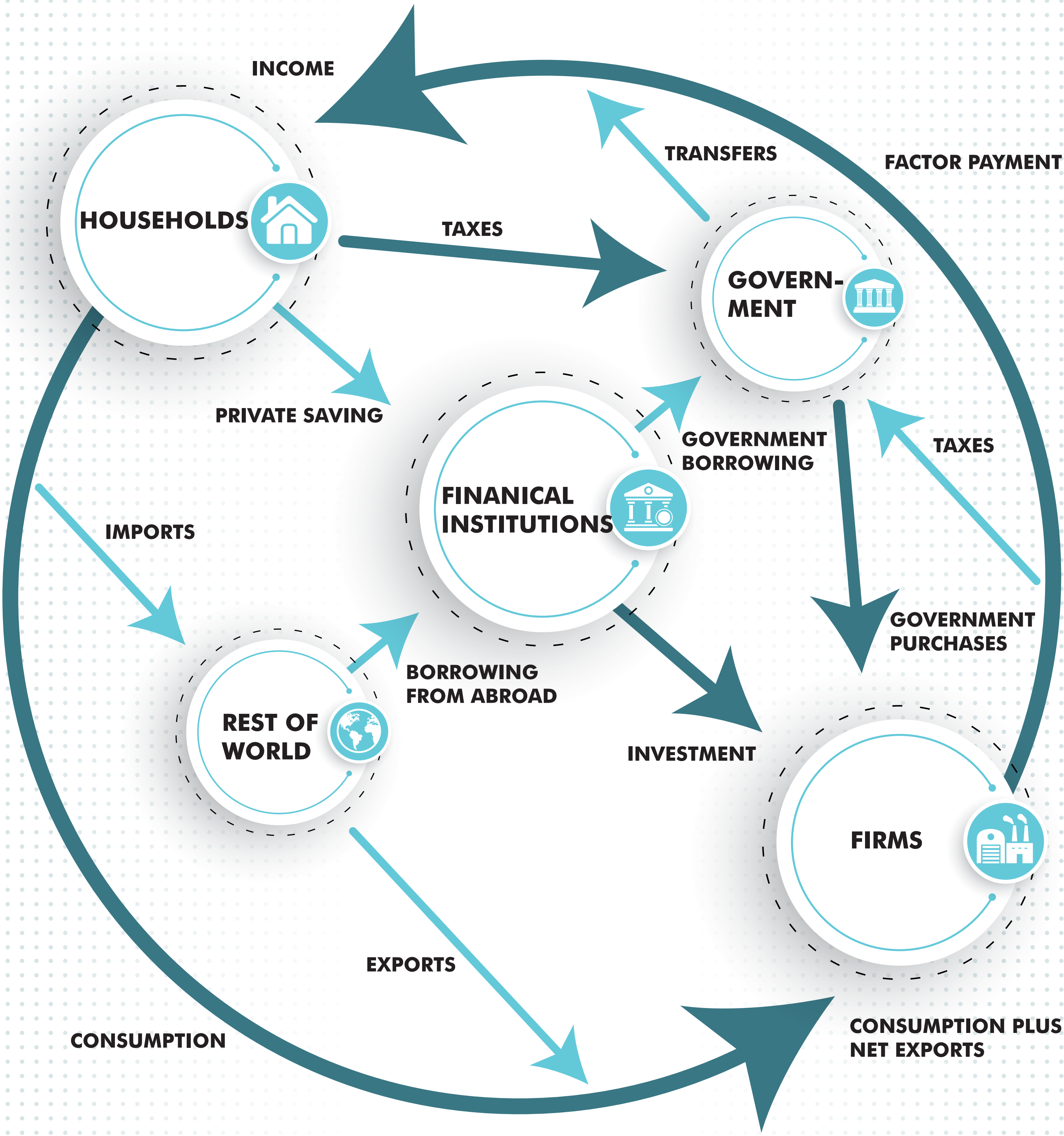
QUICK REVISION MODULE

(UPSC PRELIMS 2024) ECONOMICS QRM

NATIONAL INCOME ACCOUNTING

National Income Accounting is used to measure the economic activity in the national economy as a whole. Some of the metrics used for this purpose are: Gross Domestic Product (GDP), Net Domestic Product (NDP), Gross National Product (GNP), Net National Product (NNP), Gross National Income (GNI), and Net National Income (NNI).

CIRCULAR FLOW OF ECONOMY IN AN OPEN ECONOMY WITH GOVERNMENT AND FOREIGN SECTOR:



SOME BASIC CONCEPTS

GDP

It measures the value of **final** goods and services produced **within a geographic boundary** regardless of the nationality of the individual or firm.
For instance, cars manufactured in India by Japanese company will be included in Indian GDP.

GNP

It is a measure of the value of output produced by the
nationals of a country irrespective of the geographical boundaries.
GNP = GDP + Net Factor Income from Abroad.
In India's case, GNP is lower than its GDP as net income from abroad has always been negative in India.

NNP

It is the GNP calculated after adjusting the value of 'depreciation'.
NNP = GNP - Depreciation
Note:
NNP is always lesser than GNP (Reason: the Depreciation can never be reduced to zero and will always be positive.)

NDP

It is the GDP calculated after adjusting the value of 'depreciation'.
NDP = GDP – Depreciation.

FACTOR COST (FC)

It refers to **cost of all factors of production used or consumed in producing goods and services.**
In other words, Factor Cost (FC) = Market Price – Net Indirect Taxes
Where, Net Indirect Taxes (NIT) = Indirect Taxes – Subsidies

Therefore, **Factor Cost = Market Price - Indirect Taxes + Subsidies.**

MARKET PRICE (MP)

It refers to the actual transacted price of goods and services.

Transfer Payments

It refers to payments made by the government to individuals for which there is **no economic activity produced in return** by these individuals. E.g. old age pensions, scholarships etc.

National Income (NI)

It is a measure of the sum of all factor incomes earned by the citizens of a country (whether within the country or abroad)

National Income at Factor Cost = NNP at Market Price – Indirect Taxes + Subsidies.

Personal Income (PI)

It includes all income (including transfer payments) which is received by all the individuals in a year. Thus, Personal income is:

PI = NI + transfer payments - Corporate retained earnings, income taxes, social security taxes.

Where NI is National Income.

Disposable Personal Income (DPI)

It refers to the amount, which in actual is at the disposal of individuals to spend as they like

DPI = PI - Personal Taxes.

DPI = Consumption + Savings.

Real GDP

It **refers to the current year production of goods and services valued at** base year prices. **Such base year prices are** constant prices.

It is a much better way to calculate the GDP because in a particular year GDP may be bloated up because of high rate of inflation in the economy.

Nominal GDP

It **refers to current year production of final goods and services valued at** current year prices.

COMPONENTS OF NATIONAL INCOME

Personal Consumption + Personal saving
or
Personal Disposable Income (PDI)

+ Direct personal tax
+ Misc fees and fines paid by household/Misc Receipt of the Govt.

Personal Income

+ Corporate profit tax
+ Undistribted corporate profit

Private Income

- NFIA
- Interest on National debt
- Current transfers from Govt.
- Current transfer from R.O.W (NET)

Domestic Factor Inncome Accruing to Private Sector

+ Income from properly entrepreneurship accuring of govt. administrative department
+ Saving of non department enterprises

Domestic Income

+ NFIA

National Income

MEASUREMENT OF NATIONAL INCOME IN INDIA BY NATIONAL STATISTICAL OFFICE (NSO)

- **Value Added Method (or Product Method)**
- **Income Method**
- **Expenditure Method**

VALUE ADDED METHOD

Under this method, GDP is calculated at market prices, which is the total value of outputs produced at different stages of production. It **focuses on supply side** of the product.

Goods and services included in production	Goods and services not included in production
• Goods and services sold in the market.	• Purchase and sale of Second hand items.
• Goods and services not sold but supplied free of cost.	• Production due to illegal activities.
• Services provided by the agents.	• Non-economic goods such as air and water.
	• Transfer Payments such as scholarships, pensions, etc.

NOTE: Only final Goods and not Intermediate Goods are taken for calculation to avoid **Double Counting.**

INCOME METHOD

This approach focuses on aggregating the payments made by firms to households, called factor payments. It **focuses on the demand side** of the product.

Factors of production	Types of factor incomes
Land	Rent
Labour	Wages
Capital	Interest
Organization	Profit

GDP = Wages+ Interest + Rent +Profit + Dividend + Indirect Taxes-Subsidies+ Depreciation.

EXPENDITURE METHOD

The expenditure method measures the final expenditure on GDP. It is the total spending on currently-produced final goods and services in an economy.

This final expenditure is made up of the sum of 4 expenditure items, namely:

Gross Domestic Product (GDP) = C + I + G + (X-IM)

Consumption Expenditure (C)	It is the personal consumption made by households. Payment of which is paid by households directly to the firms.
Investment Expenditure (I)	Investment is an addition to capital stock of an economy in a given time period. It includes investments by firms as well as governments sectors.
Government Expenditure (G)	It includes the value of goods and service purchased by Government.

NOTE: Government expenditure on pension schemes, scholarships, unemployment allowances, etc. are not included as they come under transfer payments.

Imports (IM)	Expenditure on foreign made products (Imports) is expenditure that escapes the system.
Exports (X)	It is the expenditure by other economies on our production (Exports).

Base Year	GDP Deflator	Gross value added (GVA)
Base year is the year used as the beginning or the reference year for constructing an index.	It is the ratio of GDP at current prices to GDP at constant prices. GDP deflator is published on a quarterly basis since 1996 with a lag of two months.	It is defined as the value of output less the value of intermediate consumption.

It is usually assigned an arbitrary value of 100.

To make the calculation of GNP/GDP easier, economists use a price index to find the real GNP/GDP. A Price index is a number showing the changes in the overall level of prices. It shows a change in the general price level of an economy.

GDP deflator = (Nominal GDP/Real GDP) * 100

It is a tool to measure the inflation comprehensively. Unlike the WPI and the CPI, GDP deflator is not based on a fixed basket of goods and services, it covers the whole economy.

The GVA at basic prices will include production taxes and exclude production subsidies available on the commodity.
GVA at basic prices = GVA + production taxes less production subsidies
On the other hand, GVA at factor cost includes no taxes and excludes no subsidies.
GVA at factor cost = GVA at basic prices - production taxes less production subsidies.

DIFFICULTIES IN MEASUREMENT OF NATIONAL INCOME

GNI

- **Non-Monetization of transactions** especially the barter transactions in rural areas.
- **Unreported illegal Income** or black economy.
- **Absence of data on growing service sector.**
- **Work of informal sector and housewives** are not included.

RECENT DEVELOPMENTS IN GDP MEASUREMENT

Change in the base year for calculating national accounts from 2004-05 to 2011-12.

Measurement of growth of GDP at constant market prices intead of earlier constant prices.

Sector-wise estimates of GVA at basic prices instead of earlier factor cost.

Use of MCA21 database of Ministry of Corporate Affairs.

Comprehensive coverage of the financial sector.

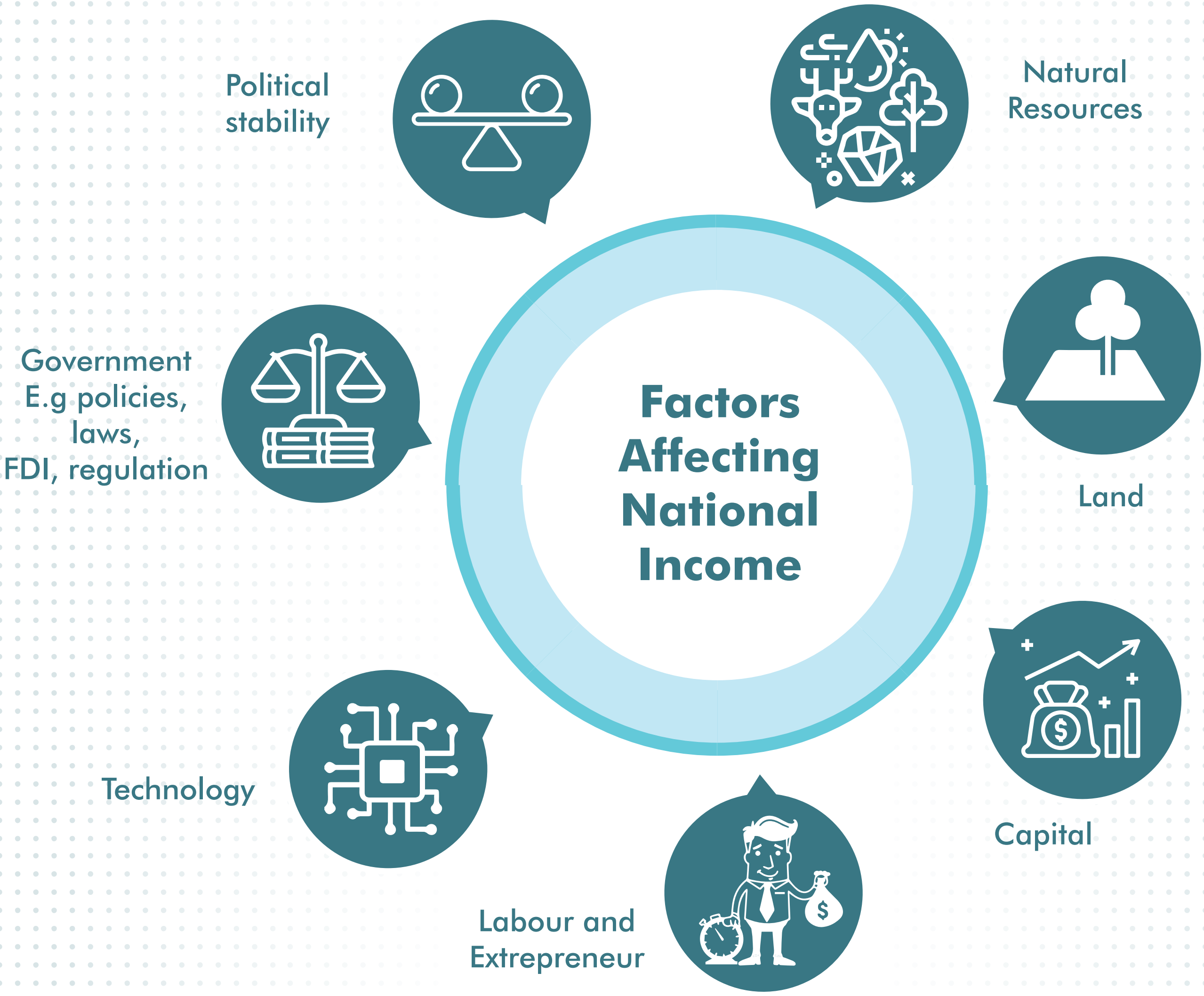
Improved coverage of activities of local bodies and autonomous institutions.

DEBATES AROUND GDP:

Higher economic growth may not necessarily transform into higher economic development. This is evident from following points:

- **Gender disparities** are not indicated in the data of GDP.
- **Does not measure sustainability of growth** as the growth may be at the cost of exploitation of environment.
- **Condition of poor is not indicated.** Even though Indian economy grew at a rate of over 7-8% in last decade the food inflation was at the highest levels adversely affecting the poorest strata of the society.
- **Economic inequality not revealed by GDP:** Inequality in earnings has double in India over the last two decades which were incidentally the years of highest GDP growth also.
- Other intangibles not measured: Does not value intangibles like leisure, quality of life etc.

FACTORS AFFECTING NATIONAL INCOME



GREEN GDP

It is an index of economic growth with the environmental consequences of that growth factored in.

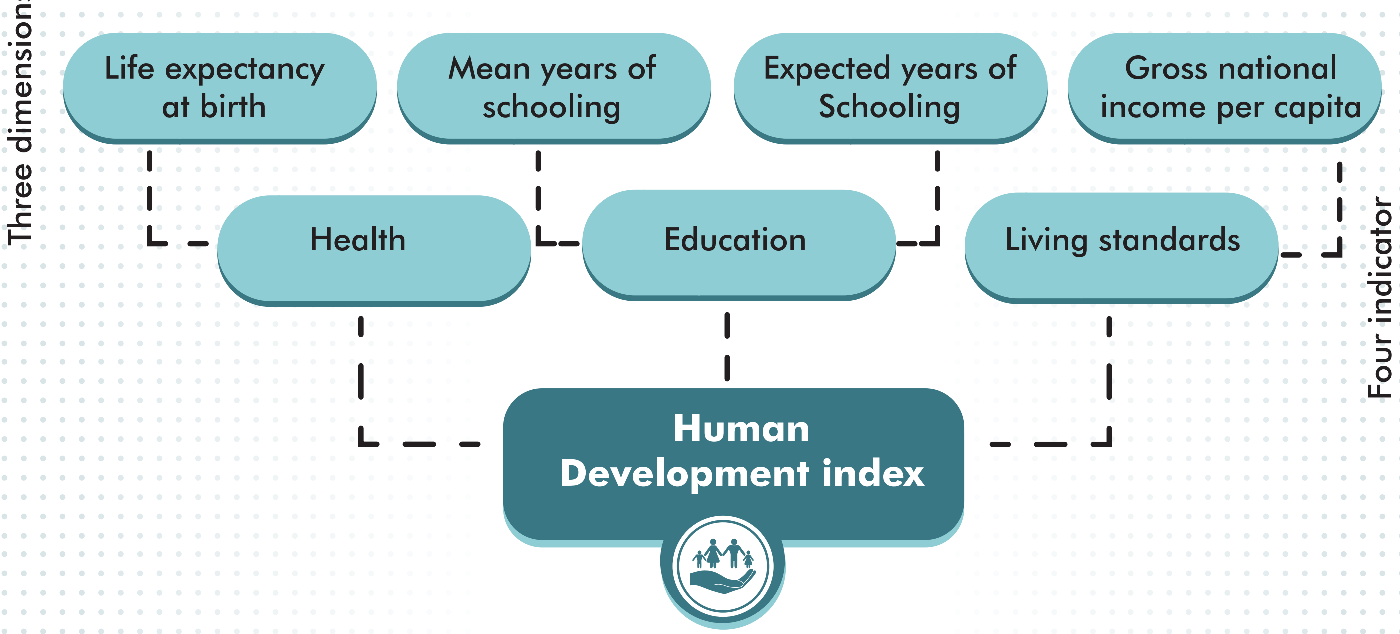
Green GDP = GDP – the value of environmental degradation – P P = all expenditures resulting from cleaning up pollution, avoiding further environmental damage, and health care costs of pollution- induced illnesses GOI is yet to implement the recommendations given by Partha Dasgupta committee in this direction.

HDI OR HUMAN DEVELOPMENT INDEX

United Nations Development Programme (UNDP) published its first Human Development Report (HDR) in 1990. The report had a HDI which was the first attempt to define and measure the levels of development. The parameters and indicators are explained in the given diagram.

COMPONENTS OF THE HUMAN DEVELOPMENT INDEX

The HDI-three dimensions and four indicators



GROSS NATIONAL HAPPINESS

It is given holistic and due importance in consideration of sustainable development. Four important pillars of it are:

- Sustainable and equitable socio-economic development,
- Good Governance,
- Environmental Protection,
- Cultural Promotion.

Important Timelines of GNH

GROSS NATIONAL HAPPINESS

- **1975** — Idea Coined by Bhutan's 4th Dragon king, Jige Sigme Wangchuk
- **2010** — Current Version developed by Center for Bhutan Studie
- **2012** — UN Resolution for GNH as the chief Development Indicator
- **2013** — World Happiness report Consisting of 83 Countries published
- **2013** — Den mark topped the list and portugal was lowest

Note: Other indexes will be covered in later topics of this module.

STATISTICAL SYSTEMS OF INDIA

Ministry of Statistics & Programme Implementation (MoS&PI) is the nodal ministry.

- **Statistics Wing National Statistical Office(NSO)**
- **Programme Implementation Wing**

NOTE: Programme Implementation Wing has three divisions: Twenty Point Programme, Infrastructure Monitoring and Project Monitoring and Member of Parliament Local Area Development Scheme.

NATIONAL STATISTICS OFFICE (NSO)

It has been created by merging the Central Statistical Office (CSO) and National Sample Survey Office (NSSO) based on the recommendation of Dr. C. Rangarajan Commission. It is the nodal agency for planned development of the statistical system in the country. It is headed by chief statistician of the country.

It is mandated with the following responsibilities:-
- Provides and maintains norms and standards in the field of statistics.
- Prepares national accounts as well as publishes annual estimates of national product.
- Maintains liaison with international statistical organizations.
- Compiles and releases **Index of Industrial Production (IIP), Annual Survey of Industries (ASI), etc.**
- Organizes and conducts periodic all-India Economic Censuses.
- Conducts large scale all-India sample surveys for socio economic areas, such as employment, consumer expenditure, housing conditions and environment, etc.

NATIONAL STATISTICAL COMMISSION (NSC)

It was set up based on recommendation of the Rangarajan Commission in 2005.

COMPOSITION

- A part-time Chairperson and four part-time Members, each having specialization and experience in specified statistical fields.
- CEO of NITI Aayog: Ex-officio member of NSC.
- Chief Statistician of India is the Secretary to the NSC. He is also the Secretary of MoS&PI.

FUNCTIONS

- To serve as a nodal and empowered body for all core statistical activities of the country.
- Evolve, monitor and enforce statistical priorities and standards.
- To ensure statistical co-ordination among the different agencies involved.

INDEX OF INDUSTRIAL PRODUCTION (IIP)

- IIP is used to measure the performance of industrial activity in the economy.
- It is released by NSO every month.
- The base year for calculation of IIP – 2011-12.
- Broadly, following there sectors are used for calculating the IIP.

Mining (Weight: 14.37%)	Manufacturing (Weight: 77.63%)	Electricity (Weight: 7.99%)

INDEX OF EIGHT CORE INDUSTRIES

- It is released by Office of the Economic Adviser, Department for Promotion of Industry and Internal Trade.
- It measures the performance of only 8 important sectors of the economy.

CORE INDUSTRIES			
Refinery Products (28.04per cent)	Electricity (19.85per cent)	Steel (17.92per cent)	Coal (10.33per cent)
Crude Oil (8.98per cent)	Natural Gas (6.88per cent)	Cement (5.37per cent)	Fertilizers (2.63 per cent)

ANNUAL SURVEY OF INDUSTRIES (ASI)

- Conducted by NSO on annual basis.
- Principal source of industrial statistics in India.
- It covers most of the industries in the Factories Act and is broader in terms of coverage of industry as compared to IIP.
- Industries excluded from the survey: Defence establishments, oil storage and distribution depots, restaurants, hotels, café and computer services and the technical training institutes.

SUSTAINABLE DEVELOPMENT GOALS (SDGS)

- At 70th Session of the United Nations (UN) General Assembly (2015), document titled **"Transforming our World: the 2030 Agenda for Sustainable Development"** was adopted.
- It had **17 Sustainable Development Goals (SDGs)** and the associated **169 targets.**
- **Countries have the primary responsibility** for follow-up and review at the national level.
- **In India:**
  - **MoSPI is responsible for the development of the National Indicator Framework (NIF)** for measuring the progress of the SDGs and associated target
  - **NITI Aayog has the overall responsibility of SDGs implementation** and align the government schemes/programs to SDGs.