NATIONAL INCOME CONCEPTS

National Income is the sum total of the money value of all the final goods and services produced in a country during an accounting year.

National Income @ Current Prices:-National Income at current prices is the sum total of the money value of all the final goods and services produced in a country during an accounting year calculated at the prices prevailing in the market.

National Income @ Constant Prices:- National Income at constant prices is the sum total of the money value of all the final goods and services produced in a country during an accounting year calculated at the prices prevailing in the base year.

Some Basic Concepts

1). Final Goods:- Goods used for final consumption and not again subjected to a process of production of other goods are called final goods. Eg:- cloths, houses, shoes, chappals, school bags, cycles, food items, TV, motor cycles etc.

2). <u>Intermediate Goods</u>:- Goods used as an input for producing other goods are called intermediate goods.

Eg:- Cotton thread used to make cloth, cement, laterite, sand, bricks,etc. used to construct houses, leather used to make shoes, plastic materials used to make bags, steel used in the manufacture of cycles, wheat used to make bread etc.

3). Consumption Goods:- Goods which are not subjected to a further process of production and used by the consumer directly are called consumption goods or consumer goods. Consumer goods may be Durable Goods, Semi durable Goods, Non-durable Goods.

4). Capital Goods:- Goods once produced and which can be used again for production are called capital goods. Capital goods are essential for economic progress of a nation.

Eg:- Machinery, Factory, Buildings, trucks, Aeroplanes, Roads, ports etc.

5). Depreciation(Consumption of Fixed Capital):- The loss of value of fixed assets (capital goods) due to wear and tear and expected obsolescence is called depreciation. Expenses connected with repair and replacement of capital goods are called depreciation costs.

Eg:- Suppose a production unit buys a new machine for Rs.10,00,000/-. After 20 years, this machine has to be replaced due to wear and tear. So every year the depreciation allowance for this machine is Rs. 50,000/- (10,00,000÷20). Therefore, depreciation every year is Rs. 50,000/-

6). Inventory:- The stock of raw materials, semi-finished goods and unsold finished goods which a firm carries from one year to the next is called inventory.

7). Net Indirect Tax:-

Indirect Tax Paid – Subsidies received.

Value of Output:- Output multiplied by its market price.

ie, Value of output = output x market price

Value in terms of Market Price			
Sales	4000	10	40000
Increase in Stock	1000	10	10000
Value of Output			50000

Value in terms of Cost Incurred	
Intermediate Consumption	30000
Wages and Salaries	10000
Interest	1000
Rent	1000
Profit	6000
Depreciation	1000
Net Indirect Tax	1000

Value of Output = 50000

Gross Value Added

The real value generated and added in the process of production is called value added.

Gross Value Added=Gross Value of Output-Value of Intermediate Consumption

1) Gross Domestic Product@ Market Price(GDP_{mp})

Sum total of the money value of all the final goods and services produced within the domestic territory of a country during an accounting year.

2) Net Domestic Product@ Market Price(NDP_{mp}):- When Depreciation is deducted from GDP we get NDP.

$$NDP_{mp}=GDP_{mp}-\text{Depreciation}$$

3) Net Domestic Product @ factor Cost(NDP_{fc}):-

When Net Indirect Tax is deducted from NDP_{mp} we get NDP_{fc}.

$NDP_{fc} = NDP_{mp} -$ Net Indirect Tax

3) Gross National Product(GNP_{mp}):- Sum total of the money value of all the final goods and services produced within the country during an accounting year calculated at the prices prevailing in the market.

4) Net National Product(NNP_{mp}):-

$$NNP_{mp} = GNP_{mp} - \text{Depreciation}$$

5) Net National Product(NNP_{fc}):-

$$NNP_{fc} = NNP_{mp} - \text{Net Indirect Tax}$$

Measurement of National Income

1). Product/Output/Value Added Method:-

Steps:-

I.Classifying Production Units in to sectors:- All the production units in the economy are broadly classified into three sectors:

a) Primary Sector
b) Secondary Sector
c) Tertiary Sector

a) Primary Sector:- Primary sector includes all the producing units producing commodities by exploiting natural resources. This includes:

1)Agriculture & Allied Activities

2)Forestry & Logging

3)Fishing

4)Mining & Quarrying

b) Secondary Sector:- It is concerned with the manufacturing activities such as:

1) Manufacturing including Registered and Unregistered Manufacturing
2) Construction
3) Electricity, Gas & water supply

c) <u>Tertiary sector</u>:- Tertiary sector includes all the units engaged in the production of services. This includes:

1) Transportation & Communication, Storage
2) Trade, Hotels & Restaurants
3) Banking & Insurance
4) Real Estate, Ownership of Dwelling & Business services.
5) Public Administration & Defence
6) Education, Health Care etc.

II. Estimating Net Value Added:- Estimation of Net value added involves the following steps:

a) Calculation of Gross Value of Output at Market Price.
b) Calculation of the Value of Intermediate Consumption.
c) Calculation of the Value of depreciation.
d) Calculation of Net Indirect tax.

The Value of Output is calculated by multiplying the physical output with the market price. When the value of intermediate consumption is deducted from the value of output, we get the gross value added. Deducting depreciation from the gross value added, we get the net value added at market price. Deducting net indirect taxes from this, we get the net value added at factor cost.

III. Calculating Net Factor Income Earned from Abroad:- The third step involves the calculation of the Net Factor Income Earned from Abroad. This is, then, added to the Net Value-Added in the domestic territory. This gives us the value of National Income.

Eg:- Calculate Net Value Added at Market Price from the Data.

Consumption of Fixed capital	120 Crores
Profit	160 Crores
Subsidy	15 Crores
Wages & Salaries	650 Crores
Indirect Taxes	100 Crores
Mixed Income of the self employed	700 Crores
Interest	60 Crores
Rent	125 Crores

Precautions in using the Value – added method

Include the following Items:-

1) Production for self consumption
2) Own Account production of Fixed Assets
3) Imputed rent on owner occupied houses.
4) Exclude the following Items:-

1) Second-hand goods purchased and sold.

2)Services of Housewives, work done as hobby etc.

Income Method

Using Income method, National Income is estimated by adding up the incomes received by all factors of production.

Steps:-

1. Classifying Production Units into Sectors:-

a)Primary Sector....

b)Secondary Sector......

c)Tertiary Sector

2.Classifying Factor Incomes:-

a) Compensation to Employees:- It consists of wages and salaries paid to labour in cash or in kind. The main elements of compensation to employees are:

(i) Wages & Salaries including bonus, commission, brokerage etc.

(ii) Welfare payments like employer's contribution to PF.

(iii) Incomes paid in kind like free ration, free uniforms, free housing, travel and medical benefits etc.

b) <u>Operating Surplus</u>:-

(i) rent, (ii) interest, (iii) profit

c) <u>Mixed Income of the Self Employed</u>:-

(i) Compensation to Employees, (ii) rent,

(iii) interest, (iv) profit

3.Estimating Factor Incomes:-

When the factor incomes received by the factors of production in all production units in a sector are added up, we get the total income generated in that sector. Similarly, the factor incomes received by all the three sectors can be estimated. The sum of this will give us the domestic factor income.

4. <u>Calculating NFIEFA</u>:- The final step is the calculation of NFIEFA. This is added to the domestic factor income to get National Income.

Precautions:-

Include:-

1) Income generated in the process of production for self consumption.
2) Imputed rent on owner occupied houses.

Exclude:-

1) All transfer payments.
2) Illegal incomes like income from Smuggling, Black Marketing.
3) Corporate taxes(Corporate taxes are excluded since corporate profits from which taxes are paid, included.)
4) Windfall gains like winning from lotteries.
5) Income from the sale of second hand goods.(These are excluded because they were included in the year of pdn).
6) Income from the sale of shares and bonds in the stock market.(Excluded because there is no corresponding increase in production of goods.)
7) Interest on national debt(Excluded, treating it as Transfer Payments).

3.Expenditure Method:-

Steps:-

I) Identifying Components of final expenditure:-

There are five components of final expenditure. They are:

a) Private Final Consumption Expenditure.(C)
b) Govt. final consumption Expenditure.(G)
c) Gross Fixed Capital Formation.(I)
d) Changes in Stock.
e) Net Exports(X-M)

a) Private Final Consumption Expenditure:- It is the expenditure incurred by individuals and households and private non-profit institutions like charitable societies, trade unions etc. The consumption expenditure of this group mainly consists of the following.

1) Expenditure on durable goods.
2) Expenditure on semi-durable goods.
3) Expenditure on Non-durable goods.
4) Expenditure on services like Education, Health, Entertainment etc.
5) Consumption expenditure incurred abroad by residents like students, tourists etc.

(Expenditure incurred by foreigners within the country is excluded because their expenditure is financed by income generated in their country.)

b) Govt. Final Consumption expenditure:-

It comprises of:

1) Expenditure on the purchase of goods and services by the Govt.
2) Salary and wages paid by the Govt. to its employees.
3) Purchase made by Govt. abroad.

c) Gross Fixed capital Formation:- It is also known as investment expenditure. Capital formation is composed of Gross Fixed Capital Formation consists of expenditure incurred on Fixed assets. Fixed capital assets are assets like Buildings, Machinery, equipment, Tools etc.

d) Change in Stock:- Increase in stock is caused when the entire production is not consumed. Decrease in stock occurs when consumption is more than production.

GFCF+Change in Stock=GDI Expenditure.

e) Net Exports:- Net Exports = Exports – Imports or(X-M)

AE= C+G+I+(X-M)

II) Estimating Total expenditure Incurred:-

Final Consumption expenditure of the households can be calculated by multiplying the quantity of goods and services consumed by their market prices and adding up everything.

Final consumption expenditure of the government can be calculated by adding up the value of goods and services consumed by the government and the compensation of employees.

Investment expenditure incurred on Gross Fixed Capital Formation can be estimated by calculating the actual expenditure on the creation of capital assets like buildings, machinery, equipment etc.

The value of change in stock is calculated by multiplying the quantity of change in stock with the market price of the commodity.

The value of Net exports is calculated by deducting the value of imports from the value of exports. **AE= C+G+I+(X-M)**

III) Calculating Net Factor Income Earned From Abroad:-

The aggregate value of the five components of final expenditure gives us the value of GDP. To get GNP, we have to add NFIEFA to GDP.

PFCE + GFCE + GFCF + Change in Stock+(X-M) = GDP

GDP + NFIEFA = GNP

Precautions:-

1.All expenditures on Second hand goods should be excluded.

2.Expenditure on the purchase of old (change of ownership only) and new shares and bonds (no corresponding production of G & S) should be excluded.

3.All government expenditures on transfer payments must be excluded.

4.All expenditure on intermediate goods and services are to be excluded since it leads to double counting.

Use or Significance of N.I estimation

1.To evaluate the performance of the economy over the years.

2.For economic planning and for the formulation of economic policies.

3.To understand the contribution of each sector towards National income.

4.To make comparison between the economic performance of two countries.

5.To measure the inequalities in the distribution of income.

Difficulties in the Measurement of National Income

Conceptual Difficulties:-

1.Service without remuneration:-

Certain services such as service rendered by a housewife is not included in National Income because payments are not made. But when the same services are supplied by a house-maid remuneration is paid and it is included in national income estimation.

2.Classification of goods as Intermediate goods and Final goods:-

It is very difficult to classify certain goods as final goods and intermediate goods because the same product is used as an intermediate good and final good. When milk is purchased by a household it is final good but in a hotel it is a n intermediate good.

3.Diificulty in estimating the value of output produced in the government sector:-

Since the government provide public goods either at free of cost or at nominal prices, it is very difficult to estimate their value.

Practical Difficulties:-

1.Inadequacy of statistical data:-In under developed countries and developing countries, accurate and adequate statistical data are not maintained.

2.Illiteracy of farmers:- Illiterate farmers may not be keeping proper accounts of their production.

3.Lack of occupational specialisation:- In developing countries people are mostly unskilled and they earn their income from more than one occupation. Hence it is difficult to compute their income.

4.Production for self consumption:- In developing countries a major part of the agricultural output is consumed by the farmers themselves. Hence its value cannot be estimated.

5.Existence of a non monetised sector:- In developing countries, in villages people still make certain barter transactions.

Black money, price changes etc. also pose problems to national income estimation.