

NATIONAL INCOME

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NATIONAL INCOME

In simple words, national income may be defined as the value of commodities and services produced during a particular period counted without duplication. The National Income Committee (NIC), set up by the Government of India in 1949, produced for the first time, national income estimates for the entire Indian Union.

Here, it would be worthwhile to give some idea about the national income of a nation. Different economists defined national income in various ways. Here is one such definition:

"Sum of the employees compensation and the net income from property and entrepreneurship, that is the distributed factors income, represents the national income, represents the national income of the country".

The important concepts of national incomes are: —

(1) Gross Domestic Product (GDP): — GDP is the total market value of all final goods and services currently produced within the domestic territory of a country in a year.

Four things must be noted regarding this concept:

(i) It measures the market value of annual output of goods and services currently produced. This implies that GDP is a monetary measure.

(ii) In calculating GDP accurately, all goods and services produced in any given year must be counted only once so as to avoid double counting.

(iii) GDP includes only currently produced goods and services in a year. Market transactions involving goods produced in the previous periods such as old houses, old cars, factories built earlier are not included in GDP of the current year.

(iv) GDP refers to the value of goods and services produced within the domestic territory of a country by nationals or non-nationals.

(2) Gross National Product (GNP): — GNP is the total market value of all final goods and services produced in a year. GNP includes net factor income from abroad where as GDP does not. So, $GNP = GDP + \text{Net factor income from abroad}$.

Net factor income from abroad = factor income received by Indian nationals from abroad — factor income paid to foreign national working in India.

(3) Net National Product (NNP) at Market Price: — NNP is the market value of all final goods and services after providing for depreciation. That is, when charges for depreciation are deducted from the GNP we get NNP at market price. So, $NNP = GNP - \text{Depreciation}$.

Depreciation is the fall in the value of fixed capital due to wear and tear.

(4) Net National Product (NNP) at Factor cost (National Income):-

NNP at factor cost or National Income is the sum of wages, rent, interest and profits paid to factors for their contribution to the production of goods and services in a year. It may be noted that NNP at factor cost = NNP at market price - Indirect taxes + Subsidies.

▣ Methods of Estimation of National Income: → The methods used to estimate the national income of a country necessarily depend upon the availability of statistics. Commonly, the following three methods are used for calculation of national income.

- (a) Output or Production Method,
- (b) Income Method,
- (c) Expenditure Method.

(a) Output or Production Method: → This method is also called inventory or value-added method. This method approaches national income from the output side. Under this method, the economy is divided into different sectors such as agriculture, fishing, mining, construction, manufacturing, trade and commerce, transport, communication and other services. Then the gross product is found out by adding up the net values of all the production that has taken place in these sectors during a given year. In order to arrive at the net value of production of a given industry, intermediate goods purchased by the producers of this industry are deducted from the gross value of production of that industry. The net values of production of all the industry and sectors of the economy plus the net factor income from abroad will give us the GNP. If we deduct depreciation from the GNP we get NNP at market price. Then { NNP at market price - Indirect taxes + subsidies } will give us NNP at factor cost or National Income.

The output method can be used where there exists a census of production for the year. The advantage of this method is that it reveals the contributions and relative importance and of the different sectors of the economy.

(b) Income Method :- This method approaches national income from the distribution side. According to this method, national income is obtained by summing up of the incomes of all individuals in the country. Thus, national income is calculated by adding up the rent of land, wages and salaries of employees, interest on capital, profits of entrepreneurs and income of self-employed people.

This method of estimating national income has the great advantage of indicating the distribution of national income among different income groups such as landlords, capitalists, workers, etc.

(c) Expenditure Method :- This method arrives at national income by adding up all the expenditure made on goods and services during a year. Thus, the national income is found by adding up the following types of expenditure by households, private business enterprises and the government:

(i) Expenditure on consumer goods and services by individuals denoted by C . This is called personal consumption expenditure.

(ii) Expenditure by private business enterprises on capital growth and on making additions to inventories or stocks in a year. This is called gross domestic private investment denoted by I .

(iii) Government expenditure on goods and services denoted by G .

(iv) Expenditure made by foreigners on goods and services of the national economy over and above what this economy spends on the output of the foreign countries, i.e., exports - imports denoted by $(X-M)$. Thus $GDP = C + I + G + (X-M)$.

▣ Uses of National Income :-

1. National Income estimates are of great importance to get a broad view of the entire economy of a country. They also provide the information about the changes occurring in economy from year to year. The economic policies and planning are mostly framed keeping in view, the national income of a nation.
2. National Income estimates give us an idea of the purchasing power of the people in the country and standard of living of the nationals.
3. National Income figures help forecast the level of business activity for months and years ahead.
4. National Income figures have been found useful for studies of the problems of the economically underdeveloped countries.

❑ Difficulties in the Estimation of National Income :-

Every country, advanced or underdeveloped, faces some difficulty in computing national income. However, underdeveloped countries are faced with some special difficulties arising out of the peculiar nature of such economies. The important difficulties that are faced while estimating national income are:

- (i) There is a substantial non-monetised sector which makes the calculation of national income difficult. A great deal of what is produced in a section is either exchanged for other goods or is kept for personal consumption. This tends to underestimate the national income.
- (ii) National income estimates include only those goods and services, which are commonly used. People living in rural areas usually manufacture articles of consumption, from traditional goods (raw materials) are able to avoid many expenses. For example, they build their own huts, garments and other items of necessity. The value of such goods are not included in the national income estimates.
- (iii) While computing national income of a country, the problem of double counting may crop up. The best way to avoid this is to calculate only the value of these goods and services that enter into the final consumption stage.
- (iv) National income estimates fail to measure adequately the changes in output due to changes in the price level. They should be adjusted by the Price Index Number.

Special Difficulties of estimation of National Income in Under-developed countries :-

- (v) In under-developed or developing countries, people are mostly illiterate and don't keep any accounts and even if they do, they are reluctant to disclose their income correctly. In such a situation only rough estimates are possible.
- (vi) In under-developed or developing countries due to the lack of occupational specialisation, calculation of national income by agricultural origin becomes rather difficult. For instance, besides the crops, farmers often produce a variety of products like - eggs, milks, etc. that are not included in the calculation of national income estimates due to the lack of the availability of such data.
- (vii) In under-developed countries there is a general lack of adequate statistical data. Inadequacy, non-availability and unreliability of statistics is a great handicap in measuring national income in these countries.

Indian Official Statistics

Indian Statistical System: → India currently following a decentralised statistical system. The structure is based on the federal constitution where the Union and the state governments share the responsibility and cost of collection of data for the items covered under the Union and state lists. The central statistical organisation (CSO), head quartered in New Delhi, acts as the advisory and co-ordinating body to regulate the data collection and compilation efforts of centre and states.

The history of the statistical system in India can be viewed from the following table:

<u>Organisation/Committee</u>	<u>Year</u>	<u>Activities</u>
1) Formation of statistical Committee	1862	To collect information related to education, finance, industries, trade.
2) Foundation of Statistical Research Bureau	1933	To analysis economic statistics.
3) National Sample Survey Organisation (NSSO)	1950	To collect data for estimating National income.
4) Formation of Central Statistical Organisation (CSO)	1951	Collection, compilations and publication of statistical data.

Ministry of Planning: → As discussed earlier the statistical organisations were set up under the cabinet secretariat in different years. But in 1973 some of these organisations were brought under Ministry of Planning and were made responsible for maintaining statistics related to the subject of planning and development.

There are two independent departments under the Ministry. These are:

- (i) Department of Statistics
- (ii) Department of Programme Implementation.

Statistics division which further consists of

- (i) The Central Statistical Organisations (CSO),
- (ii) The National Sample Survey Organisation (NSSO),
- (iii) Computer Centre.

■ Central Statistical Organisation (CSO) :-

Central Government established CSO, under cabinet secretariat, with the objective of creating co-ordination of large-variety of statistical information, collected at the centre and state level. CSO is headed by a Director General, who is assisted by 3 additional Director Generals, 4 Deputy Director Generals, Directors and Joint Directors and other supporting officials.

The Main Activities/Functions of CSO are :-

- ① Co-ordinating the statistical activities of various central Government departments and state governments.
- ② Acting as a co-ordinator and advisor in statistical matters of the centre and states.
- ③ Collecting, compiling and publishing statistical data on all India basis for the centre and states.
- ④ Providing statistical information to planning commission for the development of 5-years plans.
- ⑤ Providing training to personals in statistical departments of Government.
- ⑥ Compilation and publication of National Income Statistics and Industrial Index.
- ⑦ Conducting Economic Censuses and related surveys.
- ⑧ Providing statistical information to the offices of United States.

The Major Publications of CSO are :-

- ① Guide to Official Statistics,
- ② Directory of statistics, India,
- ③ Statistical System in India,
- ④ Abstract of Statistics (Monthly),
- ⑤ Statistical Abstract (Annual),
- ⑥ Statistical Pocket Book (Annual),
- ⑦ Statistical Newsletter (Quarterly).

National Sample Survey Organisations (NSSO):-

NSSO functions under a government council with the requisite independence and autonomy in the matter of collection, processing and publication of National Sample Survey (NSS) data.

The NSSO is headed by a Director General and Chief Executive Officer (DG and CEO) who is responsible for co-ordinating and supervising all activities of the organisation. The DG and CEO is also the Member Secretary of Government Council.

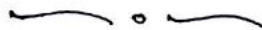
The NSSO is responsible for conducting nation-wide surveys on various socio-economic aspects including: Survey of Economic Census, Annual Survey of Industries (ASI), Supervision of area enumeration and crop estimation surveys, Urban Frame Survey.

The Major Activities / Functions of NSSO are:-

- ① Collection of socio-economic data relating to demographic conditions for the whole country on regular basis.
- ② To provide data for national income and planning.
- ③ To conduct annual surveys in the organised industrial sector.
- ④ Training of personnel and providing guidance to the states in the conduct of surveys.

List of Publications of NSSO are:-

- ① "Sarvekshana" is one of the main bi-annual technical journal of the NSSO which covers the analysis and main results of surveys conducted by NSSO.
- ② Land and Livestock holdings, debt and investment.
- ③ Consumer Expenditure, Education, Health and Aged in India.



NATIONAL INCOME

Some countries are rich, some are poor and yet some others are in between. How do we measure the performance of an economy? Performance of an economy is related to the level of production or total economic activity. Measures of national income and output are used in economics to estimate the total value of production of an economy. The standard measures of income and output are: Gross National Product (GNP), Gross Domestic Product (GDP), Gross National Income (GNI), Net National Product (NNP), Net National Income (NNI). In India, the central statistical organization (CSO) has been estimating the national income.

We measure our academic performance in relation to other students by the percentage of marks scored by us. Similarly, a country's economic performance has been measured by indicators of national income such as GDP or GNP. Further, measuring national income is essential for various purposes that include projection about the future course of the economy, assisting government as the basis to design suitable development policies, helping firms in forecasting future demand for their products and facilitating international comparison.

National income per person or per capita income is used as an indicator of people's standard of living or welfare. However, many development economists have criticized that GNP as a measure of welfare has many limitations. As a measure GNP exclude poverty, literacy, public health, gender equity and many human issues of well-being, they developed other measures of welfare such as the Human Development Index (HDI).

Some rich countries in terms of National Income are poor in human development. Similarly, poor countries in terms of national income have performed well in human development. In case of India, though the GDP is growing faster, its performance in terms of HDI is far below than that of many countries.

* What's National Income? ***

out

- It measures the volume of commodities and services turned out during a given time period, counted without duplication.
- It measures the flow of goods and services in an economy and the productive powers in the economy.
- It is not to be confused with 'National Wealth'.

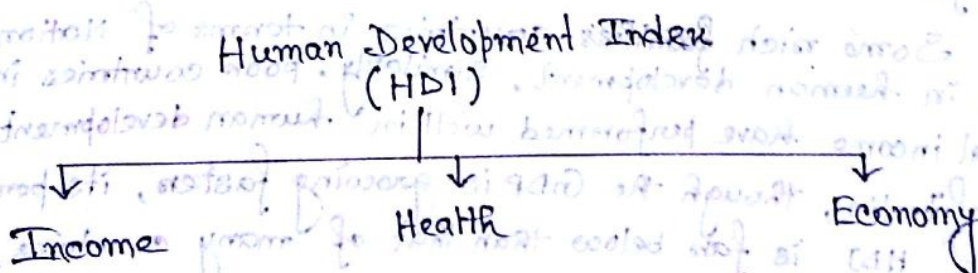
■ BACKGROUND: NIC (National Income Committee) was formed in 1949 to compile statistics and estimate National Income. It was headed by P.C. Mahalanobis & Rao.

■ IMPORTANCE / NEED FOR THE STUDY OF NATIONAL INCOME:

- 1) To measure the size of an economy and to see economic development of the country.
- 2) To trace the trend or speed of the economic growth in relation to previous year(s) as well as to other countries.
- 3) To know the structure and composition of the National Income in terms of various sectors and the periodical variation in them.
- 4) To make projection about the future development trend of the economy.
- 5) To help Government, to formulate suitable development plans and policies to increase growth rates.
- 6) To fix various development targets for different sectors of the economy on the basis of earlier performance.
- 7) Indicates people's 'standard of living'.

■ LIMITATIONS: It excludes poverty, literacy, public health, gender equality and other measures of human prosperity.

■ ALTERNATIVE MEASURE OF HUMAN WELFARE:



DEFINITIONS OF NATIONAL INCOME: ***

- i) Alfred Marshall : — "The labour and capital of the country acting on its natural resources produce annually a certain net aggregate of commodities, material and immaterial, including services of all kinds... This is the net annual income or revenue of the country on the national dividend."
- ii) Irving Fisher : — "The national dividend or income consists of services as received by ultimate consumers, whether from their material or from their human environment."
- iii) Paul A. Samuelson : — "Gross National Product (GNP) is the most comprehensive measure of a nation's total output of goods and services. It is the sum of the dollar value of consumption, gross investment, government purchase of goods and services and net exports."
- iv) NATIONAL INCOME COMMITTEE OF INDIA : — "National income estimate measures the volume of commodities and services turned out during a given period, counted without duplication."

MEASURES OF NATIONAL INCOME:

National Income can be measured by →

- i) Gross Domestic Product (GDP) ***
- ii) Gross National Income (GNI)
- iii) Gross National Product (GNP)
- iv) Net National Product (NNP)
- v) Net National Income (NNI)

WORDS : —

- "Gross" means total product, regardless of the use to which it is subsequently put.
- "Net" means "Gross" minus "the amount that must be used to offset depreciation".
- "Net" gives an indication of how much product is actually available for consumption or new investment.
- "Domestic" means the boundary is geographical; we are counting all goods and services produced within the country's borders, regardless of by whom.
- "National" means the boundary is defined by citizenship (nationality). We count all goods and services produced by the nationals of the country (or business owned by them), regardless of where that production physically takes place.

Basic Concepts : —

Gross National Product : — Gross national product is the total value of output (services and goods) produced and income received in a year by domestic residents of a country. It includes profits earned from capital invested abroad.

Gross Domestic Product : — Gross domestic product is the total value of output (goods and services) produced by the factors of production located within the country's boundary in a year. The factors of production may be owned by any one citizen and foreigners.

• The GDP could be described as the market value of all final goods and services produced within a country in a given period of time.

$$\underline{GDP = GNP - \text{net income earned from abroad.}}$$

Net National Product : — Net national product is arrived at by making some adjustments, with regard to depreciation, in GNP. We know GNP is the total value of output produced and income received by domestic residents of a country in a year. In that one year the available plant and machinery will wear and tear and get condemned. Such decline in capital assets due to wear and tear is called depreciation. NNP is arrived at by deducting the value of such depreciation from GNP.

$$\underline{NNP = GNP - \text{depreciation.}}$$

Net Domestic Product : — Net domestic product is arrived from GDP by making some adjustment with regard to depreciation. We know GDP is the total value of output produced and income received in a year by domestic residents of a country, it also includes the profit earned from capital invested abroad. In that one year period the available plant and machinery will wear and tear and get, condemned. Such decline in assets due to wear and tear is called depreciation. NDP is the value arrived from deducting the value of such depreciation from GDP.

$$\underline{NDP = GDP - \text{depreciation.}}$$

Per Capita Income : — Per capita income or output per person is an indicator to show the living standard of people in a country. If real PCI increases then we can consider it to be an improvement in standard of living of people. It is arrived by dividing GDP by the total population size.

$$\underline{PCI = \frac{GDP}{\text{total population size}}}$$

FORMULAE :

- GDP at Market price = value of output in an economy in a particular year — intermediate consumption.
- NNP at factor cost = GDP at market price — depreciation + NFIA (Net factor income from abroad) — net indirect taxes

GDP & GNP : — While GDP indicates the productive capacity of an economy, GNP is a crude indicator of living standards. The significance of distinction of GDP and GNP depends upon the nature of economy. For instance, if a country has more non-resident inflows and produces a considerable portion of its output by multinational corporation (i.e. with the help of external factors of production) GNP is higher than GDP. Otherwise the distinction will be negligible.

Many countries have foreign firms. In case of US Ford Motors, the income received from the factory would be counted as Indian GDP, but the profits send to US and could be counted as US GNP. Similarly, GNP is arriving by adding the profits earned from the capital invested abroad to GDP.

National Income at Current prices and Constant Prices : —

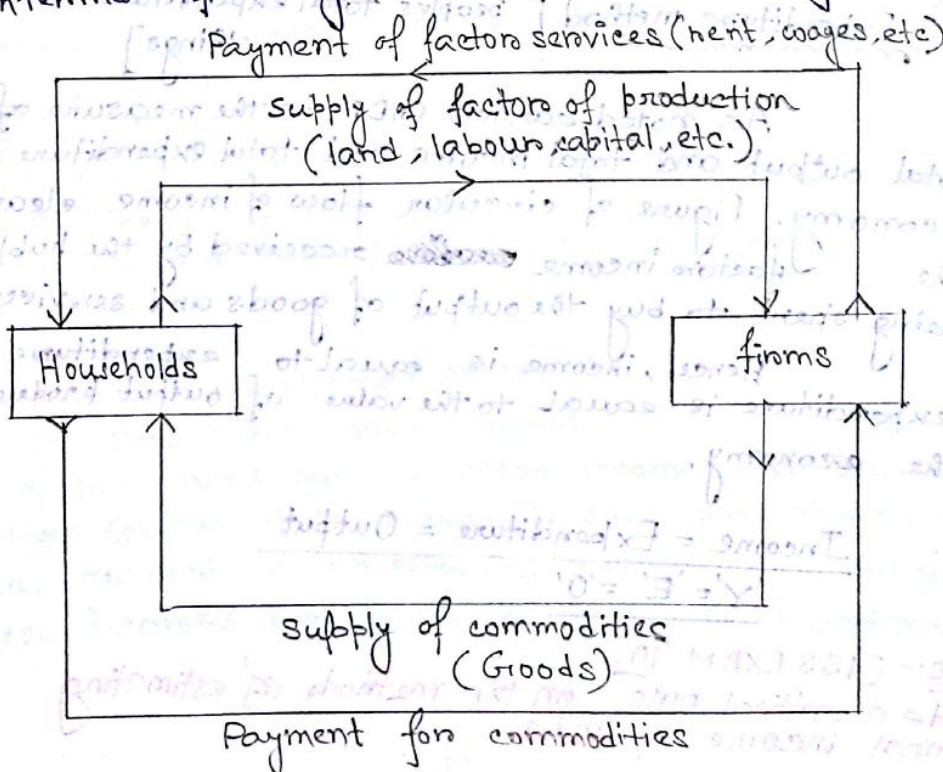
The national income is always measured either at current prices or constant prices. The measure based on current prices use on going market prices to compute the value of output. It is quite possible that current prices will always be higher than real prices due to many factors like taxes and inflation. Hence National income based on current prices includes such influences by taxes and inflation/Price rise. Inflation as a common feature in almost all countries; it is necessary to measure National Income by deducting the inflation. Therefore National income based on current prices is measured by making necessary adjustment to eliminate the effect of inflation. Thus it is based on unchanged prices of output. As the National Income at constant prices is based on real worth of purchasing power of income, it is called real national income.

■ CIRCULAR FLOW OF INCOME : — Before discussing the calculation of national income,

a brief introduction of the circular flow of income would be helpful. The circular flow of income is explained with a simplest model consisting business (firms and producers) and public sectors (households or consumers). The public own the productive resources (i.e. factors of production namely land, labour and capital). Business sector or producers employ the factors of production to produce the goods and services. Such goods are bought by the people.

Thus public own the factors of production and provide them to producers. The producers employ the factors input to produce output of goods and services, which is bought by the consumers. For the employment of factor services the public receive the factor income viz. rent (land), wages (labour) and interest (capital). This income flows back from the public to the business sector as consumption expenditure to buy the goods and services.

Thus the flow chart consists two segments real flow and money flow. The outer flow shows the flow of input and output, they represent the real economy. The inner flow shows the money received as factor income and it goes to the producers as consumption expenditure to buy goods and services. As the flow chart consists income received and expenditure in terms of money, it represents the money economy.



The most important point to be noted for the computation of national income is that income (Y) received is equal to the consumption expenditure (C).

The simplest flow of income is explained without the other components of National income viz. savings or investment (I), public expenditure by Govt. (G) and expenditure on net exports (X-M). If we include the above then

$$Y = C + I + G + (X - M)$$

- ⇒ TERMS: General consumption, term into two parts →
 i) private consumption, ii) public sector (or Govt.) spending.

Private consumption is a central concern of welfare economics. The private investment and trade portions of the economy are ultimately directed to increase, in long-term private consumption.

METHODS OF CALCULATING NATIONAL INCOME : ***

There are three approaches of calculating national income. They are —

- i) Product or Output method [sum of every classes]
- ii) Income method [sum of all producers's income]
- iii) Expenditure method [people's total expenditure in buying things]

As noted earlier GDP is the measure of economy's total output and total income and total expenditure of that economy. Figure of circular flow of income clearly shows the factors income received by the public is being spent to buy the output of goods and services produced.

Hence, income is equal to expenditure and expenditure is equal to the value of output produced in the economy.

$$\text{Income} = \text{Expenditure} = \text{Output}$$

$$'Y' = 'E' = 'O'$$

Ques:- [ISS EXAM '10]
 Write a critical note on the methods of estimating national income of India.

The model can further be extended by adding up the other components like C, I, G and $(X-M)$. In the extended model savings of public, taxes and foreign trade will be deducted from the income. Similarly, investment expenditure, government expenditure and net expenditure on trade will be added up to the circular flow. The outflows are called leakages and inflows are called injections. After aggregating leakages and injection in any one year, total income component of an economy is equivalent to the total expenditure or total output. Therefore, all the three methods are supposed to give same results.

i) OUTPUT OR PRODUCT METHOD : → In the output or product method, the measures of GDP are calculated by adding the total value of the output (of goods and services) produced by all activities during any time period, such a year. The major challenge of this method is the problem of double counting.

The output of many business is the inputs of some other business, e.g. the output of the tyre industry is the input of racing bike industry. Counting the final output of both industries will result in double counting of the value of tyre. This problem can be avoided by including only the value added at each stage of production or by adding the final value of output produced.

ii) INCOME METHOD : → In the income method, the measures of GDP are calculated by adding the income earned by various factors of production which are engaged in the production of output. The various incomes included to compute Gross National Income are :

- wages and salaries.
- Income of self employed.
- Profits and dividends of business corporations.
- Interest.
- Rent.
- Surplus of government enterprises.
- Net flow income from abroad.

All of them are known as factors income and they are paid in return for the inputs engaged in some productive process which have resulted in corresponding output. The sum of all these incomes provide us the measure of national income.



EXPENDITURE METHOD :

In the expenditure method the measures of GDP are calculated by adding all the expenditures made in the economy. Expenditure method focuses on finding the total output of a nation by finding the total amount of money spent. The essential components of expenditure are :

C : Consumption expenditure

I : domestic investment

G : Government expenditure

X : exports of goods and services

M : imports of goods and services

NR : net income receipts from assets abroad.

The sum of all expenditure provides us the measure of national income.

$$\text{GDP} = E = C + I + G + (X - M)$$

- All the above three methods must yield the same result because the total expenditure by definition must be equal to the value of output produced which is equal to the income paid for the factors that produced goods and services.

- Some national income identities are :

- $\text{NNP} = \text{GNP} - \text{depreciation}$

- $\text{NNI} = \text{NNP} - \text{indirect taxes}$

- $\text{PI} = \text{NNI} - \text{Retained earnings, corporate taxes and interest on public debt.}$

- $\text{PDI} = \text{PI} - \text{Personal taxes.}$

■ PROBLEMS IN CALCULATING NATIONAL INCOME : — ***

The measurement of national income encounters many problems. The problem of double counting has already been noted. Though there are some corrective measures, it is difficult to eliminate double-counting altogether. And there are many such problems as:-

Black money :- In countries where level of illegal activities, illegal business and the level of corruption are very high, the circulation of black money is so high, it has created a "Parallel economy". It means unreported economy which is equivalent to the size of officially estimated size of the economy. GDP does not take into account the "Parallel economy" as the transaction of black money are not registered. In India, black money are all-pervasive, affecting not only the economy but also the society at large.

Non-monetization :- In most of the rural economy, considerable portion of transactions occur informally and they are called as non-monetized economy. The presence of such non-monetized economy in developing countries keeps the GDP estimates at lower level than the actual.

Growing Service Sector :- In recent years, the service sector is growing faster than that of agricultural and industrial sectors. Many new services have come up. However, the value addition is legal consultancy, health services, financial and business services and the service sector as a whole is not based on accurate reporting and hence under estimated in national income measures.

Household Services :- The national income analysis ignores domestic work and housekeeping and social services. Most of such work rendered by our women at home does not enter in our national accounting.

INDIAN STATISTICAL SYSTEM-AN OVERVIEW

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•INTRODUCTION:

India has a long tradition of both data collection & dissemination. Sound statistics leads to informed decision making and effective formulation and monitoring of public policies for the requirements of planned economic & social development.

The Indian Statistical System functions within the federal structure of the govt of India with the help of state governments. Under the Indian Constitution duties are divided according to a three-fold classification of all subjects to the Union list, the State list or the Concurrent list.

The main features of the Indian Statistical System is as follows:

- I. The Administrative Statistics System is its major component;
- II. It is laterally and vertically decentralized;
- III. In it, not only data collection but also compilation, processing and preparation of results are carried out by the states for most of the sectors; and
- IV. It is State-wise results, which flow to the Centre.

•Statistical System at the Centre:-

The collection of Statistics for different subject-specific areas, like agriculture, labour, industry, etc. vests with the corresponding administrative ministries. Large-scale statistical operations like the Population Census, Annual Survey of Industries and Economic Census are centralised & in important ministries Indian statistical officers & subordinate statistical staff perform the statistical functions. The Central Statistical Organisation (CSO) in the Ministry of Statistics & Programme Implementation (MOSPI) is the nodal agency for a planned development of the statistical system in the country & for bringing about coordination in statistical activities among statistical agencies in the Government of India and State Directorates of Economics & Statistics.

•Ministry of Statistics & Programme Implementation:

At the centre, a full-fledged Department of Statistics was created in 1961. The important organs of the Department are: Central Statistical Organisation (CSO), National Sample Survey Organisation (NSSO), Computer Centre, Indian Statistical Institute (ISI). The ministry is headed by a Secretary appointed by the govt & the

administrative in-charge of the ministry. The Secretary is assisted by two Director Generals, i.e., Director General, CSO & Director General & Chief Executive Officer (DG&CEO), NSSO who are in-charge of technical matters, Financing of the Ministry through annual budgets and does take into account the change in demand.

•Central Statistical Organisation:

CSO was set up in May 1951 as a part of the Cabinet Secretariat and having coordinating and advisory functions. CSO is responsible for coordination of statistical activities in the country as well as for verifying and maintaining statistical standards and provides national statistics to the United Nations & its specialised agencies, and brings out publications presenting all-India statistics on all principal aspects of national life. Its activities include compilation and release of national accounts statistics, social statistics, environmental statistics, conduct and presentation of statistics on Annual Survey of Industries (ASI), Economic Censuses, compilation of Index of Industrial Production, Consumer price indices & etc. The Director General heads the CSO and is assisted by 3 Additional Director Generals & 4 Deputy Director Generals. On the recommendations of the review committee, the govt of India set up an Apex Body, the National Advisory Board on Statistics (NABS) in 1982 & the main functions of NABS are to provide technical guidelines for policy issues involved in the development of statistics and for ensuring effective coordination of statistical activities, particularly in the field of data collection, improvement of quality, timeliness of statistics & storage and retrieval of data. The most important publications of CSO are : I. The Statistical abstract-India(annual) II. The monthly abstract of statistics.

•National Sample Survey Organisation:

NSSO came into existence in 1950 with the objective of conducting large-scale surveys to provide data for national income estimation as required for planning and policy formation. The organisation functions under the overall direction of a Government Council with requisite independence and autonomy in the matter of collection, processing and publication of data. The NSSO headed by the Director General & Chief Executive Officer who is responsible for coordinating and supervising all activities of the organisation. The major activities of NSSO is to survey design, field operations, processing of collected data & releasing of results based on the sample surveys. The important publications of NSSO are: I. The reports on the various rounds of the NSS II. The quarterly bulletin Sarvekshana.

The functions of NSSO are as follows:

I. Socio-economic survey: It is the main of NSSO, the NSSO is related to land utilizations, agricultural production, genetic characteristics, prices, wages, housing, investment, profits, consumer & other economic factors. These data is taken as used by planning commission and other ministries of govt of India in their works.

II. Crop-estimate survey: NSSO extends their help to improve the agricultural statistics by providing standard techniques for data collection to both State & Central Govt. As a result of this the data collected will be more uniform. The surveys are related to the crops like oil seeds, spices, vegetables, etc.

III. Industrial Survey: NSSO conducts annual survey under the act of collection of Statistics 1953, the surveys are related to the fact of employment status, salary and wages, raw materials & capital structure of industries.

IV. Price Statistics Survey: NSSO collects price statistics regularly on the urban & rural basis separately. The data collection, compilation & publishing the price index numbers is done by NSSO.

• **Computer Centre:**

The Computer Centre was set up in 1967 as an attached office under the Department Of Statistics, to cater to the data processing. This centre, as one of its major tasks, undertakes the processing of voluminous data running into several million records, collected by the NSSO & CSO. It also provides computing & other services for Govt departments & Organisations, the centre is headed by an Additional Director General.

• **Indian Statistical Institute:**

ISI was registered in 1932 at Calcutta as a non-profit-distributing learned society by Professor P.C. Mahalanobis as its founding director to carry out research, teaching, training & project activities. But gradually it became an important part of the Statistical System in India through its pioneering work on large-scale sample surveys, design of agricultural experiments, statistical quality control & planning for national development. The institute was announced as an Institute of National Importance in 1959. It offers diploma, bachelors, masters & research programmes in the field of Statistics, Mathematics, Quantitative Economics & Computer sciences. The centres are in Kolkata (Main Centre), Delhi, Bangalore, Chennai, Hyderabad. ISI is headed by a Director.

• **Labour Bureau Of Statistics:**

The office was set up in 1946 in the ministry of labour & rehabilitation. Its main functions are: i. It collects, compiles & publishes statistics of employment in respect of factories, mines, shops on all-India basis. II. It constructs consumer price index numbers. III. It brings out pamphlets on different aspects of labour legislation.

Publications are: I. Indian Labour Statistics (annual) II. Indian Labour Journal (monthly) III. Agricultural wages in India (annual).

• **Directorate Of Economics & Statistics (DES):**

The DES has large organisations at headquarters, with statistical officers in the districts. The statistical activity of the DES is more or less uniform. Its publications are: I. Agricultural situation in India (monthly). II. Indian Forest Statistics (annual) III. Bulletin on Food Statistics (annual).

• **Functions & Publications of Bureaux of Economics & Statistics:**

1. The coordination of statistics collected by different departments of the state govt.
2. The publication of abstracts assembling all essential statistical series.
3. The maintenance of liaison between the statistical units with CSO.

4. Organising special surveys, compilation of economic indicators & income statistics for the state.

Publications are: I. The Statistical Abstract(annual) II. The Statistical Bulletin(monthly or yearly).

- Industrial Statistics:- Statistics of industrial production in India may be considered under two heads: (a) statistics relating to the factory sector and (b) statistics relating to the non-factory sector. The important publications relating to industrial statistics are: I. Annual Survey of Industries II. Monthly statistics of the production of Selected Industries in India. All these are brought out by the Industrial Statistics.

• **Major Activities of West Bengal Bureau Of Applied Economics & Statistics(BAE&S) :-**

BAE&S is responsible for collection, collation & compilation of different statistical data in respect of the State. BAE&S conducts Economic Census from time to time, prepares index numbers of Industrial Productions, Wholesale Prices & Consumer prices. Different activities are as follows:

1. Rural & Urban household survey
2. Technical Committee for Coordination and Improvement of Statistical System(TCCISS)
3. Wholesale Price Index(WPI) & Consumer Price Index(CPI)
4. Annual Survey of Industry
5. NSSO Survey
6. Staff Census & Yield rates of Major Crops.

• **Agricultural Statistics:-**

Collection of Agricultural Statistics in India is primarily the responsibility of the States. DES under the Ministry of Agriculture & Irrigation is the central coordinating agency responsible for the collection, compilation & publication of agricultural statistics.

Its major publications are: I. Indian Agriculture in Brief(DES, annual). II. Bulletin of Food Statistics(DES, annual). III. Agricultural Situation in India(monthly).

Land utilizations statistics: By land utilizations statistics we mean statistics giving the areas of land put to different uses, area irrigated and crops irrigated, and the areas under different crops. The report publishes in Indian Agricultural Statistics(annual).

Crop production Statistics: For the estimation of yield, the periodical estimates of area & production are initially prepared by the concerned State agencies but are compiled by the DES. Two most important publications on area and yield of crops are the following: I. Estimates of Area & Production of Principal Crops in India(annual). II. Agricultural Situation in India(monthly).

