



## **TRINITY COLLEGE NABBINGO**

### **S.5 ECONOMICS**

#### **NATIONAL INCOME (Notes continued)**

NY is defined as the total money value of all final goods and services which arise from productive activities of a nation (country) in a given period of time usually a year.

- It includes only income that is received in exchange for goods and services which are produced in a given period time.
- It excludes all income from illegal activities and income received without providing goods or services.

**Note:**

NY is the same as national product (output) and National expenditure.

NY and NY concepts are usually defined in terms of goods and services because the incomes that people get arise from goods & services that they produce thus NY is the same as National product (output).

National Expenditure refers to the total expenditure in monetary terms on goods & services by the nationals of a country in a given period of time.

#### **CONNCEPTS OF NATIONAL INCOME**

There are different ways of expressing a country's national income.

##### **1. GROSS DOMESTIC PRODUCT(GDP)**

It refers to the total money value of all goods and services produced within the territorial boundaries of a country (by both nationals and foreigners) in a given period of time usually a year, including the value of depreciation. i.e. it does not matter whether production is by nationals or foreigners.

##### **2. GROSS NATIONAL PRODUCT (GNP)**

It refers to the total money value of all goods and services produced by the nationals of a country (both within and abroad) in a given period of time usually a year including the value of depreciation.

In this case the income of the foreigners living in the country is deducted and the income of nationals living outside the country is added. Thus to get GNP, we add net(factor) incomes from abroad to the GDP figure. i.e.  $GDP + \text{Net (factor) income from abroad} = \text{GNP}$ .

## **N.B**

Net(factor) income from abroad is the difference between incomes of nationals abroad and the incomes of the foreigners living in the country.

### **3. NET DOMESTIC PRODUCT (NDP)**

This refers to the total money value of all final goods and services produced within the territorial

boundaries of a country (by both nationals and foreigners) in a given period of time usually a year excluding the value of depreciation i.e.  $NDP = GDP - \text{depreciation}$ .

### **4. NET NATIONAL PRODUCT (NNP)**

This refers to the total money value of final goods and services produced by the nationals of a country (both within the country and abroad) in a given period of time usually a year excluding the value of depreciation i.e.  $NNP = GNP - \text{depreciation}$ .

#### ***Note;***

***Depreciation/capital consumption.*** This refers to the tear and wear of capital equipment/capital stock used to produce output.

#### **OR**

It refers to the loss of value of capital stock used in the production process.

**Depreciation allowance/capital consumption allowance.** It refers to the amount of money which is set aside to cater for depreciation of capital stock/machines.

**Developing countries prefer to use GDP rather than NNP when measuring national income because;**

**(i)** It is difficult to calculate Net income from abroad.

**(ii)** It is difficult to calculate the value of depreciation

**Note**

**(i)**  $\text{GDP} + \text{Net incomes from abroad} = \text{GNP}$

**(ii)**  $\text{GNP} - \text{Net incomes from abroad} = \text{GDP}$

**(iii)**  $\text{GNP} - \text{depreciation} = \text{NNP}$

**(iv)**  $\text{NNP} + \text{depreciation} = \text{GNP}$

**(v)**  $\text{GDP} - \text{depreciation} = \text{NDP}$

**(vi)**  $\text{NDP} + \text{depreciation} = \text{GDP}$

**SAMPLE QUESTIONS**

1. Adjust GDP to GNP
2. Adjust GDP to NNP
3. Given NNP what adjustments should be made to arrive at GDP?
4. Given that a country's GDP is 2000m U \$, net income from abroad is 800m U\$, capital consumption is 300m U\$, calculate the country's NNP.
5. Given that GNP is shs 275bn, net income from abroad is shs 15bn, calculate GDP.
6. Given that a country's GDP is shs 400bn, net income from abroad is shs 40bn and depreciation is shs 20bn, calculate Net National Product (NNP).
7. Given that a country's stock of machinery is valued at shs. 100 bn at the start of the year, total output from these machines during the year was shs 500bn, depreciation costs during the year were 20%, calculate

**(i)** the value of depreciation.

**(ii)** Net output.

**PERSONAL INCOME.**

This refers to income that is received by households and individuals of a given country in a given of time irrespective of how it has been received.

- It should be noted that some income earned from productive activities may not be currently received e.g undistributed profits while other income that is received by individuals that is not earned through productive activities within the current period e.g old age pension etc.

Thus personal income includes all income that is received by households whether it is from productive or non-productive activities but excludes all income that has been earned but not yet received.

### **Note**

#### **Personal income is not equal to National income because**

- (i) Personal income includes income resulting from non-productive activities such as prostitution etc yet National Income excludes it.
- (ii) Personal income includes transfer payments such as old age pension yet NY excludes it.
- (iii) National Income includes income that is earned but not yet received yet personal income excludes it.

#### **DISPOSABLE INCOME/Take Home Pay**

This refers to income available to individuals/house hold for spending or saving after personal income taxes and other compulsory contributions have been deducted. i.e  

$$\text{Disposable income} = \text{Personal income} - \text{personal income taxes and compulsory payments}$$
 e.g NSSF.

**NORMINAL NATIONAL INCOME.** This refers to the total money value of final goods and service arising out of productive activities of a nation in a given period of time usually a year expressed in terms of current year prices.

**REAL NATIONAL INCOME.** This refers to the total money value of final goods /services arising out of productive activities of a nation in a given time period expressed in terms of base year prices.

$$\text{i.e Real National Income} = \frac{\text{Norminal National income}}{\text{Price index}} \times 100$$

**NORMINAL GROSS DOMESTIC PRODUCT.** This refers to the total money value of final goods /services produced within the territorial boundaries of a country within a given period of time expressed in terms of current year prices.

**REAL GROSS DOMESTIC PRODUCT.** This refers to the total money value of final goods/services produced within the territorial boundaries of a country in a given period of time expressed in terms of base year prices.

$$\text{i.e. Real Gross Domestic Product} = \frac{\text{Norminal Domestic Product}}{\text{Price index}} \times 100$$

#### **Sample Qns:**

1. Supposing the base year is 2017 and National income for the current year is shs 200 billion and the price index for the year 2018 is 250. Calculate the real national income for 2018.
2. Given that Nominal Domestic product is shs 150,000,000,000 and the consumer price index is 105, calculate the real Gross Domestic Product.

#### **DETERMINANTS OF THE LEVEL NATIONAL INCOME/FACTORS THAT INFLUENCE THE LEVEL OF NATIONAL INCOME.**

1. **Availability of natural resources and the level of exploitation.** When natural resources are available and highly exploited firms get the required raw materials which increases production of goods and services leading to high level of NY but when natural resources are limited and less exploited, production of goods and services remains low because of limited raw materials leading to low levels of NY.
2. **Level of technology.** High level of technology increases efficiency of factors of production which leads to increased production of goods/services leading to high level of NY but low level of technology leads to inefficiency of factors of production which limits production of goods leading to low level of NY.
3. **Level of development of infrastructure.** High level of development of infrastructure reduces costs of production which encourages increased production of

goods and services leading to high level of NY but low of development of infrastructure increases production costs which limits production of goods and services hence low levels of NY.

**4. Political climate.** Political stability guarantees safety and security of life and property of investors, this increases production of goods and services leading to high level of National Income but political instability scares away investor for fear of loss of life and property which discourages production leading to low levels of National Income

**5. Population growth rate.** High population growth rates implies a high dependence ratio which limits saving and investment thus discouraging production of goods and services leading to low levels of National but low population growth rate implies a low dependence ratio which encourages saving and investment thus increasing production of goods and services leading to high level of National.

**6. Level of skills of labour.** High level of skills of labour promotes efficiency and productivity of labour which increase production of goods and services leading to high level of NY but low level of skill of labour limits efficiency and productivity of labour thus discouraging production of goods and services leading to low level of National Income.

**7. Size of the market.** A large size of market increases profitability of firms which encourages producers to increase production leading to high level of National Income but small size of market reduces profitability of firms which limits production of goods and services leading to low levels of National Income.

**8. Government policy on investment.** Favourable government policy on investment inform of provision of tax holidays and subsidies to investors reduces production costs and increase profits which encourages investors to increase production leading to high level of National Income but unfavourable government policy on investment inform of high taxation to investors increases production costs and reduce profit thus discouraging production leading to low level of national income.

**9. Size of capital stock.** Large size of capital stock enables producers to hire factors of production and increase production of goods and services leading to high level of national income but small size of capital stock limits producers from hiring adequate factors of production thus limiting production of goods and service low level of National Income.

**10. Level of entrepreneurial ability.** High level of entrepreneurial ability promotes innovations and inventions which encourages production of goods and services leading

to high level of National Income but low level of entrepreneurial ability limits innovations and inventions which discourages production leading to low levels of National Income.

**11. Rate of inflation.** High rates of inflation increase production costs and reduce profit levels thus discouraging production of goods and services leading to low levels of NY but low rates of inflation increase profit levels thus encouraging production of goods and services leading to high level of NY.

**12. Level of saving.** High level of saving avails funds for investment which leads to increased production of goods and services leading to high level of NY but low level of saving limits the availability of funds for investment which discourages production of goods and services leading to low levels of National Income.

**13. Nature of land tenure system.** Poor land tenure system makes it difficult for investors to acquire land for investment which limits production of goods and services leading to low levels of NY but favourable land tenure system enables investors to access land they require thus encouraging production of goods and services leading to high level of National Income.

**14. Level of accountability.** High level of accountability ensures that public funds are utilized in income generating activities which increases output of goods and services leading to high level of National Income but low level of A/C leads to diversion of public funds to personal gains which reduces output of goods and services leading to low level of National Income.

**15. Size of the subsistence sector.** Small size of the subsistence sectors encourages producers to increase output so as to increase profits leading to high level of National Income but large size of substance sector discourages large scale production since people are producing largely for their own consumption leading to low levels of National Income.

**16.** Attitude of labour towards work.

**17.** Degree of conservation

### **CAUSES OF LOW Levels of National income in Uganda**

**1.** Limited availability of natural and low level of exploitation of natural resources.

**2.** Low level of technology

**3.** Low level of development of infrastructure.

**4.** Political instability

5. High population growth rates
6. Low level of skills of labour
7. Small size of the market
8. Unfavourable government policy on investment
9. Small size of capital stock
10. Low level of entrepreneurial ability
11. High rates of inflation
12. Low level of saving
13. Poor land tenure system
14. Low level of accountability
15. Large size of the subsistence sector
16. Negative attitude towards work
17. High degree of conservatism.

### **Sample Questions**

1. **Account for the low levels of NY/GDP in Uganda.**
2. **Explain the factors that enhance NY/GDP in an Economy.**

### **MEASURES THAT MAY BE TAKEN TO INCREASE THE LEVEL OF NATIONAL INCOME.**

1. Government should increase the level of natural resource exploitation. This enables firms get the required raw materials to increase the volume of output leading to an increase in National Income.
2. Technology may be improved. This increases efficiency of factors of production and increase in production of goods and services leading to an increase in National Income.



- 3.** Labour should be equipped with appropriate skills. This enables workers to become more efficient and increase the volume of output thus increasing National Income.
- 4.** Markets can be expanded. This encourages producers to expand their production scale so as to increase profits thus increasing National Income.
- 5. Infrastructure should be developed through construction of roads.** This reduces production costs thus encouraging more investment and production thus increasing National Income.
- 6.** Government should attain and maintain political security. This ensures safety of life, and property of investors, thus attracting more investment and production thus increasing National Income.
- 7.** Government can provide investment incentives such as tax holidays etc. This reduces production costs and enables producers to increase production leading to an increase in NY.
- 8.** Government may encourage people to save through development of the financial institutions. Thus avails more funds for investment and enables investors to access funds to expand their scale of production and increase output hence increasing National income.
- 9.** Government should encourage population control. This reduces the dependence ratio and avails funds for saving and investment leading to increased production hence increasing national income.
- 10.** Land reforms should be put in place. This avails land to the potential investors and also enable existing firms to expand their scale of production and increase output hence increase National Income.
- 11.** Economy should be diversified. This increases economic activities in all sectors in the economy thus increasing output hence increasing National Income.
- 12.** Economy can be commercialized. This encourages producers to produce on a large scale and increase volume of output thus increasing National Income.
- 13.** Credit facilities should be provided to investors. This increases the capacity of firms to hire factors of production to enable them increase investment hence increase the level of National Income.
- 14.** Public enterprises can be privatized. This increases efficiency of firms which enables them to earn more profits and expand the production scale leading to increase in National Income.

**15.** Economy should be liberalized. This reduces production costs and attracts more investors to invest and compete with existing firms resulting into increased output hence increasing National Income.

**16.** Entrepreneurial skills should be increased through training. This increases innovation and inventions which results into increased output thus increasing National Income.

### **Sample questions**

- 1.** Explain the measures/steps being taken to increase the level of National Income in Uganda.
- 2.** Discuss the measures/steps that have been taken by government to increase the level of National Income in Uganda.
- 3.** Suggest measures to increase the level of National Income in Uganda.
- 4.** Explain why the National Income of Uganda is higher than that of Tanzania.

### **WHY DO COUNTRIES MEASURE NATIONAL / COMPUTE / COMPILE NATIONAL INCOME STATISTICS?**

**Countries measure National Income for the following reasons.**

- 1.** For planning purposes, National Income figures provide information on investment and consumption etc on the basis of that information government can formulate policies to increase investment and hence increase National Income.
- 2.** To measure/calculate per capita income. This is through dividing the National Income of a country by the population of that country i.e per capita income = 
$$\frac{\text{National Income}}{\text{Total Population of a country}}$$
- 3.** Per capita income is used to determine the standard of living of the people of a country in that the higher the per capita Income, the higher the standard of living and vice-versa.
- 4.** To compare standard of living of people between countries or among countries. A country with high National income figures is considered to have a high standard of living than the one with low National Income.

5. To compare the standard of living of the people of a country over a given period of time. An increase in the national income shows an improvement in the people's standard of living and vice-versa.
6. **To identify the leading and lagging sectors of the economy.** The data collected from the various sectors of the economy can be used by government to formulate policies to uplift the lagging sectors or promote the leading sectors of the economy.
7. **To compare the economic performance overtime e.g to determine the economic growth rate.** The information may be used to monitor, assess and compare the economic performance of a country over a given period of time by analyzing how National Income is changing in that period of time i.e an increase in National Income implies an improvement in economic performance and vice versa.
8. **7. To determine income distribution.** The National Income figures show the distribution of income among factors of production, geographic areas and on the basis of this information government can take appropriate action to address income inequality.
9. **To determine/show the extent of a country's dependence on other countries.** Information on expenditure approach can be used to show how much is spent on imports and how much is earned from exports thus a higher level of imports and exports implies a higher level of external dependence and vice versa.
10. **To solicit for foreign aid.** Donar agencies and countries require information on the performance of different sectors of the economy to enable them identify sectors which need the assistance.
11. **To identify/show the expenditure patterns within a country.** The expenditure approach shows where the bulk of the incomes of people, firms and government are spent, this enables government to determine whether the economy is on the right course to Economic growth or not and on the basis of this government can take appropriate action.
12. **To determine the level of resource utilization in the economy.** An increase in National Income implies that the level of resource utilization is increasing.

13. To measure the amount of goods and service available for competing uses of private consumers, firms and government.

### Sample Questions

1. Explain the importance of computing national income to a country.
2. Explain the uses of National Income statistics to a country.
3. Discuss the benefits of compiling National Income of a country.

### METHODS/WAYS OF MEASURING NATIONAL INCOME

National Income is measured using the following approaches and these include.

1. Income approach
2. Expenditure approach
3. Output approach/value added approach/product approach

#### INCOME APPROACH

This involves summing up all incomes received by the owners of factors of production for rendering productive services in an economy in a given time period usually a year. **i.e**  
**income approach = Rent + Interest + Wages + Profits**

#### Note.

When using the income approach we must count only incomes received by producing output. Therefore there should be **"quid pro quo"** i.e money should be paid against exchange of goods/services.

Thus **"Non quid proquo" payment i.e Transfer payments** made without supplying goods/service in the course of the year must be excluded or else there would be double counting.

### **Examples of transfer payments/non-quid proquo payments**

- (i) Sick benefits
- (ii) Unemployment benefits
- (iii) Old age pension
- (iv) Students' grants
- (v) Famine relief
- (vi) Students' pocket money
- (vii) Gifts/Donations

### **Sources of transfer payments**

- (i) Governments
- (ii) Institutions/non-government organisations
- (iii) Individuals

### **PROBLEMS ASSOCIATED WITH INCOME APPROACH.**

**(i) Inadequate information on people's incomes.** Individuals have different sources of income which are not known to government and many are self-employed and unwilling to declare their incomes.

**(ii) Net Incomes from abroad.** It is difficult to value net income from abroad because there is limited information of how many Nationals are abroad and how much they earn.

**(iii) Capital gains.** These represent increase in the value/appreciation in the value of capital assets but these gains do not correspond to output of goods and services and thus should be excluded when estimating National Income.

**(iv) Depreciation.** Firms regard depreciation as a cost of production since capital stock/machines need replacement when it is completely worn out. However it is not easy to calculate how much must be set aside for depreciation.

**(v) Transfer payments.** These are payments made without supplying goods and services but it may be difficult to identify them leading to double counting.

**Note;**

National Income arrived at using the income approach is usually referred to as **National Income at factor cost** because it is obtained by adding up payments made to factors of production for their contribution in the production of goods/services.

### **EXPENDITURE APPROACH**

This involves the summing up of total amount of money spent on final goods/services by the different economic units in a year i.e  $C+I+G+(x - m)$

**Note that;** Expenditure on intermediate goods is excluded to avoid double counting.

Where C - represents consumption expenditure by households i.e expenditure on final goods/services by the house holds.

I - represents investment expenditure by firms i.e expenditure made by private firms either on new investment or replacement of old capital goods.

G - Represents government expenditure on goods and services i.e expenditure made by government on the provision goods/services to the public.

X - represents expenditure by over seas buyers on the country's exports.

M - represents expenditure by domestic buyers on imports.

Thus  $(x-m)$  is net foreign expenditure i.e the difference between expenditure made by foreigners on the country's exports and the expenditure made by domestic buyers on imports (differences between export earnings and payments for imports).

### **N.B**

Since exports are produced with the country, they create income at home and their values are included in a country's National Income.

**But;** Since imports are not produced within the country and they create incomes to overseas suppliers their values should be excluded from the country's National Income.

### **Note;**

National Income arrived at using the expenditure approach is known as **National Income at market price** because it is obtained by summing up the payment made for goods and services in a market in the course of the year.

**Problems associated with the expenditure approach.**

**(i) Limited information.** Individuals are not willing to declare how much they spend on consumption and investment for fear of being highly taxed.

**(ii) Double counting.** This arises due to the failure to distinguish between intermediate expenditure and final expenditure.

**(iii) Expenditure on imports.** This must be excluded from National Income but it is difficult to identify how much is spent on imports.

**(iv) Transfer payments.** Expenditure on transfer payments should be excluded from National Income but it is difficult to identify them.

### **PRODUCT/OUTPUT/VALUE ADDED APPROACH.**

This involves adding the total money value of final goods/services from all productive activities of a nation/country in a given period of time.

**OR**

It is the summing up of value added to output at each stage of production in given period of time.

**Note;**

**Value added** is the difference between the value of output and the value of inputs at each stage of production process.

<b>Firms</b>	<b>Value of output(shs)</b>	<b>Value of inputs(shs)</b>	<b>Value added(shs)</b>
Wheat farmers	10 m	-	10 m
Millers	15 m	10 m	5 m
Bakeries	25 m	15 m	10 m
Retailers	30 m	25	5 m
Total	80 m	50 m	30 m

Therefore National Income by value added approach is shs 30m.

**Problems associated with the output approach.**

- (i) Inadequate information on what is produced by all Enterprises in a country.
- (ii) Double counting due to failure to distinguish between final and intermediate output.
- (iii) Goods produced but not sold/Non-marketed output. There is a problem of attaching value to goods which are produced but not sold e.g A farmer often consumes part of his output rather than selling it.
- (iv) Valuing inventories and work in progress.
- (v) Determining the boundary of production.

**Note that;**

The three approaches/methods of measuring National Income give the same results. This is because whenever something is produced and sold, its value is equal to the consumer's expenditure on it. The same value is received by those who contributed to its production and the same value is a result of the value added to the commodity at the successive stages of production thus the equation  $O \equiv E \equiv Y$ .

**OR**

Mukasa manufactures a car and sells it John at U\$10,000 i.e

- (i) The value of Mukasa output is U\$10,000
- (ii) Income received by Mukasa is also U\$10,000
- (iii) Expenditure by John is also U\$10,000.

**GNP/NY at factor cost and GNP/NY at market price.**

**GNP factor cost.** refers to the total money value of final goods/service produced by the nationals of a country in a given period of time expressed in terms of what is paid to factors of production in the production process.

**While**

**GNP market prices.** refers to the total money value of final goods/services produced by the nationals of a country in a given period of time expressed in terms of what is paid for final goods and services in the market.

**Adjustment from GNP/NY market price to GNP/NY factor cost.**

In order to convert GNP mp to GNP f.c. We subtract indirect taxes and add subsidies.



**Note that** indirect taxes are subtracted because they are paid as part of a commodity in the market but they are not received as incomes by the factors of production instead they go to government. **While subsidies** are added to GNP mp to obtain GNP fc because when producers are subsidized they spend less on production and therefore the actual cost of production subsidized are added to the market price to get GNP fc.

**Note that GNPmp** - includes indirect taxes but excludes subsidies.

GNPfc – includes subsidies but excludes Indirect taxes

### Sample Questions

1. Given GNPfc how do you arrive at GNPmp?
2. Given GNPmp, what adjustment would you make to arrive at NNP fc?
3. Given GDPmp how would you arrive at GNPfc?
4. Given GDPmp is U\$ 500bn, and subsidies amount to U\$ 400bn, indirect taxes U\$ 155bn. Calculate GDP fc.
5. Given that a country's GDPfc is U\$100 bn, net income from abroad is U\$10bn, indirect taxes are U\$2 bn and subsidies U\$3 bn, calculate the country's GNP mp.
6. Given GPfc for country Y is U\$ 300bn, indirect taxes amount to U\$100bn, subsidies amount to U\$50bn, calculate the country's GDP at market price.

### PROBLEMS FACED WHEN MEASURING NATIONAL INCOME.

1. **Double counting.** This is a problem because when using the output and income approaches it becomes difficult to distinguish between intermediate and final goods and while using the income approach it becomes difficult to determine the transfer payments. And as a result they are included leading to over estimation of national income.
2. **Inadequate data/limited information.** In developing countries many people do not keep records of their income, output and expenditure. As a result many forms of incomes are guessed and many are left out giving inaccurate data.

3. **Determining the boundary of production.** It is difficult to determine what to include and what to exclude in national income measurements. This is because there is no general agreement on what is a productive activity. Some activities are considered to be productive to some people but unproductive to the others.

***Note:***

***Boundary of production refers to those activities that are considered to be productive and must be included in National Income measurements.***

4. **Valuing subsistence output/non-marketed output.** Sustenance output does not pass through the market and it has no market value, this makes it hard to attach monetary value on the output as a result those involved in measuring national income just impute value to the output which may be higher or lower leading to inaccurate data.
5. **Problem of illegal activities.** Income from illegal activities such as smuggling, drug trafficking, prostitution, robbery etc. should be excluded from national income measurements but it difficult to identify income from illegal activities.
6. **Calculating the value of depreciation.** It is hard to determine the life span of machines therefore making it difficult to determine how much to deduct as value of depreciation.

***Note:***

***For this reason, developing countries prefer to use GDP rather than NNP, because it is hard to determine how much to subtract as depreciation.***

7. **Valuing unpaid for services.** The unpaid for services like those of housewives are difficult to standardize and therefore not easy to attach monetary values as a result they are ignored leading to underestimation of national income.
8. **Determining net income from abroad.** This is a problem because systems in place are not able to track down all movements of funds in and out of the country.
9. **Limited facilities such as computers.** This makes it hard to store data and this brings about inefficiency thus leading to inaccurate information.

10. **Limited skills of staticians.** This leads to inefficiency in collection of information and interpretation of data etc.

11. **Errors of omission and commission.** This means that some information is not included while wrong data is included which may lead either to under estimation or over estimation of national income.

12. **Prices changes.** In times of rising prices, the value of nominal national income rises and it may appear that people are producing more yet national output may have fallen while in times of falling prices, the value of normal national income falls and it may appear that people are producing less yet national output many have increased.

**NOTE: To convert nominal National Income into real national income, the price index is used as a deflator i.e.**

$$\text{Real National income} = \frac{\text{Nominal National Income} \times 100}{\text{Price index}}$$

**Note: Deflating National Income figures helps to give more realistic value of National income by removing the effect of inflation.**

13. **Valuing government output/services.** Government outputs has no market value, its value is only estimated by salaries and wages paid to public servants whose activities contribute to National income, however at times the wages and salaries may not correspond to the amount and quality output they produce. Thus leading to inaccurate figures.

14. **Problems of inventories.** Some output produced in a particular year and sold in another. This makes it difficult to determine when the monetary value of this output should be included;

**Note;**

**Problems faced/encountered when measuring National are divided into**

(i) Conceptual

(ii) Statistical

**Conceptual problems.** These are problems related to the definition of the concept of National Income i.e. problems of interpretation. It is agreed that only incomes from productive activities should be taken into account but there is no general agreement on what is a productive activity i.e. problems concerned with what should be included or excluded from National Income statistic.

**These problems include**

(i) Determining the boundary of production i.e. determining what to include and exclude. This is because some activities are considered to be productive to some people and unproductive to others.

(ii) Inventories and work in progress i.e. whether to include it or not thus makes it difficult when to include it.

(iii) Illegal activities such as smuggling, drug trafficking etc. i.e whether to include them or not. This is because it is difficult to distinguish income from legal and income from illegal activities.

(iv) Whether to include the substance output or not. This is because it is difficult to find out how much is produced.

(v) Unpaid for services like those of house wives whether to include them or not. This is because they are not standardized making it difficult to determine their value to be included.

(vi) Differentiating between intermediate goods and final goods.

**Statistical problems.**

These are problems concerned with the collection and computing of data/information.

**These include;**

(i) Double counting – i.e. the value of certain products is sometimes counted more than once.

(ii) Inadequate data/information – Many people in developing countries do not keep records of their income, output and expenditure.

(iii) Calculating the value of depreciation.

(iii) Valuing unpaid for services.

(v) Price changes

- (vi) Valuing government output.
- (vii) Valuing inventories and work in progress.
- (viii) Valuing subsistence out put
- (ix) Calculating net income from abroad.
- (x) Errors of omission and commission.
- (xi) Shortage of skilled man power.

**Prepared By;**

**Ms. Nabulya Mary Kintu**

GOT FROM EDUFLIX APP