## Economics Lecture 3 – Class Notes

**National Income** – Total value of final goods and services produced by the normal residents during an accounting year, after adjusting depreciation.

- It is Net National Product (NNP) at Factor Cost (FC)
- It does not include taxes, depreciation and non-factor inputs (raw materials)

**Domestic Income** - Total value of final goods and services produced within a domestic territory during an accounting year, after adjusting depreciation.

- It is NDP at FC
- Both NNP and NDP can be measured at constant prices (real income) or market prices (nominal income)
- Domestic Income + NFIA = National Income

**Measurement of National Income can be done by three methods**

1. Income Method – Estimated by adding all the factors of production (rent, wages, interest, profit) and the mixed income of self-employed.
    - In India, one-third people are self-employed
    - This is the 'domestic' income, related to the production within the borders of the country
2. Production (Value Added) Method – Estimated by adding the value added by all the firms
    - Value added = Value of Output – Value of (non-factor) inputs
    - This gives GDP at Market Price (MP) – because it includes depreciation (therefore 'gross') and taxes (therefore 'market price')
    - To reach National Income (that is, NNP at FC)
        i. Add Net Factor Income from Abroad: GNP at MP = GDP at MP + NFIA
        ii. Subtract Depreciation: NNP at MP = GNP at MP – Dep
        iii. Subtract Net Indirect Taxes: NNP at FC = NNP at MP – NIT
3. Expenditure Method
    - Y = C + I + G + (X-M), where Y = GDP at MP, C = Private Sector's Expenditure on final consumer goods, G = Govt's expenditure on final consumer goods, I = Investment or Capital Formation, X = Exports, I = Imports, X-M = Net Exports

Any of these methods can be used in any of the sectors – the choice of the method depends on the convenience of using that method in a particular sector

**Sectors of Indian Economy**

1. Primary Sector – Agriculture and allied activities, Mining and Quarrying
    - Production Method used here
2. Secondary Sector – Manufacturing, Electricity, Gas and Water Supply, Construction
    - Production Method used for all segments except construction (where expenditure method is used)
3. Tertiary Sector – All services

- Income Method used here

Sometimes another classification is used, where Indian Economy is divided into three segments –

1. Agriculture – This includes agriculture and allied activities
2. Industry – This includes Mining and Quarrying, Manufacturing and Electricity
    - In IIP, this classification is used to refer to 'industry'
3. Services – This includes construction and all services

**Items not included** in National Income – Intermediate goods, Transfer payments (unilateral payments made without expectations of return; like gifts, unemployment allowance, donations etc), sale and purchase of old goods and existing services (shares are not included, unless they are through an IPO), windfall gains (lottery income), black money (cannot be estimated), work done by housewives

- **Items included** in National Income (NI) – Goods produced for self-consumption, estimated rent of self-occupied property

**Quick Facts**

- First rough estimate of NI was done by Dadabhai Naoroji for 1867-68; published in his book Poverty and Unbritish rule in India (famous for its Drain of Wealth theory)
- First scientific estimate made by Prof V K R V Rao (1931-32)
- GoI estimated the NI for the first time in 1948-49 through the Ministry of Commerce
- National Income Committee was set up in 1949 (Chairman – Dr P C Mahalanobis)
    - P C Mahalanobis was also the chairman of Indian Statistical Institute
- Currently, Central Statistical Organization (est 1950) estimates NI (since 1956)
    - It publishes National Accounts Statistics annually
    - Under the Ministry of Statistics and Programme Implementation
    - Now, CSO has been merged with National Sample Survey Organization to form National Statistical Organization

**Problems faced in the estimation of National Income**

I. Conceptual problems – what should be included or excluded in NI? (e.g. which activities of foreign firms or the govt should be considered productive?)
II. Practical or Statistical problems – small shopkeepers, casual workers etc don't keep a proper record of their income/expenditure; non-market activities (self-consumption) are tough to estimate

Per Capita Income = National Income/Population

- For FY 2011-12, it was Rs 60,000 (nominal)

**Economic Growth and Development**

- If the production of goods and services increases, we call it Economic Growth

- That process of Economic Growth which leads to improvement in the general welfare of people is called Economic Development. It means progressive changes in the socio-economic structure of the country

| Economic Growth | Economic Development |
|---|---|
| Increase in production | Increase in production and welfare |
| Quantitative concept | Qualitative concept |
| Uni-dimensional | Multidimensional |
| Just a means to an end | An end in itself – this is what countries aim at |
| Major concern of developed countries | Major concern of developing countries |
| Growth can happen without development | Development cannot happen without growth |
| Indicators<br>✓ Real GDP<br>✓ Real per capita income | Indicators<br>✓ Human Development Index<br>✓ Physical Quality of Life Index<br>✓ Net Economic Welfare (NEW) |

**Net Economic Welfare** (NEW) – The major problem of GNP as a measure of welfare is that it measures the commercial transactions taking place in the economy while the welfare of the individuals depends on many other non-transactional aspects. This concept of NEW was popularized by Paul Samuelson.

- NEW = GNP + Housewives' Services + Value of Leisure – Expenditure on defence – Cost of Environmental degradation
- Practically, it is tough to estimate this. Therefore, it was not widely adopted

**Per Capita Income (PCI)** – It is not a satisfactory indicator of economic development because it increases if the overall national income increases, without regard to the composition of the national income. For example, even if the govt produces a lot of weapons during war, PCI will go up. It does not take into account the welfare dimension (poverty, literacy, political liberty, environment etc).

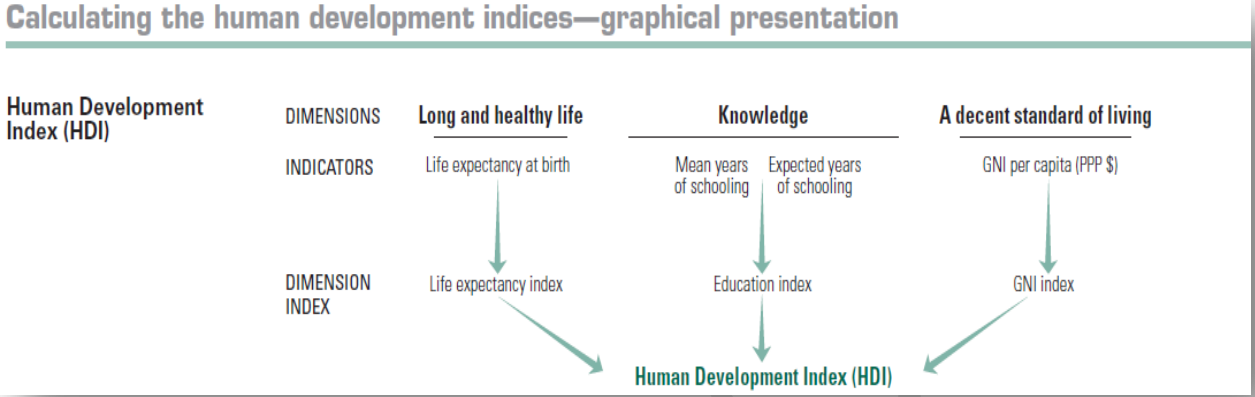
**Physical Quality of Life Index (PQLI)** – Introduced by M D Morris in 1979, it is the average of three statistics: basic literacy rate (at the age of 15 years), infant mortality, and life expectancy at age one, all equally weighted on a 0 to 100 scale. It was widely used till 1990, when HDI was introduced.

**Human Development Index (HDI)** – It was created by economist Mahbub ul Haq (Pakistan), followed by economist Amartya Sen in 1990, and is published by the United Nations Development Programme.

Three basic things separate the HDI from the rest: First, **HDI is supplemented by other indices** that give, separately, specific characteristics of development and, together, **a broader picture of the development processes** taking place. Second, it **was developed and is backed by the United Nations Development Programme (UNDP)**, the major United Nations development agency and a major international forum of development. Third and most important, human development is not only a new measure of development performance; it involves an altogether new approach to development efforts.

The **three dimensions of HDI** are long and healthy life (indicator – life expectancy at birth), knowledge (indicator – mean and expected years of schooling) and decent standard of living (GNI per capita). The geometric mean of the three indicators is the HDI.

**2010 Human Development Report** was important because it was the 20th year of HDI measurement and certain changes were introduced in the parameters of HDI




- GNI per Capita = GNP/Population; Per Capita Income = NNP/Population
- Life Expectancy index for a country = (Actual value – minimum value)/(Maximum Value – Minimum Value)
    - So, for India, it is (65.4 – 20)/(83.4 – 20) = 45.4/63.4 = 0.716
    - Similarly, other indices are also calculated
- India's HDI is 0.547, placing it at a low rank of 134 out of 187 countries.
    - India has the world's largest number **of multidimensionally poor**, more than half of the population, at 612 million
    - Overall ranks – 1. Norway 2. Australia 3. New Zealand 4. US……187. Republic of Congo
    - India was below China but above Pakistan
    - India features in the 'Medium Human Development' group