





# 1. Introduction to Economic Development



**Professor:** 

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#### Content

- Different living standards around the world
- Useful indicators to analyze economic development issues
- What is "development"
- The international Development Agenda: from Millennium Development Goals to Sustainable Development Goals

#### What differences can you see?





Nuclear family of 3-4 members

Annual Y \$50,000

**Comfortable home** 

3 meals/day

Lots of consumer goods

Good health
Good education

Get to choose a profession

**Life expectancy = 78** 



**Rural Southeast Asian Family** 

Large family 6-8 members

**Annual Y \$5000** 

Poorly built house (1 room)

1-2 meals/day (usually the same)

No electricity

Poor health
One child enrolled in school

Work all day in the field

Life expectancy = 65



Family with an average of 5 children

**Annual Y \$900 - 1000** 

Hut

1 meal/day (always grains)

No electricity

Very high infant mortality rate Probably no children in school

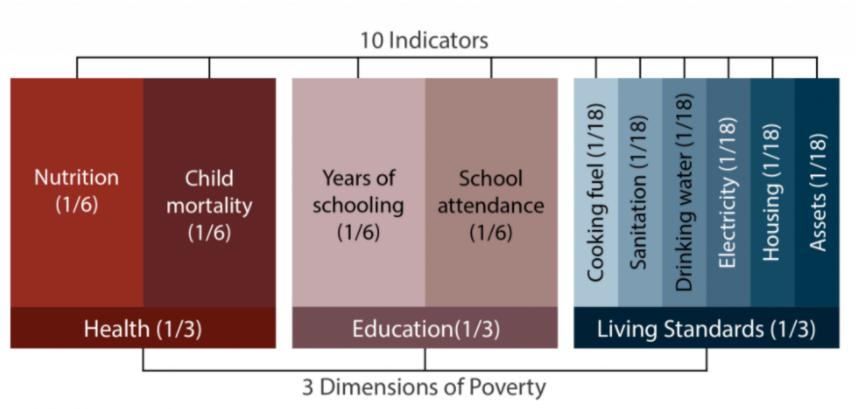
No work to do

Life expectancy = 55

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#### Not just a matter of income

#### **Global Multidimensional Poverty Index**



© Oxford Poverty and Human Development Intiative (OPHI)

#### Subsistence economy

An economy in which production is mainly for personal consumption and the standard of living yields little more than basic necessities of life—food, shelter, and clothing.

Income line = \$1.90 per day PPP 768,5 million people

**Lowest Stratum: Extreme Poverty** 

- Cooking: Open fire, smoke exits through hole in the roof
- Food and nutrition: Food insecure, majority of food grown by family; often malnourished and among the 800 million people classified as hungry
- *Clothing:* Used, worn, may be inadequate; flip-flops or in many cases still bare feet
- Education: Majority now able to attend primary school, but may not complete it
- Housing: Self-constructed, natural or found materials, often mud; thatch roof, dirt floors with mats
- Furnishings: Any pallet or bed, table, chair, or shelf is self-constructed; no electricity
- Water: hand-carried in buckets from public, often unsanitary sources
- Sanitation: Pit latrine or open defecation
- Transportation: On foot

More than ¾ of extreme poor live in rural areas

Income line = \$3.80 per day PPP 3 billion people

Second-Lowest Stratum

- *Cooking:* Basic, but typically use kerosene or some other improved energy source
- *Food and nutrition:* May be food insecure or vulnerable to falling into food insecurity
- Clothing: Inexpensive, often used clothing, not well fitting, perhaps inadequate for the weather; worn shoes and rubber-soled shoes
- *Education:* Children finish primary school; on average attend a couple years longer
- Housing: Partly and perhaps fully selfconstructed; improved floor, corrugated tin roof
- Furnishings: Basic tables and seating; fans if electricity; power connection may be illegal and improvised
- Water: From a tap, typically outdoors and perhaps a 50-metre-plus walk; needs self-treating with chlorine or boiling
- Sanitation: Latrine
- Transportation: Bicycle

"Multidimensionally poor"

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Source: Todaro, 2016

#### Highest ("Rich") Stratum

- Cooking: Modern appliances including modern range, microwave, dishwasher
- Food and nutrition: Rich and diverse diet, though obesity may bring other health risks
- Clothing: Well-fitting, perhaps designer clothing; multiple, relatively new, comfortable dress and sports shoes
- Education: Children complete high school; on average attend at least one year of post-secondary education
- Housing: Modern, manufactured, professionally constructed
- Furnishings: House filled with consumer goods and durables, wifi, home entertainment centres
- Water: Safe water at taps throughout the house
- Sanitation: Hygienic, modern bathroom plumbing
- Transportation: A car per each adult; or in high density each person is assured reliable transportation alternatives

Income line = \$75 per day PPP 1 billion people Income line = \$15 per day PPP >2 billion people

#### Second-Highest Stratum

- Cooking: Manufactured burners with improved fuel if not electric plates
- Food and nutrition: Usually food secure; but many vulnerable to fall into food insecurity
- Clothing: Inexpensive, though new when purchased, and worn or less-expensive shoes and sneakers; expensive clothes as social expectations rise
- Education: Children finish primary school; some finish secondary school
- Housing: Modest but better constructed, if not comfortable
- Furnishings: Electricity, purchased tables, chairs, beds; fans or even a room AC, space heater, a television
- Water: Piped directly to house site; may need treating
- Sanitation: Toilets, but many lack what the top stratum considers full indoor plumbing
- Transportation: Motor bike

When one is poor, she has no say in public, she feels inferior. She has no food, so there is famine in her house; no clothing, and no progress in her family.

-A poor woman from Uganda

For a poor person, everything is terrible—illness, humiliation, shame. We are cripples; we are afraid of everything; we depend on everyone. No one needs us. We are like garbage that everyone wants to get rid of.

-A blind woman from Tiraspol, Moldova

Life in the area is so precarious that the youth and every able person have to migrate to the towns or join the army at the war front in order to escape the hazards of hunger escalating over here.

—Participant in a discussion group in rural Ethiopia

When food was in abundance, relatives used to share it. These days of hunger, however, not even relatives would help you by giving you some food.

—Young man in Nichimishi, Zambia

We have to line up for hours before it is our turn to draw water.

—Participant in a discussion group from Mbwadzulu Village (Mangochi), Malawi

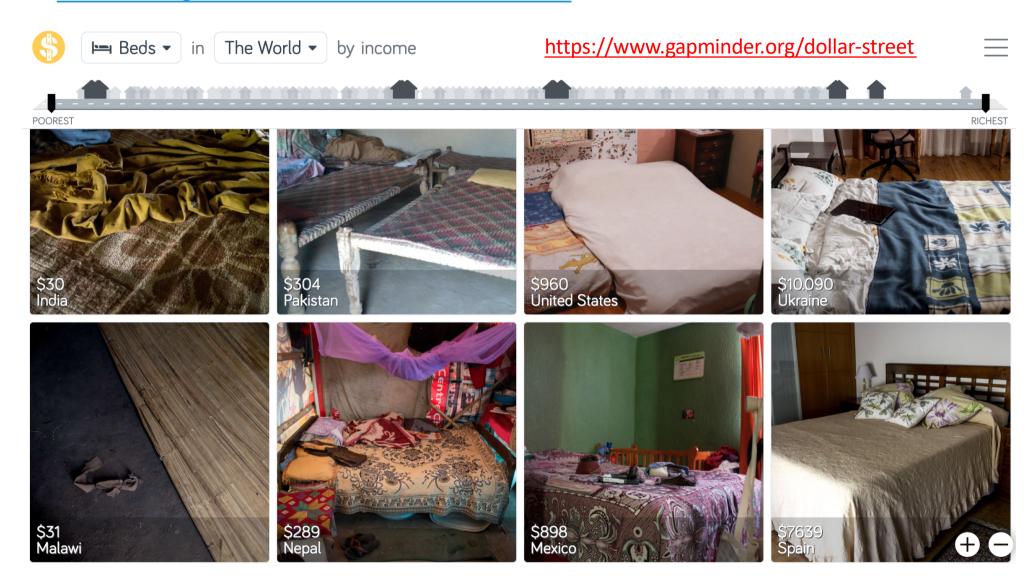
[Poverty is]...low salaries and lack of jobs. And it's also not having medicine, food, and clothes.

-Participant in a discussion group in Brazil

Don't ask me what poverty is because you have met it outside my house. Look at the house and count the number of holes. Look at the utensils and the clothes I am wearing. Look at everything and write what you see. What you see is poverty.

-Poor man in Kenya

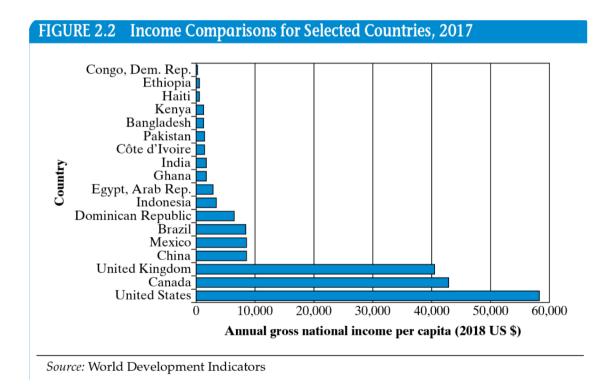
Source: Todaro, 2016 Oihana Basilio 2021



- See how the rest of the world lives, organized by income | Anna Rosling Rönnlund (12 min)
  - https://www.youtube.com/watch?v=u4L130DkdOw

- Comparisons of <u>average national income</u> (per capita income) –
   Conventional measure: <u>very incomplete</u>
  - GNI per capita = total domestic and foreign value added claimed by a country's residents, without making deductions for depreciation of the domestic capital stock
  - Gross Domestic Product (GDP) = total value for final use of output produced by an economy, by both residents and nonresidents

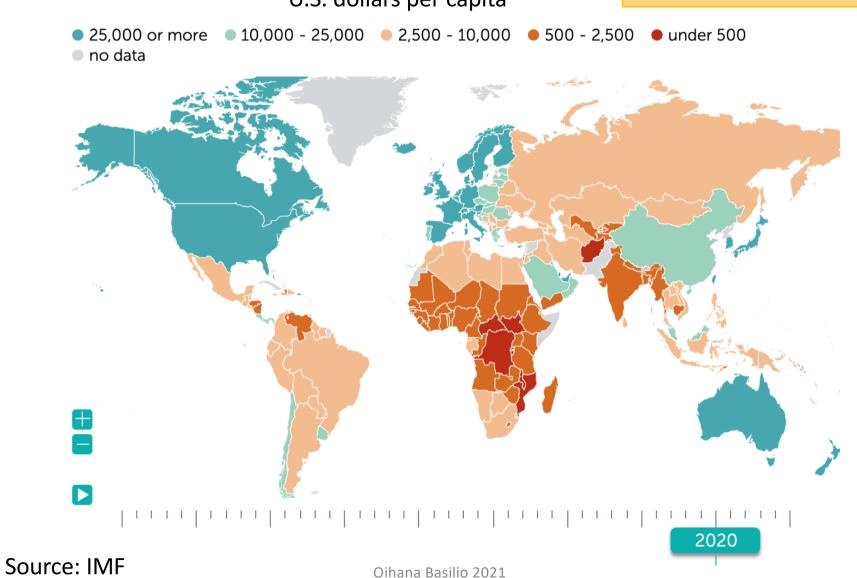
GNI = GDP + difference between the income residents receive from abroad for factor services (labor and capital) less payments made by nonresidents who contribute to the domestic economy



Source: Todaro, 2016

## GDP per capita, current prices U.S. dollars per capita

Huge differences in GDP per capita



#### Classifications by average levels of development

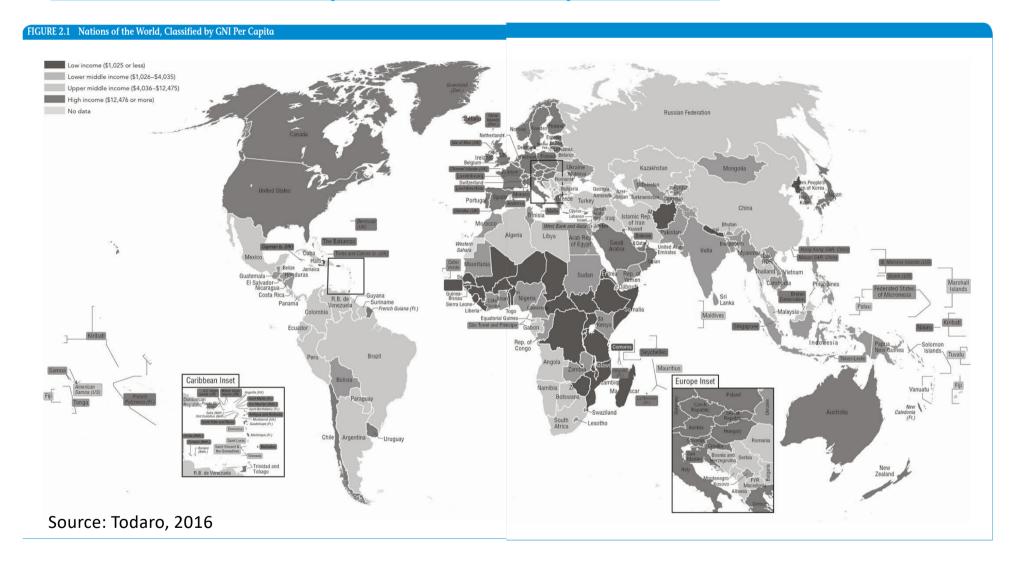
The World Bank classifies countries according to four ranges of average GNI:

- Low-Income Country (LIC): GNI per capita of less than \$996 in 2018.
- Lower-Middle Income Country (LMC): GNI per capita between \$996 and \$3,895 in 2018.
- Upper-Middle Income Country (UMC): GNI per capita between \$3,896 and \$12,055 in 2018.
- High-Income Country (HIC): GNI per capita of at least \$12,056. 16% of the world
- The biggest factor in the sharp improvement is rapid income growth in China, which became a LMC in 1999, and India, which did so in 2007.

United Nations Development Program (UNDP) classifies countries taking account of their health and education attainments in addition to income: **Human Development Index (HDI).** 

➤ Average levels of human development have also been rising strongly in recent years

**Achieving development is not just an economic phenomenon**. Besides economic changes, it also requires structural and institutional changes.



**World Bank classification**: Low-income countries (LICs), lower-middle-income countries (LMCs), upper middle-income countries (UMCs) and high-income countries (HICs) – cutoffs updated each year to adjust for inflation

- Adjusting for <u>Purchasing Power Parity (PPP)</u>
  - GNI comparisons between developed and less-developed countries do not measure the **relative domestic purchasing power of different currencies** 
    - E.g. prices of nontraded services are much lower in developing countries because wages are so much lower
  - PPP is calculated using a common set of international prices for all goods and services – calculate on average prices in the country
  - Income gaps between developed and developing countries GNI > PPP





Source: Todaro, 2016 Oihana Basilio 2021

#### GNI per capita does not reflect core capabilities $\rightarrow$ alternative measures

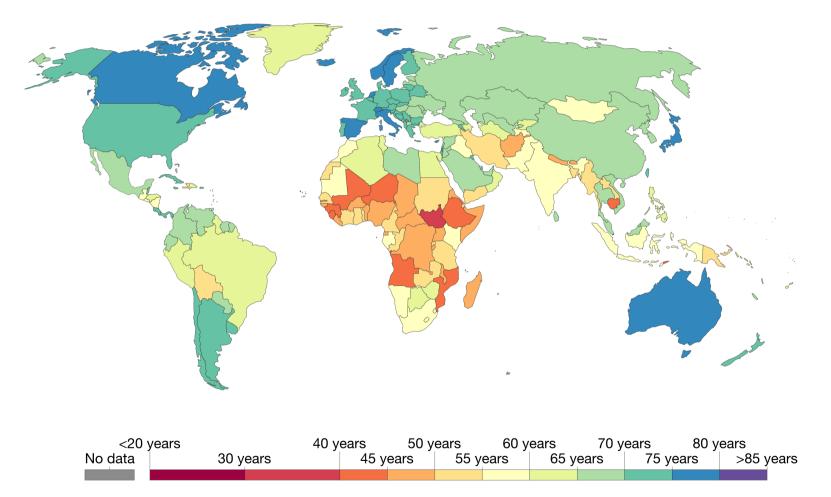
- Comparing countries by <u>health and education levels</u>
  - 3 basic indicators of average health
    - Life expectancy at birth: average nr of years that newborn children would live if subjected to the mortality risks prevailing for their cohort at the time of their birth
    - Under-5 mortality rate
    - Prevalence of undernourishment: consuming too little food to maintain normal levels of activity
  - 2 basic indicators of average education
    - Gross enrolment ratio for secondary school (can be greater than 100%, because it includes students who have taken longer to graduate or returned to school later)
    - Per cent of population with at least some secondary education

Source: Todaro, 2016 Oihana Basilio 2021

Life expectancy, 1983

## Important improvent in life expetancy all over the world over the last century





Source: Riley (2005), Clio Infra (2015), and UN Population Division (2019)

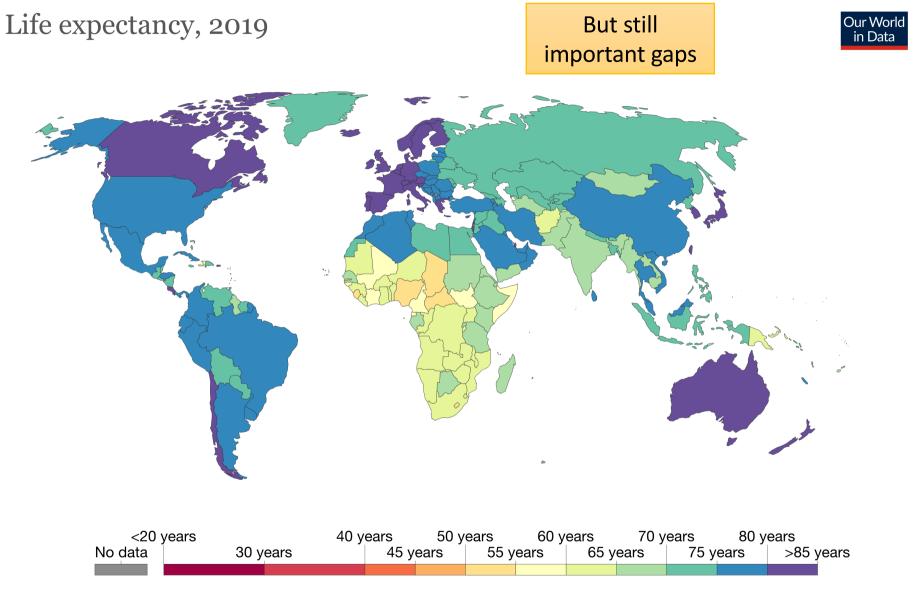
OurWorldInData.org/life-expectancy • CC BY Note: Shown is period life expectancy at birth, the average number of years a newborn would live if the pattern of mortality in the given year were to stay the same throughout its life.

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Important improvents in life expetancy all over the world over the last century.

		Life expectancy years				
Country	ŢĀ	Start ↓ <del></del>	End ↓ <del></del>	Absolute Change	Relative Change ↓₹	
Cuba		<b>18.9 years</b> in 1899	<b>78.6 years</b> in 2015	+59.7 years	+316%	
South Korea		<b>23.5 years</b> in 1908	<b>82.1 years</b> in 2015	+58.6 years	+249%	
Pakistan		<b>20.1 years</b> in 1921	<b>66.6 years</b> in 2015	+46.4 years	+231%	
Mexico		<b>23.3 years</b> in 1893	<b>74.9 years</b> in 2015	+51.6 years	+222%	
Nicaragua		<b>24.0 years</b> in 1920	<b>73.6 years</b> in 2015	+49.6 years	+207%	
Guatemala		<b>24.0 years</b> in 1900	<b>73.3 years</b> in 2015	+49.3 years	+205%	
North Korea		<b>23.5 years</b> in 1908	<b>71.5 years</b> in 2015	+48.0 years	+204%	

Source: https://ourworldindata.org/human-development-index



Source: Riley (2005), Clio Infra (2015), and UN Population Division (2019)

OurWorldInData.org/life-expectancy • CC BY

Note: Shown is period life expectancy at birth, the average number of years a newborn would live if the pattern of mortality in the given year were to stay the same throughout its life.

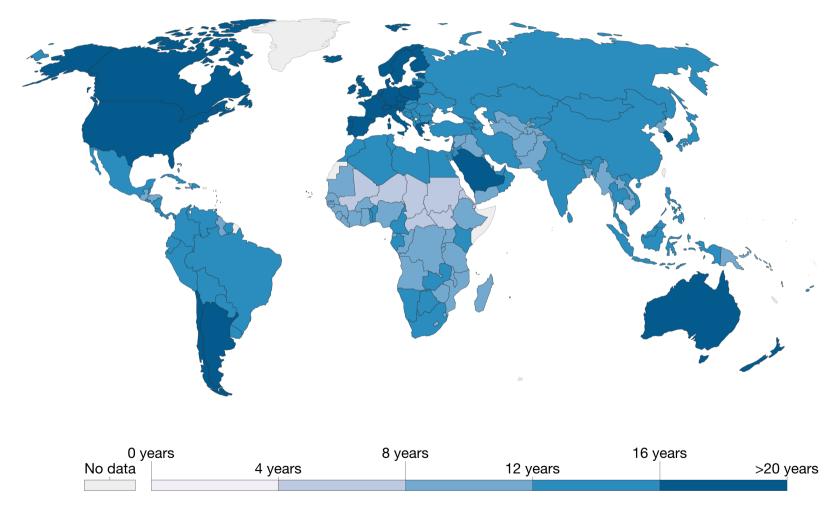
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	Life expectancy years				
Country 1ª	Start ↓ <del>-</del>	End ↓₹	Absolute Change 👢	Relative Change 🗜	
Monaco	<b>62.2 years</b> in 1950	<b>85.7 years</b> in 2015	+23.5 years	+38%	
San Marino	<b>62.6 years</b> in 1950	<b>84.4 years</b> in 2015	+21.8 years	+35%	
Hong Kong	<b>62.1 years</b> in 1950	<b>84.0 years</b> in 2015	+21.9 years	+35%	
Japan	<b>36.4 years</b> in 1865	<b>83.9 years</b> in 2015	+47.5 years	+130%	
Spain	<b>29.5 years</b> in 1882	83.0 years in 2015	+53.5 years	+181%	
Chad	<b>35.5 years</b> in 1950	<b>53.1 years</b> in 2015	+17.6 years	+49%	
Nigeria	<b>33.1 years</b> in 1950	<b>53.1 years</b> in 2015	+20.0 years	+60%	
Sierra Leone	<b>24.5 years</b> in 1931	<b>52.9 years</b> in 2015	+28.4 years	+116%	
Lesotho	<b>43.9 years</b> in 1950	<b>51.0 years</b> in 2015	+7.1 years	+16%	
Central African Republic	<b>31.8 years</b> in 1950	50.9 years in 2015 Oihana Basilio 202	<b>+19.1 years</b>	+60%	

#### Expected years of schooling, 2017



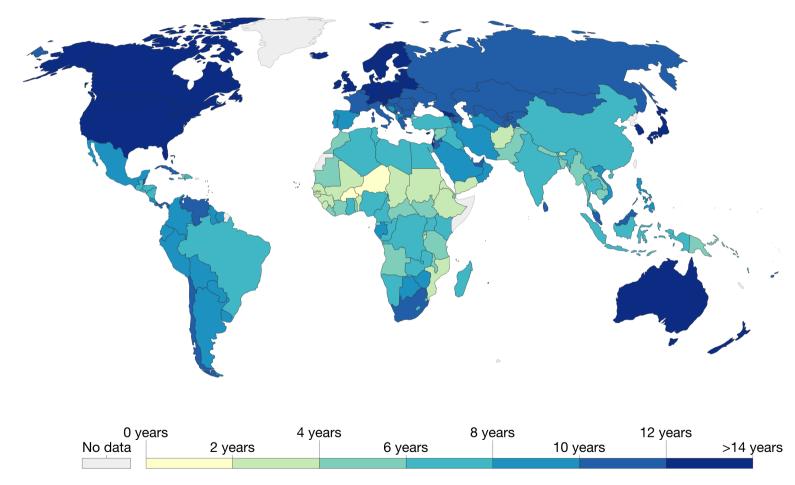
The number of years a child of school entrance age can expect to receive if the current age-specific enrolment rates persist throughout the child's years of schooling.



#### Average years of schooling, 2017







Source: Lee-Lee (2016); Barro-Lee (2018) and UNDP HDR (2018) OurWorldInData.org/global-rise-of-education • CC BY Note: Formal education is primary/ISCED 1 or higher. This does not include years spent repeating grades.

#### GNI per capita does not reflect core capabilities $\rightarrow$ alternative measures

- The Human Development Index (HDI): index measuring socioeconomic development, based on combining measures of education, health and adjusted real income per capita.
  - Scale 0 (lowest HD) to 1 (highest HD)
  - 3 dimension indexes → calculated using the following indicators, and relating them to maximum and minimum values attained globally:
    - **Health** = life expectancy at birth
    - Education = average schooling attained by adults AND expected years of schooling for school-age children
    - Decent standard of living: PPP adjusted per-capita GNI

$$Dimension Index = \frac{Actual \ Value - Minimum \ Value}{Maximum \ Value - Minimum \ Value}$$

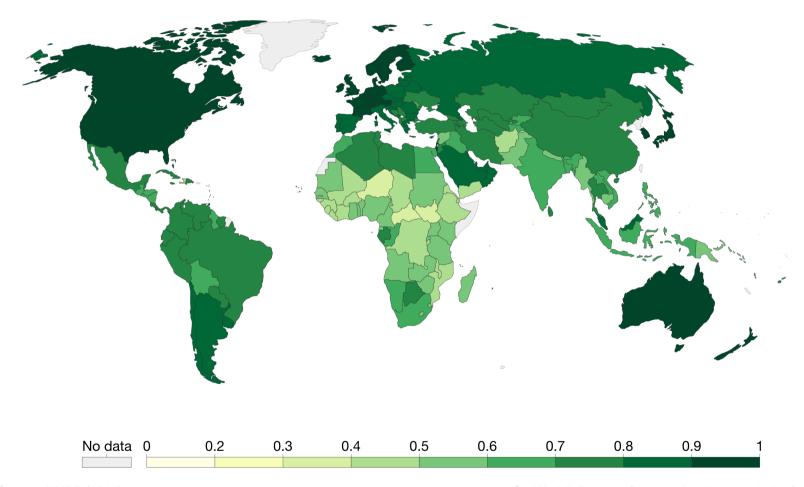
• HDI Index: geometric mean =  $H^{1/3}$  E  $^{1/3}$  I $^{1/3}$  =  $^3$   $\checkmark$  (H\*I\*E)

Source: Todaro, 2016 Oihana Basilio 2021

#### Human Development Index, 2017

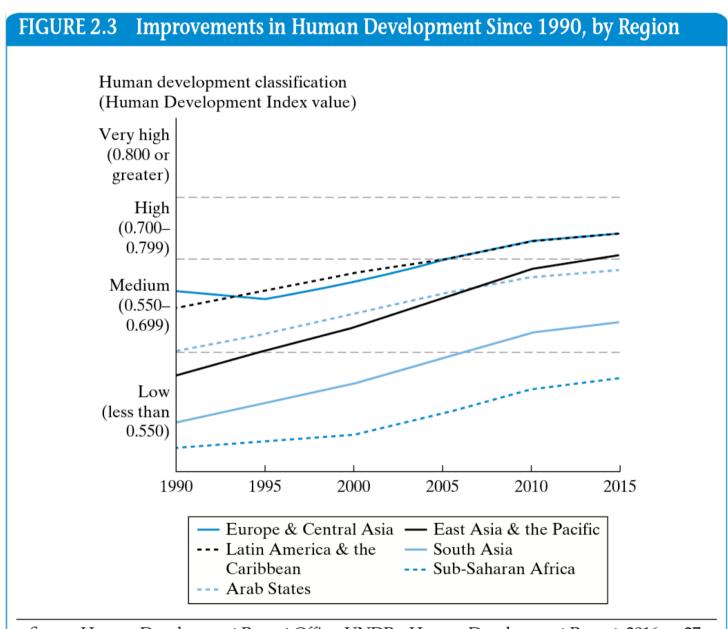


The Human Development Index (HDI) is a summary measure of key dimensions of human development: a long and healthy life, a good education, and having a decent standard of living.



Source: UNDP (2018)

 ${\tt OurWorldInData.org/human-development-index/ \bullet CC\ BY}$ 



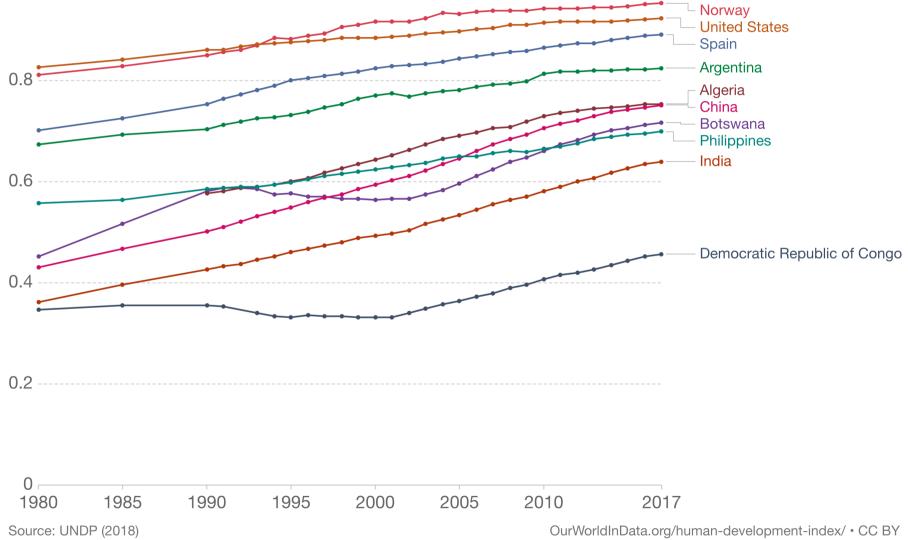
Source: Todaro, 2016

Source: Human Development Report Office UNDP – Human Development Report, 2016, p. 27

#### Human Development Index, 1980 to 2017



The Human Development Index (HDI) is a summary measure of key dimensions of human development: a long and healthy life, a good education, and having a decent standard of living.

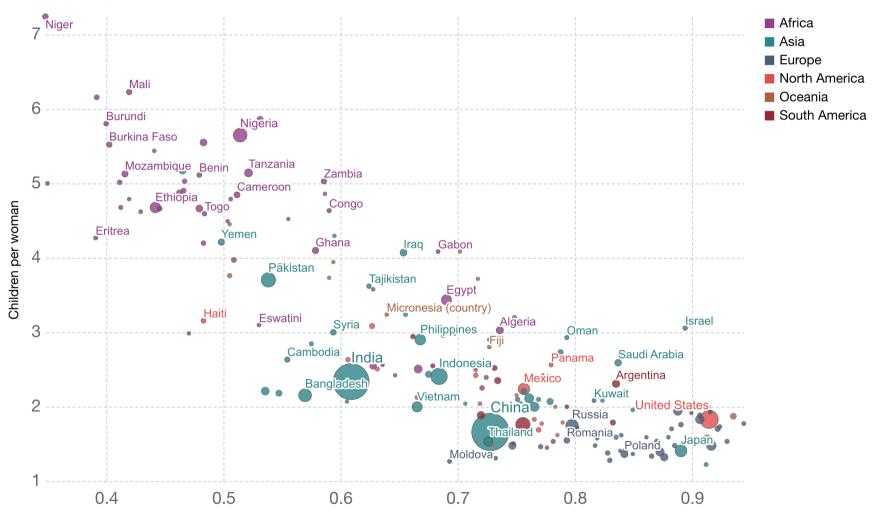


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#### Children per woman vs. Human Development Index, 2014



The fertility rate is much higher in countries with low living standards. But at very high living standards the fertility rate is again higher.

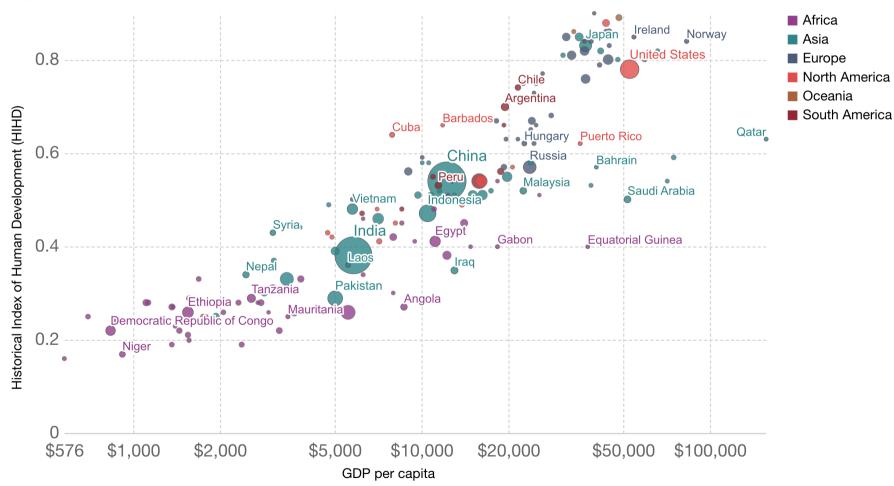


Source: United Nations – Population Division (2019 Revision), UNDP via the Quality of Government dataset OurWorldInData.org/fertility/ • CC BY Oihana Basilio 2021

#### Historical Index of Human Development vs. GDP per capita, 2015



Historical Index of Human Development (HIHD), measured from 0 to 1 (where highest is best) versus gross domestic product (GDP) per capita, measured in 2011 international-\$. HIHD is a composite measure of development derived from the variables average life expectancy, literacy rates, educational enrolment and GDP per capita.

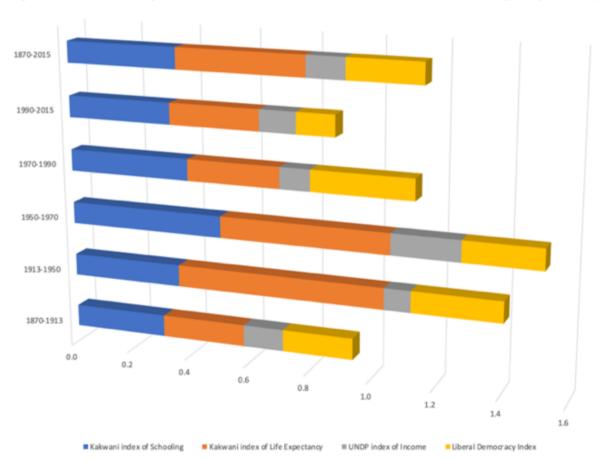


Source: Prados de la Escosura (2018); Maddison Project Database (2018)

The world human development has steadily improved over time, although advances have been unevenly distributed across world regions.

Leandro Prados de la Escosura, 2019

Figure 2 Drivers of augmented human development in the world, 1870-2015 (yearly rate, %)



#### **READINGS:**

- Human development in the age of globalisation – Prados de la Escosura (2019)

Other important issues: Democracy??

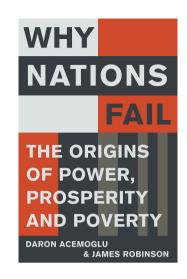
(indicators: e.g. Liberal democracy Index)

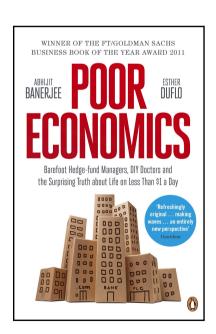
Source: https://voxeu.org/article/human-development-age-giobalisation 2021

#### **Development economics**

The study of how economies are transformed from stagnation to growth and from low-income to high-income status, and overcome problems of extreme poverty.

**Development** The process of improving the quality of all human lives and capabilities by raising people's levels of living, self-esteem, and freedom.



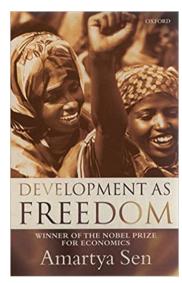


"Most development specialists conceive of development as a multidimensional process involving major changes in social structures, popular attitudes, and national **institutions**, as well as acceleration of economic growth, reduction of inequality, and poverty eradication. Development, in its essence, represents the whole gamut of change by which a social system, tuned to the diverse basic needs and evolving aspirations of individuals and social groups within that system, **moves** away from a condition of life widely perceived as unsatisfactory toward a situation or condition of life regarded as materially and spiritually better."

#### 3 core values:

Vital sustenance Self-esteem Freedom





#### Amartya Sen's "Capability" approach

- Development is both a physical reality and a state of mind in which the means for obtaining a better life are secured, following at least three objectives:
  - 1. Increasing the availability and widening the distribution of life-sustaining goods (e.g food, shelter, health, protection)
  - 2. Raising levels of living, including higher incomes, provision of jobs, better education, and greater attention to cultural and human values, to enhance material well-being and generate greater self-esteem; and
  - 3. Expanding the range of economic and social choices available to individuals and nations by freeing them from servitude and dependence both to other people and nation states, and to ignorance and human misery

    Interview with Amartya Sen:

https://www.voutube.com/watch?v=il9hiB1Tveo

### Income and wealth are not ends in themselves but instruments for other purposes

#### The meaning of development

#### The meaning of development:

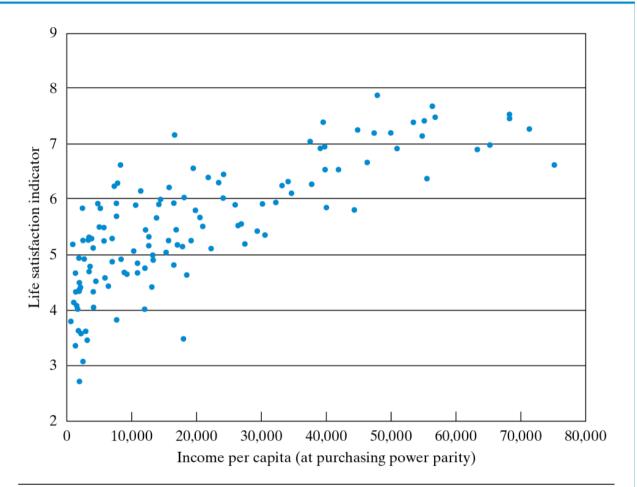
#### Amartya Sen's "Capability" approach

**Capabilities** The freedoms that people have, given their personal features and their command over commodities.

- Capability to function is what matters for status as a poor or non-poor person.
- What matters for well-being is not just the characteristics of commodities consumed (as in the utility approach) but what use the consumer can and does make of commodities =
   FUNCTIONINGS = resulting from choices, given capabilities
- Sen identifies **5** sources of disparity between (measured) real incomes and actual advantages:
  - **1. Personal heterogeneities** (e.g. disability, illness, age, or gender)
  - **2. Environmental diversities**, such as heating and clothing requirements in the cold or infectious diseases in the tropics, or the impact of pollution;
  - **3. Variations in social climate**, such as the prevalence of crime and violence, and "social capital";
  - **4. Distribution within the family**—family resources may be distributed unevenly, as when girls get less medical attention or education than boys do; and
  - **5. Differences in relational perspectives** i.e., some goods are essential because of local customs and conventions (e.g., "to appear in public without shame," include higher-quality clothing (such as leather shoes) in high-income countries rather than in low-income countries)

Happiness is part of human well-being, and greater happiness may in itself expand an individual's capability to function.

The average level of happiness or satisfaction increases with a country's average income, but the relationship is increasing at a decreasing rate.



*Note:* The data on the x-axis is drawn from the World Bank World Development Indicators. The y-axis uses the Cantril Self-Anchoring Striving Scale from the Gallup World Poll, asking respondents to imagine a ladder with steps from 0 (worst possible life for you) to 10 (best possible life for you) and answer. On which step of the ladder would you say you personally feel you stand at this time?

## **Gross Happiness Index**: based on

- equitable social development,
- cultural preservation,
- conservation of the environment
- promotion of good governance.

# Gross national happiness in Bhutan: the big idea from a tiny state that could change the world

Bhutan measures prosperity by gauging its citizens' happiness levels, not the GDP. Now its ideas are attracting interest at the UN climate change conference in Doha



▲ The principles of Bhutan's gross national happiness system are spelled out for pupils at a secondary school in Paro, a largely agricultural region. Photograph: Jean-Baptiste Lopez/UNICEF

Source: https://www.theguardian.com/world/2012/dec/01/bhutan-wealth-happiness-counts



Source: Video: https://www.youtube.com/watch?v=Se2gfFKp1\w21

#### **Sustainable Development Goals (SDGs)**

 United Nations (2015) -17 SDGs (169 targets) to be achieved by 2030 -





Millennium Development Goals (MDGs) Precursor to the SDGs adopted by the United Nations in 2000 to: eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality; improve maternal health; combat diseases; ensure environmental sustainability; and develop a global development partnership. Goals were assigned targets to be achieved by 2015.

By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day <br&gt;

Indicators -

#### 1.1.1

Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals

#### **2020 HDR**

Expanding human development, easing planetary pressures

# Renewing human development for the Anthropocene

We are destabilizing the planetary systems we rely on for survival.

The strain on our planet mirrors that in societies.

These imbalances reinforce each other, amplifying the challenges.

## Mechanisms of change to catalyse action

We need a just transformation in the way we live, work and cooperate.

New social norms, improved incentives and working with—not against—nature can take us there.

## Exploring new metrics

A new era requires new measures of human development.

The Report proposes
the Planetary pressures—
adjusted Human
Development Index
and a new generation
of dashboards.

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