

# Indicators

# What is an indicator?

An indicator does not tell the whole story.

Instead, an indicator “indicates” (or “points”) to something that needs further investigation.

Indicators are often used to make comparisons:

- Between countries
- Between groups
- Over time

Usually indicators are quantitative.



*“Indicators are an abbreviated language or device: They point, but do not explain.”*

*“ICT indicators provide a snapshot summary of information about projects, countries or regions. The vantage point of the snapshot provides an indication of who is taking the picture and what is being identified as important – or not.”*

These and other quotes are from Amy Mahan

# Indicator composition

Some indicators consist of a single number

- e.g. Gross domestic product (GDP)

Most indicators are made up of several components

- e.g. human development index (HDI) is composed of three components
- e.g. African Gender and Development Index (AGDI) has 42 components

More is not necessarily better.

Too many fruit results in a bad fruit salad.



# Choosing indicators

It is good to have a theoretical basis for choosing indicators.

HDI uses Amartya Sen's theory of "capabilities" – adding health and education to income

AGDI has social, economic and political power indicators.

AGDI focuses on the "gap" between male and female.

*“Indicators are not value free, but because they are expressed in numbers, they appear to be objective answer to what may be straightforward questions..... [but] indicators can be misused or misinterpreted.”*

# Hidden bias

Sometimes the indicator components do not measure what you think:

GDP does not include all production – it excludes production of services for household use. This is a gender bias.

HDI (and GDI) have a bias towards developed countries.

GDI has an assumption about the degree of aversion to inequality.

# Theory can exclude some things

AGDI could not include maternal mortality or violence against women because it included only components that had measures for both male and female.

A decent work index cannot include paid leave, union membership and other aspects if it covers both self-employed and employees.



# How reliable are the data?

International indices often use “lowest common denominator” data elements because data for better components are not available for many countries

International data often are based on models and “heroic” assumptions rather than direct measurement e.g. UNAIDS models, and GDI earnings data

Official indices often use data in international databases, which can be out-of-date



# Reliability and comparability

Data sources may not cover the full story or population

- In some countries census and survey exclude informal settlements
- In many countries questions about marriage and work are not asked about children under a certain age
- In many countries, informal sector excludes rural areas and excludes agriculture

There may be differences in definition across countries

- In Africa, youth is often defined to 35 years of age, versus 25 years in Europe



# Simplicity

The Gender Development Index was the HDI with each component adjusted for gender inequality.

The replacement Gender Inequality Index

*“is based on the general mean of general means of different orders – the first aggregation is by the geometric mean across dimensions; these means, calculated separately for women and men, are then aggregated using a harmonic mean across genders”*



# More simplicity

With an index, “more” is not necessarily “better”.

If there are too many components, it is difficult to tell what is causing the high or low score.

The “number” of the indicator can be useful as a slogan, but for policy-making and advocacy, we need to know where things are going wrong.

The indicator “points” to what needs further investigation or advocacy “push”



# Is it worth the effort?

How much will it cost in terms of time and money to construct the index?

Are you committed to repeating the effort again to measure change over time?

What will you gain by having the index?

Will your index be better than what already exists?  
How will it be better?

Will the index be relevant in 3 years time?



If you want to go ahead...

...

# Technical issues

You cannot add apples and giraffes:

- Each component needs to be standardised e.g. from 0 to 1
- Each component needs to measure in the same direction e.g. 1 always “good” and 0 “bad”
- Each component/group of components needs to have appropriate weight – the weight should not be determined on the basis of what data are available

# EXERCISE

Is there something in our research topic that could be the basis of a useful indicator?

What would be compared e.g. countries, over time, male and female youth?

What components would we use for the index?

Where would we get the data?

