

# Disability and Wellbeing: Using the Capability Approach for Definition and Measurement

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# Outlines

1. Conceptual Background
2. Measurement of CA-based Disability
3. Implications for data collection and monitoring

# Introduction

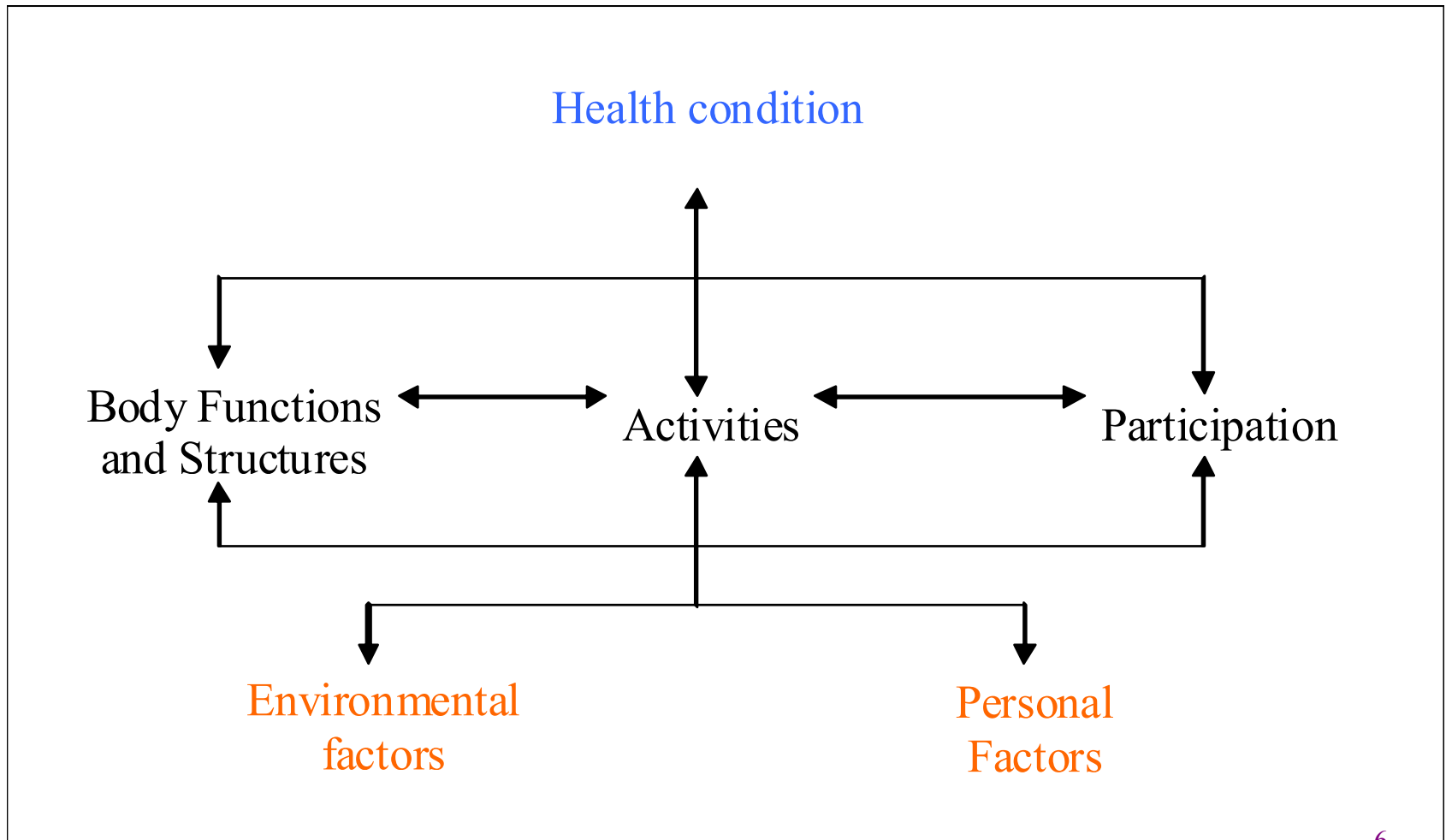
- Disability is complex, multifaceted.

# Part 1: Conceptual Background

# Different Models

- The medical model considers disability as a problem of the individual that is directly caused by a disease, an injury or other health conditions.
- The Social Model.
- The ICF model and classification.

# The ICF model



# The ICF model (cont.)

<b>HEALTH CONDITION</b>	<b>IMPAIRMENT</b>	<b>ACTIVITY LIMITATION</b>	<b>PARTICIPATION RESTRICTION</b>
Leprosy	Loss of sensation of extremities	Difficulties in grasping objects	Stigma of leprosy leads to unemployment
Panic Disorder	Anxiety	Not capable of going out alone	People's reactions leads to no social relationships

## Disability under the Capability Approach:

- Disability has been defined in terms of capability or functioning deprivation (e.g. Burchardt 2004; Mitra 2006)
- Disability occurs when an individual with an impairment is deprived of practical opportunities or functionings.



# Disability under the Capability Approach (Cont.):

- Advantages
- Disadvantages
- CA vs. ICF (Bickenbach 2014; Mitra 2014)

## Part 2. Measurement of CA-based Disability

# Direct measurement

A direct approach uses *broad activity limitation* questions. It is one that asks people to report, usually in only one question, if they are limited in their opportunities or achievements due to an impairment.

*“Is your child limited in the amount or the type of schooling he/she can have due to a physical, mental or emotional condition? “*

# Indirect/stepwise measurement

It makes the distinction between the impairment(s), on the one hand, and wellbeing indicators, on the other.

- Step 1: Prevalence of impairments:  $P = n_a/N$  where  $n_a$  is the number of people with impairments, and  $N$  is the number of people in the entire population.  $N=n_a+n_b$ , where  $n_b$  is the number of people without impairments.
- Step 2: Deprivation headcount ratio.  $H_a=q_a/n_a$  and  $H_b=q_b/n_b$ .
- Step 3: The prevalence of CA-based disability, or disability deprivation headcount ratio, is as follows:

$$H=H_a \times P=q_a/N$$

# Indirect/stepwise measurement (Cont)

Challenges:

(1) with the identification of impairments

# Washington Group Short Disability Measure

## **Introduction:**

The next questions ask about difficulties you may have doing certain activities because of a health problem.

### *Seeing*

1. Do you have difficulty seeing, even if wearing glasses?

### *Hearing*

2. Do you have difficulty hearing, even if using a hearing aid?

### *Mobility*

3. Do you have difficulty walking or climbing steps?

### *Remembering*

4. Do you have difficulty remembering or concentrating?

### *Self-care*

5. Do you have difficulty (with self-care such as) washing all over or dressing?

### *Communicating*

6. Using your customary language, do you have difficulty communicating, for instance? understanding or being understood?

# Indirect/stepwise measurement (Cont)

Challenges:

(2) with the measurement of wellbeing:

- . measurement of capabilities in general;
- . measurement of capabilities mapped onto health conditions (Coast et al 2013; Simon, Anand et al 2013); measurement of its multiple dimensions (Alkire and Foster 2011).

(3) terminology: disability as 'capability-deprived' vs. disability as 'with an impairment or health condition'.

# Indirect/stepwise measurement (Cont)

Opportunity:

To identify a particular group that may be disadvantaged.

Sen (2009): “Justice-enhancing changes or reforms demand comparative assessments, not simply an immaculate identification of ‘*the just society*’ (or ‘the just institutions’)” (emphasis in original) (p. 401).

Instead, Sen proposes a comparative approach to justice that focuses on questions related to how justice could be enhanced.



# An implementation of the stepwise measurement

.  $H_a$  and  $H_b$  calculated as multidimensional headcount ratios as per Alkire and Foster (2011).

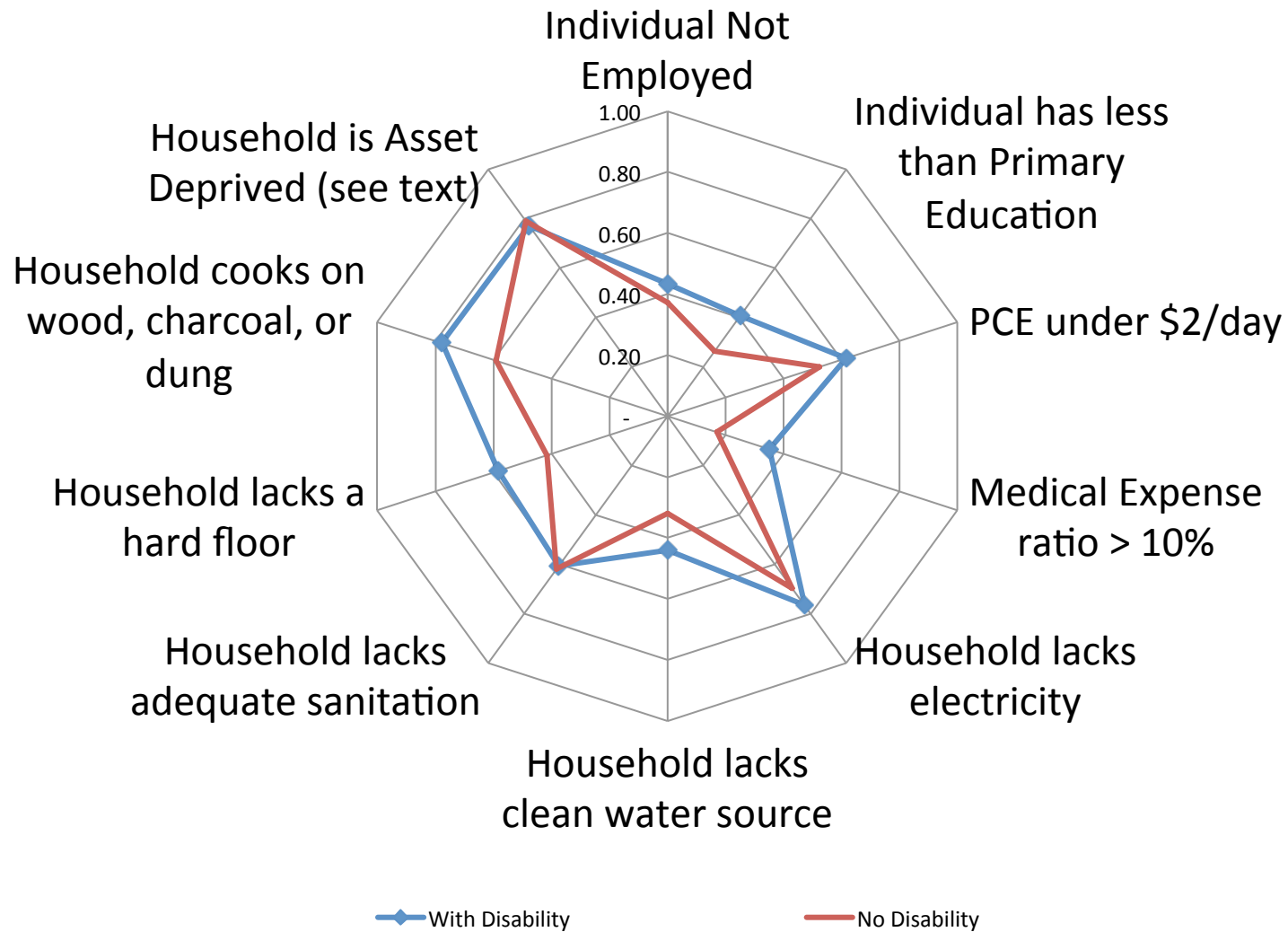
# An implementation of the stepwise measurement: Results

	Disability prevalence (%)	Deprivation headcount among persons with disabilities (%)	Disability and deprivation headcount (%)
	P	Ha	H=P x Ha
<u>SubSaharan Africa</u>			
Burkina Faso	7.95	96.16	7.64
Ghana	8.41	67.30	5.66
Kenya	5.30	66.94	3.55
Malawi	12.97	90.39	11.72
Mauritius	11.43	15.19	1.74
Zambia	5.78	81.01	4.68
Zimbabwe	10.98	68.66	7.54

# An implementation of the stepwise measurement: Results (Cont.)

	Year n	Year n+1
<b>Prevalence of disability: P</b>	7.95	
Difficulty Seeing	2.4	
Difficulty walking or climbing steps	2.8	
Difficulty concentrating	4.2	
Difficulty with self care	2.5	
<b>Disability and deprivation headcount ratio: <math>H=P \times H_a</math></b>	7.64	
<b>Deprivation headcount ratio among persons with disabilities: <math>H_a</math></b>	96.16	
Rate of deprivation in indicator #1 (less than primary school completion)	91.91	
Rate of deprivation in indicator #2 (non-employment)	66.25	
<b>Deprivation headcount ratio among persons without disabilities: <math>H_b</math></b>	92.97	
Difference ( $H_a - H_b$ )	3.19	*
Rate of deprivation in indicator #1 (less than primary school completion)	89.26	
Difference	2.65	
Rate of deprivation in indicator #2 (non-employment)	40.88	
Difference	25.36	*

# Kenya

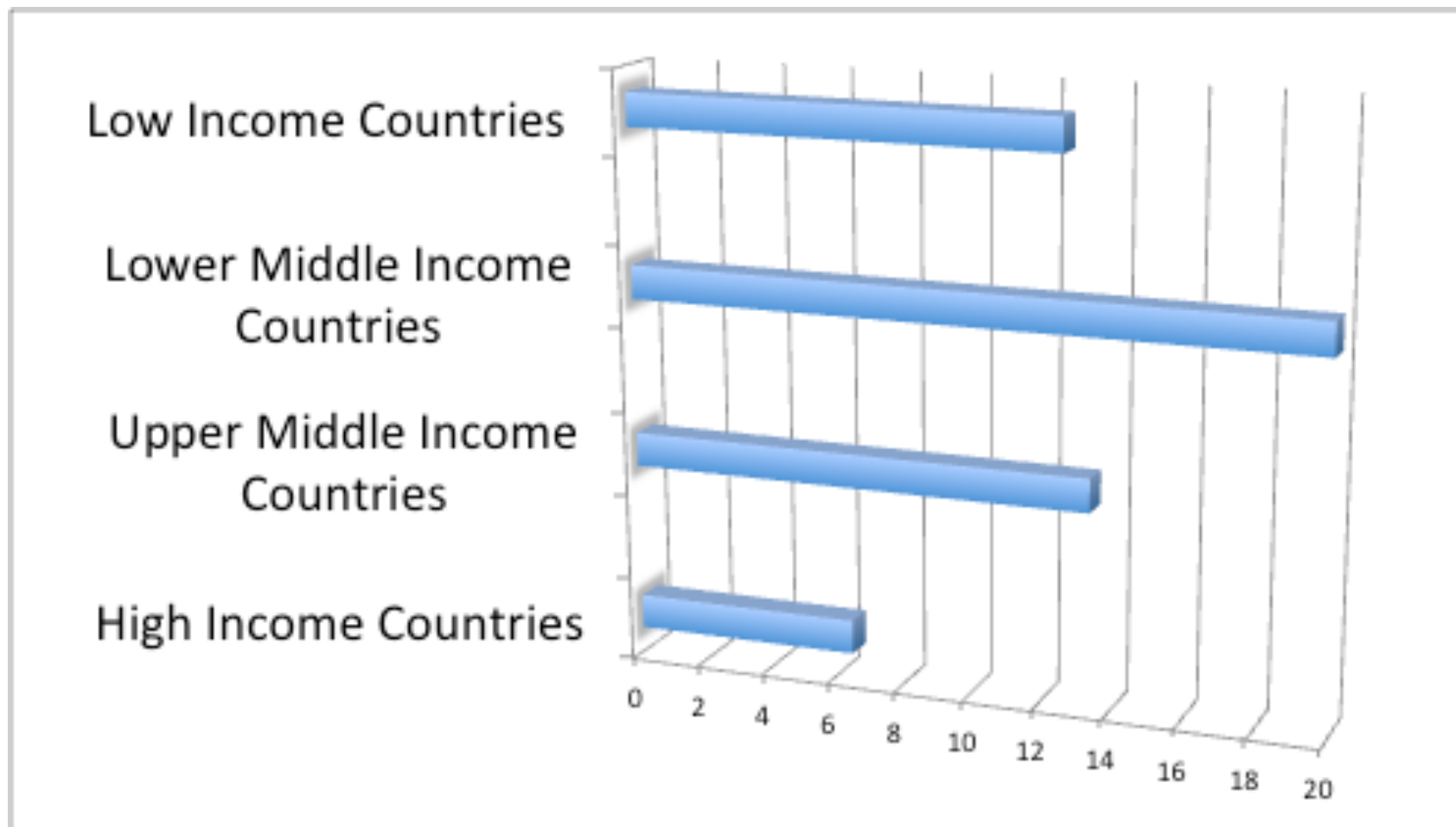


## Part 3: Implications for Data Collection and Monitoring Economic and Social Justice

# Implications

- Using a CA-based measure seems particularly appropriate for monitoring
  - the Convention on the Rights of Persons with Disabilities; and
  - the Post-2015 Development Agenda.
- But data is missing for this measure, especially in low- and middle-income countries (LMICs).

# Yet, we know that....



- Growing evidence about the association of disability and poverty, especially when poverty is measured multidimensionally (Trani and Cuning 2013; Mitra et al 2013).



There is a need for a two-layer disability data system.

- Layer #1: Global disability data
- Layer #2: Disability-specific data on disabilities, wellbeing, and factors that influence both (barriers and facilitators).

- Global institutions such as the World Bank and donors that fund international data collection efforts such as USAID can play a key role in developing and encouraging this disability data collection system.
- To some extent, this system already started when the U.N. Washington Group on Disability Statistics was formed. It needs to continue in order to deliver global and country-specific data.
- Without a global two-layer disability data system, injustices will continue, largely invisible and uncontested.

## Citation:

- Mitra, Sophie (Forthcoming) Measuring Disability and Wellbeing using the Capability Approach, in Stein, M.A. and Langford, M. (eds) *Disability Social Rights*, Cambridge University Press.

Thank you!

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