Poverty

- A state or condition in which a <u>person or community</u> lacks the <u>financial resources and essentials</u> to <u>enjoy a minimum standard of life and well-being</u> that's <u>considered acceptable in society</u>.

- *United Nations*: Fundamentally, poverty is the inability of getting choices and opportunities, a violation of human dignity. <u>It means lack of basic capacity to participate effectively in society</u>.

- *World Bank*: Poverty is pronounced deprivation in well-being, and comprises many dimensions. It includes low incomes and the <u>inability to acquire the basic goods and services necessary for survival with dignity</u>

- There are 5 facets of poverty.
    a. Income poverty
    b. Human poverty
    c. Inclination to face pressures
    d. Powerlessness
    e. Isolation

Income Poverty

- A state or condition in which a <u>person or community</u> lacks the <u>income</u> to <u>enjoy a minimum standard of life</u> that's <u>considered acceptable in society</u>.

- In other wards <u>inability to access a goods and services basket</u> that provides minimum standard of living that's acceptable in society <u>due to lack of income</u>.

- There are two aspects of income poverty.
    a. Absolute poverty
    b. Relative poverty

Absolute Poverty

- This is a situation that is <u>experienced when income levels are inadequate to enjoy a minimum standard of living</u> or <u>income level is below the absolute poverty line</u> which ensures <u>minimum standard of life</u> that is <u>considered acceptable in society</u>.

- This is contrasted with <u>relative poverty</u> which is where income levels are <u>relatively too low</u> to enjoy a reasonable standard of living in that society <u>compared to other high income earners in the society</u>.

- Absolute poverty line is explicitly fixed at specific welfare level.
- The poverty line explains the minimum expenditure required for food and non-food consumption over a fixed period of term to ensure reasonable standard of living.

Measuring Absolute Poverty

There are 3 key measurements used to measure absolute poverty.

  a.   Official Poverty Line
  b.   Poverty Head Count
  c.   Poverty Gap/ Poverty shortfall
  d.   International Poverty line/Global Poverty line

Official Poverty Line (OPL) / National Poverty Line

- This is also known as the 'Poverty Threshold'.
- The official poverty line in Sri Lanka is fixed at a welfare level of a person who meets a certain minimal nutritional intake (2030 kilocalories) and other essential non- food items.
- More precisely, the official poverty line is defined at the monthly per capita expenditure for a person to be able to meet the nutritional anchor of 2030 kilocalories and other essential non- food items.
- There are 2 parts of OPL.

    a.   Food poverty line

    The food poverty line is defined as the monthly per capita expenditure for a person to be able to meet the nutritional anchor of 2030 kilocalories.

    b.   Non-food poverty line

    The non-food poverty line is defined as the monthly per capita expenditure for a person to be able to meet essential non- food items.

Poverty Head Count

- The Poverty Head Count Ratio shows the total number of people living under the poverty line as a percentage of the total population.

- The poverty head count ratio is calculated as the summation of people living under the poverty line to the total population.

$$\text{Poverty Head Count Ratio} = \frac{\text{Total No. of persons living under the poverty line}}{\text{Total population}} \times 100$$

- While the headcount index is simple to construct and easy to understand, it has its own shortfalls.

    a. The first of its shortfalls is that the intensity of poverty is not taken into account.

    b. In addition, it does not measure how poor the poor are. Therefore, even if people below the poverty line became poorer, it would not reflect the severity of poverty.

	Poverty Head Count Index (%)
Sri Lanka	4.1
Urban	1.9
Rural	4.3
Estate	8.8
Western	1.7
Northern	7.7
Colombo	0.9
Kilinochchi	18.2

Poverty Shortfall

- The poverty gap measures the depth of poverty and so provides information regarding the total resources needed to bring all the poor to the level of the poverty line.

- It, therefore, captures the mean aggregate income or consumption shortfall relative to the poverty line across the whole population.

- Policy makers are keener on poverty shortfall as it indicates the minimum cost of eliminating poverty or it shows much would have to be transferred to the poor to bring their incomes or expenditures up to the poverty line.

	Poverty Gap Index (%) (2016)
Sri Lanka	0.6
Urban	0.3
Rural	0.6
Estate	1.2

International Poverty line /Global Poverty line

- Measuring poverty on a global scale requires establishing a uniform poverty level across extremely divergent economies, which can result in only rough comparisons.
- As differences in the cost of living across the world evolve, the global poverty line has to be periodically updated to reflect these changes. Since 2008, the last update, we have used $1.25 as the global line.
- As of October 2015, the new global line will be updated to $1.90
- Just over 900 million people globally lived under this line in 2012 (based on the latest available data), and we project that in 2015, just over 700 million are living in extreme poverty.
- About 120 million additional people are living in poverty as a result of the pandemic, with the total addition expected to rise to about 150 million by the end of 2021.

Poverty by Asian Countries

Figure 5 : $1.9 Poverty by Asian Countries
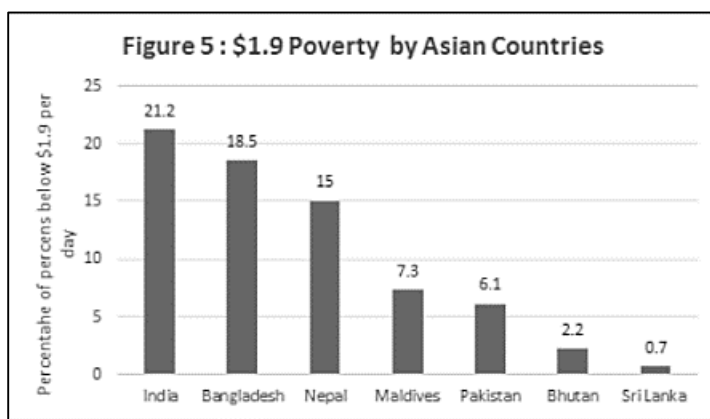
Relative Poverty

- Relative poverty is a <u>measure of wealth inequality</u>, describing <u>an individual or group's wealth</u> <u>relative to another individual or group.</u>

- **World Bank:** relative poverty is defined <u>in relation to the overall distribution of income or consumption in a country</u>; for example, the relative poverty line could be set at 50 percent of the country's mean income or consumption.

- Relative poverty is a measurement that shows inequality of income and wealth distribution.

Human Poverty

- Human poverty is a situation that an individual or group of persons lack <u>opportunities and choices</u> to achieve their <u>human development</u>.

- In other words human poverty is a situation that an individual or group of persons lack basic requirements (Life sustenance, Self-esteem and Freedom of choice) to live **<u>lives that they value</u>**.

- Human poverty is a multi-dimensional phenomena that captures health, education, standard of living ect. Thus, in order to measure human poverty UN has introduced the <u>multi-dimensional poverty index</u>.

Multi-dimensional Poverty Index

- The Multidimensional Poverty Index (MPI), was introduced by the <u>United Nations Development Programme</u> Report (UNDP Report) in <u>2010</u>.

- This is a <u>composite index</u> complements money-based measures by considering <u>multiple deprivations.</u>

- The index identifies <u>10 deprivations</u> across the same <u>three dimensions as the HDI</u> (Health, Education & living standard) and shows the number of people who are multidimensionality poor (suffering deprivations in 33% of weighted indicators) and the number of deprivations with which poor households typically struggle.

- It can be deconstructed by region, ethnicity and other groupings as well as by dimensions, making it an apt tool for policymakers.

- About <u>1.7 billion people</u> in <u>109 countries</u> are covered by the MPI.

Dimension	Indicators
Health	Child Mortality
	Nutrition
Education	Years of school
	Children enrolled
Living Standards	Cooking fuel
	Toilet
	Water
	Electricity
	Floor
	Assets

Calculating Multi-dimensional Poverty Index

MPI = H X A

MPI = Multi-dimensional poverty index

H = Percentage of people who are multidimensional poor (incidence of poverty)

A = Average intensity of MPI poverty across the poor (%) (intensity of poverty)

Ex:- Assume a country consist of 3 persons, Person A, Person B and Person C.

Indicator	Weight	Person A	Person B	Person C
Child Mortality	1/6	0%	0%	0%
Nutrition	1/6	0%	0%	0%
Years of school	1/6	100%	100%	0%
Children enrolled	1/6	0%	100%	0%
Cooking fuel	1/18	0%	100%	100%
Toilet	1/18	0%	100%	100%
Water	1/18	0%	0%	100%
Electricity	1/18	100%	100%	100%
Floor	1/18	100%	0%	100%
Assets	1/18	100%	0%	0%
Weighted score		33.33%	50.00%	27.78%
Status		MPI poor	MPI poor	Not MPI poor

Incidence of poverty (H)

$$\text{Incidence of poverty (H)} = \frac{\text{Number of people who are MPI poor (Deprived of 33\% weighted score)}}{\text{Total Population}}$$

$$\frac{1+1+0}{3} = 0.67$$

Intensity of poverty (A)

$$\text{Intensity of poverty (A)} = \frac{\text{Aggregate weighted score of the population who are MPI poor}}{\text{Population who are MPI poor}}$$

$$\frac{0.33 + 0.5}{2} = 0.417$$

MPI Score = 0.67 X 0.417 = 0.278

Calculating MPI of Sri Lanka

MPI = H X A

MPI of Sri Lanka = 2.4 % X 37.5 %

= **0.009**

H = Percentage of people who are multidimensional poor (incidence of poverty) = 2.4 %

A = Average intensity of MPI poverty across the poor (%) (intensity of poverty) = 37.5 %

This means that the poor in Sri Lanka experience 0.9% of the total possible deprivations the country could experience.

Consumption Poverty vs. Global MPI

- The MPI is a globally comparable measure of poverty. It measures acute multidimensional poverty, and only includes indicators that are available for many countries.

- National poverty measures are typically monetary measures, and thus capture something different.

- The fact that there are differences does not mean that the national poverty number, or the MPI headcount is wrong. These simply measure different conceptions of poverty.

- At the same time, just as national poverty measures, in contrast, are designed to reflect the national situation more accurately. The global MPI index is more complement with $1.9 international poverty line.

- Global MPI measures are especially useful for cross country comparisons.

- For example, the given figure presents the global multidimensional poverty index for Asian countries. It reveals that among seven countries Pakistan reported the highest MPI (.23) while Sri Lanka reported the lowest MPI.

Figure 4 : Global MPI by Asian countries
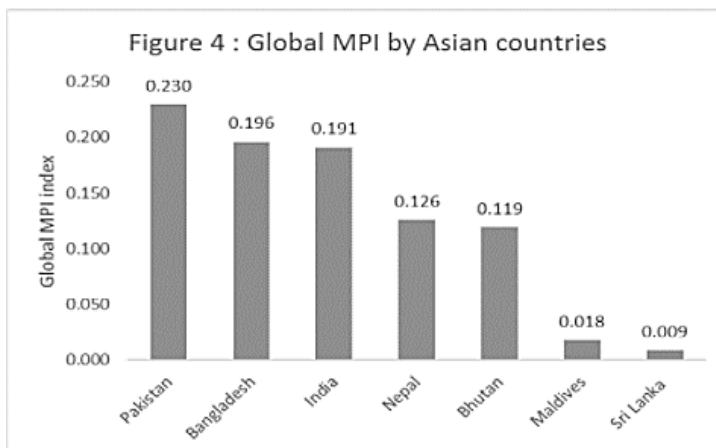
- In country context it is useful for policymakers to target resources more effectively identifying severely deprived dimensions of poverty.

- For example, in Sri Lankan context among the ten areas considered, the most deprived area is nutrition.

- However, it is needed to compile National MPIs to understand poverty measure that reflects local priorities in multidimensional approach for policy targeting.

- Further, it provides the information for the SDGs to target goal 1 indicator 1.2 in 2030.

Social & Economic Development by International Ranking

SOCIAL & ECONOMIC DEVELOPMENT BY INTERNATIONAL RANKING (2020)								
Index Name	No of Countries	Sri Lanka	India	Bangladesh	Bhutan	Maldives	Nepal	Pakistan
Prosperity index	167	84	101	125	n.a.	n.a.	114	138
Competitiveness Index⁺	140	84	68	105	n.a.	n.a.	108	110
Human Development index*	189	71	129	135	134	104	147	152
Global Hunger index	107	64	94	75	n.a.	n.a.	73	88
Global Innovation index	131	101	48	116	n.a.	n.a.	95	107
Corruption Perception index	179	94	86	146	24	130	117	124
Doing Business index*	190	99	63	168	89	147	94	108
World Happiness index	149	129	139	101	n.a.	89	87	105
Economic Freedom index	178	131	121	120	109	136	157	152
Logistics Performance index (2018)	160	94	44	100	149	86	114	122

* 2019 Data

Programmes introduced to mitigate poverty in Sri Lanka

1. Introducing economic development programs to accelerate economic development whilst reducing poverty in Sri Lanka.

2. Developing small and medium scale industries

3. Strengthening micro financing facilities/social security robes (ex;- Sanasa, Sarvodaya, SEEDs, Samurdhi micro financing facilities, Gami pubudu, Isuru micro financing facility)

4. Developing rural infrastructure. Ex:- Gamidiriya, Maga Naguma

5. Developing local agricultural sector. Ex;- 1000 tanks project, Developing local dairy industry, rural economic centers

6. Strengthening Social safety nets Ex;- Samurdhi programme, Nutritional allowance programme, Dry rations programme.

7. Developing facilities to counter rural drinking water and sanitation problems.

Impact of Sri Lanka's social protection programs on poverty

- Household Income and Expenditure Survey collects the social protection information of **13 social protection programs** launched by the government mainly under the social assistance and social insurance.

- The total social protection transfer (sum of total social insurance and social assistance transfers) reduced the **poverty from 6.7 percent to 4.1 percent.**

- In other words the social protection transfer in Sri Lanka **has lifted 2.6 percent poor people above poverty line.**

- The most contributory significant factor was the **pension scheme**. In the absence of pension, **poverty headcount index would increase to 5.7 percent**.

Key reasons for the poverty in Sri Lanka (Key reasons for rural & estate poverty in Sri Lanka)

01. Sectorial problems

    a.   Problems relating to agricultural sector

- Lack of opportunity for agricultural development Ex;- lack of land, lack of water
- Very low level of productivity
- Due to the fact that 1/3 of the labour force is involved in agricultural jobs, their income is very low.

    b.   Problems relating to education

- Lack of vocational education
- Lack of facilities in rural schools
- Lack of educational level in rural sector

    c.   Problems relating to energy

- Since Sri Lanka is heavily dependent on oil as a source of energy creation, high cost in energy.

02. Problems relating to characteristics of individuals and households

- Persons who do not have assets endowment vulnerable to economic shocks
- No strong social security network for all elderly people
- No strong social security network for disable people
- Social problems such as alcoholism, addicted to drugs, domestic violence etc.

03. Problems relating to location (Rise in rural poverty)

- Most of the economic activities are concentrated to western province
- Rural sector has been isolated and economic development is not properly filter down to rural sector
- Under development of physical and social infrastructure, market facilities etc.

Economic growth and Eradication of Poverty

- Theoretically due to an economic growth, employment of an economy rises. Through that, income level of people can get increased and it will empower people to fulfill their basic human need better. This will become a fighting mechanism against poverty in an economy.

- Even though theoretically there is strong automatic co-relationship between economic growth and eradication of poverty, in reality this strong automatic co-relationship does not exist. In other words, even though economic growth is necessary to eradicate poverty, poverty will not get automatically eradicated due to mere economic growth.

- In order to assess whether poverty has been eradicated through accelerated economic growth following criterions also need to be evaluated.

    a. Pattern of economic growth (ex:- sectorial economic growth)

    b. Sources of economic growth

    c. Distribution of development benefits

- Even though economic growth has been achieved growth benefits would not have filtered to all social classes

- Therefore in order to eradicate poverty two mechanisms need to be achieved.

    a. Economic growth mechanism

    b. Mechanism of distribution growth benefits among all social classes

- Therefore whether the economic growth leads to eradicate poverty or not is decided by the economic policies those are used by that particular economy.

Pro-Poor Growth

- Pro-poor growth is the economic growth that effectively contributes to increase income level of the poor in the society.

- Since economic growth benefits are not naturally distributed to everyone in the society, pro-poor growth is the growth that changes relative income distribution of the economy in such a manner that poor is benefiting out of economic growth.

- There are two definitions used in defining pro-poor growth.

    a. Absolute definition

    Pro-poor growth is the growth that increases absolute income of poor

    a. Relative definition

    Pro-poor growth is the growth that increases average income of poor more than proportionate times than the average income increase of non-poor

Inclusive Economic Growth

- Inclusive economic growth is the sustainable economic growth that spreads across all section of the economy.

- Inclusive economic growth provides equitable opportunities for all economic participants during the process of economic growth. Thus benefits flow down to every section of society.

- During inclusive economic growth all citizens get the opportunity to contribute to economic growth and get the benefits of economic growth.

- Key Characteristics of inclusive economic growth

  a. Providing increasing amount of opportunities to poor to improve their living standards

  b. Empower poor in such a manner that poor can contribute to decision making process

  c. Providing economic security to poor and counter insecurity faced by poor.

Methods of achieving Inclusive Economic Growth/ Pro-Poor Growth in SL

a. Develop human and physical resources of poor

b. Improve agricultural sector and improve income level, employment opportunities for poor

   Ex;- Guaranteed price for paddy, fertilizer subsidy, 1000 tanks programme, improve local dairy industry, rural economic centers

c. Improve productivity in agricultural sector

   Ex;- Introduce improved technology, improve knowledge of farmers to diversify, induction & training sessions on latest technology in agriculture

d. Improve water supply and sanitation facilities in the rural sector

e. Strengthening micro financing and other social security robes

f. Providing lands for the people who do not have lands for cultivation

g. Improve education and vocational training

h. Provide effective social safety nets

Recent government policies to reduce regional disparities

a. Improve regional infrastructure facilities and connecting markets

b. Improve agricultural sector

   Ex:- Fertilizer subsidy, creating markets for agri-produce

c. Regional industrial improvement (in other provinces other than western province)

d. Improve educational facilities, training and skill development

e. Including millennium development goals in to national development programme

f.   Improving science and IT at rural level

g.   Regional development projects

Social Safety nets Programmes in SL

01. Samurdhi Programmme

02. Financial aid given to disable solders and dependents in the families of solders who died in the war

03. Aid programs for displaced people due to conflicts and natural disasters

04. Uniforms and text books for school children

05. Pension and dry rations

Sri Lanka Prosperity Index

- The index is compiled using 41 variables, which are categorised into three sub-indices. All sub-indices have equal weights in prosperity index.

Economy and Business Climate sub-index	Price stability, living standard, income, poverty, employment, industrial density and banking density.
Well-being of the People sub-index	Availability of healthcare facilities, availability & quality of education facilities, wealth, availability & usage of entertainment facilities, air quality and purity of environment.
Socio-Economic Infrastructure sub-index	Availability of transport facilities, availability of road coverage, availability of telecommunication facilities, availability of ICT facilities, availability of electricity, availability of safe & quality drinking water, availability of sanitation and crime-free environment

- Variables used in compiling SLPI are in the form of many different units of measurement. Therefore, all variables are transformed into a common scale by standardising data over the past 10 years.
- Since the index values for the country and for the provinces are compiled separately, provincial indices cannot be compared with the national level indices. Thus, indices at provincial level can be compared across provinces as well as time, while the national level indices can only be compared across time.
- Sri Lanka Prosperity Index for 2019 is 0.802.

Millennium Development Goals

- The Millennium Development Goals (MDGs) are eight international development goals that were introduced following the Millennium Summit of the United Nations in 2000, following the adoption of the United Nations Millennium Declaration.
- All 189 United Nations member states at the time (there are 193 currently) and at least 23 international organizations committed to help achieve the Millennium Development Goals by 2015.

- Millennium development goals are,

    1. To eradicate extreme poverty and hunger
    2. To achieve universal primary education
    3. To promote gender equality and empowering women
    4. To reduce child mortality rates
    5. To improve maternal health
    6. To combat HIV/AIDS, malaria, and other diseases
    7. To ensure environmental sustainability
    8. To develop a global partnership for development

Sustainable Development Goals

- World leaders unveiled the new global Sustainable Development Goals (SDGs) at the United Nations Headquarters in New York in September 2015, as the successors to the Millennium Development Goals (MDGs) drawn up in 2000.
- SDGs recognize poverty as the major hindrance for sustainable development and greatly emphasize eradicating poverty in all its forms and dimensions, including extreme poverty.

	The Five Broad Focus Areas of SDGs
People	**To end poverty and hunger**, in all their forms and dimensions, and to ensure that all human beings can fulfill their potential in dignity and equality and in a healthy environment.
Planet	**To protect the planet from degradation**, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.
Prosperity	**To ensure that all human beings can enjoy prosperous and fulfilling lives** and that economic, social and technological progress occurs in harmony with nature.
Peace	**To foster peaceful, just and inclusive societies** which are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development.
Partnership	To mobilise the means required to implement this agenda through a **revitalized Global Partnership for Sustainable Development**, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and the most vulnerable and with the participation of all countries, all stakeholders and all people

17 Goals of SDGs

Goal 01	End poverty in all its forms everywhere	**No Poverty**
Goal 02	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	**Zero Hunger**
Goal 03	Ensure healthy lives and promote wellbeing for all at all ages	**Good health & wellbeing**
Goal 04	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	**Quality Education**
Goal 05	Achieve gender equality and empower all women and girls	**Gender Equality**
Goal 06	Ensure availability and sustainable management of water and sanitation for all	**Clear Water & Sanitation**
Goal 07	Ensure access to affordable, reliable, sustainable and modern energy for all	**Affordable & clean energy**
Goal 08	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	**Decent work and economic growth**
Goal 09	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	**Industry, Innovation and Infrastructure**
Goal 10	Reduce inequality within and among countries	**Reduce inequality**
Goal 11	Make cities and human settlements inclusive, safe, resilient and sustainable	**Sustainable cities and communities**
Goal 12	Ensure sustainable consumption and production patterns	**Responsible consumption and production**
Goal 13	Take urgent action to combat climate change and its impacts	**Climate Action**
Goal 14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	**Life below water**
Goal 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation, and halt biodiversity loss	**Life on land**
Goal 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	**Peace, Justice and Strong Institution**
Goal 17	Strengthen the means of implementation and revitalize the global partnership for sustainable development	**Partnerships for the goals**

~~Equality~~ Equity

- This refers to the **equity in income distribution** in an economy. In other words this refers to the **distribution of income in such a manner that it reduces inequality between households**.
- Economic equality **does not** mean that **all household should receive the same income**.
- Equality is important to establish social and political stability in a country and uplift the human development of an economy.

Measuring ~~Equality~~ Equity

- There are two main measurements used in measuring equality
    1. Functional income distribution/ factor income distribution
    2. Individual income distribution/Personal income distribution

Functional Income Distribution

- Functional income distribution refers to as how the income of an economy is **divided among the owners** of **different factors of production**, into wages, rents, etc.
- Therefore in this method income distribution is measured in terms of **source of income.**
- In this measurement economists show inequality of different factor owners. Ex;- Haves (property owners) vs. Have nots (Workers)

Individual Income Distribution

- Personal income is **an individual's total earnings** from wages, investment interest, and other sources within a particular period of time.
- This concerned about the distribution of income across individuals and households
- Personal income distribution can be measured as
    a.   Absolute income distribution or
    b.   Relative income distribution

Absolute Income Distribution

- This is the measurement that measure **inequalities of income distribution among persons by measuring percentage of households belong to a particular monthly income bracket**.
- In this method monthly income of household will be categorized in to **income brackets** and assess the percentage of households belong to each monthly income bracket.

Ex;- Monthly income <15,000 – 25% of HHs

Monthly income <20,000 – 30% of HHs

- Through absolute income, absolute poverty and household percentage who achieved satisfactory income level accepted by the economy (HHS received equality) can be shown.

Relative Income Distribution

- This is the measurement that measures the **distribution of total national income of an economy among different income classes.**

- In other words relative income distribution is calculated **by classifying all income earners to different income classes and by analyzing percentage of income received by each income class from total national income**.

- Relative income distribution in Sri Lanka (Household Income and Expenditure Survey - 2016)

|	
Share of income to total household income - Poorest 20% - Sri Lanka	4.8 %
Share of income to total household income - Poorest 40% - Sri Lanka	14.4%
Share of income to total household income - Richest 20% - Sri Lanka	50.8 %

- There are two methods to measure relative income distribution
    a. Lorenz curve
    b. Gini Co-efficient

Lorenz Curve

- A graphical representation of wealth distribution developed by American economist Max Lorenz in 1905.

- The Lorenz curve can be used to **show what percentage of households possesses what percentage of that nation's wealth**. For example, it might show that the country's poorest 10% possess 2% of the country's wealth

- On the graph, **a straight diagonal line represents perfect equality of wealth distribution**; the **Lorenz curve** (actual distribution of income of the economy) lies beneath it, **showing the reality of income distribution**.

- The **difference between the straight line and the curved line is the amount of inequality of wealth distribution**, a figure described by the **Gini coefficient**.

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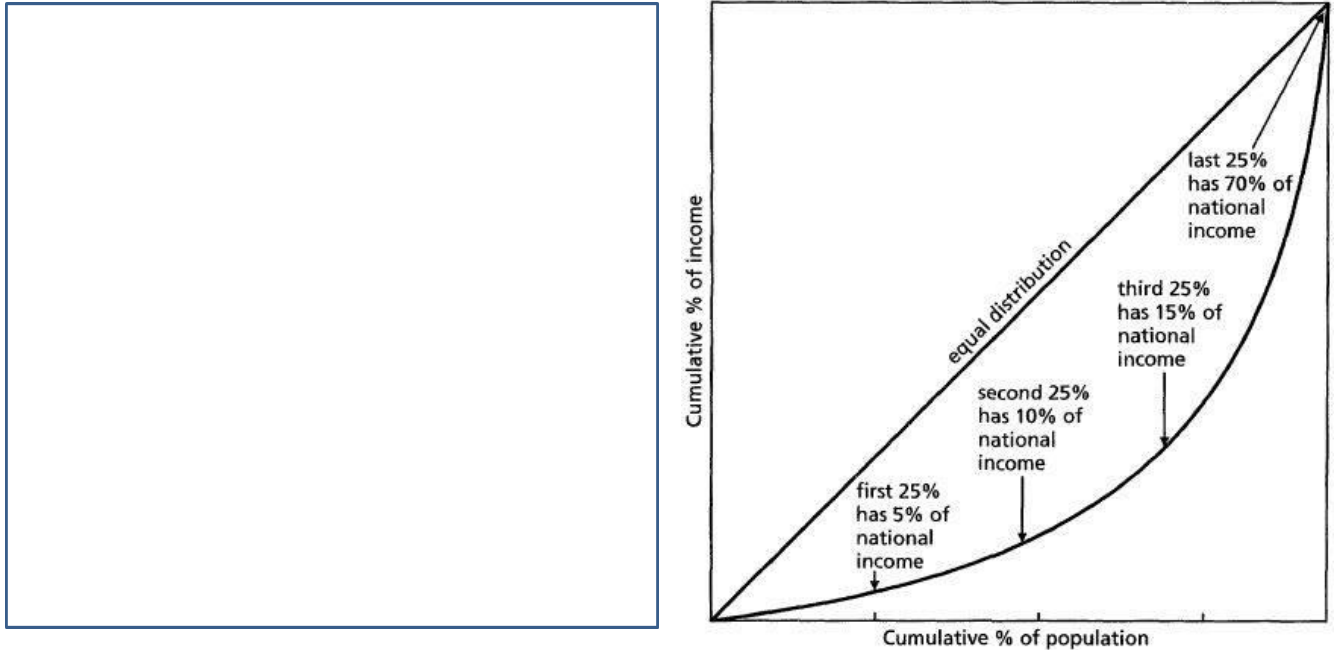
- When **Lorenz curve reach closer to equal distribution line**, relative income distribution of an economy become **more equal.**

- Lorenz curve **spread far away from the equal distribution line,** relative income distribution of an economy become more **unequal.**

Gini Co-efficient

- Gini coefficient is a **measure of statistical dispersion intended to represent the relative income distribution of a nation's residents**.

- This number, which **ranges between 0 and 1** and is based on residents' net income, helps define the **gap between the rich and the poor**, with **0 representing perfect equality and 1 representing perfect inequality.**

- This **is not a measurement of wealth**. A wealthy country and a poor country can have the same Gini coefficient.

Gini Co-efficient =	Area between Lorenz curve and line of equal distribution (Area A)
	Total area bellow Lorenz curve (Area A +B)

Line of perfect equality (income distribution

Lorenz Curve
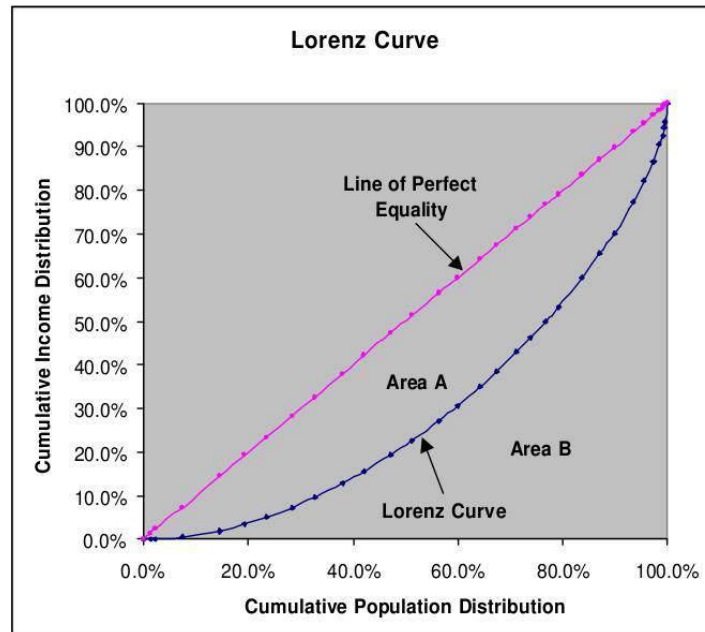
Factor market

- Factor market is the market where factors of production namely; land, labour, capital and entrepreneurship are transacted between factor owners (HHs) and factor buyers (firms).

- Factor market is also controlled by demand and supply forces. However unlike in the goods and services market, in factor market demand and supply is relating to input/factors of production.

- Equilibrium price in the factor market represent price of factors of production
  Ex;- Wage level (price of Labour), Rent level (price of land), interest level (price of capital), Rent Normal profits (price of entrepreneurship).

- Equilibrium quantity in the factor market represents employment level of input/factors of production.
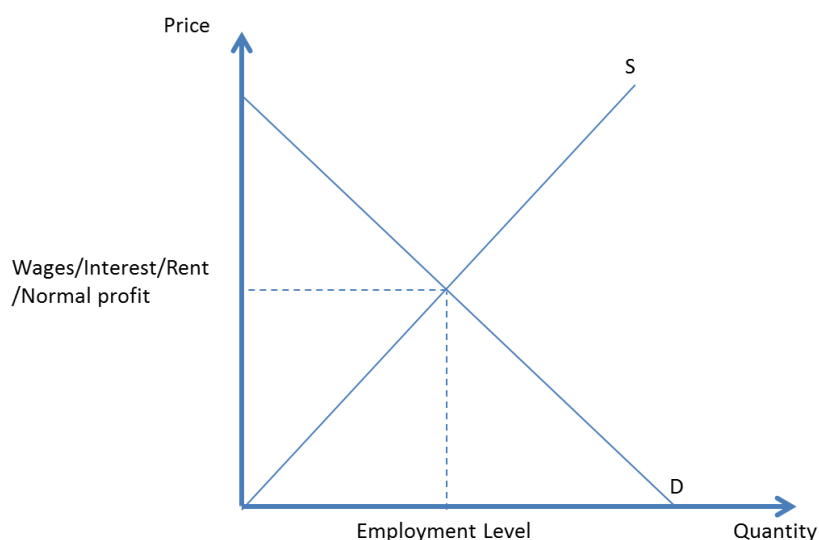
Demand in factor market

- The main reason that creates demand in the factor market is the productivity of input/factors of production.

- In other wards the ability to produce a good or a service makes the demand for factors of production.

- Thus, demand in the factor market is **an indirect demand** that depends on the demand for goods and services.

  Ex:- Demand for labour depends on the goods and services that uses labour power

Factors that determine demand in factor market

- Price of the concerned factor

- Prices of other factors of production

- Productivity of the concerned factor

- Demand for the goods and services those use concerned factor of production

Demand of labour

- At different wage levels the number of workers or work hours that is willing to be employed is the labour demand.

- Labour demand curve represent this relationship between wage levels and employment level of labour

- Normal labour demand curve slope downwards from left to right

Supply of labour

- Labour supply can be subdivided in to main 2 categories.
    a.   Labour supply of an individual worker
    b.   Labour supply of an economy

Labour supply of an individual worker

- At different wage levels the number of work hours/days that is willing to be supplied by an individual employee is considered as labour supply of an individual worker.

- Labour supply of an individual worker is depended on 2 main factors.

a. Utility obtained from wages

This is the amount of goods and services that can be purchased from the money income that the worker received. In other words real income of the nominal income a worker receives for his/her labour contribution.

b. Utility obtained from the job/ Job satisfaction

This is the satisfaction a worker gets by doing a particular job. Nature of the job, work environment and social recognition are the main contributors to job satisfaction. If a worker is satisfied with the work that he/she does they may even work additional hours.

Labour supply of an economy

- At different wage levels the number of work hours/days that is willing to be supplied by all workers in an economy is considered as labour supply of an economy.
- This can also be defined as the total labour capacity (Number or workers or number of labour hours) available for an economy at a particular time.
- There are main factors those determine labour supply of an economy.
    a. Population and age structure of an economy
    b. Labour participation ratio
    c. Work time (days & hours)
    d. Efficiency and ability of labour force
    e. Wage scales

Important: - Labour supply curve of an economy can be obtained by adding all individual demand curves horizontally.

Equilibrium in labour market (determining wage level)

- With the mutual interaction between demand and supply in the labour market, wage level and employment level of the economy is determined.
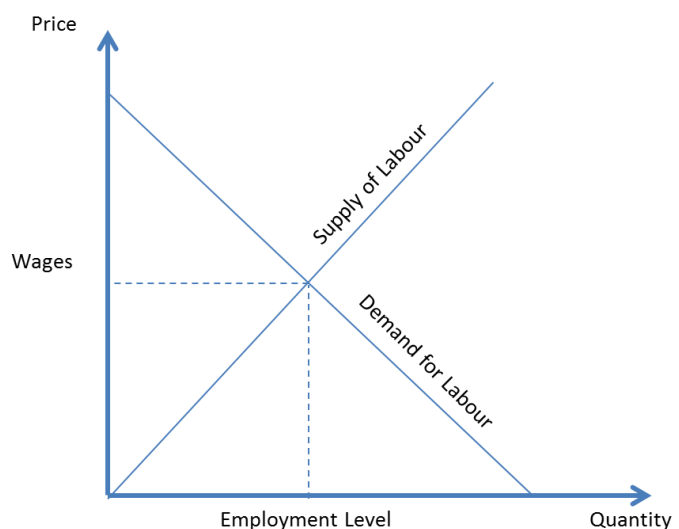
Transfer Earnings

- Transfer earning is the expected return of the factor owner to provide a factor of production for a particular economic activity.

- In other words return expected by the factor owner to continue the supply of a particular factor of production in to a particular economic activity.

- This expectation (transfer earning) is equal to the opportunity cost of the factor of production.

- In other words factor owner expects at least a return from the selected economic activity which is equal to the return that he could have earned from the second best economic activity that he sacrificed to supply the factor of production to selected economic activity.

  Ex:- Normal profit expected by an entrepreneurship

  Wage expected by a worker to work

  Interest expected by a capital owner to provide capital for an economic activity

  Rent expected by a landlord to provide land for an economic activity

- If the factor owners do not receive "transfer earnings" as the return for the supply of factors of production for a particular economic activity, then factor owners discontinue the supply of factors to that particular economic activity.

- Therefore, transfer earnings can also be defined as the return that is sufficient for the factor owners not to transfer their factors of production from the current economic activity to anther economic activity.
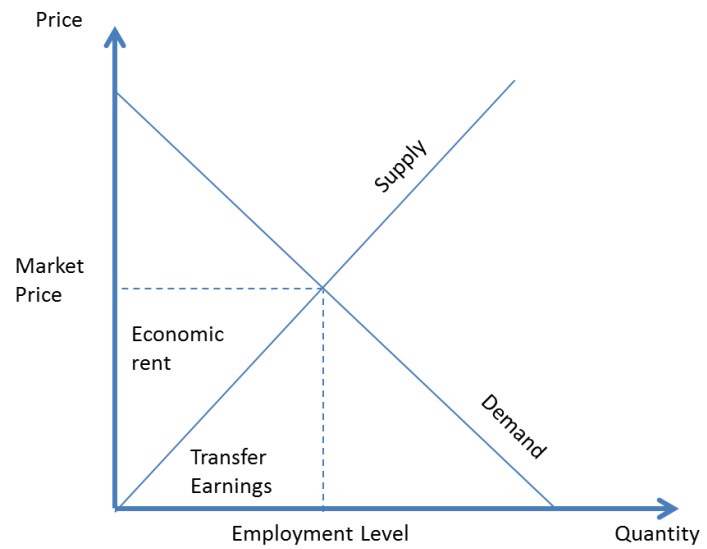
Economic Rent

- Economic rent is the return that the factor owner receives over and above the expected return to provide a factor of production for a particular economic activity.

- In other words extra return received on top of expected return by the factor owner to continue the supply of a particular factor of production in to a particular economic activity.
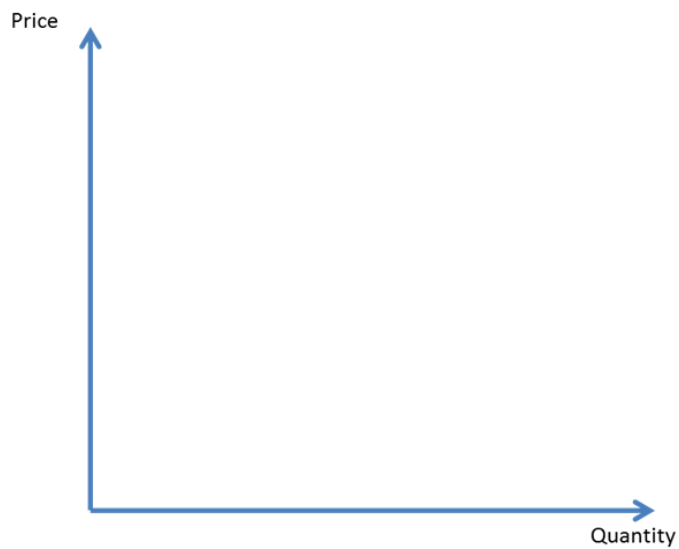
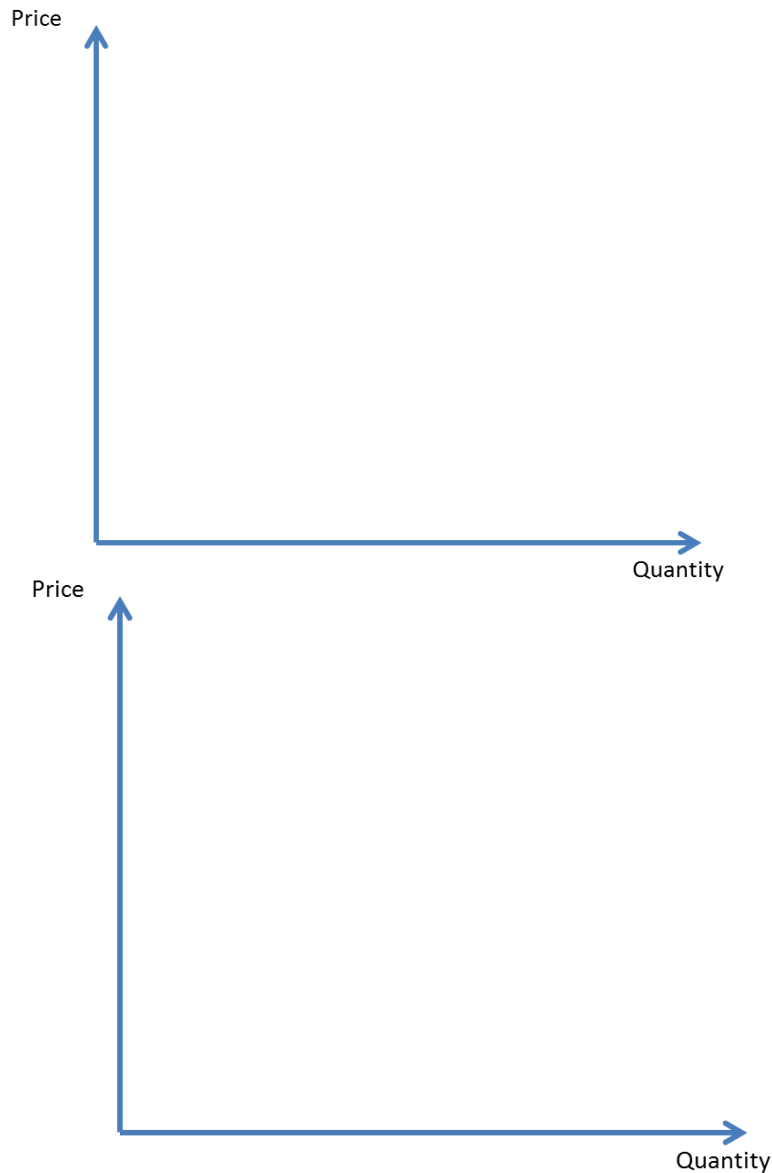 Ex:- Economic profit (Supernormal profit)

- Economic rent can also be defined as the difference between the actual earning and transfer earning by a factor owner

Transfer earnings and economic rent

Price

Market
Price

Supply

Economic
rent

Demand

Transfer
Earnings

Employment Level

Quantity

Transfer earnings and economic rent at different supply elasticity

Price

Quantity

Price

Quantity

Price

Quantity

Important: - Under inelastic factor of production supply factor owner receives more economic rent whereas under elastic factor of production supply factor owner receives less economic rent

Population

- Population is the number of people that lives in a particular geographical area during a specific period of time.

- According to CBSL, mid-year population in 2019 is 21.8 million.

- Population & the age structure have strong co-relationship to the economic growth and the living standard of an economy.

- There are 3 demographic variables that contribute to the size of the population in a country

    a.   Fertility/live births

    b.   Mortality

c. Migration

Mid-year Population

- In any country population figures are presented as mid-year population (as a standard practice)

- Mid-year population is the population as at 01st of July of a particular year.

- In calculating mid-year population it is assumed that population change is identical throughout the year.

- There are several ways of calculating mid-year population of a country.
    a. Censes
    b. Sample survey
    c. International migration reports

Concepts of Population

1. Crude Birth Rate

- Crude birth rate is number of live birth per 1000 persons of mid-year population in a specific year

$$\text{Crude Birth Rate} = \frac{\text{Number of live births}}{\text{Mid-year population}} \times 1000$$

- There are several determinants of crude birth rate

    - Women who are in the age of fertility
    - Education level of women
    - Health Care facilities
    - Religious and cultural factors
    - Urbanization

    - Marrying age and Number of marriages
    - Women employment
    - Economic condition of the families
    - Development of birth control methods
    - Social attitudes

2. Crude death Rate

- Crude death rate is number of deaths per 1000 persons of mid-year population in a specific year

$$\text{Crude death Rate} = \frac{\text{Number of deaths}}{\text{Mid-year population}} \times 1000$$

- There are several determinants of crude death rate

    - Health Care facilities

    - Number of suicides

- Percentage of population who are old
- Poverty and economic conditions
- Epidemics and other sicknesses

- Civil wars and other fights
- Number of accidents
- Natural disasters

3. Rate of natural increase in population

- Natural increase in population refers to the population growth due the difference between live births and deaths of a particular year.

Natural increase in population = Crude Births - Crude Deaths

- Rate of natural increase in population refers to the percentage of population growth (mid-year population) due to natural increase in population ; due to crude births and crude deaths

Rate of natural increase in population	=	$\dfrac{\text{Natural increase of population}}{\text{Mid-year population}}$ X 100%

Rate of natural increase in population	=	$\dfrac{\text{Crude Birth Rate – Crude Death Rate}}{10}$

4. Demographic Transition Stages of Population

- Demographic transition (DT) refers to the transition from high birth and death rates to low birth and death rates as a country develops from a pre-industrial to a post industrialized economic system.
- In a country or in a community demographic transition takes place in 4 stages.

   a. Stage 01

   In pre-industrial society, death rates and birth rates were both high and fluctuated rapidly according to natural events, such as drought and disease, to produce a relatively constant and young population Ex;- Europe and particularly the Eastern United States during the 19th century

   b. Stage 02

   This stage leads to a fall in death rates while having a high birth rate as stage 01 and therefore makes an increase in population. The decline in the death rate is due initially to two factors:

   ✓ First, improvements in the food supply

    ✓   Second, significant improvements in public health reduce mortality, particularly in childhood

c.   Stage 03

Stage Three moves the population towards stability through a decline in the birth rate. The resulting changes in the age structure of the population include a reduction in the youth dependency ratio and eventually population aging.

d.   Stage 04

This occurs where birth and death rates are both low. Therefore the total population is high and stable. There is a low death rate because there are not a lot of diseases and famines and there is enough to eat. The birth rate is low because the people have more opportunities to choose if they want children.

Countries that are at this stage (Total Fertility Rate of less than 2.5 in 1997) include: United States, Canada, Argentina, Australia, New Zealand, most of Europe, Bahamas, Puerto Rico, Trinidad and Tobago, Brazil, Sri Lanka, South Korea, Singapore, Iran, China, Turkey, Thailand and Mauritius

MODEL OF DEMOGRAPHIC TRANSITION
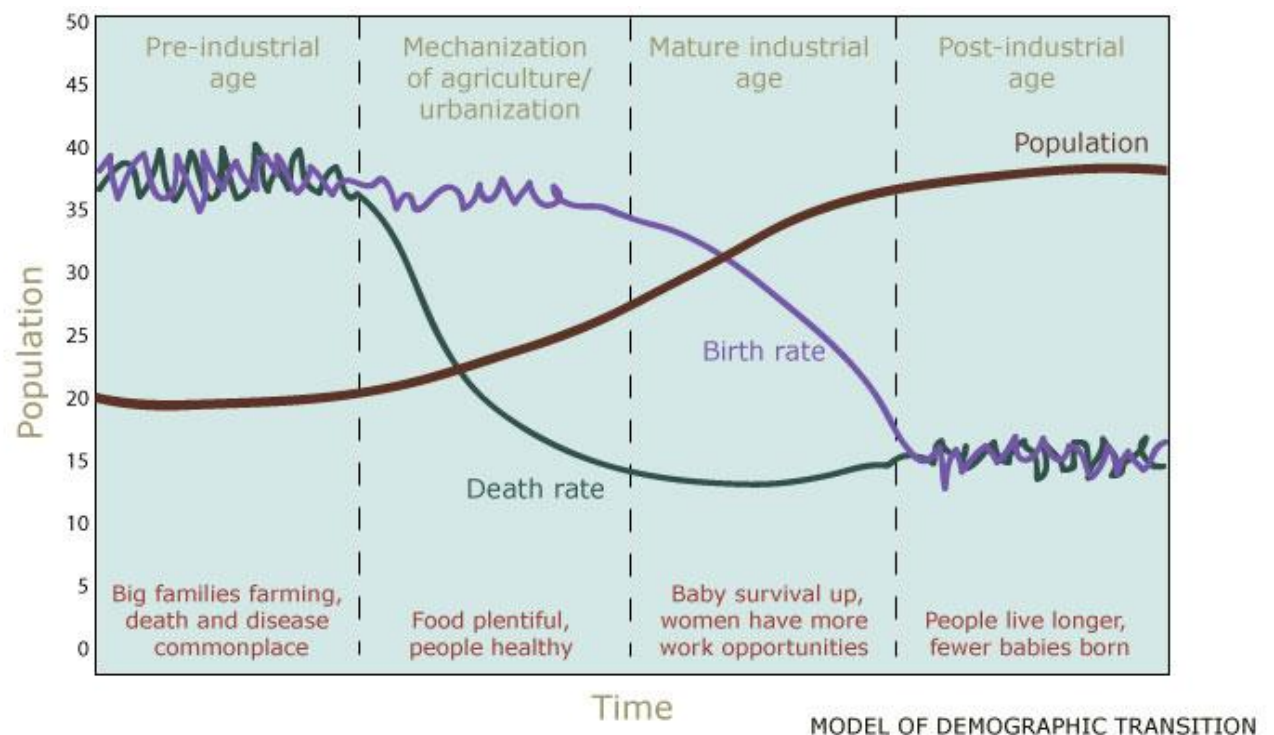
5. Net Migration

- Net migration is the change in population due to the difference of emigration and immigration in an economy in a given period of time.

- outbound from one country to another country becomes an emigration to former country and becomes an immigration to latter country

> Net Migration = Immigration - Emigration

- If net migration is positive it leads to a population growth whereas if net migration is negative it leads to a population decline.

- There are several reasons behind the migration

  - Job opportunities
  - Civil wars and other civil conflicts
  - Relatives and family reasons
  - Political reasons

  - Education opportunity
  - Tourism & travel
  - Natural disasters

6. Net Migration Rate

- Net migration rate is number of net migrations per 1000 persons of mid-year population in a specific year

$$\text{Net Migration Rate} = \frac{\text{Net Migration}}{\text{Mid-year population}} \times 1000$$

7. Growth of mid-year population

- Increase in mid-year population in current year compared to the immediate past year is considered as growth of population or growth of mid-year population

$$\text{Growth of population} = \frac{(\text{Natural increase of population} + \text{Net migration})}{\text{Mid-year population}} \times 100\%$$

$$\text{Growth of population} = \frac{\text{Change in population between years}}{\text{Mid-year population of immediate past year}} \times 100\%$$

$$\text{Growth of population} = \text{Rate of Natural increase of population} + \frac{\text{Net Migration}}{10}$$

8. Sex Ratio

- Sex ratio is calculated in two ways;
  a. Total sex ratio
     - This is the ratio that shows the number of men per 100 women in mid-year population.
     - In other words, total sex ratio is the percentage of men population as against women population.

$$\text{Total Sex Ratio} = \frac{\text{Mid-year Men population}}{\text{Mid-year women population}} \text{ X100\%}$$

     - It is expected total sex ratio will further go down as life expectancy at birth is higher among women than men.

  b. Sex ratio at birth
     - This is the ratio that shows the number of male live births per 100 female live births in specific year.

$$\text{Sex Ratio at birth} = \frac{\text{Male live births of a particular year}}{\text{Female live births of a particular year}} \text{ X100\%}$$

9. Age Distribution/Age Structure

- From the mid-year population, population that belongs to different age categories is known as age distribution or age structure of an economy.
- There are 3 main age categories;
  a. Child Population (0-14 Years)
  b. Working age population (15- 59 years)
  c. Elderly population (60 years and over)

Important: It is important not confuse age distribution with labour force. In Age distribution working age population is classified as 15-59 years. However labour force is defined as economically active population 15 years of age and over.

10. Transition of Age Distribution

- Transition of age distribution is the process of converting the young population in to an old population. This transition can be analyzed in 3 stages.

  a. Stage 01 : increase in child population (baby boom) due to reduction in child motility and increase in fertility rate (1960s -70s world population)

  b. Stage 02: With time increased child population transferred to working age population. Thus, working age population rises. During this stage child population drops due to reduction in fertility rate though child mortality remains low. (1990s – 2000s world population).

  c. Stage 03: Elderly population rises with the increase in life expectancy at birth and continued fall in fertility rate. (beyond 2010)
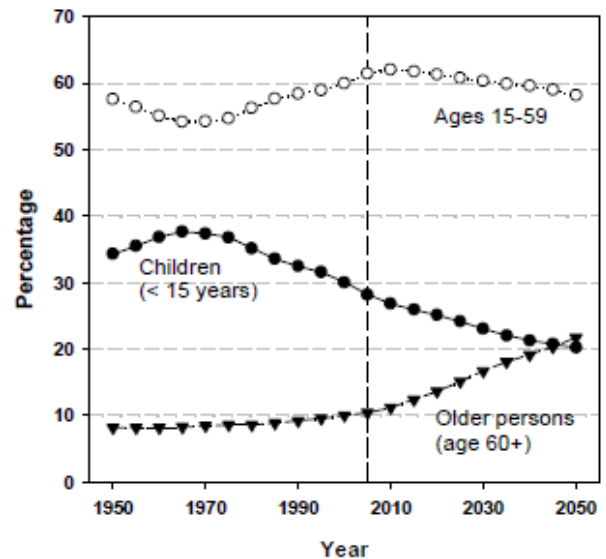
11. Dependency Ratio

- Dependency ratio is dependent persons (< 15 years or > 59 years) per 100 working age population (15-59 years) in an economy.
- This provides an indication of the ratio between working age population verses dependent population
- There are 3 key dependency rations:

  a. Child Dependency Ratio

      Child dependency ratio is child dependents (0-14 Years) per 100 working age population (15-59 years) in an economy.

$$\text{Child Dependency Ratio} = \frac{\text{Child Population (0-14 Years)}}{\text{Working age population (15-59 Years)}} \times 100\%$$

  b. Old age dependency Ratio

      Old age dependency ratio is old age dependents (60 Years and more) per 100 working age population (15-59 years) in an economy.

$$\text{Old age Dependency Ratio} = \frac{\text{Old age Population (60 Years and more)}}{\text{Working age population (15-59 Years)}} \times 100\%$$

  c. Total Dependency Ratio

Total dependency ratio is all dependents (both child and old age dependents) per 100 working age population (15-59 years) in an economy.

Total Dependency Ratio =	Child Population (0-14 Years) + Old age Population (60 Years and more)	X100%
	Working age population (15-59 Years)	

Total Dependency Ratio =	Child dependency ratio + Old age dependency ratio

11. Population Aging

- Population aging is referred to a continuous increase in percentage of old age population (60 years and more) in a country.

- Due to population aging the median age of a country rises.

- Population aging happens due to due to

    ✓ rising life expectancy and/or

    ✓ declining birth rates (fall in fertility)

- The magnitude of population aging is measured by index of aging.

12. Index of Aging

- This index indicates old age population (60 years and more) as a percentage of child population (0-14 years).

- This can also be defined as old age population (60 years and more) per 100 child population (0-14 years).

Index of Aging =	Old age Population (60 Years and more)	X100%
	Child population (0-14 Years)	

Economic consequences of Aging Population

1. Increase pressure on management of public finance

    Due to high old age population government has to allocate more funds on health care facilities and social security funds. Therefore it creates an additional pressure on public expenditure. Further when more funds are allocated on above purposes government may have less funds to allocate on the development projects. Thus, it can create an adverse effects on economic development.

2. Increase pressure on working age population due to high old age dependents

   Working age population will have to spend their savings to look after old age dependents. Thus, living standard of working age population may fall down. Further due to less savings and investment they may risk their future.

3. Some of the households (especially poor households) may fail to support old age dependents.

   Therefore poverty among old age population may rise. This will again increase pressure on the government to establish institutions to look after old age population that is being negated by their own families.

4. Female old age population will suffer more than male old age population.

   Due to several factor such as low education, low participation in labour force, several legal amendments on female property rights and higher life expectancy at birth than males will make old age female population to face to more adverse conditions than old age male population.

Economic consequences of reduction in child population

1. Due to the reduction in child population, government will have fewer burdens to spend on education and health care for children.

2. Therefore government can focus more to improve quality of education and health care rather than quantity. Ex;- more schools Vs. better schools.

3. Further, with the reduction of child dependency it can have a favourable impact on household savings & investment.

13. Demographic Dividend

- The demographic dividend refers to the accelerated economic growth that begins with changes in the age structure of a country's population.

- A demographic dividend occurs when the majority of the population is of a working age and can contribute to the country's economy.

- According to the definition of UN, if a country to achieve demographic dividend it should have a age structure with less than 30% of child population (0-14 years) and less than 15% old age population (60 years and more).

- In such a situation country has less pressure from dependents, thus country can achieve accelerated economic growth.

- The main contributor for demographic dividend is fall in fertility rates (birth rate) due to significant reductions in child and infant mortality rates

- Demographic dividend normally prevails for 3-4 decades.
- According to Censes and Statistic department data based on 2011 censes Sri Lanka currently have a age structure that can achieve demographic dividend (25.8% child population & 12.2% old age population)
- It is predicted that first dividend will be received by Sri Lanka during 1991- 2030 period. However with the rising aging population in Sri Lanka the criteria of less than 15% old age population (60 years and more) might get violated by 2017.

Labour Force
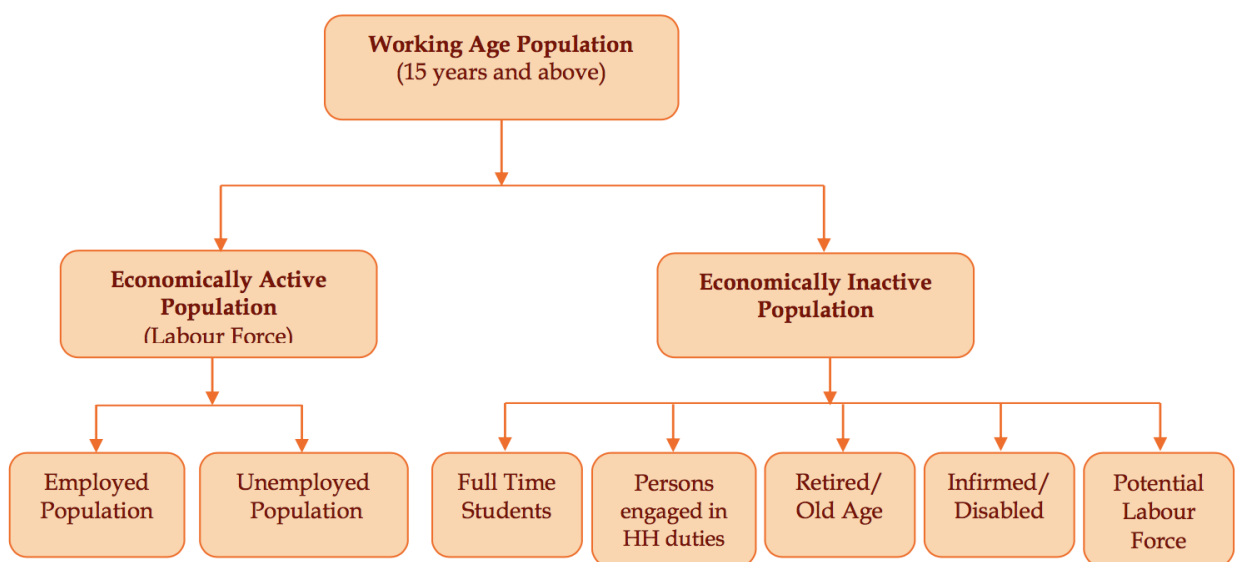
- **The labour force** is composed of **currently economically active population 15 years of age and over**.
- Population 15 years of age and over is known as **working age population**. (2013 onwards)
- All persons who are/were **employed or unemployed** during the reference period of the survey are referred to as economically active
- Therefore, all persons in working age population do not considered as labour force. It is because there are economically inactive persons in the working age population.
- Economically inactive population is all persons who **neither worked nor available/looking for work** during the reference period.
- Persons are not in the labour force (not economically active) for such reasons as:
  - a.   full time care of the household,
  - b.   full – time students,
  - c.   retired or old age,
  - d.   infirmed or disabled, or
  - e.   are not interested in working for one reason or another

- Economically active population figures are used for
    a. Monitoring the Economic situation of the country
    b. Human Resource Development planning
    c. Formulation, Implementation and Monitoring employment policies
    d. Income support and Social Programmes

- Information about labour force is obtained from labour force survey conducted by Census and Statistics Department of Sri Lanka.

- Therefore labour force has main two categories of people:
    a. Employed population
    b. Unemployed population

> Labour Force = Employed population + Unemployed population

- **Employed Population** is Persons, who during the reference period, worked as paid employees, employers, own account workers (self-employed), or unpaid family workers are said to be employed. This includes persons with a job but not at work during the reference period.

- **The persons with job, but not at work:** These are persons who
    ✓ have already worked in that job,
    ✓ were temporarily not at work during the reference period, and
    ✓ had formal job attachment during their absence from work

- Reasons for absence may range from illness/injury; holiday/vacation; strike/lockout; educational/training leave; maternity leave; reduction in economic activity; temporary disorganisation/suspension of work (e.g. bad weather, mechanical/electrical breakdown, shortage of raw material/fuels); to other temporary absence with or without leave.

- **Unemployed population** is Persons who are seeking and available for work, but had no employment during the reference period.

Factors those determine Labour Force

1. Demographic factors
   a. Population
   b. Age structure
   c. Sex ratio
   d. Marriage rate
2. Social economic factors
   a. Education
   b. Urbanization
   c. Social security service
   d. Social, cultural and religious attitudes

Labour force participation ratio

- The labour force participation ratio is presenting <u>labour force (economically active population)</u> as percentage of <u>total population 10 years of age and over</u>. 15

- In other words labour force per 100 persons who are 10 years of age and over.

Labour force participation Ratio =	$\dfrac{\text{Labour Force}}{\text{Population 15 years of age and over}}$	X100%

Employment rate

- Employment rate is showing the employed population as a percentage of labour force.

Employment rate =	$\dfrac{\text{Employed population}}{\text{Labour Force}}$	X100%

Status of Employment

- Based on the employment status, employed population can be categorized in to 5 main categories.
   a. Public sector employees
   b. Private sector employees
   c. Employers
   d. Self employed
   e. Unpaid family workers

Employment to Population Ratio

- The employment-to-population ratio is defined as the **proportion employed to the country's working-age population.**

- It provides information on the ability of an economy to create employment.

- On the other hand employment-to-population ratio helps to comprehend and compare labour markets in different countries.

$$\text{Employment to population ratio} = \frac{\text{Employed population}}{\text{Working} - \text{age population}} \times 100\%$$

Potential Labour Force

- Potential labour force is a new criterion identified in order to capture situations of inadequate absorption of labour, beyond those captured by unemployment (International Labour Organization, 2013).

- The draft 19th ICLS resolution introduced a definition of **potential labour force**. It is proposed that the definition cover **persons who have indicated some interest in employment, distinguishing three mutually exclusive groups:**

  a. **Unavailable jobseekers**, referring to persons without employment who are seeking employment but are not available;

  b. **Available potential jobseekers**, referring to persons without employment who are not seeking employment but are available; and

  c. **Willing potential jobseekers**, comprising persons without employment who are neither seeking nor available for employment but who want to be employed.

- Above three parties are captured under unemployed population but with this new definition they are being recognized as 'potential labour force'.

- However, for Sri Lanka it is not possible to provide information for above three groups a, b, and c separately but it is possible to estimate the number of persons who are in the inactive group showing some interest in finding a job.

- This criteria considers the **inactive persons who declared that they want a job**.

- Within the total potential labour force there can be persons,

  a. Who **put pressure on the labour market** (by actively seeking an employment) but who, because they are **not immediately available**, are excluded from unemployment. [1 SEP]

  b. Who are **not seeking** an employment **due to indefinite lay-off or discouragement**, and it also comprises persons **facing a variety of obstacles to seeking employment**, including personal

and family-related factors in addition to the socio- economic context. ⌷sep⌷

c. Who **imply that the expression of interest** in the labour market is generally in the form of an expressed desire for employment.

Formal & informal Employment

- **Formal employment** is the employment in <u>government, semi-government, private companies and business estate</u> sectors.

- In order to identify whether employment is formal or informal following creations are used
  a. Registration of the organization
  b. Accounts keeping practices of the Organization
  c. Total number of regular employees of the organization

- **Informal employment** is the persons and household those produce goods and services using relatively higher amount of labour and lesser amount of capital.

- Fifteenth International Conference of Labour Statisticians **(15th ICLS)** informal employment categories were defined as follows:

  a. They are **private unincorporated enterprises** that are not constituted as separate legal entities independently of their owners, and for which **no complete accounts** are available that would permit a financial separation of the production activities of the enterprise from the other activities of its owner(s).

  b. **All or at least some of the goods or services produced are meant for sale or barter**, with the possible inclusion in the informal sector of households which produce domestic or personal services in employing paid domestic employees.

  c. Their **size in terms of employment is below a certain threshold** to be determined according to national circumstances, and/or **they are not registered under specific forms of national legislation** and/or **their employees (if any) are not registered**.

Unemployment Definition

- According to Censes and Statistic department of Sri Lanka defined un employment as follows:
  Persons available and/or looking for work, and who did not work and taken steps to find a job during last four weeks and ready to accept a job given a work opportunity within next two weeks.

Unemployment Rate

- Unemployment rate is showing the unemployed population as a percentage of labour force.

$$\text{Unemployment rate} = \frac{\text{Unemployed population}}{\text{Labour Force}} \times 100\%$$

Types of Unemployment

1. Seasonal Unemployment

This is an elevated level of unemployment that is expected to occur at certain parts of the year. For instance, amusement parks may experience seasonal unemployment during the winter months because less people will visit the parks during this time.

2. Frictional Unemployment

Frictional unemployment is the time period between jobs when a worker is searching for, or transitioning from one job to another. It is sometimes called search unemployment. Frictional unemployment is always present in an economy.

3. Cyclical Unemployment

Cyclical, deficient-demand, or Keynesian unemployment, occurs when there is not enough aggregate demand in the economy to provide jobs for everyone who wants to work. In other wards unemployment that is attributed to economic contraction is called cyclical unemployment. Therefore this known as unemployment associated with business cycle of an economy.

4. Structural Unemployment

Structural unemployment occurs when a labour market is unable to provide jobs for everyone who wants one because there is a mismatch between the skills of the unemployed workers and the skills needed for the available jobs.

5. Involuntary and Voluntary Unemployment

Involuntary unemployment occurs when a person is willing to work at the prevailing wage yet is unemployed. Involuntary unemployment is distinguished from voluntary unemployment, where workers choose not to work because their reservation wage is higher than the prevailing wage.

6. Disguised Unemployment/ Hidden unemployment

This is the unemployment that does not affect aggregate output. Disguised unemployment exists where part of the labor force is either left without work or is working in a redundant manner where worker productivity is essentially zero. An economy demonstrates disguised unemployment where productivity is low and where too many workers are filling too few jobs. Even additional workers are eliminated there will have no impact to the output.

Key reasons for the unemployment in SL

a. Mismatch between skills required by the job market and the skills available with unemployed workers
b. Preference towards public sector jobs than private sector jobs
c. Low economic development
d. Low growth in job creations due to less investment and rigid labour rules.

Reasons for having a high level of educated unemployment in Sri Lanka

a. Mismatch between skills required by the job market and the skills provided by the education system
b. Attitudes; Preference towards public sector jobs than private sector jobs
c. Reluctant to work in informal sector
d. Less entrepreneurial skills and social attitude towards SME entrepreneurs
e. Low economic development to create jobs for knowledge workers

Key proposals to reduce unemployment in SL

a. Improve economic growth
b. Industrial differentiation
c. Creates self-employment opportunities by promoting small and medium scale enterprises (SMEs)
d. Educational reforms and vocational training
e. Attract more domestic and foreign investments
f. Attracts more foreign job opportunities
g. Introduce flexible labour laws.

Key Labour Force Indicators of Sri Lanka

Indicator	Year							
	2013	2014	2015	2016	2017	2018	2019	2020
Labour force participation rate								
By Gender								
Total	53.7	53.2	53.8	53.8	54.1	51.8	52.3	50.6
Male	74.9	74.6	74.7	75.1	74.5	73.0	73.0	71.9
Female	35.4	34.6	35.9	35.9	36.6	33.6	34.5	32.0
Total	53.7	53.2	53.8	53.8	54.1	51.8	52.3	50.6
Urban	47.7	48.7	48.6	49.8	50.5	49.6	50.2	47.0
Rural	54.9	54.1	54.8	54.6	54.8	52.3	52.7	51.3
Unemployment Rate								
By Gender								
Total	4.4	4.3	4.7	4.4	4.2	4.4	4.8	5.5
Male	3.2	3.1	3.0	2.9	2.9	3.0	3.3	4.0
Female	6.6	6.5	7.6	7.0	6.5	7.1	7.4	8.5
By selected age Group (Year)								
20 – 29	13.1	13.6	14.2	14.2	13.5	15.0	15.3	18.1
20 – 24	19.3	19.9	19.7	19.9	17.8	20.1	20.3	25.2
25 – 29	7.6	8.2	9.4	9.2	9.5	10.4	11.0	12.0
By selected educational level								
GCE A/L and above								
Total	8.7	8.2	9.2	8.3	8.1	9.1	8.5	9.8
Male	5.7	5.4	4.7	4.7	5.0	5.1	5.0	6.2
Female	11.8	11.1	13.5	11.9	11.3	13.2	11.9	13.6
Employed population								
By industry (Percentage)								
Total	7,681,279	7,700,489	7,830,976	7,947,683	8,208,179	8,015,166	8,180,693	7,999,093
%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	2,321,215	2,222,859	2,244,547	2,153,874	2,140,185	2,043,698	2,071,940	2,169,679
%	30.2	28.9	28.7	27.1	26.1	25.5	25.3	27.1
Industry	1,996,730	2,027,426	2,018,171	2,097,503	2,331,494	2,239,262	2,258,421	2,152,746
%	26.0	26.3	25.8	26.4	28.4	27.9	27.6	26.9
Services	3,363,334	3,450,205	3,568,259	3,696,306	3,736,500	3,732,206	3,850,332	3,676,668
%	43.8	44.8	45.6	46.5	45.5	46.6	47.1	46.0

Underemployment

- Underemployment is a situation where qualitatively and/or quantitatively labour resource is not fully utilized in an economy.
- Under-employment can be distinguished in to two principal forms known as visible underemployment and invisible underemployment.
- Visible underemployment is reflecting an insufficiency in the volume of employment. In Sri Lanka visible underemployment is defined as, if the person has worked less than the normal duration in

his/her main activity. Normal duration in SL is 35 hours per week applicable to all workers, except government teachers

- Invisible underemployment is characterized by low income, underutilization of skill, low productivity and other factors. Ex;- Graduates are working as office assistance.

Underemployment Rate

- Underemployment rate is showing the persons who are underemployed as a percentage of employed population.

$$\text{Underemployment rate } = \frac{\text{Under employed population}}{\text{Employed population}} \times 100\%$$

Key proposals to reduce underemployment in Sri Lanka

a. Increase job opportunities in formal sector and attract informal sector employees for those jobs.
b. Introduce advance technology to agricultural sector
c. Create productive jobs aiming females
d. Vocational training and improve skills of the labour force
e. Match demand and supply of the labour market
f. Improve private sector job opportunities.

Barriers to develop an effective labour market in Sri Lanka

a. Big informal employment sector
b. Higher preference for the public sector jobs
c. Less creation of jobs suited for women
d. Illegal migration Ex;- Australia, Italy
e. Low labour productivity
f. Education system does not provide skills required by the job market
g. Strict labour laws
h. Population aging and the pressure that builds on working age population

Proposals to improve labour productivity in Sri Lanka

a. Invest for new technology
b. Improve capital intensity in production
c. Training and development

d. Management policies

e. Macro-economic stability

f. Labour market liberalization

g. Improve quality of vocational training centers.

h. Educational reforms to a change attitude towards productivity.

Benefits of foreign employments to Sri Lanka

a. Favourable impact on balance of payment

b. Helps to improve equity and income distribution

c. Improve national savings

d. Improvement of foreign assets and can lead to expansion of money supply

e. Reduction in poverty

f. Helps to stabilize foreign exchange rate

g. Helps to reduce domestic unemployment

Drawbacks of foreign employments to Sri Lanka

a. Contains a social cost (Family problems) and an opportunity cost

b. Temporary brain drain and reduction of skilled labour to the country. Thus, this can impact domestic economic growth.

c. Due to reduction in skilled labour some of the domestic productions can suffer.

Key Socio-economic characteristics of the foreign employees who works in middle-east countries

a. Most of them are untrained women workers

b. Majority of the workers travel for house made jobs.

c. Most of the workers are from low income families

d. Their dependents mainly dependent upon the foreign remittance sent by the foreign employed workers

e. This helps to reduce poverty in rural sector

f. This migration has caused many social problems.

Stabilization of population

- This is the situation that rate of natural increase of population become zero or closer to zero.

- This is also known as Zero population growth (also called the replacement level of fertility)

- This is a condition of demographic balance where the number of people in a specified population neither grows nor declines naturally (except migrations)

- In the long term, zero population growth can be achieved when the birth rate of a population equals the death rate,

Importance of zero population growth

- With the reduction of dependents personal savings will increase

- Helps to reduce government welfare cost

- Helps to maintain a high level of employment

- Helps improve standard of living

Population Density

- Population density is the number of people living per unit of an area (normally for a squire kilometer).

Population Density =	$$\dfrac{\text{Total population in a particular geographical area}}{\text{Number of square kilometers in that geographical area}}$$