

# Capital Formation at State Level

By  
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## Abstract

*Capital formation at state level assumes paramount importance in the context of policy making and balanced regional development. It assesses the investments made in the state in public and private sector. The Regional Accounts Committee (RAC), set up by the Govt. of India in 1972 under the chairmanship of Prof. M. Mukherjee, to examine the data availability at state level, recommended for compilation of estimates of capital formation at state level. The National Statistical Commission in its report has also recommended for compilation of estimates of capital formation at state level. The CSO has conducted number of workshops to impart training to the representatives of states on various aggregates including capital formation. As a result many states have started compiling estimates of capital formation.*

*At present most of the states are compiling estimates for public sector only but few states have also attempted to compile the estimates for private sector. There are some problems in compilation of estimates for private sector. This paper has reviewed the present status of compilation of estimates of the capital formation at state level and various problems faced by states while compiling the estimates of capital formation particularly for private sector. The paper has also discussed attempts made by the CSO for compilation of GFCF estimates at state level.*

## Introduction

Capital formation at state level assumes paramount importance in the context of policy making and balanced regional development. It assesses the investments made in the state in public and private sector. The Regional Accounts Committee (RAC), set up by the Govt. of India in 1972 under the chairmanship of Prof. M. Mukherjee, to examine the data availability at state level, recommended for compilation of estimates of capital formation at state level. The expert group, constituted in 1995, under the chairmanship of Prof. Raja Chelliah and National Statistical Commission, constituted in 1999, under the chairmanship of Dr. C. Rangrajan have also recommended for compilation of estimates of capital formation at state level. The CSO has conducted number of workshops to impart training to the representatives of states on various aggregates including capital formation. As a result many states have started compiling estimates of capital formation.

On the recommendations of Committee on capital formation and saving under the chairmanship of Prof. K.N. Raj, which submitted its reports in 1982, it was decided that CSO would prepare estimates of saving and capital formation for public and household sector while the RBI will prepare the estimates of saving and capital formation for private corporate sector and saving of financial part of household sector and both agencies will provide information to each other. The CSO is officially authorized to release estimates of capital formation and saving besides other

aggregates of national income. Accordingly the CSO releases the estimates of capital formation and saving for Indian economy every year. However the responsibility of preparation and release of the estimates of state income including capital formation is of states.

At present only some of the states are compiling estimates for public sector. Some states have also attempted to compile the estimates for private sector. There are some problems in compilation of estimates for private sector. This paper has reviewed the present status of compilation of estimates of the capital formation at state level and various problems faced by states while compiling the estimates of capital formation particularly for private sector. The paper has also discussed attempts made by the CSO for compilation of GFCF estimates at state level particularly for private sector.

### **Estimates of capital formation at National Level:**

At national level the estimates of capital formation are prepared separately by following three methods:

I. Flow of funds method

-As the sum of saving and net capital inflow from abroad.

II. Commodity flow method

- GFCF by type of assets (construction and machinery & transport equipment) following commodity flow method and change in stock by industry of use.

III. Expenditure method

By adding GFCF by industry of use following different method for different industrial category and change in stock by industry of use.

These three methods give three sets of estimates of capital formation. For determining the rate of domestic capital formation the estimates as obtained from method I are used. As the estimates obtained from this method are to be taken firmer than that of by type of assets and by industry of use. The discrepancy of estimates of method II to method I is called "error and omission" whereas the discrepancy of method III with method I is called as "difference". Generally the order of estimates is  $est(\text{method I}) > est(\text{method II}) > est(\text{method III})$ .

These estimates are prepared and released by National Accounts Division of CSO every year in the month of January and are published in annual publication of NAD "National Accounts Statistics"(NAS). The statements 18, 19 and 20 of NAS give the estimates of Gross Domestic Saving, Gross Capital Formation by type of assets and Gross Capital Formation by industry of use respectively. The latest available publication is "National Accounts Statistics 2003".

The rate of Gross Domestic Capital Formation for Indian economy for the years 1993-94 to 2001-02 at current and constant prices is given as under:

Years	Rate of GDCF at current Prices	Rate of GDCF at 1993-94 prices
1993-94	23.1	23.1
1994-95	26.0	26.4
1995-96	26.9	27.3
1996-97	24.5	25.1
1997-98	24.6	25.9
1998-99	22.6	24.6
1999-00	25.2	27.7
2000-01	24	26.2
2001-02	23.7	25.6

It is observed from this table that the rate of capital formation for the entire economy is hovering around 22.6 to 27.7 % of GDP.

### 3. Estimates of Capital formation at State Level:

#### Background:

The first attempt to examine the data availability at state level and to suggest measures for compilation of accounts at state level was made by the Regional Accounts Committee (RAC), set up in May 1972 under the chairmanship of Prof. M. Mukherjee.

The RAC submitted its First Report in November 1974 and the Final Report in September 1976. In the first report, the RAC recommended a set of Standard Tables to be prepared at State level mainly to meet the immediate requirements of the policy makers at the regional level. In the final report, the Committee recommended a System of Regional Accounts (SRA) consisting of a set of three consolidated accounts, besides other useful accounts. It gave scope, coverage and methodology for compilation of fixed capital formation at state level. In order to compile the production and capital finance accounts, the estimates of GFCF are essentially required.

The CSO later constituted a sub-group on state domestic product and expenditure accounts in 1982. The reports of the sub-group containing inter alia, methodological notes on "Fixed capital formation at state level: Scope, Coverage and method of estimation" as approved by the Advisory Committee on National Accounts was forwarded to state DES in July 1986 for implementation. The CSO conducted three workshops, the first in August 1977, the second in July, 1981 and the third in November 1990 in this regard, for the benefit of officers of the DESs. In 1997 a special workshop at Bangalore was conducted by the CSO on "Capital Formation and Consumption of Fixed Capital" wherein the concept, scope, definitions and methodology was circulated to representatives of state.

An expert group on capital formation and saving was set up by the Government of India in 1995 to undertake a critical review of the available estimates of saving and capital formation in the economy and recommend improvements in the methods and

procedures of estimation. Initially the group was constituted under the chairmanship of Prof. V.M. Dandekar. But due to sad demise of Prof. Dandekar, the group was reconstituted under the chairmanship of Prof. Raja Chelliah. One of the terms of reference set for the group was to review the existing methodology and suggest improvements in the estimation of capital formation at state level. The group reviewed the status of the availability of state level estimates of capital formation and observed that the situation is not very satisfactory. The group recommended that all the states should compile the estimates of capital formation at least for public sector, as the data for public sector can be obtained easily from budget documents and annual reports of the enterprises. It was further recommended that the CSO should continue to provide all possible technical guidelines to the various State Directorates so that all the States can produce estimates of total capital formation within their respective territories.

The National Statistical Commission (NSC) in its report has also reviewed the status of compilation of estimates of capital formation and recommended that all states should compile estimates of capital formation. The extracts of NSC recommendations regarding the compilation of estimates of capital formation at state level is given as under:

*"Capital Formation, Capital Stock and Consumption of Fixed Capital*

*13.7.6 Currently, some States are compiling estimates of gross fixed capital formation (GFCF) by assets and industry for the public sector, while three States are also compiling the GFCF estimates for the Whole State economy. Since estimates of construction and machinery equipment are already compiled for the SDP estimates, it may not be difficult to compile GFCF estimates at State level, with certain assumptions. The CSO has provided necessary technical guidance from time to time on the compilation of GFCF at the State level. Once the States start compiling the GFCF estimates, a database on this could be developed, which in the long run, will be used for compiling the estimates of capital stock and CFC".*

## **Methodology**

The RAC has recommended in its reports that instead of GCF, states should compile the estimates of GFCF only, as the estimation of change in stock is not conceptually viable or feasible at the state level due to open boundaries of the states. Moreover the estimates of change in stock are subject to higher fluctuations. Thus it was felt at state level GFCF would be a better indicator of capital formation. The three methods as discussed in para 2.1 and used at national level are not feasible at state level as the commodity flow and saving & flow of funds methods require the data on exports and imports, which are not available at state level. The only method that can be used to prepare the estimates of GFCF at state level is the expenditure method.

In the Regional Workshop on estimation of Capital Formation and Consumption of Fixed Capital at state level held at Bangalore in 1997, it was agreed that the estimates should be prepared by industry of use on the basis of location of fixed assets and by type of assets. As per the classification of SNA 1993, the broad classification of GFCF by type is given at appendix-I. At national level also same classification is being followed as far as possible depending upon the data availability. For this purpose, entire state economy is classified into industry sector broadly in terms of the industrial

classification used for measurement of the net domestic product. Each industrial activity can further be divided into public, private organized and private unorganized sectors. The commodities, which enter into the estimation of GFCF, should be valued at purchaser's price or actual expenditure incurred.

### **Present Position:**

The estimates of GFCF at state level are not presently compiled by the CSO because of non-availability of state wise details on capital expenditure made by the two institutional sectors namely Private Corporate sector and Household sector. The only institutional sector for which estimates are available is public sector. Although the data on GFCF of private corporate sector at national level is available from studies of Company Finances conducted by the RBI, such details are not available at state level due to small sample size adopted by the RBI for these studies. Further the results obtained from sample studies are blown up by the paid up capital. The blowing up factor is not available at state level. Due to this reason the estimates of private corporate sector at state level are being compiled by the RBI. Similarly the estimates of household sector at national level are based on various enterprise surveys. The benchmark estimate's are obtained from these surveys and moved for subsequent years with suitable indicators. But at state level the estimates of household sector is again a problem as the results for many states are not available in these surveys and getting bench mark estimates is difficult.

In view of above difficulties, most of the states are preparing estimates of GFCF for public sector only. For public Sector, States are preparing estimates by type of assets and by industry of use. The list of such states is given at appendix-II.

As far as private sector is concerned, only household sector estimates are being prepared by few states on the basis of information from enterprise surveys conducted by CSO/NSSO. The benchmark estimates are available from enterprise surveys and moved forward with suitable indicators. The estimates as prepared by the states are released in their publication "Estimates of capital formation".

### **Attempt made by the CSO**

As indicated above, most of the states are preparing estimates of capital formation for public sector only. Private sector estimates are not being prepared by states due to non-availability of data for private corporate sector and household sector. Thus the CSO took the initiative in this direction and attempted to compile the estimates of GFCF at state level particularly for private sector using various adhoc sources of data from 1993-94 to 1999-00. These estimates as given in appendix-III are separately compiled for public sector, private sector and supra-regional sector. The classification of the institutional sectors is slightly deviated from conventional classification of sectors namely public sector, private corporate sector and household sector as used at national level. At state level the private corporate sector and household sector are clubbed together due to non-availability of data separately for these two sectors. The estimates of supra-regional sectors are prepared by the CSO and supplied to states. Thus the estimates of public, private and supra regional sectors as prepared by CSO were circulated to states along with methodology. As a result of this exercise many states

have started compilation of estimates of private sector. The methodology used to prepare these estimates is explained as below: -

## **Public Sector**

The estimates of GFCF for the public sector have been prepared separately for (a) Administrative departments (b) Departmental Commercial Undertaking (DCU) (c) Non-departmental Commercial Undertaking (NDCU).

### **(a) Administrative Departments**

Estimates of GFCF in respect of administrative departments of state governments are available in the budget documents of the respective state governments. For the part relating to the central government administration, which needs to be allocated to the different states, the allocation is done on the basis of the following procedure.

Estimates of GFCF for administrative departments are based on the analysis of 'Demand for Grants' of all Central ministries/departments. Analysis of these budget documents is carried out by the CSO every year for the purpose of national level estimates. In these budget documents, details of probable capital expenditure of projects costing Rs.50 lakh and above, by type of assets and by location, for the previous year are given, in the 'Works Annexure'. The GFCF for the part relating to central government administration has been distributed state-wise on the basis of this information available in this 'Works Annexure' of budget documents. The data relating to coast guard ships/vessels, defence wireless, ocean development, satellites etc., are unallocable and remain undistributed among the states. The data for capital formation in respect of 'Border development Boards' meant for North-eastern States are distributed in proportion to their net domestic product (NDP). In respect of Quasi public bodies under the central government, the estimates of GFCF of these bodies have been distributed to different states on the basis of their gross state domestic product (GSDP).

### **(b) Departmental Commercial Undertakings**

Estimates of GFCF in the case of DCU's under the jurisdiction of the central government are based on their classification according to their geographical location in different states.

### **(c) Non departmental Commercial Undertakings:**

Estimates of GFCF for the State NDCU's are based on analysis of annual accounts/Reports of these companies. In the case of central NDCU's, state-wise allocation has been done on the basis of the Table on Gross block of central companies, which is available in the Public Enterprises Survey Report. In this report, the table on Gross block gives details of fixed assets of central companies. Allocation on the basis of Gross Block data has been done for all industries, except for electricity, gas, transport, and storage, as information for these sectors is obtained from direct sources. In the case of electricity, state-wise GFCF estimates have been compiled through the analysis of Annual Accounts of State Electricity Boards and Corporations. For the central companies, the allocation is done on the basis of state-wise capital

expenditure made by these companies. In respect of gas, estimates of GFCF for the central undertakings have been allocated to the states on the basis of information available on state-wise capital expenditure, by these undertakings. In the case of road transport, port transport, and storage sub-sectors, the state-wise allocation has been done on the basis of the analysis of Annual Reports of the respective undertakings. In the case of Central Warehousing Corporation, air transport, and water transport, estimates of their GFCF are allocated to the states on the basis of their GSDP.

## **Private Sector**

The private sector consists of two parts namely private corporate sector and household sector. The problem of compiling estimates of GFCF for private corporate sector at state level has already discussed in para 3.8 The estimation for household sector can broadly be divided into following three categories: -

- Where data are collected on regular periodic intervals say every year (e.g. production of principal crops, mining, registered sectors etc.).
- Where bench mark estimates can be worked out reasonably/satisfactorily every few years and the estimates for intervening years can be worked out by moving the bench mark estimates by means of appropriate indicators of physical output and prices (e.g. livestock products, unregistered manufacturing, construction, trade etc.)
- Where national totals are allocated among the states by use of some meaningful indicators (e.g. banking, railways. Central government administration. Etc.)

To take care the private corporate part, the estimates as obtained above are redistributed by taking total private estimates for each sector at national level as controlling total. The methodology used for compilation of these estimates is explained as below: -

## **Agriculture**

The private sector component has been prepared on the basis of data on capital expenditure available from the AIDIS, 1991-92. The total expenditure has been moved to subsequent years with state-wise value of output (excluding livestock) of agriculture sector. The estimate of GFCF of livestock is obtained by allocating national level estimates of livestock according to the number of livestock (only for those categories who are taken for GFCF). The sum of GFCF agriculture and GFCF livestock gives the estimates for private sector. The GFCF so obtained is re-distributed by taking national level private estimates as controlling total.

## **Forestry**

In the case of forestry, the activity is primarily under the public forests. Data in respect of public sector part is obtained from the analysis of budget documents. The all-India estimates of GFCF in the private sector have been distributed on the basis of the state-wise GFCF in the public sector in the forestry sector.

## **Fishing**

The state-wise estimates of GFCF have been obtained by allocating the national level private estimates of GFCF using the state-wise GSDP of fishing sector.

## **Mining and Quarrying**

The state-wise estimates of GFCF have been obtained by allocating the national level private estimates of GFCF using the state-wise value of output of minor minerals.

## **Registered manufacturing**

The state-wise estimates have been obtained by using the state-wise information on GFCF available from the results of Annual Survey of Industries (ASI). The results so obtained have been used to distribute national level private estimates of GFCF of this sector.

## **Unregistered Manufacturing**

The information on this sector is not directly available. The information on fixed assets owned per enterprise and number of enterprises as given in the NSSO survey on unorganized manufacturing sector in India, 1994-95, state-wise, the survey year estimates of GFCF have been prepared. The estimates of GFCF for the subsequent years have been made by extrapolating the benchmark state-level estimates of GFCF with the GSDP of unregistered manufacturing sector. The estimates so obtained have been adjusted with national level private estimates of GFCF of this sector.

## **Electricity gas and water supply**

The major component of this sector for the private part pertains to electricity. The other two activities namely gas and water supply are primarily in the public sector. The national level estimates of the entire sector in the private segment are allocated to the states on the basis of state-wise GDP estimates of the electricity sub-sector.

## **Construction**

The national level estimates of the entire sector in the private segment are allocated to the states on the basis of state-wise GDP estimates of the construction sector.

## **Real estates and ownership of dwellings and Business Services**

The state-wise information available in the AIDIS relating to fixed capital expenditure of rural and urban residential buildings for the year 1991-92 has been moved forward by using relevant quantum indices and price indices to obtain the estimates for the subsequent years. Using this information, the national level estimates (except for software) of the entire sector in the private segment are allocated. The Software component of the GFCF has been allocated to the states on the basis of GSDP estimates of software.

## **Trade, Hotels and Restaurants**

The estimates of the private part of trade have been prepared on the basis of the results of Enterprise Surveys, 1996-97 conducted by the CSO/NSSO. The data used pertains to net addition to fixed assets per enterprise and number of enterprise in the DTE/NDTE/OAE. Beyond the survey year, the estimates are obtained by moving the survey year estimates with GSDP of this sector. The total estimate of trade so obtained is adjusted for national total in private sector. In the case of Hotels and Restaurants, information available on the Closing Stock of Fixed assets in the Enterprise Survey, 1992-93 has been used as an indicator for distributing the national level estimates in private sector of this sector.

## **Transport and Storage**

The estimates of GFCF for private part can be prepared on the basis of the results of Enterprise Survey, 1993-94 on Transport Sector. The information on closing balance of fixed assets for mechanised and non-mechanised transports have been used to obtain GFCF of this sector. For other years these estimates can be moved with the help of number of vehicle or any other suitable indicator. For the estimates of air transport, national level GFCF for air transport in private sector have been allocated to states on the basis of GSDP of air transport. Similarly for shipping, the national level estimates in private sector have been allocated to states on the basis of data on percentage of cargo handled in the ports. In the case of storage, information available on the Closing Stock of Fixed Assets from Enterprise Survey, 1992-93 has been used for allocating national level estimates in private part

## **Other Services**

The estimates of private part of this sector has been obtained from Enterprise Survey Report on Establishments in Service sector, 1991-92. The data on net addition to fixed assets for the year 1991-92 is obtained from this survey. Estimates of GFCF for other years have been obtained by moving the survey year estimates with the state-wise value added of this sector

## **Supra-Regional Sector**

For supra-regional sectors like railways, banking and insurance, communications and central government administration, the estimates are prepared by the CSO and made available to states. The methodology used by the CSO for preparing these estimates is given as follows:

### **Railways**

This sector covers the activities of the railways including workshops and factories and also construction including major repairs undertaken by the railways. The data on capital expenditure during the year have been derived as the difference in the outlays expected up to the end of the current and preceding years given in the publication of Railways Board "Works, Machinery and Rolling Stock Programme of Railways (Detailed Programme)". As per the recommendation of Regional Accounts Committee (RAC), the rolling stock of railways has not been allocated to the States. The estimates of State

wise GFCF have been prepared for Building, construction including construction of new lines, track renewals, cables route electrification, and machinery and equipment including expenditure on computerization, signaling and telecommunication works and other installations. The capital expenditures have been distributed on the basis of location of projects mentioned in the above source documents. If a section covers more than one state, the allocation to different states has been done on the basis of new lines, tract renewals and others items of machinery falling within the concerned states. This has been done on the basis of railway map of India. The difference between the national level GFCF and the estimates prepared by the above method has been allocated on pro-rata basis.

## **Banking & Insurance**

This sector covers Public sector banks, Private banks, Banking department of RBI, Financial corporations, Insurance corporations, Regional Rural bank, Cooperative credit societies, Financial investment companies, other Financial companies and state financial corporations. In the case of public banks, the state-wise data on construction and machinery & equipment have been collected from these banks. The fixed capital expenditure of private banks and non-responding public banks has been distributed on pro-rata basis of state wise data of the responding public banks. All India estimates of financial investment companies are distributed in the proportion of state-wise data on paid up capital received from Department of Company Affairs, Ministry of Finance. The state-wise estimates of central/state finance companies on construction and machinery& equipment are added to state finance companies data to obtain the consolidated state-wise estimates. Estimates of GFCF from state financial corporation are being compiled from annual reports of these corporations. In the case of Banking Department of RBI, insurance corporations and central financial corporations, estimates are based on the state-wise data on construction and machinery & equipment made available by the respective institutions. Data in respect of regional rural banks and cooperative credit societies are supplied by NABARD.

## **Communication**

This sector covers the activities of Posts and Telecommunication. The source of data for posts is the Department of Posts and for telecommunication, it is the Department of Telecommunication, MTNL & VSNL. For posts, circle-wise data on capital expenditure in respect of building, construction and machinery & equipment during the year has been obtained from the Department of Posts. Postal circles are generally co-terminus with the states. Where circle comprises of more than one state, capital expenditure is allocated among different States/UTs using the number of Post Offices in different States/UTs, within that circle. The All-India capital expenditure for posts is distributed among states in the ratio of capital expenditure among states as compiled above. For Telecommunication, circle-wise data for capital expenditure is made available separately for construction and machinery from the Department of Telecommunication. Where circle comprise of more than one state, capital expenditures allocated in the ratio of Telecom Plan Investment break up available for the year 1989-90. For VSNL & MTNL totals GFCF is allocated to states in the proportion of actual state-wise capital expenditure supplied by MTNL and VSNL.

## **Central Government Administration**

The state/UT wise fixed capital expenditure for different type of assets is extracted from the "Demands for Grants" documents received from all the central government Ministries/Departments for each financial year. In the work annexure of these documents, the probable capital expenditure of the projects costing Rs 5 crore and above. Besides, in these annexure, a large amount of money is earmarked under the category 'collective all other works', the identification of which by type of assets and location are not available from these documents.

Further , (i) the data for capital formation in respects of 'Border Development Boards' meant for North Eastern States are distributed among north eastern states in the proportion to their NVA compiled from the respective State Govt. budgets, (ii) the additional capital formation data for union territories is also obtained from home ministry's demand for grants, (iii) The data relating to coast guard ships/vessels, defence wireless, ocean development, satellites etc., are un allocable and remain undistributed among the states. The remaining amount of fixed capital formation for central government administration i.e. (total-i-ii-iii) has been distributed among all states/UTs in the ratios of the statewise amount of fixed capital formation extracted from the available Work Annexures of all Ministries/Departments as detailed in pervious para.

## **Suggestions**

As it is clear from recommendations of RAC and NSC that the estimates of capital formation at state level are to be compiled by the states only. The CSO can give only guidelines and other technical assistance to state.

As far as public sector is concerned there is not much problem in compilation of estimates of GFCF. The estimates can be prepared by analysing the budget documents. However, the data on local bodies is weak. Local body data can be obtained by analyzing the grants to local bodies in details. Thus it is expected from all the states that they should compile the estimates of GFCF, at least, for public sector.

But the main concern is private corporate sector and to some extent household sector. For private corporate sector state level estimates of GFCF are not available nor any suitable indicator is available which can be used for allocating national level estimates of private corporate sector. But attempts are to be made to compile the estimates at state level. The Department of Company Affairs (DCA) can be contacted for private corporate data. Alternatively the data of centre for monitoring Indian Economy (CMIE ), Mumbai can be utilized for preparing the private corporate sector estimates.

For household sector the enterprise surveys on different subjects can be used to obtain the bench mark estimates and some suitable indicator can be used to arrive at the estimates for subsequent years. Though most of the enterprise survey are very old and needs to be revised immediately. But in the absence of any other sources the same can be used to prepare the estimates of household sector.

The states which are not covered in the enterprise survey can obtain the results for benchmark year by using some appropriate indicator like GSDP of that sector. For those industries for which neither any enterprise survey is available nor direct data is available, national level private estimates can be allocated on the basis of GSDP of that sector.

The AIDIS 1991-92 used for preparing the estimates of agriculture and real estates & ownerships of dwelling is very old and needs to be revised. The new AIDIS 2002-03 was already conducted and results are expected very soon. The new AIDIS will take care of this problem.

For mining and quarrying sector, information from IBM and state department of mining and geology may be collected.

For registered manufacturing sector, while ASI data is available to the states, both for census and sample sectors, it is necessary that the state develop their own index number series for industrial production and prices similar to All-India series. This would provide an appropriate indicator to the states to move the latest available estimates based on ASI data to obtain current year estimates on provisional basis.

For unregistered manufacturing the latest available enterprise survey is for 2000-01. The states can revise their estimates on the basis of information available in this survey.

For mining, transport, trade, hotel and restaurant storage, other services etc, the enterprise surveys are very old and coverage of these surveys is not complete. For these sectors, it would be necessary to collect comprehensive information on various aspects for benchmark year. The benchmark estimates as obtained from these survey needs to be revised in the light of latest changes in different sectors. States can conduct small-scale surveys on various sectors to obtain benchmark estimates. The benchmark estimates should be moved for subsequent years with suitable indicators.

As the results are not available separately for all the states in the enterprise survey presently used for compilation of household sector estimates, it is difficult to compile the estimates for benchmark year of those states for which results are not available. However the information for such states, for benchmark year, can be obtained by distributing the information in enterprise surveys for 'other states' with the help of GSDP of that sector.

At present the data on capital expenditure is being collected through the Enterprises surveys (ESs). A separate block is included in the ES for this purpose and information on buildings, plant & machinery and other fixed assets acquired by the enterprises during the 365 days preceding the date of survey are collected. But the information collected through ESs has its own limitation. The information collected through ES does not reflect the true picture of capital formation as major part of capital formation takes place at the time of setting up of enterprise and at this stage, the enterprise remains out of the coverage of the survey. Even after the completion of the set up, if the enterprise is not operational, it will be kept out of the preview of the survey, as an enterprise to be covered in the survey has to be operational for at least 30 days. Thus the estimates of capital formation collected through ES suffer from the drawback of underestimation. But

in the absence of any other information on fixed assets of enterprises, the results of ESs can be used.

## **Conclusions**

The state wise estimates of GFCF as prepared by CSO are based on adhoc sources of data, especially in the private sector. In the case of public sector the information is available from budget documents and annual reports. The estimates of local bodies could be compiled by state by analysing the budget of the local bodies. This pilot exercise undertaken by CSO gives rough estimates of GFCF State wise. However, these estimates particularly for private sector give a direction to states for compilation of estimates of GFCF in their states. The efforts put in by some states in compilation of estimates for public and private sector GFCF deserve appreciation. The quality of the estimates particularly for private sector is not very good but it can be improved upon gradually. It is hoped, with the active and consistent interaction of states and CSO, all the states will be a position to prepare the estimates of capital formation in the near future.

## **References:**

- ❖ System of National Accounts (SNA) 1993
- ❖ Sources and Methods 1989
- ❖ Indian Economy by Datt and Sundharam
- ❖ Report of Regional Accounts Committee (RAC)
- ❖ Report of Raja Chelliah committee
- ❖ Report of National Statistical Commission (NSC)

## **Notes**

### **Concept and definitions**

The simple meaning of the capital formation is that the society does not use the whole of its current productive activity to the needs and desire of immediate consumption, but directs a part of it to the making of capital goods such as building and other structure, plant and equipments, transport facilities, tools and instruments and all other form of real capital which can repeatedly used for production purposes and hence increase the efficacy of productive efforts. Thus capital formation means acquiring assets through production process.

Domestic capital formation is defined as that part of the country's current output and imports which is not consumed or exported during the accounting period but set aside as addition to its stock of capital goods.

Gross capital formation (GCF) refers to the aggregate of gross additions to fixed assets (i.e., fixed capital formation) and change in stocks during the accounting period. Fixed assets comprise construction and machinery & equipment (including transport equipment and breeding stock, draught animals, dairy cattle and the like). Gross capital formation is measured by the total value of the (i) gross fixed capital formation, (ii) changes in inventories and (iii) acquisitions less disposals of valuables. As the information on item (iii) is not available, total capital formation can broadly be classified

into (i) Gross Fixed Capital Formation( GFCF) and (ii) changes in stocks of raw materials, semi-finished and finished goods.

Gross fixed capital formation (GFCF) is measured by the total value of a producers' acquisitions, less disposals, of **fixed assets** during the accounting period plus certain additions to the value of non-produced assets realised by the productive activity of institutional units. Fixed assets are tangible or intangible assets produced as outputs from processes of production that are themselves used repeatedly or continuously in other process of production for more than one year.

1.5 There is substantial diversity in the different types of gross fixed capital formation that may take place. The following main types may be distinguished.

**(a) Acquisitions, less disposals, of new or existing tangible fixed assets, subdivided by type of asset into :**

- Dwellings,
- Other buildings and structures;
- Machinery and equipment;
- Cultivated assets – trees and livestock-that are used repeatedly or continuously to produce products such as fruit, rubber, milk etc.

**(b) Acquisitions, less disposals, of new and existing intangible fixed assets, sub-divided by type of asset into:**

- Mineral exploration;
- Computer software
- Entertainment, literary or artistic originals;
- Other intangible fixed assets;
- Major improvements to tangible non-produced assets, including land;
- Costs associated with the transfers of ownership non-produced assets.

The various component of acquisitions and disposals of fixed assets as referred to in categories (a) and (b) above are, listed below:

- (a) Value of fixed assets purchased
- (b) Value of fixed assets acquired through barter,
- (c) Value of fixed assets received as capital transfers in kind;
- (d) Value of fixed assets retained by their producers for their own use, including the value of any fixed assets being produced on own account that are not yet completed or fully mature;

**Less**

- (e) value of existing fixed assets sold;
- (f) Value of existing fixed assets surrendered in barter;
- (g) Value of existing fixed assets surrendered as capital transfers in kind.

**Scope and coverage**

as explained above the estimates of capital formation cover (i) durable goods – the lifetime of which is one year or more- acquired by producers (ii) major improvements and alteration of the durable goods which significantly extend the expected life-time or

productivity of assets, (iii) new construction (iv) reclamation and improvement of land and the development and extension of timber tracts, mineral exploration, orchards, plantations and similar other agricultural holdings and (v) breeding stocks, draught animals, dairy cattle and the like

Purchase of durable goods by household for its own consumption are not treated as capital formation though the lifetime of such durable goods may be more than one year.

Though human resources fulfill the definition of a capital formation but it is kept out of the preview of capital formation.

The purchase of land does not form part of capital formation but reclamation and improvement of land forms part of capital formation.

Expenditure on current repair and maintenance incurred for keeping the fixed assets in proper working order is not classified as capital expenditure. But major repairs, which extend the life of existing assets forms part of capital formation.

Assets like land, mineral deposits, timber tracts, etc., classified as non reproducible tangible assets are not included in compilation of estimates of capital formation though dealer's margin, service charges and other transfer costs in regards to transaction in such assets form part of capital formation.

Destructive weapons such as missiles, rockets, bombs etc are excluded from the scope of capital formation however military structures used for dwelling purposes is included in capital formation.

Expenditure on computer software, Entertainment, literary or artistic originals and copyrights/patent also form part of fixed capital formation.

Research and development expenditure should be considered as normal revenue expenditure. Whereas the expenditure on mineral exploration is treated as capital expenditure whether it is successful or not.

Expenditure on land clearance, irrigation works, plantation and cultivation of new timer tracts, new fruits and sap bearing trees, vines etc. which yield products after a number of years is included in the capital formation. However, after such plantation as cultivation become productive, further outlays in respect of cultivation should be classified as intermediate consumption.

Clearance and afforestation of timber tracts and forest is classified under land improvement activity and included in gross fixed capital formation.

Soil conservation activity undertaken by the public sector for conservation of forests and capital expenditure on such construction activity is included in gross fixed capital formation. Similarly soil conservation activity in the private sector may be treated as own-account construction. The expenditure on own-account construction should, in principle, be assigned to the construction industry and should not form part of the output of the industry where it is actually undertaken.

## **Classification of Gross Fixed Capital Formation According to Type**

### **Residential Buildings**

Value of work put in place on the construction of buildings which consist entirely or primarily of dwellings, expenditure on major alteration in, and additions to, these buildings; and transfer and similar costs in respect of purchase (sale) of existing residential buildings. Included are outlays on the external and internal painting of new buildings and on the installation of new permanent fixtures such as fixed stoves, central heating, air-conditioning, lighting, plumbing and water-supply facilities, and all other fixed equipment customarily installed before dwellings are occupied. Excluded are repair and replacement of work-out or damaged fixed equipment customarily installed before dwellings are occupied. Excluded are repair and replacement of work-out or damaged fixed equipment and fixtures. Also classified here are the sale proceeds and purchase costs, except the included transfer costs, of transactions in existing residential building, leaving out the side of the buildings. Hotels, autocourts and similar buildings operated for purely transient occupancy are considered to be non-residential structures.

### **Non-residential Buildings**

Value of work put in place on buildings and structures which are entirely, or primarily, for industrial or commercial use; outlays on major alterations in, and additions to, these buildings and structures and transfer and similar costs in respect of purchase (sales) of existing non-residential buildings. Examples of non-residential buildings are factories, warehouses, office buildings, stores, restaurants, hotels, garages, farm buildings such as stables and barns, and buildings for religious, educational, recreational and similar purposes. Also included are outlays on the installation, alteration and improvement of fixtures, facilities and equipment which are integral and unmoveable parts of the structures, but not expenditure on the repair or replacement of such worn-out or damaged fixtures and purchase cost, net of any transfer costs, of transactions in existing non-residential buildings, leaving out the value of the land which may be involved in the transaction.

### **Other Construction except Land Improvement**

Value of work put in place on the construction and major alteration or renewal of works, such as the permanent ways of railroads, roads, streets, sewers, bridges, viaducts, sub-ways and tunnels, harbours, piers and other harbour facilities, car parking facilities, airports, pipelines, oil-wells and mine shafts, canals and waterways, water-power projects, dams and dikes which are not part of irrigation and flood control projects, drainage and sanitation projects, athletic fields, electricity transmission line, gas main and pipes, telephone and telegraph lines, etc. Includes the cost of raising the surface of future building sites levelling the sites, and laying out the necessary streets and sewers, but excludes ground work within the buildings, as the case may be. Also included are transfer and similar costs in respect of purchase (sales) of existing assets of the type. Classified here as well are the sales proceeds and

purchase cost net of included transfer costs of transactions in such existing assets, leaving out, if feasible the value of the involved land.

## **Land Improvement and Plantation and Orchard Development**

### **Land Improvement**

Outlays on land reclamation and land clearance, irrespective of whether it represents an addition to total and availability or not; irrigation and flood control project and dams and dikes which are part of these projects; clearance and afforestation of timber tracts and forests; and the transfer costs of transaction in land, farms, mineral deposits and concession, timber tracts and forests, fishing grounds and concessions, and similar natural resources.

### **Plantation, Orchard and Vineyard Development**

Expenditure on planting and cultivating until they yield crops of orchards, rubber plantations, and other new holdings of fruit-bearing and sap bearing plants which take more than a year to become productive.

### **Transport Equipment**

Purchasers' value of new and imported, completed ships, aircrafts, railway and tramway rolling stock, tractors for road haulage, trucks, moving vans and the like, motor vehicles, carts and wagons acquired by industries, government services for civilian use and private non-profit services; outlays on major alterations and improvements in existing transport equipment of this type owned by these units, and dealers' margins, transport and other transfer costs in respect of purchase (sales) of such second-hand assets. Also classified here are the proceeds of sales by resident producers of their old and scrapped transport equipment and the cost of their purchases, net of included dealers' margins and other transport charges, of second-hand transport equipment for use as such.

### **Machinery and Equipment**

#### **Agricultural Machinery and Equipment**

Purchasers' value of new and imported agricultural machinery and equipment such as harvesters, threshers, ploughs, harrows and other cultivators, and tractors other than for road haulage, outlays on major alterations and improvements in such machinery and equipment and dealers' margins, transport and other transfer charges in respect of the purchase (sale) of second-hand agricultural machinery and equipment. Also classified to this category are the proceeds of the sales of old and scrapped agricultural machinery and equipment by farmers and the cost, net of included dealers' margins and other transport charges, of their purchase of these second-hand items.

## Others

Purchasers' value of additions of new and imported durable goods not elsewhere classified to the fixed assets of resident producers, their outlays on major alterations, improvements and renovations of these goods and dealers' margins, transport and other transfer charges in respect of the purchase (sales) of second-hand fixed assets not elsewhere classified. Included are power generating machinery; office machinery/equipment, furniture and furnishings; art objects; metal working machinery, mining; construction and other industrial machinery, cranes and forklift equipment' durable containers, equipment and instruments used by professional men, and equipment, furnishings and furniture for use by hotels, boarding houses, restaurants, hospitals, research institutions, schools and other services. Items of small value, such as hand tools, office desk equipment and furnishings may be excluded on practical grounds if the customary accounting procedure is to treat them as a current expenditure. Also classified here are the proceeds of sales by the producers of their used and scrapped fixed assets of the same type and the cost, net of dealers' margins and other transfer charges of purchases of these second-hand items by resident producers for use as fixed assets.

## **Breeding Stock, Draught Animals, Dairy Cattle and the Like**

Value of additions to, less disposals of, breeding stock, draught animals, dairy cattle, sheep, etc., raised for wool clipping.

## **Mineral exploration**

Mineral exploration is undertaken in order to discover new deposits of minerals or fuels that may be exploited commercially. Such exploration may be undertaken on own account by enterprises engaged in mining or the extraction of fuels. Alternatively, specialised enterprises may carry out exploration either for their purposes or for fees. The information obtained from exploration influences the production activities of those who obtain it over a number of years. The expenditure incurred on exploration within a given accounting period, whether undertaken on own account or not, are therefore treated as expenditures on the acquisition of an intangible fixed asset and included in the enterprise's gross fixed capital formation.

The expenditures included in gross fixed capital formation include not only the costs of actual test drillings and borings, but also the costs incurred to make it possible to carry out tests, for example, the costs of aerial or other surveys transportation costs, etc. The value of the resulting asset is not measured by the value of new deposits discovered by the exploration but by the value of the resources allocated to exploration during the accounting period.

## **Computer software**

Computer software that an enterprise expects to use in production for more than one year is treated as an intangible fixed asset. Such software may be purchased on the market or produced for own use. Acquisitions of such software are therefore treated as gross fixed capital formation. Software purchases on the market is value at purchasers' prices, while software developed in-house is valued at its

estimated basic price, or at its costs of production if it is not possible to estimate the basic price.

Gross fixed capital formation in software also includes the purchase or development of large databases that the enterprise expects to use in production over a period of time of more than one year. These databases are valued in the same way as software, described above.

### **Entertainment, literary or artistic originals**

Originals consist of the original films, sound recordings, manuscripts, tapes, models, etc., on which drama performances, radio and television programming musical performances, sporting events, literary and artistic output, etc., are recorded or embodied.

The acquisition of an original constitutes gross fixed capital formation. The original is often retained by its producer, but it may also be sold after it has been produced in order to be exploited by another unit. When it is sold the gross fixed capital formation is measured by the price paid by the purchaser to acquire the asset. If it is not sold the gross fixed capital formation is measured by the price paid by the purchaser to acquire the asset. If it is not sold, its valuation may be difficult because it depends on the future benefits that the owner expects to derive. These benefits may be very difficult to estimate in advance. In the absence of other information it may be necessary to value original by its costs of production, as in the case of many other kinds of output produced for own gross fixed capital formation.

**Appendix- II**

As on 10.7.2002

**Data position on GFCF by Industry of Use at current price by respective States**

<b>STATE</b>	<b>Data available for the Years</b>	<b>Total GFCF</b>	<b>Public Sector</b>	
1.Andhra Pradesh	93-94 to 99-2000	Available	Available	
2.Assam	90-91 to 97-98	Available	Available	
3.Goa	93-94 to 96-97	Not Available	Available	
4.Haryana	80-81 to 94-95	Available	Not Available	
	93-94 to 97-98	Available	Not Available	
5.Karnataka	80-81 to 93-94	Available	Available	
6.Kerala	80-81 to 90-91	Available	Not Available	
7..Madhya Pradesh	80-81 to 95-96	Available	Available	
	93-94 to 97-98	Available	Available	
8.Maharashtra	80-81 to 98-99	Not Available	Available	
	93-94 to 97-98	Not Available	Available	
9.Meghalaya	86-87 to 95-96	Not Available	Available	
10.Orissa	80-81 to 95-96	Not Available	80-81 to 93-94	
	93-94 to 98-99	Not Available	Not Available	
11.Punjab	80-81 to 95-96	Available	Not Available	
	93-94 to 99-2000	Available	Not Available	
12.Rajasthan	80-81 to 97-98	Available	Not Available	
	93-94 to 99-2000	Available	Not Available	
13.Tamil Nadu	80-81 to 97-98	Available	Available	
	93-94 to 98-99	Available	Not Available	

SL.NO.	STATE / UT.	PUBLIC SECTOR				PRIVATE SECTOR	SUPRAREGIONAL SECTOR	TOTAL GFCF
		ADMIN	DCU	NDCU	TOTAL PUBLIC			
1	Andhra Pradesh	651	1415	1825	3891	6096	912	10899
2	Arunachal Pradesh	174	131	436	740	21	9	770
3	Assam	463	199	979	1640	731	877	3248
4	Bihar	924	557	1408	2889	3584	463	6936
5	Goa	94	56	108	258	324	129	711
6	Gujarat	613	501	4459	5573	8459	843	14875
7	Haryana	245	438	230	913	3793	170	4876
8	Himachal Pradesh	213	29	610	853	929	80	1861
9	Jammu & Kashmir	385	465	398	1248	348	63	1658
10	Karnataka	391	1665	1497	3554	5102	1481	10137
11	Kerala	335	266	774	1376	4460	569	6404
12	Madhya Pradesh	1068	1187	942	3197	6446	705	10347
13	Maharashtra	1697	2168	8318	12182	14841	4273	31296
14	Manipur	94	144	8	246	60	11	318
15	Meghalaya	148	32	45	225	64	35	324
16	Mizoram	101	86	-91	96	28	95	219
17	Nagaland	203	70	44	317	100	12	429
18	Orissa	337	578	2277	3192	3457	425	7075
19	Punjab	281	648	725	1653	2846	375	4874
20	Rajasthan	743	722	1404	2869	4208	483	7560
21	Sikkim	58	72	32	162	18	1	181
22	Tamil Nadu	497	296	2656	3449	9607	1075	14132
23	Tripura	115	77	-8	184	66	24	273
24	Uttar Pradesh	1625	844	2676	5144	9032	1092	15269
25	West Bengal	526	59	2037	2622	4851	1161	8634
26	Andaman & N.I.	49	0	0	49	51	1	101
27	Chandigarh	88	0	240	328	71	31	430
28	Dadra & Nagar H.	10	0	0	10	85	1	96
29	Daman & Diu	9	0	2	11	105	1	116
30	Delhi	367	7	2172	2545	1479	1302	5327
31	Pondicherry	29	36	4	68	232	10	311
32	Lakshadweep	13	0	-1	12	420	1	432
	All India	12545	12745	36206	61496	91912	16710	170118

## ESTIMATES OF STATE LEVEL GFCF (In Rs. Crore)

1994-95

SL.NO.	STATE / UT.	PUBLIC SECTOR				PRIVATE SECTOR	SUPRAREGIONAL SECTOR	TOTAL GFCF
		ADMIN	DCU	NDCU	TOTAL PUBLIC			
1	Andhra Pradesh	523	1481	3805	5809	8995	1224	16029
2	Arunachal Pradesh	207	241	361	809	67	13	889
3	Assam	612	186	3414	4212	992	338	5542
4	Bihar	778	401	2164	3343	6207	878	10428
5	Goa	75	100	314	489	391	81	961
6	Gujarat	612	602	4664	5878	10606	1064	17548
7	Haryana	363	987	1324	2674	4314	286	7273
8	Himachal Pradesh	267	40	777	1083	1002	151	2236
9	Jammu & Kashmir	466	560	-499	527	508	93	1129
10	Karnataka	448	1702	1935	4085	8224	2338	14647
11	Kerala	468	343	1003	1815	6365	559	8739
12	Madhya Pradesh	1186	1322	2434	4942	9698	741	15381
13	Maharashtra	2278	2909	10155	15341	21271	5956	42569
14	Manipur	122	168	-2	288	99	21	408
15	Meghalaya	138	20	14	172	76	54	302
16	Mizoram	114	108	-1	222	33	6	261
17	Nagaland	188	75	101	364	162	18	544
18	Orissa	429	660	2814	3902	3675	355	7932
19	Punjab	354	786	1139	2278	4263	580	7121
20	Rajasthan	967	877	1643	3486	6403	653	10542
21	Sikkim	68	77	-9	136	23	1	160
22	Tamil Nadu	665	323	3704	4692	15796	1927	22416
23	Tripura	164	97	248	510	124	36	670
24	Uttar Pradesh	1860	762	2545	5167	15294	1063	21524
25	West Bengal	611	232	3163	4007	5974	2196	12178
26	Andaman & N.I.	127	0	2	129	68	3	200
27	Chandigarh	58	0	-14	45	244	67	355
28	Dadra & Nagar H.	11	0	0	11	142	0	154
29	Daman & Diu	10	0	1	11	219	2	232
30	Delhi	401	2	1267	1670	3686	1854	7210
31	Pondicherry	39	49	1	88	131	13	232
32	Lakshadweep	12	0	1	13	570	1	584
	All India	14621	15111	48469	78201	135614	22574	236388

STATE / UT.	PUBLIC SECTOR				PRIVATE SECTOR	SUPRAREGIONAL SECTOR	TOTAL GFCF
	ADMIN	DCU	NDCU	TOTAL PUBLIC			
Andhra Pradesh	857	1486	2898	5241	12740	1420	19402
Arunachal Pradesh	227	280	187	694	92	26	812
Assam	619	183	1605	2407	1723	379	4509
Bihar	1036	437	1798	3271	5865	621	9757
Goa	107	102	42	250	646	255	1152
Gujarat	917	789	5397	7103	24830	1366	33299
Haryana	505	482	1657	2644	6911	248	9803
Himachal Pradesh	324	42	908	1274	1351	253	2878
Jammu & Kashmir	446	739	1278	2462	650	252	3364
Karnataka	696	1613	2246	4555	10959	1880	17393
Kerala	623	390	1180	2193	8396	784	11372
Madhya Pradesh	1517	1036	3296	5849	11329	927	18105
Maharashtra	3542	3631	7024	14197	34289	8162	56648
Manipur	157	170	4	330	125	36	491
Meghalaya	190	23	18	231	97	105	433
Mizoram	148	87	0	235	43	10	288
Nagaland	309	74	65	449	209	35	693
Orissa	690	702	2909	4301	5289	401	9992
Punjab	753	921	1524	3198	6566	672	10437
Rajasthan	1453	994	2168	4615	8449	717	13782
Sikkim	80	96	43	218	27	2	247
Tamil Nadu	1245	244	3225	4714	18083	2253	25050
Tripura	160	136	91	387	159	66	612
Uttar Pradesh	3616	826	3432	7873	20820	1423	30116
West Bengal	945	276	2202	3423	8145	2142	13710
Andaman & N.I.	119	0	5	124	88	10	222
Chandigarh	62	0	22	84	308	84	476
Dadra & Nagar H.	14	0	1	15	241	0	257
Daman & Diu	12	0	1	13	205	6	223
Delhi	2022	519	586	3127	3807	2879	9813
Pondicherry	174	121	9	304	933	19	1256
Lakshadweep	3	0	1	4	656	1	661
All India	23567	16399	45822	85788	194032	27433	307253

SL.NO.	STATE / UT.	PUBLIC SECTOR				PRIVATE SECTOR	SUPRAREGIONAL SECTOR	TOTAL GFCF
		ADMIN	DCU	NDCU	TOTAL PUBLIC			
1	Andhra Pradesh	845	1473	2489	4807	13820	1284	19911
2	Arunachal Pradesh	257	211	363	831	92	22	945
3	Assam	505	171	1686	2362	1361	907	4629
4	Bihar	1108	458	1973	3539	6779	591	10909
5	Goa	103	94	77	274	829	201	1304
6	Gujarat	952	940	3428	5320	22241	1113	28674
7	Haryana	662	577	1511	2749	7547	279	10574
8	Himachal Pradesh	296	62	924	1282	1762	181	3226
9	Jammu & Kashmir	565	804	669	2038	653	272	2963
10	Karnataka	749	1644	2167	4559	14618	1933	21111
11	Kerala	678	384	1115	2177	9186	818	12181
12	Madhya Pradesh	1635	1037	3439	6111	11870	945	18926
13	Maharashtra	3900	2421	7876	14196	47125	6294	67616
14	Manipur	215	169	5	389	127	31	546
15	Meghalaya	159	18	36	213	114	87	414
16	Mizoram	143	147	0	289	47	9	345
17	Nagaland	238	64	76	379	223	29	631
18	Orissa	691	1230	1737	3658	5133	433	9223
19	Punjab	603	804	1458	2865	6280	699	9843
20	Rajasthan	1383	865	2218	4466	9314	684	14464
21	Sikkim	88	92	53	233	28	2	263
22	Tamil Nadu	1205	82	2943	4230	20461	1920	26611
23	Tripura	242	96	219	557	175	56	787
24	Uttar Pradesh	2881	1159	4324	8365	24224	1479	34069
25	West Bengal	929	370	1544	2843	8365	1425	12632
26	Andaman & N.I.	87	0	4	91	102	17	210
27	Chandigarh	25	0	1	26	368	83	478
28	Dadra & Nagar H.	21	0	0	21	955	0	977
29	Daman & Diu	11	0	1	12	322	3	337
30	Delhi	2423	621	1584	4628	4158	2351	11136
31	Pondicherry	185	126	8	319	434	18	770
32	Lakshadweep	17	0	0	17	700	1	719
	All India	23796	16120	43928	83844	219413	24166	327423

SL.NO.	STATE / UT.	PUBLIC SECTOR				PRIVATE SECTOR	SUPRAREGIONAL SECTOR	TOTAL GFCF
		ADMIN	DCU	NDCU	TOTAL PUBLIC			
1	Andhra Pradesh	842	2011	2020	4873	13780	1446	20099
2	Arunachal Pradesh	259	283	37	579	94	21	695
3	Assam	433	293	2336	3061	1614	293	4968
4	Bihar	945	150	1421	2517	6547	907	9971
5	Goa	115	106	59	280	937	102	1318
6	Gujarat	1116	1327	5740	8183	27375	1043	36601
7	Haryana	562	789	1314	2665	7245	301	10211
8	Himachal Pradesh	428	106	1487	2021	2435	147	4603
9	Jammu & Kashmir	155	84	519	757	692	299	1749
10	Karnataka	789	1686	3134	5609	16935	1456	24000
11	Kerala	793	492	1651	2936	9292	852	13080
12	Madhya Pradesh	1438	1436	1416	4290	413115	974	418378
13	Maharashtra	4669	2381	4956	12006	39746	4587	56339
14	Manipur	229	194	124	547	141	25	713
15	Meghalaya	163	20	35	218	111	75	405
16	Mizoram	124	241	76	441	41	9	490
17	Nagaland	261	86	111	458	247	28	732
18	Orissa	740	1416	2247	4403	5020	514	9937
19	Punjab	873	1234	1637	3743	6611	650	11005
20	Rajasthan	1613	1324	1739	4675	9947	826	15448
21	Sikkim	104	103	108	315	33	8	356
22	Tamil Nadu	1314	305	4175	5794	18892	2127	26813
23	Tripura	209	88	246	544	189	48	781
24	Uttar Pradesh	3014	1492	4737	9244	24266	1867	35377
25	West Bengal	1106	302	3632	5040	8812	1400	15252
26	Andaman & N.I.	95	0	2	97	111	27	236
27	Chandigarh	100	0	68	168	419	44	631
28	Dadra & Nagar H.	16	0	0	16	1363	1	1379
29	Daman & Diu	13	0	1	14	412	3	429
30	Delhi	1600	284	3574	5458	4752	1647	11857
31	Pondicherry	231	90	7	329	420	17	766
32	Lakshadweep	24	0	0	24	984	1	1009
	All India	24374	18322	48609	91305	222584	21744	335633

STATE / UT.	PUBLIC SECTOR				PRIVATE SECTOR	SUPRAREGIONAL SECTOR	TOTAL GFCF
	ADMIN	DCU	NDCU	TOTAL PUBLIC			
Andhra Pradesh	1314	1839	3364	6516	12781	1407	20704
Arunachal Pradesh	224	181	-83	322	94	28	443
Assam	519	251	1569	2339	1338	322	3999
Bihar	1489	489	1181	3159	11637	728	15523
Goa	123	48	81	252	757	78	1087
Gujarat	1679	1659	5609	8947	23512	1072	33531
Haryana	512	813	975	2299	7481	262	10042
Himachal Pradesh	605	104	2190	2900	4043	139	7081
Jammu & Kashmir	527	469	885	1881	1133	313	3327
Karnataka	1364	1777	2189	5331	24290	1360	30981
Kerala	725	417	2066	3208	8114	938	12259
Madhya Pradesh	1499	1531	4910	7940	12393	1080	21413
Maharashtra	6297	1700	8329	16325	30385	4340	51050
Manipur	182	183	-42	324	537	31	892
Meghalaya	200	23	26	249	4195	91	4535
Mizoram	149	102	4	255	42	10	307
Nagaland	252	95	20	367	176	32	575
Orissa	677	1433	1895	4005	3148	501	7653
Punjab	871	1220	2055	4146	5134	691	9971
Rajasthan	1669	1307	1137	4114	8772	735	13621
Sikkim	126	106	71	303	972	6	1281
Tamil Nadu	1949	643	3319	5911	17351	2216	25478
Tripura	201	93	45	339	164	69	571
Uttar Pradesh	3589	1415	4704	9708	27425	1737	38871
West Bengal	1367	365	2621	4353	7252	1406	13011
Andaman & N.I.	122	0	4	126	94	27	247
Chandigarh	120	0	33	153	439	70	662
Dadra & Nagar H.	21	0	0	21	703	1	725
Daman & Diu	15	0	1	16	534	3	552
Delhi	2833	444	3515	6792	4902	1349	13043
Pondicherry	247	142	11	400	184	20	604
Lakshadweep	30	0	0	30	1264	1	1295
All India	31496	18848	52686	103030	221245	21060	345335

SL.NO.	STATE / UT.	PUBLIC SECTOR				PRIVATE SECTOR	SUPRAREGIONAL SECTOR	TOTAL GFCF
		ADMIN	DCU	NDCU	TOTAL PUBLIC			
1	Andhra Pradesh	1452	2770	4443	8666	15760	1769	26194
2	Arunachal Pradesh	265	237	275	777	100	77	954
3	Assam	710	337	-940	107	1746	545	2398
4	Bihar	2158	1282	1097	4537	6272	1134	11943
5	Goa	119	126	65	310	1513	80	1903
6	Gujarat	3157	1973	6858	11988	27722	1735	41445
7	Haryana	745	790	1215	2750	9713	650	13114
8	Himachal Pradesh	728	40	1480	2249	4738	351	7338
9	Jammu & Kashmir	579	795	394	1768	1276	228	3272
10	Karnataka	1437	1887	2573	5898	20601	1842	28341
11	Kerala	918	437	1691	3046	8742	1125	12913
12	Madhya Pradesh	1542	1695	3835	7071	12650	1437	21159
13	Maharashtra	6283	544	12032	18859	38581	5089	62529
14	Manipur	227	546	-10	763	588	88	1439
15	Meghalaya	255	19	24	299	4515	187	5001
16	Mizoram	208	133	42	383	52	28	463
17	Nagaland	276	97	148	521	193	76	791
18	Orissa	1451	1351	1402	4203	1394	965	6563
19	Punjab	908	719	1275	2903	6315	842	10060
20	Rajasthan	1503	1079	3968	6550	9850	1032	17432
21	Sikkim	100	81	-66	115	1030	9	1154
22	Tamil Nadu	2565	1120	3936	7622	19985	2483	30090
23	Tripura	232	142	64	439	187	135	762
24	Uttar Pradesh	2968	1633	6071	10672	24215	2505	37392
25	West Bengal	1831	413	1704	3947	7236	1927	13110
26	Andaman & N.I.	135	0	12	147	76	163	386
27	Chandigarh	106	0	31	136	506	145	787
28	Dadra & Nagar H.	19	0	26	45	924	20	989
29	Daman & Diu	14	0	0	14	760	17	791
30	Delhi	2008	11	1837	3856	5126	1566	10548
31	Pondicherry	319	176	-130	366	423	34	823
32	Lakshadweep	33	0	0	33	1367	34	1434
	All India	35251	20434	55355	111040	234158	28318	373517