. Officer (2) — Stat. Officer (2)

Supporting Stat. Staff — Supporting Stat. Staff

Administrative Staff
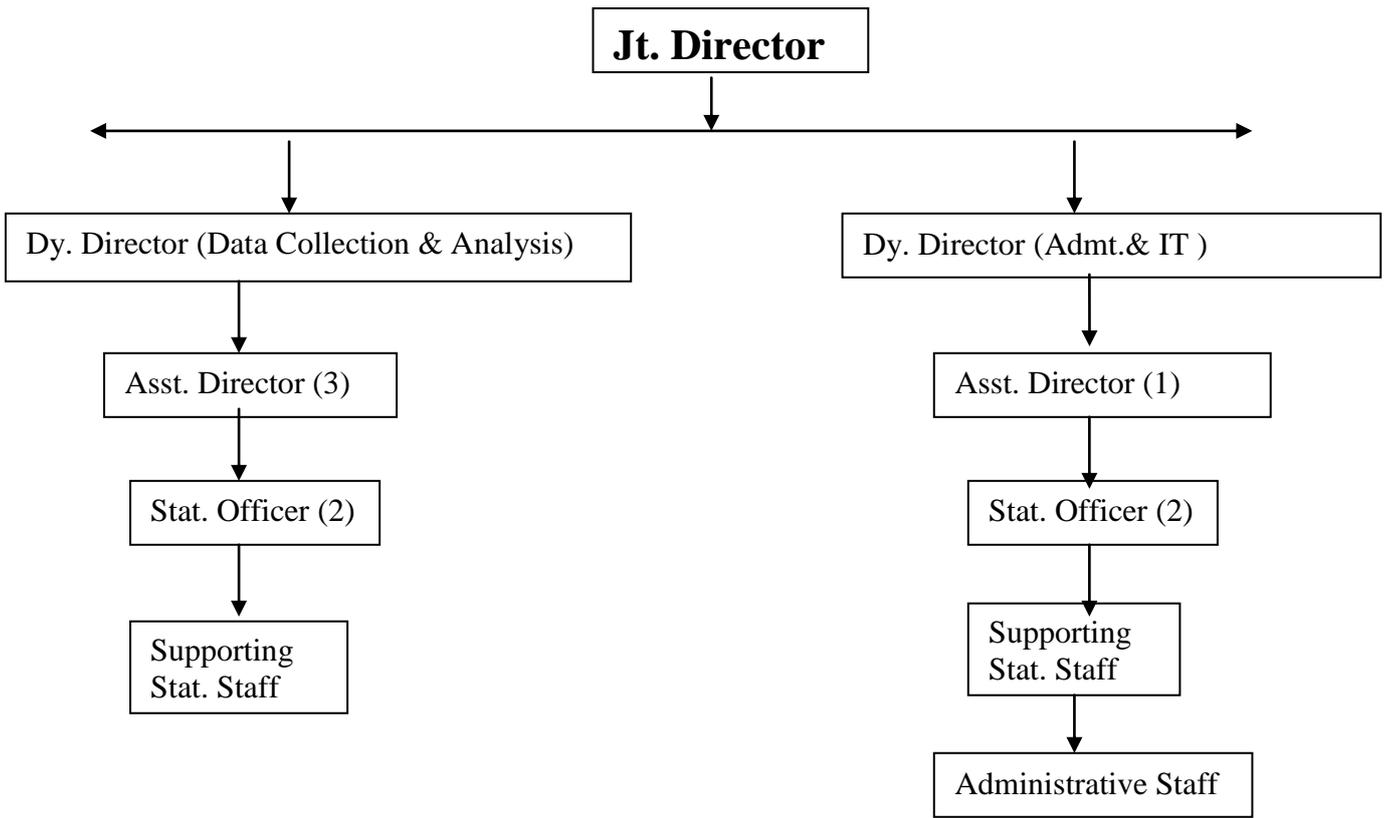
To be headed by a Joint Director and assisted by 2 Deputy Directors, 4 Assistant Directors, 4 Statistical Officers and supporting statistical and administrative staff

PROPOSED ORGANISATIONAL SET UP OF A DISTRICT OFFICE (38)

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                          ┌──────────────┐
                          │ Dy. Director │
                          └──────┬───────┘
          ┌──────────────────────┼──────────────────────┐
          ▼                                              ▼
┌─────────────────────────────────┐    ┌─────────────────────────────┐
│ Asst. Director (Data Collection  │    │ Asst. Director (Admt.& IT ) │
│ & Analysis)                      │    └──────────────┬──────────────┘
└────────────────┬─────────────────┘                   ▼
                 ▼                          ┌─────────────────────────┐
        ┌──────────────────┐                │ Stat. Officer (1)       │
        │ Stat. Officer (3)│                └──────────────┬──────────┘
        └────────┬─────────┘                               ▼
                 ▼                              ┌──────────────────────┐
        ┌──────────────────┐                    │ Compiler &           │
        │ Supporting       │                    │ Computer             │
        │ Stat. Staff      │                    └──────────┬───────────┘
        └──────────────────┘                               ▼
                                            ┌──────────────────────────┐
                                            │ Administrative Staff      │
                                            └──────────────────────────┘
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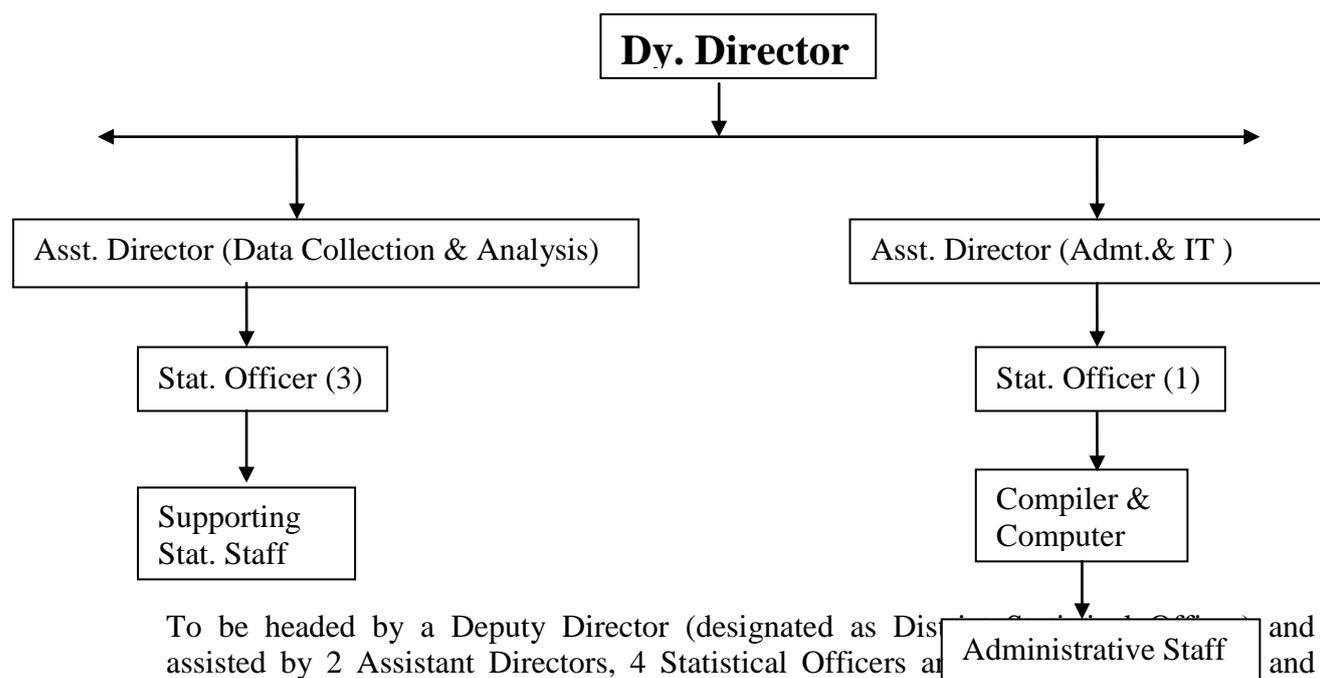
To be headed by a Deputy Director (designated as District Statistical Officer) and assisted by 2 Assistant Directors, 4 Statistical Officers and supporting statistical staff and administrative staff.

All major Line Departments generating the core statistics (other than those being produced by the DES such as Education, Health & Family Welfare, Transport, Industry, Welfare, Finance, Ravenous, Labour, Urban Development, Rural Development, Energy, Forest & Environment, PHED, PWD, Police & Panchayti Raj, should expand and upgrade their statistical units/cells to an independent Division headed by a Joint Director Level Officer supported by sufficient number of Deputy/Assistant Directors and supporting statistical personnel. The Joint Director in charge of the Statistics Division should report directly to the Secretary/ Principal Secretary of the concerned Line Department.

The rest of the Line Departments generating statistics pertaining to their administrative needs should also expand and upgrade their statistical units/cells to an independent Division headed by a Deputy Director Level Officer supported by sufficient number of Assistant Directors and supporting statistical personnel. The Deputy Director in charge of the Statistics Division should report directly to the Secretary/ Principal Secretary of the concerned Line Department

Physical Space

There is urgent need for Own Building for the Headquarters Office of DES and own Buildings for Divisional and Districts (where accommodation is yet to be provided in Collectorates).

The DES (HQ) needs office accommodation of about 41080 sq. fit & Flour space of 29600sq. fit for the proposed training institute, the details of which are given below :

Proposal for a building of the DES headquarters

	Items	Room/hall size	Sanctioned/ Poposed Post	Required Area(Sq. ft.)
(i)	Director Office	25' x 20'=500	01	500
(ii)	Additional. Dir.	20' x 16'=320	05	1600
(iii)	Jt. Dir.	16' x 14'=896	04	896
(iv)	Deputy Dir.	14' x 14'=168	08	1344
(v)	Assistant Dir.	12' x 12'=144	29	4176
(vi)	Staff hall			
(a)	Economic Statistics	8' x 8'=64	47	3008
(b)	NSS	8' x 8'=64	42	2688
(c)	Agriculture	8' x 8'=64	84	5376
(d)	Vital	8' x 8'=64	48	3072
(e)	Evaluation	8' x 8'=64	30	1920
(f)	Research & Adhoc	8' x 8'=64	09	576
(g)	Survey & Census	8' x 8'=64	30	1920
(vii)	Meeting hall	50' x 25'=1250	01	1250
(viii)	Library Room	50' x 25'=1250	01	1250
(ix)	Computer Room	35' x 25'=875	01	875
(x) (a)	Store Room (for schedule)	25' x 20'=500	01	500
(b)	Store Room (for stationary)	25' x 20'=500	01	500
(xi)	Record Room	40' x 30'=1200	01	1200
(xii)	Toilet / Urinal	10' x 8'= 80	-	80
(xiii)	Garage	14' x 10'=140	03	420
			Total Area	**34227**
(xiv)	Passage extension @20% of total Area -			**6845**
			Round Total Amount	**41080**

Approximate Cast @ Rs. 950/- per sq. fit. = **3, 90, 26,000/-**
(Rs. Three Crores Ninety Lacks & Twenty Six Thousands)
Fall Selling @ Rs. 90 = 41080*90 = 3697200
Flooring @ Rs. 140 = 41080*140 = 5751200

Total Amount ₹ = 4,84,74,400

(four Crore eighty forty Lakhs seventy four thousand & four hundred only)
The required floor space for the restructured DES has to be worked out afresh.

Office Space for field offices of the DES
Since the planning & development Dept. has instructed to have combined building for planning & statistical machinery this should be taken on priority basis to insure there completion within the time – horizon of SSSP
To accommodate the recommended officer/staff strength of the 9 divisional and 38 district offices physical space requirements are to be assessed afresh.

Proposal of Photo copier machine:

	Item	Quantity	Rate(in ₹)	Total amount
(i)	Headquarter level 80000=00	01	80000 =00	
(ii)	Divisional level 80000=00	09	80000=00	
(iii)	District level 80000=00	38	80000=00	

Proposal of Phone & Fax

Item		Quantity	Rate(in ₹)	Total amount
(i) Headquarter level 28000=00	Phone-	07	4000 =00	
40000=00	Fax-	02	20000=00	
(ii) Divisional level 36000=00	Phone-	09	4000=00	
128000=00	Fax-	09	20000=00	
(iii) District level 152000=00	Phone-	32	4000=00	
760000=00	Fax-	38	20000=00	
(iv) Evaluation office 20000=00	Phone-	05	4000=00	
100000=00	Fax-	05	20000=00	

Total   ₹12,92,000=00
(Total Rs. Twelve lakh ninety two thousand only)

Transport Vehicles for the senior officers at the DES Headquarters and Districts need be provided.

Proposal on Hiring Vehicles

Approximated monthly cost for Hiring vehicles
(for 24-hours)   =   ₹ 20000.00
Detail monthly cost of required Hiring Vehicles:-

	Item	No. of Hire vehicle	Rate (in Rs.)	Total amount
(i)	Headquarter level	02	20000	40000.00
(ii)	Divisional level	07	20000	140000.00
(iii)	District level	33	20000	660000.00

(iv)	Evaluation office	05	20000	100000.00

		Total	₹ **940000.00**

Monthly cost for Hiring the total Vehicles   =   **940000.00**
Annually cost for Hiring the total Vehicles   =   12X940000

<p align="center">Total = ₹ 1,12,80,000.00</p>

<p align="center">(Rs.one crore twelve lakh and Eighly thousand only)</p>

CHAPTER 8

HUMAN RESOURCE DEVELOPMENT AND TRAINING NEEDS

8.1 At the National Level

8.1.1 In order to equip the country's huge statistical personnel updated with newer practices in the official statistics and data management under the overall domain of human resource development, which is a challenge in itself, there is urgent need for technical enhancement of the capacity of the Central Statistical Organisation (CSO). This huge responsibility has recently been entrusted to the **National Academy of Statistical Administration (NASA)** working under the Training Division of the CSO. The task is to develop an effective strategy of training, a calendar of training programme and to implement it. The strategy entails conducting of both induction and refresher training in-house programmes at the NASA and outsourced trainings in several reputed and specialized institutions. The programmes cater to the need based training of the statistical personnel working in the Central Government, namely the ISS officers and the SSS officials, whose cadre is managed by the Ministry of Statistics and Programme Implementation (MoSPI) and the statistical officers and officials from State/UTs Governments and Public Sector Undertakings, in the identified areas.

8.1.2 CSO is also supporting capacity development of the statistical personnel of the friendly and neighbouring countries also. This entails conducting as well as organising request based trainings, International workshops and seminars.

National Academy of Statistical Administration (**NASA**)

8.1.3 The National Academy of Statistical Administration (NASA) was declared functional, at Knowledge Park – II, Greater NOIDA in Uttar Pradesh, on 13th of February, 2009, the Training Division of the CSO functions from the NASA Complex with a camp office at the Jeevan Prakash Building, Kasturba Gandhi Marg, New Delhi. The Training Division is headed by an Additional DG, supported by two DDG level officers, 5 Directors, 6 Deputy Directors, 8 Assistant Directors / SSO, a few supporting staff and contractual staff.

8.1.4 The NASA has state–of-the-art facilities for training and boarding and lodging for trainees, alongside administration and residential accommodation for faculty and supporting staff. It is situated in a serene environment, almost 50 Kms away from Delhi, in the midst of an upcoming teaching institutional area, in the NCR region. The NASA complex has three well organised building blocks, the centrally air conditioned Academic and Administrative Block, the Hostel Block and the Residential block, surrounded by well maintained landscapes .

8.1.5 NASA has **boarding and lodging facilities** for around 100 trainees at any point of time, housed in 40 Single and 30 double bedded air-conditioned Rooms. The complex has 20 residential flats/houses for the faculty and the supporting staff; some of which are occupied.

8.1.6 Need-based annual training calendars are prepared in advance for the next year besides reviewing the syllabi, duration and training methodology for all the modules. Most of the courses are conducted at NASA while some of the specialized courses are outsourced to reputed institutes/organizations in Delhi or outside.

8.1.7 **Subjects covered in the various programmes** conducted by NASA are mainly in the areas of various Official Statistical Systems, Theoretical & Applied Statistics, Large Scale Sample Surveys, SNA 1993, Data Management Techniques, Information Technology, Management, Leadership, Communication, TQM, Presentation Skills, Financial Management, Micro and Macro Economics, etc. for the statistical personnel of the country covering induction and refresher training programmes for the cadre of Indian Statistical Service (ISS) officers and officials of the Subordinate Statistical Service (SSS). It also conducts/organizes customized training courses for statistical officers of State/UT Governments, Public Sector Undertakings and International participants as well.

Important Activities undertaken by NASA, Training Division:

8.1.8 Based on the recommendations of the 16th COCSSO meeting held in Shimla, two high powered committees have been constituted for the following two important activities:

a) Creating a repository of all material for teaching 'Gender Statistics' at NASA and to develop a curriculum, course material and identify resource persons for undertaking teaching of gender statistics; and

b) Assessment of the training capacity of the States and UTs and to devise an appropriate strategy for development of capacity of the States in training their statistical personnel

8.2 At the State Level for Bihar

8.2.1 Directorate of Economics and Statistics (DES) is the most important government agency where statistical exercises in the form of Censuses, Surveys and Studies covering all the sectors of economy are undertaken periodically. To improve the technical capabilities of the staff and officers of the State Statistical System with a view to cope up with various changes taking place in the State and National economic conditions, the statistical machinery should be made vibrant with adequate training in modern techniques in statistics and collection of data   The staff and officers of the DES need to be adequately trained in the latest techniques of applied and theoretical statistics as well as exposed to latest Computer and data management techniques.

8.2.2 In order to meet the current and future needs of the policy makers there often arise needs and challenges in terms of methodology, coverage and application aspects of different schemes in the statistical system. The Government also entrusts such responsibilities to the DES to take up different types of object specific studies for formulating the policies both in the short and long run. To execute the technical works in the statistical system very effectively, the government statistician should possess updated knowledge and has to maintain a good standard of versatility, which could be made possible only through training.

8.2.3 For enhancing the quality and efficiency of the human resources in the DES and other Line Departments, the staff and officers engaged in statistical activities have to be trained through refresher training by the best faculties in the field of applied and theoretical statistical techniques in training institutions endowed with high-tech infrastructural facilities. Appropriate training at regular interval would result in motivated and trained human resources of high quality.

8.2.4 For meeting the above mentioned goals a well equipped Statistical Training Institute on the lines of the NASA is essential for the officials of the DES and statistical personnel of the Line Departments to create the platform for brain storming sessions, group discussions, conduct of workshops, seminars, etc., on varied subjects, which ensures free expressions for quality improvement and also enhance perfection in disseminating the information at all levels. This would also help to enrich the survey capabilities, analytical and computing capabilities of staff in DES.

8.2.5 Improvements in the capacity building of the staff and officers of the present statistical system are required to be enhanced through in-house and outdoor trainings. The module of the training may consist of Statistical methodology, Technical, Managerial, Documentation and Soft skill aspects so as to make the officials of the DES competent with exposure to latest developments in the methodologies.

8.2.6 For the Officers and Staff of the DES, exposure training on various statistical schemes and programmes may be imparted periodically according to fixed time frames. Also, concepts in Practical Economics, Statistics and Mathematics may be refreshed from time to time. Training on computer handling is utmost necessary for DES personnel.

8.3 Need for a Statistical Training Institute at Patna:

8.3.1 There are many universities offering degree / Diploma courses in theoretical statistics. But an institutional setup in the field of Applied Statistics including Official Statistics is missing in Bihar. To overcome this important shortcoming and to provide periodical training to officers and staff working both at State and District levels in the DES and other Line Departments, to keep abreast with latest developments and also to act as a Statistical Learning Hub for Bihar, a **Training Institute on the lines of the National Academy of Statistical Administration (NASA) of the CSO** is felt essential for Bihar, with state of art infrastructure and full time faculty.

8.3.2 The analytical capability of the staff has to be upgraded for making use of modern Statistical Methods and Operational Research Techniques in a cost effective manner, to get the most needed analyzed and processed information out of the available data, with a view to catering effectively the emerging demands for information from various organs of the Government and other data users.

8.3.3 Specialised training should be provided through nationally organized courses, for example by the CSO. However, some key professional staff may be sent abroad to be trained in new and advanced statistical methods and approaches. This could be through study tours and participation in overseas courses or through courses and seminars delivered by foreign experts or a combination of the two approaches. The staff thus trained should be used as part time specialist trainers.

Management of Statistical System

8.3.4 To improve the management of the State's Statistical System, it is imperative for the DES Director and functional heads within the DES and DSOs to have a through understanding of the role and functioning of a modern statistical system so that appropriate reform measures, as required, are planned and initiated. It is suggested that courses in the following areas are developed and organised:

1. Management principles
2. Project planning and management in the context of overall priorities with respect to Statistical activities and operations.
3. Financial management
4. Human resource management

8.3.5 **A well planned Training Module has to be developed which may include the following activities to start with :**

1. An induction course covering basic principles in Economics & Statistics, Official statistical system and related methodology, analytical reasoning and communication skills, report writing skills etc to be provided for all direct recruits in the cadres of Assistant Statistical Investigators, Block Statistical Supervisors and Assistant Directors/DSOs.
2. Periodical refresher course covering Basic principles in Economics & Statistics, Official Statistical System and related Methodology, Analytical Reasoning and Communication Skills, Methods of preparing Reports etc,. to all technical staff and officers of the Directorate of Economics and Statistics so that a statistical personnel is exposed to training once every 5 years at least.
3. Need based Special short courses on subjects like National Sample Survey subjects, Methods of State Income Estimation, Application of Statistical Packages, course on Official Statistics and Related Methodology, recent developments in the international arena etc.,
4. Training on Computer Applications, Software Development, Data security and Management of Computer Systems- handling of special statistical packages like SPSS, STRATA etc.,
5. Advanced Training in application of latest computer languages and software development.
6. Advanced Courses - Applied Statistics, Biostatistics, Industrial Quality Control, Environmental Statistics, Quantitative Techniques and Operations Research, Market Research, biometrics, informatics, etc.

> **Physical and Financial requirements of the proposed Statistical Institute are to be worked out by the DES taking into account the statistical training needs of the DES and the Line Departments.**

8.3.5 As a part of Human Resource Development, it is necessary to be fully equipped with the existing situation, developments, improvements, modern techniques and terminologies, used by other Countries, with regard to collection, compilation, data processing, analysis and presentation of various types of statistics. Exposure to such developments to the officers and staff periodically will enrich the knowledge and efficiency of this department. The programmes need be arranged in association with professional agencies, the universities in India or abroad or with reputed research and

training organisations like the Indian Statistical Institute, Indian Agricultural Statistics Research Institute, etc.

8.3.6 Required Areas of Training in Computers and IT

The areas of required training needs in computers and IT are indicated below:

1 Basic training in Computer Orientation should be given to all staff of DES at A, B and C levels.

2 Advance Computer Orientation training need be given to data users of computers along with some of the staff in C level.

3 Basic Training in RDBMS is recommended to be given to most of the staff of B and C levels which should include training on MS-Access and Oracle.

4 Training in Advanced concepts and usage of RDBMS is recommended for all the staff involved in data analysis and interpretation which should cover advanced concepts in managing and administering database.

5 Training in statistical analysis need be given to all the staff at A, B and C levels involved in data analysis and interpretation.

6 For Hardware Troubleshooting it is suggested to have a training programme for two to three persons from each office to take care of the hardware trouble shooting requirements that may arise during the course of usage of hardware.

7 Other Job Specific Training should be given to the staff and officers such as training on specific software such a SPSS used in data analysis etc.

Developing Manpower Skills

8.3.7 Having adequate staff is a necessary pre-requisite for improving data quality in terms of adequacy/coverage, accuracy, reliability and timeliness. However, this is not a sufficient condition. Generation of quality data requires skilled staff. Since most of the current statistical staff is deficient in statistical skills both at the operational level - routine methods of data collection, processing and summarization - and statistical methods to improve the practice of statistics. The latter deficiency is of particular concern as the statistical staff is not fully conversant with "applicable theoretical techniques". Further, the DES and statistical staff of line departments do not have adequate capabilities to tabulate data on demand and to analyse data from different sources.It is thus imperative for the DES to have a detailed training programme to upgrade the staff skills in the two broad

areas as given above. The areas of training have been indicated below. The first step that DES should take is to establish a structured training programme. Periodic refresher training programmes should be conducted for all the officers and staff of DES. Refresher training could be conducted in house in collaboration with the **CSO (in the absence of the proposed/recommended Training Institute at Patna)** and focus on the following areas, among others: (i) principles of economics; (ii) system of national accounts;(iii) time series analysis and forecasting; (iv) geographical information system; (v) classificatory analysis; (vi) techniques of pooling NSS Central and State Sample data; and (vi) information technology.

8.3.8 The DES should develop a training programme focussed on the following distinctive areas and linked with the on-going and planned statistical activities:

1. Induction training course for all new statistical staff
2. Training for middle level staff
3. Refresher training programmes for all officers
4. Specialized training programmes to develop a core group of specialists who can also serve as trainers
5. Management of Statistical System

Induction Training: All new statistical staff should be given induction training, preferably after an initial period of six months to one year. The induction training modules should include the following, among others:

1. An overview of the National and State Statistical Systems
2. Basic exposure to economic, financial and social sectors, and local area planning statistics
3. Fundamentals of national accounting
4. The role of sample surveys, censuses, administrative data in a statistical system
5. Management of statistical programs - data flow, coordination etc.
6. Planning, budgeting, organizational principles
7. Use of standard computer packages and data presentation

Training for Middle Level Staff:

The Bihar DES has a large number of staff at this level, who have not been exposed to training. As the middle level staff plays a critical role in execution of statistical activities, it needs to be formally trained to enhance their productivity and efficiency. Given the functions of middle level staff, they should be trained in the following areas, among others:

1. Techniques of data validation and verification
2. Use of standard computer packages in data editing and tabulation
3. Interview techniques in household surveys
4. Database maintenance and other core operations.

The training should be supplemented by special training associated with particular surveys and statistical computations so as to get hands-on training. It is suggested that the above training be provided by DES at the DSO and SDM levels who have the responsibility for generating source and field level data. The responsibility for the preparation of training materials should be assigned to the CSO so as to maintain uniformity of standards across all States and Union Territories. The training module should preferably be interactive making use of computer assisted instruction techniques.

Refresher Training Programmes: Periodic refresher training programmes should be periodically conducted for all the officers and staff of DES. Refresher training could be conducted in house in collaboration with CSO and focus on the following areas, among others:

1. Principles of economics
2. System of national accounts
3. Time series analysis and forecasting

4. Classificatory analysis
5. Techniques of pooling NSS Central and State Sample data;
6. Information technology
7. Geographical Information System

Specialised Training Programmes:

Specialised training be provided in the following areas, among others

1. Statistical Methods
2. Advanced Statistical Methods/Techniques
3. Survey Methods and Data Collection
4. Data Processing
5. Data Tabulation
6. Data Analysis
7. Data Management
8. Report Preparation

8.3.9 Specialised training should be provided through nationally organized courses, for example by the CSO. However, **some key professional officials may be sent abroad to be trained in new and advanced statistical methods and approaches**. This could be through study tours and participation in overseas courses or through courses and seminars delivered by foreign experts or a combination of the two approaches. The staff thus trained should be used as part time specialist trainers.

8.4 Manpower Requirements for the proposed Training Institute

Physical requirements of proposed Statistical Institute are as follows:

Requirement of Staff for Statistical Training Institute

SN	Designation	Number of Posts
	Academic Staff for Statistical Training	
1	Professor - Cum-Principal	1
2	Reader In Official Statistics	1
3	Reader In Statistics	1
4	Lecturer In Official Statistics	1
5	Lecturer In Mathematical Economics	1
6	Lecturer In Computer Applications	1
	Total Academic Staff	**6**
1	Administrative Officer (in cadre of Assistant Director of Statistics)	1
2	Technical Assistants (in the cadre of Statistical Inspectors)	2
3	Administrative Assistants (in the cadre of Assistant Statistical Investigators)	2
4	Steno	1
5	Typist	2
6	Record Clerk	1
7	Driver	2
8	Office Assistants	2
9	Watchman	2
10	Sweeper	3
	Total Administrative Staff	**18**
	Total Staff required	**24**

Floor Space Requirements of the Proposed Training Institute

Sl. No.	Facilities	Floor Space (in Sq. Ft)	Number of Units	Total Floor Space (In Sq. Ft)
1.	Class rooms	600	3	1800
2.	Conference Hall	1200	1	1200
3.	Library facilities	1200	1	1200
4.	Computer Lab	1000	1	1000
5.	Principal and faculty chambers	1200	1	1200
6.	Office room	1200	1	1200
7.	Mini hostel	6000	1	6000
8.	Principal Quarters	1200	1	1200
9.	Faculty quarters	800	5	4000
10	Staff Quarters	600	18	10800
	Total	**15000**	**33**	**29600**

All training needs such as Vehicles/transportation needs, Telephones, PCs, Computers, Projectors, FAX, Photo Copiers, Stationary, etc. are to be assessed on the basis of training need norms of the NASA

CHAPTER 9

INFORMATION COMMUNICATION AND TECHNOLOGICAL (ICT) REQUIREMENTS

9.1 Urgent Need for ICT

9.1.1 The functions of State Governments have increased tremendously in the fast changing world. The concept of a State has changed from that of a simply maintaining law and order to that of welfare state. Statistical data and methods are of great help in promoting human welfare, framing suitable polices and efficient functioning of various departments of state government. The DES undertakes multifarious activities pertaining to the collection and analysis of data on socio-economic aspects of the State economy, evaluation of development program and formulation of annual five year plans.

9.1.2 The DES is broadly responsible for the collecting official statistics, conducting surveys, censuses and providing statistical data to the various govt. departments such as Planning, Finance, Agriculture, Education, Health and Social Welfare etc. for policy formulation. The DES collects data from almost all State Government Offices/ Board and Corporations located in Patna and 38 districts of the state. The DES provides data to both the State and Central Govt. DES also plays a crucial role in the socio-economic development of the State by providing regular and reliable information on growth parameters and social indicators.

9.2 Existing IT System and nature of work at the DES

9.2.1 DES-Bihar does not have any dedicated EDP center or computerized solution to support it's data collection and Analysis. The processing of data is now being done on Personal Computers which have been installed at the State and District Headquarters. The electronic data processing has been decentralized at 38 Districts. The data is captured in word and excel.

9.2.2 The data for various line departments in the state is also collected by DES at district and state level. The issue is inconsistency of this data. Also the data is not made available on time leading to delay in various publications. It also relies on DP Division of the NSSO for generating tabulations of NSS data and preparation of reports.

9.3 Assessment of IT Requirements

9.3.1 The need for additional IT resources can be assessed on the basis of the volume of data handled both, current and proposed and the related data processing work load of the operational staff, and the need to access IT resources by the supervisory and top management staff.

9.3.2 Local Area Networking/Wide Area Networking is required for faster transmission of data for which all computers are to be connected to each other within an office. In the DES headquarters, the desktops will be linked to the domain server(s) using network switches. In the offices that do not have a server, peer-to-peer workgroup networks will be established

9.3.3 At the minimum, broadband is proposed for all the offices. In extreme cases, dial-up connectivity can be considered. At the headquarters, the broadband connection can be of much higher bandwidth (say 512KB or more). In case T1 leased lines are used (especially in the case of in-house web server), these can be shared for internet access.

9.3.4 The DES should have a web-site with statistical reports complied by them for dissemination. The DES can choose to have space bought out on an external server; or maintain an in-house server. Specialist staff, a generator and leased line connectivity will be mandatory for an in-house web server.

9.3.5 Windows 2000 Server is the standard platform that is generally proposed for the servers. Windows XP Professional may be recommended for the desktops. It is expected that by the time procurement does take place, newer and better versions may be available; which should be adopted accordingly. Windows XP also has built-in multi-lingual capability
Word processing, spreadsheets, e-mail and presentations requirements can be met with the MS- Office Professional software. The professional version, as compared to the standard version, also includes MS-Access database and programming tools, which may not be essential on all computers.

## 9.4 Common challenges and issues faced

- **Challenges faced**
  - Identifying correct samples (Urban Blocks, Households)
  - Preparing Questionnaires/Schedules
  - Printing of Data Collection Forms
  - Timely distribution of Data collection forms
  - Development & Distribution of Data Entry Software
  - Timely collection of data
  - Manual data verification and validations
  - Accuracy and completeness of Data collected
  - Integration and Consolidation of Data
  - Design and development of Key statistical Tables/Reports
  - Timely distribution of Key Tables/Reports which can act as inputs to decision makers
 - Ad-hoc analysis

- **Issues**
  - Non standardized Data Entry software
  - Difficulty in interview process
  - Manual data collection
  - Manual Data Verification and Validation
  - Time taken for data correction
  - Decentralized data storage
  - Retrieval of Historical data for comparison and analysis
  - No sophisticated tools for statistical analysis
  - Unskilled resources in the field of IT and Statistics
  -

9.5 Shortcomings of the present system and need for improvements

- System is not suitable for exchange of data in soft form between Computer Centre & field offices of DES & other Government Agencies.
- At present no Database or RDBMS is available.
- Only flat files are generated.
- There is no intelligent storage of Data.
- Presently the data cannot be made available online to remote users.
- No Statistical analytical tools are available.
- For any query or small reports, separate program is required to be written.
- Does not have dedicated Electronic Data Processing Center
- Historical data, though it is available in physical form, is not useful as it cannot be retrieved easily.
- Staff is not trained in handling the computer systems

The following diagram represents the current process function of DES-BIHAR
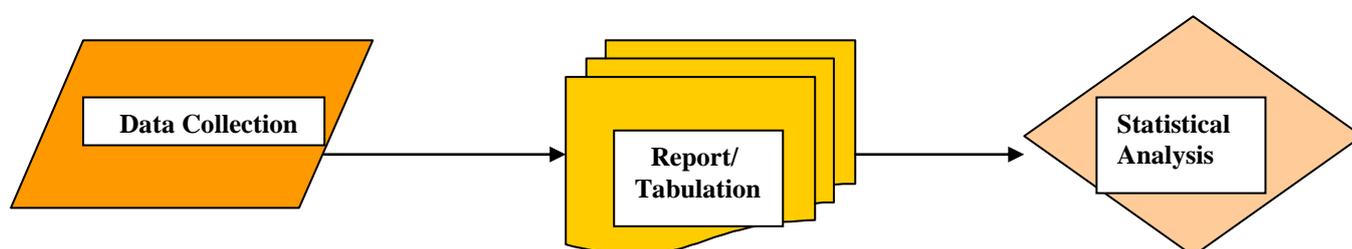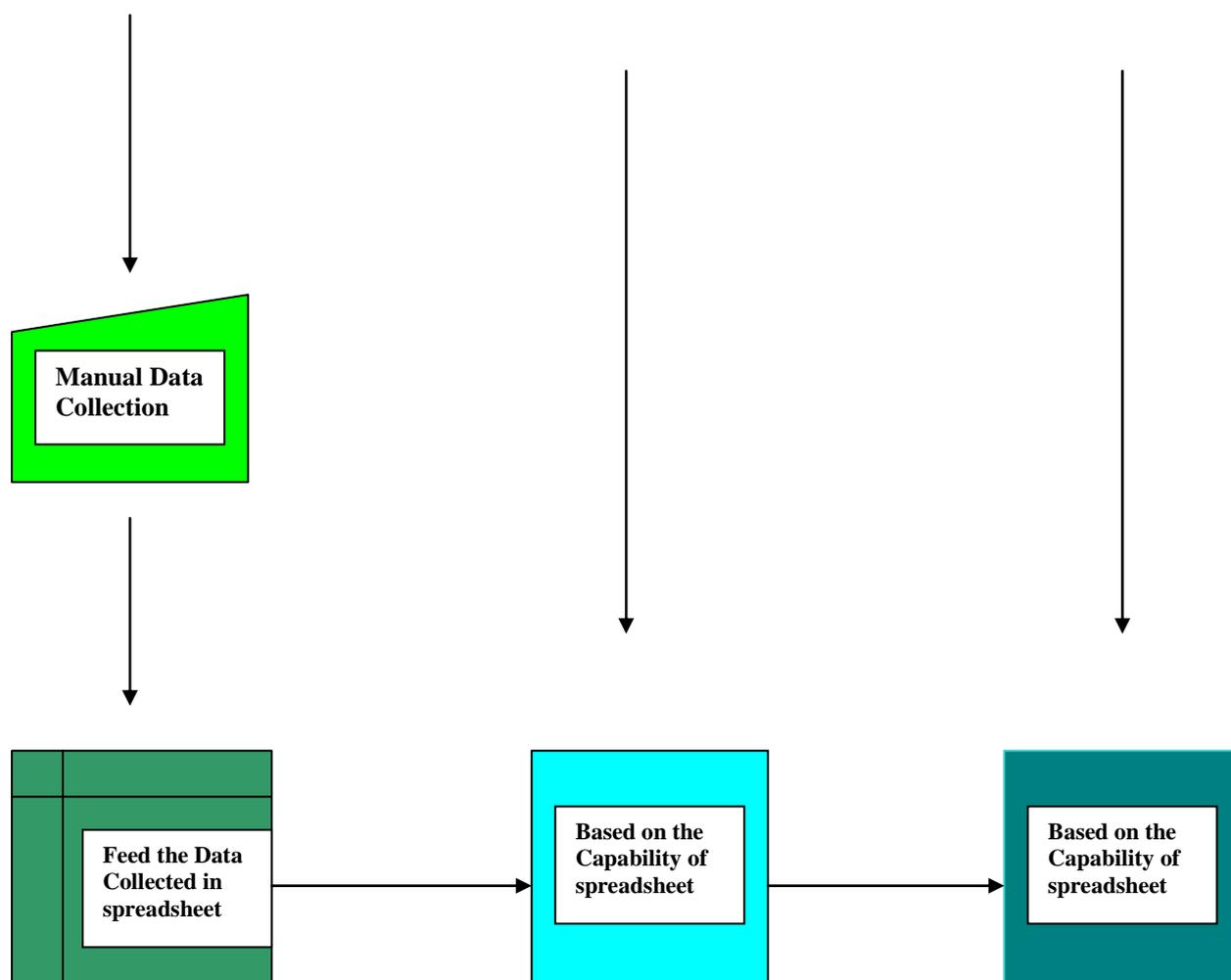
9.5.1 The National Statistical Commission (NSC) chaired by Dr. C. Rangarajan noted the following crucial deficiencies which also do prevail in DES-Bihar:

Existence of gaps in the availability of needed information.

- Delays in publication of results – primarily because majority of the time gets invested in collection & compilation of data.
- Large and frequent revisions of published results – since validation of data happen manually.
- Generation of data from different desperate data sources thus leading to gross discrepancies in official statistics from different sources.
- Lack of scientific standard on the sources, methods and procedures of statistics.
- Enablement of staff on latest statistics tools.

- Data collection and other allies aspects such as compilation, processing and preparation of results are carried out for some of the sectors although there is divergence across the states

9.5.2 For meeting the existing data gaps and improving the efficiency of the current statistical system in the state there has to be a **well defined goal which is to build- an effective & efficient statistical data/information based Decision Support System capable of providing analytical & timely information to the Planning Department, Other Departments of the State & Central Governments, Research Institutes and Academicians & Public at large.**

9.6 Approach for the new System

9.6.1 The Government of India and the State Government have taken lot of e-Governance initiatives and various Govt. departments have started implementing computerization projects. Consequently, the challenges of the Department are not limited to data collection and publishing reports. The computerization projects of various departments with the centralized architecture shall lead to creation of electronic repository of basic data as per requirements of the departments. This IT intervention entails Department to remold its present functioning of merely collecting secondary data from implementing departments and publishing reports. It is, therefore, necessary to keep pace with the advent in the technology and develop capabilities/capacities in advance statistical analysis of the data to face new challenges. It is expected that in the near future basic data shall be available to Department in the electronic format for further statistical analysis and as such the Department shall become the central repository of an electronic data. As stated above conventionally the Department is collecting data and publishing reports with bare minimum use of statistical analysis. If at all statistical analysis is to be done on a large data collected through censuses, surveys and data available from routine administrative process of departments, Statistical Analytical Tools and High end Servers are required. With the availability of such IT infrastructure, the roll of Department shall be more focused on integration and mapping of basic data of various departments, data mining & warehousing statistical analysis, forecasting, providing advice consultancy to the Government department etc. rather than collecting, compiling and publishing reports type of work. This back drop has driven, DES in identification of the new system.

9.6.2 The new system should be driven by the following consideration and features. We propose to implement these features in phased manner as indicated below.

• Strengthening the data collection process (Phase 1)

       i. Use of browser/web based technology

       ii. Decentralization data entry

       iii. Ensuring data quality

• Creation of Centralize data repository (Phase 1)

• Migration of the Legacy data both Electronic and non Electronic (Phase 2)

• Build report generation capability (Phase 2)

• Use of statistical tools for analysis (Phase 3)

• Data dissemination on the web (Phase 3)

Phase 1	Phase 2	Phase 3
Electronic Data Collection Framework	Historical Data Migration	Build Analytical Framework
Web based application with Online and Offline data entry features	Report Development	Development Do Ad-hoc reporting and Data Analysis
Data Validation and Quality check features	Web Portal Development	Distribution Ad-hoc reports
Data Consolidation in Central repository	Reports/Publication Distribution on Portal	

9.6.3 For implementing the phased approach, we can select 2 critical activities and complete all the 3 phases as proposed above and subsequently cover the remaining activities.

9.7 Benefits of the Proposed Approach

9.7.1 The new system with the above mentioned features would help DES in following ways:

- Online integration of data from all across the districts.

- Online validation of data at the time of DATA ENTRY itself.

- Creation of central repository- integrated data storage and dissemination facility on official statistics covering all economic and social sectors.

- Integration of legacy data.

- Establishment of common statistical and reporting platform across the Directorate.

- Timely availability of data and release of reports.

- Availability of statistics that meet the test of practical utility are to be compiled and made available for citizen's entitlement to public information.

- Facilitate correct interpretation of data and to provide the single version of truth.

- Achieve and maintain international standards in official statistics.

- Evolve state strategies/policies for the collection, tabulation and dissemination of core statistics, including the release of calendar for various data sets.

- Identify the core statistics which are of state interest and are critical to the development of economy.

- The system would facilitate in developing strategies for human resource development on official statistics including IT and communication need of the statistical system.

- Efficient co-ordination with state departments on statistical activities including strengthening of existing institutional mechanisms.

- Monitoring and review the functioning of the statistical system in the light of the laid down policies, standards and recommend measures for enhancement.

- With the above objectives the DES will also consider following in consultation with the technical experts

9.8 Total Cost of Ownership

Cost factors considered for arriving at the total cost of ownership

- Hardware procurement and Installation

- Software procurement and Installation

- Cost of the new technical solution

- Cost of maintenance of Infrastructure and solution

- Technology Identification

- Server Sizing

Capacity Building

The emphasis must be given on the capacity building of DES staff, hence it is recommended to incorporate in depth training on various new technologies.

Proposed Solution

The various components of the proposed solution along with details of high-level architecture of the important solution components are as follows:

High level solution approach –S/W Platform and Technical choices

- The Statistical, BI/DW solution has been proposed as the solution of choice due to its complete fitment to the statistical analysis and reporting capabilities.

- The O/S & RDBMS recommended for the DES solution.

- Web based (100% browser based) data entry (data collection) application software and state of the art statistical tools.

- Legacy Data in non RDBMS format (Text flat file formats) would be accessed for processing per requirement through native connectors in the proposed Statistical, BI/DW solution

PROPOSED SOLUTION – HIGH LEVEL ARCHITECTURE
HIGHLIGHTS – PROPOSED SOLUTION

Solution Architecture
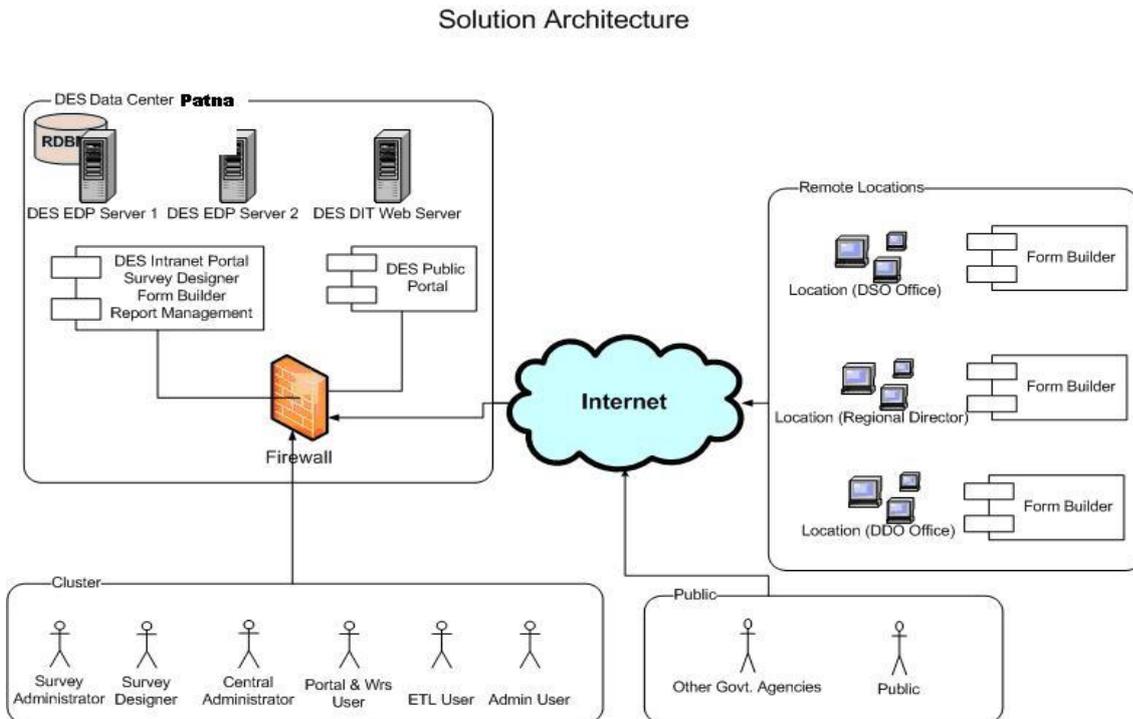
Application

- Web Based, Data Entry and Data Collection application with proper validations at various levels of data collection
- On-line/Off-line data entry and data synchronization capability
- Sophisticated software tools for Statistical analysis which can take care of current and future requirements
- Administration of user roles, responsibility and accesses/controls
- Easy configuration and customization for future needs.
- Facility for Bi-Lingual support - English and Hindi (DevNagiri script)

Infrastructure

- Data center at DES- Bihar office in Patna
- Networking at DES- Bihar office in Patna and all DSO's
- Systems at DES- Bihar office in Patna and all DSO's
- Connectivity from DSO's to Central office in Patna
- Mailing solution

Assessment of IT Requirements

Based on the end to end solution proposed a state of art IT infrastructure requires to be built. The basics components required and their descriptions are mentioned below

S.No.	Components	Recommendation
1	Data Center	A basics data center is required at DES- Patna office, since IT operations are a crucial aspect for **business continuity.** It is a facility used to house computer systems (servers) and associated components, such as storage systems, redundant or backup power supplies, redundant data communications connections, environmental controls (e.g., air conditioning, fire suppression) and security devices.
2	Servers	The servers are required to run the application for

		collections and statistical reporting. Moreover mailing, webhosting and security and backup servers are also considered.
3	Desktop Computers	All DSO are required to at-least two Desktop Computers for feeding the data collected at the field. And the systems around 15-20 is required at head office for the officers as well as for the IT infrastructure maintenance team.
	Laser printers	One colour laser printer and heavy duty network laser has been proposed for the headquarters office of the DES. All statistical cells and administrative cells will have at least one low-end laser printer per five desktop computers.
	Deskjet printers	One A3 deskjet printer need be provided at the state central IT location. They are also required to be provided exclusively to all Joint Director and above level officers for convenience in their low volume colour printing requirement.
	Scanners	Scanners are proposed for the central facility
	UPS	UPS proposed are of two types - on-line (10kVA) UPS that can support a server, some desktops and associated peripherals; as well as low-end 600VA UPS for individual computers
	Back up devices	A backup systems for the server based configurations. Optionally, fully functional on-line replicated servers can also be considered.
	Local Area Networking	All computers are to be connected to each other within an office. In the DES headquarters, the desktops will be linked to the domain server(s) using network switches. In the offices that do not have a server, peer-to-peer workgroup networks will be established.
	Internet connectivity	At the minimum, broadband is proposed for all the offices. In extreme cases, dial-up connectivity can be considered. At the headquarters, the broadband connection can be of much higher bandwidth (say 512KB or more). In case T1 leased lines are used (especially in the case of in-house web server),

		these can be shared for internet access.
	WEBSPACE	The DES should have a web-site with statistical reports complied by them for dissemination. The DES can choose to have space bought out on an external server; or maintain an in-house server. Specialist staff, a generator and leased line connectivity will be mandatory for an in-house web server; hence it has not been recommended.
	OS for servers	Windows 2000 Server is the standard platform that has been proposed for the servers.
	OS for Desktop Computers	Windows XP Professional has been recommended for the desktops. It is expected that by the time procurement does take place, newer and better versions may be available; which should be adopted accordingly. Windows XP also has built- in multi-lingual capability.
	MS-Office Professional /Standard (latest version)	Word processing, spreadsheets, e-mail and presentations requirements are met with this software. The professional version, as compared to the standard version, also includes MS-Access database and programming tools, which may not be essential on all computers.
	Anti-virus Software	Anti-virus software is essential on all computers including the servers.
	E-mail server; proxy server	Proxy server and e-mail server will provide internet connectivity and individual e-mail ID's to all the users.
	Firewall	Security considerations, especially at the head office will be addressed by the implementation of a firewall.
	Statistical Software Package	has been recommended as the standard software for statistical applications
	GIS	
	Laptops	
	Projectors	

1) Data Center

A basic Data Center is required at the central Office. The required space for building for the Datacenter needs to be given. The following requirements need be provided for building up the non-IT infrastructure at the Datacenter like:

- Air Condition
- UPS
- Electrical Layout
- Alternate Power resource
- Racks
- Civil and interior work as per the standard Datacenter norms
- Fire suppression System
- Water Leak Detectors (WLD)
- Rodent Repellents
- Passive Cabling
- Access Control etc.

a) Non- IT Infrastructure for Data Center

Sl. No.	ITEM DESCRIPTION	Amount in ₹
A	**Civil Work**	
1	Fabrication of room for 10 Ft height	
2	Providing and fixing false flooring	
3	Fire retardant paint	
4	Providing and fixing at all height false ceiling	
5	Double cup Panel Lifter for false flooring	10,00,000.00
6	Split Ac 2 Ton	
B	**FE-227 Gas Suppression, Fire Alarm & Detection and VESDA System**	
1	Fire Alarm and Detection System with installation testing & commissioning	
2	Water leakage detection system*	
2	**Rodent Repellant System	
	Total Amount for Physical Infrastructure for basic data center	

*Water Leakage detection system which will alert us in case of any water leakage to prevent the IT equipment failure due to water leakage.

**Rodent Repellant System is used to prevent the IT equipment from any type of Rodent damages

b) IT Infrastructure for Data Center

i) Servers:

Server segment will host the servers for different applications like Web server, BI/DW server, Database server, Application, Backup, Antivirus & Antispaming, Xchange & Active directory for mail users. These servers will be connected to the core layer of the LAN through higher end server farm switches. These server farm switches provide high speed and scalable connectivity for the servers.

S.No	Component	Basics Description	Qty	Amount in ₹
1	Web Server	Blade Intel Xeon dual processor 2.40 GHZ, RAM – 32 GB, HDD- 300*2 GB	1	4,25,000.00
2	Business Intelligence/DW Server	Blade Intel Xeon dual processor 2.40 GHZ, RAM – 64 GB, HDD- 300*2 GB	1	6,25,000.00
3	Database Server	Blade Intel Xeon dual processor 2.40 GHZ, RAM – 32 GB, HDD- 300*2 GB	1	4,25,000.00
4	Application Server	Blade Intel Xeon dual processor 2.40 GHZ, RAM – 32 GB, HDD- 300*2 GB	1	4,25,000.00
5	Backup Server	Blade Intel Xeon processor 2.40 GHZ, RAM – 8 GB, HDD- 300*2 GB	1	3,25,000.00
6	MS Exchange Server	Blade Intel Xeon dual processor 2.40 GHZ, RAM – 32 GB, HDD- 300*2 GB	1	4,25,000.00
7	Antivirus Server	Blade Intel Xeon processor 2.40 GHZ, RAM – 8 GB, HDD- 300*2 GB	1	2,75,000.00
8	Anti spam Server	Blade Intel Xeon processor 2.40 GHZ, RAM – 8 GB, HDD- 300*2 GB	1	2,75,000.00
9	Active Directory Server	Blade Intel Xeon processor 2.40 GHZ, RAM – 8 GB, HDD- 300*2 GB	1	2,75,000.00
	Total amount for Blade Servers in ₹		**9**	**34,75,000.00**

ii) Blade Enclosures:

A Blade System enclosure is required since it holds up to 16 server and/or storage blades plus redundant network and storage switches. It includes a shared, multi-terabit high-speed mid-plane for wire-once connectivity of server blades to network and shared storage. Power is delivered through a pooled power backplane that ensures the full capacity of the redundant hot-plug power supplies is available to all blades.

iii) Back up Devices:

Backup devices are required to take the back up of the data stored electronically in the systems for future purpose in case some loss of data happens to the existing system

Backup Device			
13	Tape Blade	1	
14	800GB RW Data Cartridge	7	2,50,000.00
Blade Enclosure			
10	Blade System Enclosure	1	22,00,000.00
12	One time installation and support for five years		7,00,000.00
	Total Amount in ₹		29,00,000.00
15	Universal Cleaning Cartridge	2	
	Total Amount in ₹		

iv) Storage:

Centralized dedicated storage for Webserver, BI/DW & Database are required to handle growing storage data of different server's application.

16	**Storage for Data Store**	**₹12,00,000**

v) Other Equipments:

S.No	Components	Basic Description	Qty	Amount in ₹
10	Switches	24 Port Managable Switch required for networking at central Site for approx. 20 Users.	2	4,00,000

11	Printer	1 No. MFP printer will be used at Central site to print, scan & copy of Any document.	4	1,00,000
31	Desktops	20 Nos of Desktop will be used at Central site for user at central site.	20	10,00,000
32	Networking for 20 Points	To connect the Central Office User	1	50,000
33	Data base Software Licenses	Used to install at Data base Server	1	18,00,000
34	UPS - 10 KVA with 30 Min. Backup	This UPS will be used to provide Backup to servers & other IT equipment placed in server Room for 30 Min. as in case of Power failure we can work for 30 Min.	1	2,50,000
35	UPS – 600 VA for 20 Desktops	This UPS will be used to provide Backup to the desktop at central office	20	75,000
	Total Amount			**36,75,000**

vi) System Softwares:

S.No	Components	Basic Description	Qty	Amount in ₹
36	RHEL Std. 2 Socket 3 Year License	Software License for Linux Server	4	523250
37	Windows Sever Std 2008R2 SNGL OLP C	Software Licenses for Microsoft based servers.	5	213785
37	Media	CD for Microsoft servers	1	2243
38	Exchange Server Std 2010 SNGL OLP C	Exchange server licenses for making Exchange server for mailing.	1	42608
39	Media	CD for making Exchange servers	1	2243
40	Backup exec 2010 server win per server std express band s	Back software Licenses used for Backup	1	106600
41	Backup exec 2010 agent for windows systems win per server std lic express band s	Back software Licenses used for Backup	2	111800
42	Backup exec 2010 agent remote for linux or unix servers lnx/unx per server std lic express band s	Back software Licenses used for Backup Linux/Unix Based server	3	110500
43	Backup exec 2010 for exchange win per server std lic express band s	Back software Licenses used for Backup of Xchange server	1	106600
44	Backup exec 2010 for active directory win per domain controller std lic express band s	Back software Licenses used for Backup of Active directory server	1	106600

45	Backup exec 2010 agent for database win per server std lic express band s	Back software Licenses used for Backup for Database server	1	123500
46	Firewall with 3 Years Licenses	This is the UTM box which will prevent the servers for any kind of Virus, Threat etc.	1	598000
47	Implementation extra	This will be installation charges for servers, firewall etc.	1	260000
	Total Amount			**23,07,729**

Vii) Applications

An applications needs to build which caters all the requirements of DES- Bihar and have the following features:

- Web Based, Data Entry and Data Collection application with proper validations at various levels of data collection
- On-line/Off-line data entry and data synchronization capability
- Sophisticated software tools for Statistical analysis which can take care of current and future requirements
- Administration of user roles, responsibility and accesses/controls
- Easy configuration and customization for future needs.
- Facility for Bi-Lingual support - English and Hindi (DevNagiri script)

This will be deployed at central level and client access would be given at each system where data entry, reporting viewing and analysis are required. The following is the budgetary estimate of the same.

S.No	Components	Unit	Total Amount in ₹
1	Online Data Entry application/ Business Intelligence/ Datawarehousing/ Statistical Analytics/Forecasting	Server based License	1,50,00,000
2	Development/ Implementation/ Webportal / Training	8 -12 months	2,50,00,000
3	Maintenance & Support	36 Months	60,00,000
4	One Data Entry operator at 38 districts	24 Months	1,20,00,000

	Total Amount			5,80,00, 000

2) District head quarters:

The district headquarters are presently equipped with two Desktop's at each district, and thus it is suggested that 2 more PC's at each district with necessary IT infrastructure.

Sr. No.	Item	Description	Qty	Total Price in ₹
1	Desktop	2 Nos of Desktop will be used at each District site for filling the data for onward transmission to central site.	80	3952000
2	UPS	600 VA UPS will be connected for each desktop for lose of data at any time of Power tripping & if Power is not available we can still work for short time.	80	218400
3	Printer	1 No. MFP printer will be used at Each district to print, scan & copy of Any document for the purpose of sending to central site.	40	468000
4	WinSvrCAL 2008 SNGL OLP C UsrCAL	These windows Licenses are required to access the server	80	145693
5	ExchgStdCAL 2010 SNGL OLP C UsrCAL	These Licenses are used to access the Exchange server installed at central site for Mailing wtc.	80	302778
6	InterScan Messaging Security Suite - MultiOS (Three year license)	Antivirus for Desktops for 3 Years	80	257811
7	Endpoint protection 11.0 bndl promo std lic basic 36 months express band f	Antivirus for Desktops for 3 Years	80	176270
8	Switches	8 Port switch will be used at each District level to connect the internal user.	40	78000
9	Networking	Approx. 5 Point Networking at each district location	40	312000
	Total Amount			**59,10,952**

3) Line departments:

The 6 major line departments as mentioned below. We are suggesting 2 items of each except printer which will be single at each line departments

1. Directorate of Health and Family Welfare
2. Directorate of Education
3. Commissionorate of Labour
4. Directorate of Employment and Training
5. Forest Department
6. BSRTC

Sr. No.	Item	Description	Qty	Total Price in ₹
1	Desktop	2 Nos of Desktop will be used at each District site for filling the data & send to central site.	12	592800
2	UPS	600 VA UPS will be connected for each desktop for lose of data at any time of Power tripping & if Power is not available we can still work for short time.	12	32760
3	Printer	1 No. MFP printer will be used at Each district to print, scan & copy of Any document for the purpose of sending to central site.	6	70200
4	WinSvrCAL 2008 SNGL OLP C UsrCAL	These windows Licenses are required to access the server	12	21854
5	ExchgStdCAL 2010 SNGL OLP C UsrCAL	These Licenses are used to access the Exchange server installed at central site for Mailing wtc.	12	45417
6	InterScan Messaging Security Suite - MultiOS	Antivirus for Desktops for 3 Years	12	38672
7	Endpoint protection 11.0 bndl promo std lic basic 36 months express band f	Antivirus for Desktops for 3 Years	12	26441
	Total Amount in ₹			**8,28,143**

Summary of Total Costing

S.No	Component	Total Amount in ₹
	Data Center and Central Office	
A	Non- IT Infrastructure	

		Preparation of data center civil work	10,00,000
B		IT Infrastructure	
		Blade server	34,75,000
		Blade enclosures	29,00,000
		Backup devices	2,50,000
		Storage	12,00,000
		Other equipments	36,75,000
		System Softwares	23,07,729
C		Applications	
		Data entry application/BI/DW/Statistical Analysis/Forecasting/Webportal	5,80,00,000
2		District Head Quarters	59,10,952
3		Line Department	8,28,143
		Total Amount	**₹7,95,46,824**

CHAPTER 10

Legal Protection for Data Collection and Dissemination

10.1 Statistical legislation

10.1.1 For any Statistical System the process of data collection starts with the selection of the sample units(in a sample survey) or from every individual units if it is conducted as a census and complete enumeration. Primary data are collected directly from individuals and institutions under National Sample Survey, Economic Census, Handlooms survey, Agricultural Wages, etc. On the other hand secondary data are collected from administrative records or statutory returns from various government departments, institutions and industries. The quality and timeliness of data collection mainly depend on the cooperation of the respondents.

10.1.2 Generally collection of data is influenced by psychological determinants such as the way the data collectors (investigators) approach the respondents and data suppliers. Success of the process of data collection depends on the skills of the investigators such as tactics, persuasion ability, patience, lateral attitudes etc. If the investigator is facilitated or provided with specific legal provisions, it would enable the investigator to collect quality data and the morale of the investigator would improve with a sense of security.

10.1.3 The urgent need of the hour is broader legislation, conferring statutory power to the personnel of the statistical system. The Government of India have been in the process of putting the entire data collection within a legal framework, laying down the obligations and rights of the respondents as well as those of the data collectors. The National Statistical Commission as a high level body having a policy-making, standard-setting and co-ordinating role for the statistical system is for broader legislation in this regard.

10.1.4 Presently there are two laws relating to collection of Statistics, called Census Act, 1948 and Collection of Statistics Act, 1953. There is a third set of laws, mainly for administrative purposes, under which statutory returns have to be submitted to specified authorities. These returns are an important source of official statistics. This includes the Registration of Birth and Death Act of 1969. Many of these laws are outdated and require a relook.

10.1.5 The Collection of Statistics Act, 1953 covers only limited areas of data collection and facilitate the collection of statistics relating to industries, trade, and commerce. The Act specifies that the Central or a State Government may appoint a Statistics Authority, who in turn may serve on the owner of an industrial or a commercial concern or an individual, a notice requiring him to furnish certain listed information about the concern. It confers the right of access to relevant records or documents and restricts publication of any information disclosing the identity of the concern. It also provides for certain penalties for wilfully refusing to furnish, or, the furnishing of false information.

10.1.6 However, this law has so far been sparingly used for collecting data under Annual Survey of Industries, to collect information on input, output and employment from a limited segment of the industrial sector. A very large segment of industries remains uncovered and even the penalty clause has not been successful in avoiding non-response.

10.1.7 Though clauses 3(a), (b) and (c) of the Collection of Statistics Act (1953) on the one hand gives the State Governments the right to name a Statistical Authority, it seems to be substantially negated by subsequent provisions of the Act under the same clause. The Statistics Authority for the Annual Survey of Industries has always been the Head of the Field Operations Division of the NSSO, while the DES has also been engaged in collection of data on Annual Survey of Industries, without any such legal support. To strengthen the attempts of the DES to collect industrial statistics, particularly through the Annual Survey of Industries, provision of the appropriate legal authority is necessary. As such these existing laws are not broader enough to serve our data requirements. Hence there is a need for a State to enact specific laws to ensure the speedy execution of statistical activities.

10.1.8 Statistical legislation is a fundamental pre-requisite for an effective statistical system. The statistical legislation defines the statistical system and roles and responsibilities of the various players in the system and safeguards the system and regulates collection and management of official statistics. Presently legislative support is available for the registration of births and deaths, labour and employment, factories etc. As part of the process of implementing the recommendations of the National Statistical Commission the Central Government has enacted the Collection of Statistics Act 2008 and repealed the Collection of Statistics Act 1953. The new Act enhances the scope of data collection in the official statistical system of the country. It covers all types of data providers, namely, households, enterprises and establishments, unlike the 1953 Act which covers only industrial and commercial concerns.

The new Act provides for modern methods of data collection like E-filing. It empowers not only the Central and State Governments, but also the local governments in data collection. It provides for more decentralized data collection activities, as it enables the appointment of statistical officers in any given geographical unit for this purpose. It also has provisions for using the data only for statistical purposes and for disclosing the data to potential users only, after suppressing the identification details of the concerned data providers. The new Act helps in avoiding unnecessary duplication of survey efforts. The Central Government is empowered to make rules under this new Act. For this purpose the Ministry of Statistics and Programme Implementation (MOSPI) is in the process of consultion with other Central Government departments, State Governments and UT Administrations for suggestions to the draft rules under preparation by the Central Government. It is expected that the Act and rules will come into force within a short course of time. There is need for the State Govt. to adopt such legislation on statistics for improvement in the statistical system of the State

Salient features of the Collection of Statistics Bill 2008

1. Provision to cover any topic under Core Statistics, as defined by the National Statistical Commission;
2. Scope has been enhanced to collect statistics not only from industrial/commercial concerns but also from individuals and households covering wide spectrum of Statistics under the Bill;

3. Provision to make it obligatory on the part of individuals, or enterprises, or State and private agencies to provide the information sought for any survey;
4. To provide right to access to records, including the records of Government agencies for statistical purposes;
5. To ensure the informant's right to privacy by making it illegal to publish the identity of the informant, or by requiring him to furnish sensitive information;
6. To provide penalties for informants, for their refusal to supply, or for wilfully supplying wrong information; and
7. To make it a penal offence for a statistical officer authorised to collect, process, or disseminate information collected from any survey under the Act, if he wilfully distorts or manipulates the data.

CHAPTER 11

STRATEGIC STATISTICAL GOALS AND EXPECTED IMPROVEMENTS

11.1 The Vision and the Mission

11.1.1 The **Vision** of any State   Statistical System should be to become as one of the finest and most creative Statistical System in the National Statistical System and to effectively monitor the Programmes and Projects of the government ensuring efficient use of National Resources.

11.1.2 With such a Vision in the background the **Mission** of the State Statistical System should have the following objectives:

(i)   To make available reliable and timely statistics and to undertake regular assessment of data needs for informed decision making;

(ii)   To cater to the emerging data needs in a dynamic socio-economic context, to reduce respondent burden and to avoid unnecessary duplication in data collection and publication;

(iii)   To adopt and evolve standards and methodologies for statistics generated by various agencies responsible for generation of State and district specific statistics pertaining to the activities of the concerned agency and to steer its development for further improvement and bridging data gaps;

(iv)   To ensure and strengthen trust and confidence of all stake holders in the State Statistical System by maintaining confidentiality of data providers and promoting integrity and impartiality of all elements of official statistics ;

(v)   To provide leadership and coordination to ensure harmonious, efficient and integrated functioning of all the elements of the State Statistical System;

(vi)   To continue to asses skill requirement, and develop human resource capacity at all levels of the statistical system;

(vii)   To participate and contribute actively in all national initiatives and to support development of the National Statistical System; and

(viii) To facilitate and monitor infrastructure and large projects to achieve high performance levels through systems improvement, and adoption of best practices.

11.2 Basic Statistics for Local Level Development

11.2.1 This is one of the most neglected area of statistical data required for regional and micro level planning. To strengthen and improve the existing data gap the Planning Commission has given in-principal approval for the scheme of Basic Statistics for Local Level Development of the MOSPI. Under the Scheme, village level statistics to be compiled in a village schedule by the Panchayat Secretary from the existing village level registers and with the help of village level functionaries such as Anganwari workers, ANM, village Pradhan, Chowkidar, revenue officials, Patwari, etc. Prior to drafting of the new scheme, the Planning Commission has suggested to roll out a pilot scheme to identify data sources for compilation of information on basic statistics for local level development. To capture required data on various socio-economic indicators and their sources, the pilot scheme is in operation in 32 States, UTs except Delhi Chandigarh and Goa. A special purpose software has been developed for the purpose of creation of village level database and generation of certain types of reports and provided to the States/UTs for preparation of pilot project data

sets. Two training courses for District level functionaries were conducted by the CSO in 2009.

11.3 Long-term Vision to meet specified data needs

11.3.1 In light of the assessment of needs and analysis of the current situation in the state, the State should adopt the following Vision for the State Strategic Statistical System.

Vision for the State

a) Development of a coherent and consistent system of data collection, analysis and dissemination within the present structure of a decentralized set of responsibilities under the constitutional framework and ensure that official statistics matches the data needs at all levels of aggregation from nation level down to sub district level and so that it would be comparable both across time and space.

b) Wherever it is required, suitable standards and methodologies should be evolved and make them dynamic in tune with the process of strengthening state capacities.

c) To strengthen the coordination mechanism among the data producers by taking advantage of the status of DES as the nodal agency and the authority for managing the state statistical cadre.

d) To develop expertise among statistical personnel for independent design of surveys and studies.

e) Generation of base line data and to provide subsequent data sets for carrying out meaningful evaluation of development programmes.

Mission of the State Statistical System

a) To elevate the status of statistics in the eyes of administrators
b) To make the state statistical system an indispensable instrument for the development, regulatory and service functions of government
c) To enhance the creditability, comprehensiveness / completeness, timeliness and usability of statistics within and outside government
d) To provide physical infrastructure and to promote human resource capabilities of the statistical system
e) To provide easy accessibility to users by adopting modern technology.

11.4 Strategic Goals

Goal 1: To raise awareness of the role of statistics in administration

For achieving this goal the following strategies are recommended:

1) Organise a series of seminars and workshops on the role of statistics in administration for senior administrators and deliver messages through targeted advocacy materials and statistical activities
2) Conduct interactive sessions among statisticians in the state line departments

Goal 2: Effective implementation of "The Collection of Statistics Act" 2008

For achieving this goal the following strategies are recommended:

1) A detailed circular need be issued by the DES to all Line Departments and other agencies responsible for data collection and generation of statistics about the Act.
2) To conduct a workshop for the Secretaries, heads of the departments and Academicians for apprising them of the provisions of the Act and the role of the line departments and

3) To conduct a training programme on the provisions of the Act to all   statistical personnel.

Goal 3: To bring about better coordination among data producers

For achieving this goal the following strategies are recommended:

1) Establishment of a separate coordination division in the DES to oversee the implementation of a) Collection of statistics Act 2008, b) Nodal functions of the DES and c) Conduct structured meetings of all departmental statisticians to review the activities and performance of SSS.

2) Constitution of district level committees under the chairmanship of the District Magistrate with DSO as member secretary to coordinate statistical activities and improve data production process

Goal 4: To raise the accuracy and reliability of statistics

For achieving this goal the following strategies are recommended:

1) Training of staff of DES and line departments on the CSO technical specifications, data assessment techniques and data collection techniques to the appropriate levels of officials for their responsibilities
2) Effective coordination among stakeholders to produce compatible statistics, meeting quality standards
3) Improvement in the quality of supervision of data collection
4) Establishment of a better statistical infrastructure needed to produce good economic and social statistics
5) Filling of all vacant posts of primary workers or outsource the work wherever needed
6) Focus on the 20 key statistical activities for providing reliable, credible and timely data in the first instance and extend this to the entire state statistical system and
7) Conduct of type studies to improve the base level data wherever needed

Goal 5: Raise the usefulness and relevance of state statistics

For achieving this goal the following strategies are recommended:

1) Acquire appropriate and adequate state-of-the-art ICT equipments, software and necessary training in ICT applications for all staff to meet the proposed standards for periodicity and timeliness of available data sets

2) Development of effective mechanism for collection and collation of the regular flow of data available from administrative records and these should be duly complemented with the data produced by periodical censuses and surveys

3) To evolve proper mechanism for effective validation, storage, retrieval, transmission of the administrative data using modern tools of Information and Communication Technology

4) Application/adoption of established methods of small area estimation to arrive at estimates at district and sub-district levels from surveyed data

Goal 6: To understand and meet user needs more consistently

For achieving this goal the following strategies are recommended:

1) Establishment of an effective system to meet and understand users needs.

2) Consultation with users on a regular basis about their needs and the extent which available data sets meet those needs

3) Bring out annual reports containing analytical data and also disseminate trough departmental website for easy and better accessibility to users

4) To ensure that metadata is prepared and made available with the data

5) Identification of suitable indicators for monitoring and for review and improvement, keeping the various objectives of the department in view and the schemes implemented

Goal 7: To supplement statistical data with analytical work and capacity building of the statistical personnel

For achieving this goal the following strategies are recommended:

1) Establishment of a fully equipped training centre which will also function as research and training as well as analysis unit

2) To organize training programmes for statistical personnel in statistics, economics, management, evaluation, implementation of the Statistics Act, 2008, project planning, through well structured curriculum

3) Develop curriculum / training modules for HR development by engaging consultants

4) Impart training to all statistical personnel in the modern management of statistical institution and ICT

5) The heads of the different divisions of DES, heads of departmental statistical divisions, chief planning officers and district statistical officers should bring

out analytical reports at the district and state level on the official statistics collected at the grass root level. The Annual Administration Reports of the departments should also contain analytical data

Goal 8: Enhance the status of DES

For achieving this goal the following strategies are recommended:

1) Necessary administration action is needed to elevate the status of Director, Directorate of Economics and Statistics to the level of Secretary to the state Government.

2) To provide adequate human resources to achieve the goals and strategies of SSSP bearing in mind the existing recruitment polices of the government.

3) Provide adequate resource for implementation of SSSP

4) District statistical offices should have their own accommodation or in government premises

5) All DSOs offices need be fully equipped with modern office and computing equipments.

6) Establishment of strong inter communication links between DES and national level statistical organizations in all central ministries, other state SSBs, district statistical offices and private users

Goal 9: To carry out the 20 key statistical activities according to specified national standards

For achieving this goal the following strategies are recommended:

a) State Domestic Product (SDP) Estimates:

Goal A : Achieving reliability of the estimates

• To have latest rates and ratios, a number of type studies should be conducted by the DES

• Commercial Taxes Department to revise the VAT returns to suit the needs of the SDP estimates
• Evolving uniform format for obtaining annual accounts of NDCUs in a soft copy entered through a software developed for this purpose by the DES
• Reconciliation of agriculture and horticulture data to have single data set
• Development of software for compilation of annual accounts of local bodies
• Establish GDP WAN facility and other infrastructure provided by the CSO

Goal B : Achieving credibility of the estimates

• Freezing of estimates at the end of third year of the estimate
• Having a single dataset with different agencies

Goal C : Achieving timeliness to bring out the estimates

• Bringing out advanced estimates by 25th of February every year (current year estimates)
• Bringing out quick estimates by 10th of February every year (previous year estimates)
• Bringing out final estimates by 31st of January every year (year before last)

Goal D : Information, Education and Communication:

• Uploading estimates immediately after the release on official website
• Bringing out annual publication during the month of June every year
• Holding workshops of data producers, compilers and users to disseminate the information and to have feedback for further improvement

b) Estimates of Capital Formation and Savings:

Preparation of Public and Private components
• A project need be taken up to compile estimates of Capital Formation for public and private from 1999-00 to till date. This exercise will build the capacity of DES personnel to compile estimates for future years.
• Software for compilation of Capital Formation and Savings estimates is to be developed.
• The compilation of estimates should be undertaken by the DES on annual basis.

Data dissemination
• These estimates should be released along with the SDP estimates every year

c) Estimates of District Domestic Product
Goal A : Achieving reliability of the estimates

• All DSOs should start compilation of DDP estimates
• Development of a software for compilation of Budgets and annual accounts of local bodies at district level
• Upgradation of in-house IT infrastructure and development of relevant software for compilation
• Regular training for staff- orientation and re-orientation courses

Goal B: Achieving creditability of the estimates
• Having a single dataset with different agencies

Goal C: Information, Education and Communication
• to bring out reports annually and uploading estimates immediately after the release on official website

e) Estimates of the Contribution of Local Bodies
Goal and Strategies:
• All DSOs should commence compilation of estimates of the contribution of local bodies after a survey to be undertaken by the DES
• The Budget and Accounts of Local Bodies need be computerized.
• Reports need be generated at district and state level before the compilation of

SDP and DDP estimates
• Rural Development and Panchayat Raj (RDPR) and Urban Local
Development Department should monitor the submission of Budget and
Annual Accounts of Local Bodies to the concerned authority on time so that
the computerization of these documents takes place on time

f) Annual Survey of Industries (ASI):

g) Index of Industrial Production (IIP):

The above two statistical activities need be initiated as early as possible

h) Crop Area and Production Estimates:

   Road Map to Improve Crop Area and Production Statistics

Goal A : Creating awareness among public
• This can be achieved by Information, Education and Communication (IEC)
activity. IEC involves workshops, seminars to farmers, canvassing activities
related to agriculture statistics and its importance in grama sabhas, through
pamphlets and other publicity measures
• NGOs may be involved in propagating the importance of agriculture statistics

Goal B : Increase the accuracy and reliability of statistics
• A methodology to be derived to augment results of ICS and TRS with that of the
final area and production estimates. A correction factor may be derived from the
observation in area enumeration of ICS
• Exploring the possibility of aerial photography and remote sensing technology to
estimate area of crops

Goal C: A scientific, simpler methodology to cover more crops for better estimates.

• A systematic method of oral enquiry to estimate yield. Oral enquiry method
may be launched on a pilot basis for one or two crops.

Goal D: Development of skill and capability of the staff
• Intensive training to field staff and supervisory staff
• A training institute to be established for the Directorate of Economics and
Statistics to give continuous in-service training for capacity building to both
department staff and staff of relevant line departments

Goal E: Improve the credibility of the system
• Follow up supervision in ICS for corrective action in the defaulting villages in
the succeeding year

**Goal G: Development of better sustainable system to have reliable, credible and
timely area and production statistics**
• There are a large number of vacant posts at the block level. These posts are to
be filled in a phased manner within three years in order to have better field
work, supervision and monitoring

i) Wholesale Price Index

Goal : The DES should initiate necessary action to become an important contributor in the scheme and participate in the national activities.

j) Consumer Price Index

Goals and Strategies: The state should participate in the construction of the CPI.

• Since the CPI for industrial workers, agriculture labourers and urban nonmanual employees represent a certain set of categories which does not represent the whole population, the National Statistical Commission has recommended constructing CPI for rural and urban areas at district level.

The NSSO has taken up a survey on consumer expenditure, employment and unemployment during the 66th round from July 2009 to June 2010. It now nwcessary to make use of this survey to arrive at the weighting diagram and item
basket for construction of CPI for rural and urban areas.

• Holding workshop of data producers, compilers and users to disseminate the information and to have feedback for further improvement.

k) Birth and Death registration and Population
Goals and strategies:

• It is essential to open registration centres in all government hospitals/nursing homes/primary health centres and in private hospitals in every district of the State
• District andblock level registration functionaries are to be educated at regular intervals about the registration procedures as per the Act and Rules
• The existing publicity measures to create awareness are not effective; hence there is need for effective but low cost publicity measures having local and mass appeal through advertisements in the local cable network, Dordarshan and private channels. The services of Self-help Groups and NGOs may be utilised for the purpose of creating awareness. A focused strategy to cover low performing districts is to be taken up on priority by educating the people, particularly the women
• A motivational film on Registration of Births and Deaths directed by a well known film artist needs to be made and telecasted through
Doordarshan twice a month. The District Information and Publicity Officers should include this film in their programme and show it in the villages
• Computerisation of statistical reports
• DES to take up studies and analysis on the registration statistics reported in order to cross check the reliability of statistics generated by administrative records
• Take up mopping up operations in case of birth registration at the time of admission to schools
• Bringing out Annual report containing all the Statistical tables every year by the 31st July of the year following the year to which the report relates

l) Participation in National Sample Survey Organisation Surveys
Goals and strategies:
• Bringing out report and statistical tables of every round within a year of

completion of each round

• Bringing out district level report and statistical tables at least in the case of certain NSSO studies by enhancing the sample size

• To conduct state level seminar on the state sample results in order to disseminate the information

m) Health, Morbidity, Mortality and Family Welfare Statistics

1. Organizational arrangements:

a) At the State Level:

Structural & functional re-organization of state demographic unit need be undertaken. The State Demographer may be re-designated Joint Director, Health Statistics All the ASOs working with other programme divisions except planning need be shifted to the re-constituted section of Joint Director, Health Statistics. The HMIS wing of the State Department of Health and Family Welfare and the computer wing headed by a senior programmer in the Directorate also need be brought under his overall control. All the other disease control programme divisions shall also have to report to him. The reconstituted JD, Health Statistics will report to the Director, Health and Family Welfare. There has to be a close working relationship between the JD, Planning and the JD, Health Statistics for an effective data based planning and evidence based monitoring. The Joint Director, Health Statistics shall act as the single source of information in the health sector.

b) At the District Level:

At the district level, the District Health Intelligence Bureau (DHIB) to be headed by an Assistant Director (Statistics) shall be constituted. This canl be done by upgrading one of the four posts of ASOs to that of an Assistant Director. The remaining three ASOs in the district shall be under his control and guidance. The DHIB should be responsible for the compilation, analysis & dissemination of all the health data including that of the private sector.

c) At the Block Level:

With the amount of workload projected for the next 10/15 years, there is need for assisting the block health officer with a qualified Statistical Inspector (SI) who can assist and guide the taluk health officer in data collection and analysis.

2. Accuracy and reliability of data:

• At the PHC level, the sub-centre level data should be thoroughly checked for its completeness and consistency by the supervisory staff and the medical officer concerned and then only forwarded to the BHO. Though this is a routine exercise, it has to be implemented more vigorously and monitored regularly by the BHO and other higher officers

• The statistical units at the district and block level should scrutinize the reports received from the lower level for completeness and consistency

• Periodical sample check of data for completeness and consistency should be taken up by entrusting the responsibility to external agencies through outsourcing

• The ICT infrastructure provided under the NRHM need be fully utilized to ensure fast transmission of complete and consistent data sets

• The software provided by National Health System Resource Centre (NHSRC) would be made use of to generate regularly important health and family indices

for state and sub-state levels and also to add any new parameters to the collection system with the help of this flexible software

n) Education and Literacy statistics:
Statistics on educational institutions and school enrolment data:

Reforms Proposed:

1) Primary and Secondary Education:

a) There is little response from some of the private un-aided managements to provide information in time. Hence, they have to be brought under the statistical system through enforcement of Collection of Statistics Act, 2008
b) Design different formats for different types of managements
c) Commence preparation and publishing district level reports
d) Collect data on amount released to School Development and Monitoring Committees (SDMC) and purpose wise amount spent and include this in annual publication at district and state levels
e) A workshop need be held to assess data needs in the context of the increasing emphasis on secondary and higher education and also on redressal of imbalances – regional, caste and gender

2) Pre University Education:
a. Implement Secondary Education Management Information System to strengthen the data base of pre university education
b. Build the capacity of personnel to analyse the data and bring out reports at district and state level
c. Use ID during the entry to the 11th standard to track the career of those passing 12th standard examinations.
d. Bring out publications at district and state level with detailed analysis of data on time
e. Upload important data on the departmental website
f. Hold consultation meetings with the users to get their opinion
g. Modify the publications suiting to the needs of the users

p) Labour and Employment Statistics:

Reforms Proposed:

1) Labour Statistics – Labour department:
• Development of a software for creation of business register, online registration, online entry of returns and web based collection of data by the enforcement authorities.
• Computerisation of all the registered establishments under all the Acts
• Collection and computerisation of unregistered establishments. (Rs.15.00 lakh)
• Testing of software and computerisation of periodical returns by the establishment and enforcement authorities
• Brain storming sessions with the enforcement officers at regional level to enable them to conduct awareness programme for all the employers

• Conducting awareness programme to all the employers and their associations at taluk level regarding 100% registration, renewals and submission of returns
• Training to the enforcement authorities Collection and compilation of returns online
• Compilation of business register of all categories of establishments
• Updation of business register by the enforcing authorities
• Preparation of labour statistics at a glance with analytical data

2) Child labour statistics:
• The State Level Resource Centre of the Labour department should develop an MIS on this activity
• The centre should generate all the information on child labour like the number, the quantum of elimination and rehabilitation, etc., it will also disseminate all the information on its website

3) Employment Statistics – Employment and Training department Employment Exchanges:

1. Use the business register prepared by the Labour Department for collecting employment statistics from the private establishments.
2. Improve the collection of data of public sector
3. Conduct awareness programmes at district level for obtaining data from private sector.
4. Use the software already developed for collection of data. and get the web based validated data .
5. Build the capacity of stake holders in collection, compilation and analysis of data
6. Bring out annual publication of employment data for public and private sectors including other activities

q) Housing statistics:

Reforms Proposed:

In order to consolidate housing data of both private and public sectors, the following measures are proposed:

a. PRIs and ULBs will have to coordinate with the census authorities in the collection of housing statistics during the population census 2011 to build business register of housing stock and link it with asset registers of local bodies
b. Systematic numbering of the buildings and houses by the local bodies will have to be undertaken, classifying them according to the classification done during the census
c. Asset registers need be developed and computerized with the above information
d. workshops need be conducted for Gram Panchayats and ULBs to work out modalities to add houses/ buildings built in their jurisdiction to the asset register after the census.
e. Development of software with the assistance of NIC with regard to award of licenses for construction of houses and buildings by the local bodies. The items of NBO schedule need be incorporated in the software. Submission of completion reports need be made compulsory in the prescribed format by the builders whether public or private. This will help in maintaining the housing stock at the local body

level and in updating the business register and asset register.

f. Build the capacity of local body personnel in the collection, compilation and analysis of data and also ICT and bring out reports at local body, block, and district levels

g. Awareness programmes for the public by the local bodies regarding compulsory issue of license and submission of completion reports of the buildings through the ward sabha and gram sabha need be organized.

h. Housing department has tol come out with State Housing Policy once in five years.

i. Computerization of data and bringing out publications annually and uploading the same on the local body website and also consolidated information at district and state level on the website of the concerned departments

r) Electricity production and distribution statistics:

Reforms Proposed:

a) Impart training in consolidation, analysis of electricity data through Central Electricity Authority or CPRI or such other institutions.

b) Obtain ICT infrastructure and software

c) Disseminate the consolidated data on generation, transmission and distribution of electricity through the web site of the Energy department and also through print media

s) Environment and Forestry statistics:

Reforms Proposed:

1) Forestry Statistics:

1. There is need to collect statistics on the following additional subjects:

a) Forest fires and the consequent destruction

b) Details of plantations, activities of village forest committees

c) Forest and animal species under extinction

d) Medicinal plants

e) Census of commercial forest produces like sandalwood, etc.

2. There is also need for taking up scientific sample surveys for:

i) Estimating minor and major forest produce,

ii) Growing stock,

iii) Enumeration of sandalwood trees and estimation of their value and estimation of important species like teak, rosewood etc.

3. There is need to a) fill up vacant posts of statistical personnel and b) develop their capacities adequately.

4. Total computerization of forest statistics using the funds provided under central finance commission grants and software support provided by NIC.

t) Water supply and sanitation statistics:

Reforms Proposed:

i) Rural Water supply:

1. Fill up all the existing vacant posts including those statistical cadre posts filled up by non statistical personnel of PRED
2. The different water supply schemes installed at considerable cost have been treated as physical assets by the department and as per the PWD code, detailed information about them has to be maintained in the prescribed registers
3. regular assessment of source data for coverage, statistical analysis and dissemination to public need to be improved
4. the performance of the programs need to be cross checked physically, in the context of ensuring that there is no duplication of schemes
5. Extensive use of computer packages like GIS, OAP, and STADD
6. To bring out an annual publication "Rural Water Supply at a Glance"

ii) Rural Sanitation:

The Total Sanitation Campaign is the most important of the sanitation programmes. The programme should be implemented through gram panchayats. In order to assess whether a GP is totally sanitized, the following additional information not being collected now needs to
be collected by the agency.
a) Schools having toilets exclusively for girls.
b) Awareness programme organized for children on hygiene.
c) No. of villages having space for disposing waste.
d) Awareness programme for villagers for safe handling of drinking water resources.
e) Awareness programmes organized on the importance of hygiene practices such as brushing the teeth, taking daily bath, washing hands.

iii) Water Supply in Urban Areas :

a) Fill up the existing vacant statistical posts in the department of Municipal Administration
b) Design proper statistical formats and procedure for collection of data on water supply and sanitation from all local bodies
c) Commence collection of data and the subsequent processes
d) Bring out annual publication "Statistics on water supply and sanitation in urban areas"
e) Disseminate electronically in the department's web site

u) Transport statistics:
Reforms Proposed:

1) Motor vehicle registration statistics:
a. Create business register of vehicles and driving license holders.
b. The department will incorporate following parameters in the software and generate the following data
i. Average age of vehicles.
ii. Gender wise registration of vehicles.
iii. Ownership pattern including gender.
iv. Gender wise driving licenses issued.
v. Number of enquiries under RTI Act.
vi. Number of licenses cancelled under drunk and drive cases.
vii. Number of electric / battery driven vehicles
viii. Number of vehicles using LPG

ix. Number of beneficiaries under LPG kit.
x. Number of vehicles off the road.
c. Bringing out publications at district and state level with detailed analysis of data
d. Uploading important data on the departmental website
e. Hold workshops with the users to get their opinion about the data
f. Modify the software according to the needs of the users

The above measures will help in:
a) Maintenance of data on registration and issue of license at all levels and its easy transmission.
b) Uploading monthly and quarterly data sheets for state and sub state level on department's web site
c) Uploading annual data within a month of the close of financial year;
d) Making public analytical reports.

2) Road Statistics:

a. To develop a coordination mechanism among all data producing agencies/departments.
b. Provide ICT infrastructure as proposed under Government of India.
d. Develop software for updating the roads status in the District Rural Roads Plan formed and developed under various schemes and to get updated data on category of roads by using GIS, OAP and STADD.
e. Bring out an annual publication of the department entitled "Rural Roads at a glance" at district and state levels.

Traffic Accident Statistics:
Build the capacity of police personnel to analyse the data with the help of statistical packages and bring out reports at district and state level

Passenger Traffic Statistics:

1. A data centre for consolidating the statistics should be established at Bihar State Road Transportation Corporation, Patna

2. Private operators both authorized and unauthorized are not bound by any statute or rule, in the first place to keep an account of the number of passengers they carry and therefore the issue of furnishing data does not arise. Even if they maintain the passenger data and are prepared to share it , there is no government agency which can collect, compile, coordinate, analyse and disseminate this information. As per the recommendations of the National Statistical Commission, compulsory furnishing of certain minimum statistics by the private transport operators at the time of renewal of licenses should be enforced. The Regional Transport Officers should be entrusted with the responsibility of collection and computerization of this data furnished by private transport operators at the time of renewal of license by devising a suitable format by and use the software developed by NIC;

3. As there is no nodal agency for systematic collection, compilation, analysis and dissemination of passenger statistics, this function could be entrusted to the Bihar State Road Transport Corporation situated at Patna. Software has to be developed to consolidate the passenger statistics from the 4 transport corporations. The BSRTC should also to retrieve the passenger statistics of private transport owners data collected and computerized at RTO offices. These

two passenger statistics should be analysed by the BSRTC and uploaded on its web site

v) Statistics for local area planning:

Reforms Proposed:

a) Collection of static and dynamic data in respect of Basic Statistics for Local Level Development (BSLLD) in the formats namely schedule A and schedule B respectively prescribed by the Central Statistical Organisation (CSO) through the GPs in districts including those commenced during 2009-10
b) Compilation of data so collected through the software supplied by the CSO
c) Consultation meetings need be held with the stakeholders to standardize the formats.
d) Consultation meetings need be held with the stakeholders for determination of parameters on which data is to be collected by ULBs
e) Development or modification of the software suiting to the needs of PRIs and ULBs
f) Commence collection and computerization of data in the formats designed after the consultation meetings
g) The Block Planning Units should be created in all the blocks with the responsibility of training the basic workers and to interact with all the nodal departments in the collection of Statistics
h) The Block Planning Officer should be designated as the nodal officer for all planning and statistical activities in the block
i) Build the capacity of local body personnel in the collection, compilation and analysis of data and also in ICT and bring out reports at local body, block, and district level
k) District Planning Committees will monitor the collection of statistics and their use in the planning, monitoring and evaluation purposes by the PRIs and ULBs and advise them suitably
l) Planning department and DES should issue necessary instructions with regard to BSLLD
m) Bringing out publications at district and state level with detailed analysis of data
n) Uploading important data on the departmental websites
o) Hold workshops with the members of PRIs and ULBs to get their opinion about the data generated and their use
p) Modify the parameters according to the opinions expressed in the workshop

w) Data on Major Fiscal Variables:

Reforms Proposed:

a. The data of departments with regard to above recommendations at (a) of the general budget data and (a) of tax data is not being classified and provided in the state budget document. There is need for publishing the details given above.

b. With regard to compilation of local body statistics action has been taken to collect, compile and consolidate the data pertaining to Panchayat Raj Institutions and Urban Local Bodies under estimates of the contribution of local bodies.

c. The State Government is not making available to the public the data on major fiscal variables on a monthly basis The Finance Department should make this

data to the public through its web site from 2010-11, on the lines of Economic and Financial Data under "Special Data Dissemination Standard" published by Ministry of Finance, Department of Economic Affairs, Government of India on the national summary data page

x) Monitoring and Evaluation:

1) Statistics for monitoring and Evaluation:

Reforms Proposed:

The BSSSP recommends very strongly that this exercise be done for all important programmes in each department. The DES may be made responsible for collecting, collating and analyzing the data. The State Planning Board can take up focused evaluation studies on the basis of the data.

2) Creating a data base on assets:

a. All the departments have to computerize the assets of their departments assigning unique ID with the software developed by the NIC. Initially the DES should monitor this work and later on the departments, PRIs and ULBS will have to continue to update the same. This unique ID will have to be displayed on the assets with permanent mark. The expenditure for this activity will have to borne by the department under the administrative expenditure head of accounts
b. The progress will be monitored by the High Level Steering Committee

Assessment of alternative strategic choices:

The strategies recommended to achieve the different goals can be broadly classified into those requiring administrative actions, those requiring surveys, domestic training through a designated training centre and provision of manpower directly answerable to Government. Domestic training, a proposed strategy as against external training, has no alternative. In domestic training all the resources are under the direct control of the Director DES. Therefore, utilizing this resource optimally, it would be possible to develop the capabilities of the statistical personnel. External training may be used as a supplementary in respect of very advanced areas of knowledge and skills required. Outsourcing to the private sector can be a good alternative strategy only in cases where there is acute shortage of manpower and where diversion of the regular staff from their routine activities is required. Such as situation is now prevalent in the statistical system in the state. Hence many of the studies and type studies proposed need be outsourced to reputed external agencies selected through a strict competitive process. As between administrative reporting verses statistical surveys, the two will have to be deployed as complementary strategies and not alternatives. Important statistics and data should be generated regularly through the administrative process. An example is birth and death statistics where it is necessary to improve the registration system so that we can rely on the data generated by the registration process itself and do not depend on the SRS data. Survey should be conducted only to collaborate this data in cases where there is some doubt with regard to the accuracy of the data. Surveys are useful in (1) checking on sample basis the authenticity of the data (2) for additional information which may be considered necessary, on the basis of the statistical information already available.

CHAPTER 12

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS/PRESENT STATUS

12.1 List of the core 20 Statistical Activities

12.1.1 The key performance yardstick for the project is the extent to which the State Government is able to meet effectively, adequately and systemically the national minimum standards in regard to the following **20 key statistical activities listed under the ISSP:**

1. **Estimates of State Domestic Product; 2.Estimates of Capital Formation**

2. **and Savings; 3. Estimates of District Domestic Product; 4.Estimates of**

    contribution of local bodies; 5.Data on major fiscal variables; 6.Annual

    Survey of Industries; 7.Index of Industrial Production; 8.Crop Area and

    Production Statistics; 9.Whole sale Price Index; 10.Consumer Price Index;

    11.Health, Morbidity, Mortality and Family Welfare Statistics;

    12.Education and Literacy Statistics; 13.Labour and Employment

    Statistics; 14. Housing Statistics; 15.Birth and Death Registration Statistics

    and Population; 16.Electricity production and distribution statistics; 17

    Environment and Forestry statistics; 18 Participation in the Surveys of

    National Sample Survey Office (NSSO); 19.Transport Statistics;

    and 20. Statistics for Local Area Planning

12.1.2 The present status of these **20 core statistical activities** identified to be included in the SSSP is given below

SN	Activity	Agency/ Department Responsible	Base Year whereever applicable	Frequency of data collection	Periodicity of release of estimates	Year for which Data are available	Time Lag in Data Dissemination in months
1	State Domestic product	DES	1993-94	Annual	Annual	FY2002-03 (Final)	12-quick 24-provisional 36-final
2	Capital	DES	-	Annual	Annual	FY2002-03	36

	formation						
3	District Domestic Product	DES	-	Annual	Annual	FY2002-03	36
4	Contribution of Local Bodies	DES	-	Annual	Annual	FY2002-03	12-quick 24-provisional 36-final
5	Major fiscal data	Finance Deptt	-	Monthly/Annual	Annual	FY2005-06	>1
6	Annual Survey of Industries	Not undertaken					
7	Index of Industrial Production	Not undertaken					
8	Crop area and production statistics	Revenue DES	-	Seasonal/Annual	Seasonal/Annual	AY2003-04	24
9	Wholesale Price Index	Not undertaken					
10	Consumer Price Index	DES	1939	Monthly/Annual	Monthly/Annual	Feb,2006	3
11	Health, Morbidity, Mortality and family welfare statistics	Health & FW	-	Monthly/Annual	annual	CY2000	72
12				Education and Literacy Statistics			
12 A	Institutional	Education Directorate	-	Annual as on 30/9	Annual	EY 2002-03	24
12B	Enrolment Data	Education Directorate	-	Annual as on 30/9	Annual	EY2002-03	24
13				Labour and Employment Statistics			
13 A	Labour Statistics	Labour Department.	-	Monthly	Annual	FY2004-05	12
13 B	Employment Statistics	Director Employment	-	Monthly/Quarterly	Annual	FY2004-05	12
14.	Housing Statistics	Housing Board, Census, Rural Development	-	Monthly/Decadal	Annual / Decadal	CY2001	36 Months after Census
15	Birth and Death Registration Statistics	DES	-	CRS Monthly SRS annual	Annual ,,	CY2005 CY2005	10 10
16	Electricity Production and Distribution Statistics	B.S.E.B.	-	Daily/Monthly	Annual	Data not published after 1999-2000	60
17				Environmental Statistics			
17.A	Forestry Statistics	PCCF	-	Monthly	Annual	FY2004-05	12
17.B	Water Supply and Sanitation Statistics	Drinking Water & Sanitation	-	Monthly	Annual	FY2004-05	12
18	Participation in National Sample Survey	DES	-	Annual	Not Tabulated		
19				Transport Statistics			
19.A	Motor Vehicle	Transport Department.	-	Monthly	Annual	FY2004-05	12

	Registration						
19.B	Road Length	PWD	-	Annual	Annual	FY2004-05	12
19.C	Road Accidents	Police Department.	-	Monthly	Annual	FY2003-04	24
19.D	Passenger and Goods Traffic	Not Done					
20	Statistics for Local Area Planning	Local Area Planning not done					

12.2 Present Statistical System in Bihar

12.2.1 One of the weaknesses of the **Statistical System in Bihar** is the low priority given to the administrative statistics, which forms its core. The key reason for the deterioration of the administrative statistics has been the very low priority given to the primary statistical activities in public administration and in the day to day governance and the apathetic attitude to administrative statistics on the part of main users, both in and outside the government.

12.2.2 At the same time, there has been a significant jump in the demand for credible, complete and timely data most of which has necessarily to emanate from the official sources. With significant domestic liberalization and progressive integration of the Indian economy with the global economy, this need is now also being felt at sub-national levels, as the states are competing to attract private domestic and foreign investment. Therefore the time is most appropriate not just to take a hard look at the official statistics to correct the priorities but also to make the necessary investment to make the official statistics meet the demands of the present and future. The decentralized system in the country makes it imperative that improvements of the State Statistical System should be of paramount importance in any scheme of improving the Indian Statistical System.

12.2.3 The Statistical System in Bihar is decentralized with the **Directorate of Economics and Statistics (DES)** as the key agency for collection and dissemination of key economic statistics. The individual line departments are responsible for collection, compilation, processing and release of the data in their own subject fields **The DES has now been declared as the Nodal Statistical Agency in the State.** Departments with statistical cells are functioning independently through their own staff. Each department recruits its own staff as there is **no common statistical cadre**. However, in a number of line departments staff has been provided by DES. Many of the departments do not have any statistical cell and statistical staff.

12.3 Data Gaps

12.3.1 There are several data gaps in the existing statistical system. Some of these gaps are described below for important core statistics such as estimates of Gross State Domestic Product (GSDP), estimates of Capital Formation, District Domestic Product (DDP), Health and Family Welfare Statistics, etc. Data gaps with respect to estimation of GSDP are several which includes absence of data on wholesale price index; statistics on by-products of agricultural and livestock products; index of agricultural production; expenditure data on new constructions and repairs of residential buildings; transportation of own products of ancillary activities etc. Savings are not estimated and

private sector is excluded from the estimation of GFCF. Data is available only for gross assets and not for actual addition to fixed assets, which do not satisfy the definition. Required statistics at the district level in respect of most sectors for estimation of DDP are not available. For example, production data of crops including horticultural and floricultural crops not covered under CCE are not available. Similarly, value of certain inputs used in primary sector (feed of livestock, irrigation charges, marketing charges, etc.) is not available. Also, service sector data is not available. Data in respect local bodies on outsourced services and activities is not provided by the local bodies to DSOs and DSE; and Zila Parishad, Panchayat Samities and Gram Panchayats are excluded.

12.3.2 There is serious data gaps in respect of various Price Indices such as the WPI, the CPI, IIP, etc. The DES was participating in the Annual Survey of Industries (ASI) but for more than a decade it has not been participating in the ASI nor in the IIP perhaps due to lack of sufficient Staff.

12.3.3 There is no mechanism of data collection on morbidity, mortality, pre-natal and post-natal health statistics in the health department in spite of pressure from the Central Ministry of Health and Family Welfare to compile relevant data as per the HMIS Formats prescribed under the NRHM.

12.3.4 Data pertaining to Education and Literacy details of the population in the state and districts are available only from the Population Census once in ten years and not compiled or tabulated from the Statistical records in the HR Department in the state. Also, data for the State and districts is not available with respect to children out of school classified by gender and castes, attainment levels, attendance data and drop outs.

12.3.5 Data Gaps are also found in several social and economic sectors of the state economy such as labour and employment, housing, social welfare, transport and roadways, Power and Electricity generation etc.

12.3.6 There is an urgent need to get the state sample data collected through the NSS Surveys processed and compiled to   get better estimates of various socio economic indices pertaining to the state and the districts.

12.4 Vacant Posts

12.4.1 Taking into account all the statistical posts in the DES and those in the Line Departments, the number of all **sanctioned statistical posts in the state comes to 3097 out of which 1643 posts (53 percent) are vacant. This is a matter of concern for any system to function efficiently.**

12.4.2 The break up of the statistical posts into gazetted and non gazetted indicates that there are only 192 gazetted posts in the statistical system of Bihar out of which 151 i.e. about 80 percent of them are vacant. **The vacant posts include the post of the Director of the DES. This is a very serious problem for any system to function efficiently.**

Status of all Statistical Posts in the DES and Line Departments in Bihar

Srl. No.	Name of the post	Status of statistics Personnel in Departments/ Directorate			
		Sanctioned post	Filled up	Vacant Post	% of vacant post
1	2	3	4	5	6
1	Director (16400 – 20000)	1		1	100
2	Sr. Joint Director (14300 - 400- 18300)	1	0	1	50
3	Joint Director (12000-375-16500)	6	2	4	67
4	Dy. Director /Statistical Authority / State Demographer (10000-325-15200)	30	16	14	47
5	Asst.Director/Dist.Statistical Officer/Statistical Officer/ Lecturer (6500-200-10500)	153	22	131	86
Total (Gazetted)		**192**	**41**	**151**	**79**
6	Asst. Statistical Officer/ Statistical Officer / Economic Investigator (5500-175-9000)	297	184	113	38
7	Sr. Statistical Asst./ Jr. Statistical Asst. / Block Statistical Supervisor / Investigator / Statistical supervisor/ Research Asst./ Statistical Asst. /Investigator cum Analyst / Asst. Investigation Officer (5000-150-8000)	1863	773	1090	59
8	Compiler/ Statistical Ganak/Computer (4000-100-6000)	689	441	248	36
9	Enumerator (3200-85-4700)	8	0	8	100
10	Jr. Field Investigator /	240	56	184	77
	Total (Gazetted)	**2805**	**1413**	**1392**	**50**
	Total (Gazetted+ non Gazetted)	**3097**	**1454**	**1643**	**53**

12.5 IT Resources

12.5.1 The IT resources of the DES including that of the Divisional and District Offices and also that of the line departments are inadequate and out dated. As such there is need for urgent action to strengthen IT infrastructure for data compilation, tabulation, report generation and other activities. This will not only improve the accuracy and reliability of data but also reduce the time lags in release of processed and final estimates. Moreover it will speed up the transmission of raw data from the field to DSOs and DES using electronic modes of communication. As is well known**,** electronic compiling, tabulation and processing of data is critical for ensuring accuracy of data as well as its timely release and dissemination. Equally important is IT's role in networking and establishing strong communication links within DES and with (i) all Divisional Offices and DSOs; (ii) the State's line departments; (iii) all Central Ministries with substantial statistical output; (iv) all State Directorates of Economics and Statistics (DESs); and (v) the National Sample Survey

Office and its Survey Design and Research Division, Data Processing Division, Field Operation Division and Coordination and Publication Division, and also with the (vi) Central Statistical Office (CSO). The DES should be provided with a robust IT infrastructure using an integrated architecture linking all stakeholders – the three Phases of State government, CSO, NSSO, DESs of other States/UTs, among others like ISI - through IT-based communication network.

Availability of IT staff

12.5.2 There is no IT technically qualified person in the Directorate. There is an acute shortage of computer operators. Currently there are only two technically sound computer operators along with one or two other staff members who can manage to do limited work on computers. Most of these people have limited computer knowledge and can only perform their routine jobs. As a result of virtual absence of computer literate staff, most of the computers are kept idle all the time or at best used as typewriters.

IT Training to Staff

12.5.3 No formal IT training has been provided to any staff. However, some staff have acquired (self taught) skills in Word Processing; Spreadsheet; and other software applications . There is no IT technically qualified person in the Directorate. There is an acute shortage of computer operators. Currently there are only two technically sound computer operators along with one or two other staff members who can manage to do limited work on computers. Most of these people have limited computer knowledge and can only perform their routine jobs. As a result of virtual absence of computer literate staff, most of the computers are kept idle all the time or at best used as typewriters.

Web-site and Web-servers

12.5.4 None of the computers in the Directorate are networked. There is no website or web server. The Directorate has very limited exposure to internet facility.

12.6 Human Resource Development

12.6.1 Presently most of the officers and staff of the DES and the statistical personnel in the Line Departments are not trained in latest statistical and computer techniques. The staff and officers of the DES need to be adequately trained in the latest techniques of applied and theoretical statistics as well as exposed to latest Computer and data management techniques.

12.6.2 In order to meet the current and future needs of the policy makers there often arise needs and challenges in terms of methodology, coverage and application aspects of different schemes in the statistical system. The Government also entrusts such responsibilities to the DES to take up different types of object specific studies for formulating the policies both in the short and long run. To execute the technical works in the statistical system very effectively, the government statistician should possess updated knowledge and has to maintain a good standard of versatility, which could be made possible only through training.

12.7 Physical infrastructure

12.7.1 The DES has inadequate infrastructure. The current office building is located in the main secretariat complex in old dilapidated barracks, and all the sections of the DES are not housed in one premise but are scattered in the barracks. It is inadequate for the growing needs of DES.

12.7.2 Since the Directorate's office is in barracks, the rooms are very hot and humid. In the rainy season it gets very muddy and there is seepage in the computer room. In the summers it is very hot - the temperature rises to more than 45 degrees at times and IT equipments do not function efficiently under such an environment.

12.7.3 As regards the DSOs, the offices of all the existing 16 DSOs are dilapidated and largely dysfunctional with inadequate space. There is, therefore, a need to provide all the 38 DSOs with appropriate office space for as DES has to take action to set up DSOs in the remaining 22 Districts for which adequate budgetary provisions should be made.

12.7.4 **Office Automation Equipment***:* DES has inadequate office equipments including PCs/Computers both in the headquarters and DSOs. There is a need to provide photocopying machines and fax machines in all the DSOs to enhance the efficiency of raw data transmission, and dissemination of data.

12.7.5 **Transport Vehicles:** The DES, Divisional Offices, and DSOs do not have adequate number of vehicles that constrains field operations and supervision. Further, nearly all the current stock of vehicles is old and some are beyond repair.

12.8 Data Quality

12.8.1 The present quality of the data outputs of the line departments and that of the DES has been assessed earlier using IMF standards. The quality of statistical output was classified in three qualitative categories - high, medium, and low - in terms of the extent to which the three threshold indicators i.e. adequacy, comprehensiveness, approximation to definition, and timeliness; assessment of source data for coverage, sample error, response error, and non sampling error; and assessment and validation of intermediate data and statistical outputs. There is need for improvements in the data quality of most of the statistical products.

Recommendations of the 13th Finance Commission in respect of Statistics should now be accepted and implemented by the State Government which are reproduced below for ready reference.

Recommendation

86. To enhance the quality of statistical systems, we recommend a grant of Rs. 616 crore for State Governments at the rate of Rs. 1 crore for every district to fill in statistical infrastructure gaps in areas not addressed by the India Statistical Project (ISP).

(Para 12.101)

Improving Transparency in Government Accounts

12.97 Transparency in government accounts improves the feedback loop, reflects the fiscal impact of all policy initiatives and enhances accountability, thus ensuring greater productivity. We discuss separately various initiatives to aid transparency in Central and State Government accounts, including accrual accounting, maintaining consistency in financial accounts across states and improving audit mechanism. In the following paragraphs, we discuss two specific initiatives for enhancing the quality of data– strengthening statistical systems at the state and district level and setting up a data base for State Government employees and pensioners.

Improving Statistical Systems in State Governments

12.98 A number of steps have been taken to strengthen the statistical system in the country. The National Commission on Statistics (NCS) was set up to comprehensively steer the growth of the statistical system in the country and oversee all initiatives for its growth. The National Strategic Statistical Plan (NSSP) 2008 sets out the medium term strategy for empowering the existing statistical framework to produce comprehensive good quality relevant economic and social data for policy and decision making. The India Statistical Project (ISP) focuses on strengthening the statistical capacity of all states and Union Territories. In particular, they are being encouraged to effectively meet the national minimum standards with regard to twenty key statistical activities.

12.99 Despite these impressive achievements, a number of important issues remain to be addressed. These are outlined below:

i) FC-XII noted the need to measure Gross State Domestic Product (GSDP) at market prices consistent with national estimates, instead of at factor cost, as is presently being done. This is still not available. Further, the measurement of GSDP across states should be standardised such that use of comparable GSDP series by the Finance Commission and other bodies is made redundant.

ii) This Commission has elsewhere made recommendations on the need to incorporate environmental considerations into government policy. As part of this effort the estimation of Green GDP/GSDP would be very valuable. Such an estimate would account for depreciation of natural assets and consider loss of income due to environmental degradation.

iii) Comparable estimates of district income are extremely relevant for measuring intra-state income disparities. This will enable State Governments to effectively plan policy and programme interventions. They could also be used as a parameter for horizontal distribution of fiscal transfers. As many as 23 states have generated district income statistics for the period 1999-2000 to 2005-06. For these to be usable, all states should generate this data in accordance with the guidelines of the Central Statistical Organization (CSO). They also need to be validated at the national level to ensure comparability.

iv) For equitable horizontal distribution, the measurement of cost disabilities is important. The cost of services varies across states due to a large number of factors such as geographic location, population size and distribution and demographic characteristics. Further, to estimate cost disabilities of states, two types of data are required: (a)

quantifiable measure of the level of various services available in different states and (b) the corresponding unit cost. As of now, such data are not available.

v) Measurement of inter-regional trade data would be useful to provide insights in an inter-regional framework.

12.100 We recommend that the Ministry of Statistics take steps to fill in the statistical gaps outlined above. To ensure that the National Strategic Plan is implemented effectively, this Commission recommends grant assistance to State Governments, which should be utilised by them to fill in infrastructure gaps.

12.101 At least 75 per cent of the grant will be utilised for strengthening statistical infrastructure at the district level not covered by the India Statistical Project and the proposed CSS pertaining to Basic Statistics for Local Level Development. A maximum of 25 per cent of the grant can be used for improving statistical infrastructure at state headquarters. States will be eligible for Rs. 616 crore in the aggregate, with Rs. 1 crore being provided to every district. State-wise eligibility for this grant is placed in Annex 12.14.

12.102 The grant will be drawn down in five annual instalments. The first instalment will be drawn down only after the state submits an expenditure plan for the entire grant. All subsequent instalments will be drawn down after submission of UCs/SOEs for the previous instalments. States are provided the flexibility to modify their expenditure plan at any time.

It is recommended that the amount of Rs. One crore per district being recommended by the 13[th] Finance Commission for statistical activities every year need be utilised for infrastructure development of the DSO for collection of Local level statistics pertaining to the concerned district.

RECOMMENDATIONS of the SSSP excluding those suggested by the 13[th] Finance Commission are described below

Based on the review of the current situation of the statistical system in Bihar and with the ultimate objective of improving the quality and timeliness of the Statistical outputs the following Recommendations are made with the hope that they are taken up seriously and implemented by the State Administration.

Recommendations for the Directorate of Economics & Statistics (DES) and the Line Departments

Administrative Recommendations

1. All the vacant positions in the Directorate including that of the Director of the DES should be filled in urgently

2. The Director of the DES should be in the PB-4 Pay Band with Grade Pay of Rs. 10000 i.e. (Rs. 37400- 67000+ 10000) (S-29)

3. Besides the Director, the DES should have 5/6 Additional Directors in the pay band, S-26 each for Administration, IT & ISSP; State Income and related activities; Social Statistics; Agriculture Statistics; Industry Statistics; Other Surveys, Monitoring, and Miscellaneous Statistics

4. For assisting the Director and the Additional Directors, the DES should have 11 Joint Directors(S-24), 20 Sr. Deputy Directors, 20 Deputy Directors(S-19), 20 Assistant Directors (Group A Entry Level), and suitable number of Class II level Statistical Officers and non Gazetted supporting Statistical personnel

5. All the vacant positions in the 9 Divisional and 38 District Offices need be filled in on priority for normal functioning of the field level statistical offices

6. The Divisional Offices should be headed by an Statistician of the rank of Joint Director (S-24) and supported by 2 Deputy Directors, 2 Assistant Directors and suitable number of supporting statistical personnel

7. The District Offices should be headed by an Statistician of the rank of Deputy Director (S-19) and supported by, 2 Assistant Directors and suitable number of supporting statistical personnel

8. All major Line Departments generating the core statistics (other than those being produced by the DES such as Education, Health & Family Welfare, Transport, Industry, Welfare, etc.) should expand and upgrade their statistical units/cells to an independent Division headed by a Joint Director Level Officer supported by sufficient number of Deputy/Assistant Directors and supporting statistical personnel. The Joint Director in charge of the Statistics Division should report directly to the Secretary/ Principal Secretary of the concerned Line Department

9. The rest of the Line Departments generating statistics pertaining to their administrative needs should also expand and upgrade their statistical units/cells to an independent Division headed by a Deputy Director Level Officer supported by sufficient number of Assistant Directors and supporting statistical personnel. The Deputy Director in charge of the Statistics Division should report directly to the Secretary/ Principal Secretary of the concerned Line Department

10. **Immediate administrative decision need be taken for providing sufficient working space for the DES and its field offices. For this the DES and the field offices should have separate buildings which can be done by undertaking construction of a new multi-storey office building in place of the present old barracks. For the Divisional and District Offices, separate adequate office space has to be provided in the Revenue Divisional Offices and in the District Collector's Offices respectively**

11. **Administrative decisions are required to be taken by the concerned Line Departments for providing sufficient working space for their Statistics Divisions for improving the quality of data being compiled and tabulated and extra statistical activities undertaken to plug the data gaps.**

12. **A Technical Committee in collaboration with the NIC may be constituted to assess the IT/ICT needs of the DES, its field offices and also for statistical needs of the Line Departments**

13. **Sufficient administrative supports in terms of office equipments, transport facilities etc. are to be provided to the DES and the Statistical Divisions in the Line Departments for improving the quality of data being compiled and tabulated and extra statistical activities undertaken to plug the data gaps.**

14. **To meet the training needs of the DES and other Statistical offices necessary administrative decisions are required to be taken by the Planning and Development Department (under whom the DES works) for establishment of an Independent Statistical Training Institute in Patna having separate campus and on the lines of the National Academy of Statistical Administration (NASA) of the CSO.**

15. **Immediate action may be taken by the Principal Secretary of the Planning and Development Department in consultation with the Personnel Department for a thorough Cadre Review for a common statistical cadre on the lines of the Indian Statistical Service (ISS) to man all statistical positions in the DES, its field offices and in the Line Departments and may be named as the Bihar Statistical Service(BSS).**

16. **Necessary action is required to be taken for framing Rules under the latest Collection of Statistics Act Effective implementation of "The Collection of Statistics Act" 2008. For effective implementation of "The Collection of Statistics Act" 2008, a detailed circular need be issued by the DES to all Line Departments and other agencies responsible for data collection and generation of statistics about the Act. The DES may also initiate a series of workshops for the Secretaries, heads of the departments and others for apprising them of the provisions of the Act and the role of the line departments and also conduct a training programme on the provisions of the Act to all the statistical personnel.**

Technical Recommendations pertaining to the 20 key statistical activities according to specified national standards

1. To raise the accuracy and reliability of statistics

For improving the accuracy and reliability of the statistics being produced by the DES and the line departments the following strategies are recommended:

1) Training of staff of DES and line departments as per the CSO technical specifications on data assessment techniques and data collection techniques.
2) Effective coordination among stakeholders to produce compatible statistics, meeting quality standards
3) Improvement in the quality of supervision of data collection
4) Establishment of a better statistical infrastructure needed to produce good and timely economic and social statistics
5) Filling of all vacant posts of primary workers or outsource the work wherever required.
6) Focus on the 20 key statistical activities for providing reliable, credible and timely data in the first instance and extend this to the entire state statistical system and
7) Conduct of type studies to improve the base level data wherever needed

Recommendations for improving the standards and reliability of the 20 key statistical activities

1. State Domestic Product (SDP) Estimates:

For achieving reliability of the SDP estimates it is necessary a) to have latest rates and ratios for which a number of type studies should be conducted by the DES,
b) Commercial Taxes Department to be requested to revise the VAT returns to suit the needs of the SDP estimates, c) Evolving uniform format for obtaining annual accounts of NDCUs in a soft copy entered through a software to be developed for this purpose by the DES, d) Reconciliation of agriculture and horticulture data to have single data set,
e) Development of a suitable software for compilation of annual accounts of local bodies, f) Establishment of GDP WAN facility and other infrastructure provided by the CSO

For achieving credibility of the SDP estimates it is recommended a) to freeze the estimates at the end of third year of the estimate and b) Having a single dataset with different agencies

For achieving timeliness in bring out the estimates it is proposed to
a) bring out advanced estimates by 25th of February every year (current year estimates)
b) bring out quick estimates by 10th of February every year (previous year estimates) and
c) bringing out final estimates by 31st of January every year (year before last)

2. Estimates of Capital Formation and Savings:

For improving the estimates of Capital Formation and Savings it is suggested that technical guidance is obtained from the CSO to start estimation of Savings and include private sector also. The DES should initiate necessary steps for a) **Preparation of Public and Private components of GFCF which may require a dedicated project to compile estimates**

of Capital Formation for public and private from 1999-00 to till date. This exercise will build the capacity of DES personnel to compile estimates for future years; b) Development of a suitable software for compilation of Capital Formation and Savings estimates; and c) such compilation of estimates should be undertaken by the DES on annual basis.

3.Estimates of District Domestic Product

For achieving reliability of the estimates a) All DSOs should start compilation of DDP estimates under guidance of the DES, b) the DES should develop a software for compilation of Budgets and annual accounts of local bodies at district level, c) upgradation of in-house IT infrastructure and development of relevant software for compilation, and d) conduct of regular training for staff- orientation and re-orientation courses

4 Estimates of the Contribution of Local Bodies

For this a) All DSOs should commence compilation of estimates of the contribution of local bodies after a survey to be undertaken by the DES, b) The Budget and Accounts of Local Bodies need be computerized, c) Reports need be generated at district and state level before the compilation of SDP and DDP estimates, and necessary steps need be taken by the DES so that the Rural Development and Panchayat Raj (RDPR) and Urban Local Development Department start to monitor the submission of Budget and Annual Accounts of Local Bodies to the concerned authority on time so that the computerization of these documents takes place on time

5. Annual Survey of Industries (ASI)

6. Index of Industrial Production (IIP)

Urgent action both by the DES and the State government are necessary so that these two important statistical activities are taken up as early as possible.

7. Crop Area and Production Estimates:

A Road Map to Improve Crop Area and Production Statistics need be prepared for which a) awareness among public is created by Information, Education and Communication (IEC) activity. IEC involves workshops, seminars to farmers, canvassing activities related to agriculture statistics and its importance in grama sabhas, through pamphlets and other publicity measures and NGOs may also be involved in propagating the importance of agriculture statistics

For increasing the accuracy and reliability of statistics a) A methodology to be derived to augment results of ICS and TRS with that of the final area and production estimates. A correction factor may be derived from the observation in area enumeration of ICS, b) Exploring the possibility of aerial photography and remote sensing technology to estimate area of crops, c) A systematic method of oral enquiry to estimate yield. Oral enquiry method may be launched on a pilot basis for one or two crops,

d) Intensive training to field staff and supervisory staff need be organized at regular intervals, and e) for improve the credibility of the system undertake intensive supervision in ICS for corrective action in the defaulting villages in the succeeding year.

For development of better sustainable system to have reliable, credible and timely area and production statistics it is strongly recommended that all vacant posts in the field offices are filled in immediately in order to have better field work, supervision and monitoring.

8.Wholesale Price Index

The DES should initiate necessary action to become an important contributor in the scheme and participate in the national activities.

9. Consumer Price Index

The state should participate in the construction of the CPI.

The NSSO has taken up a survey on consumer expenditure, employment and unemployment during the 66th round from July 2009 to June 2010. It now necessary to make use of this survey to arrive at the weighting diagram and item basket for construction of CPI for rural and urban areas.

10. Birth and Death registration and Population

To increase the recording efficiency of the Civil Registration System (CRS) the following steps need be taken up: a) It is essential to open registration centres in all government hospitals/nursing homes/primary health centres and in private hospitals in every district of the State, b) District and block level registration functionaries are to be educated at regular intervals about the registration procedures as per the Act and Rules. c)The existing publicity measures to create awareness are not effective; hence there is need for effective but low cost publicity measures having local and mass appeal through advertisements in the local cable network, Dordarshan and private channels. The services of Self-help Groups and NGOs may be utilised for the purpose of creating awareness. A focused strategy to cover low performing districts is to be taken up on priority by educating the people, particularly the women, d) A motivational film on Registration of Births and Deaths directed by a well known film artist needs to be made and telecasted through Doordarshan twice a month. The District Information and Publicity Officers should include this film in their programme and show it in the villages. e)Computerisation of statistical reports. f) DES to take up studies and analysis on the registration statistics reported in order to cross check the reliability of statistics generated by administrative records. f) Take up mopping up operations in case of birth registration at the time of admission to schools. g) Bringing out Annual report containing all the Statistical tables every year by the 31st July of the year following the year to which the report relates.

11.Participation in National Sample Survey (NSS) Surveys

Urgent action is required for tabulation of the State sample data collected as part of the NSS regular annual surveys and adopt the standard software developed by the

DP division of the NSSO. The ultimate goal of utilizing the rich quality data should be to a) Bring out analytical reports and statistical tables based on data collected through every round within a year of completion of each round, b) Bring out district level reports and statistical tables by pooling the central and state sample data, and c) To conduct state level seminar on the state sample results in order to disseminate the information

12.Health, Morbidity, Mortality and Family Welfare Statistics

For reducing the time lag and improving the quality of the returns in terms of both coverage and content structural & functional re-organization of state demographic unit need be undertaken. The State Demographer may be re-designated Joint Director, Health Statistics. All the statistical personnel need be placed under the Joint Director and the ASOs working with other programme divisions except planning need be shifted to the re-constituted section of Joint Director, Health Statistics. The HMIS wing of the State Department of Health and Family Welfare and the computer wing headed by a senior programmer in the Directorate also need be brought under his/her overall control. All the other disease control programme divisions shall also have to report to him. The reconstituted JD, Health Statistics will report to the Director, Health and Family Welfare. There has to be a close working relationship between the JD, Planning and the JD, Health Statistics for an effective data based planning and evidence based monitoring. The Joint Director, Health Statistics shall act as the single source of information in the health sector.

At the District Level

At the district level, the District Health Intelligence Bureau (DHIB) to be headed by an Assistant Director (Statistics) need be constituted. This can be done by upgrading one of the four posts of ASOs to that of an Assistant Director. The remaining three ASOs in the district shall be under his control and guidance. The DHIB should be responsible for the compilation, analysis & dissemination of all the health data including that of the private sector.

At the Block Level
With the amount of workload projected for the next 10/15 years, there is need for assisting the block health officer with a qualified Statistical Inspector (SI) who can assist and guide the block health officer in data collection and analysis.

For improving the accuracy and reliability of data a) At the PHC level, the sub-centre level data should be thoroughly checked for its completeness and consistency by the supervisory staff and the medical officer concerned and then only forwarded to the BHO. Though this is a routine exercise, it has to be implemented more vigorously and monitored regularly by the BHO and other higher officers, b) The statistical units at the district and block level should scrutinize the reports received from the lower level for completeness and consistency, c) Periodical sample check of data for completeness and consistency should be taken up by entrusting the responsibility to external agencies through outsourcing, d) The ICT infrastructure provided under the NRHM need be fully utilized to ensure fast transmission of complete and consistent data sets, and e) The software provided by National Health System Resource Centre (NHSRC) should be used of to generate regularly important health and family indices for state and district levels and also to add any new parameters to the collection system with the help of this flexible software.

13.Education and Literacy statistics:

For improving the quality of the existing statistics on educational institutions and school enrolment data and also for reducing the time lag it is suggested that the standard statistical return formats of the HRD Ministry be followed and coverage of educational institutions be enlarged by including private schools and colleges.
a) They have to be brought under the statistical system through enforcement of Collection of Statistics Act, 2008, b) Different formats of data collection may have to be designed for different types of managements, c) Commence preparation and publishing district level reports, d) Collect data on amount released to School Development and Monitoring Committees (SDMC) and purpose wise amount spent and include this in annual publication at district and state levels, and e) A workshop need be held to assess data needs in the context of the increasing emphasis on secondary and higher education.

For Pre University Education the following steps need be taken up

a. Implement Secondary Education Management Information System to strengthen the data base of pre university education
b. Build the capacity of personnel to analyse the data and bring out reports at district and state level
c. Use ID during the entry to the 11th standard to track the career of those passing 12th standard examinations.
d. Bring out publications at district and state level with detailed analysis of data on time
e. Upload important data on the departmental website
f. Hold consultation meetings with the users to get their opinion
g. Modify the publications suiting to the needs of the users

For literacy Statistics, besides the Census, latest NSS reports can also be utilized.

14.Labour and Employment Statistics:

For improving the quality of Labour Statistics the Labour department should undertake the following steps:

1) Development of a software for creation of business register, online registration, online entry of returns and web based collection of data by the enforcement authorities.
2) Computerisation of all the registered establishments under all the Acts
3) Collection and computerisation of unregistered establishments.
4) Testing of software and computerisation of periodical returns by the establishment and enforcement authorities
5) Brain storming sessions with the enforcement officers at regional level to enable them to conduct awareness programme for all the employers
6) Conducting awareness programme to all the employers and their associations at block level regarding 100% registration, renewals and submission of returns
7) Training to the enforcement authorities Collection and compilation of returns online
8) Compilation of business register of all categories of establishments

9) Updation of business register by the enforcing authorities
10) Preparation of labour statistics at a glance with analytical data

For improving the availability of data on Child labour the state department of Labour should create a State Level Resource Centre which should develop an MIS on this activity and should generate all the information on child labour like the number, the quantum of elimination and rehabilitation, etc., it will also disseminate all the information on its website

For improving the quality and updated information on Employment Status of the population the Employment and Training department and the Employment Exchanges should

1. Use the business register prepared by the Labour Department for collecting employment statistics from the private establishments.
2. Improve the collection of data of public sector
3. Conduct awareness programmes at district level for obtaining data from private sector.
4. Use the software already developed for collection of data. and get the web based validated data .
5. Build the capacity of stake holders in collection, compilation and analysis of data
6. Bring out annual publication of employment data for public and private sectors including other activities

15.Housing statistics

In order to consolidate housing data of both private and public sectors, the following measures are proposed:

a) PRIs and ULBs will have to coordinate with the census authorities in the collection of housing statistics during the population census 2011 to build business register of housing stock and link it with asset registers of local bodies

b) Systematic numbering of the buildings and houses by the local bodies will have to be undertaken, classifying them according to the classification done during the 2011 census

c) Asset registers need be developed and computerized with the above information

d) Workshops need be conducted for Gram Panchayats and ULBs to work out modalities to add houses/ buildings built in their jurisdiction to the asset register after the census.

e) Development of software with the assistance of NIC with regard to award of licenses for construction of houses and buildings by the local bodies. The items of NBO schedules need be incorporated in the software. Submission of completion reports need be made compulsory in the prescribed format by the builders whether public or private. This will help in maintaining the housing stock at the local body level and in updating the business register and asset register.
f) Improvements in the skills and capacity of local body personnel in the collection, compilation and analysis of data and also ICT and bring out reports at local body, block, and district levels.

g) Awareness programmes for the public by the local bodies regarding compulsory issue of license and submission of completion reports of the buildings through the ward sabha and gram sabha need be organized.
h) Housing department/Bihar Housing Board/State PWD etc. have to come out with State Housing Policy once in five years.
i) Computerization of data and bringing out publications annually and uploading the same on the local body website and also consolidated information at district and state level on the website of the concerned departments

16. **Electricity production and distribution statistics:**

The following steps need be taken by the BSEB and the Power Department:

a) Impart training in consolidation, analysis of electricity data through Central Electricity Authority or CPRI or such other institutions.
b) Obtain ICT infrastructure and software
c) Disseminate the consolidated data on generation, transmission and distribution of electricity through the web site of the Energy department and also through print media

17. Environment and Forestry statistics:

For improving the coverage and quality of Forestry Statistics:

1. There is need to collect statistics on the following additional subjects:
a) Forest fires and the consequent destruction
b) Details of plantations, activities of village forest committees
c) Forest and animal species under extinction
d) Medicinal plants
e) Census of commercial forest produces like sandalwood, etc.

2. There is also need for taking up scientific sample surveys for:

i) Estimating minor and major forest produce,
ii) Growing stock,
iii) Enumeration of sandalwood trees and estimation of their value and estimation of important species like teak, rosewood etc.

3. There is need to a) fill up vacant posts of statistical personnel and b) develop their capacities adequately.
4. Total computerization of forest statistics using the funds provided under central finance commission grants and software support provided by NIC.

17. Water supply and sanitation statistics:

The following steps need be taken to improve the quality of data on Rural Water supply:

1. Fill up all the existing vacant posts including those statistical cadre posts filled up by non statistical personnel of PRED
2. The different water supply schemes installed at considerable cost have been treated as physical assets by the department and as per the PWD code, detailed information about them has to be maintained in the prescribed registers
3. regular assessment of source data for coverage, statistical analysis and dissemination to public need to be improved
4. the performance of the programs need to be cross checked physically, in the context of ensuring that there is no duplication of schemes
5. Extensive use of computer packages like GIS, OAP, and STADD
6. To bring out an annual publication "Rural Water Supply at a Glance"

For data on Rural Sanitation The Total Sanitation Campaign should be implemented through gram panchayats. In order to assess whether a GP is totally sanitized, the following additional information not being collected now needs to
be collected by the agency.
a) Schools having toilets exclusively for girls.
b) Awareness programme organized for children on hygiene.
c) No. of villages having space for disposing waste.
d) Awareness programme for villagers for safe handling of drinking water resources.
e) Awareness programmes organized on the importance of hygiene practices such as brushing the teeth, taking daily bath, washing hands.

For good quality data on Water Supply in Urban Areas :

a) Fill up the existing vacant statistical posts in all ULBs
b) Design proper statistical formats and procedure for collection of data on water supply and sanitation from all local bodies
c) Commence collection of data and the subsequent processes
d) Bring out annual publication "Statistics on water supply and sanitation in urban areas"
  d)   Disseminate electronically in the department's web site

17.Transport statistics

For good quality data on Motor vehicle registration statistics:
a. Create business register of vehicles and driving license holders.
b. The department will incorporate following parameters in the software and generate the following data
i. Average age of vehicles.
ii. Gender wise registration of vehicles.
iii. Ownership pattern including gender.
iv. Gender wise driving licenses issued.
v. Number of enquiries under RTI Act.
vi. Number of licenses cancelled under drunk and drive cases.
vii. Number of electric / battery driven vehicles
viii. Number of vehicles using LPG
ix. Number of beneficiaries under LPG kit.
x. Number of vehicles off the road.
c. Bringing out publications at district and state level with detailed analysis of data
d. Uploading important data on the departmental website
e. Hold workshops with the users to get their opinion about the data

f. Modify the software according to the needs of the users

The above measures will help in:
a) Maintenance of data on registration and issue of license at all levels and its easy transmission.
b) Uploading monthly and quarterly data sheets for state and sub state level on department's web site
c) Uploading annual data within a month of the close of financial year;
d) Making public analytical reports.

For good quality data on Road Statistics:
a. To develop a coordination mechanism among all data producing agencies/departments.
b. Provide ICT infrastructure as proposed under Government of India.
d. Develop software for updating the roads status in the District Rural Roads Plan formed and developed under various schemes and to get updated data on category of roads by using GIS, OAP and STADD.
e. Bring out an annual publication of the department entitled "Rural Roads at a glance" at district and state levels.

For Traffic Accident Statistics:
Build the capacity of police personnel to analyse the data with the help of statistical packages and bring out reports at district and state level

 For Passenger Traffic Statistics:

1. A data centre for consolidating the statistics should be established at Bihar State Road Transportation Corporation, Patna
2. As per the recommendations of the National Statistical Commission, compulsory furnishing of certain minimum statistics by the private transport operators at the time of renewal of licenses should be enforced. The Regional Transport Officers should be entrusted with the responsibility of collection and computerization of this data furnished by private transport operators at the time of renewal of license by devising a suitable format by and use the software developed by NIC;

3. As there is no nodal agency for systematic collection, compilation, analysis and dissemination of passenger statistics, this function could be entrusted to the Bihar State Road Transport Corporation situated at Patna. Software has to be developed to consolidate the passenger statistics from the 4 transport corporations. The BSRTC should also to retrieve the passenger statistics of private transport owners data collected and computerized at RTO offices. These two passenger statistics should be analysed by the BSRTC and uploaded on its web site

18. Statistics for local area planning:

The following steps need be taken to improve the status of statistics required for local area planning:

a) Collection of data in respect of Basic Statistics for Local Level Development (BSLLD) in the formats namely schedule A and schedule B respectively prescribed by the Central Statistical Organisation (CSO) through the GPs in districts including those commenced during 2009-10
b) Compilation of data so collected through the software supplied by the CSO
c) Consultation meetings need be held with the stakeholders to standardize the formats.
d) Consultation meetings need be held with the stakeholders for determination of parameters on which data is to be collected by ULBs
e) Development or modification of the software suiting to the needs of PRIs and ULBs
f) Commence collection and computerization of data in the formats designed after the consultation meetings
g) The Block Planning Units should be created in all the blocks with the responsibility of training the basic workers and to interact with all the nodal departments in the collection of Statistics
h) The Block Planning Officer should be designated as the nodal officer for all planning and statistical activities in the block
i) Build the capacity of local body personnel in the collection, compilation and analysis of data and also in ICT and bring out reports at local body, block, and district level
k) District Planning Committees will monitor the collection of statistics and their use in the planning, monitoring and evaluation purposes by the PRIs and ULBs and advise them suitably
l) Planning department and DES should issue necessary instructions with regard to BSLLD
m) Bringing out publications at district and state level with detailed analysis of data
n) Uploading important data on the departmental websites
o) Hold workshops with the members of PRIs and ULBs to get their opinion about the data generated and their use
p) Modify the parameters according to the opinions expressed in the workshop

19. Statistics for monitoring and Evaluation:

The BSSSP recommends very strongly that this exercise be done for all important programmes in each department. The DES may be made responsible for collecting, collating and analyzing the data. The State Planning Board can take up focused evaluation studies on the basis of the data.

A data base need be created on assets for which

a. All the departments have to computerize the assets of their departments assigning unique ID with the software developed by the NIC. Initially the DES should monitor this work and later on the departments, PRIs and ULBS will have to continue to update the same. This unique ID will have to be displayed on the assets with permanent mark. The expenditure for this activity will have to borne by the department under the administrative expenditure head of accounts
b. The progress will be monitored by the High Level Steering Committee

ANNEXTURE

SI. No.	Activity	Source of fund	Expected Period of Completion	Remarks
Road Map for Implementation of Bihar Strategic Statistical Plan -BRSSP				
	First Year (2010-11)			
1	Constitution of Steering Committee	-	Completed	Steering Committee for ISSP has been formed vide Directorate Ms. No.1075, Planning, Development and Special Initiatives Departments, dated 12.06.2009.
2	Dedicated Budget line	-	-	Orders of the Government awaited
3	Declaring as Nodal Agency	-	Completed	Orders issued Vide MS.No.1076, dt, 12.06.09, declaring DES as " Nodal Agency" for implementation of ISSP and for all statistical activities in the State.
4	Preparation of SSSP	ISSP	Preparation in Progress	
5	Approval of SSSP by Steering Committee	-	Dec- 2010	
6	Submission of SSSP to Government of India	-	Feb-2011	
	Second Year (2011-12)			
1	Allotment of land for additional building for Headquarters office of DES at Bihar	State	June 2011	
2	Provision of vehicle to District Offices	ISSP	Dec-2011	Under examination of the Government
3	Issuing Orders for establishing the Training Institute	ISSP	Jun-2011	
4	Starting the Training Institute in a Rental Building	ISSP	Jul-2011	
5	Allotment of Land for Districts and Regional offices	-	Jun-2011	
6	Allocating land for Statistical Training Institute	-	Jul-2011	

7	Accommodations for Division / Block Offices of DES	-	-	Under examination of the Government
8	Re-structuring of staffing pattern	State fund	Dec-2011	
9	Creation of Web-portal	ISSP	June 2011	
10	Requesting the departments for establishing the Statistical Cell	-	Jun-2011	
11	Creation of Web-portal	ISSP	Jan-2012	will be continued in the next year
12	Establishing a Digital Library at DES	ISSP	Jun-2011	
13	Constitution of State Statistical Commission	-	Dec-2011	Government may take decision in course of implementation of ISSP
14	Establishing BRSWAN connectivity to all field offices of DES	Financial	Jul-2011	Under examination of the Government
15	Supply of Laptop Computer to field staff	State fund	Dec-2011	Under examination of the Government
16	Purchase of vehicles for Officers at Headquarters	ISSP	Jul-2011	Under examination of the Government
17	Steps for improving crop area statistics / co-ordination committee under the Chairmanship of CRA	-	Jun-2011	
18	Formation of Co-ordination Committee for data providing department like Revenue	-	Jun-2011	
19	Formation of Research Division in DES	-	Jun-2011	
20	Provision of Cell Phone Charges to Officers, BSIs. Field staff of DES	State fund	Dec-2011	Under examination of the Government
21	Provision of remuneration to farmers for Crop Cutting Experiments	State fund	Jul-2011	Under examination of the Government
22	Establishing Sections for the left out items of 20 key sectors prescribed under ISSP	ISSP	Jun-2011	
23	Attempts will be made for collection and compilation of data of new areas such as Local Area Planning, Poverty Statistics, Tourism Statistics, Environment Statistics, Disaster Management Statistics, Gender Statistics, etc.	-	Jun-2011	
24	Formation of Software Group	-	Jun-2011	
25	Improvement of SDP estimates	-	Dec-2011	

26	Improvement of District Domestic Products estimates	-	Dec-2011	
27	On-line data capture - Annual Survey of Industries	-	Dec-2011	
28	On-line data capture- Index of Industrial Production	-	Dec-2011	
29	Improvements in Crop Area Production Statistics	-	Dec-2011	
30	Technology for speedier transmission and periodical shifting of base year in Consumer Price Index	-	Dec-2011	
31	Comprehensive data base for Housing Statistics including Private sector	-	Dec-2011	
32	Full participation and increase the adequacy of sample size in National Sample Surveys	-	Dec-2011	
33	Computation of Environment Statistics	-	Dec-2011	
34	Release of Technical Manual on Statistical Schemes	State fund	Jun-2011	
35	Organising workshops, Seminars and Report releasing functions	ISSP	Mar-2012	
36	Data, Results and other important publications will be displayed on department Website	-	Mar-2012	
	Third Year (2012-13)			
1	Creation of co-ordination with other data supplying departments	-	Jun-2012	
2	Legislation for data collection	-	Jun-2012	will be continued in the next year
3	Legislation for data collection	-	Jun-2012	
4	Creation of co-ordination with other data supplying departments	-	Jun-2012	will be continued in the next year
5	Constitution of State Statistical Commission	-	Dec-2012	
6	Establishment of Online transmission of data system though BRSWAN	ISSP	Dec-2012	
7	Finalizing the training modules for induction and refresher training	-	Dec-2012	

8	Statistics for Local Area Planning	-	Mar-2013	
9	Water supply and Sanitation Statistics	-	Mar-2013	
10	Education Statistics- Literacy Statistics	-	Mar-2013	
11	School Enrolment data	-	Mar-2013	
12	Preparation of Course Materials	ISSP	Dec-2012	
13	The scheme of Capital formation will be enhanced by computing capital formation for private sector also	-	Dec-2012	
14	Elaborate system for collection and dissemination of Transport Statistics	-	Dec-2012	
15	Estimate of the contribution of the Local Bodies	-	Jan-2013	
16	Collection of data on major fiscal variables	-	Jan-2013	
17	Wholesale Price with revised base year (new series)	-	Jan-2013	
18	Collection and dissemination of Health, Morbidity, Mortality and Family Welfare Statistics	-	Feb-2013	
19	Labour and Employment Statistics	-	Feb-2013	
20	Birth, Death and Population, Gender Statistics	-	Feb-2013	
21	Electricity Production and Distribution Statistics	-	Feb-2013	
22	Forestry Statistics	-	Feb-2013	
23	Creation of co-ordination with other data supplying departments	-	Jun-2012	will be continued in the next year
24	Creation of faculties post & administrative staff for the training institute	state fund	Des-2012	
25	Wholesale price index with revised base year (New series)		Jan-13	

Forth Year (2013-14)

1	Standardization of formats for data supplying departments and creating protocol for supplying data through web portal by line departments	ISSP	Jun-2013	
2	Provision of IT Infrastructure at all levels of DES	ISSP	Jun-2013	
3	Provision of IT Infrastructure at all levels of DES	ISSP	Jun-2013	will be continued in the next year
4	Construction of Building for Head Office, Districts and Divisions	ISSP	Mar-2014	will be continued in the next year
5	Construction of Building for BSSs.	State fund	Mar-2014	will be continued in the next year
6	Construction of Building for Training Institute	ISSP	Mar-2014	will be continued in the next year
7	Construction of Building for Head Office, Districts and Divisions	ISSP	Mar-2014	
8	Construction of Building for BSSs.	ISSP	Mar-2014	
9	Starting of first level training courses	ISSP	Jun-2013	
10	100% Computerization in the department	ISSP	Jun-2013	will be continued in the next year

Fourth Year (2014-15)

1	Key data gaps will be filled up in the context of Nation Accounts, Health, Education, Labour and Employment, Housing, Tourism, Environment and Gender Statistics.	-	Jun-2014	
2	Key data gaps will be filled up in the context of Nation Accounts, Health, Education, Labour and Employment, Housing, Tourism, Environment and Gender Statistics.	-	Jun-2014	will be continued in the next year
3	Formulating Type Studies for updating ratios in Agriculture and Horticulture	-	Jun-2014	will be continued in the next year
4	Statistics on Service Sector	ISSP	Feb-2015	

References

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2. Economic Survey 2009-10, Ministry of Finance, Govt. of India
3. Economic Survey 2009-10, Govt. of Bihar
4. Various publications of the Directorate of Economics and Statistics, Govt. of Bihar
5. Various reports of the S S Division of the Central Statistical Office (CSO) pertaining to the ISSP including the status report on Bihar Statistical System prepared in the first phase of the ISSP for all the states and UTs.
6. Reports of the National Family Health Survey (NFHS-3) for India and Bihar prepared by the International Institute of Population Sciences (IIPS, Mumbai) for the Ministry of Health and Family Welfare, Govt. of India
7. Various reports including the SRS Bulletin of the Sample Registration System (SRS) of the Office of the Registrar General, India
8. Various Census of India 2001 Reports