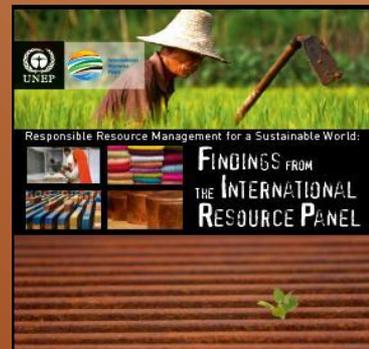
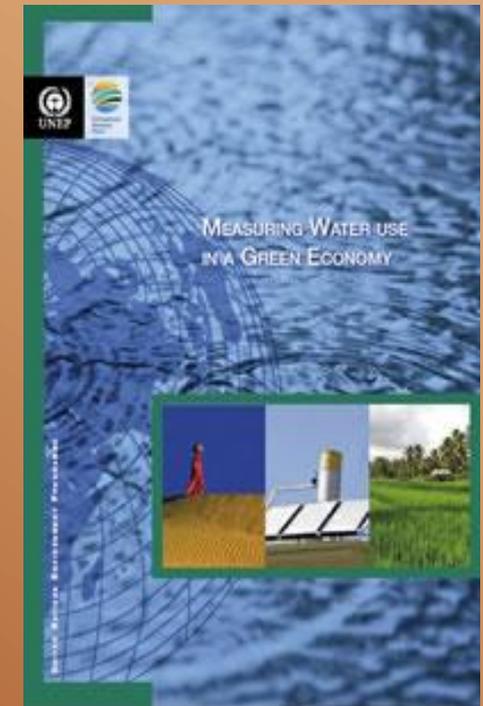
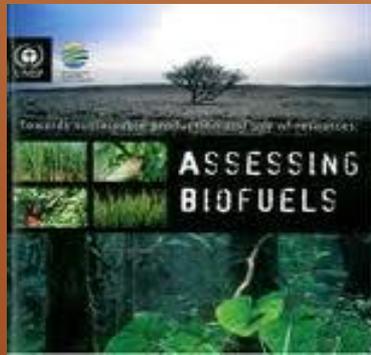


# **Sustainable Consumption and Production**

**1<sup>st</sup> Asia Pacific Meeting on 10YFP  
Bangkok, 7-8 November 2013**

# International Resource Panel Published Reports



[www. http://www.unep.org/resourcepanel/](http://www.unep.org/resourcepanel/)



**Development Alternatives HQ**

# Primary Purpose of Both Organizations

## **UNEP & IRP and Development Alternatives**

**is Creating a World with  
Sustainable Wellbeing for ALL**





***The  
World  
today is  
in high  
fever***

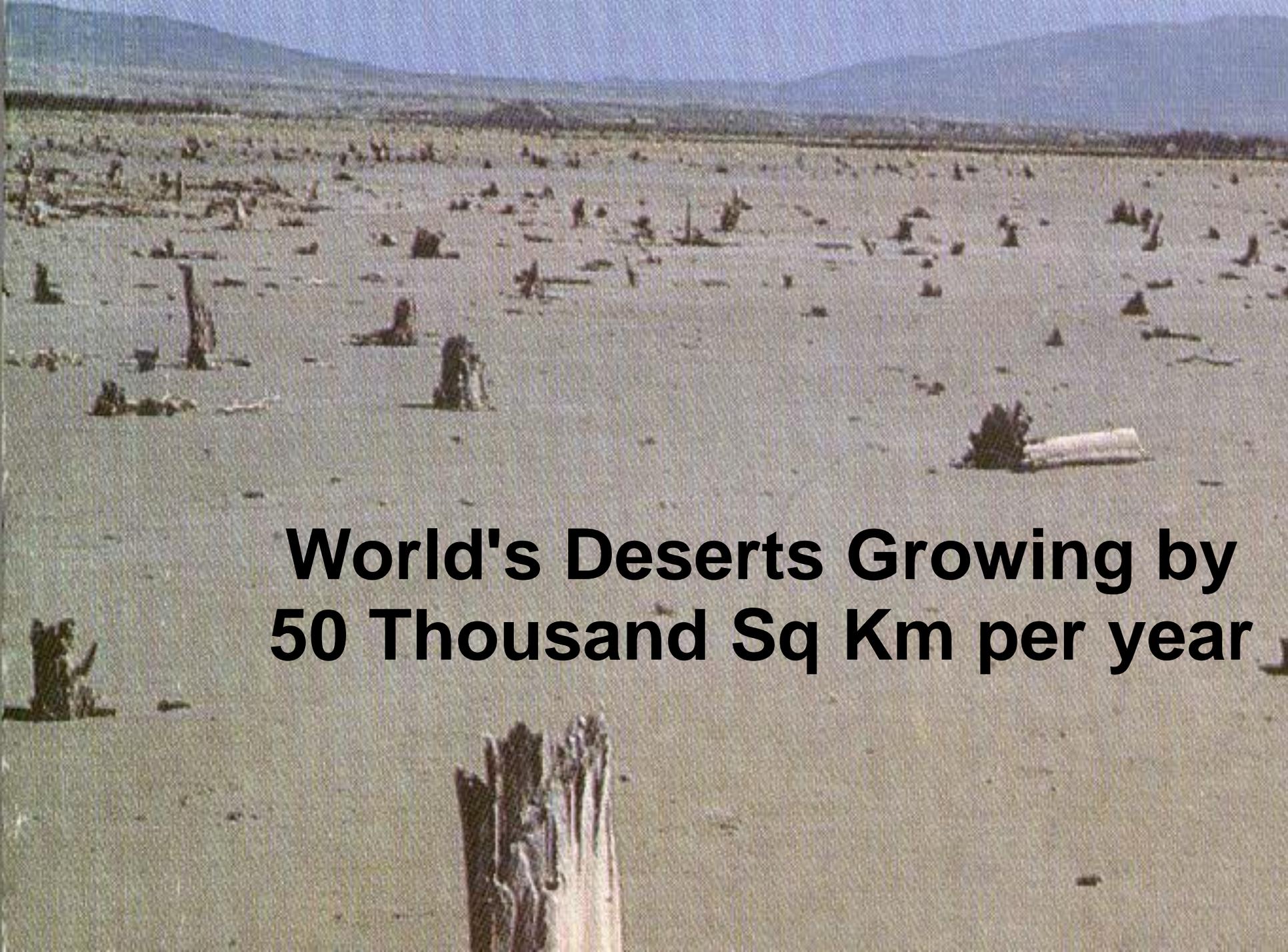
# Climate Change





Development Alternatives

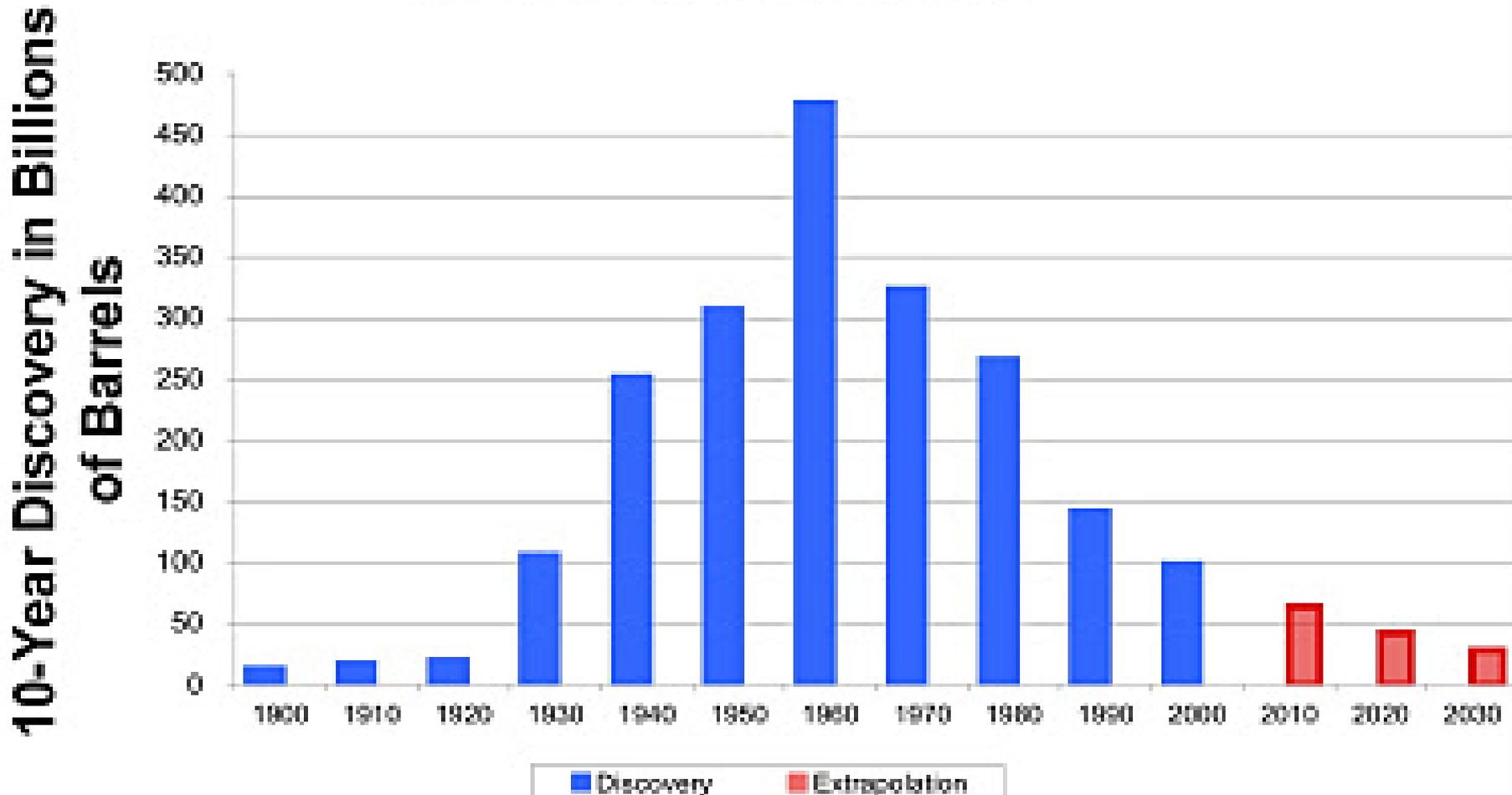
# Extinction of Species



**World's Deserts Growing by  
50 Thousand Sq Km per year**

# PEAK OIL

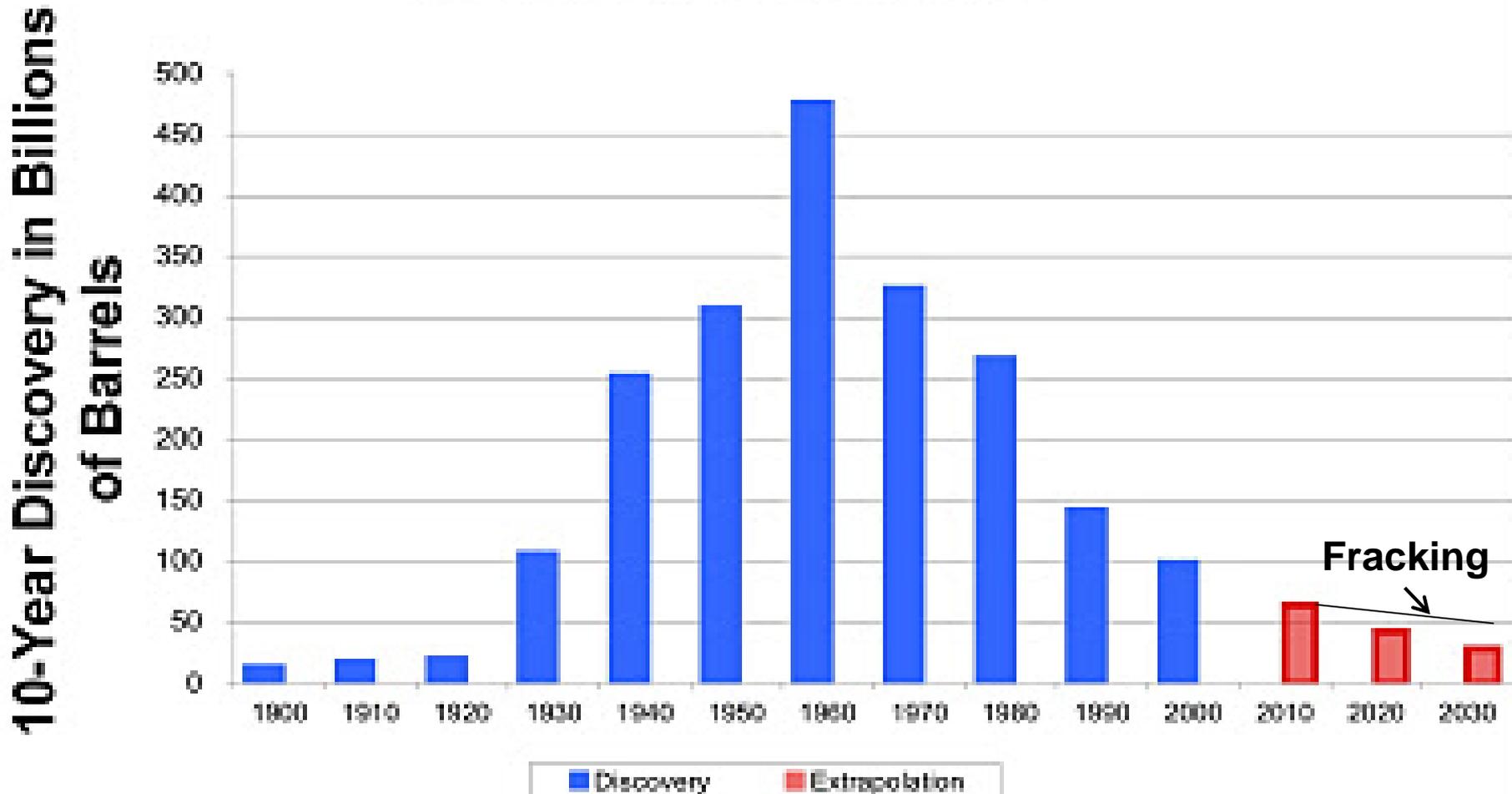
**New Oil discoveries have been declining since 1964**



Note: World oil discovery over 10-year periods, by Association for the Study of Peak Oil and Gas.

# PEAK OIL

New Oil discoveries have been declining since 1964



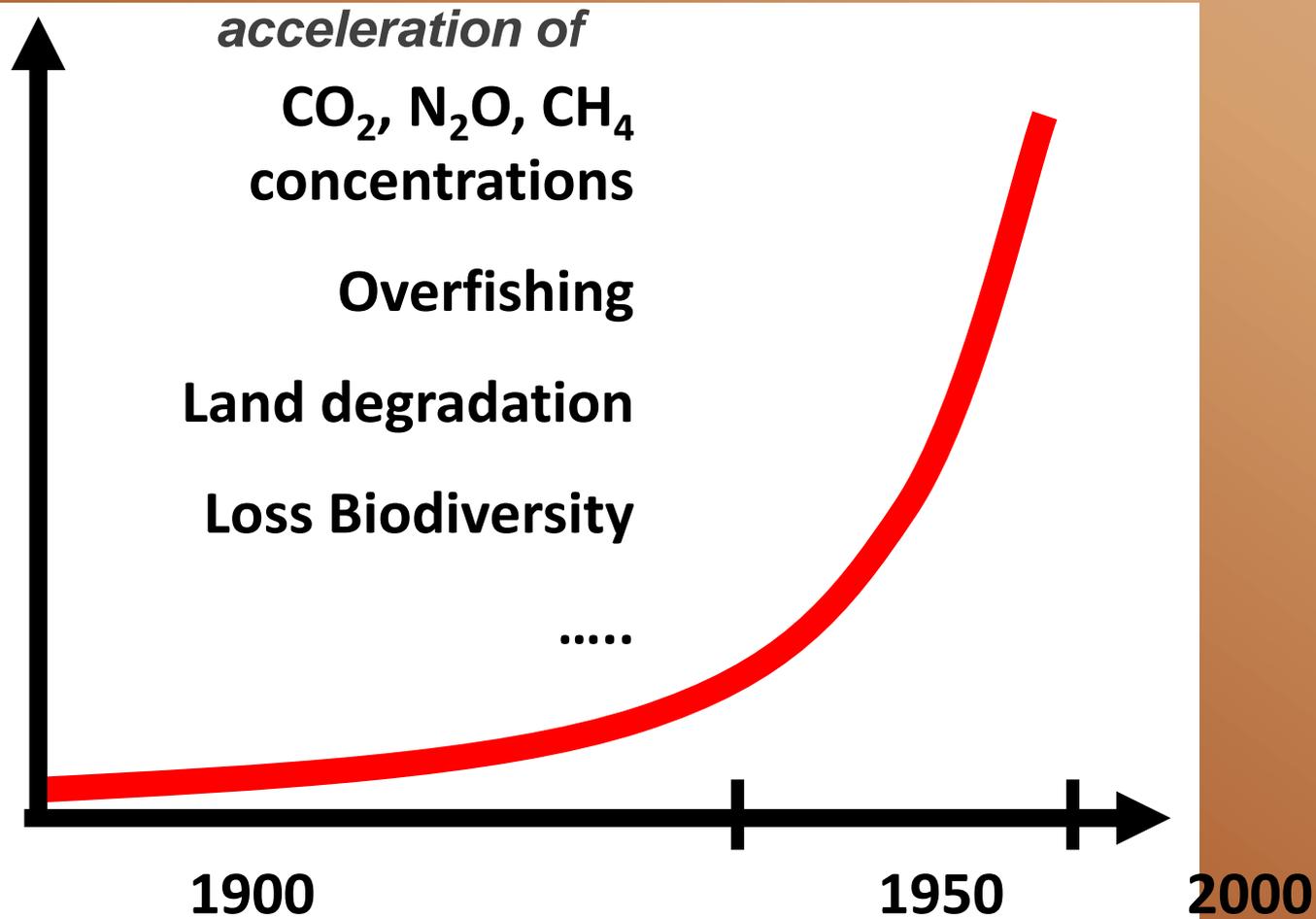
Note: World oil discovery over 10-year periods, by Association for the Study of Peak Oil and Gas.

# Not Just Peak Oil... “Peak Many Things” In The Next 20 Years

- Food production
- Topsoil
- Phosphorous
- Fish
- Water supplies
- Uranium
- Some minerals – copper, zinc and silver



# Exponential Growth

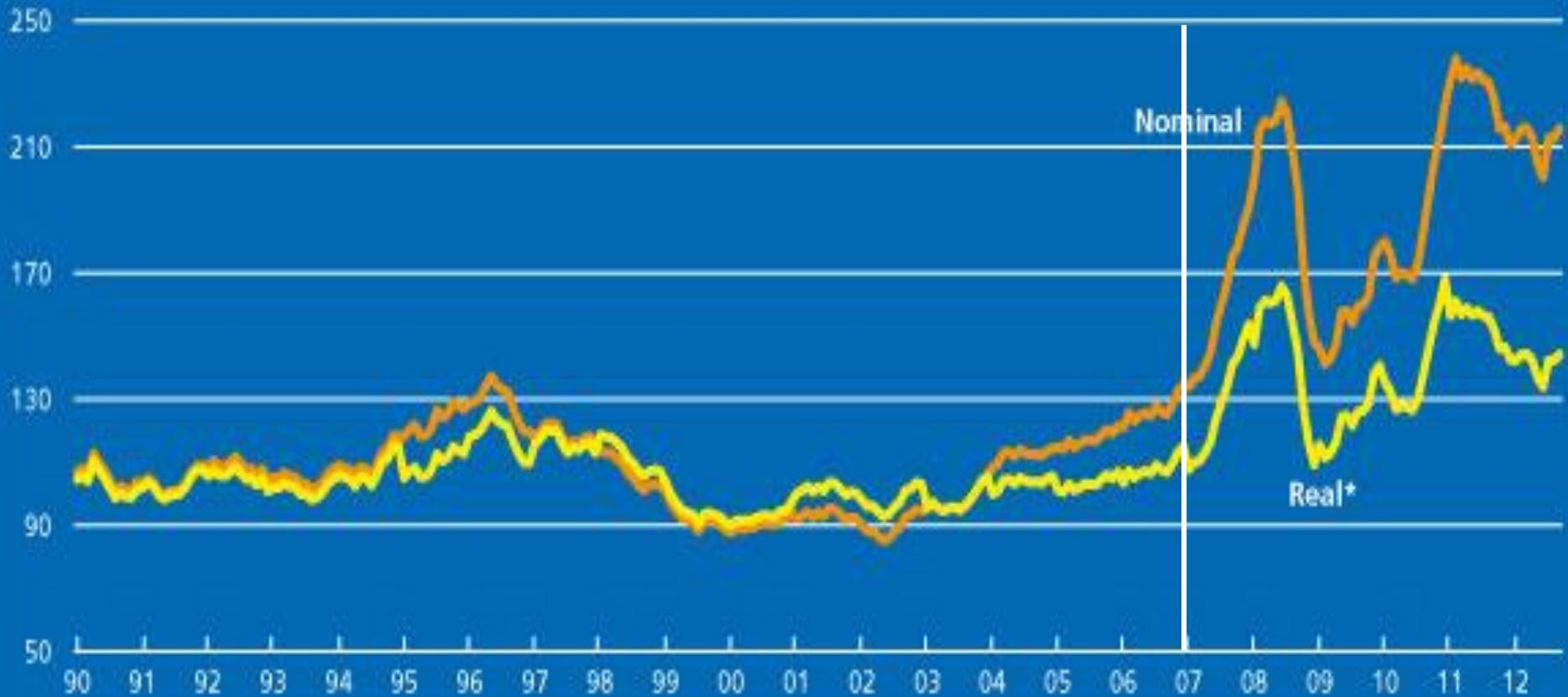




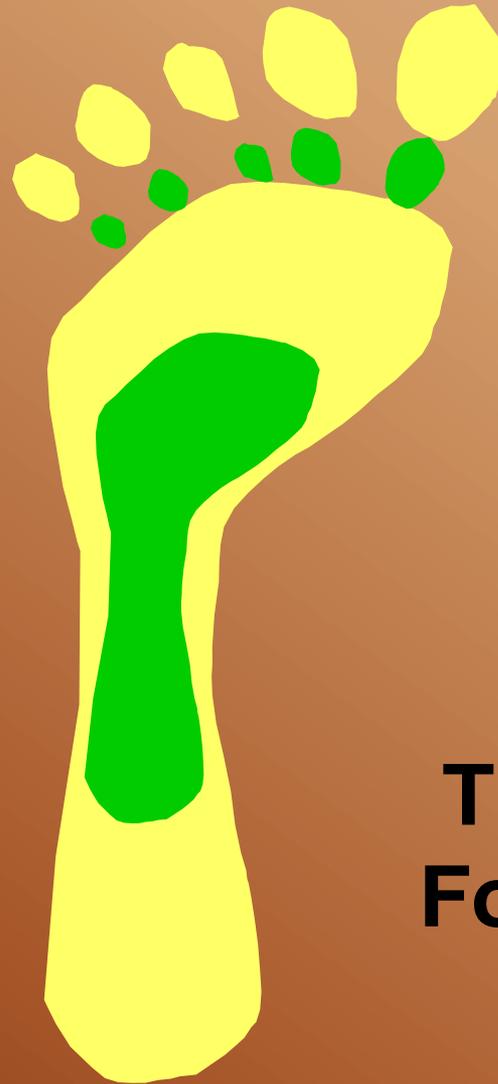
# World Food Prices - FAO

FAO Food Price Index

2002-2004=100



\* The real price index is the nominal price index deflated by the World Bank Manufactures Unit Value Index (MUV)



**Footprint**

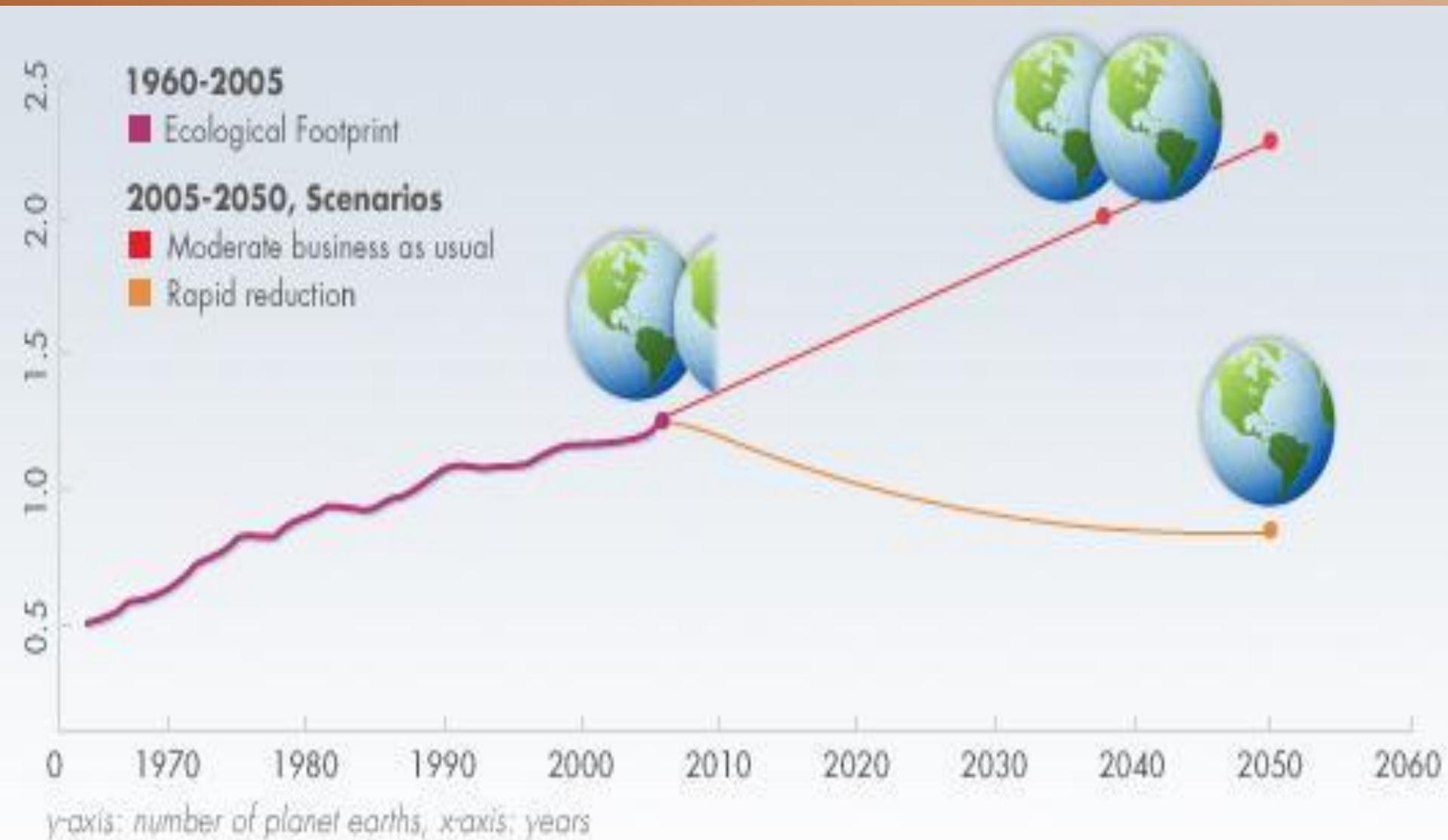


**Bio-Capacity**

**The Ecological  
Footprint of any  
Economy**



# Ecological Footprint





**So, We  
Certainly Need to  
Use the Planet's  
Resources More  
Efficiently**



# Resources





# Resources + Demographics

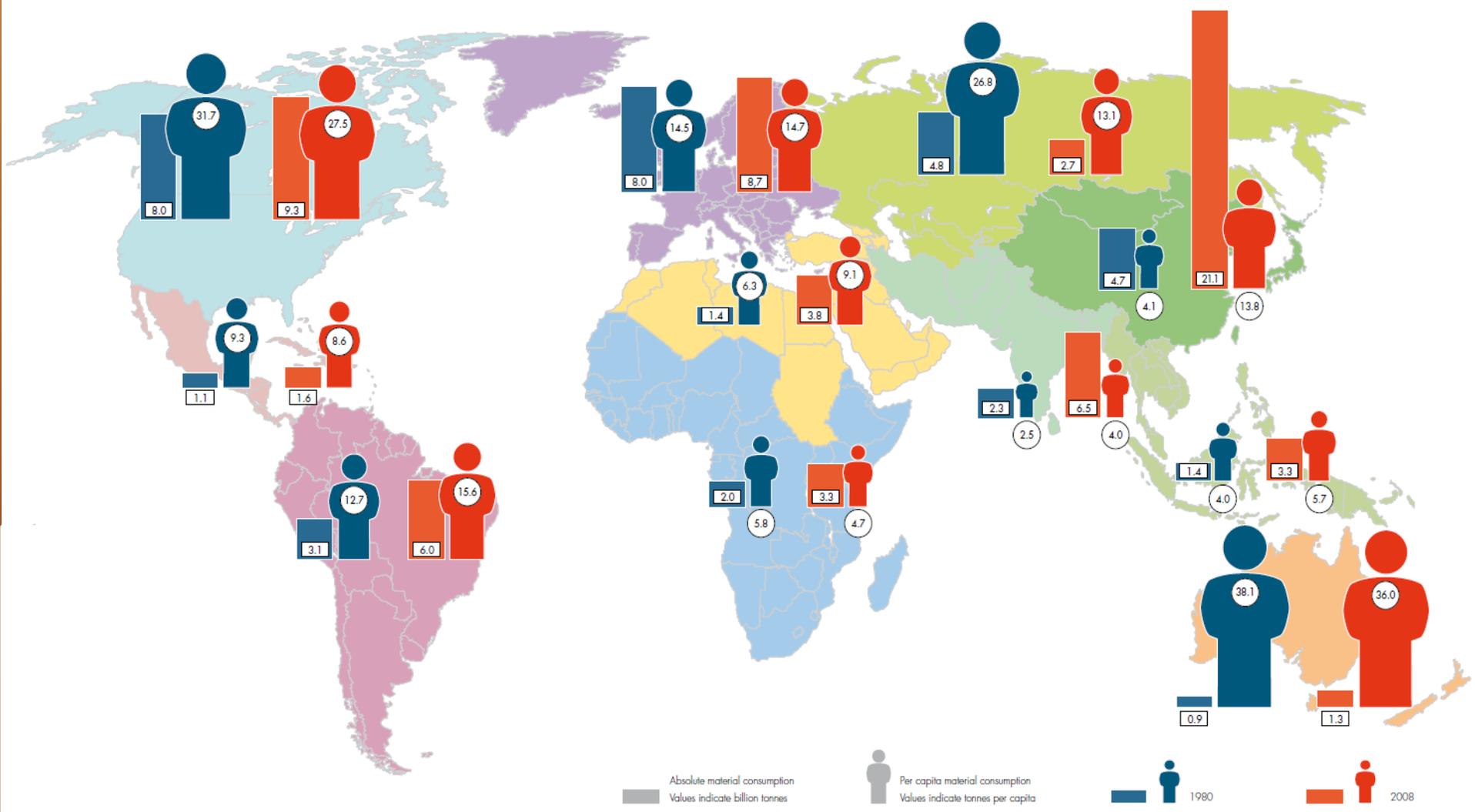




# Resources + Demographics

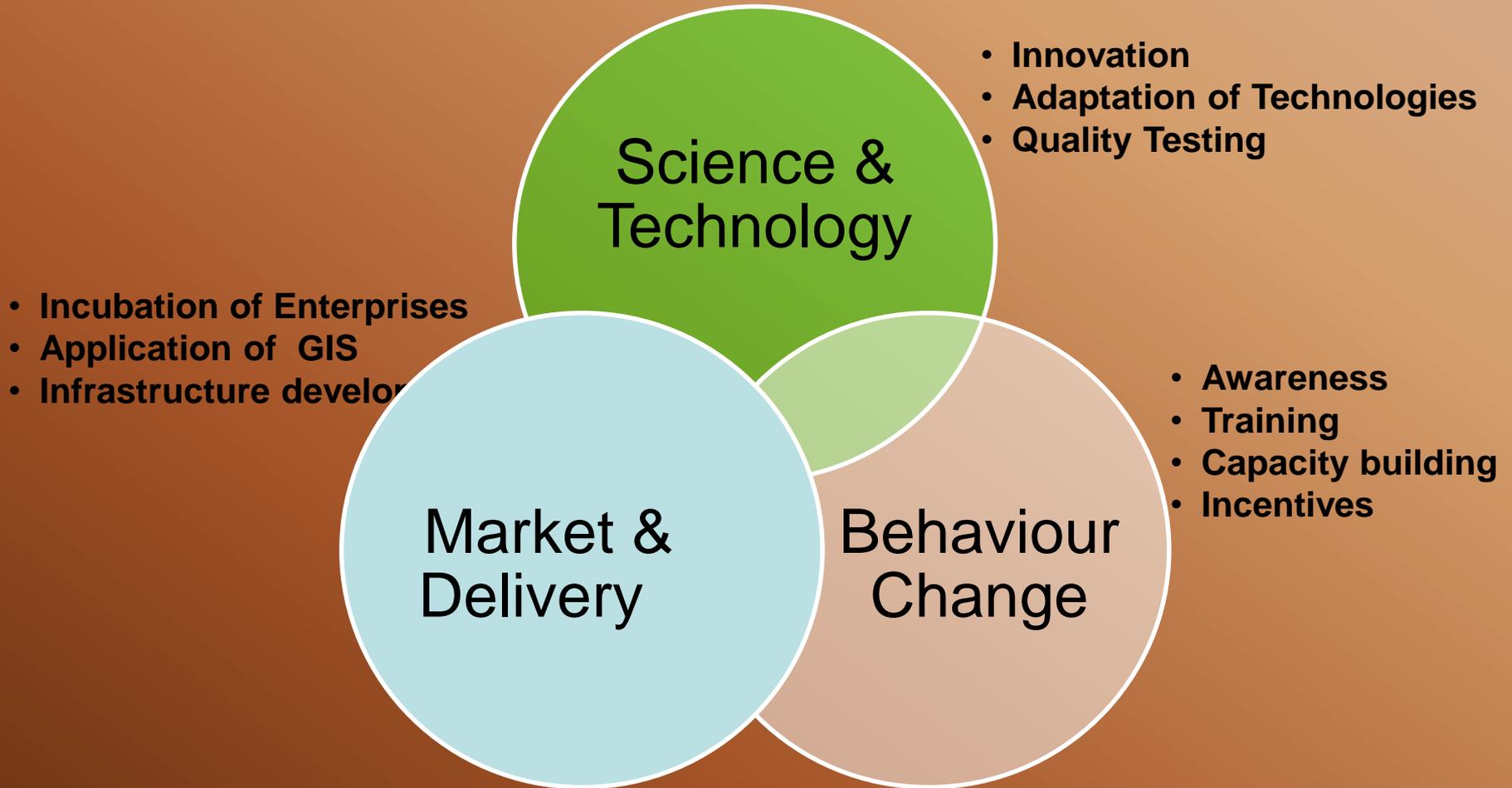
Aspirations





# Material Consumption by Region

# Leverage Points for Action



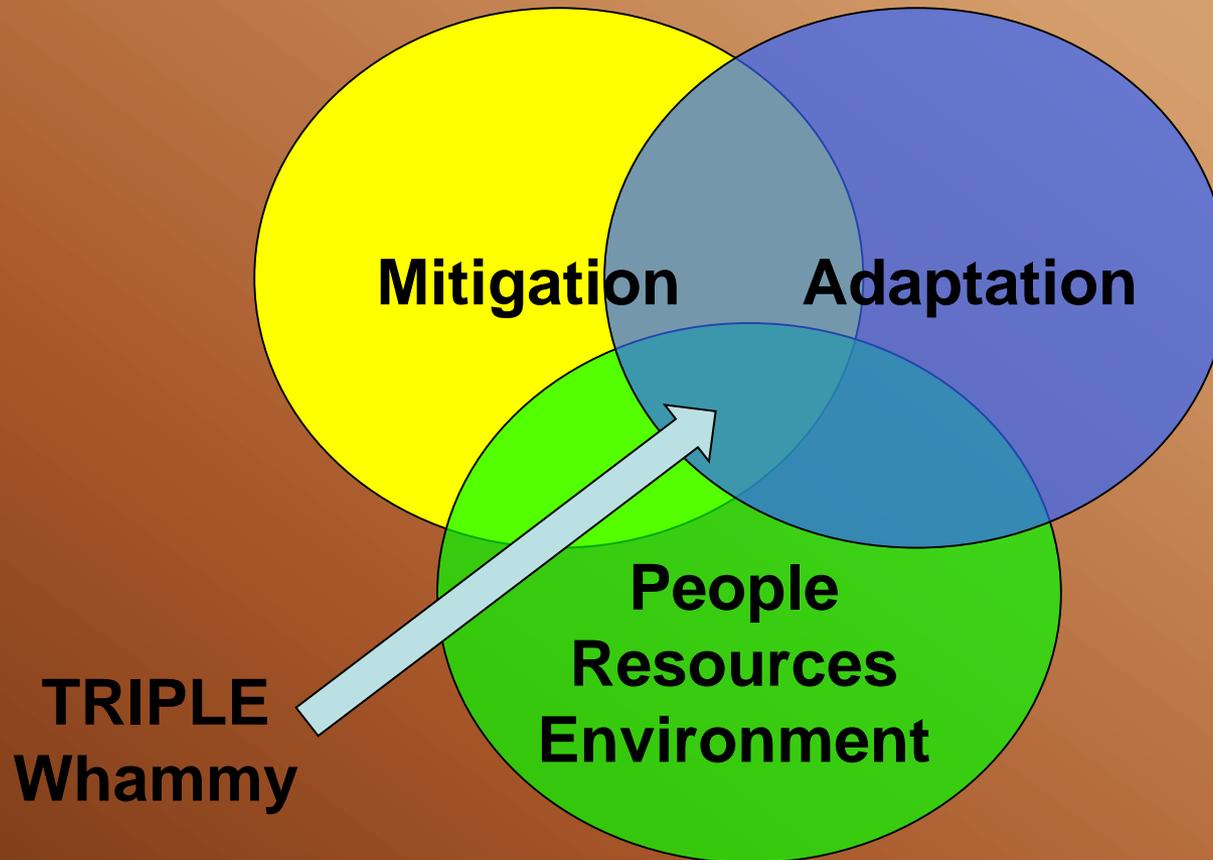
# **Sustainable Consumption & Production**

--

## **The Key to Conserving Natural Resources**



# Responding to Impending Climate Change *AND* Improving Human Wellbeing



# Triple-Impact Packages

## Options for

- Food security
- Water security
- Energy security
- Shelter security
- Livelihood security

## Improved farming practices

- Cropping patterns
- Afforestation for wasteland regeneration
- Improved water – energy efficiencies

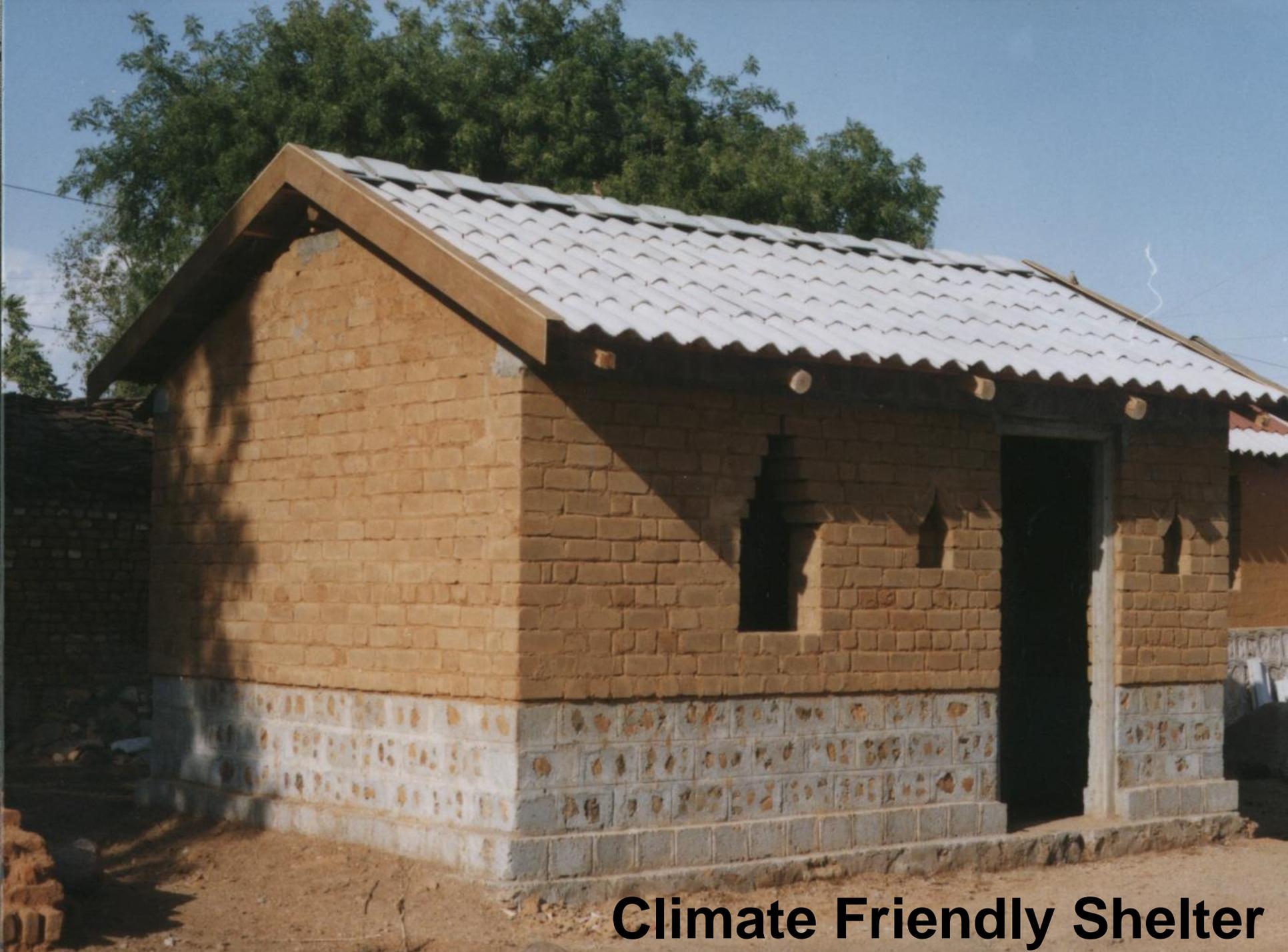
## Green Jobs

- Creating green jobs
- Green Rating System for Green Jobs

## Alternative Livelihood Options

- In Biodiversity hotspots





**Climate Friendly Shelter**



**Development Alternatives HQ**



Development Alternatives

# Renewable Energy





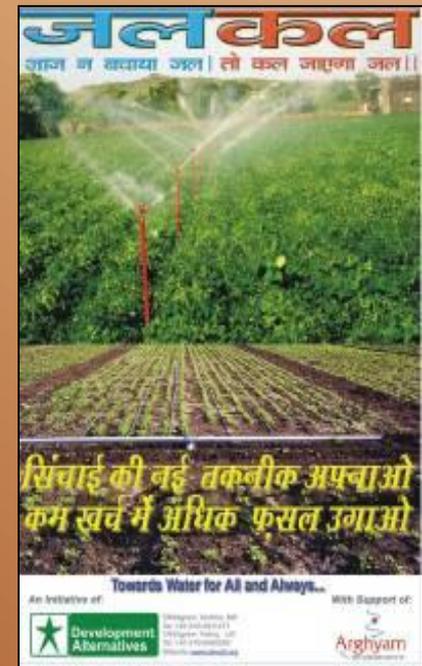
Development Alternatives

# Ecosystem Restoration



# Triple-Impact Technology Packages - AGRICULTURE

- Low carbon [Energy, Chemicals]
- Resource efficient [Irrigation, Soils]
- Multiple crops [Polyculture]





Development Alternatives

**Natural Farming**



# The Five Kingdoms of Nature

\*

- Animals
- Plants
- Fungi
- Algae
- Bacteria

# THE **BLUE** ECONOMY



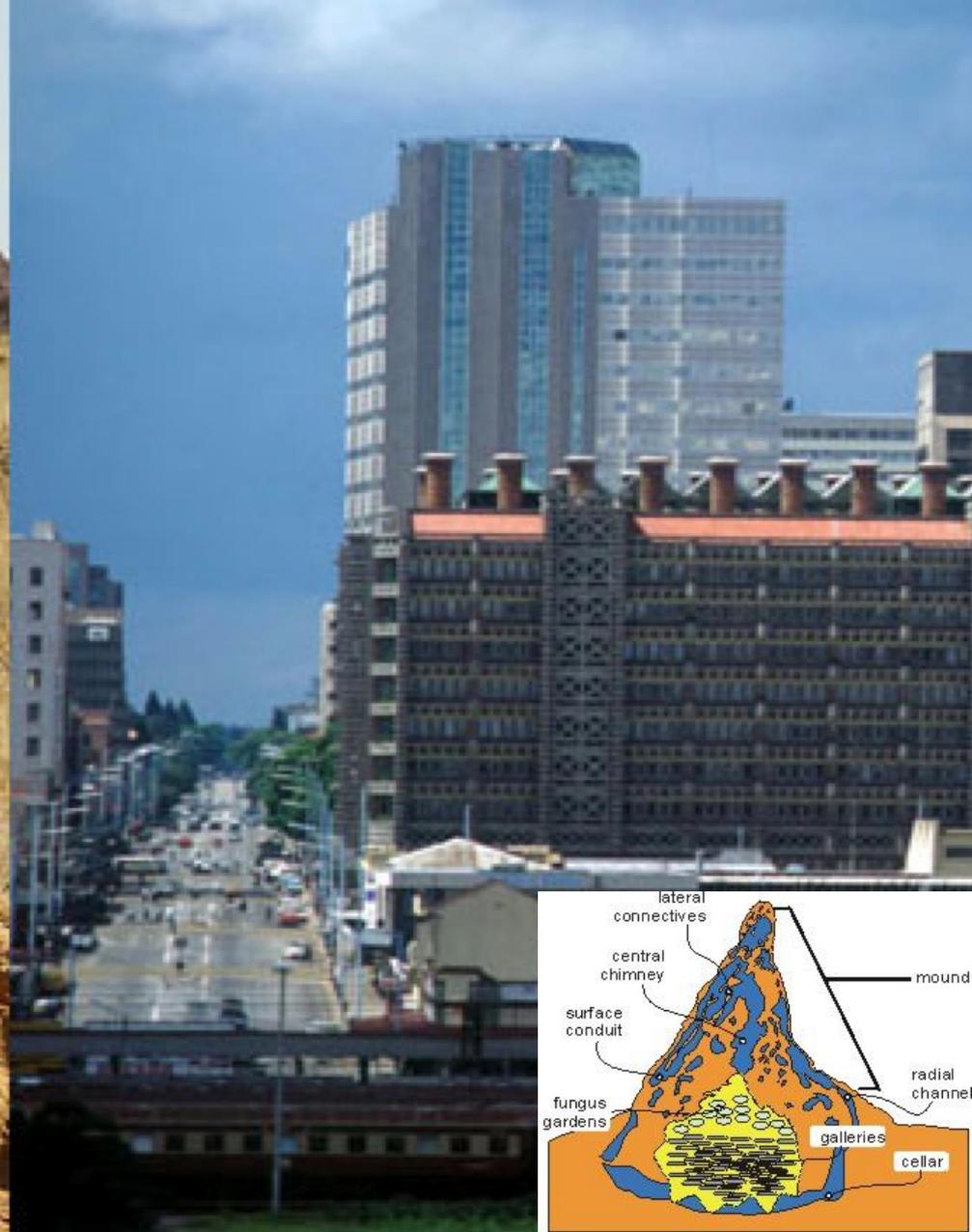
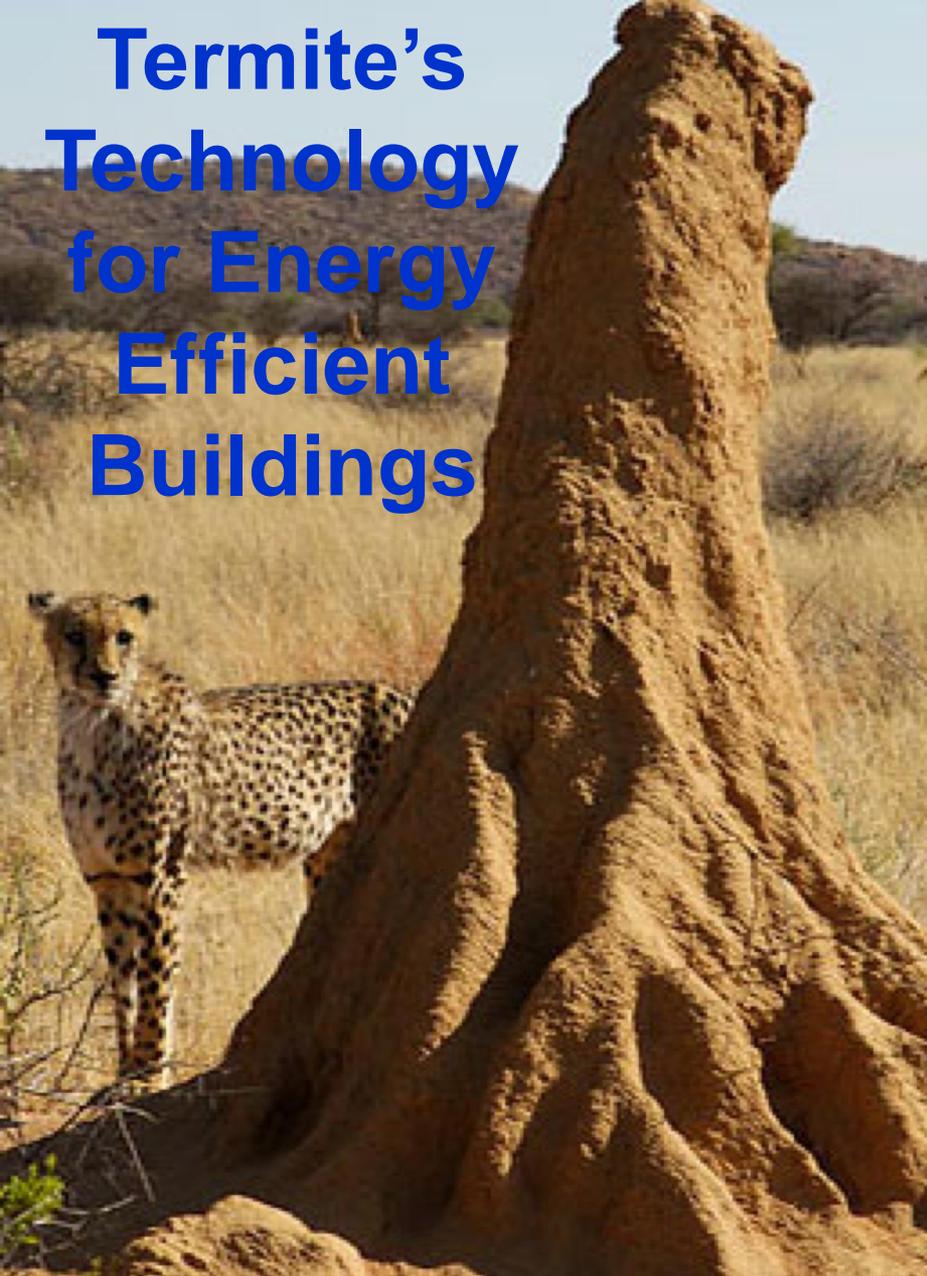
Gunter Pauli

REPORT TO THE CLUB OF ROME

## **100 Technologies Inspired by Nature**

- **Efficiency**
  - **Equity**
- **Employment**

# Termite's Technology for Energy Efficient Buildings





# Wetlands for Purifying Water



Development Alternatives

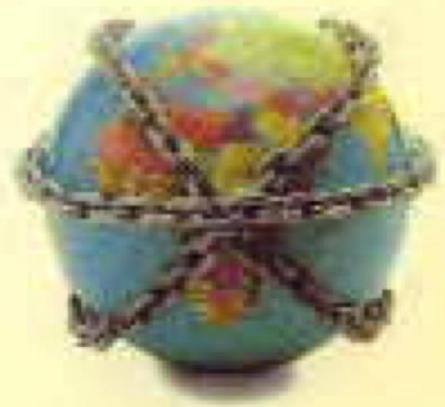
# Decoupled Resources





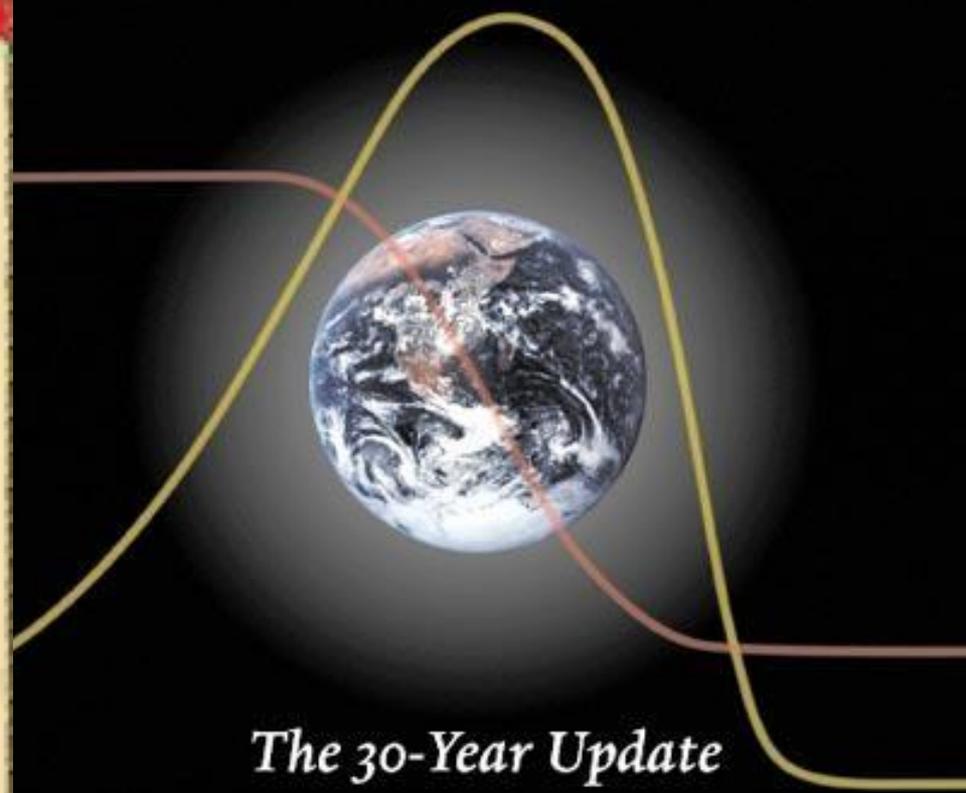
A report  
for the  
CLUB OF ROME'S  
project on the  
predicament of mankind.

# THE LIMITS TO GROWTH



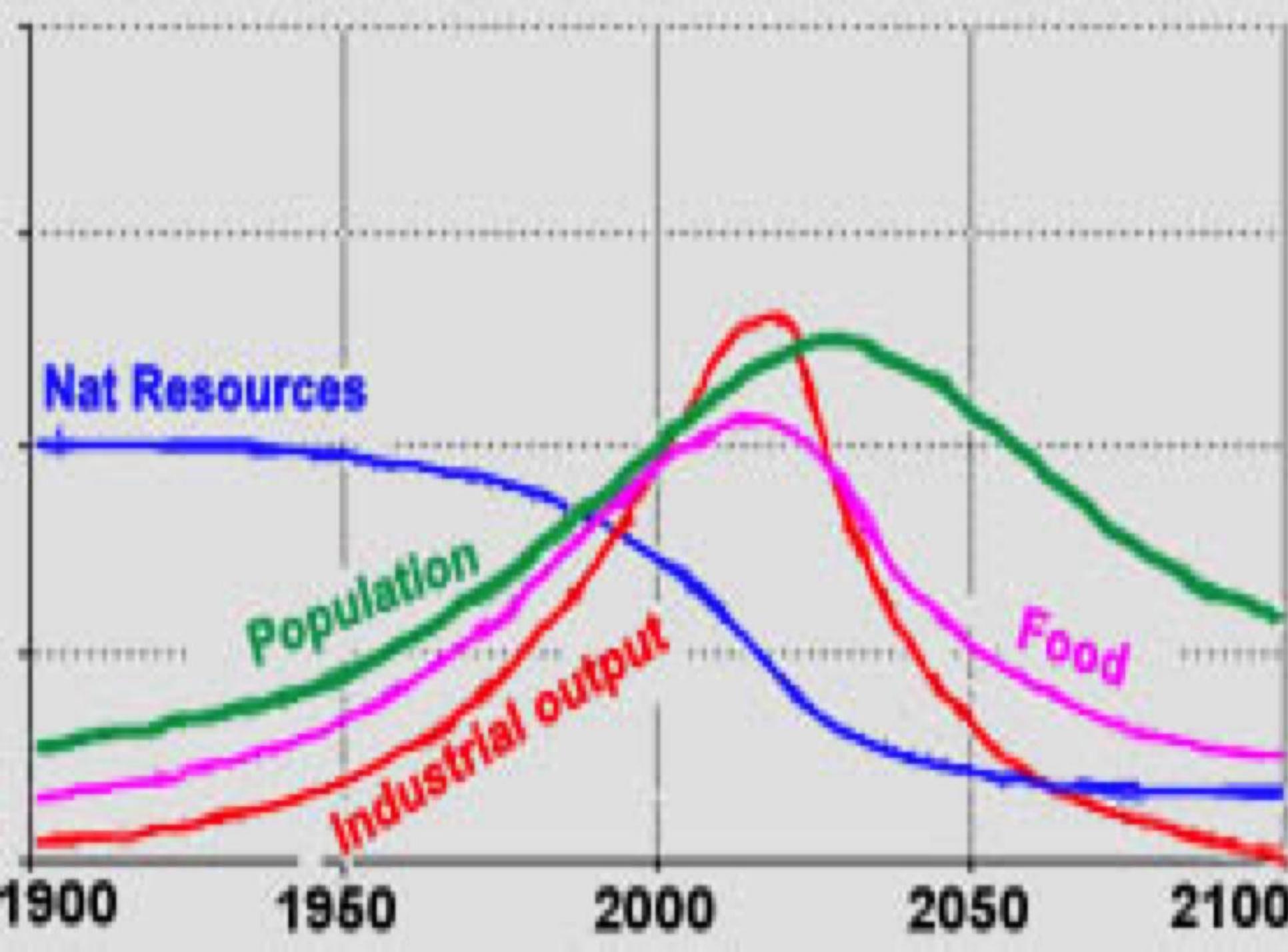
Donella H. Meadows   Dennis L. Meadows  
Jorgen Randers   William W. Behrens III

# LIMITS TO GROWTH



*The 30-Year Update*

DONELLA MEADOWS | JORGEN RANDERS | DENNIS MEADOWS



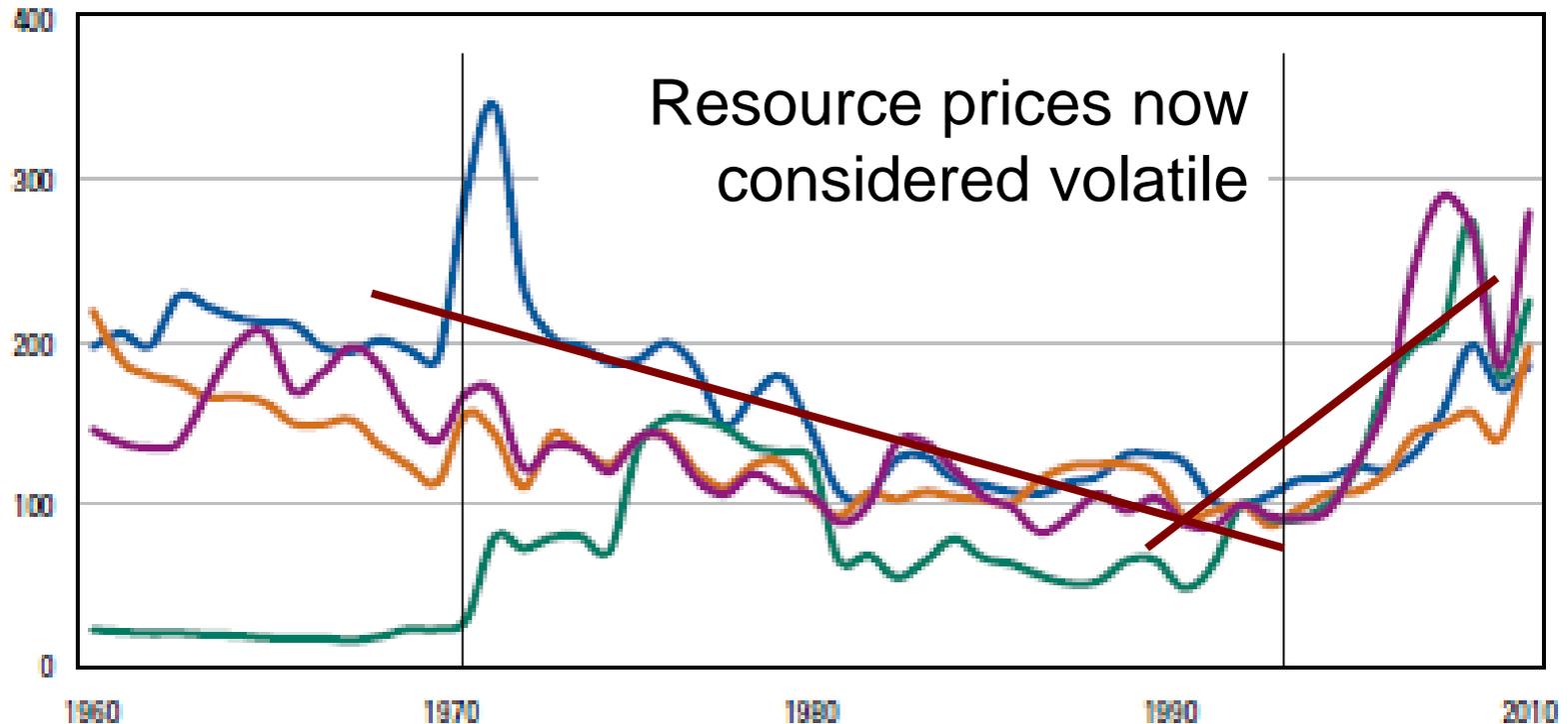
# Key findings on resource use and economic growth



Figure 2.5. Commodity price indices

Price index (real year 2000 US\$)  
2000=100

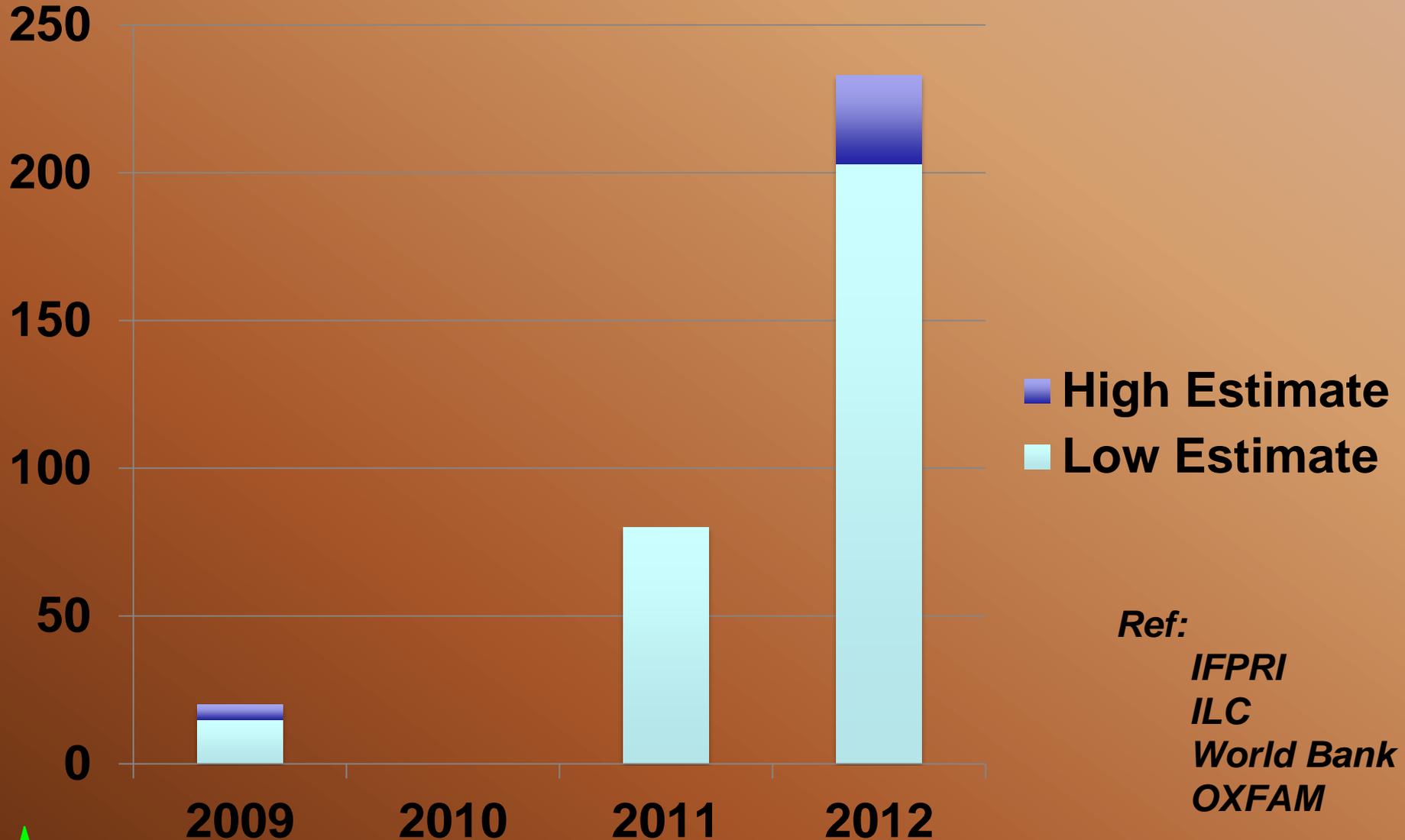
- Food
- Raw materials
- Energy
- Metals and minerals (jr)



D

Source: World Bank Commodity Price Data (Pink Sheet), historical price data, available from <http://blogs.worldbank.org/prospects/global-commodity-watch-march-2011>

# Land Acquired Overseas Since 2001 (Million Hectares)



*Ref:*

*IFPRI*

*ILC*

*World Bank*

*OXFAM*



Development Alternatives



**1 Week's Food for a Family in Europe: ~ \$ 400**

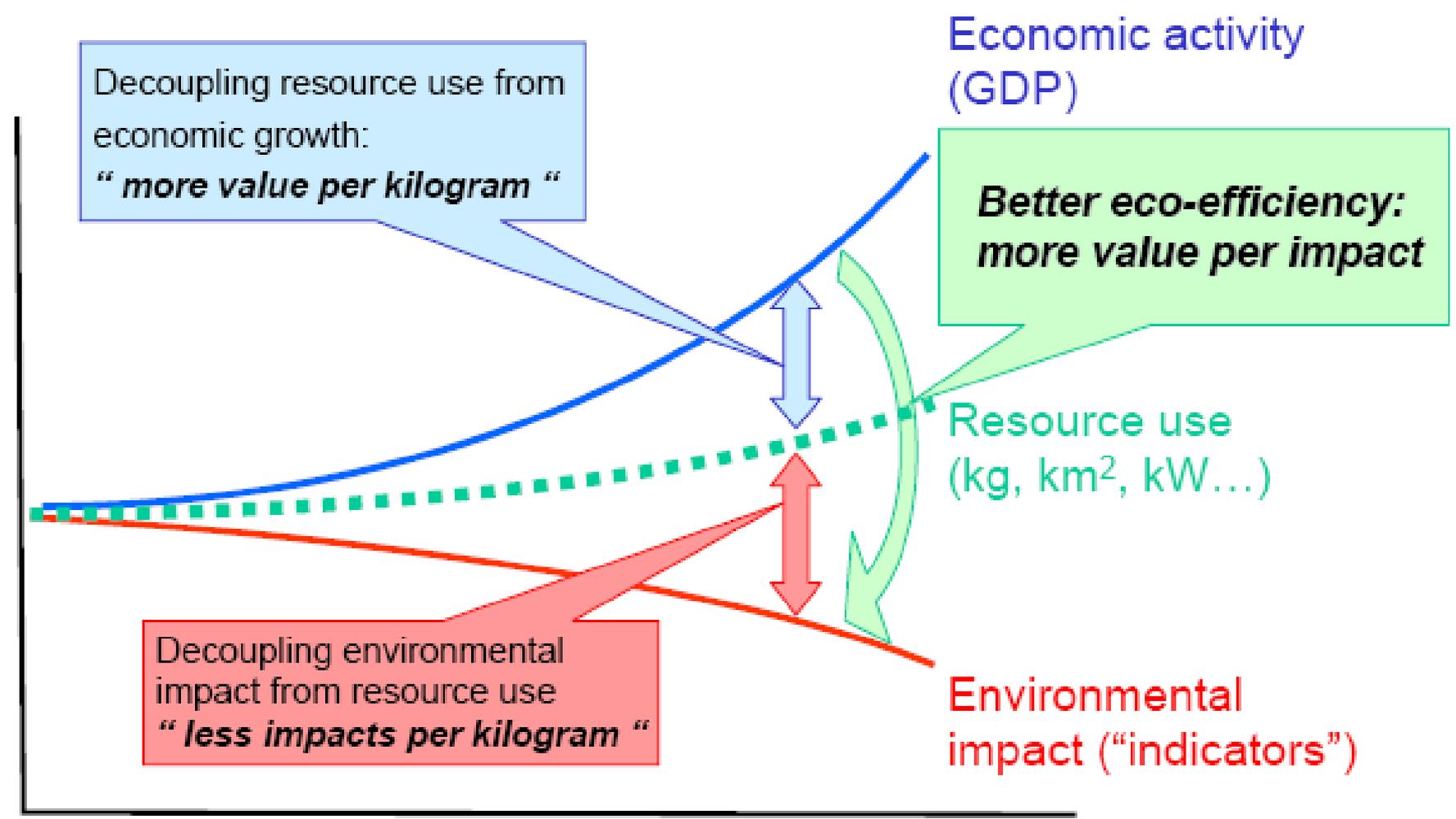


**1 Week's Food for a Family in Chad: ~ \$ 20**





# Objective: *Decouple Impact from Growth*



# Concepts

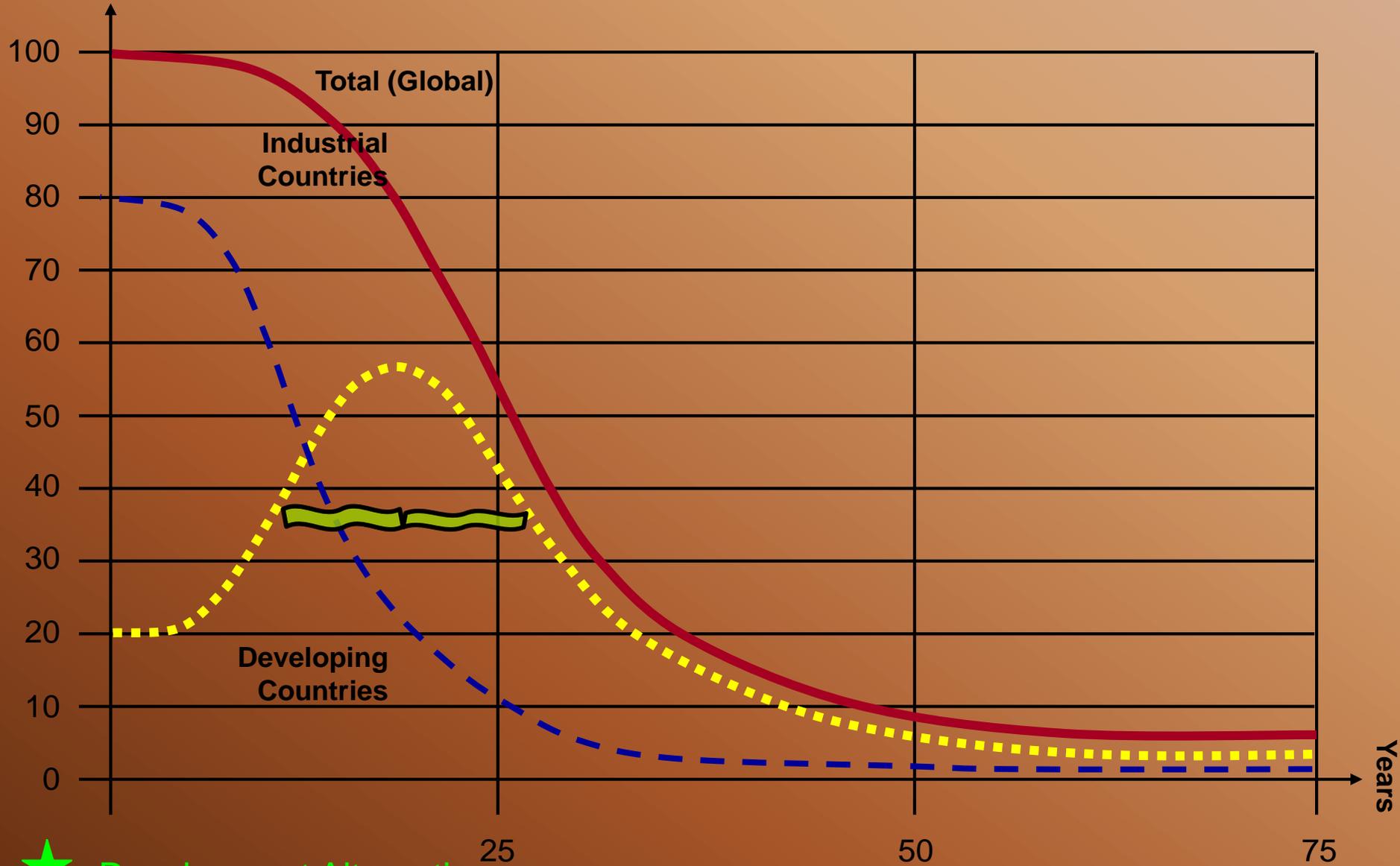
- **Efficiency**
- **Productivity**
- **Conservation**
  
- **Decoupling**
- **Dematerialization**





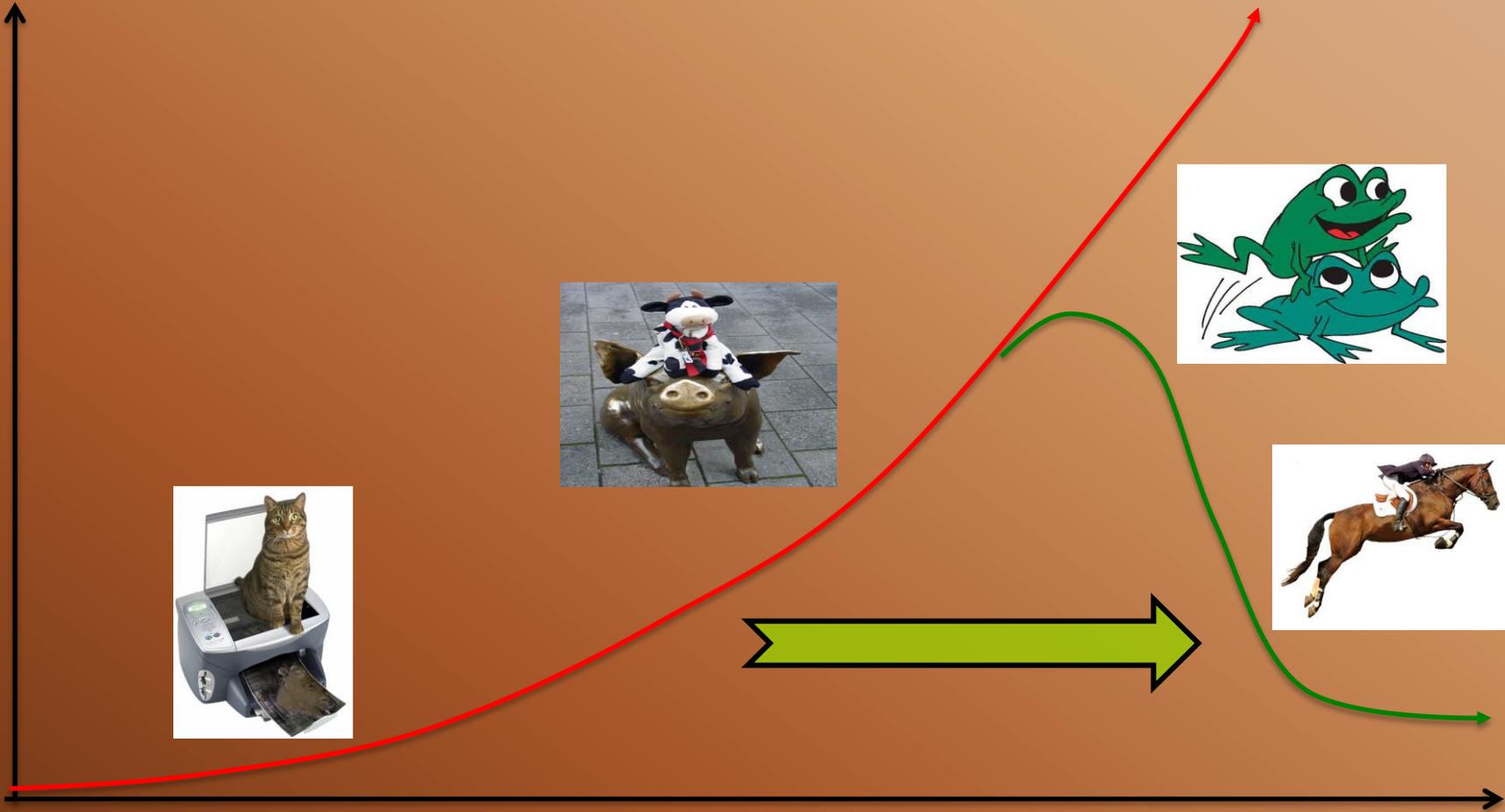


# Contraction and Convergence



# Societal Choices

Cost



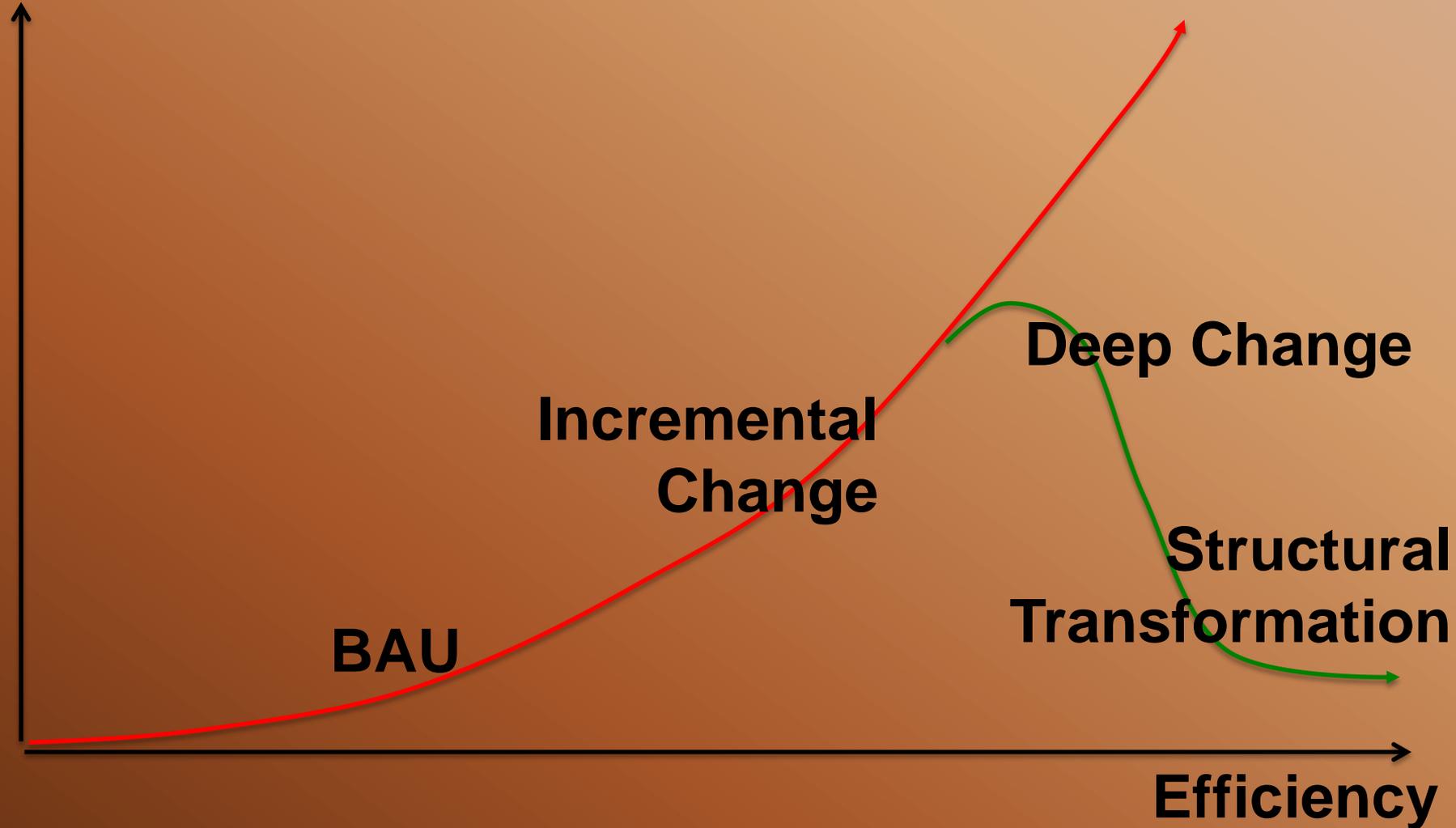
Efficiency



Development Alternatives

# Level of Change

Cost



BAU

Incremental  
Change

Deep Change

Structural  
Transformation

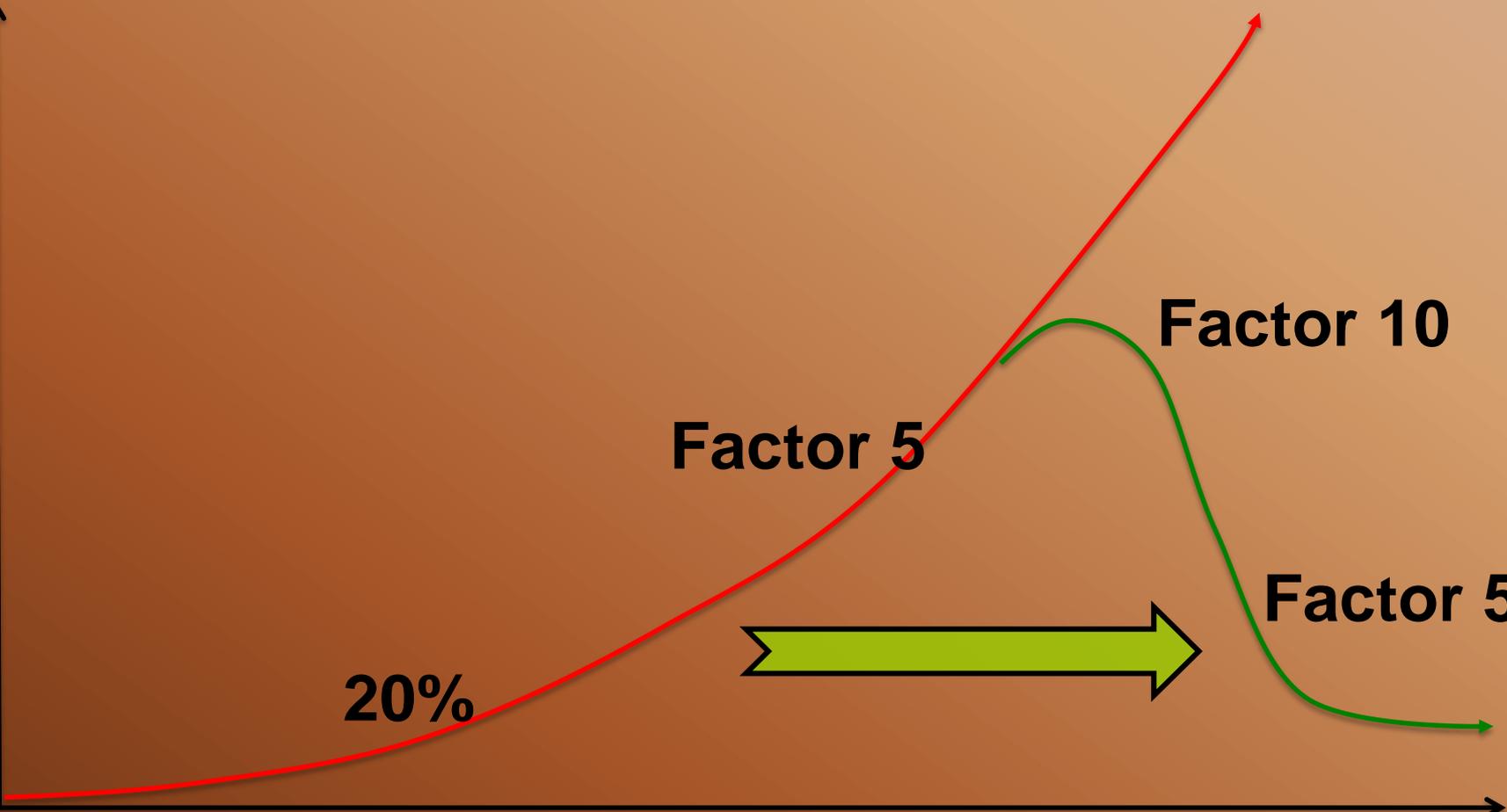
Efficiency



Development Alternatives

# Change Achieved

Cost



20%

Factor 5

Factor 10

Factor 50

Efficiency



Development Alternatives

# Systemic Issues

**Basic Needs**

***AND***

**Environment**



# Systemic Problems

## Production Systems *AND* Consumption Patterns



# Systemic Solutions

**Sustainable Jobs *AND* Sustained Resources**



# Global Ramifications

Northern Concerns *AND* Southern Imperatives



The background of the image is a photograph of the United Nations General Assembly hall. The large, circular emblem of the United Nations is prominently displayed on the wall behind the speaker's podium. The hall is filled with delegates seated at desks, and the overall atmosphere is formal and international.

**Urgent Need for**

**Charter or even Convention  
on Global Management of  
Natural Resources**

**= SCP**