Week 1: Introduction to Economic Development

The course adopts a **microeconomic approach**, focusing on individual and household behaviours, and market failures which lead to suboptimal choices, rather than macro topics like institutions or economic growth. Students are encouraged to develop a perspective that acknowledges the vastly different context of developing countries compared to a developed country like Australia.

I. The Magnitude of Poverty

Poverty remains a pervasive global issue:

- **Extreme Poverty: More than 780 million people** live below the international poverty line of **USD $1.90** (AUD $2.75) per day. This constitutes roughly **10% of the world population**.
- **Context:** This population figure is 30 times the population of Australia.
- **Trends and Targets:** Poverty has been declining (down 35% since 1990). The World Bank's goal for 2030 is to reduce the population living in poverty to no more than 3%.
- **Geographic Concentration: 75% of the world's poor live in rural areas**.

The complexity of poverty decisions is highlighted by questions such as: "Why would a man in Morocco who doesn't have enough to eat buy a television?" or "Why do the poorest people spend 7 percent of their food budget on sugar?"

II. The Economic Lives of the Poor

The course relies on **household surveys** to gain statistical descriptions of the poor.

- **Livelihood and Spending:**
  - Poverty is usually measured by **consumption** rather than income, as consumption is a more stable measure of welfare (due to consumption smoothing) and is easier to measure in contexts where income is often informal or non-market based.
  - Poor households dedicate the majority of their budget to food, typically around **two-thirds (67%)** of consumption.
  - Despite being malnourished, the poor often do not spend as much as they could on calories. Even the extremely poor spend money on non-caloric items like **sugar (7-10% of their food budget)** and contribute to local **festivals/entertainment**.
  - Investment in human capital is low: typically around **2% on education** and less than 5% on health.
  - Livelihood often depends on **agriculture** and **small, undercapitalised businesses**.
- **Demographics:** Poor families are typically large, with a median household size of **7 to 8 members**, compared to 2.6 in Australia.
- **Migration and Finance:**

- ○ **Temporary migration** is common (e.g., average duration of 40 days per episode), and for many, this seasonal income provides the **majority of their total income**.
- ○ Access to **formal credit is limited** (e.g., only 6.4% in Udaipur), leading to reliance on expensive informal credit where yearly interest rates can range from 40% to 200%.
- ○ The poor generally **do not save in formal savings accounts**.

III. The Concept of Development

The concept of development has shifted away from solely measuring economic output.

- **Critique of GNP:** Economic growth, measured by Gross National Product (GNP), is **necessary but not sufficient** for development. GNP fails to capture:
  1. **Distribution** (obscures inequality).
  2. **Non-market goods**.
  3. Well-being at **only one point in time**.
  4. **Means** (income) rather than **ends** (actual quality of life).
- **Amartya Sen's Framework:** Development should focus on **"functionings"** (doings and beings) and the freedom to choose. A person's **"capability"** is the set of alternative functionings they can choose.
- **Human Development Index (HDI):** The World Bank uses the HDI as an alternative measure, giving equal weight (one-third each) to three dimensions:
  1. **GDP Index**
  2. **Life Expectancy Index**
  3. **Education Index** (based on literacy and enrollment).

Week 2: Measuring Poverty and Inequality

The second week focuses on the detailed methods used to quantify poverty and resource distribution.

I. Measuring Poverty

1. Anonymity or Symmetry

Identity of the household or individual should not matter when calculating the poverty measure. Only the **distribution of individual consumption** (or expenditure), adjusted for factors like needs, prices, or household composition, should be used to measure poverty.

- **Symmetry** means that if two households swap consumption levels, the calculated poverty measure should remain unchanged.
- For example, if an economy consists of households with consumption levels {0.2, 0.4, 0.6, 0.8, 1}, the poverty measure must be the same if households B and D swap incomes, resulting in {0.2, 0.8, 0.6, 0.4, 1}.

2. Population Principle (Size-Independence)

This principle dictates that the poverty measure must be **independent of population size**.

- If you combine several identical consumption distributions, the overall poverty measure should not change.
- For example, if a community with the distribution {0.2, 0.4, 0.6, 0.8, 1} is joined by an identical group of individuals with the exact same distribution, the poverty measure remains the same.

3. Monotonicity

The Monotonicity principle relates directly to the **severity of poverty**.

- It states that **a reduction in the expenditures (or consumption) of a poor person should increase the overall poverty measure**.
- This principle ensures that the index reflects that poverty is getting worse if an already poor person becomes poorer, regardless of changes among the non-poor population.

4. Dalton's Transfer Principle (Pigou-Dalton Transfer Sensitivity)

This principle ensures that the index accounts for **inequality among the poor**.

- It states that **a transfer of consumption or income from a poor person to a richer person should increase measured poverty**.
- Conversely, transferring income from a richer household to a poorer household should reduce measured poverty.
- This principle is vital because measures that simply count the number of poor people (like the Headcount Index, P0) often **violate this rule**. For instance, shifting income between two people who are both already below the poverty line (or between a poor person and a rich person without changing whether they are categorized as poor) does not change the headcount, but it does worsen inequality and thus should increase the poverty measure.

Application: Foster-Greer-Thorbecke (FGT) Indices

The FGT family of poverty measures ($P\alpha$) are generalised metrics designed to help quantify poverty while considering these principles.

- **Foster-Greer-Thorbecke (FGT) Indices ($P\alpha$):** These measures generalise different ways to quantify poverty. Can be disaggregated (decomposed) for subgroups of population • Rural vs. urban • Occupation • Education

Name	Formula	Measures	Advantages	Limitations
P0 (Headcount Index)	$\dfrac{N_P}{N}$ where N_P is the number of poor and N is total population	Measures the proportion of the population that is poor	Simple to calculate	doesn't capture severity of poverty and violates Dalton's transfer principle.
P1 (Poverty Gap Index)	$P_1 = 1/N * \sum G_i/z$ $(z-y_i)$ calculates difference between poverty line (z) and individual's income (y_i). This shows how far below the poverty line that individual falls Indicator function $I(y_i<z)$ ensures G_i is only calculated for individuals whose income (y_i) is lower than the poverty line (z). If they are not poor, G_i is zero	Measures extent/ average depth to which individuals fall below the poverty line ie **severity** of poverty (average proportional poverty gap).	Measures severity of poverty by measuring the depth of deprivation Measures min and max investment needed to alleviate poverty	Violates Dalton's transfer principle ie doesn't account for shifts in inequality among the poor themselves
P2 (Poverty Severity Index)	$P_2 = 1/N * \sum (G_i/z)^2$	Takes into account inequality among the poor by squaring the poverty gap ie placing **more weight on outliers** (those furthest below the poverty line)	satisfies all four poverty principles	often unintuitive and therefore not widely used.

II. Measuring Inequality

Economists care about inequality because high inequality in conjunction with imperfect markets leads to wasted potential, affects institutional development, and weakens the effect of economic growth on poverty reduction.

- **Criteria for Inequality Measures:** A good measure must satisfy four criteria:
1. **Mean Independence:** Measure remains unchanged if all incomes double.
2. **Population Size Independence:** Measure is unaffected by population changes, all else equal.
3. **Symmetry:** Measure is unaffected if two people swap incomes.
4. **Pigou-Dalton Transfer Sensitivity:** Transferring income from rich to poor reduces measured inequality.

Measurement	Formula	Advantage	Limitation
Decile Dispersion Ratio	average consumption of the richest 10% to the poorest 10%.	easily interpretable	Doesn't satisfy Dalton's principle as it ignores distribution in the middle income percentiles
Kuznets' ratio	richest 10% divided by the poorest 40%.		
Lorenz Curve and Gini Coefficient	**Curve:** graphical representation plotting the cumulative percentage of the population against the cumulative percentage of income/consumptionPerfect equality is the 45-degree line **Gini:** area between the Lorenz curve and the 45-degree line (A), divided by the total area under the 45-degree line (A+B). 0= perfect equality. 1= perfect inequality	satisfies all four criteria for a good inequality measure	not easily decomposable into subgroups (e.g. rural vs urban) and difficult to test for statistical significance.