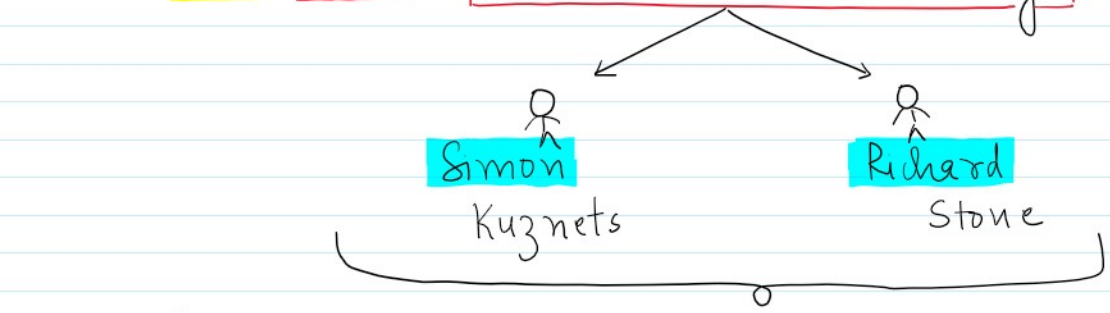
CH 6 Unit 1 **National Income Accounting** (5-7 Marks)



The Central Statistical Organisation (CSO) in the Ministry of Statistics & Programme Implementation (MOS & PI) is responsible for the compilation of National Accounts Statistics.
At the state level, State Directorates of Economics and Statistics (DESs) have the responsibility of compiling their State domestic product and other aggregates.

Why ?? (What is the usefulness ?)

→ helps business to forecast future demand of product
→ it shows composition & structure of National Income
→ It helps government in making policies
→ International comparisons

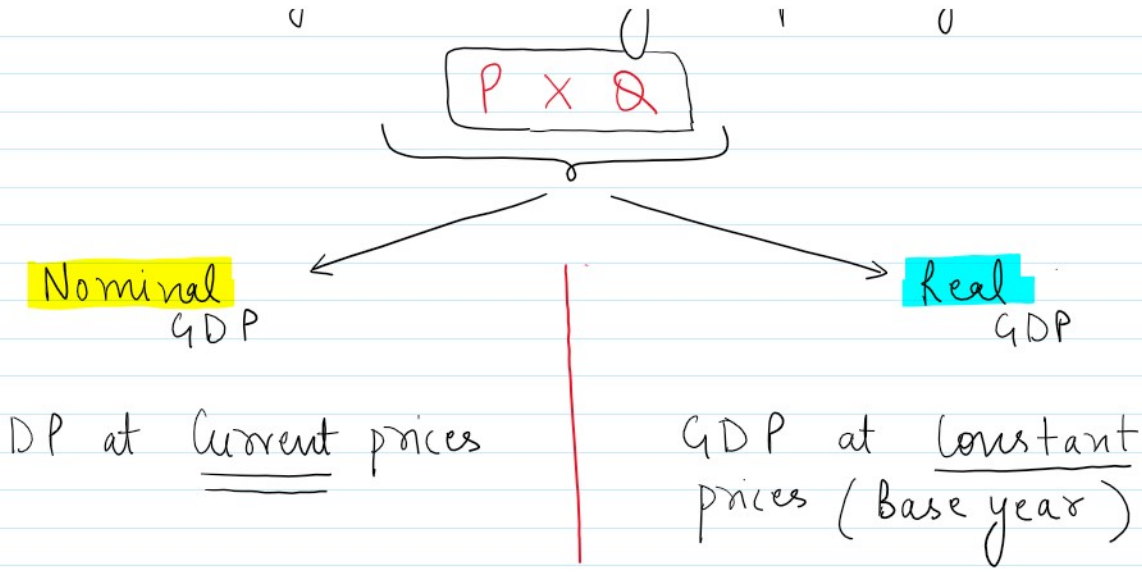
100 □ output (National Income)

→ 90 Guns	20 Guns	5 Guns
→ 10 shoes	80 clothes	95 Bread

✳ CONCEPTS

(1) **Gross Domestic Product** (GDP) – It is the money value of all final goods & services produced in the country within a given period of time.

P × Q



(2) GDP Deflator (Price Index) $= \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$

eg (1) Nominal GDP = 1200 crore
Real GDP = ??
Price Index = 120

Sol:- $\text{Price Index} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100$

$120 = \frac{1200}{\text{Real GDP}} \times 100$

$\text{Real GDP} = \frac{1200}{120} \times 100$

$= 1,000$ crores.

eg (2) Real GDP = 450
Price Index = 120
Find Nominal GDP

Sol:- $\text{Nominal GDP} = \frac{120}{100} \times 450 = 540$

100

(3) **Inflation Rate** (year 2) = $\frac{\text{GDP deflator (year 2)} - \text{GDP deflator (year 1)}}{\text{GDP deflator (year 1)}} \times 100$

eg :- GDP deflator (2024) = 150

GDP deflator (2025) = 165

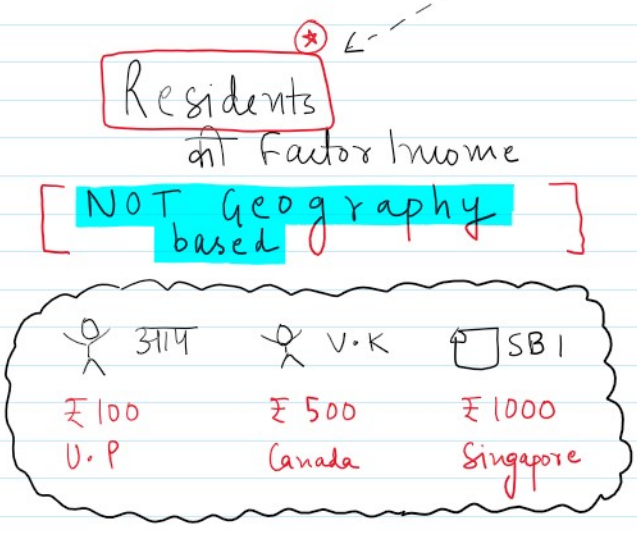
Inflation Rate = $\frac{165 - 150}{150} \times 100$ = **10%**

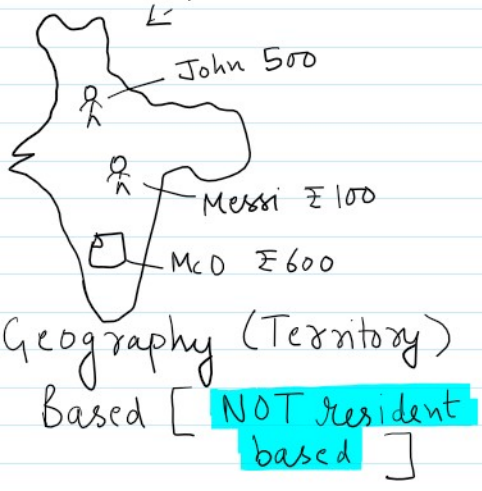
(4) Depreciation = Gross − Net

(Consumption of fixed capital)

(5) Net factor Income from abroad (NFIA) = National product (−) Domestic product

(National Income) (Domestic Income)



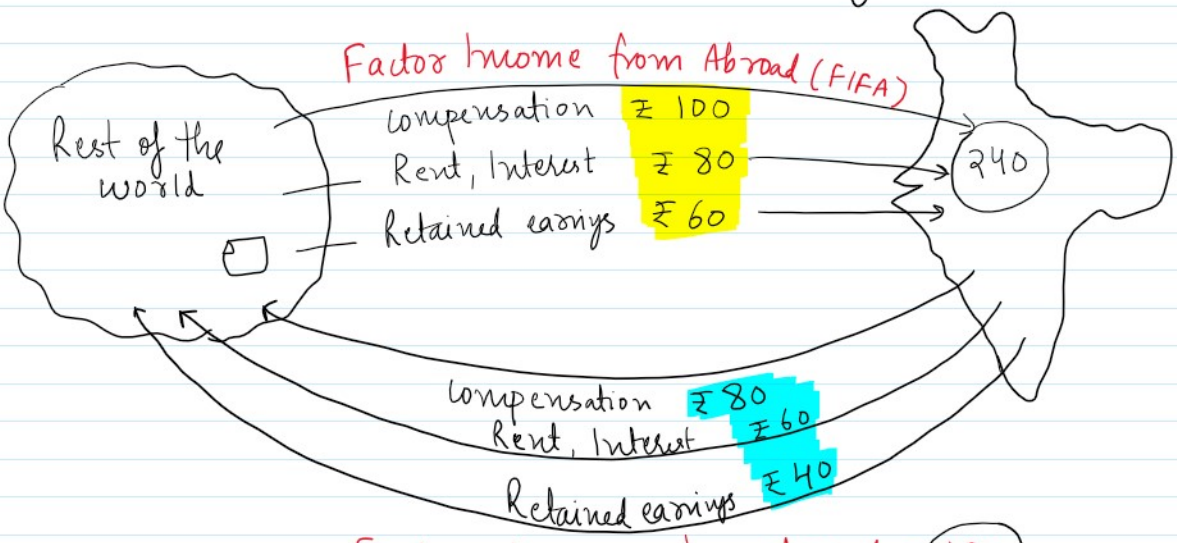


* NFIA = **Net** Compensation of Employees

(+) **Net** Income from Property & Entrepreneurship

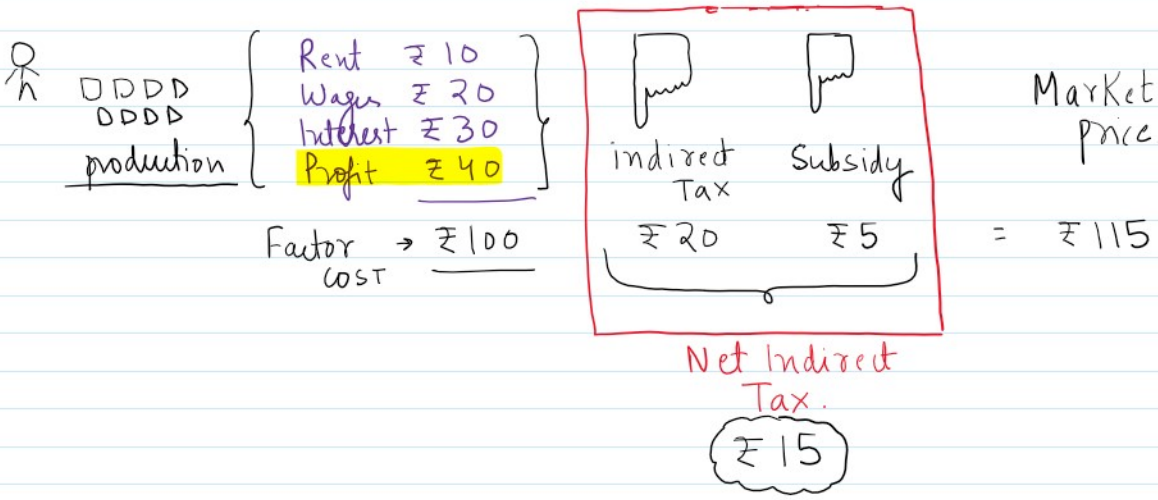
(+) Net Income from Property & Entrepreneurship

(+) Net Retained Earnings



Factor Income to abroad = 180
(FITA)

(6) **Net Indirect Taxes** (NIT) = Market price (−) Factor cost



* Net Indirect Tax = Indirect Tax (−) Subsidy

Q1 :- GDP_{MP} = 2000

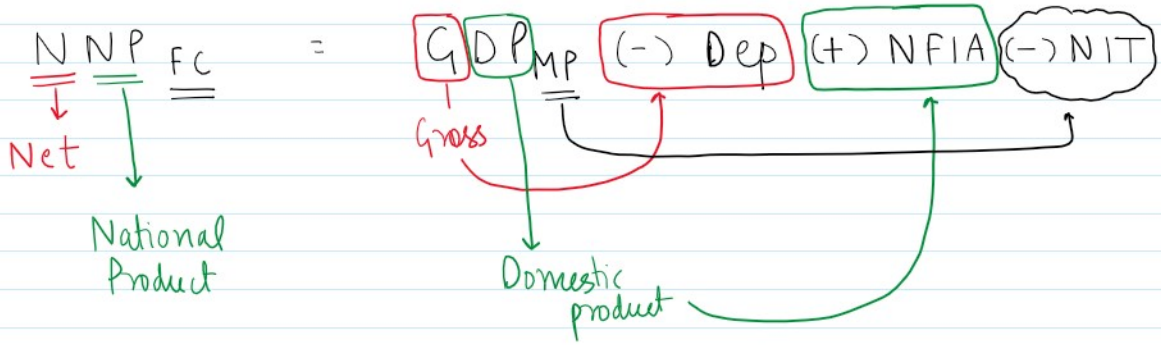
Dep = 50

NFIA = 20

NIT = 30

find NNP_{FC}

Sol:- NNP_{FC} = GDP$_{MP}$ (−) Dep (+) NFIA (−) NIT



= 2000 (−) 50 + 20 (−) 30

= 1940

Q2- NNP_{FC} = 1600

Dep = 50

NFIA = 20

NIT = (−) 10

find (i) NNP_{MP} (ii) GNP_{FC} (iii) GDP_{MP} (iv) NDP_{FC}

NNP_{FC} (+) NIT	NNP_{FC} (+) Dep	GNP_{FC} − NFIA + NIT	NNP_{FC} − NFIA
1600 + (−10)	1600 + 50	1650 − 20 + (−10)	= 1600 − 20
= 1590	= 1650	= 1620	= 1580

(7) Domestic Income (NDP FC)

Net — Domestic Product — at Factor Cost

NDP_{FC} = Compensation of employees (+) Operating Surplus (+) Mixed Income of Self employed

Wages + Salaries in Cash

* COE
  - Wages & Salaries in Cash
  - Wages & Salaries in Kind
  - Employer's contribution to Social Security Scheme (P.F)

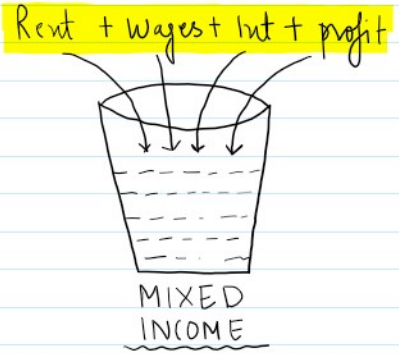
* Operating Surplus = Income from Property & entrepreneurship

= Rent (+) Royalty (+) Interest (+) PROFITS (₹100)

- Corporate Tax (Profit Tax) ₹20
- Dividend (₹30)
- Retained earnings (Undistributed profits) ₹50

PROFITS AFTER TAX (₹80)

* Mixed Income of self employed (eg doctor, Lawyer) =



(8) National Income (NNP_{FC})

- Net
- National Product
- at Factor Cost

= Domestic Income (+) NFIA

= NDP_{FC} (+) NFIA

(9) Per Capita Income

Real wala

$$= \frac{GDP \text{ (Adjusted by Inflation)}}{\text{Total Population}}$$

* It is an indicator of **STANDARD OF LIVING** of country

(10), (11) & (12) Private Income, Personal Income and Disposable Income

Imp

Private Income = **Income*** accrue to private sector from **all sources** within & outside country

Personal Income = **Income*** of household sectors (including NPOs serving households)

* **Income***
  - **Factor Income** :- Rent, Wages, Interest & Profit
  - (+)
  - **Transfer Income** :- Unilateral transfers (Gifts, donations, old age pension, remittance etc)

Personal Disposable Income = Amount of money in the hands of individuals that is **available** for consumption or saving

for consumption or saving
(खर्चा करने के लिए) (बचत करने के लिए)

For better understanding

(A) Income from Domestic product accruing to Private sector [NDP_{FC} accruing to Private Sector] = NDP_{FC} (-) Surplus of Government sector

* Surplus of Government sector means :-
  (i) Income from property & entrepreneurship accruing to Government
  (ii) Savings of Non departmental undertakings (सरकारी दफ्तर)

(B) Private Income = NDP_{FC} accruing to Private sector
(+) NFIA
(+) Net current transfers from ROW
(+) Net current transfers from Govt
(+) National Debt Interest

(C) Personal Income = Private Income
(-) Undistributed profits (i.e Retained earnings)
(-) Corporate Taxes (i.e Profit tax)

* Personal Income = National Income
(+) Income received but not earned
(-) Income earned but not received

* [illegible] = [illegible] (-) [illegible]

* Personal Income = National Income (-) Undistributed profits (-) Corporate Tax (-) Net Interest payments by Households (+) Transfer payments to Households from firms and government

(D) Disposable Personal Income (Personal Disposable Income) = Personal Income
(-) Personal Taxes
(-) Non Tax payments (like fines, penalties)

* GNDI (Gross National Disposable Income) = GNP_{MP} (+) Net Current transfer from ROW

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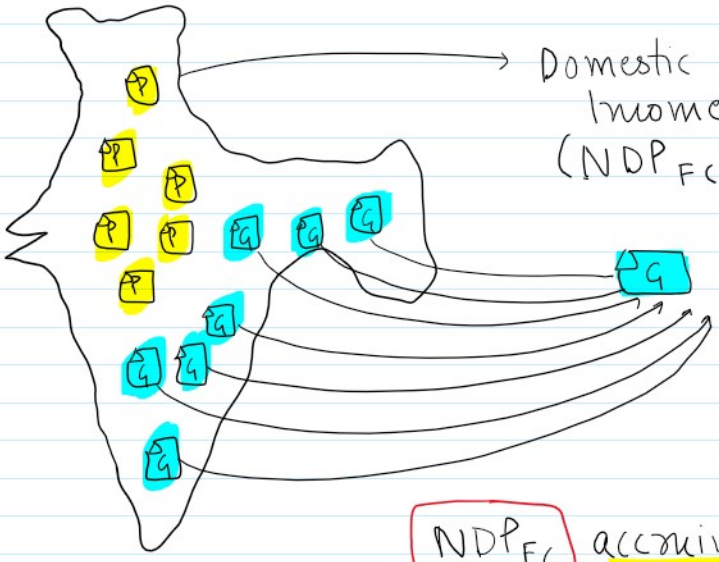
OR

= GNDI (-) Depreciation



Domestic Income (NDP_{FC}) = ₹ 1000

₹ 400

NDP_{FC} accruing to Pvt sector = ₹ 600

V

NDP_{FC} accruing to Pvt sector = ₹ 600

Factor Income (: Domestic Territory)

RIL

Factor Income ← (+) NFIA (विदेश) ₹ 100

Transfer Income

(+) Net Current Transfer from ROW ₹ 200

(+) Net Current Transfer from GOVT ₹ 300

(+) National Debt Interest ₹ 100

Govt (सरकार) ← LOAN — Pvt Co.

Interest

PRIVATE INCOME ₹ 1300

Pvt Income = 1300 RIL ₹ 1300

(−) Corporate Tax ₹ 300

(−) Undistributed profits ₹ 600

= ₹ 400

Personal Income

Gopal

₹ 400 (Personal Income) (−) Personal Tax ₹ 100 (−) Fines ₹ 200 = ₹ 100

Personal Disposable Income

× ——— × ——— × ——— × ——— ×

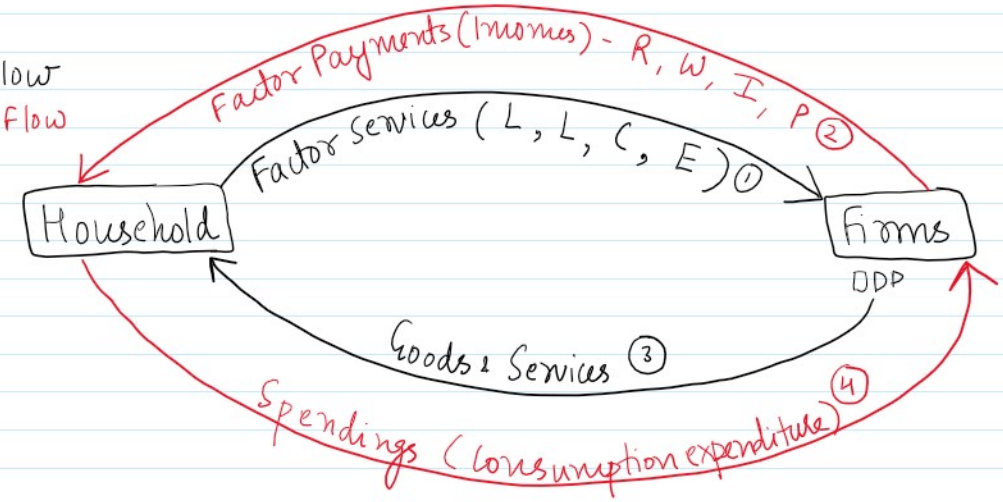
* Measurement of National Income

* Measurement of National Income

I Circular Flow of Income

- **Production phase** → firms produce goods & services with help of factor services
- **Distribution phase (INCOME)** → Flow of factor Incomes from firms to Households
- **Disposition phase (EXPENDITURE)** → Income is spent on consumption

① , ③ Real Flow
② , ④ Money Flow



II Production Method (Value Added Method)

→ Identify the producing enterprises into three sectors :-

a) Primary sector
b) Secondary sector
c) Tertiary sector

→ Calculate GVA_{MP} of each sector

Gross Value Added at Market Price = Value of Output (−) Intermediate Consumption

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Value of Output → SALES* + Δ Stock → closing (−) Opening

Intermediate Consumption → Purchase* of Raw Materials (i.e Non factor Inputs)

* Sales
  - → Domestic Sales (+)
  - → EXPORTS

* Purchases
  - → Domestic Purchase (+)
  - → IMPORTS

$$GDP_{MP} = GVA_{MP}\ (\text{Primary}) + GVA_{MP}\ (\text{Secondary}) + GVA_{MP}\ (\text{Tertiary})$$

$$GDP_{MP} = \Sigma GVA_{MP}$$

∴ National Income (NNP_{FC}) = GDP_{MP} (−) Depreciation (+) NFIA (−) NIT

* Production for self consumption*, Imputed Rent, Own account production are included in value of Output.

III INCOME METHOD

NDP_{FC} (Domestic Income) = Compensation of Employees (+) Operating Surplus (+) Mixed Income

∴ $NNP_{FC} = NDP_{FC} + NFIA$

$\therefore NNP_{FC} = NDP_{FC} + NFIA$

IV EXPENDITURE METHOD

(Income Disposal Approach)

" खर्च "

GDP_{MP} = Final consumption* expenditure (+) Gross Domestic Capital formation (+) Net exports

(i.e Gross Investment)

* Final consumption expenditure

- Households :- Private Final Consumption Expenditure (PFCE)
- Government :- Government Final Consumption Expenditure (GFCE)

{ eg :- education, healthcare, defence, subsidies, scholarship etc etc }

* Gross Domestic Capital Formation = Gross Domestic FIXED Capital formation (+) Inventory Investment

(Gross Investment)

निवेश

(लंबी अवधि) का निवेश

Inventory Investment (△ Stock)

cl − op

* Net exports = Exports (−) Imports

$\therefore NNP_{FC} = GDP_{MP}$ (−) Depreciation (+) NFIA (−) NIT

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* System of Regional Accounts in India *

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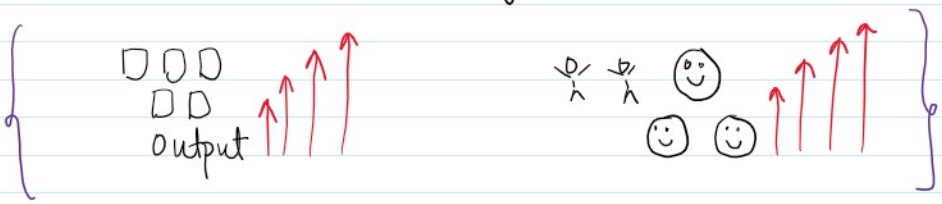
→ Regional Accounts provide integrated database on the numerous transactions taking place in regional economy. At present, all states + Union territories of India compute state income estimates and district level estimates.

→ State Income or Net State Domestic Product (NSDP) is measured by state

* GDP and Welfare *

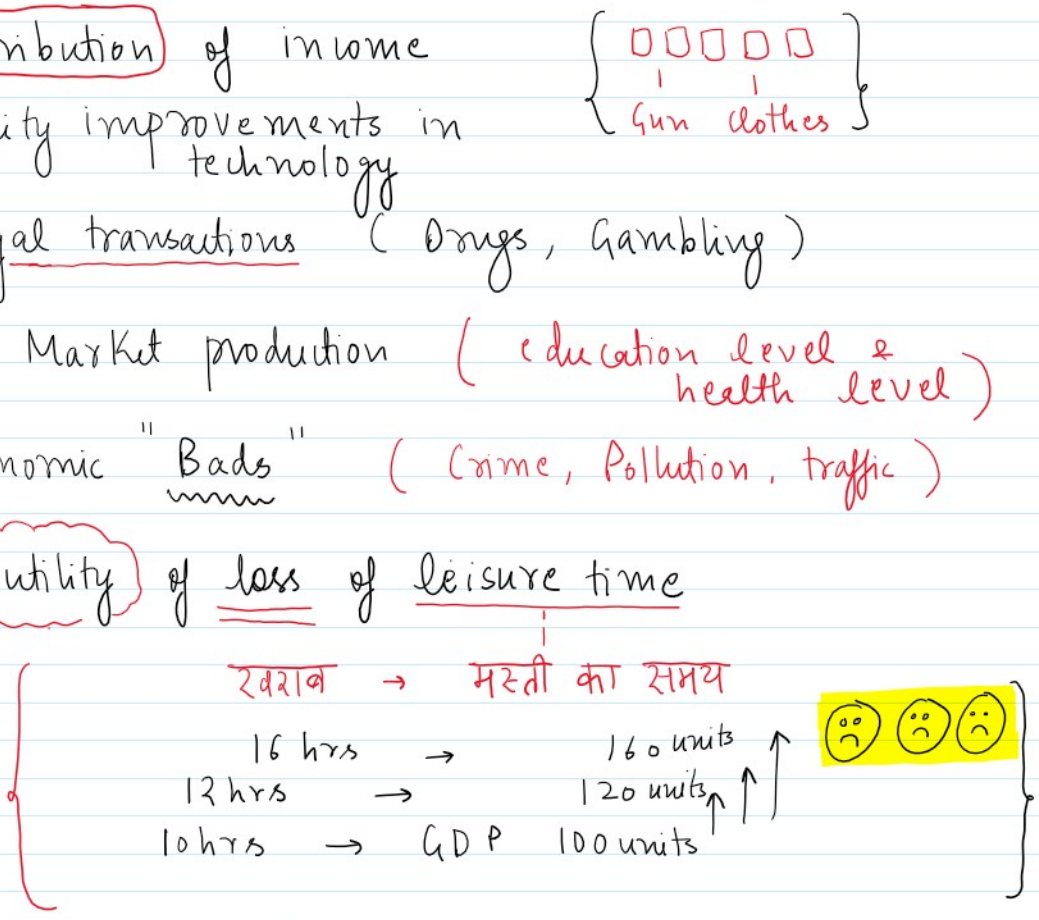


IS IT TRUE ??

NO

GDP measure excludes some of the following points :-

- Distribution of income
- Quality improvements in technology
- Illegal transactions (Drugs, Gambling)
- Non Market production (education level & health level)
- Economic "Bads" (Crime, Pollution, traffic)
- Disutility of loss of leisure time



- Positive & Negative externalities

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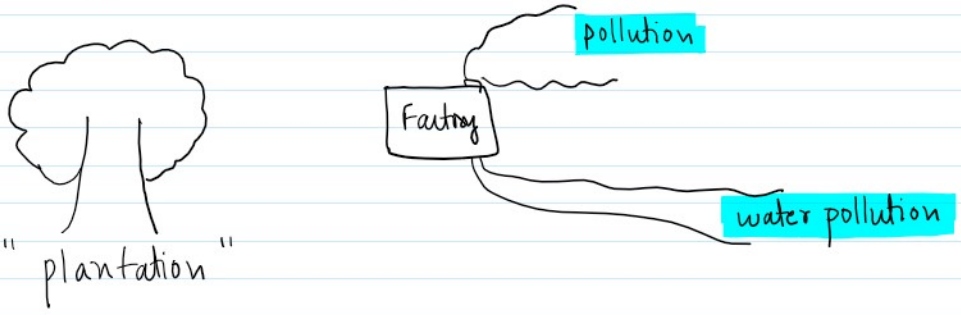

- Etc Etc.

* Limitations and Challenges of NI computation

→ Lack of agreed definition of national Income
→ Accurate distinction between final & intermediate expenditure
→ Transfer payments
→ Difficulty of incorporating distribution of Income
  - Rent
  - Wages
  - Interest
  - Profit
→ Valuation of Government "Services"

→ Inadequacy of data
→ Presence of Non-monetised sector
→ Absence of recording of Income due to Illetracy
→ Lack of accurate estimation of depreciation