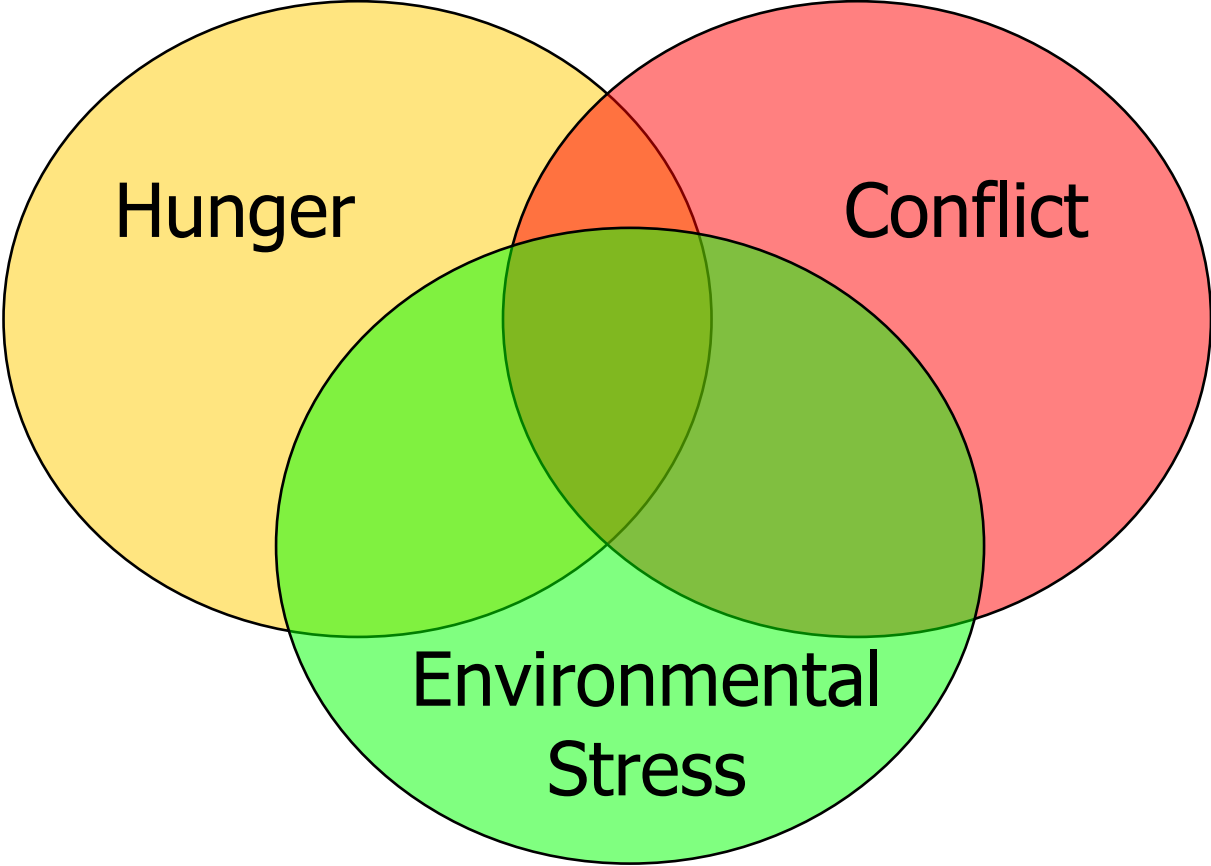


# **Hunger, Conflict and Environmental Stress**

## **Breaking Vicious Cycles**

Presentation at the III International Media Forum, Monte Porzio  
Catone (Roma), 12-15 October 2005

Hartwig de Haen, Assistant Director General, Economic and Social  
Department, FAO



Hunger

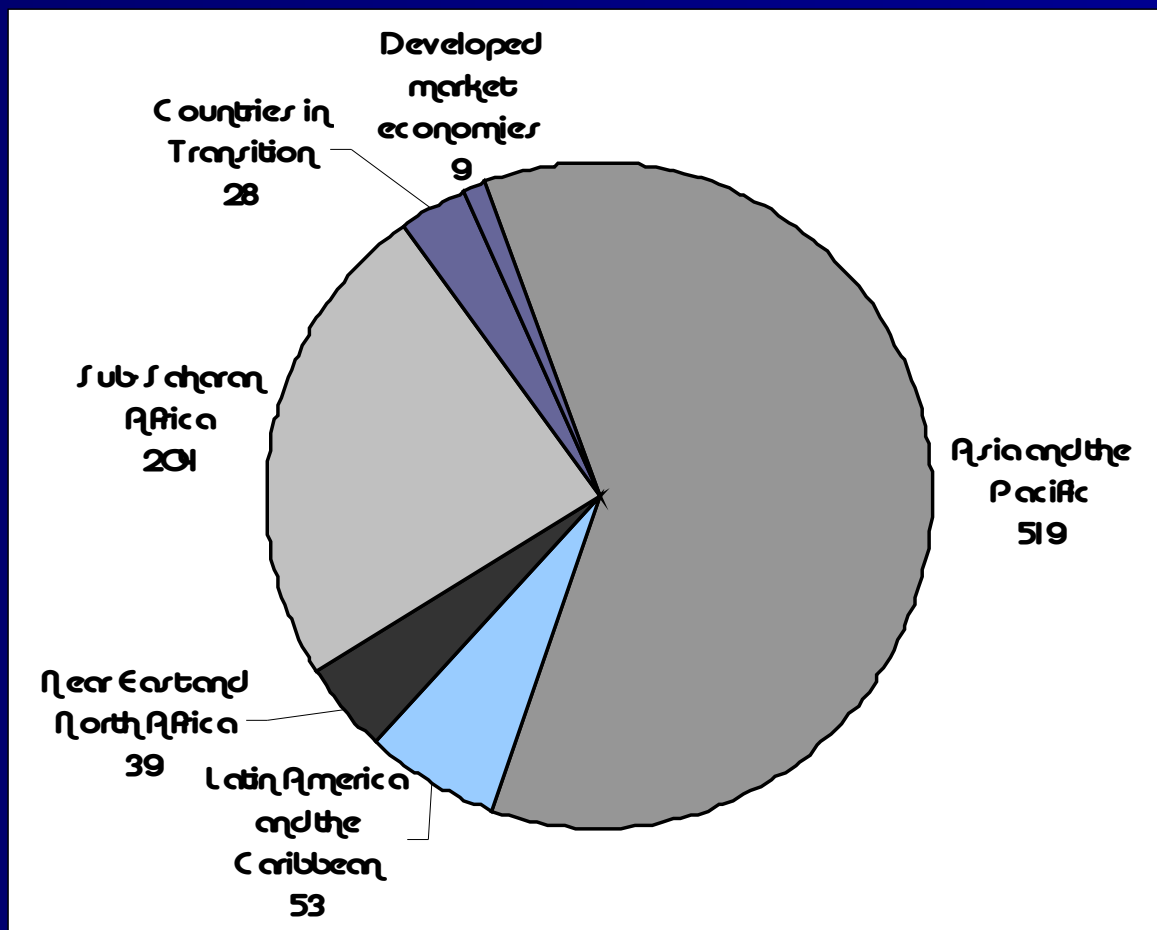
Conflict

Environmental  
Stress

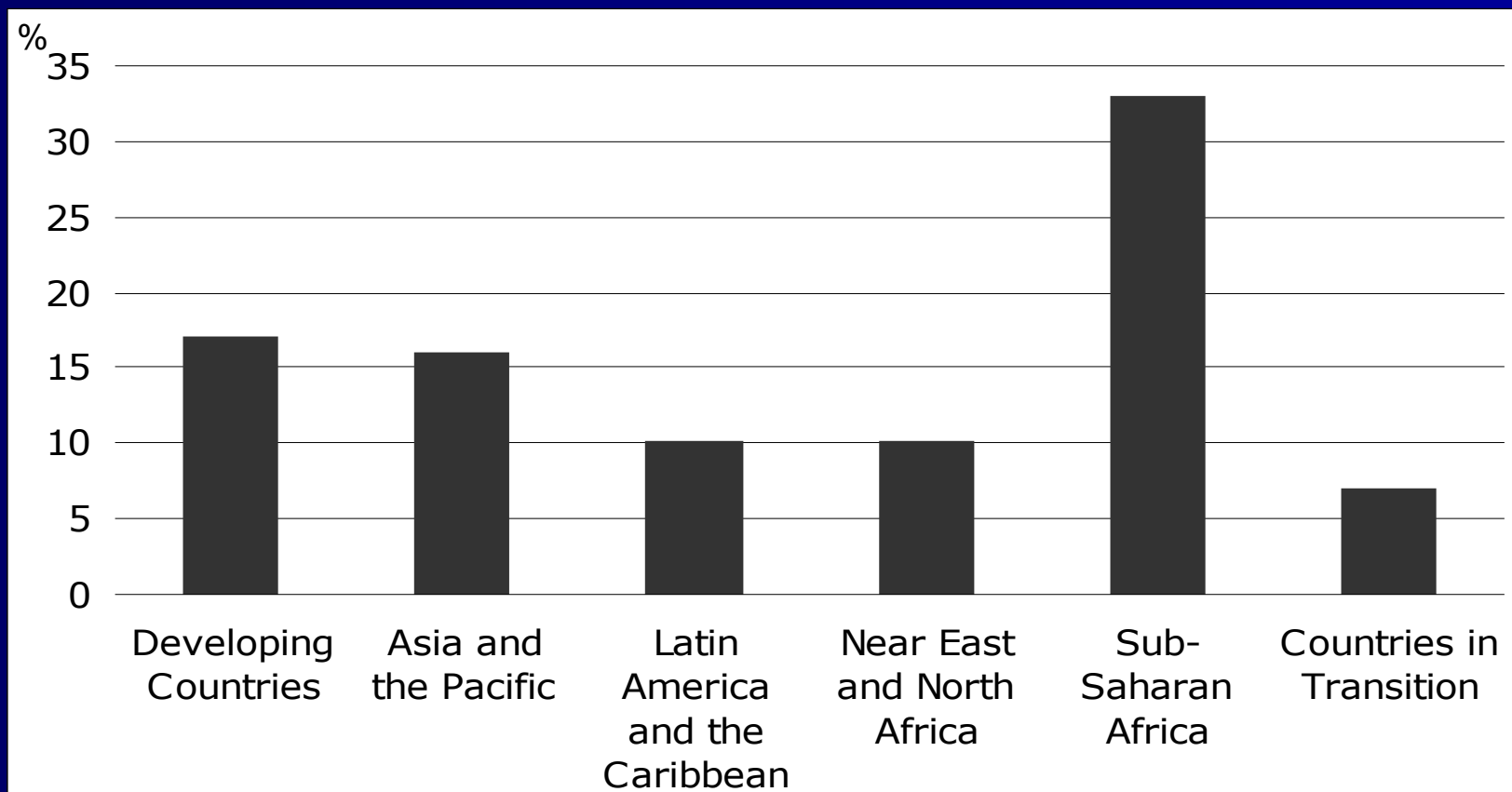


Hunger

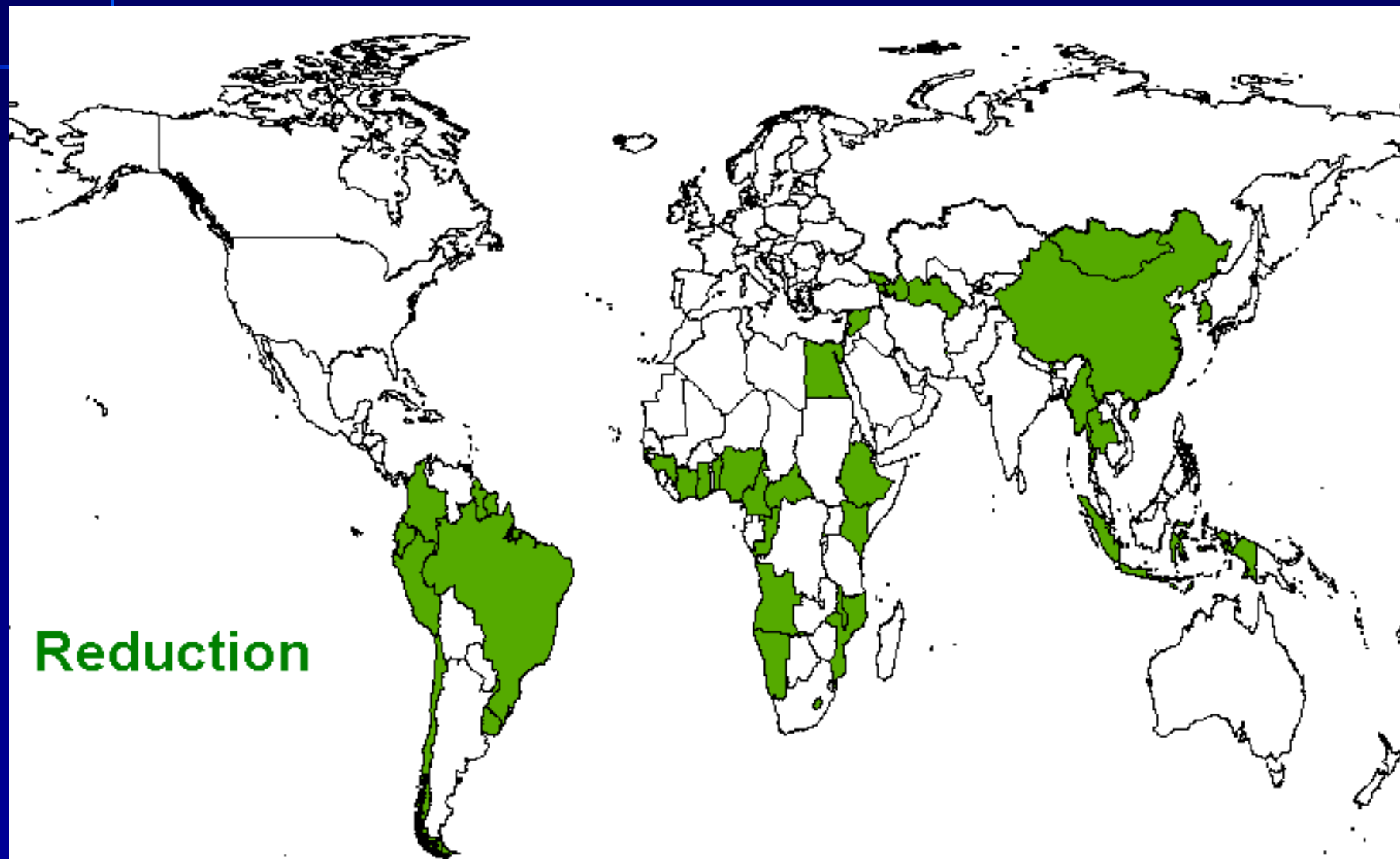
# Undernourished population by region, 2000-2002 (millions)



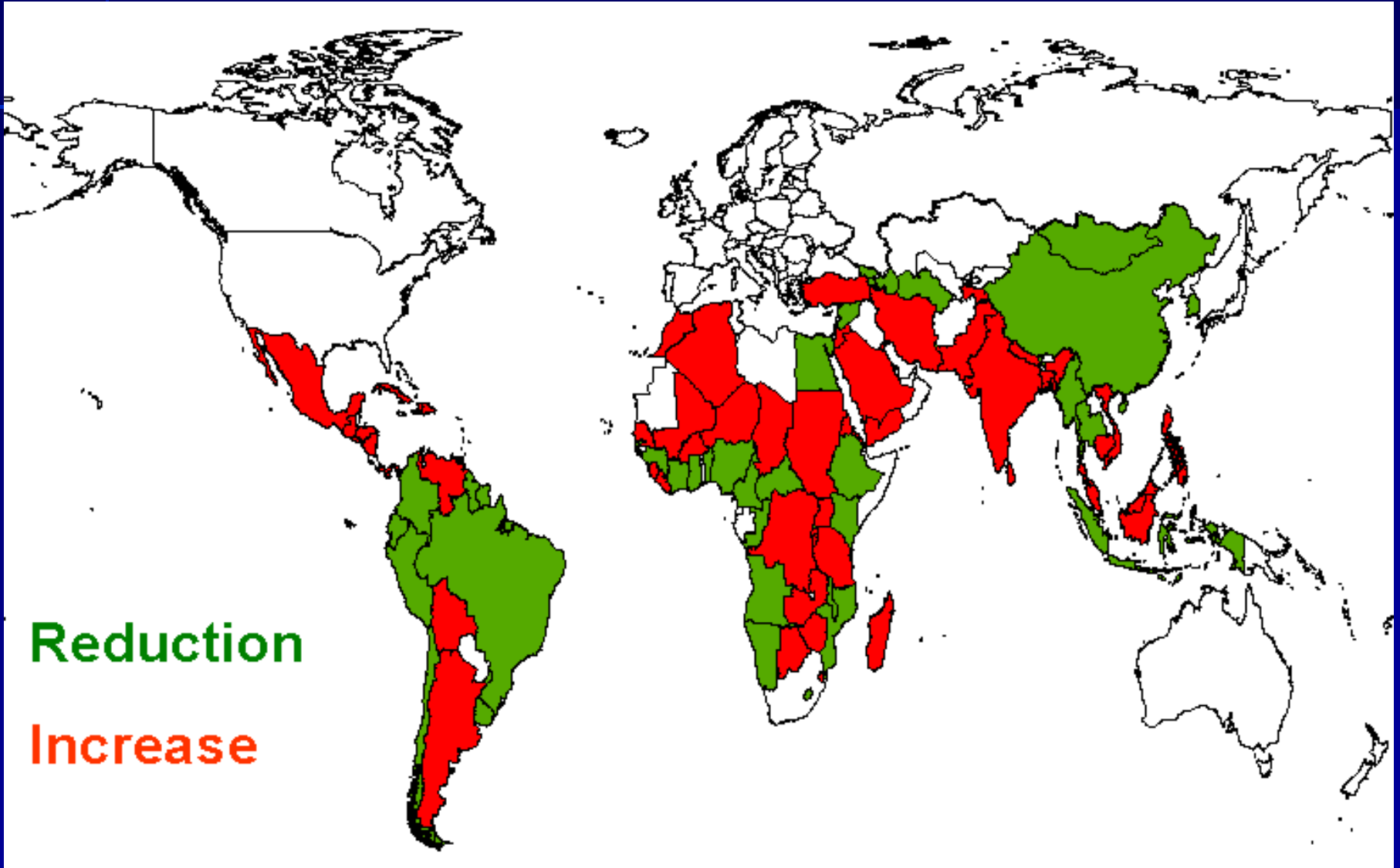
# Percentage of population undernourished, by region, 2000-2002



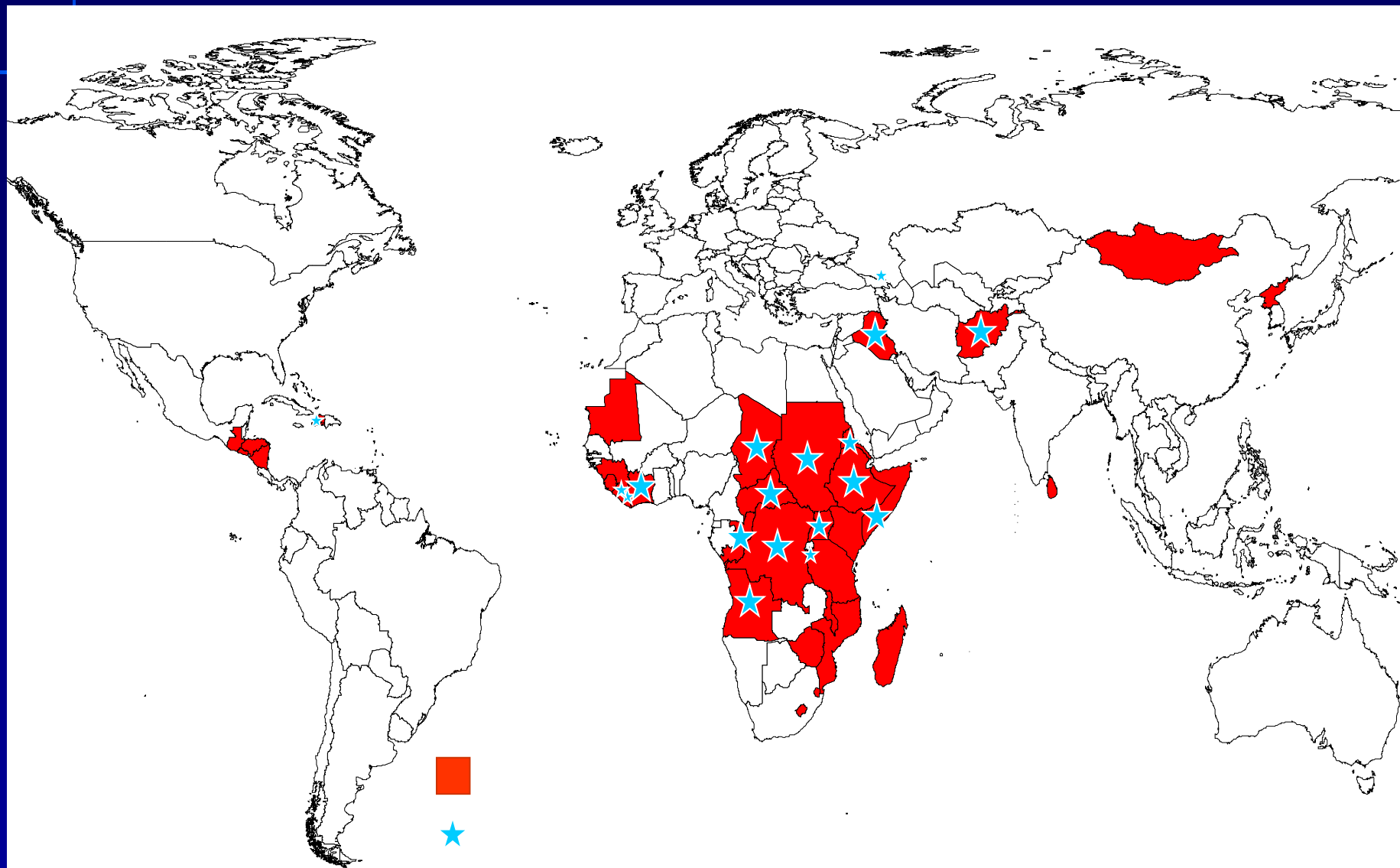
# Change in numbers of undernourished in developing countries from 1990-92 to 2000-02

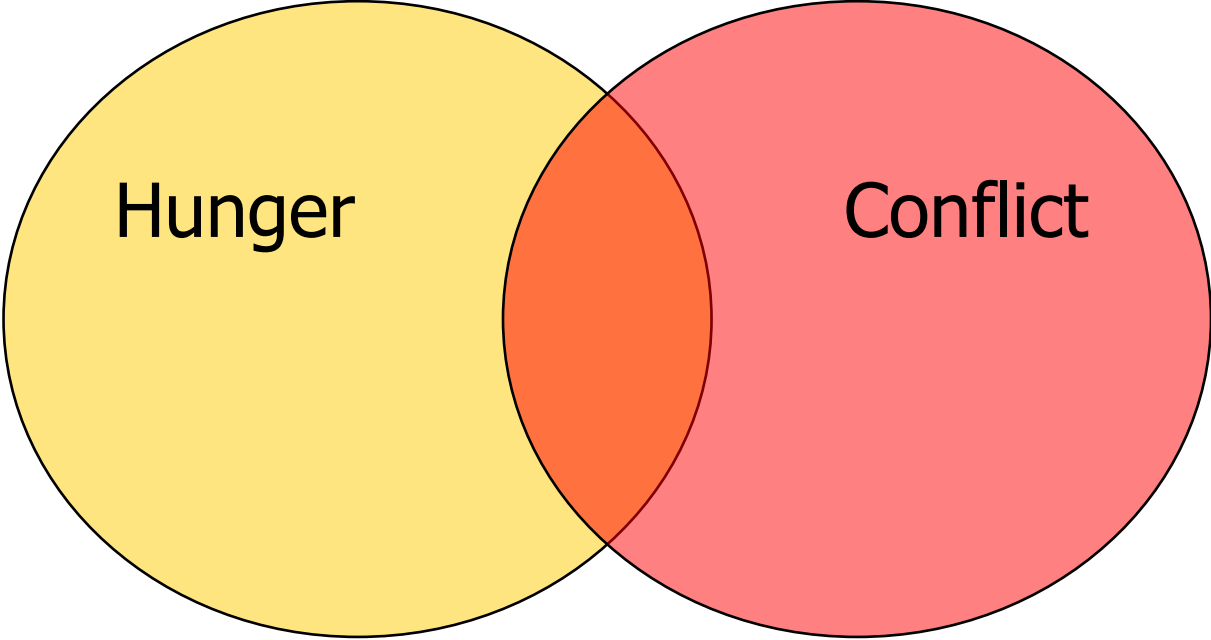


# Change in numbers of undernourished in developing countries from 1990-92 to 2000-2002



# Food emergency hotspots

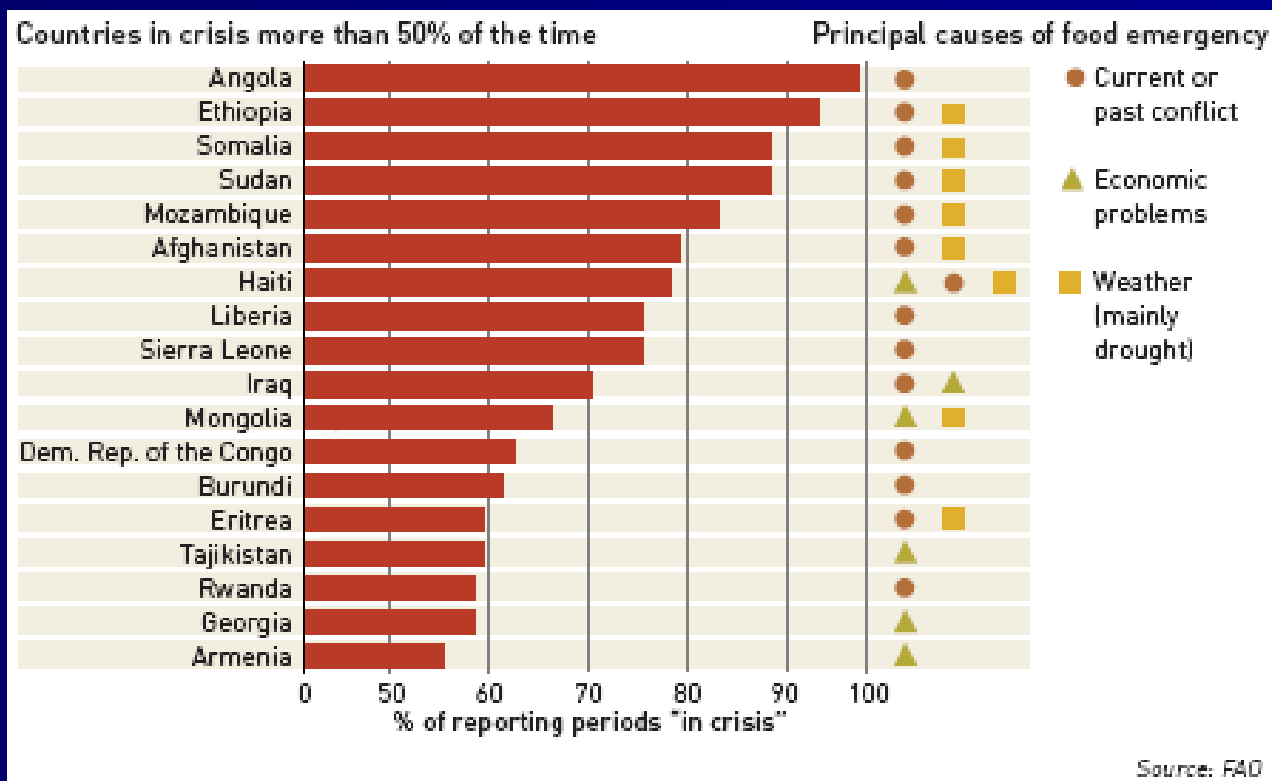




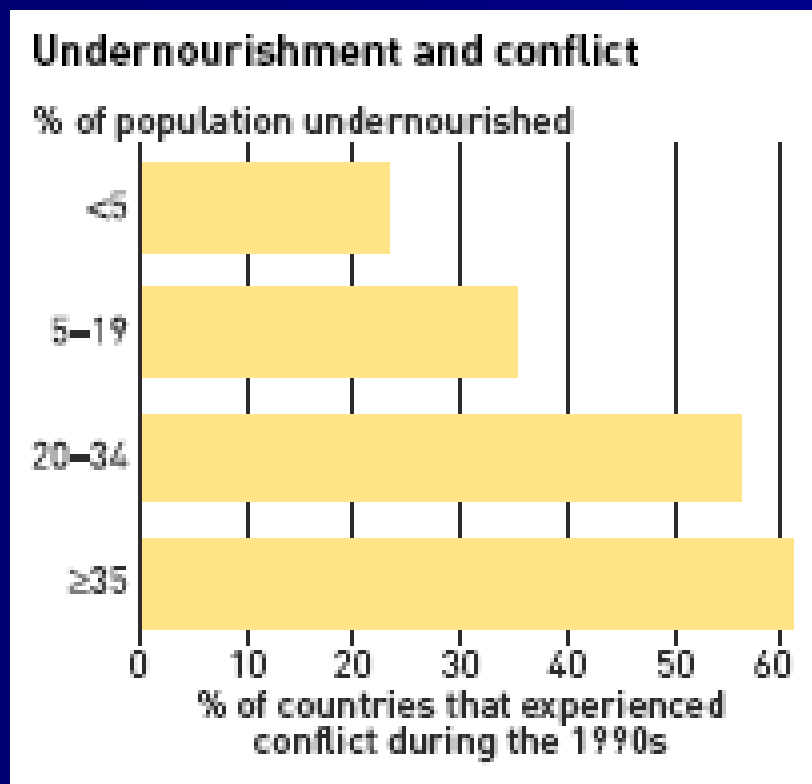
Hunger

Conflict

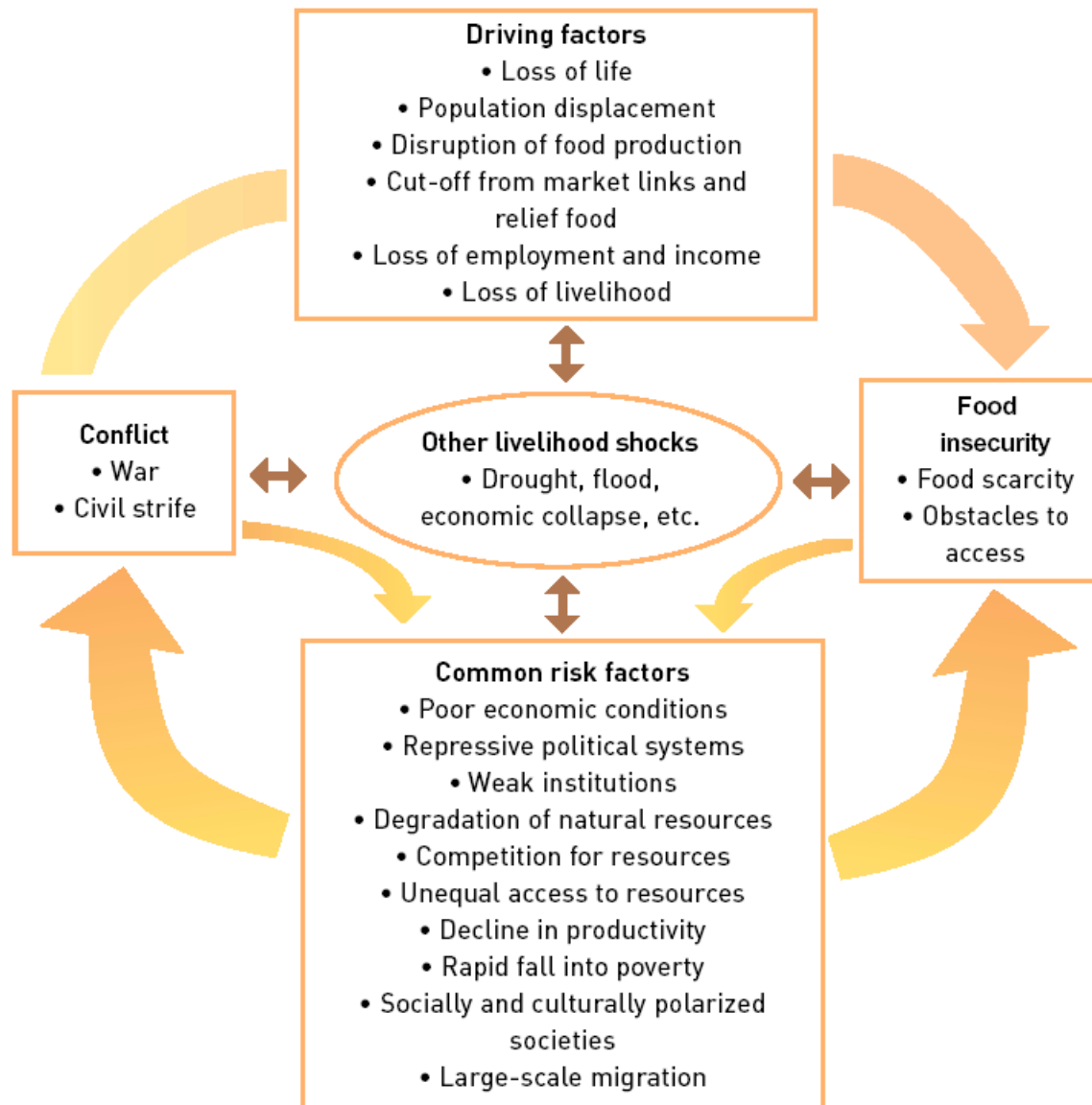
# Frequency and primary causes of food emergencies, 1986–2004



# Link between Undernourishment and Conflict

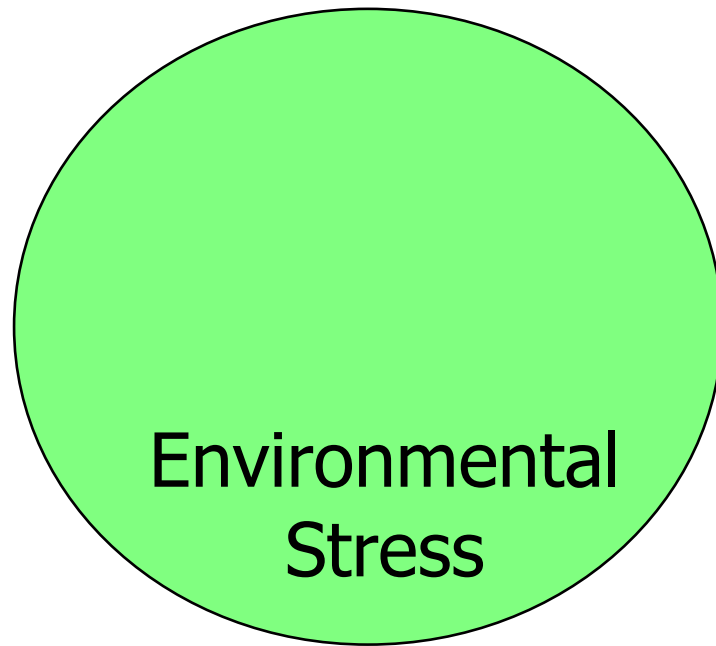


## The interface between violent conflict and food insecurity



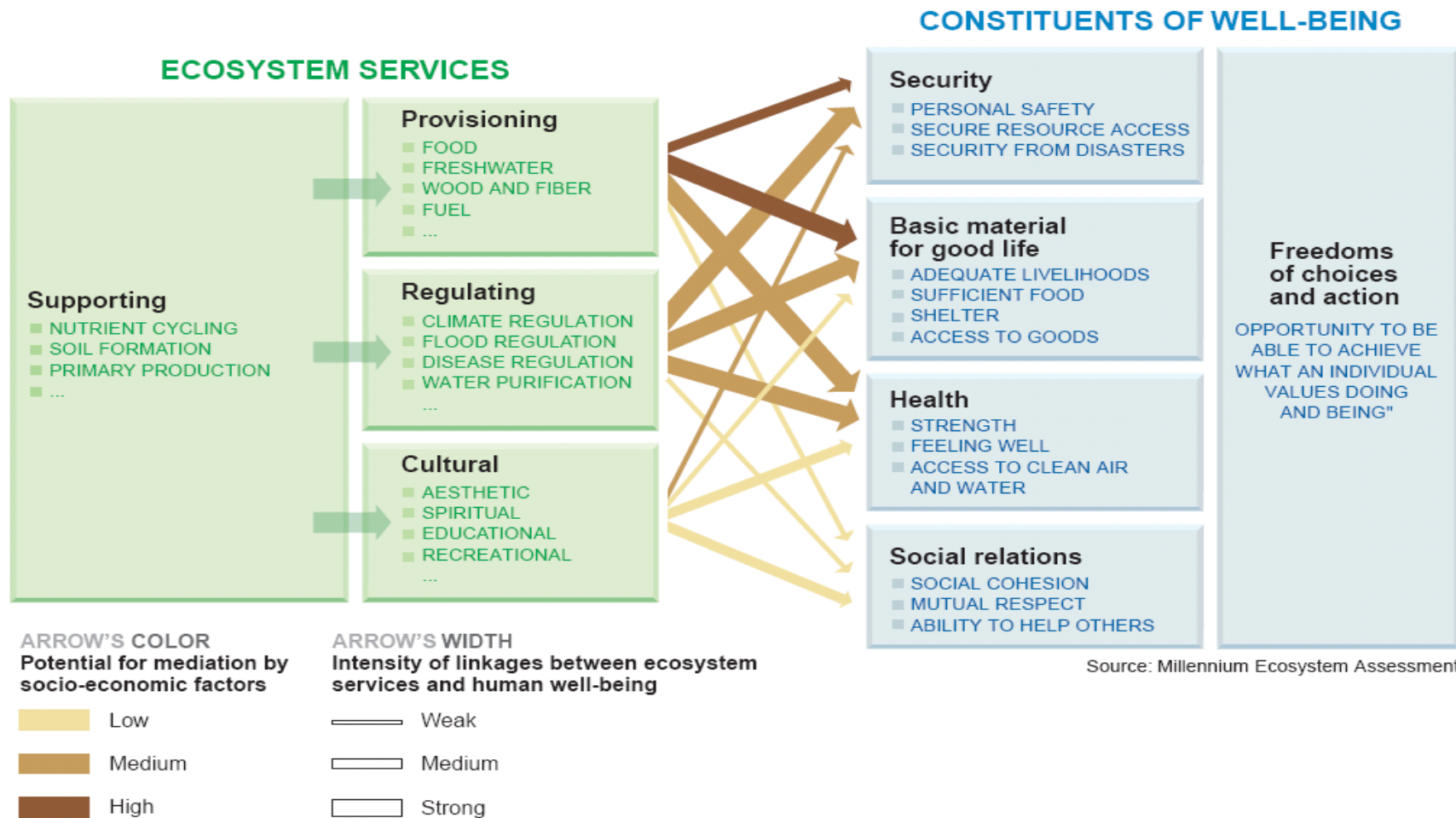
# Risk factors for conflict – alternative views

- Conflicts as scarcity-driven – social grievance
  - Inequality
  - Lack of democracy
  - Scarcity of resources
- Greed as a cause of conflicts



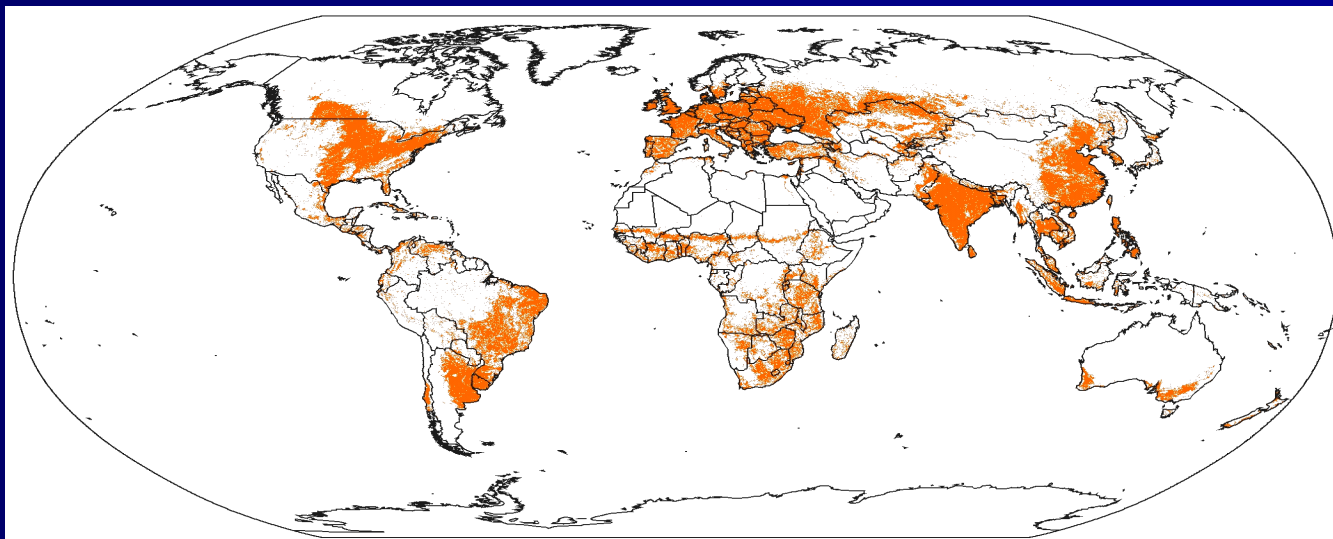
Environmental  
Stress

# Millennium Assessment: Ecosystem Services and their Impact on Human Well-being



# MA Findings: unprecedented change in structure and function of ecosystems

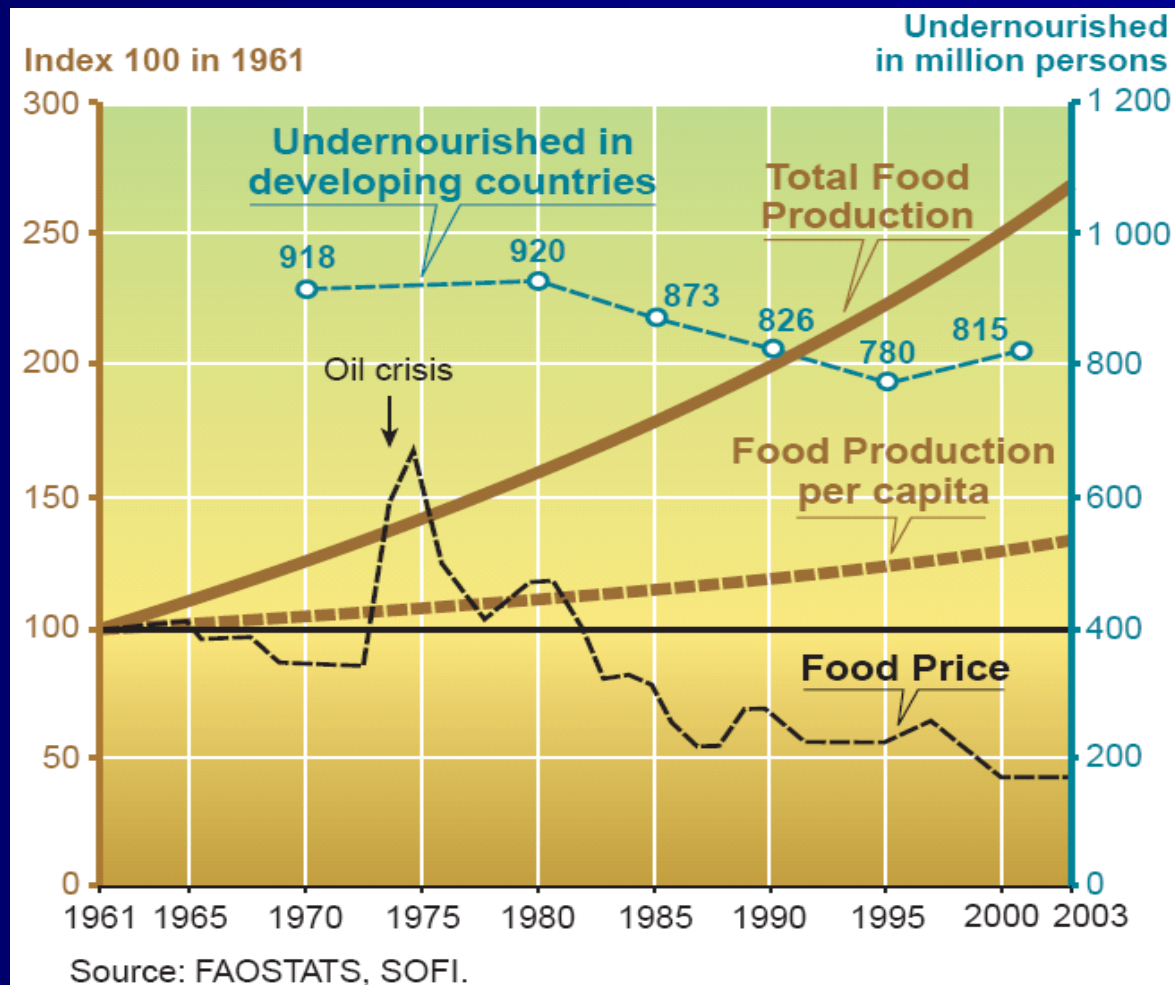
For example: More land was converted to cropland since 1945 than in the 18<sup>th</sup> and 19<sup>th</sup> centuries combined



**Cultivated Systems in 2000 cover 25% of Earth's terrestrial surface**

(Defined as areas where at least 30% of the landscape is in croplands, shifting cultivation, confined livestock production, or freshwater aquaculture)

# Using the ecosystems have provided substantial benefits



# Increased provision resulted in decline of supporting, regulating and cultural ecosystem services

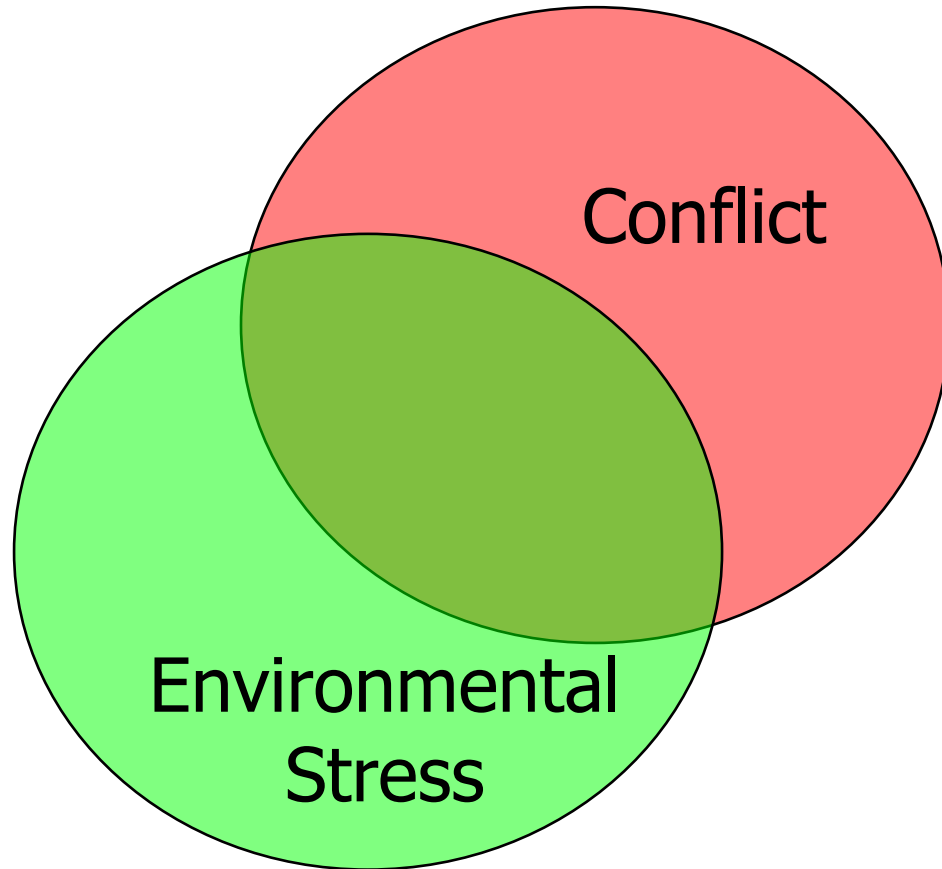
**60 % of the evaluated services are being degraded or used unsustainably**

	Status
<i>Regulating Services</i>	
Air quality regulation	↓
Climate regulation – global	↔
Climate regulation – regional and local	↓
Water regulation	+/-
Erosion regulation	↓
Water purification and waste treatment	↓
Disease regulation	+/-
Pest regulation	↓
Pollination	↓
Natural hazard regulation	↓
<i>Cultural Services</i>	
Spiritual and religious values	↓
Aesthetic values	↓
Recreation and ecotourism	+/-

# Ecosystem services and poverty and hunger reduction

## ■ Degradation of ecosystem services harms poor people

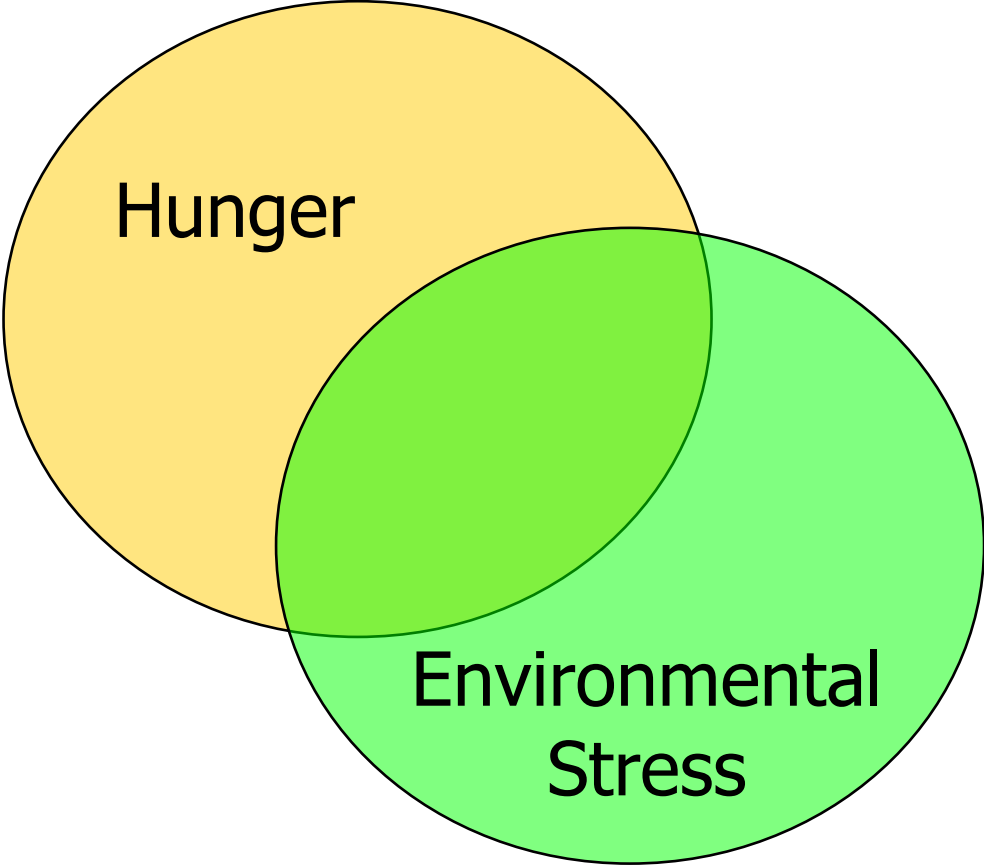
- Millions of poor in all developing regions (urban and rural) suffer from diseases associated with inadequate water and sanitation
- declining soil fertility affects poor farmers w/o access to fertilizers
- Declining fish stock reduces an inexpensive source of protein.



# The Task for the United Nations

*The implications of the scarcity of certain natural resources, of the mismanagement or depletion of natural resources and of the unequal access to natural resources as potential causes of conflicts need to be more systematically addressed by the United Nations system*

Report of the Secretary General on the prevention of armed conflict, 12 September 2003.



Hunger

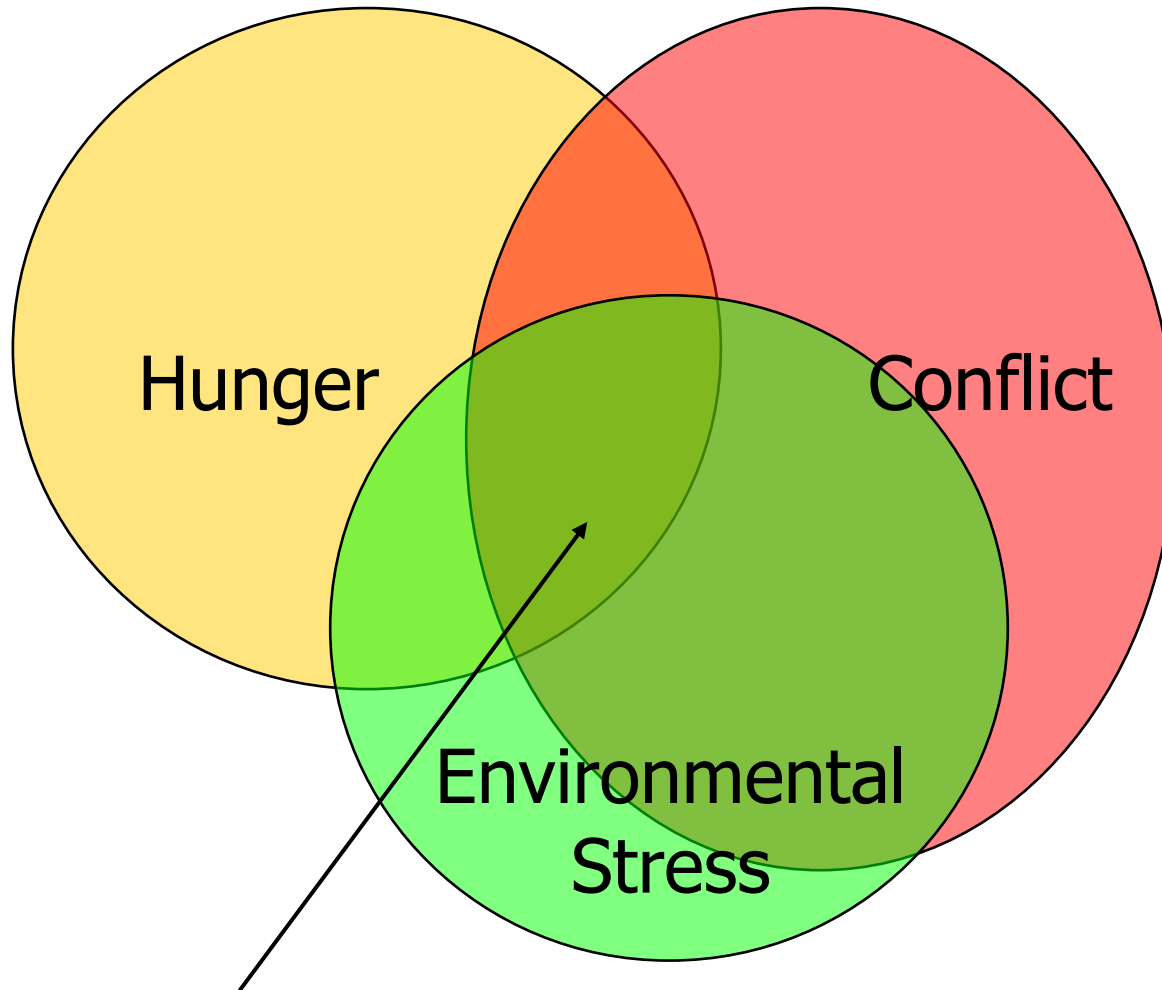
Environmental  
Stress

# Charcoal Production in Somalia

- On massive scale throughout Somalia
- Large portion for export market, with some domestic
- Conducted by businessmen, supported by militias
- Minimal returns for local pastoralists
- Direct relationship between loss of natural capital (rangeland resources) and livelihood loss (forced destitution)

# Charcoal production in Somalia





## **Breaking the Vicious Cycles:**

Governance; Dialogue; Entitlements; Institutions;  
Targeting the Poor and the Environment;  
Options; Technologies; Public Investment

# Conclusion

- There is growing evidence of linkages and vicious cycles between hunger + conflict; environmental degradation + hunger and conflict.
- Breaking the vicious cycles is possible, but requires institutional and technological options, dialogue targeted policies, public investment.

# More Information

- <http://www.fao.org>
- <http://www.fao.org/crisisandhunger>