



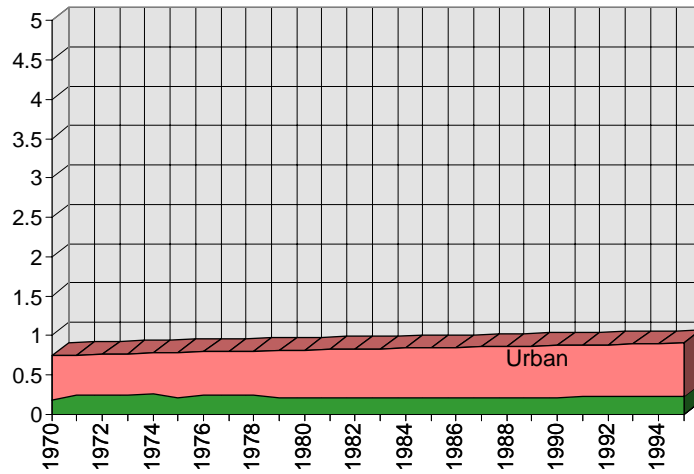
The Dilemma of Development

OLLI VARIS
Helsinki University of Technology
Finland

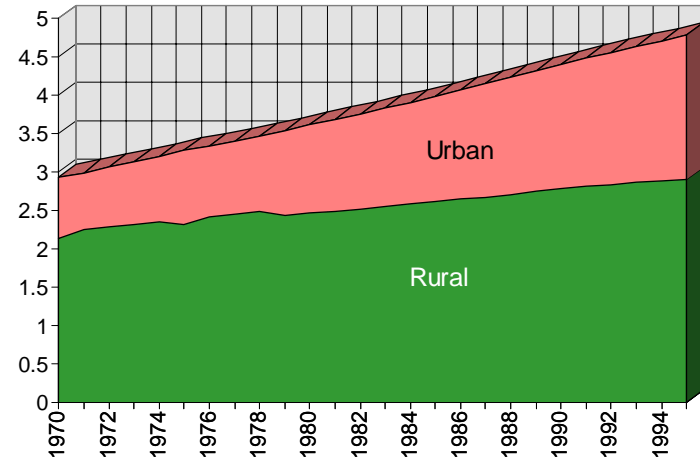
STATE OF THE WORLD AND DEVELOPMENT
October 11, 2006, Espoo

Disparity

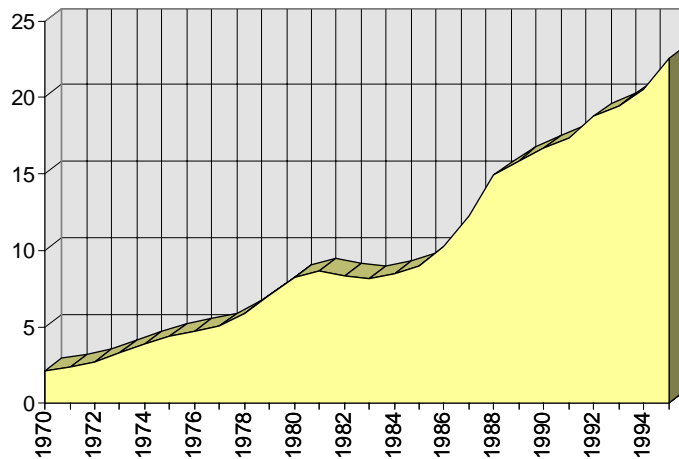
Population, high-income countries



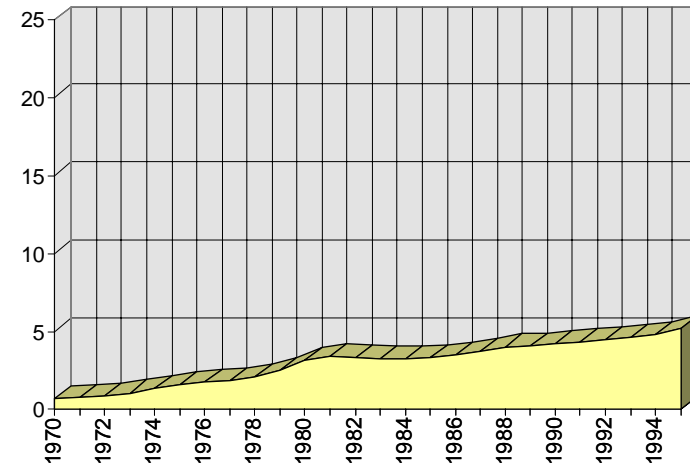
Population, middle and low-income countries



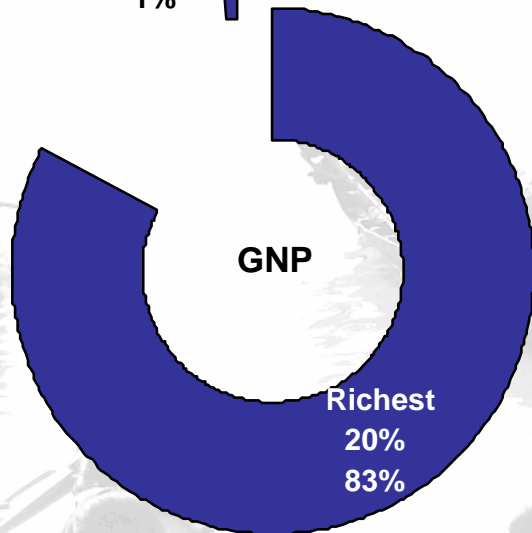
GNP, high-income countries



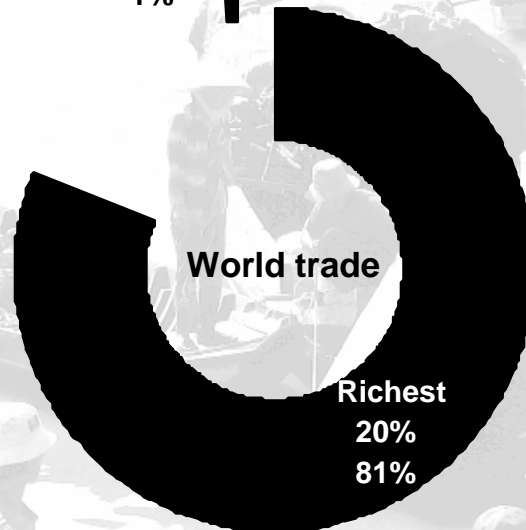
GNP, middle and low-income countries



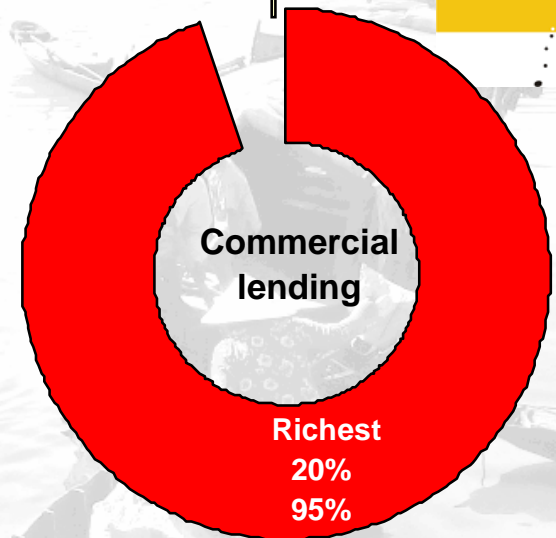
Poorest
20%
1%



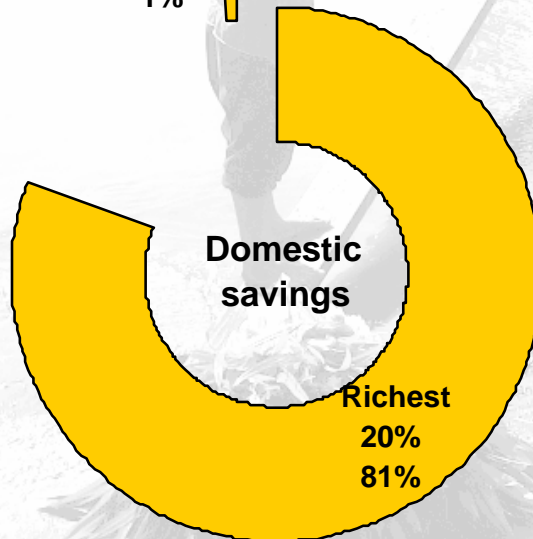
Poorest
20%
1%



Poorest
20%
0.2%



Poorest
20%
1%



Poorest
20%
1%





CONTENTS

1. What is development?
2. Dilemma of development: Mekong Case
3. Discussion



Part I: What is Development?

A review of development theories

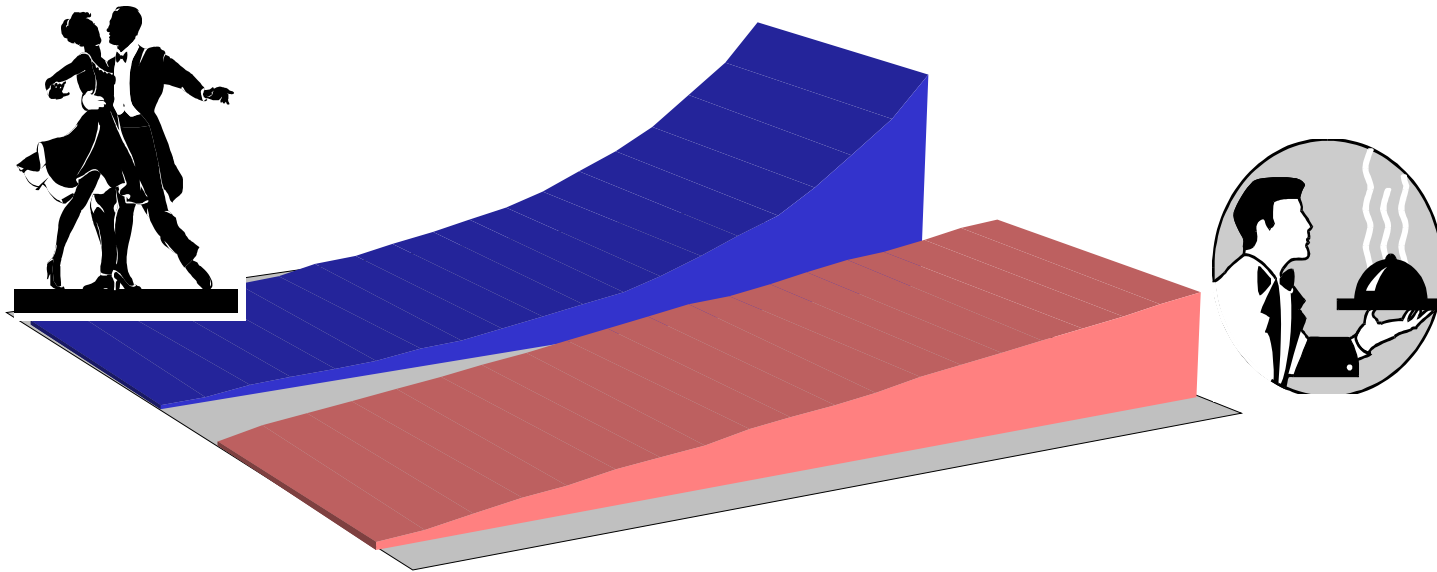
- Adam Smith: The Classical Economy
- Malthus
- Keynes
- Rostow
- Vicious circles
- Structuralist & world-systems theory
- Basic needs
- Institutionalism
- Neo-classical economy
- Human development



Classical economy

- *The classical economy* (Adam Smith 1723-1790):
 - The only real measure of value is labor, and the division of labor makes the production more efficient.
 - In contrast to *mercantilism*, which offered protectionism, markets should be allowed to function freely.
- The government should provide the legal framework: *law and order*.
 - Other interventions should be minimal. Only government investments to infrastructure such as canals and roads were advocated.

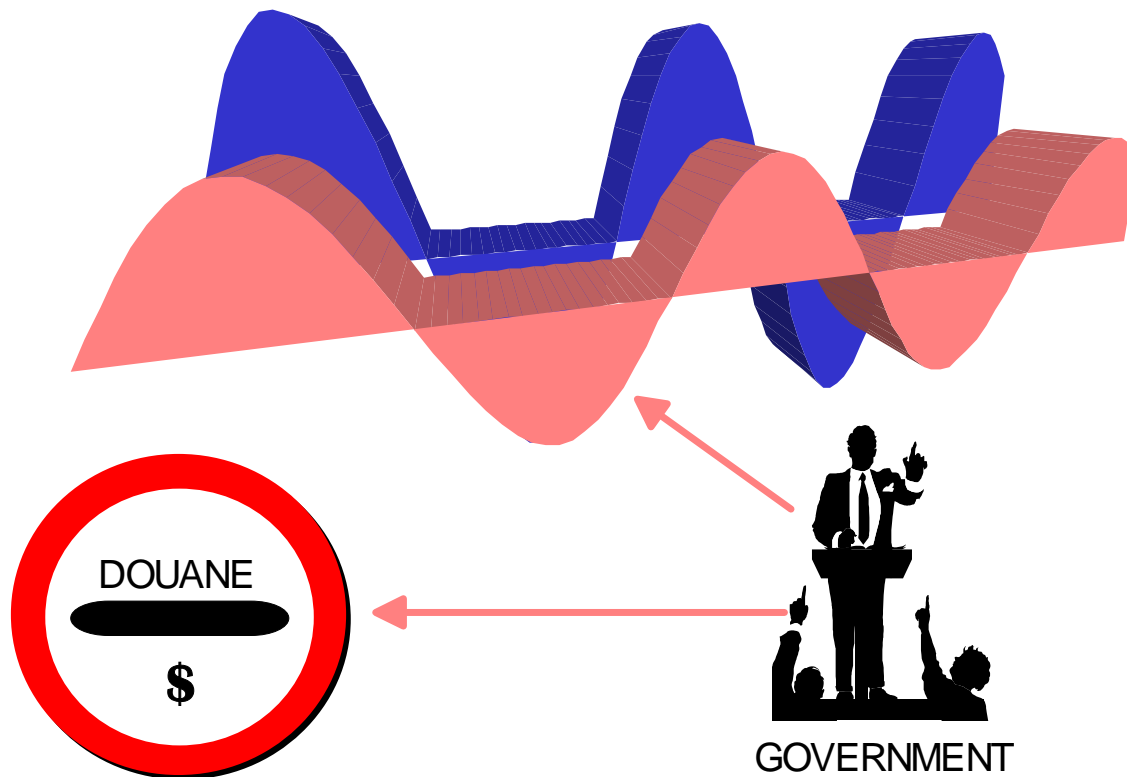
Malthusianism



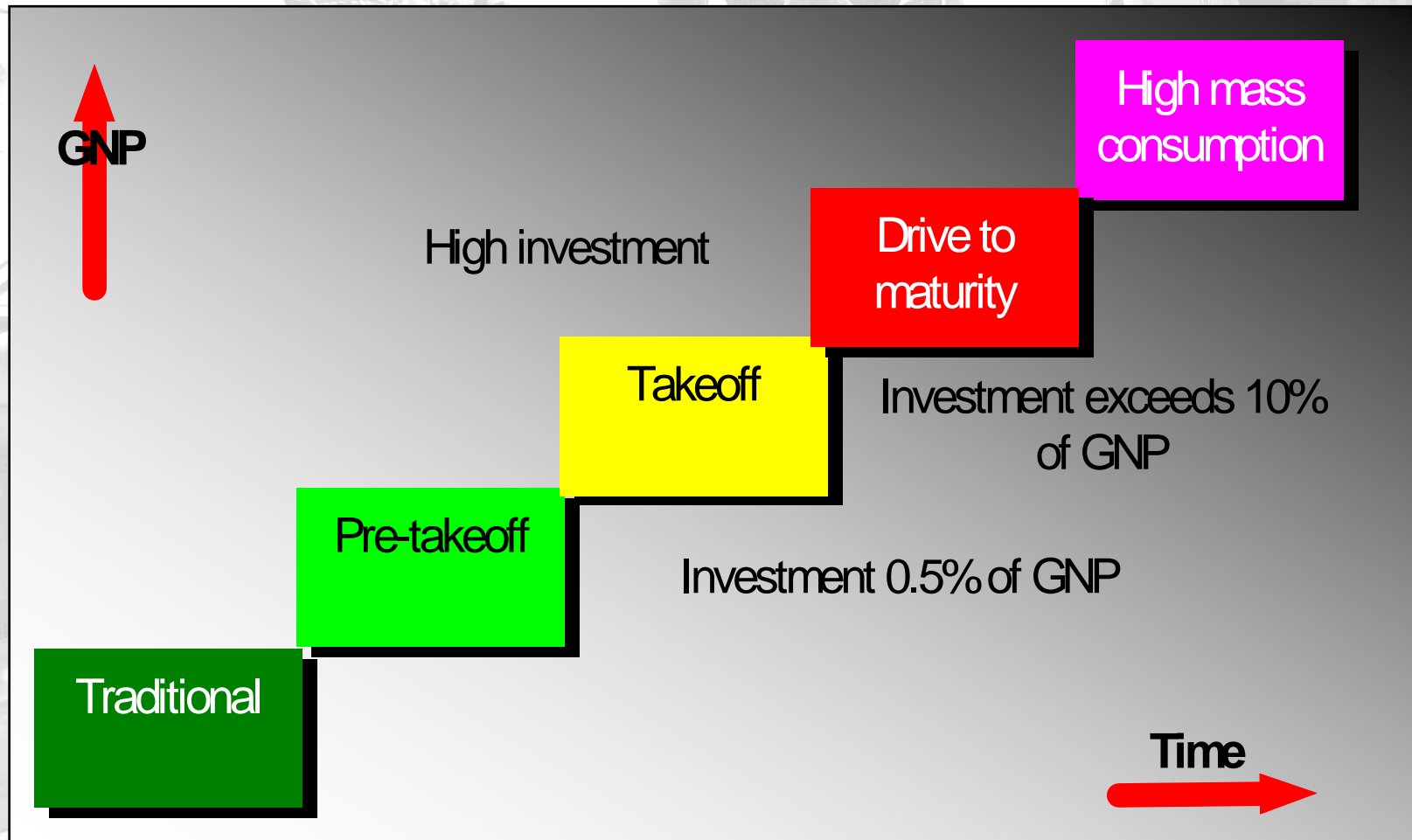
Population growth is geometric, whereas the growth in food production is arithmetic

Keynesianism

The government has a strong role in controlling credit and currency, and it also stabilizes business cycles with public savings and investments

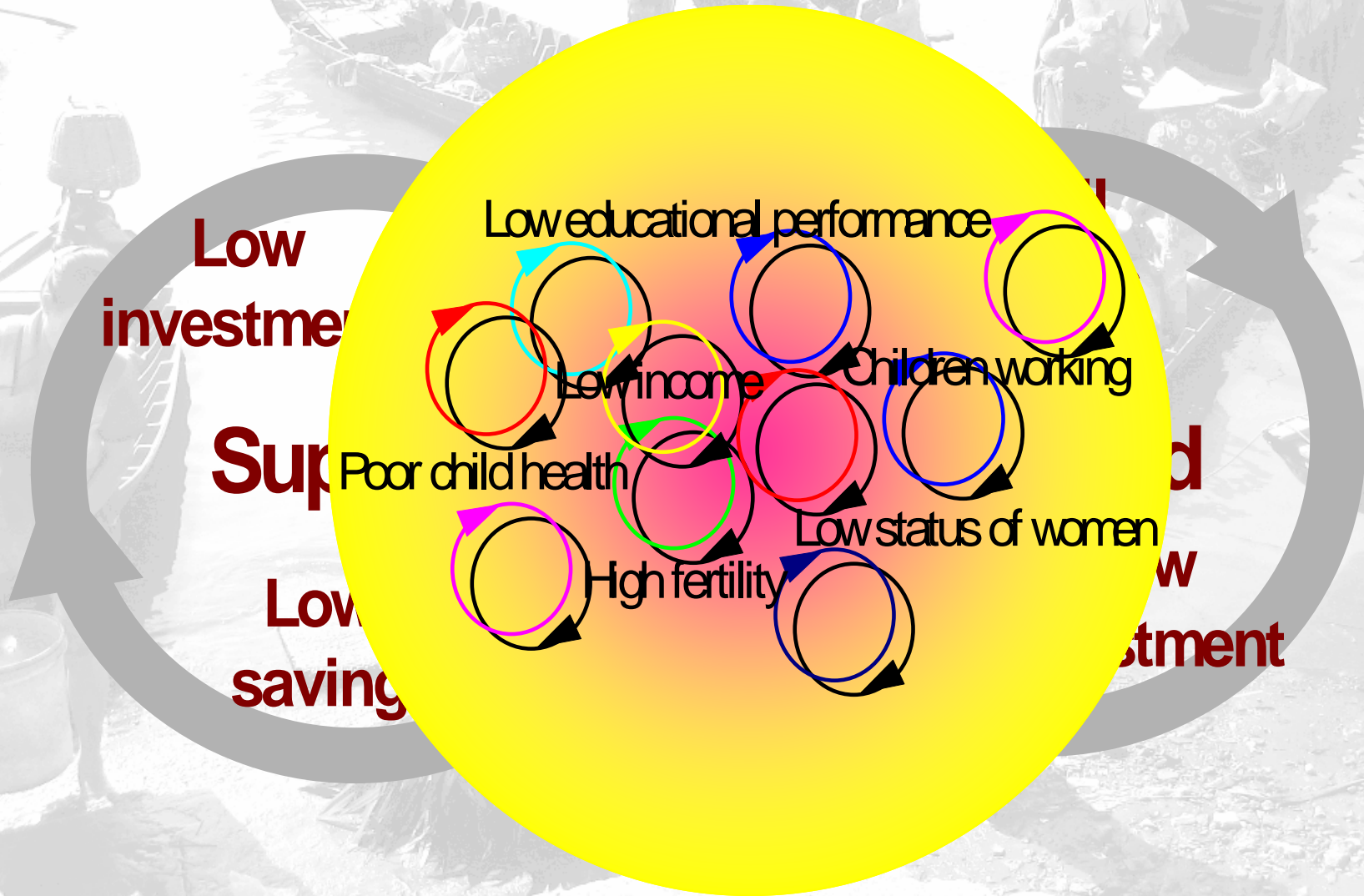


Rostow's stages of growth





Vicious circles theory



Neo-classical approach

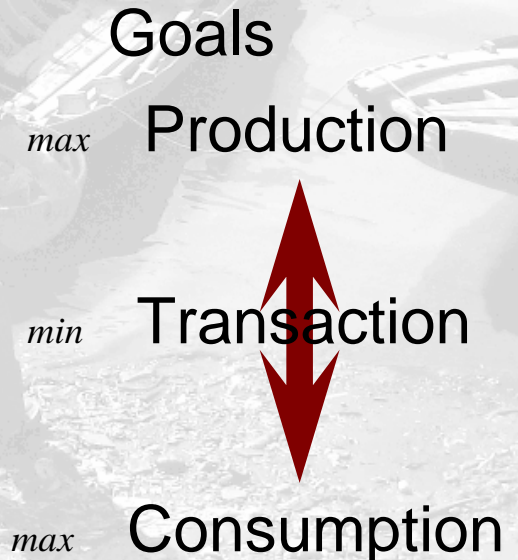
"The Washington Consensus" by World Bank & International Monetary Fund

- Remove price controls
- Fiscal discipline
- Prioritize gov't expenditure in infrastructure & human development
- Implement tax reforms
- Financial liberalization
- Remove foreign exchange controls
- Promote foreign investments
- Privatize public enterprises
- Deregulate economy
- Protect property rights

New institutional approach

- Institutions (legislative, juridical, executive, administrative, informal [behavioral norms, culture, religion...])
- Social interests (their structure, character)

Game: the society
Rules: Institutions
Players: organizations and institutions



Definitions: Informal and formal institutions



⊕ Douglass C. North:

What is the glue that keeps
societies from falling apart?

Institutions!

Examples: Informal and formal institutions



Formal

Government setup

NGOs

User organizations

Donor agencies

Legislation

Professional/technical “licensed”
knowledge

Informal (including social interests)

“Good” habits and manners

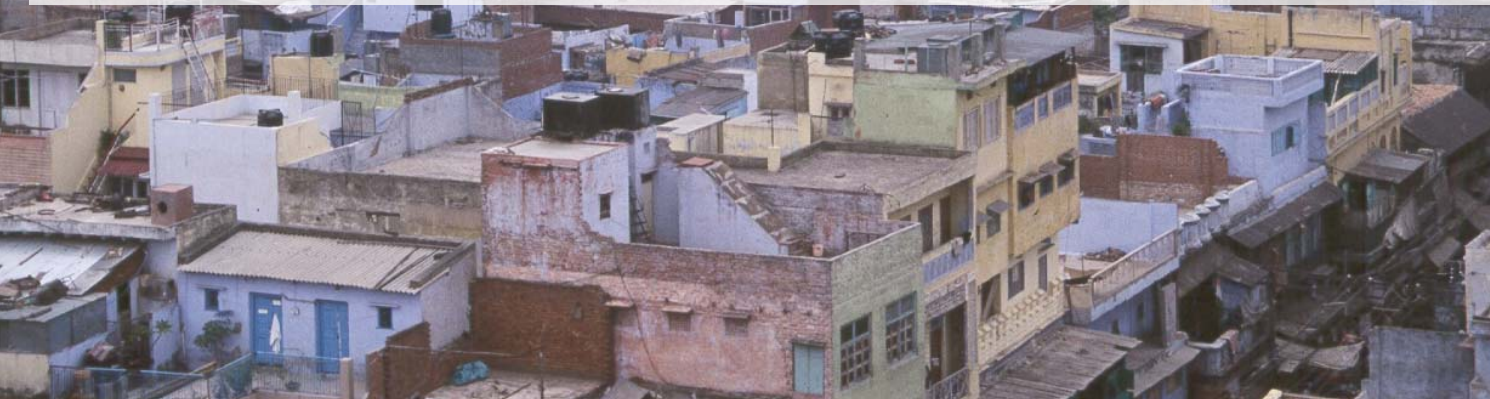
Traditions

Culture, kinship

Religions

Indigenous knowledge

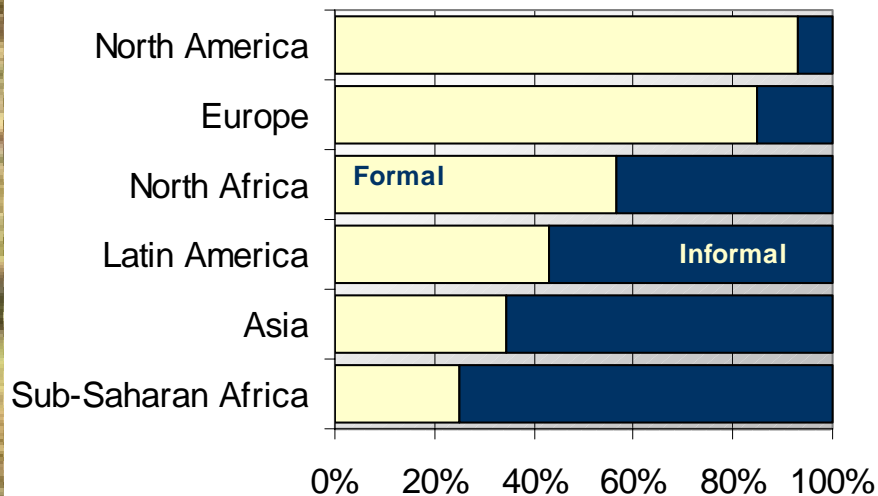
Attitudes, values (voluntarity, goodwill, responsibility,
commitment, trust, ...)



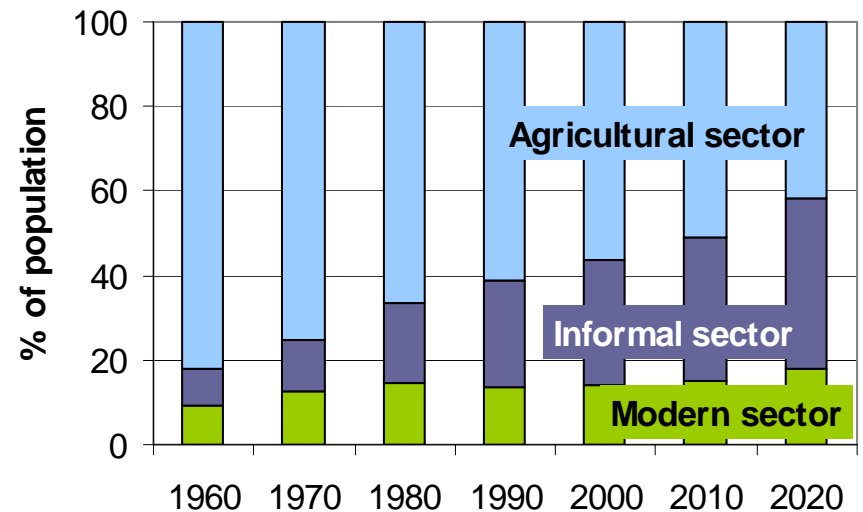
Extent of informal sector: By continent and in West Africa



Formal and informal sectors
(percentage of employed)



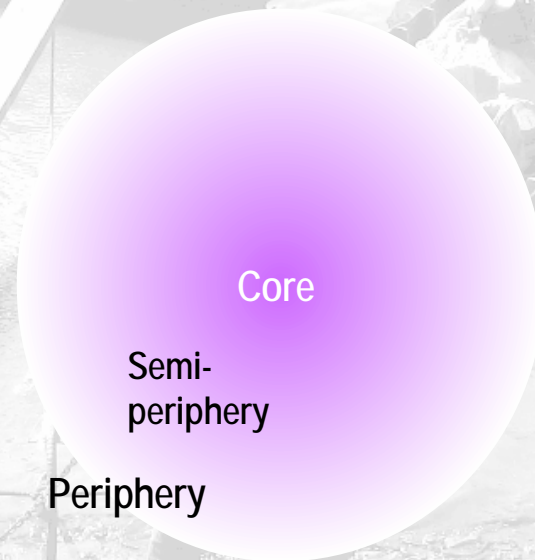
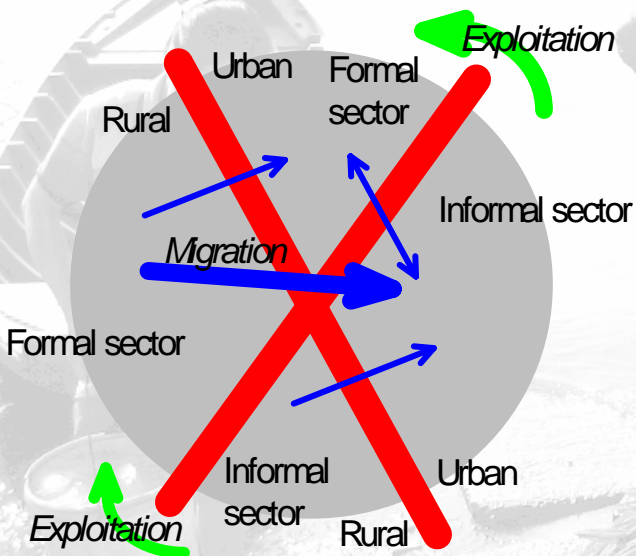
West Africa: The traditional, informal and modern sectors



⊕ Source: Charmes J 1998 (World Bank)

⊕ Source: Snrech S 1998 (OECD)

Structuralist & world systems theory



Examples of cores:

- *A megacity*
- *A special economic zone*
- *A rich country*
- *A rich region*

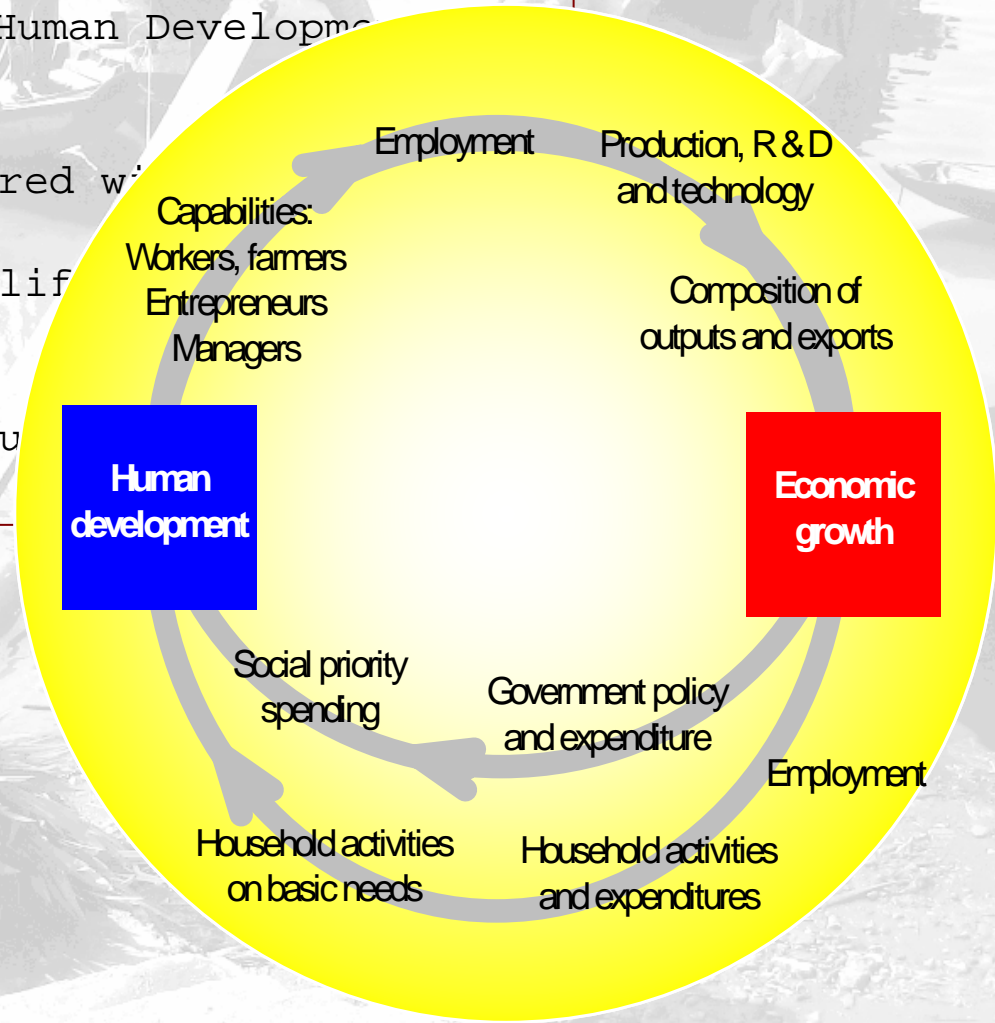
UNDP : Human Development

The most used quantification for human development by UNDP is the Human Development Index (HDI). It combines

⊕ **standard of living**, measured with GDP per capita

⊕ **longevity**, measured with life expectancy at birth

⊕ **education**, measured as adult literacy and gross school enrolment.



Regions

Water resources
vulnerability &
scarcity

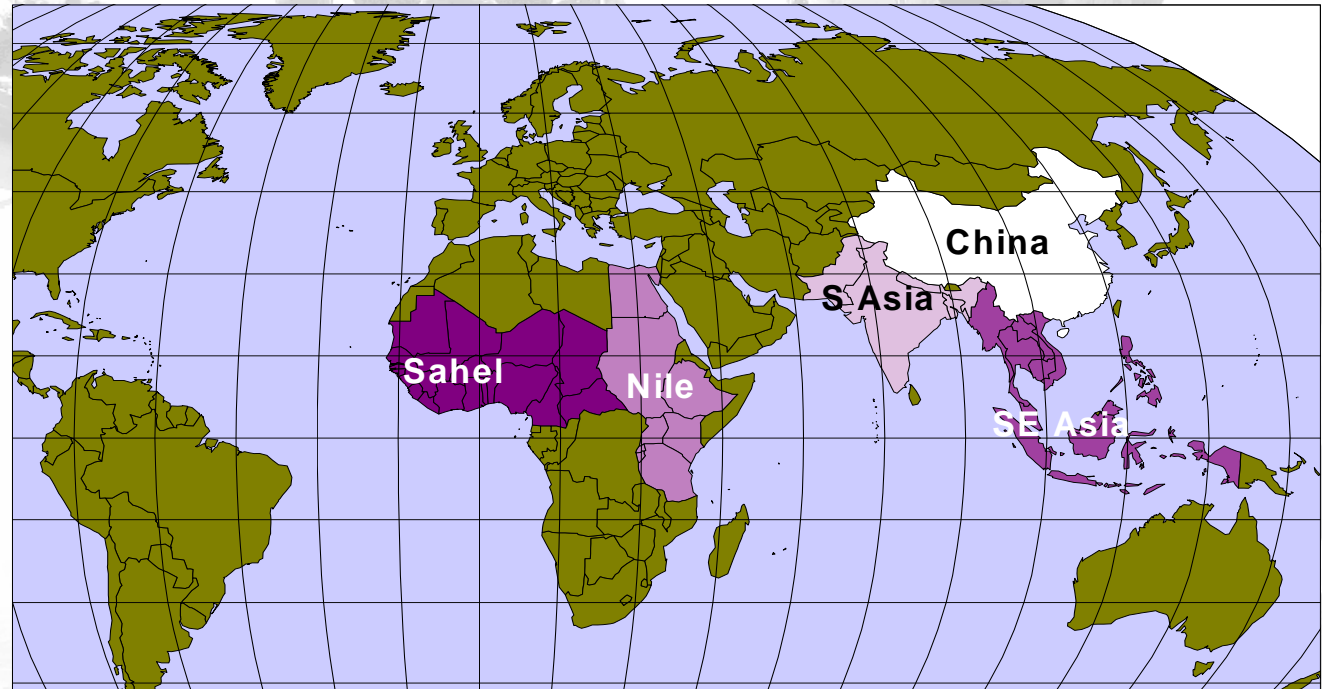
Populated in global
scale

Population growth
rapid

Urbanization and
megacity growth
extensive

Low/middle income
dominance

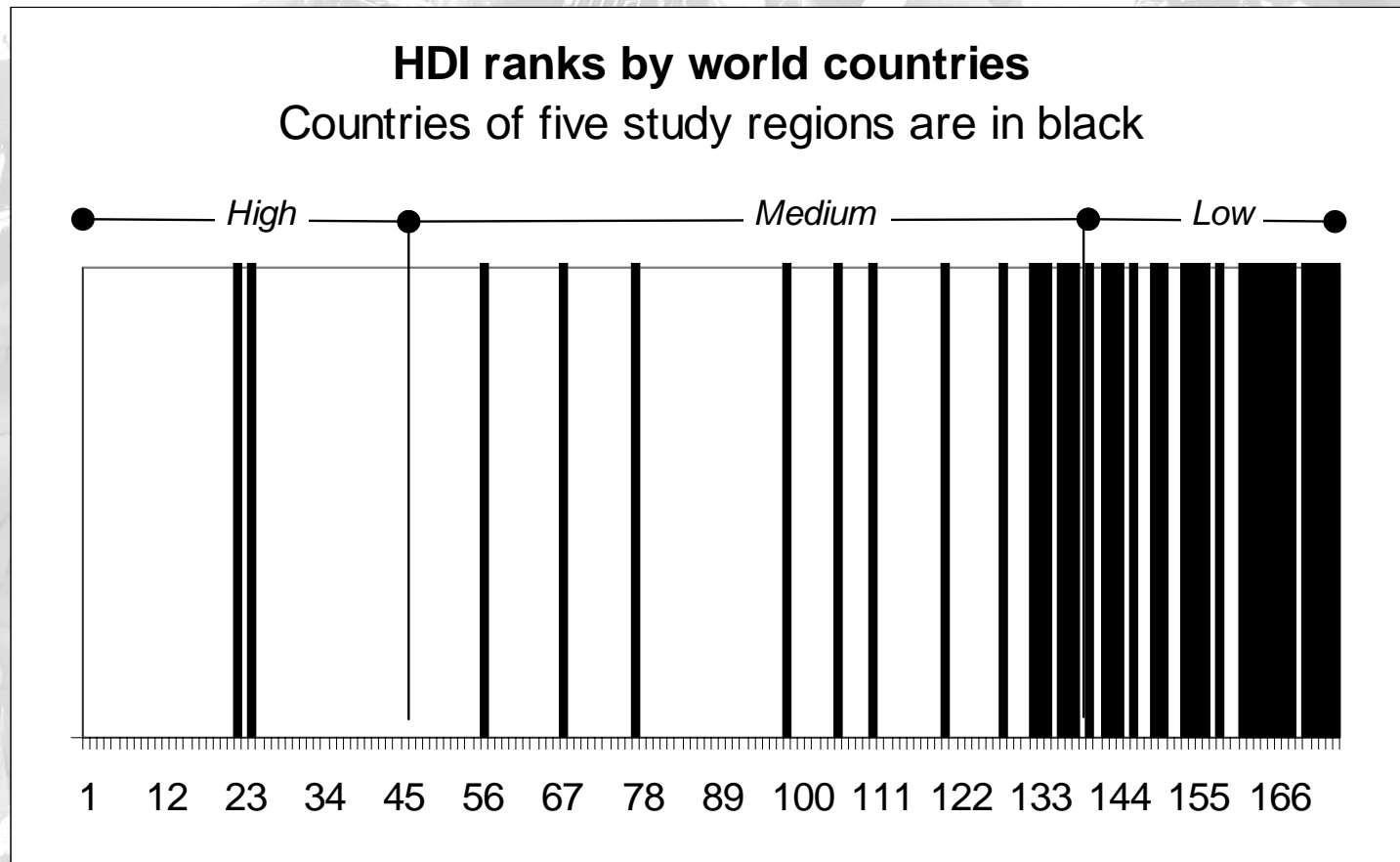
Undernourishment/
grain net importers



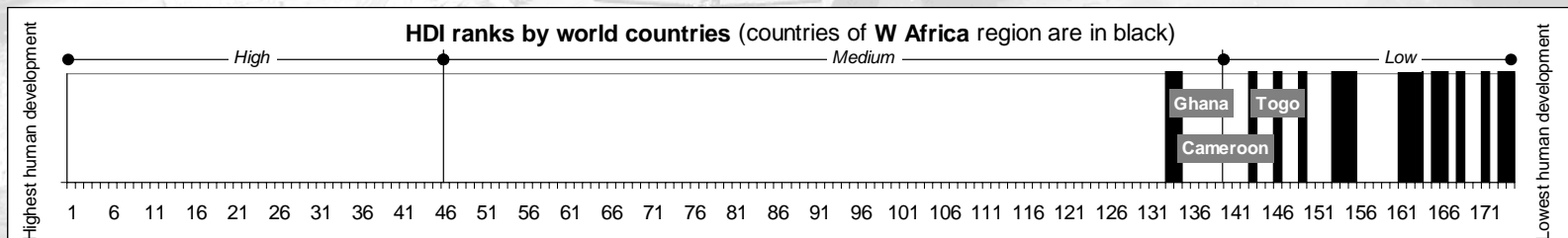
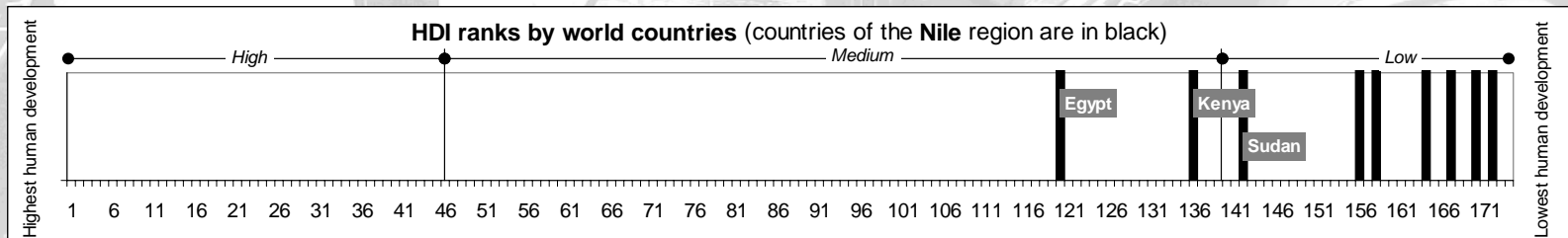
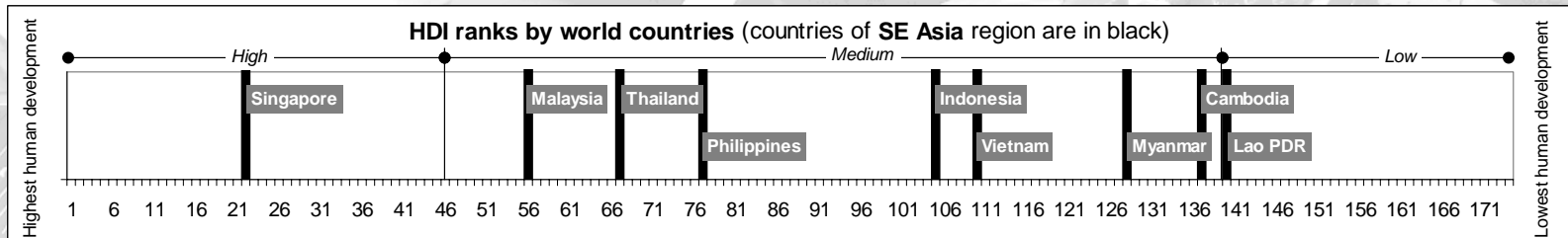
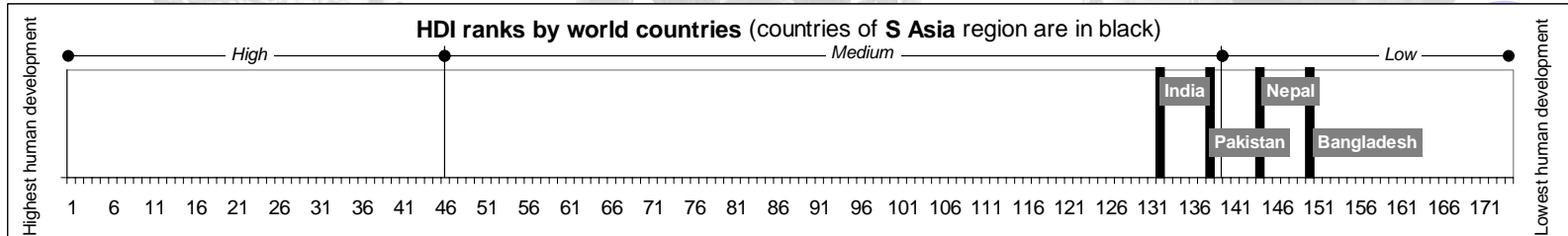
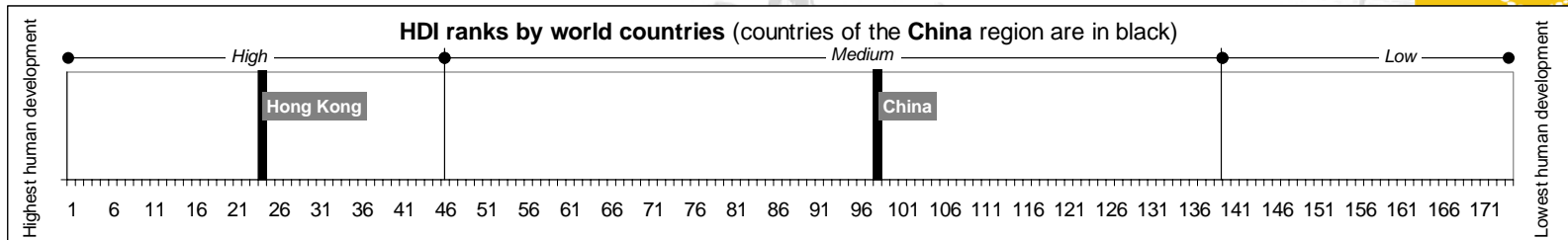
Proportion of global: population 59%; rural
population 80%; urbanization 60%; GNP 7%;
arable land 34%; cereal production 48%;
irrigation 57%; fertilizer use 45%

Human development

Ranking of study countries

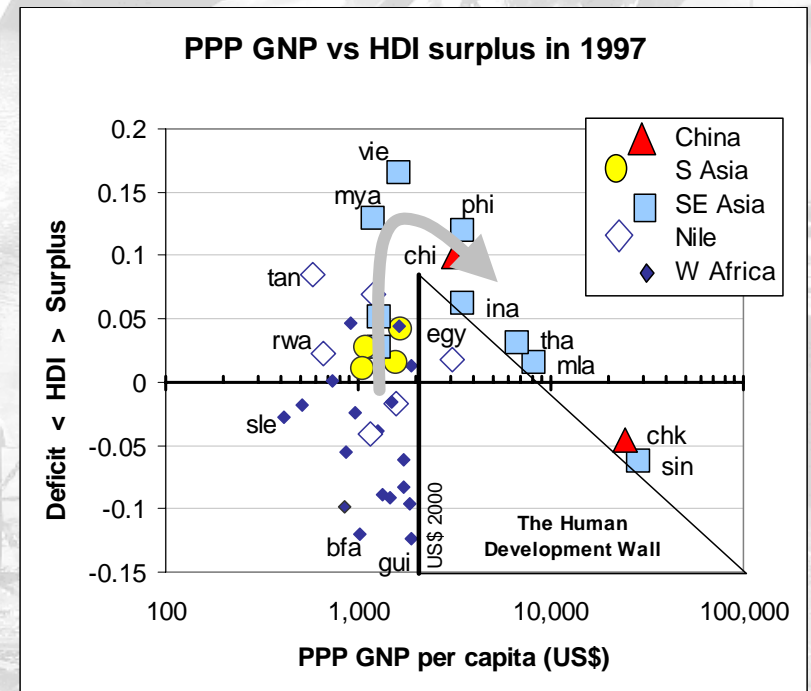
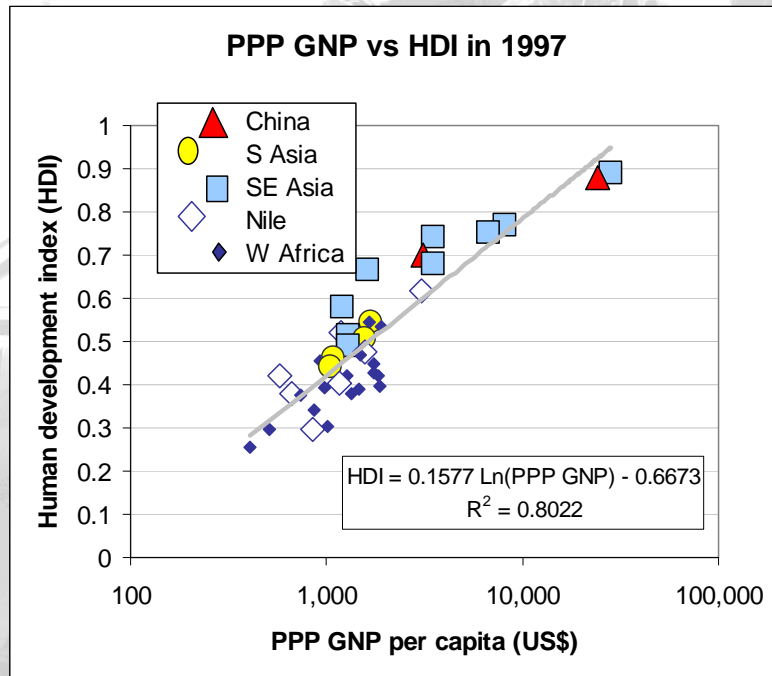


Human development Ranking of study countries



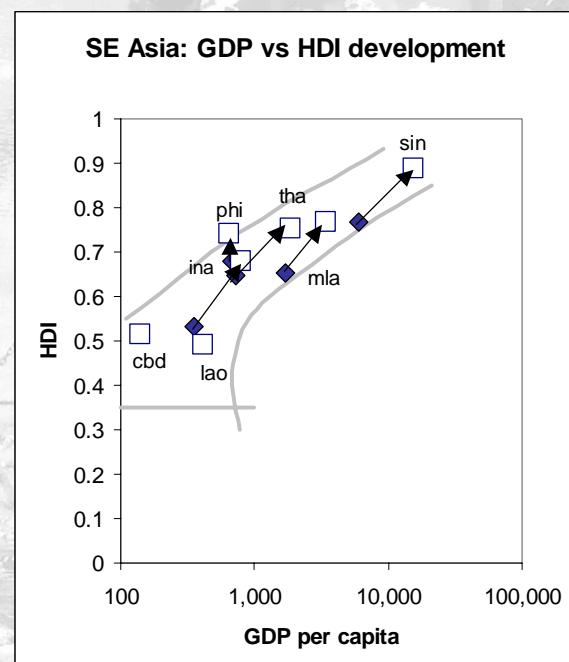
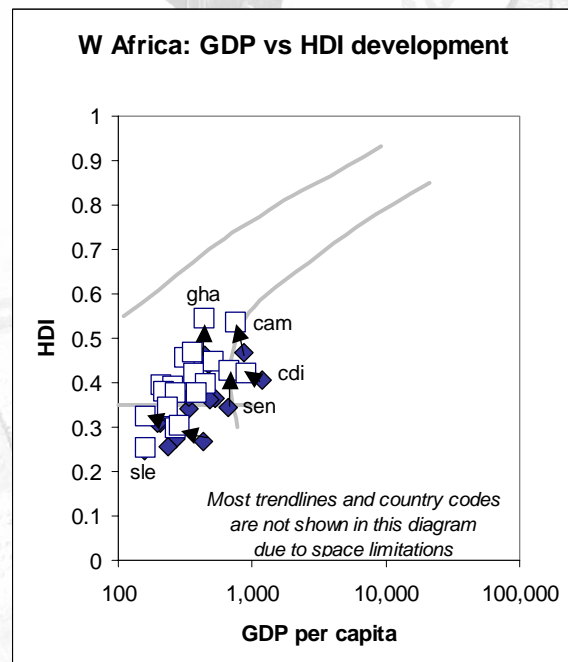
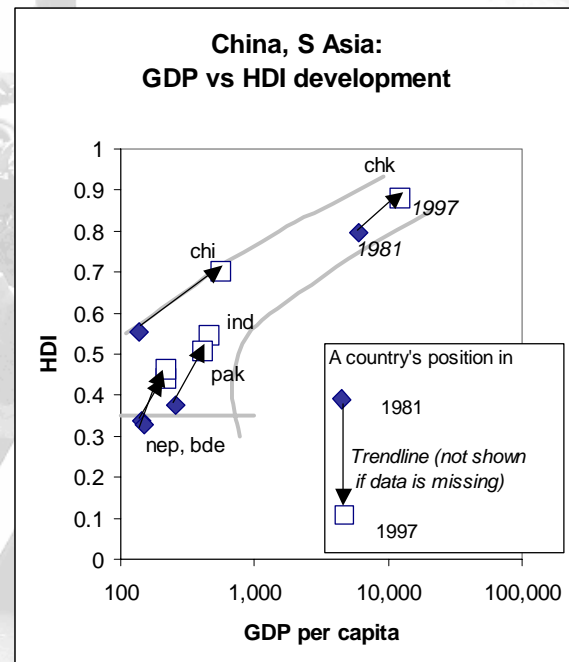
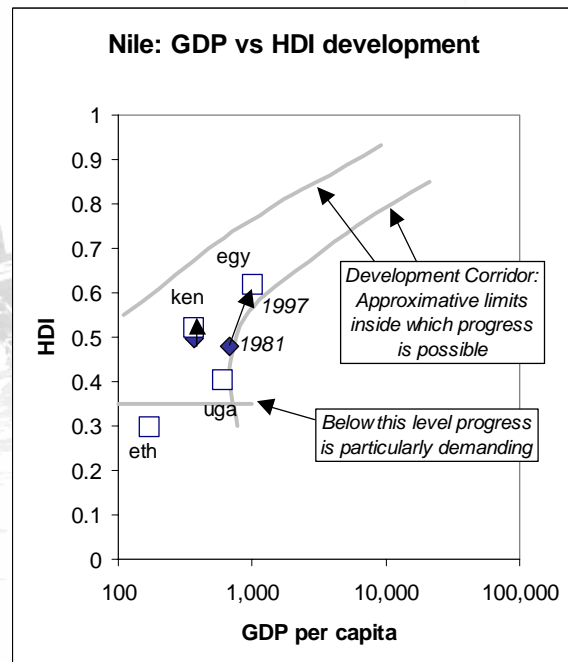
Human development

Passing the HD wall

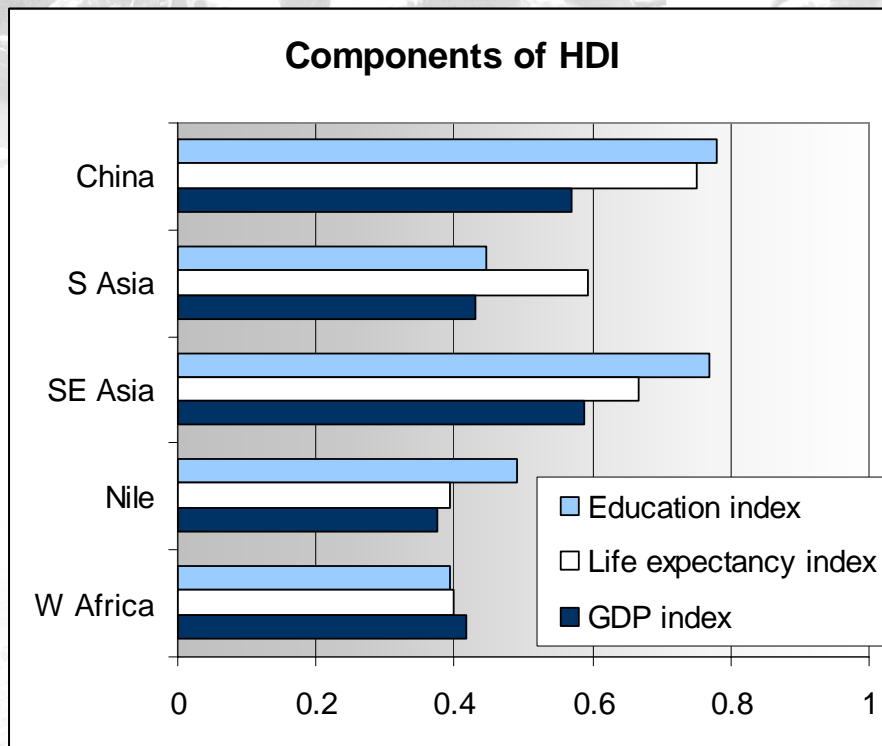


Human development

The HD Corridor

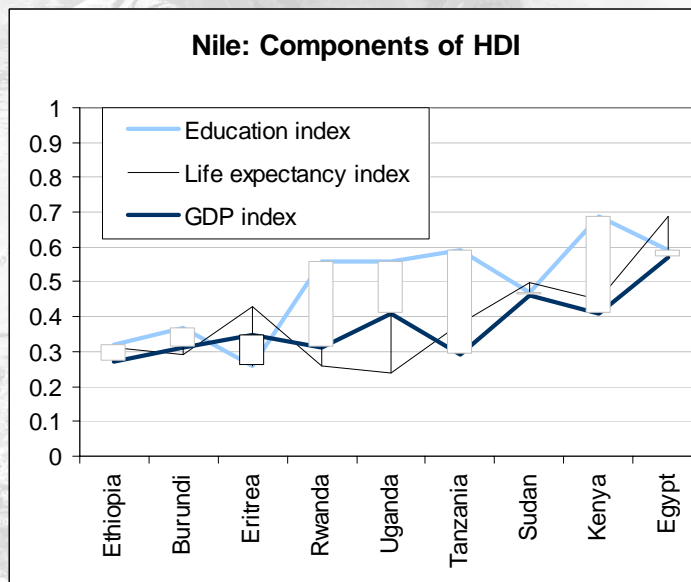
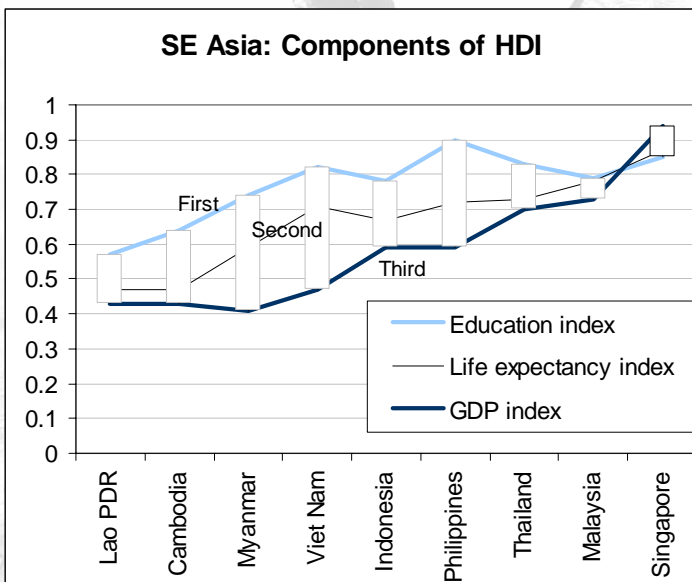
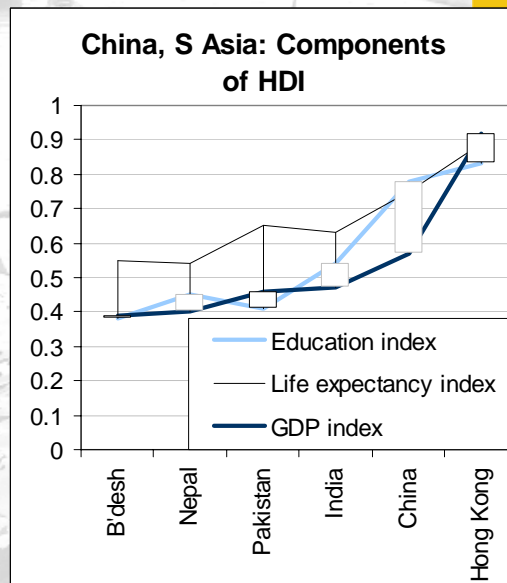
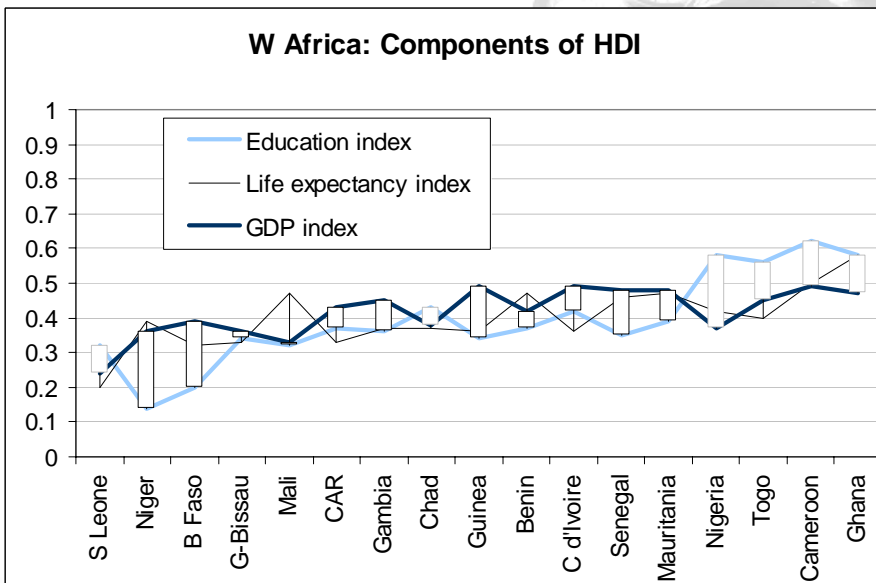


Human development Components of HDI



Human development

Education comes first





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1. What is development?
2. Dilemma of development: Mekong Case



Part II Mekong CASE

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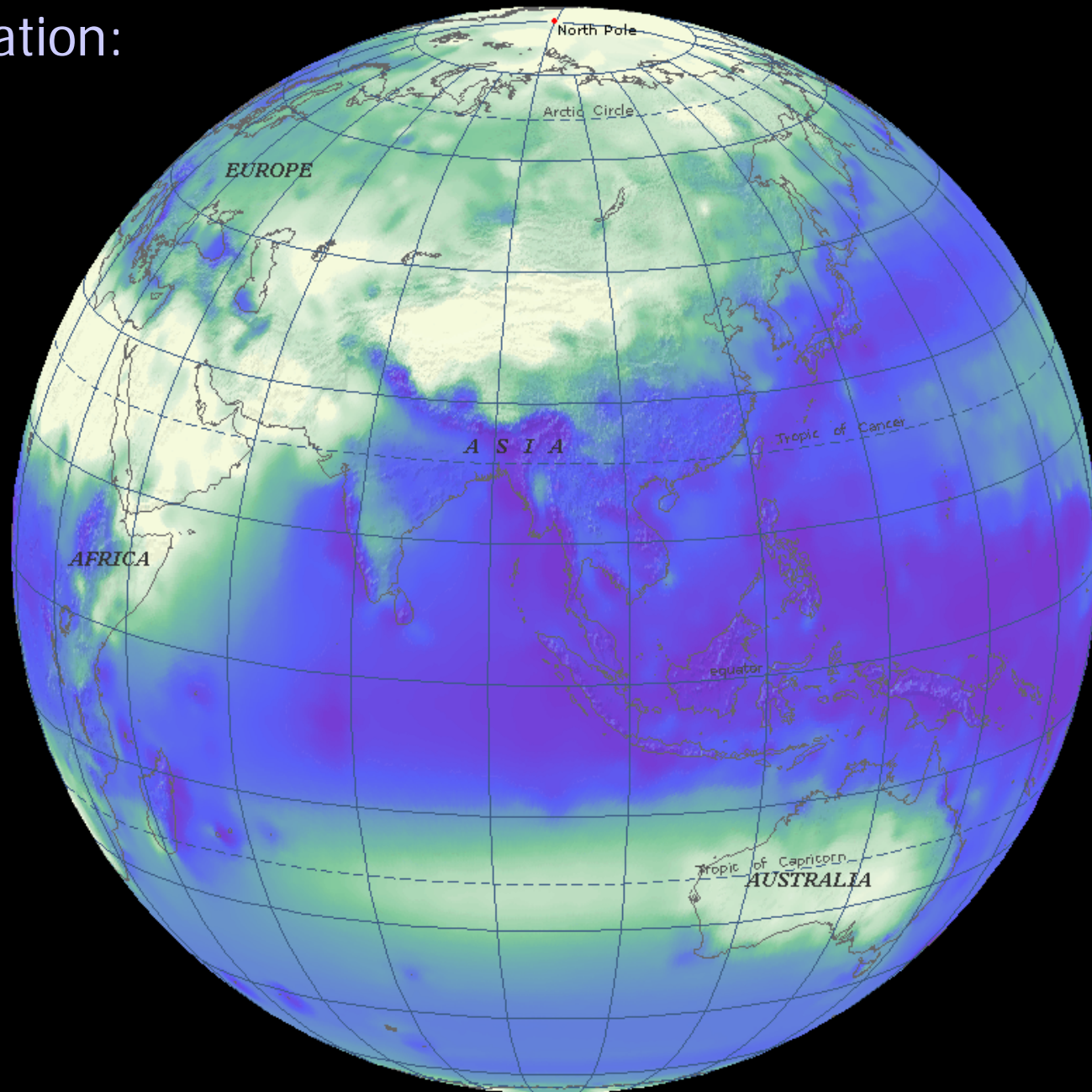


Basin:

- Transboundary
- Target area of Finnish ODA



Precipitation: Annual



Precipitation: January



Climate:

- Seasonality
- Climate change and variations???



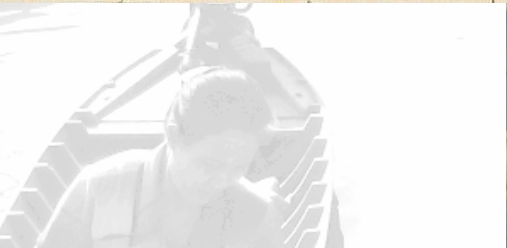


"China"

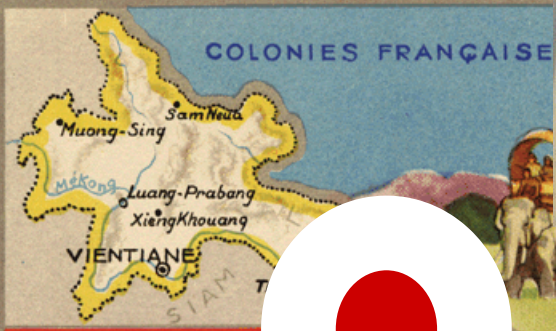
"Indo"

Culture:

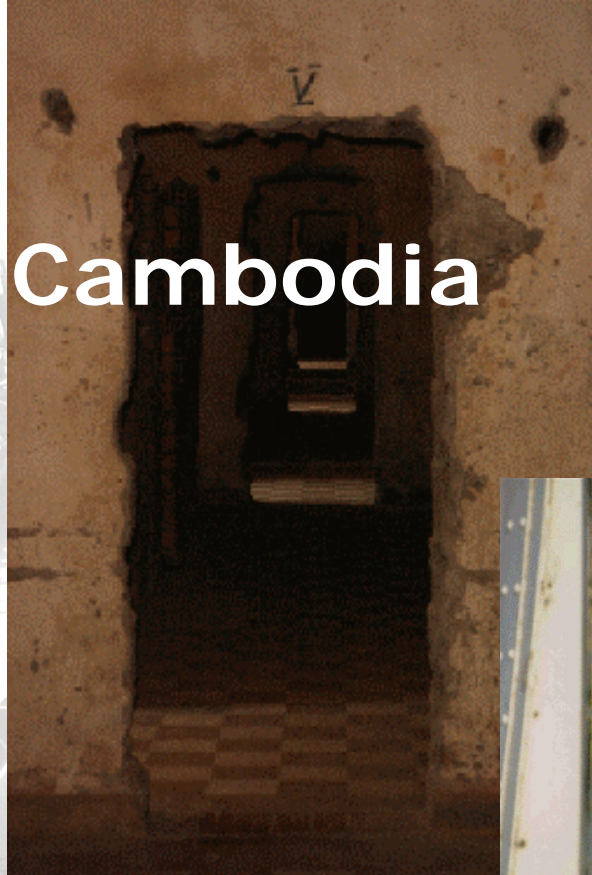
- Crossroads
- Confrontations



France
Japan
USA
USSR
China
Neighbours
+ +
????



Cambodia



m of cambodia



democratic
kampuchea



Mao's China





History:

- Violent
- External pressures
- Strange ideologies

Population

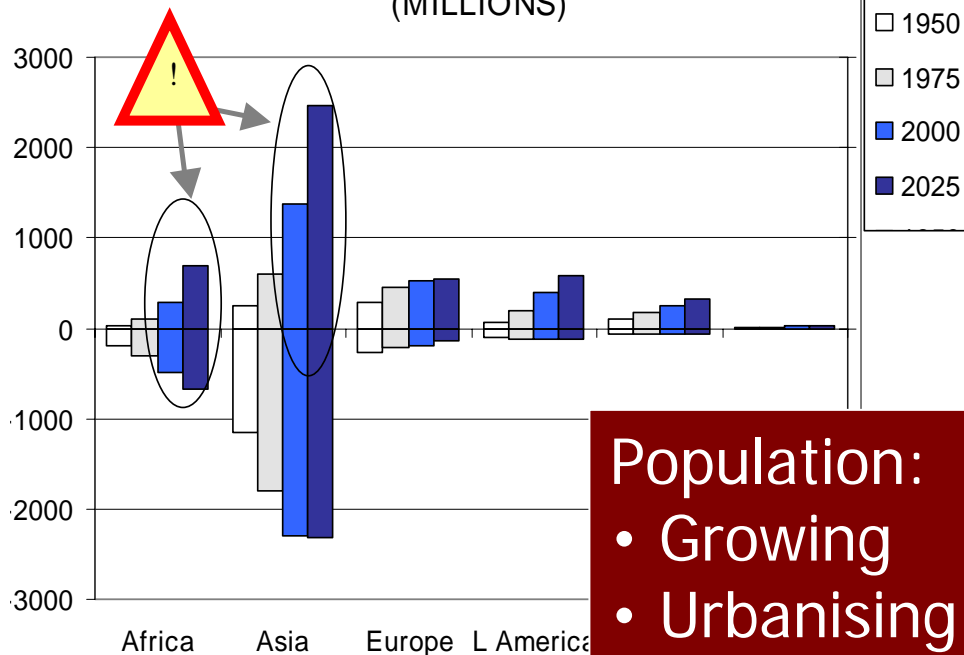
Rural population: ~stable

Urban population: +70M / year

Feeding urbans: 0.7 Niles a year!

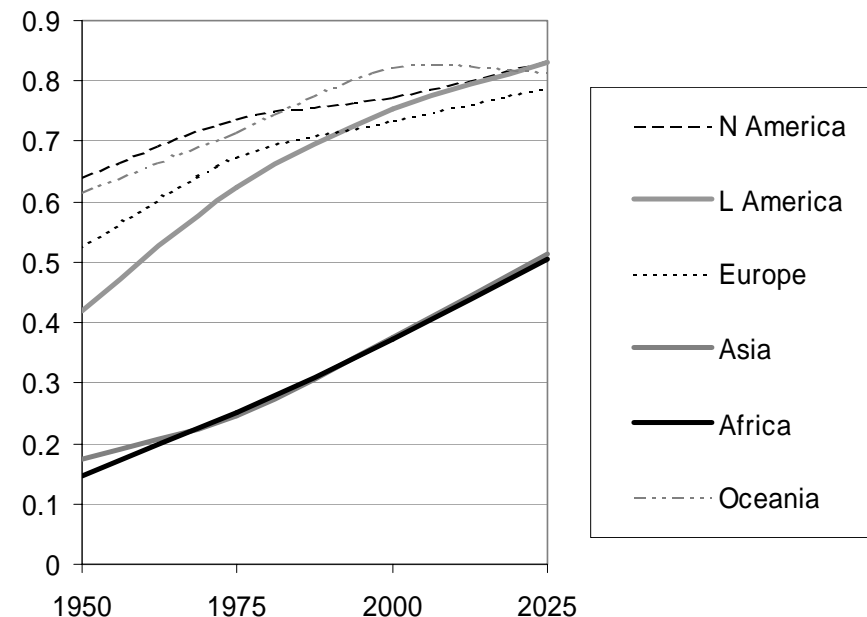


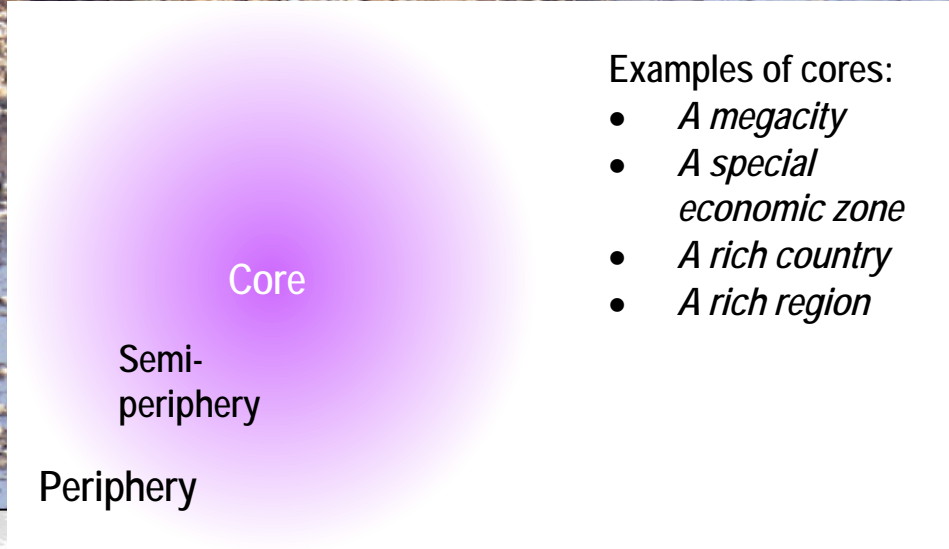
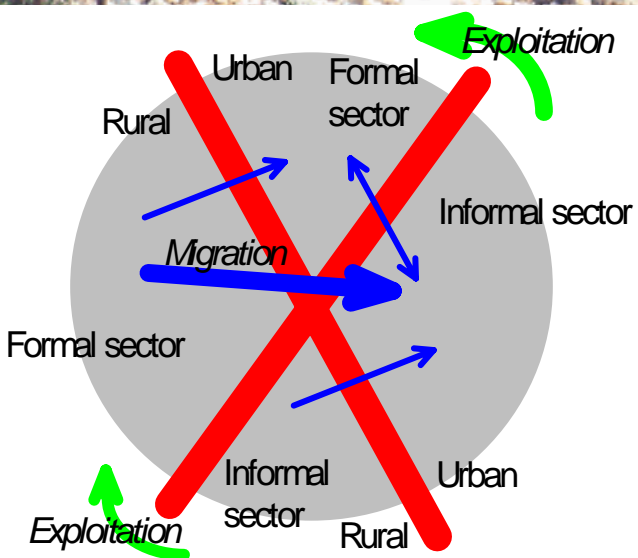
RURAL AND URBAN POPULATION BY CONTINENT
(MILLIONS)



Population:
• Growing
• Urbanising

URBANIZATION BY CONTINENT (%)

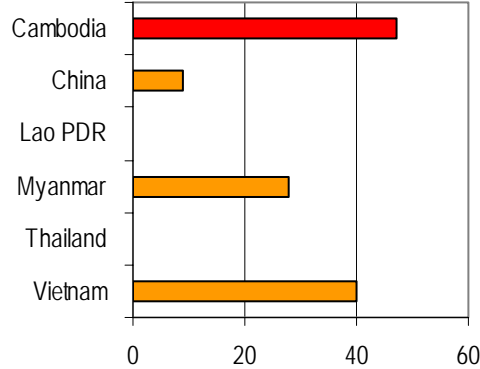




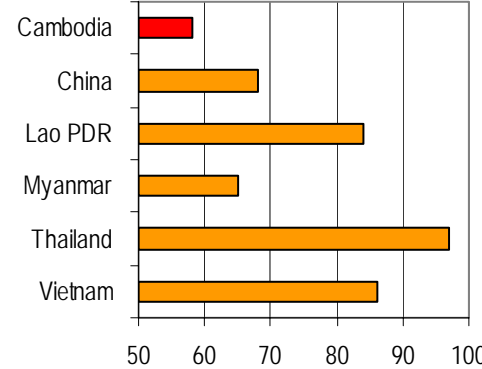
- Examples of cores:
- *A megacity*
 - *A special economic zone*
 - *A rich country*
 - *A rich region*

Water

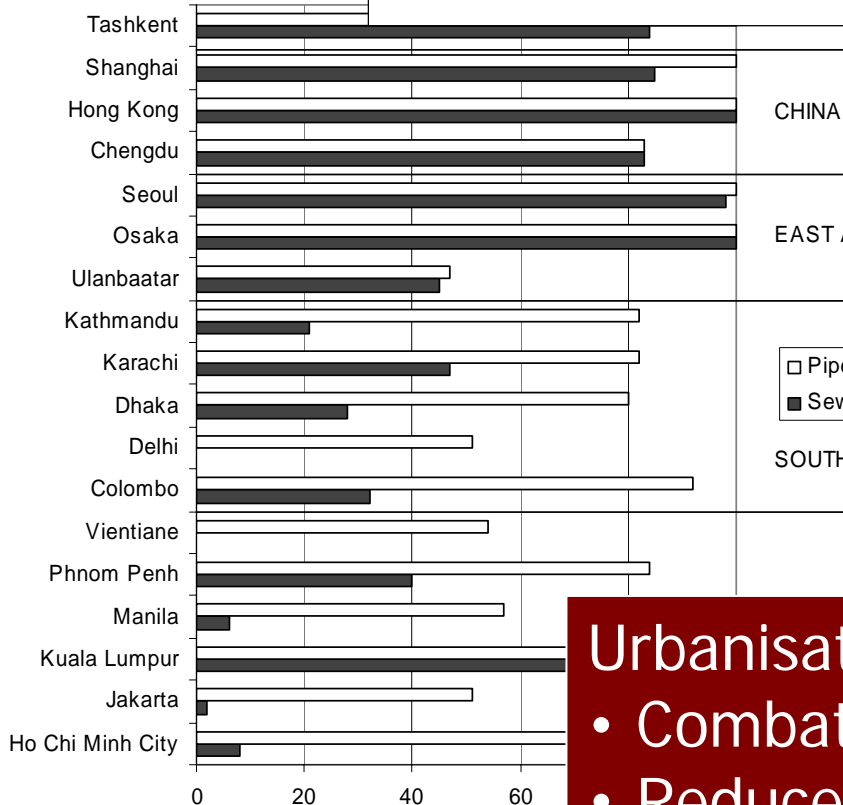
MALNUTRITION
(children under 5, %, 1996-98)



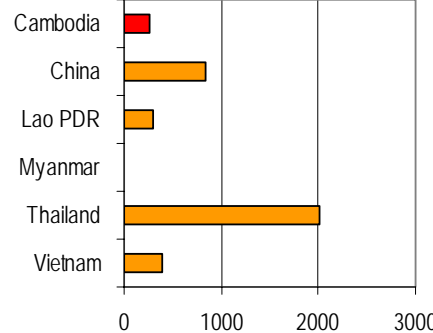
SANITATION
(urban, %, 1999)



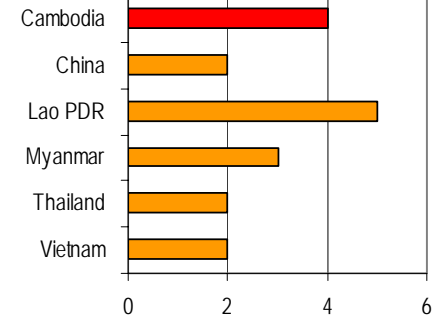
ASIAN CITIES: ACCESS TO SEWERAGE AND WASTE MANAGEMENT SYSTEMS



GNP per capita
(US\$, 1999)



FERTILITY RATE
(births per woman, 1999)



Urbanisation:

- Combat slum growth
- Reduce rural push

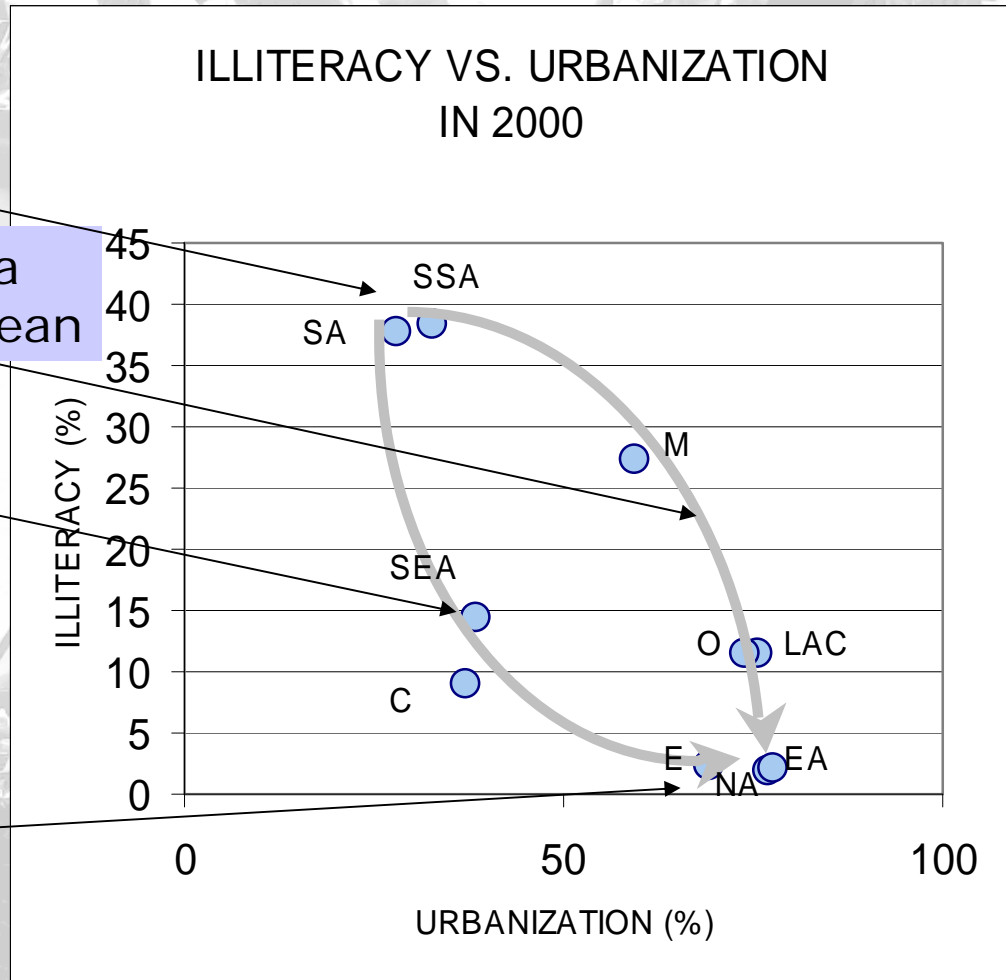
Urbanisation -> Literacy or Literacy -> Urbanisation

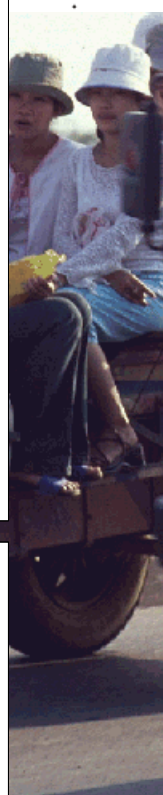
SA = South Asia
SSA = Sub-Saharan Africa

M = Middle East, North Africa
LAC = Latin America, Caribbean

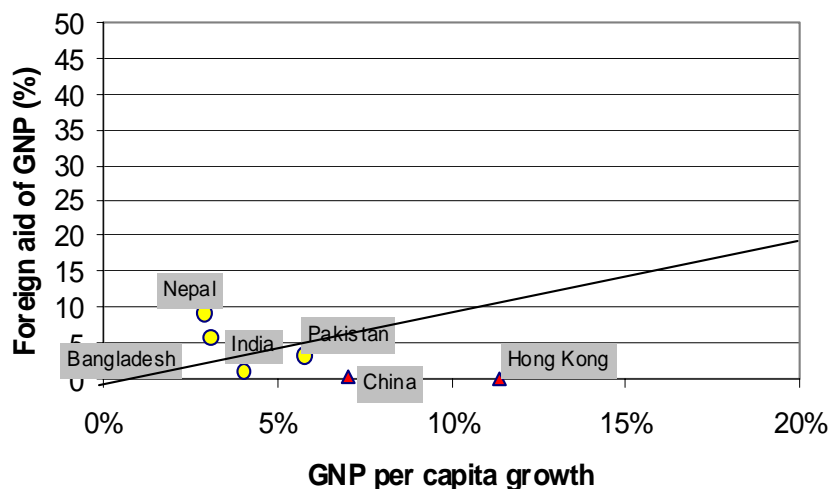
SEA = Southeast Asia
C = China

E = Europe
NA = North America
EA = East Asia

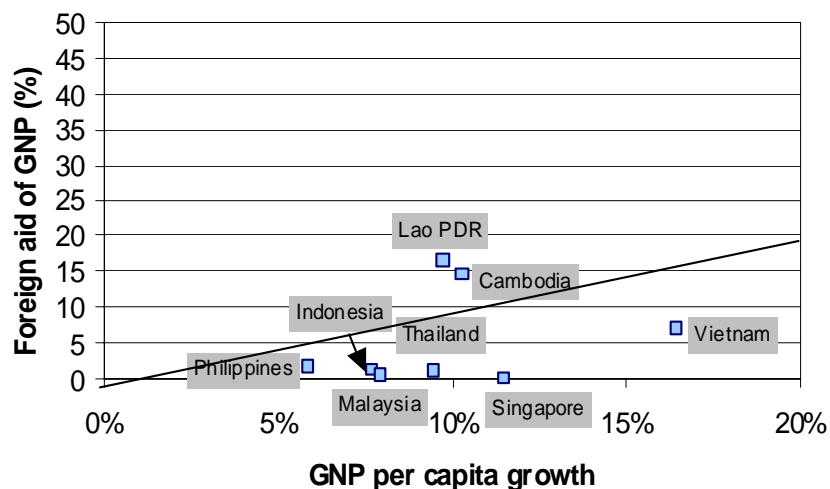




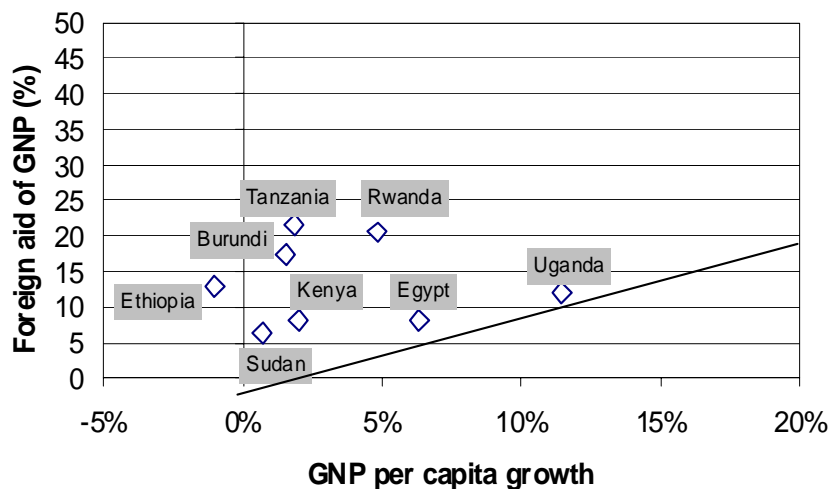
China, S Asia: Aid and economic development, 1975-1997



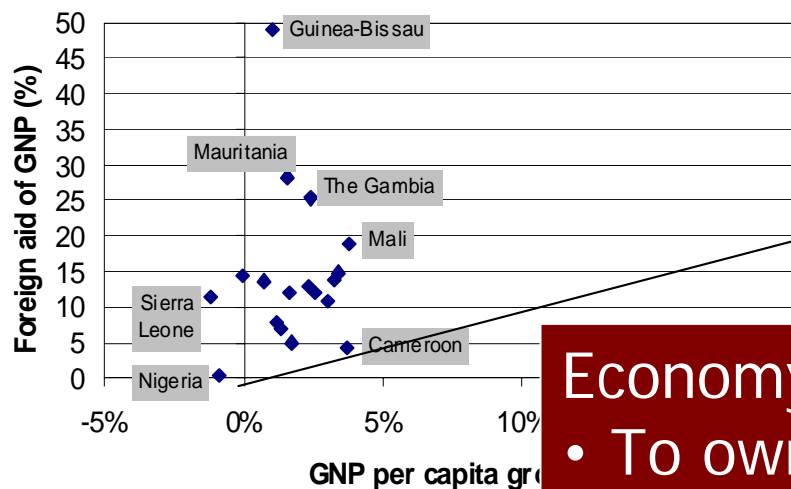
SE Asia: Aid and economic development, 1975-1997



Nile region: Aid and economic development, 1975-1997

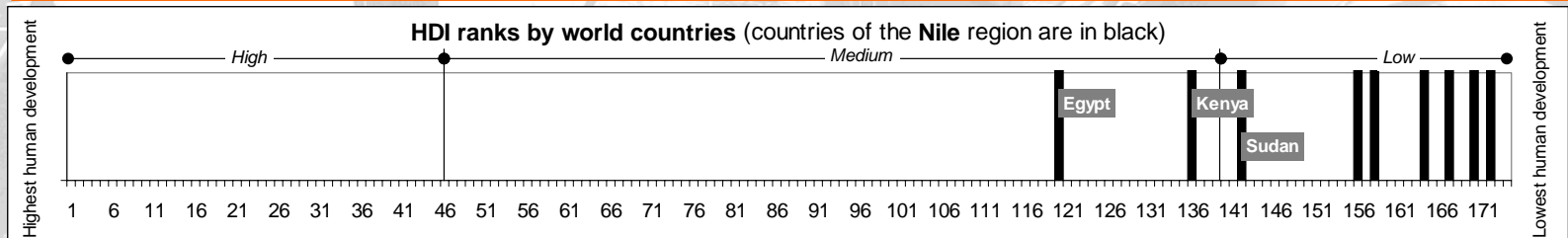
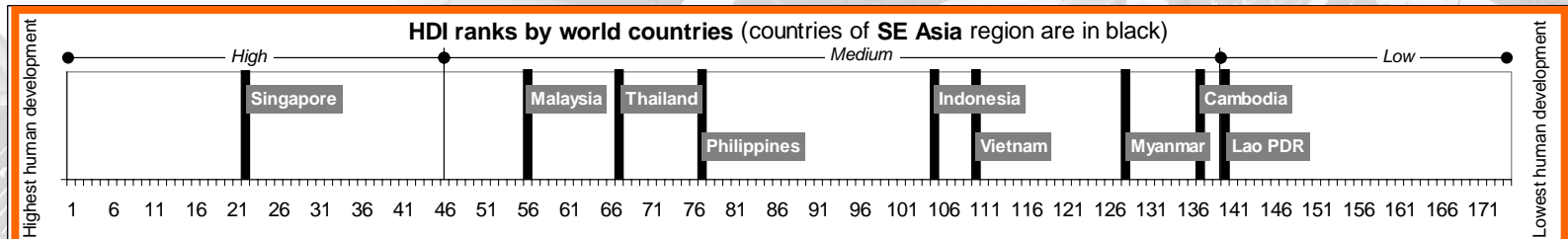
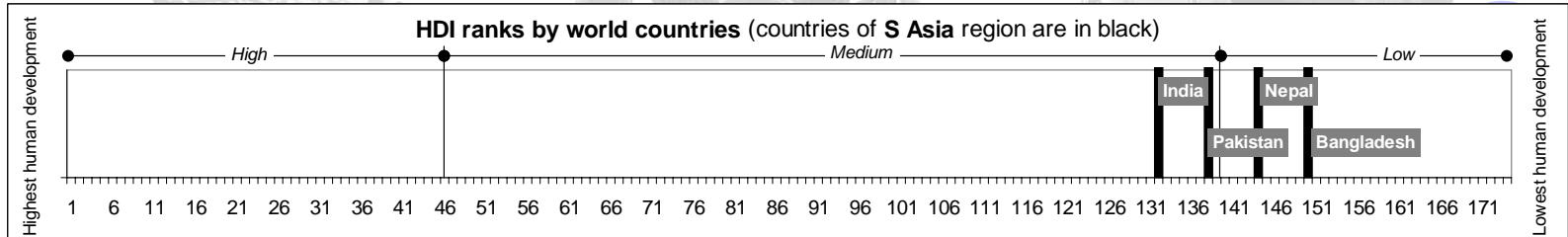
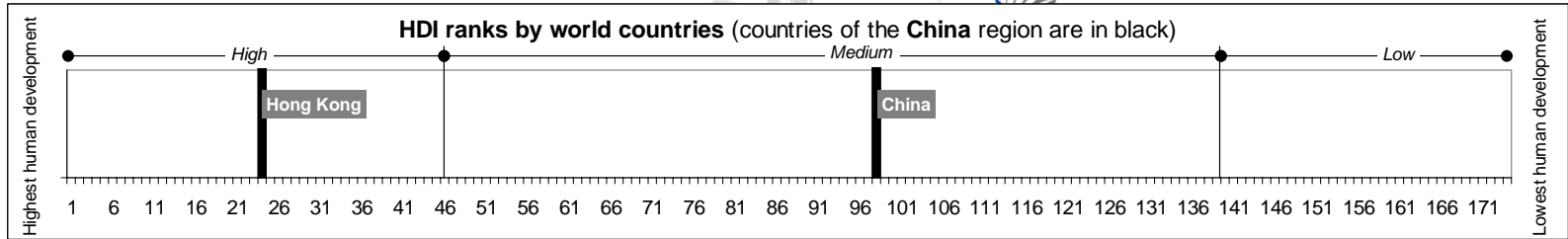


W Africa: Aid and economic development, 1975-1997



Economy:
• To own feet

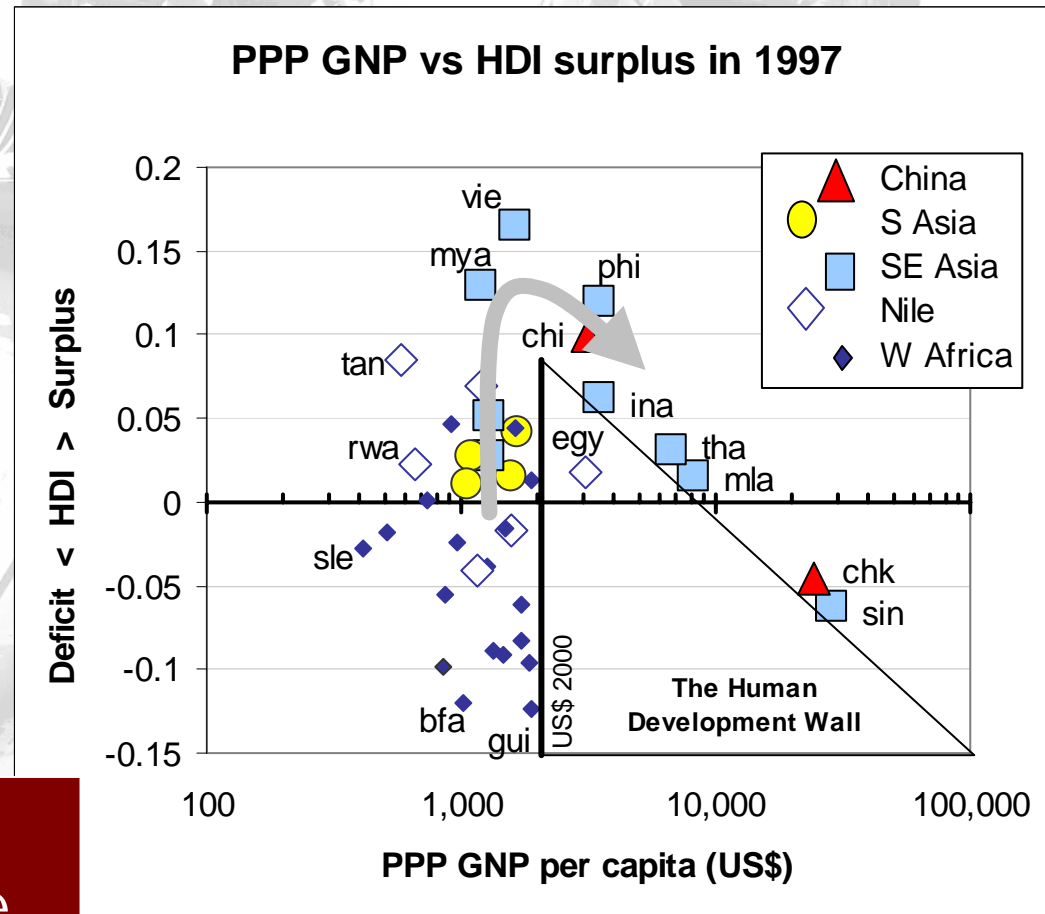
Human development



Human development:
• A widening range

Human development

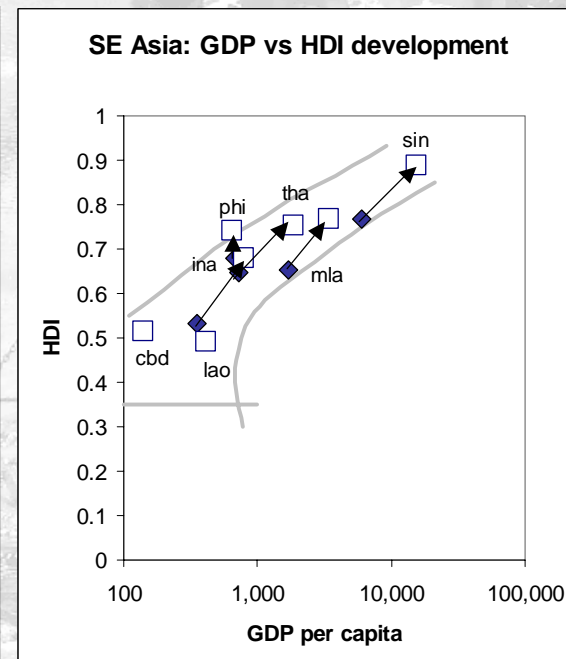
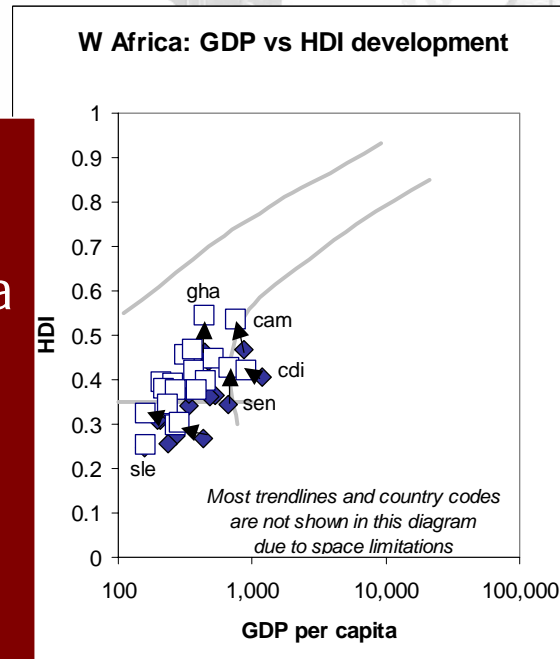
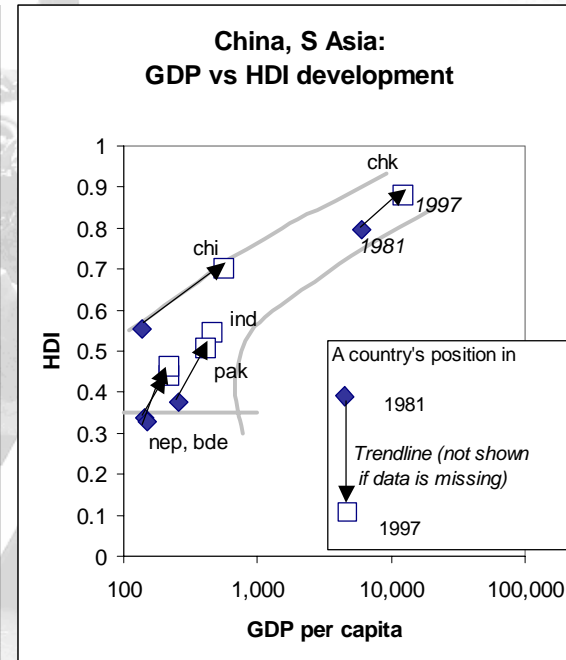
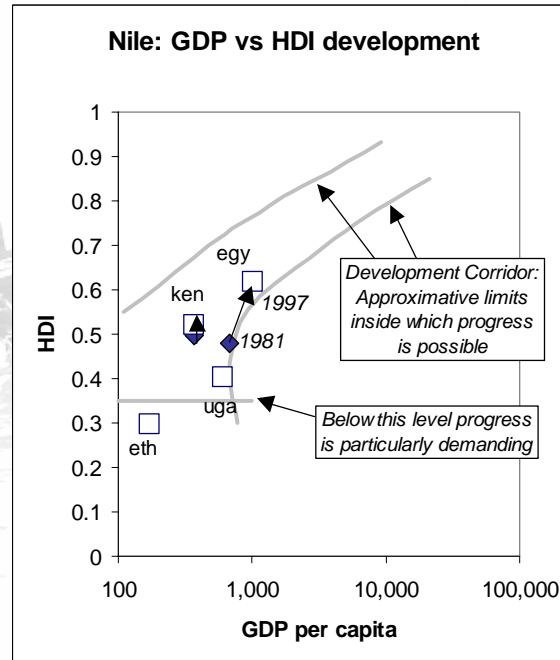
Passing the HD wall



Human development:

- Cambodia, Lao: a massive human investment needed!!

development D Corridor

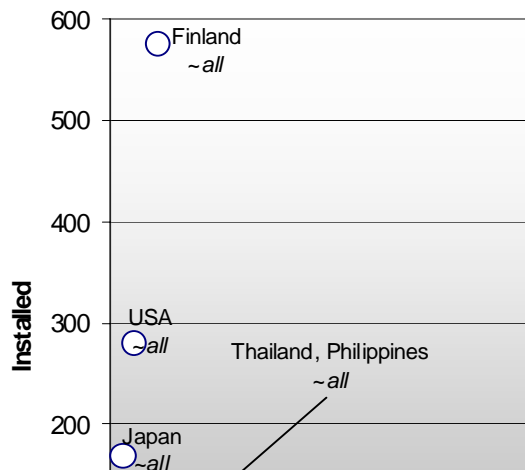


Human development:

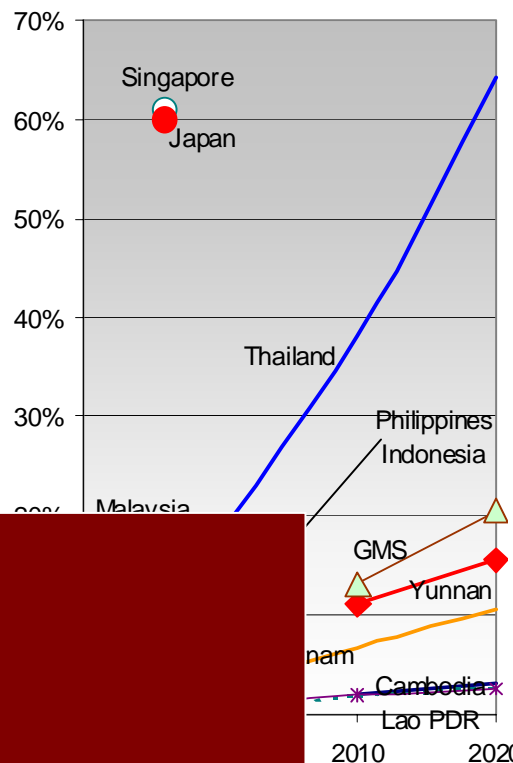
- Cambodia, Lao: a massive human investment needed!!
- Otherwise they might slide downhill again!!

Water and energy: A big controversy

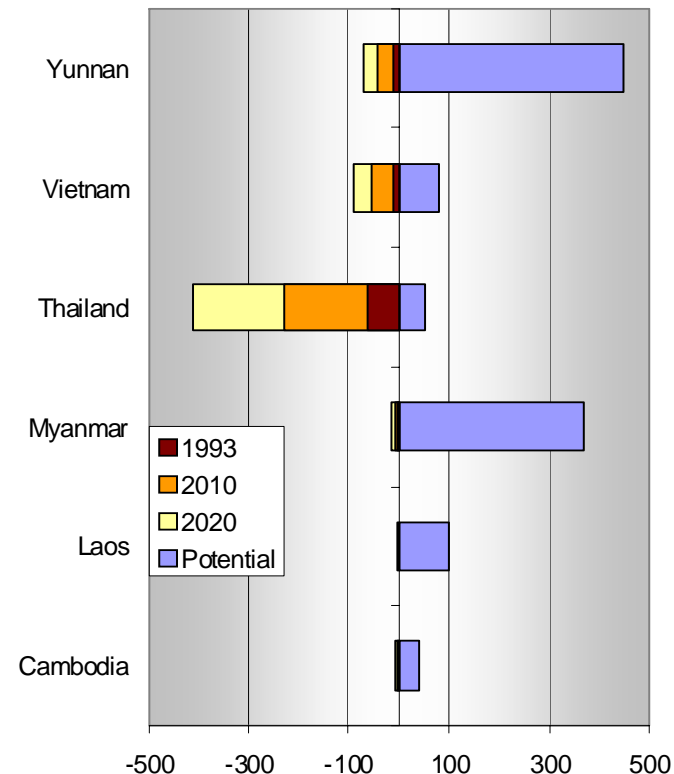
Technically feasible vs. installed
hydropower capacity (W per
capita)



Electricity consumption per
capita (% of US level in 1996)



GMS: Hydropower potential vs.
electricity demand (TWh/a)



Economic growth:

- Who gains
- Who loses

Does economic growth mean **POVERTY REDUCTION?**



"Poor"



"Rich"





Subsistence & modern sectors

some attributes

Subsistence (traditional sector)	Modern sector
Uses no or very little money	Is driven by money
People supply themselves with basic commodities such as food, water, fuelwood, etc.	Nature is used as a resource of tradable goods that are primarily valued after their trade value
Institutions are primarily customary, religious, etc.	Institutions are primarily set up by government, etc.
People are living within the nature	People are using nature as a resource base and are living out of the nature
Example activities: family farms/fishery/forestry for village-level supply	Example activities: cash-crop farming, commercial fishery, fish farming, industry, hydropower generation, urban water supply plants

A faded background image showing a busy river scene with several people and boats. In the foreground, a person is carrying a large basket on their head. In the background, there are more people and boats on the water. The overall tone is somber and reflects the theme of poverty.

Amartya Sen:

"There are good reasons for seeing poverty as a deprivation of **basic capabilities**, rather than merely as low income.

Deprivation of elementary capabilities can be reflected in

- premature mortality (especially of children),
- persistent morbidity,
- widespread illiteracy and
- other failures."

deprivation



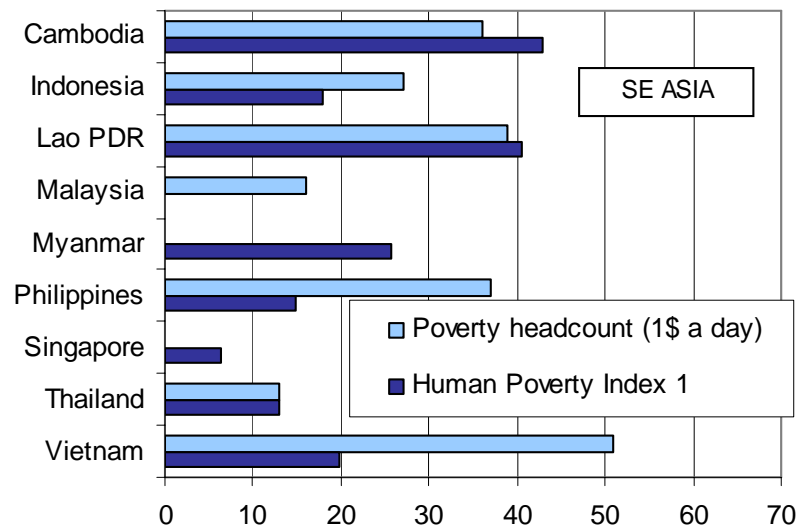
Poverty: definitions

- \$1 a day, \$2 a day...
- Specific (income or nutrition based)
 - national poverty line
 - international poverty line
 - extreme poverty line (e.g. 2,250 kcal/d)
- Social
 - Human poverty etc.
 - Population without sustainable access to improved domestic water source
 - Children under weight for age
 - Probability at birth of not surviving age 40
 - Adult illiteracy rate

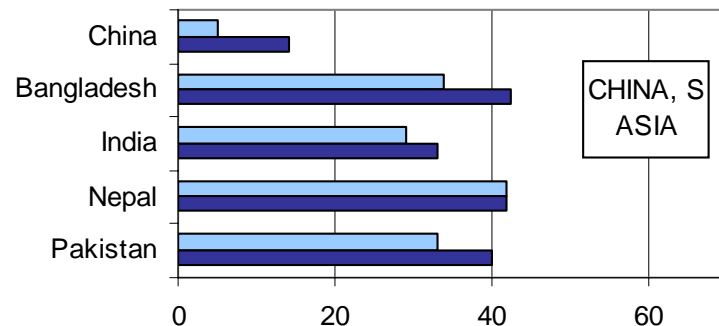
Poverty: definitions

- \$1 a day, human poverty compared

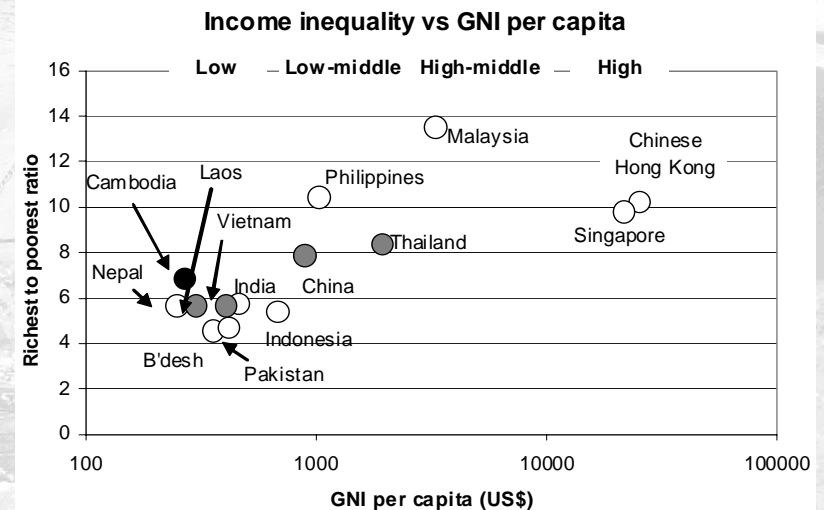
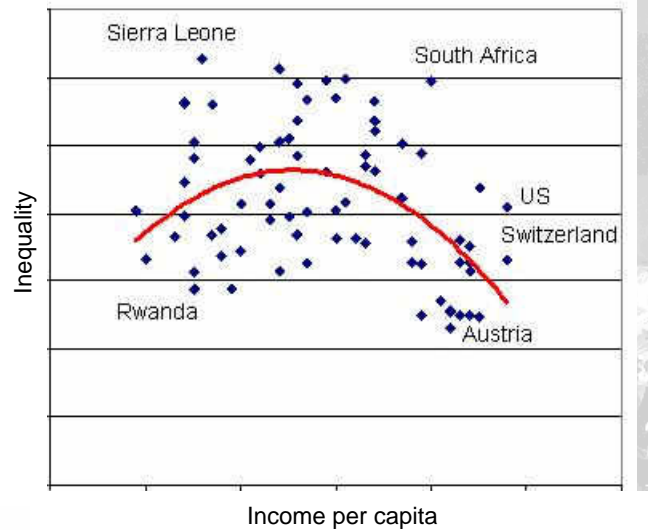
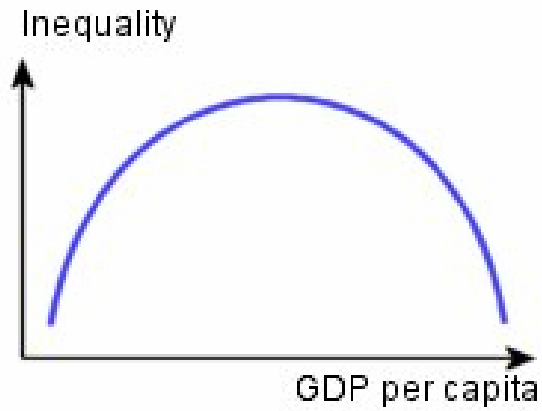
Poverty level



Poverty level



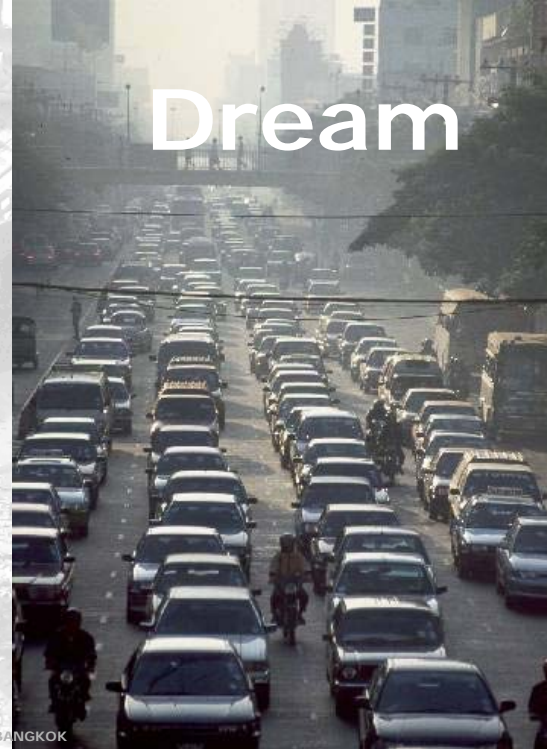
KUZNETS CURVE



Economic growth: split of the economy



Reality



Dream

UN HABITAT: An Urbanized World ... of Slum Dwellers?

- 2001: **924 million people** (31.6%) of the world's urban population lived in slums.
 - Developing regions: **43%**
 - Developed regions: **6%**
- *"It is projected that in the next 30 years, the number of slum dwellers worldwide will increase to **2 billion** if **no firm or concrete action is taken** to arrest the situation. And the latest UN Habitat estimates is that this figure might even increase to 3 billion people by 2050."*

How to manage



Command and control

Constraint

Under control

Top-down
Big
Formal
Centralized

"Beauty"
Institutions
Approaches

Bottom-up
Small
Informal, formal
Decentralized

Recognize and
mobilize for
common benefit

Resource

Public participation
Grassroot activities

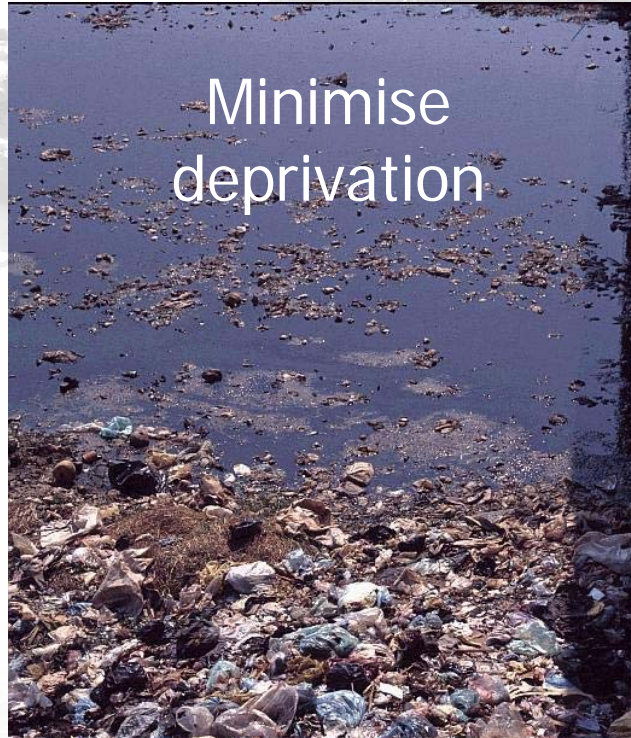
Does economic growth mean **POVERTY REDUCTION?**



"Poor"



Minimise
deprivation



"Rich"



CRITICAL in the Mekong Case:
Governance
Education
Agriculture, small-scale fisheries
Infrastructure
Community & microeconomic development
...

What is development?

"A country can be called developed, when it has acquired an institutional setup that allows it to mobilize resources and carry out changes necessary to systematically and effectively deal with problems that the country is facing".



Development: Approach?

Treat SYMPTOMS or ROOT CAUSES?

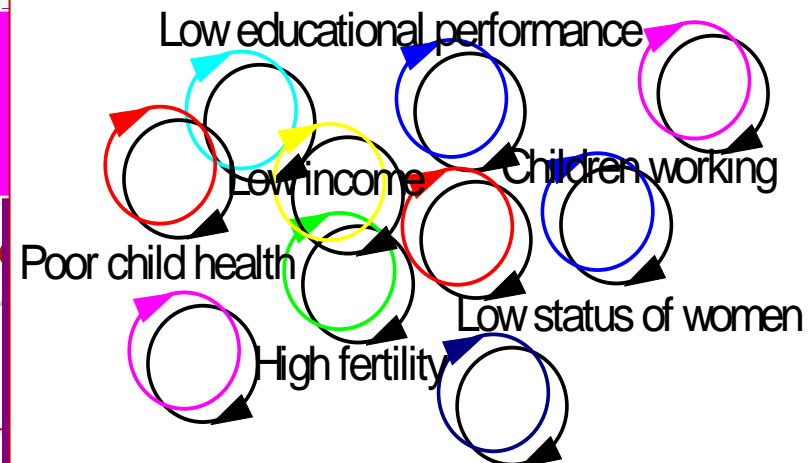
⊕ Several approaches:

- ⊕ **Basic needs:** Provide basic services (even “first aid”)
- ⊕ **Neoclassical:** strengthen macroeconomy
- ⊕ **Neo-institutional:** develop institutions and governance
- ⊕ **Human development:** improve human capacity to deal with problems
- ⊕ **Vicious circles:** break vicious circles of poverty
- ⊕ **Etc etc...**

Employment Production, R & D and technology

Capabilities:
Workers, farmers

Composition of



HELSINKI UNIVERSITY OF TECHNOLOGY
Laboratory of Water Resources



Challenge

Development experts **MUST** be able to break conventional boundaries and find interconnections in a big way

Case water





Part III Discussion

