National income is the total income of all people living in a country.

How do we calculate national income?

1. ***Gross Domestic Product (GDP)*** *stands for gross domestic product and it is the total value of all goods and services produced in an economy during a certain time period. It is the income of all people living within the borders of that country* **whether they are that country nationals or not.**

Revenue of Mega Lecture (ML) is the total receipt of cash / money from the sale of its online classes that our students pay us.

From this revenue ML has to pay its teachers their salaries, pay other expenses like fixed cost including rent, electricity etc. The remaining amount after paying our expenses is known as our profit which is basically the business owners' income from running and managing this business.

Rs 20 lakhs

Rent - income for landlord
Electricity - income for electricity producing company
Salaries - income for workers
Profit - business owners

2. ***Gross National Product (GNP):*** is the income of a certain country's nationals *regardless of their place of residence.*

How do we calculate GNP from GDP?

GNP = GDP + Net Income from Abroad

Net Income from Abroad = Income earned by your country nationals living abroad - Income earned by foreigners living in your country

3. ***Net Domestic Product (NDP) = GDP - Depreciation***

NDP is a better measure of national income as it accounts for the lost value of assets which is basically the amount businesses would be spending to replace those assets in the future.

Depreciation: wear and tear of assets during certain time period

4. ***Net National Product (NNP) = GNP - Depreciation***

Gross Domestic Product (GDP) is the basis for calculating all other national income statistics.

How is GDP determined?

Where the country's aggregate demand is equal to its aggregate supply.

Methods used for estimated / calculate GDP

1. **Income Approach*:*** it is the summation of income of all individuals who are living in a country during a certain time period which is basically estimated through tax returns. This method of GDP will always understate the value given people and businesses prefer to understate their income to avoid taxes.

2. ***Expenditure Approach:*** it is the summation of all peoples expenditure on all goods and services during a certain time period.
   Expenditure approach is a better approach for calculating GDP since it is easier for people to understate their income but it is difficult for them to hide their expenditure.

   Even though not all expenditure is through registered businesses and therefore some consumer expenditure will be unaccounted for, but its chances are fairly less compared to the income approach where people often understate their incomes to evade income tax.

3. ***Product Approach:*** it calculates GDP through a value added approach which is basically the difference between selling price and cost of components. If value added is added for all the products produced in a country that would estimate the country's GDP using the product approach.

This is not a commonly used practice for calculating the country's GDP.

Value Added = Selling Price of Final good - cost of components

Raw Cotton: 5 kg (Rs 1000 price of 5 kg of cotton)

Is GDP a good indicator of development? Should we measure development through GDP?

What is development? *<u>Development refers to the living standard of a country's nationals.</u>*

<u>Economic Growth is the percentage increase in a country's GDP from one period to another.</u>
Economic growth is the measure of that country's national income growth and so it reflects how much more a country's nationals are earning which reflects their higher purchasing power.

Economic growth is a prerequisite (necessary requirement) for development because without higher incomes a country's nationals cannot afford more and better goods and services but economic growth alone will not ensure development.

Economic growth is crucial or necessary for development but growth alone is not enough for development.

- ***What affects living standards / development?***

Development includes all things that have a positive effect on the living standards in a country.
Technically anything under the sky that affects the quality of life in a certain country will affect that country's living standards ranging from something as small as improvement in technology like satellite television to increase in income with which people can afford more goods and services, better education and health care services, better infrastructure liked roads, telecommunication etc, stronger and unbiased institutions.

- ***Is GDP a good indicator of development?***

Yes, it can be	***No, it is not***
Because it shows an increase in consumers' purchasing power which translates into affordability of better and more goods and services.	First of all GDP does not account for products/things that directly affect citizens' living standards like pollution, crime rates, quality of education/healthcare etc which directly affect a country's living standards.
	The value of GDP could be understated due to challenges faced in accurate record recording of transactions; it might not show

	accurate results. Some economies have a bigger proportion of hidden economy (transaction not being recorded) than others and therefore as per GDP they might be seen as less developed.
	How equal is the income distribution of a country would significantly affect the accuracy of GDP in gauging its level of development.
	GDP does not account for the type of goods and services produced. Some countries spend much more than other countries on less productive things like defense compared to other countries which could be spending more on education, technology, health care even though the overall GDP values of the 2 are the same.
	GDP also does not account / show how much state support is available to disadvantaged groups in that country.

- ***If not, then what are other good indicators of development?***

The 3 most popular indicators of development are as follows:

1. ***Human Development Index (HDI)***

HDI measures countries' development on 3 dimensions / aspects namely income, education and health care.

For each of these dimensions / aspects there is one statistic (some value or measurement) to capture the country's performance.

a) *Income* - Gross National Income / Gross National Product per capita
b) *Education* - average years of schooling (the number of years a typical person in that country attends school)
c) *Health Care* - life expectancy (how many years on average a typical person lives)

Through aggregating these 3 statistics an overall score is calculated for that country which is between 0 to 1. The greater the value is (meaning closer to 1) the more developed a country is.

2. ***Multidimensional Poverty Index (MPI)***

Category	***Explanation***
Living Standards	1. ***Electricity:*** household has no electricity
	2. ***Fuel:*** household uses solid fuel, like cow dung, wood etc
	3. ***Assets:*** ***The household does not own more than one of these assets: radio, TV, telephone, computer, animal cart, bicycle, motorbike, or refrigerator, and does not own a car or truck.***
	4. ***Drinking Water:*** the water is not safe for drinking or the source of drinking water is 30 mins away from the household
	5. ***Sanitation:*** household has unimproved sanitation or it is improved but it is shared with other household
	6. ***Housing:*** the housing has inadequate material for either roof, walls, or floor.
Education	1. ***Years of Schooling:*** no eligible household member did not attend school till 6th grade
	2. ***School Attendance:*** any household where someone has not attended school till the age when they should have been in 8th grade.
Health Care	1. ***Nutrition:*** anyone below the age of 70 who is defined as undernourished
	2. ***Child Mortality:*** anyone below the age of 18 who died in the last 5 years preceding the survey.

Based on the aggregate score of the 10 statistics used in MPI, economists classify countries' population as to what percentage of their population will be defined as poor.

The MPI assesses poverty at the individual level. If a person is deprived in a third or more of ten (weighted) indicators, the global MPI identifies them as 'MPI poor'. The extent – or intensity – of their poverty is also measured through the percentage of deprivations they are experiencing.

3. Measure of Economic Welfare (MEW)

Recession means period of low economic activity during which countries' GDP decrease.

GDP is the total income or national income of a country whereas GDP per capita (person) is the average income that a typical citizen of that country earns.

GDP per capita = GDP / Population