



# Rurality and development: local and global issues

- Lecture -

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**Understanding Urban and Rural Societies**

BA (Hons) Sociology  
BSc Geography

31 January 2017

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# Main Contents

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Overview of the presentation

- 1 Introduction
- 2 Historical perspective of civilisations
- 3 Ecosystems: a key concept to understand rural societies
- 4 Synthesis
- 5 Conclusion

# Sustainable Development Goals

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion



## SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

<b>1 NO POVERTY</b> 	<b>2 ZERO HUNGER</b> 	<b>3 GOOD HEALTH AND WELL-BEING</b> 	<b>4 QUALITY EDUCATION</b> 	<b>5 GENDER EQUALITY</b> 	<b>6 CLEAN WATER AND SANITATION</b> 
<b>7 AFFORDABLE AND CLEAN ENERGY</b> 	<b>8 DECENT WORK AND ECONOMIC GROWTH</b> 	<b>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</b> 	<b>10 REDUCED INEQUALITIES</b> 	<b>11 SUSTAINABLE CITIES AND COMMUNITIES</b> 	<b>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</b> 
<b>13 CLIMATE ACTION</b> 	<b>14 LIFE BELOW WATER</b> 	<b>15 LIFE ON LAND</b> 	<b>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</b> 	<b>17 PARTNERSHIPS FOR THE GOALS</b> 	

# What does rurality mean to you?

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

## Rurality and development

What is the contribution of the rural economy to economic development?



# What does rurality mean to you?

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

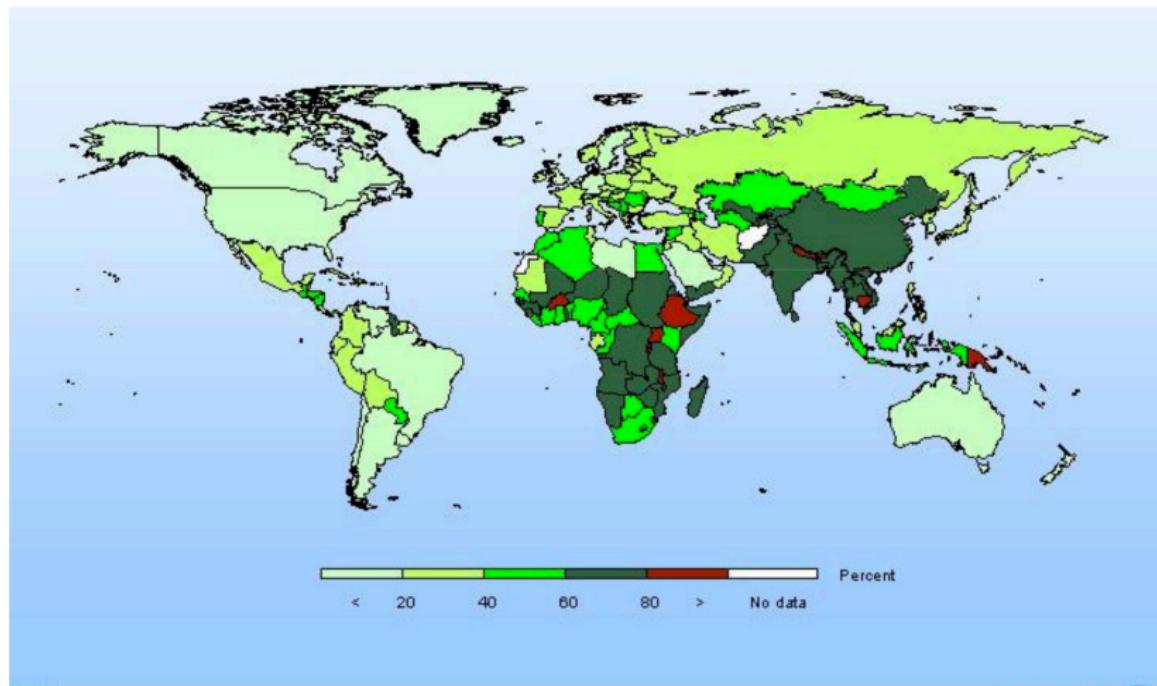
## Rurality and development

What are the specificities of rural areas?



# Rural population

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion



FAO Statistics Division, FAO Statistical Yearbook 2005-2006, Vol. 1

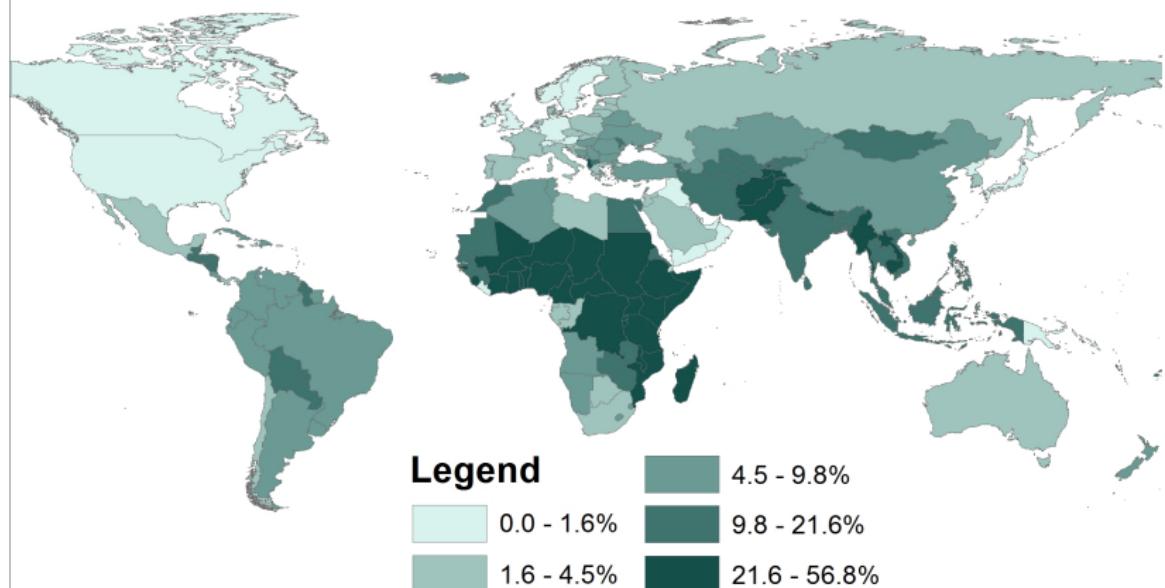
© FAO 2006



# Agriculture and economy

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

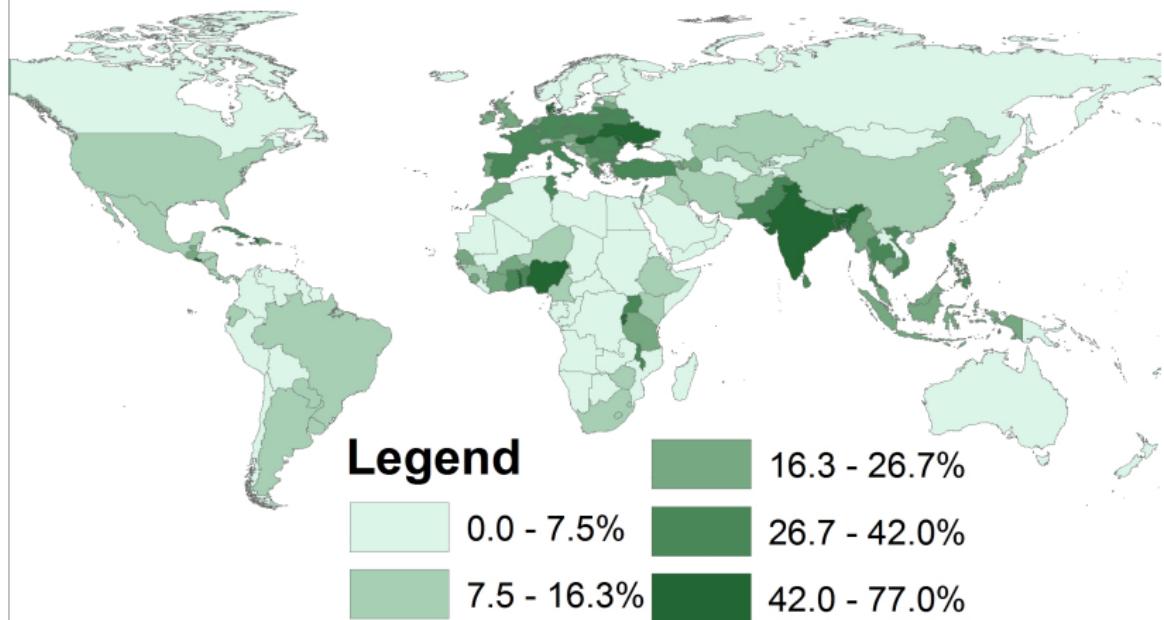
## Agriculture as Percent of GDP



# Cultivated land

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

## Percent of Total Land Area Cultivated



## Background to the problem

“85% of the poor people from developing countries live in rural areas.”

Alkire *et al.* (2014)

# Rural perspectives

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

## Background to the problem

“There has never been a more important time to address rural poverty in developing countries. It looks likely that global food security and climate change will be among the key issues of the 21<sup>st</sup> century.”

Kanayo Nwanze (2010)

## Background to the problem

### Agrarian societies

- Uncompetitive markets
- Volatile food prices
- Weak rural infrastructures
- Low levels of investment
- Deteriorating natural resources
- Inappropriate policies
- Inadequate financial services
- Threat of climate change

# Rural perspectives

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

## Background to the problem

## Agrarian societies

## Industrial societies

- Affordable housing (problem of dormitory villages)
- Transport services
- Transition of economy
- Urbanisation
- Farm productivity

# Main disciplines

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Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

Sociology

Economics

Geography

Anthropology

Environmental sciences

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# Inequalities between societies

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Introduction ► **History** ► Ecosystems ► Synthesis ► Conclusion

Why did the rate of progress differ so much for cultures on different continents?

# Inequalities between societies

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

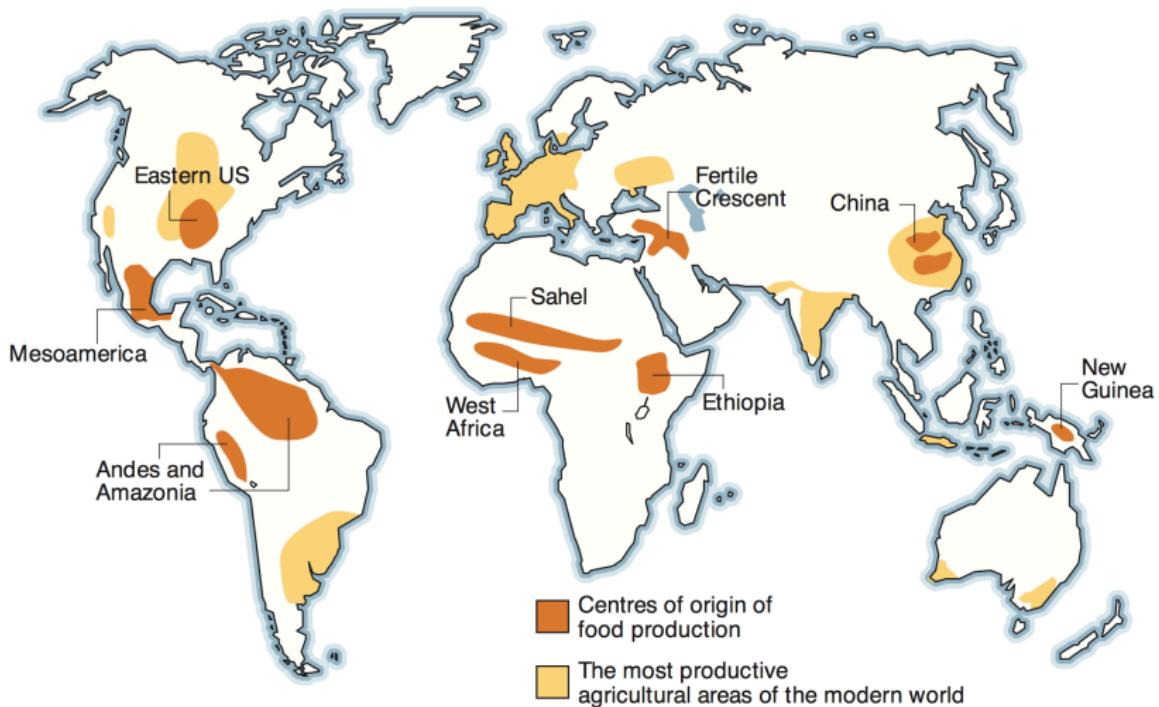
Why did the rate of progress differ so much for cultures on different continents?

## From hunter-gatherers to food producers

- **11,000 years ago:** 5 million people (100% hunter-gatherers)
- **5,000 years ago:** 50 million people (90% farmers)
- **Farming and cattle breeding**
  - ▶ Social stability
  - ▶ Labor specialisation
- **Decision-making**
  - ▶ Decline in availability of wild game, prestige, and cultural attitudes
  - ▶ Availability of domesticable wild plants and animals, technologies
  - ▶ Population pressures from growth

# Distribution of plants and animals

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion



©Diamond (2002)

# Distribution of plants and animals

Introduction ► **History** ► Ecosystems ► Synthesis ► Conclusion

## Distribution of plants and animals

- **North of China:** rice, soya
- **Mexico:** maize, beans, cotton
- **Middle-East:** wheat, malt, barley
- **Papua New Guinea:** taro

# Distribution of plants and animals

Introduction ► **History** ► Ecosystems ► Synthesis ► Conclusion

## Distribution of plants and animals

### Common food systems

- 1 cereals or tuber - *for calories*
- 1 leguminous plant - *for proteins*
- textile
- cattle

# Distribution of plants and animals

Introduction ► **History** ► Ecosystems ► Synthesis ► Conclusion

## Distribution of plants and animals

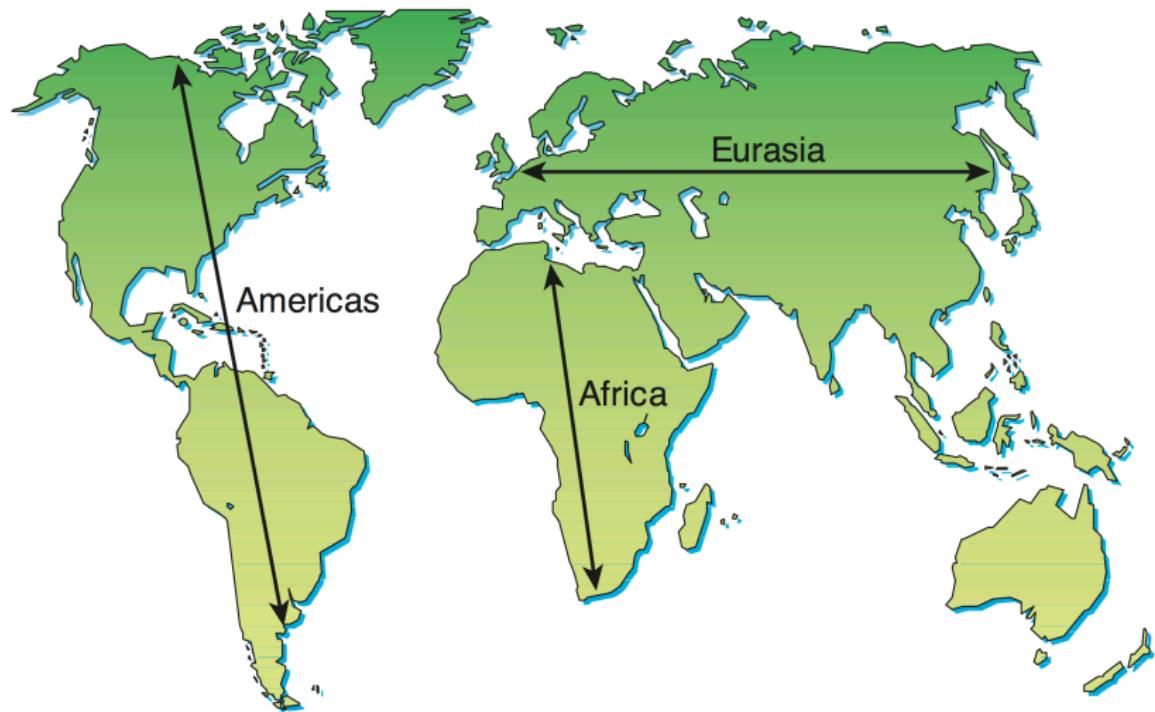
### Common food systems

## Food production

- Increased crop yields
  - ▶ Larger population density
  - ▶ More frequent child-bearing
  - ▶ Storage of food surpluses ↵ can sustain specialists
  - ▶ Animals for warmth, transport and germs (*immunity of Eurasian population*)

# Geographic orientation

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion



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# Contemporary developments

Introduction ► **History** ► Ecosystems ► Synthesis ► Conclusion

## Green revolution

- Industrialisation
- Mechanisation
- Fertilisers

# Contemporary developments

Introduction ► **History** ► Ecosystems ► Synthesis ► Conclusion

## Green revolution

### Paradigms for rural development

- A world view underlying the theories and methodology of a particular scientific subject
- Perception of the world
- Socially built and historical
- Guide development trajectories

# Contemporary developments

Introduction ► **History** ► Ecosystems ► Synthesis ► Conclusion

## Paradigms for rural development

### Rural policies

- **Before 1980:** Interventionist paradigm
  - ▶ North: agricultural modernisation
  - ▶ South: State policies (green revolution, export)
  - ▶ Price control, public investments, State control
- **1980 - 2000:** Free market
  - ▶ North: Reforms
  - ▶ South: Structural Adjustment
  - ▶ Macro-economy, market regulation, privatisation
- **2000 - now:** Institutional economics
  - ▶ North: International Trade policies
  - ▶ South: Policies against poverty, agricultural policies
  - ▶ Imperfect markets, sustainable development

# Main Contents

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Outline of the presentation

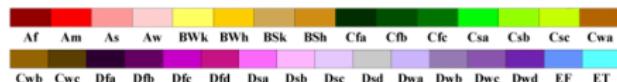
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# Climate and ecoregions

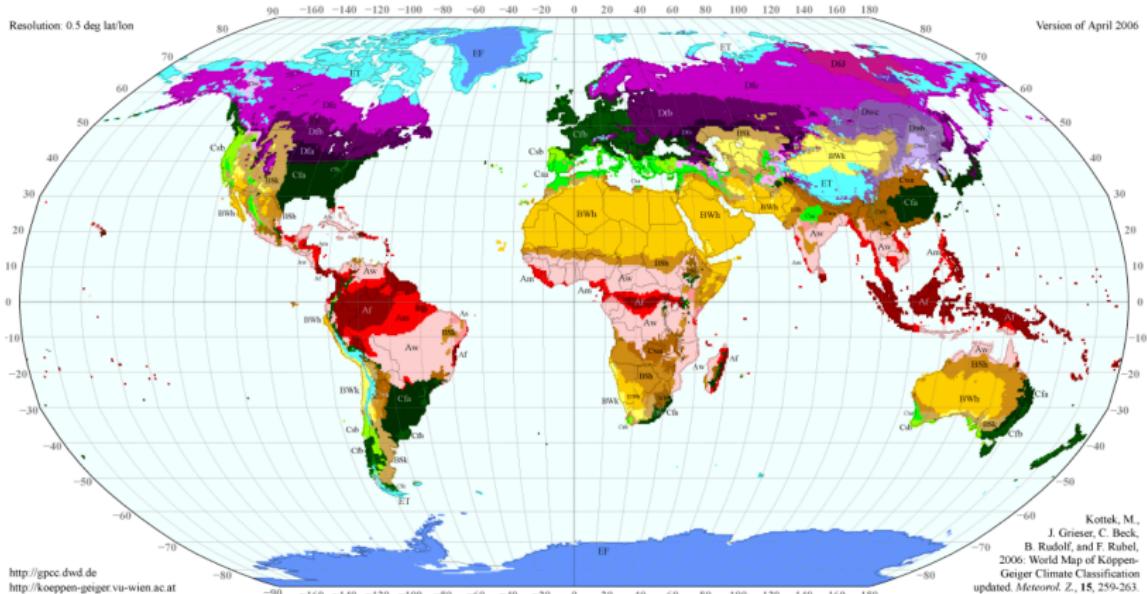
Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

## World Map of Köppen–Geiger Climate Classification

updated with CRU TS 2.1 temperature and VASClimO v1.1 precipitation data 1951 to 2000



Resolution: 0.5 deg lat/lon

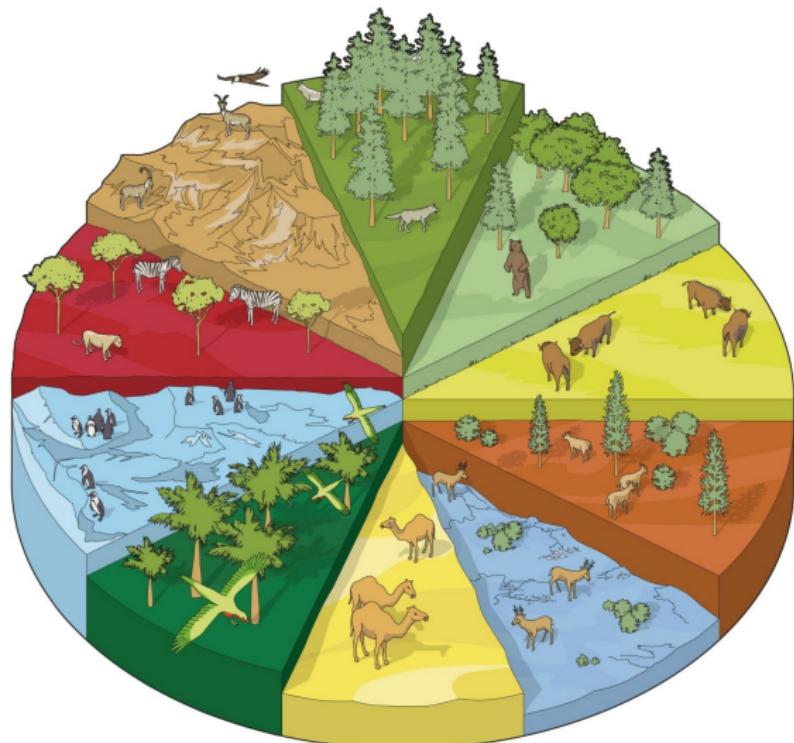


<http://gpcc.dwd.de>  
<http://koeppen-geiger.vu-wien.ac.at>

Kottek, M.,  
J. Grieser, C. Beck,  
B. Rudolf, and F. Rubel,  
2006: World Map of Köppen-  
Geiger Climate Classification  
updated. *Meteorol. Z.*, **15**, 259-263.

# Biomes

Introduction ► History ► **Ecosystems** ► Synthesis ► Conclusion



©Quora (2015)

# Ecosystems

Introduction ► History ► **Ecosystems** ► Synthesis ► Conclusion

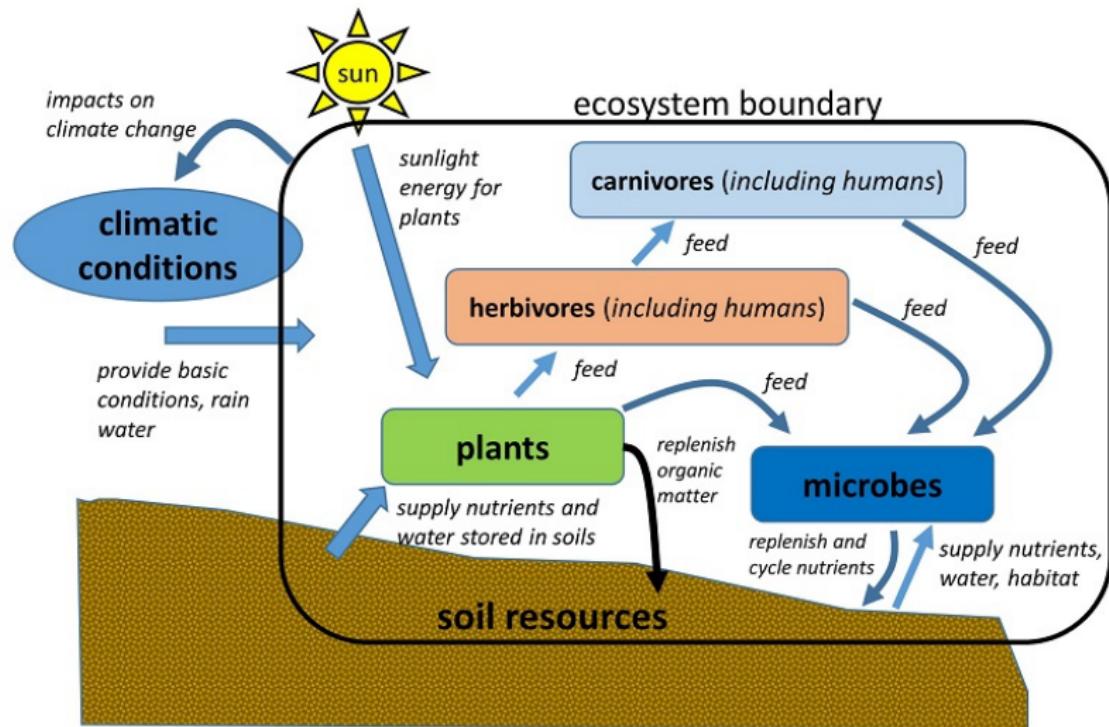
## Definition

“An ecosystem is a dynamic complex of plant, animal, and microorganism communities and the nonliving environment interacting as a functional unit.”

Millenium Ecosystem Assessment (2005)

# Ecosystems

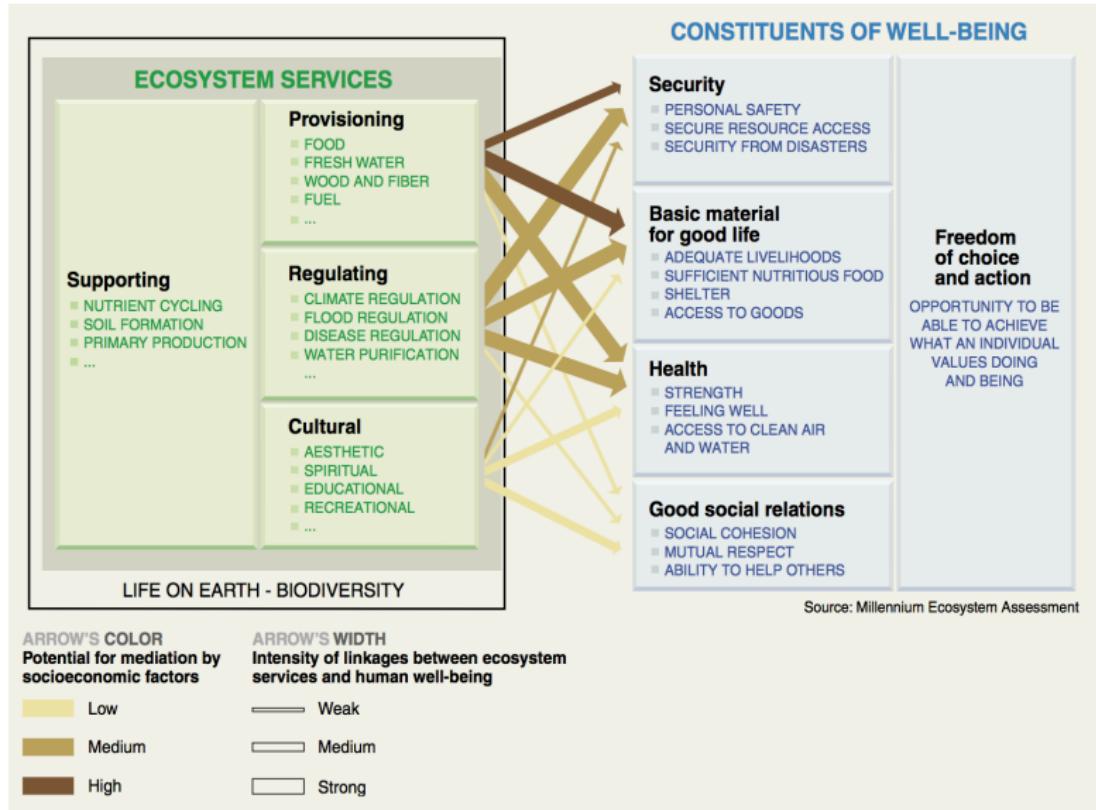
Introduction ▶ History ▶ Ecosystems ▶ Synthesis ▶ Conclusion



©T. Brawler, Penn State University (2016)

# Ecosystem services

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion



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# Tragedy of the commons

Introduction ► History ► Ecosystems ► **Synthesis** ► Conclusion



Garrett Hardin (1968)

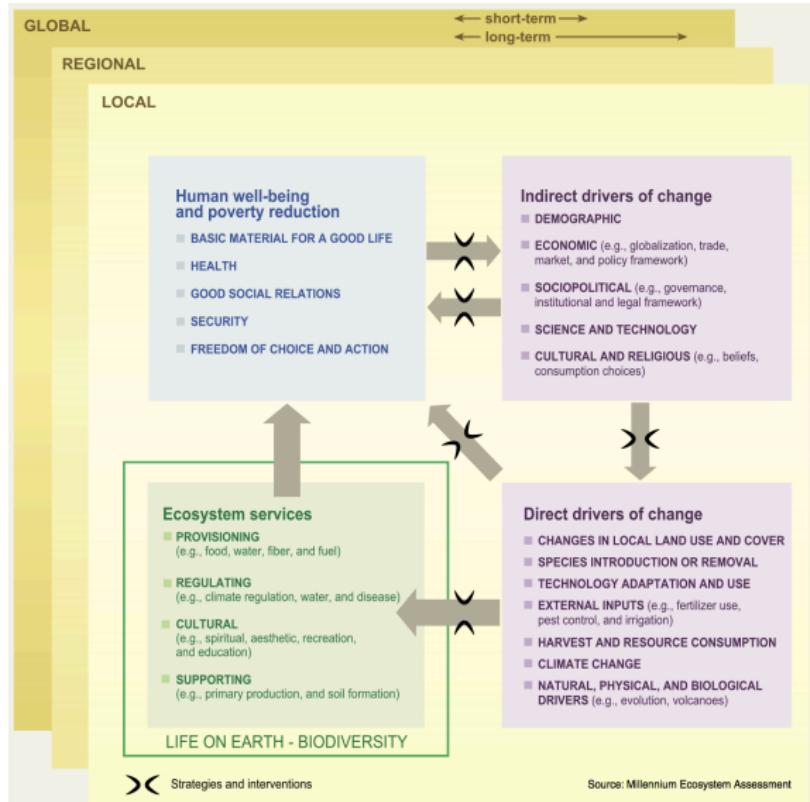
# Common-pool resources

Introduction ► History ► Ecosystems ► **Synthesis** ► Conclusion

	Excludable	Non-Excludable
Rivalrous	<b>Private Goods</b> food, clothing, cars, personal electronics	<b>Common Goods</b> fish stocks, timber, coal
Non-Rivalrous	<b>Club Goods</b> cinemas, private parks, satellite tv	<b>Public Goods</b> air, national defense

# Drivers of change

Introduction ► History ► Ecosystems ► **Synthesis** ► Conclusion



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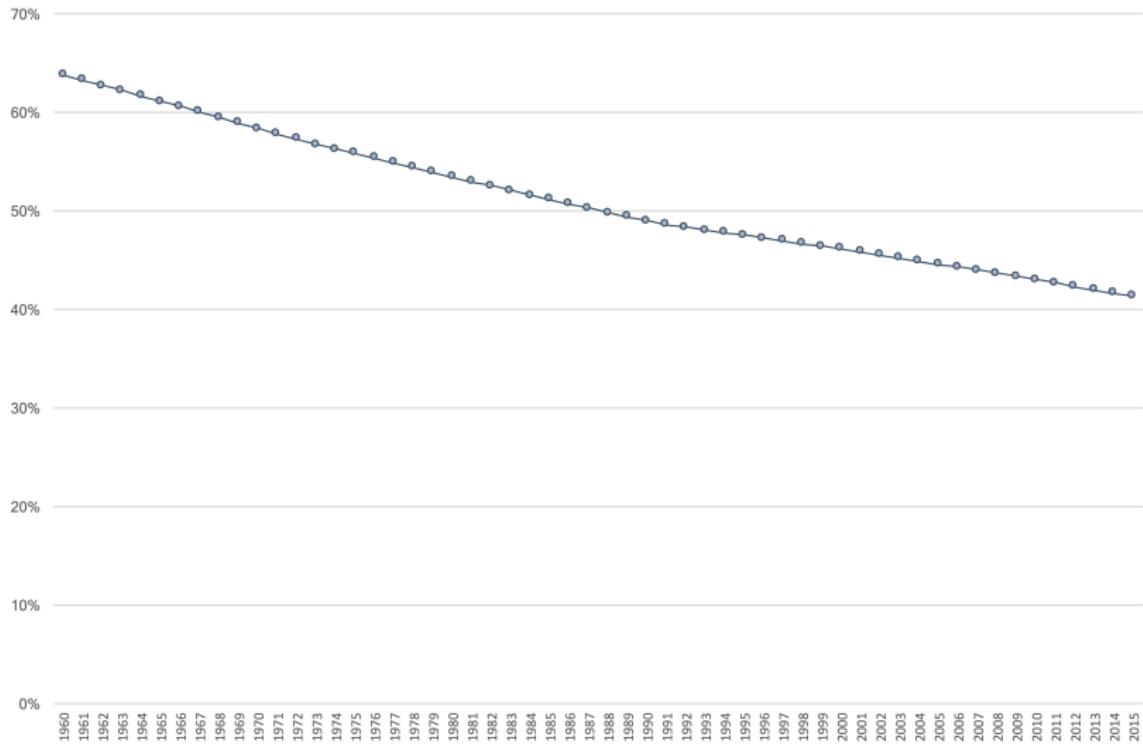
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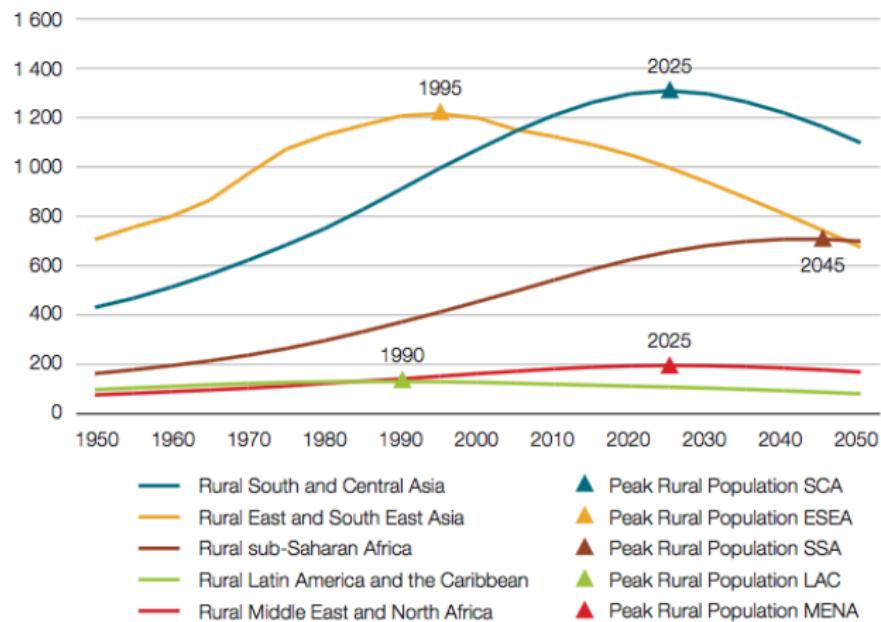
# Rural population trends

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion



# Rural population trends

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion



Sources: FAOSTAT available at: <http://faostat.fao.org/>, and originally from the World Population Prospects available at: <http://esa.un.org/unpp/>

# Rural economies in transition

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

## On-farm

- Agriculture
  - ▶ Subsistence agriculture
  - ▶ Commercial agriculture
- Livestock rearing
  - ▶ Dairy production (cows)
  - ▶ Meat production (goats)
- Fishing
  - ▶ Capture fishing
  - ▶ Aquaculture fisheries
- Forestry
  - ▶ NTFPs
  - ▶ Timber

## Off-farm

# Rural economies in transition

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

## On-farm

## Off-farm

- Rural industry
  - ▶ Agro-processing
  - ▶ Manufacturing
  - ▶ Mining & Quarrying
  - ▶ Construction
  - ▶ Tourism
- Rural services
  - ▶ Retailing & Trading
  - ▶ Social services
  - ▶ Transport & Storage
  - ▶ Communication
  - ▶ Residence

# Rurality and development

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion



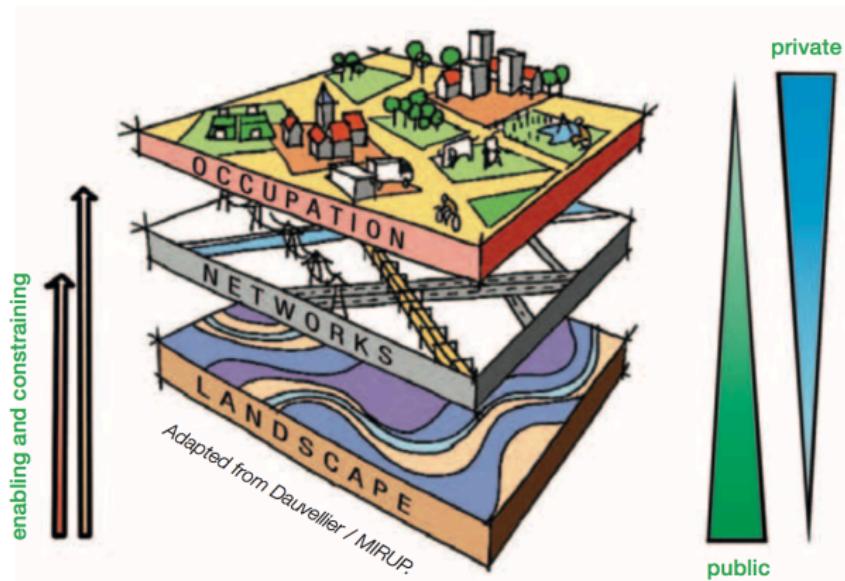
# Scales: local and global issues

Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

**occupation**  
speed of change  
10 - 25 years

**networks**  
speed of change  
25 - 100 years

**landscape**  
speed of change  
50 - 500 years



# Key challenges

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Introduction ► History ► Ecosystems ► Synthesis ► Conclusion

Technical

Economical

Social

Ethical

