

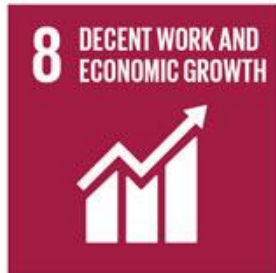
Can A Seed End Poverty?

Dr. Jacqueline Hughes
Deputy Director General
International Rice Research Institute





SUSTAINABLE DEVELOPMENT GOALS



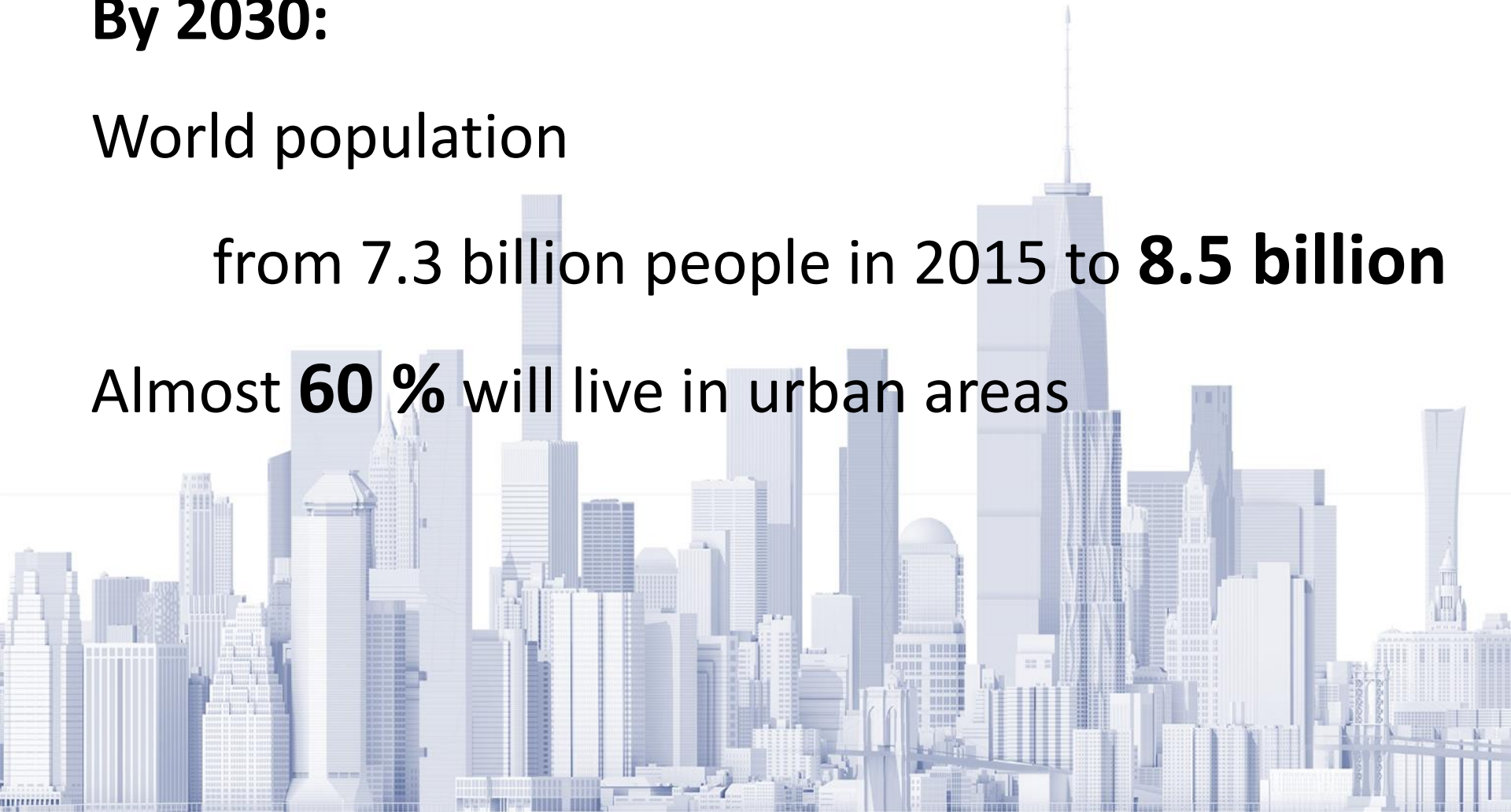
How Do You Feed an Urbanizing World?

By 2030:

World population

from 7.3 billion people in 2015 to **8.5 billion**

Almost **60 %** will live in urban areas



How Do You Feed an Urbanizing World?

By 2030:

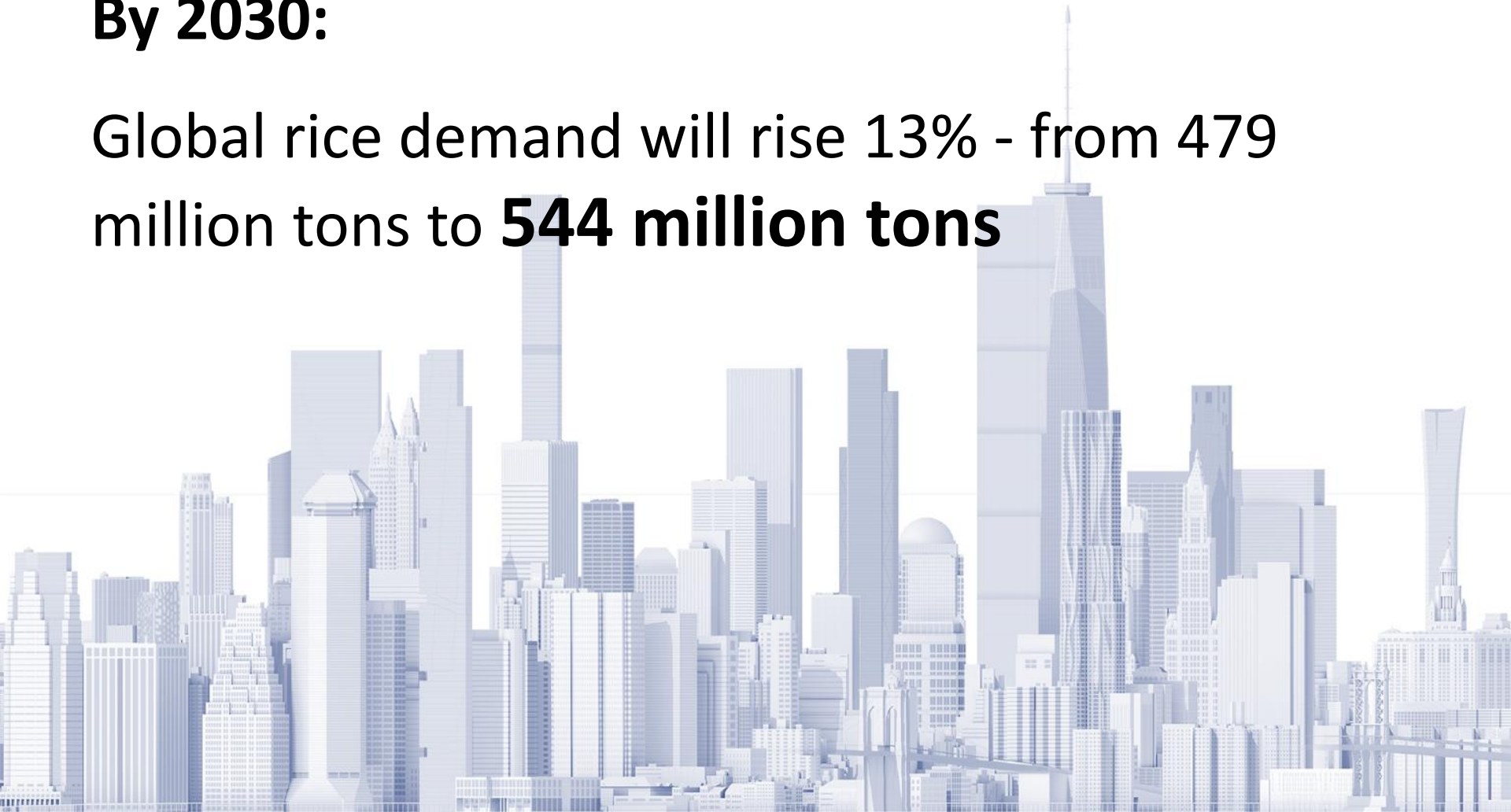
5 out of the **7** fastest growing countries will be in Asia



How Do You Feed an Urbanizing World?

By 2030:

Global rice demand will rise 13% - from 479 million tons to **544 million tons**



How Do You Feed an Urbanizing World?

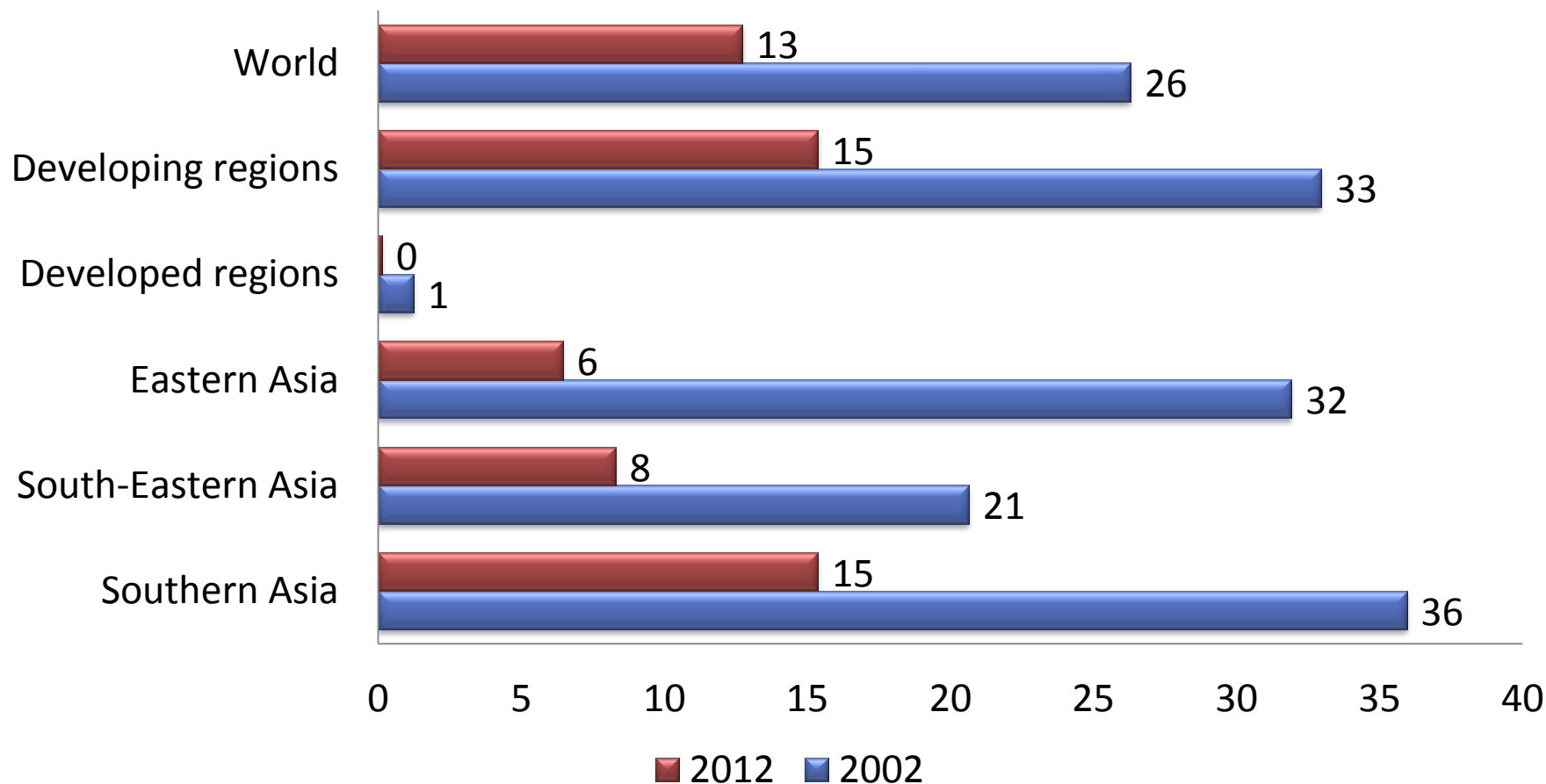
By 2030:

Asia will account for **68%** of the total increase –
despite a diversifying palate



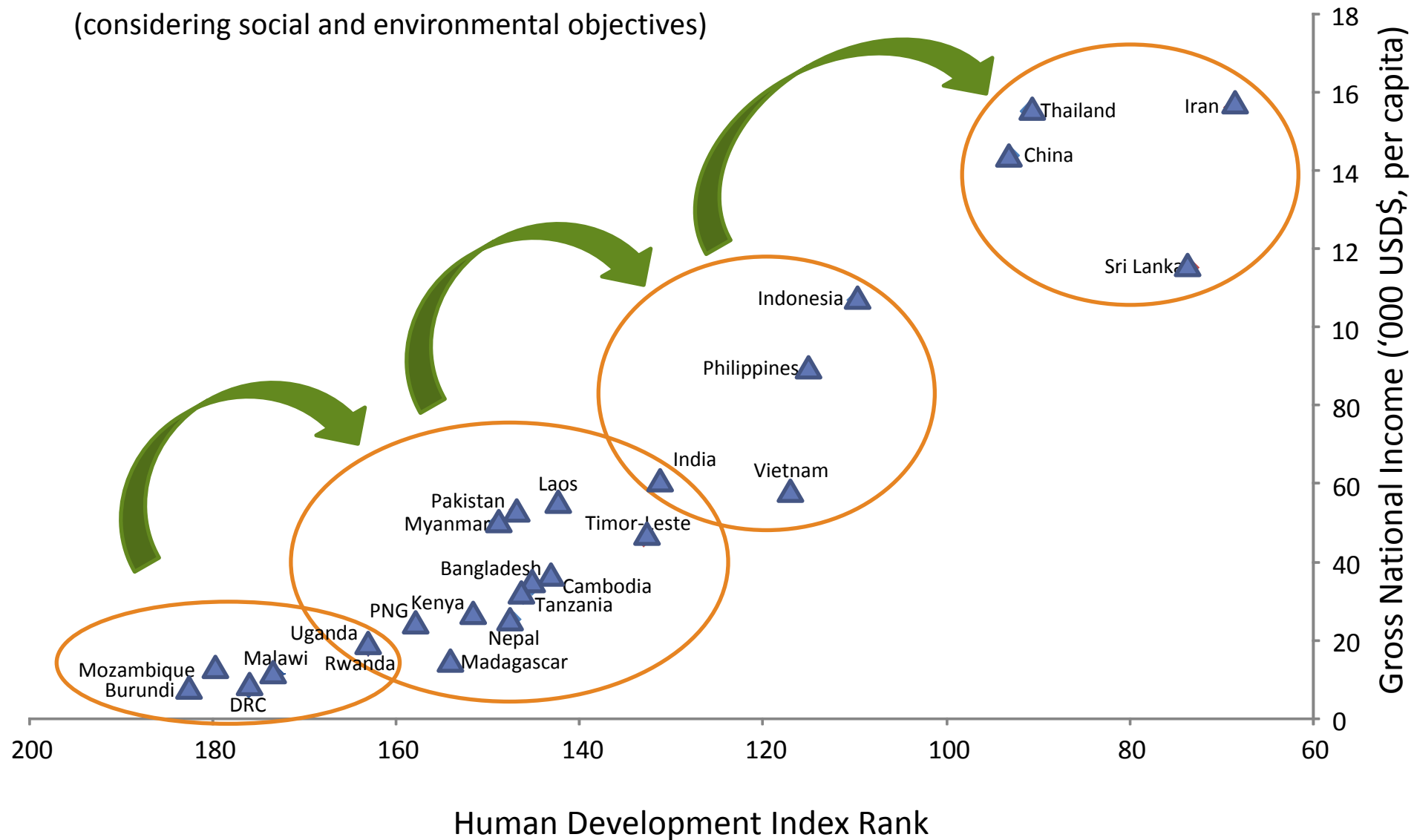
...including its poorest members?

**Proportion of population living below \$1.90 US dollars a day
2002 and 2012 (percentage)**



The Development Ladder

(considering social and environmental objectives)



The Challenge Continues



836 million people still live in extreme poverty

About **one in five persons** in developing regions lives on less than \$1.25 per day

The Challenge Continues

One in four children under the age of five in the world has inadequate height for his or her age

Drivers of Change

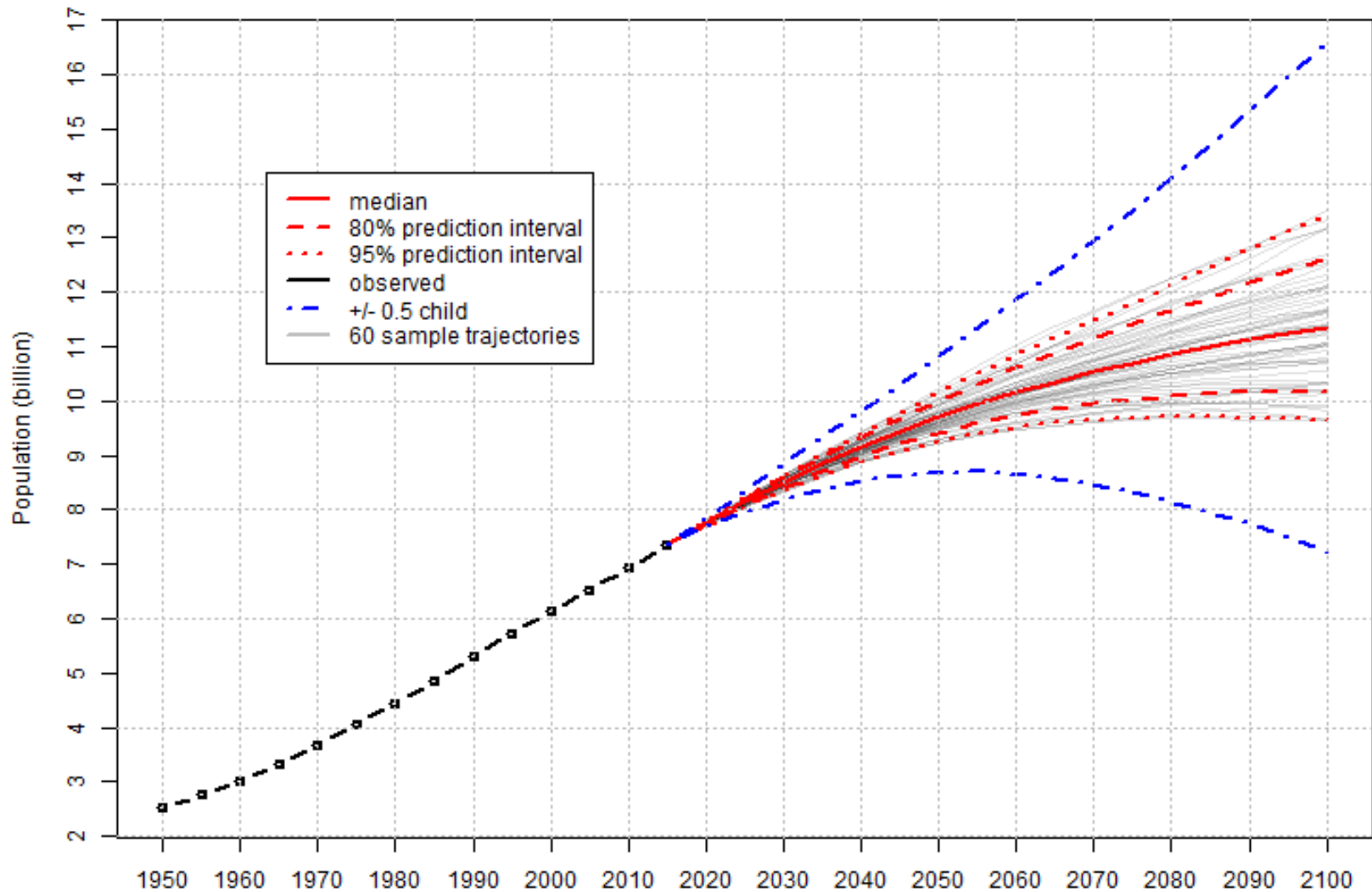
**Population
Growth**

Urbanization



Rising Global Population

WORLD: Total Population

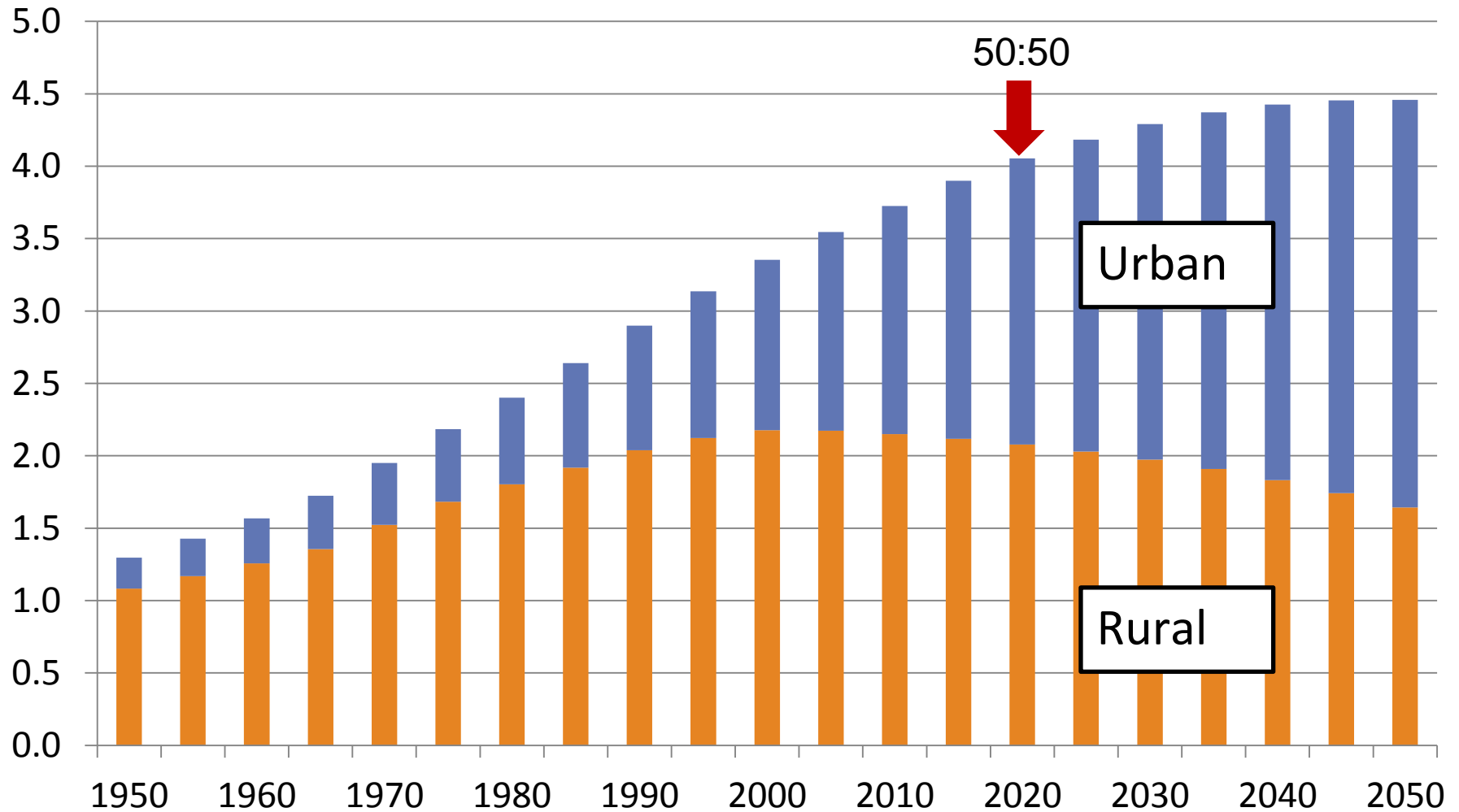


Source: United Nations, Department of Economic and Social Affairs, Population Division (2015).
World Population Prospects: The 2015 Revision. <http://esa.un.org/unpd/wpp/>

Increasing Urbanization

Urbanization in Asia

Population (billion)



Drivers of Change

**Population
Growth**

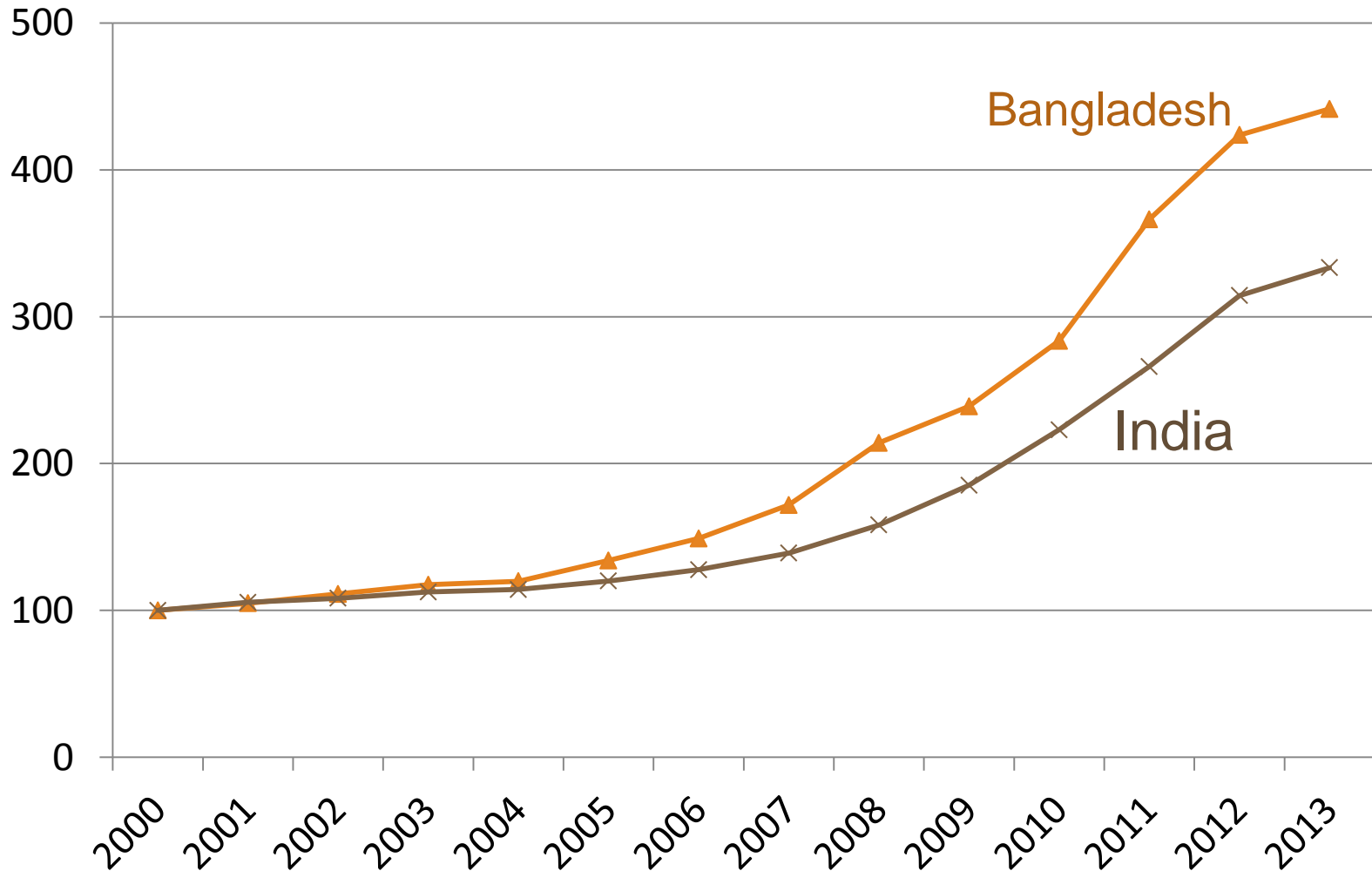
Urbanization

**Cost and
Availability
of Inputs**



Rising Cost of Labour

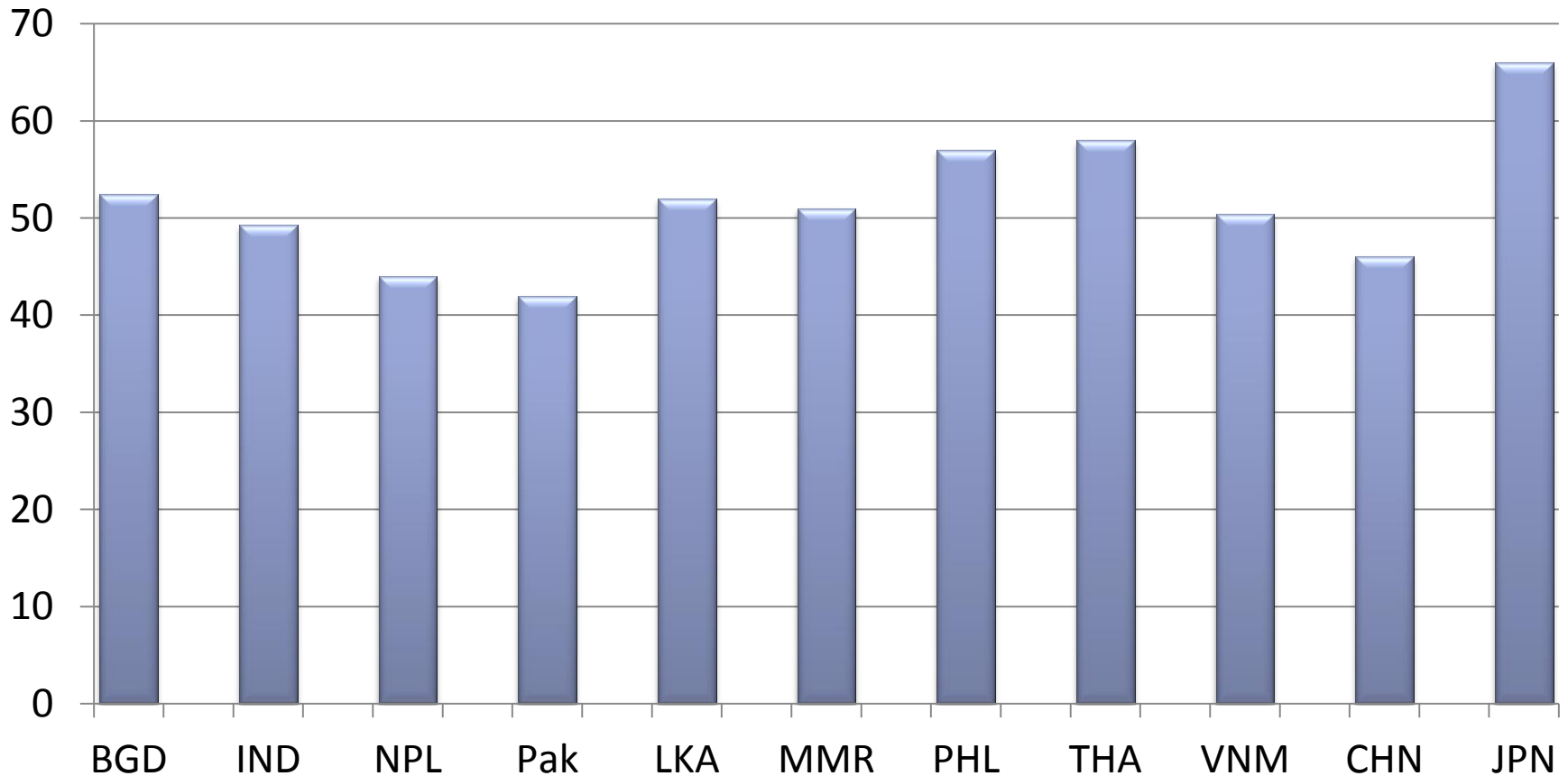
Wage rates for agricultural labour (male), South Asia



Wage rate index (2000 =100)

Ageing Farmers

Age of farm household head (years)



Drivers of Change

**Population
Growth**

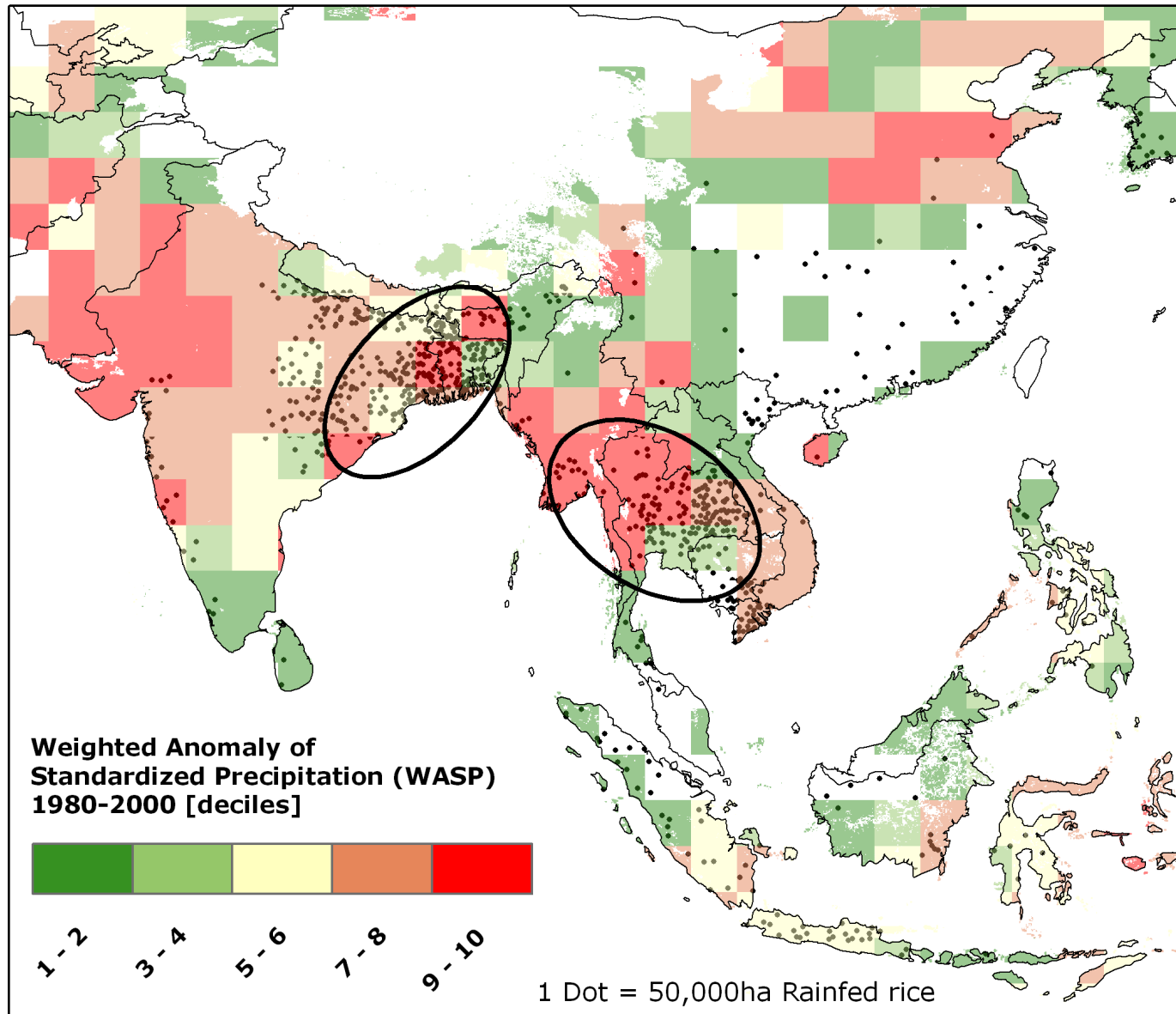
Urbanization

**Cost and
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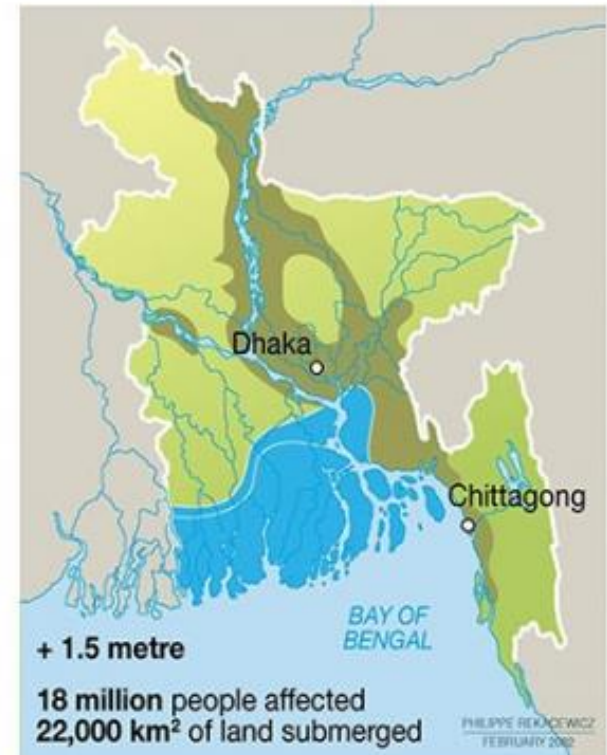
**Climate
Change**



Variation in rainfall = Risk of drought



Potential effect of rising sea levels



Sources: Dacca University; Intergovernmental Panel on Climate Change (IPCC).

Climate Change Ready Varieties



Drought



Flooding



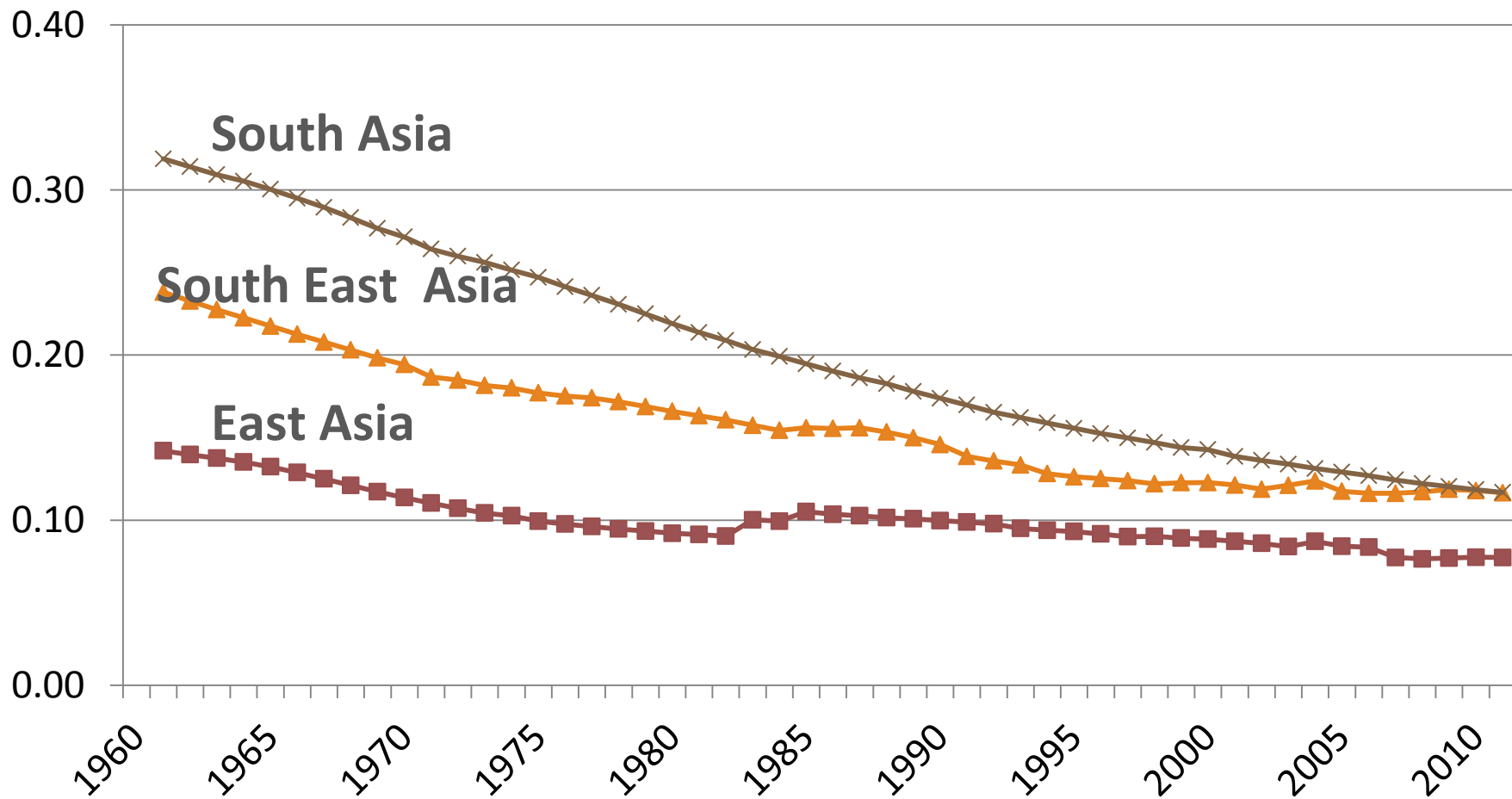
Salinity



Heat

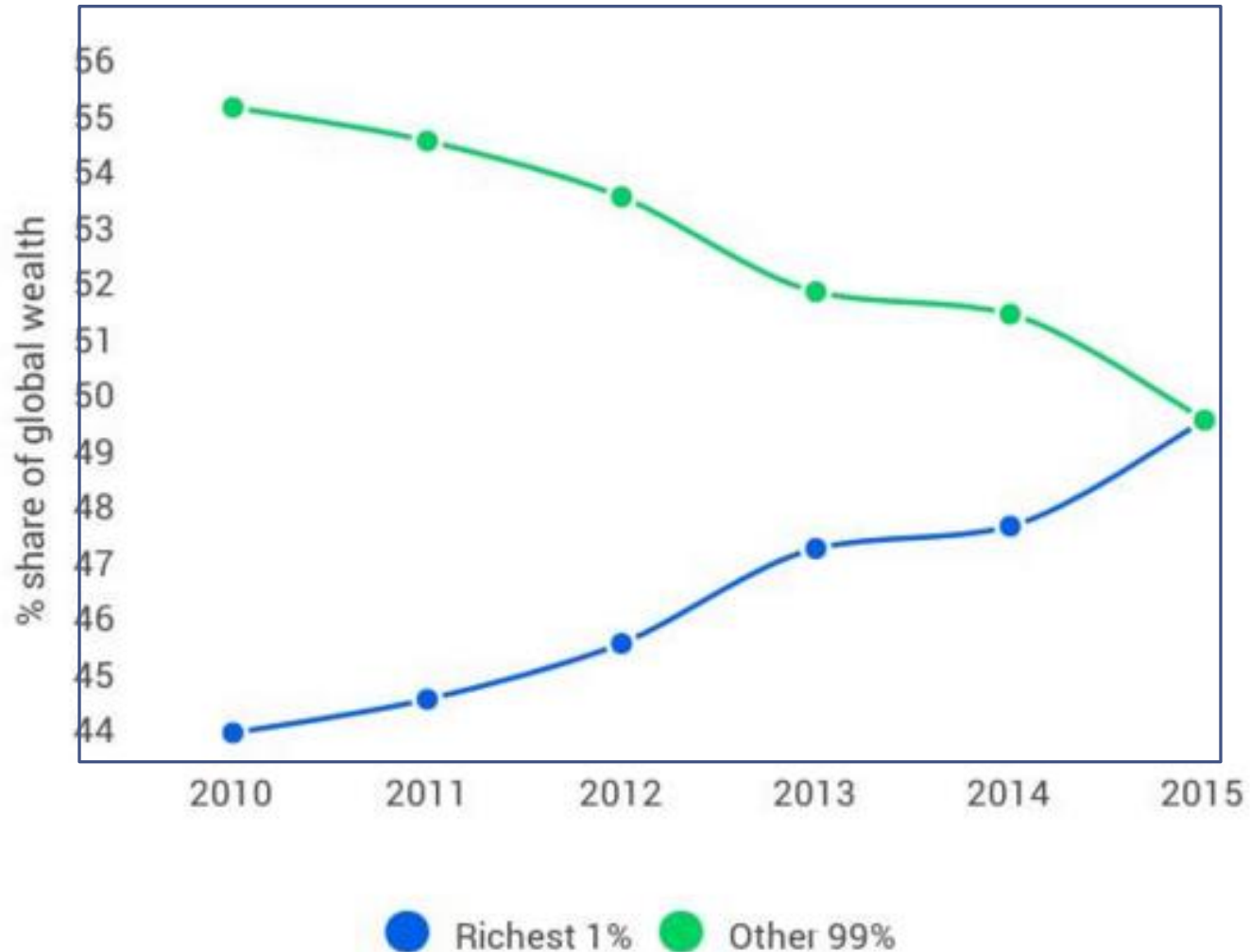
Diminishing Arable Land

Per capita arable land (ha/person)

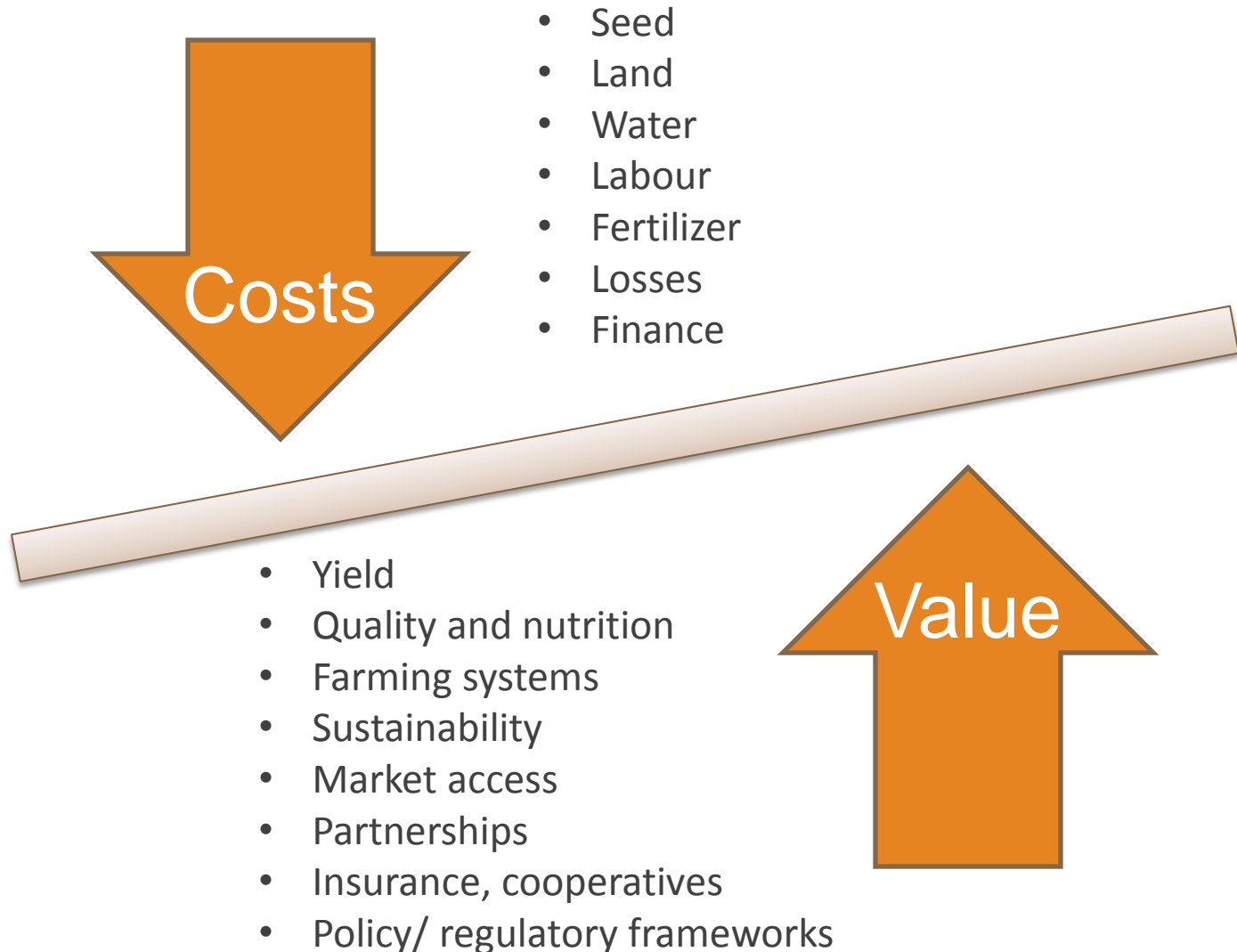


Economic Inequality

Concentration of Wealth



Improving Livelihoods



Success Factors



Adequate natural inputs

Sectoral cooperation

Good governance

Regulatory framework

Nimble value chains

Innovation and research

Partnerships



it's all about the people