

LINKING FOOD POLICIES AND SUSTAINABLE AGRICULTURE

Alexander Müller

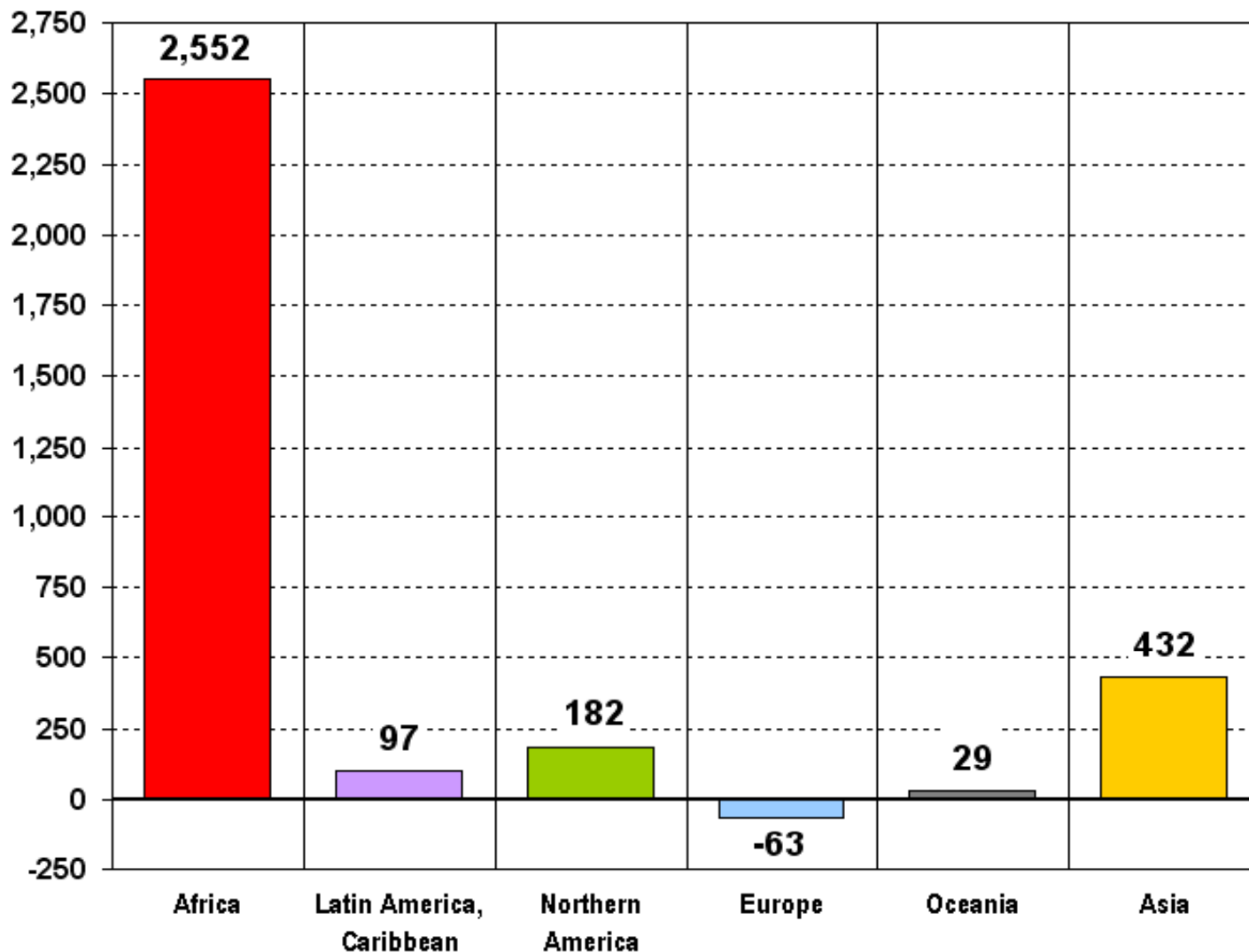
Assistant Director-General

Natural Resources management and Environment Department

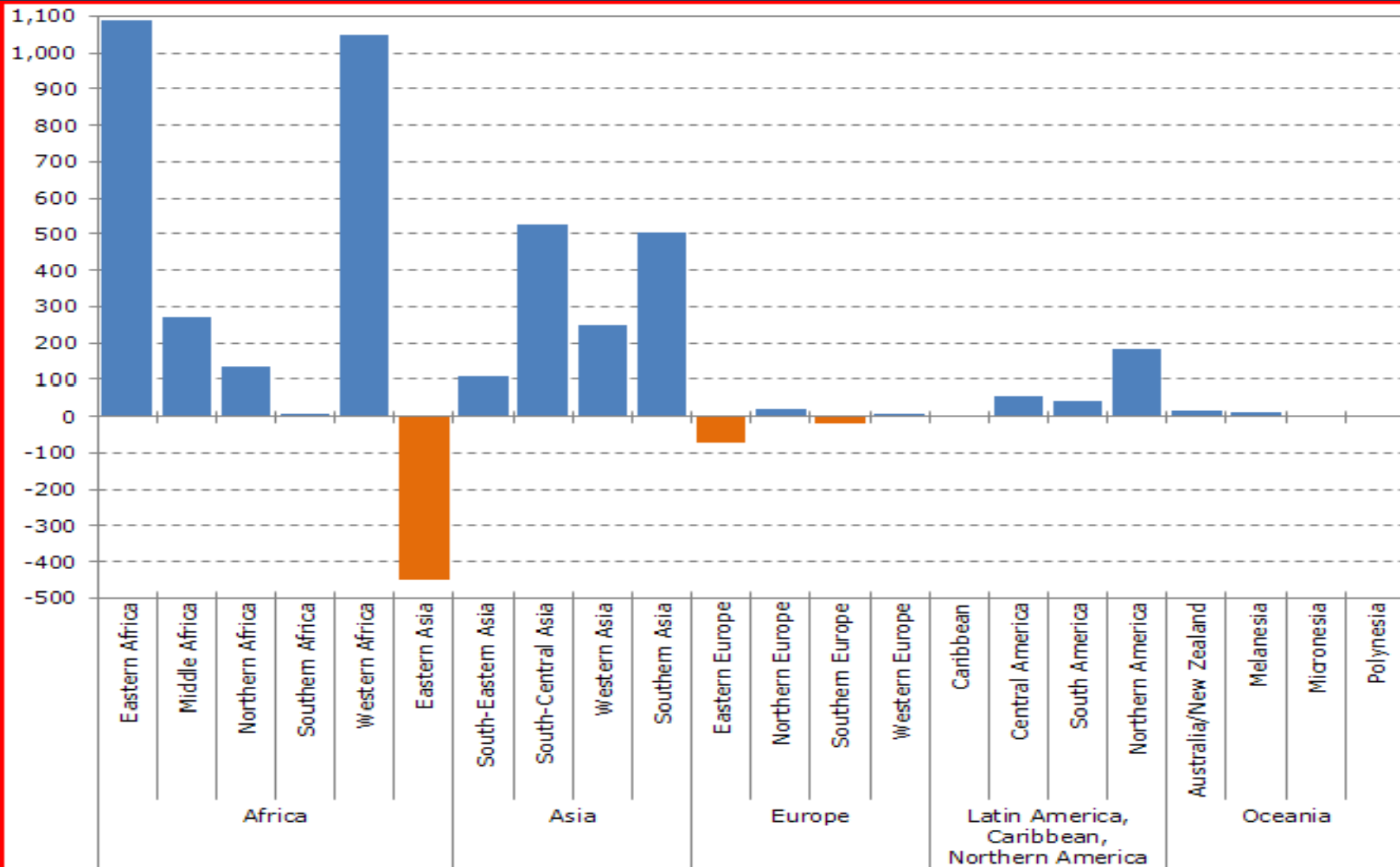
Food and Agriculture Organization

- 1. The Global Drivers of Change
- 2. The Natural Resource Base
- 3. The additional Challenge of Climate Change
- 4. Greening the Economy

World Population Prospects – Change between 2010 and 2100 (millions)



Population Prospects by Region 2010 - 2100

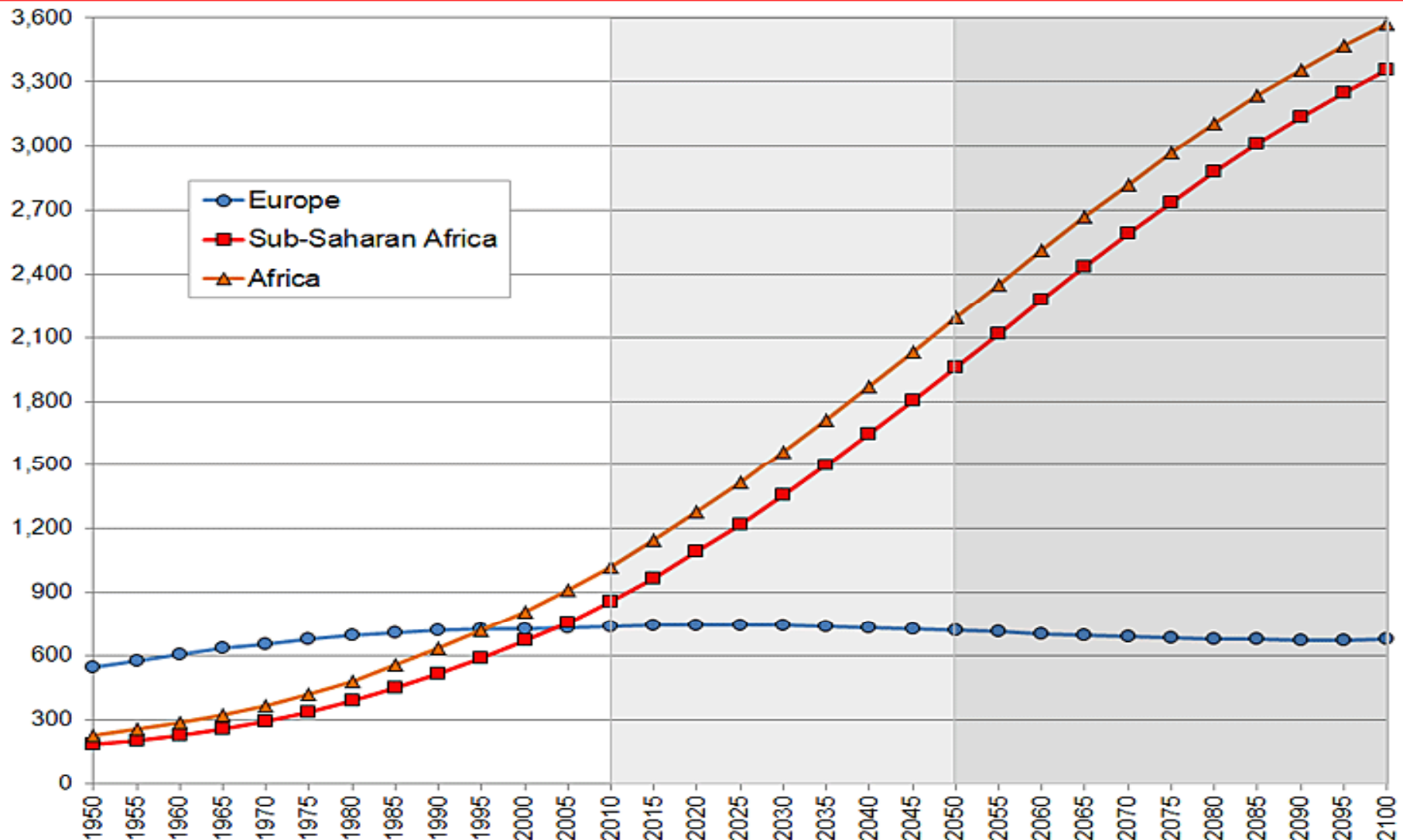


United Nations, Department of Economic and Social Affairs, Population Division (2011): World Population Prospects: The 2010 Revision. New York

Note: In our definition, Europe has 48 countries, including the Russian Federation.

(Updated: 26 October 2011)

Population Prospect for Europe, Africa and SS Africa

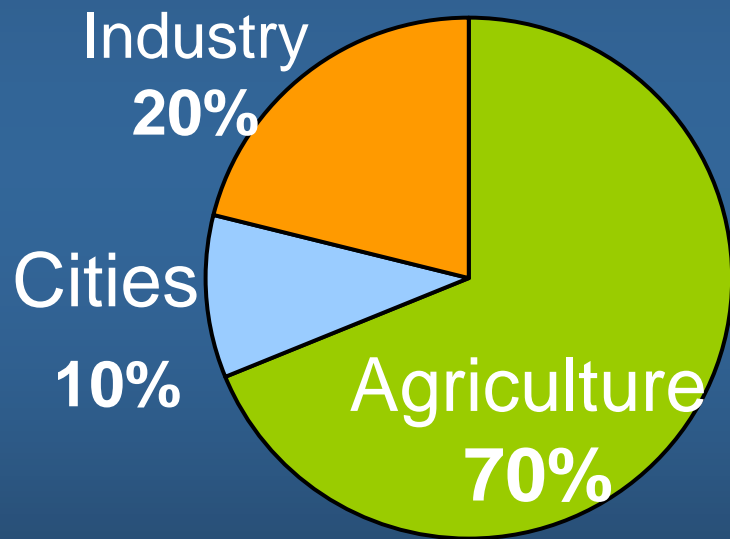


Source: United Nations, Department of Economic and Social Affairs, Population Division (2011): World Population Prospects: The 2010 Revision. New York

Note: In our definition, Europe has 48 countries, including the Russian Federation.

(Updated: 19 October 2011)

Sectoral Water Use

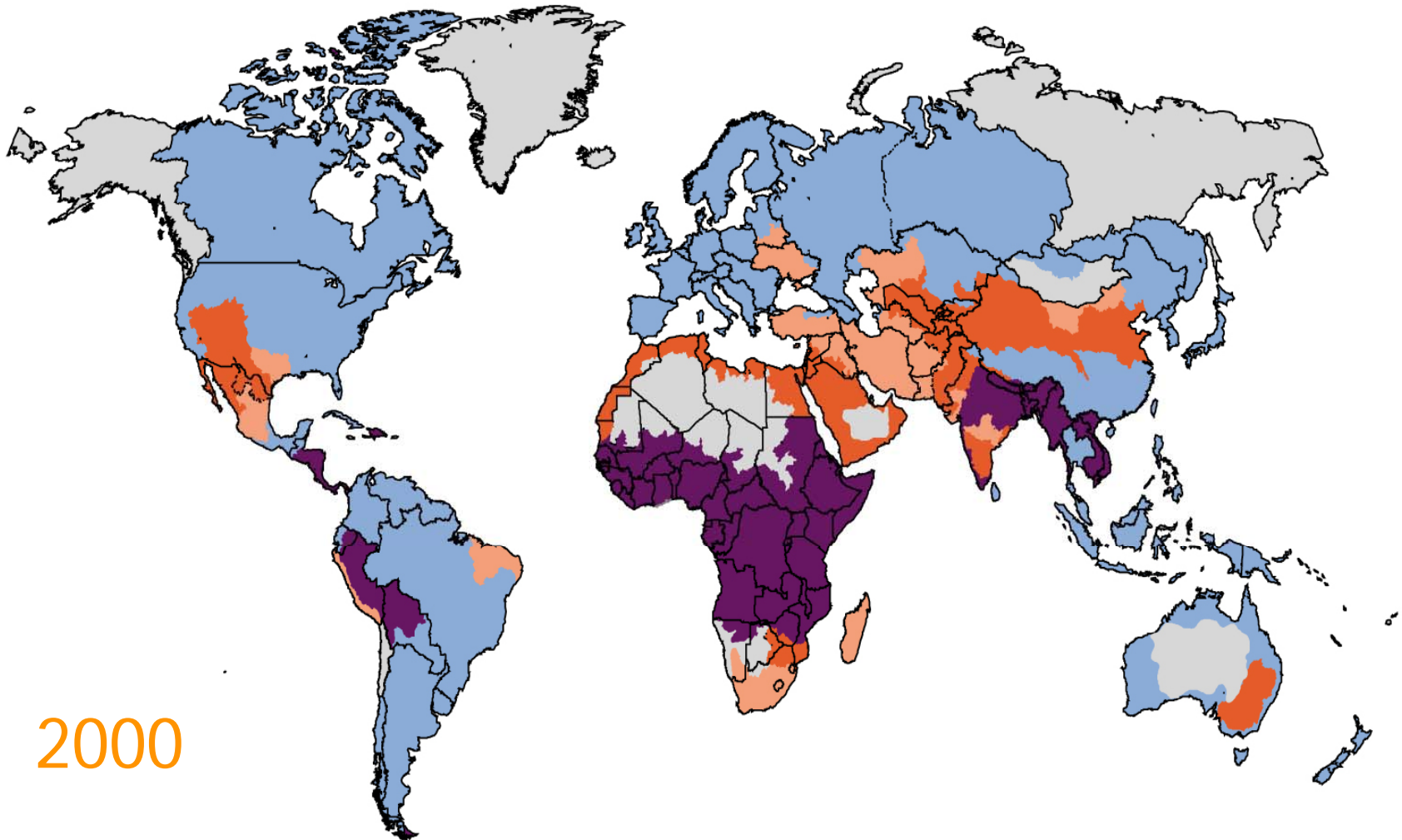
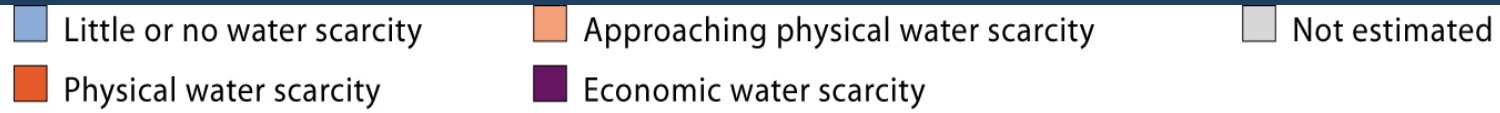


**Water
Abstraction**

Agriculture is the largest
Water User

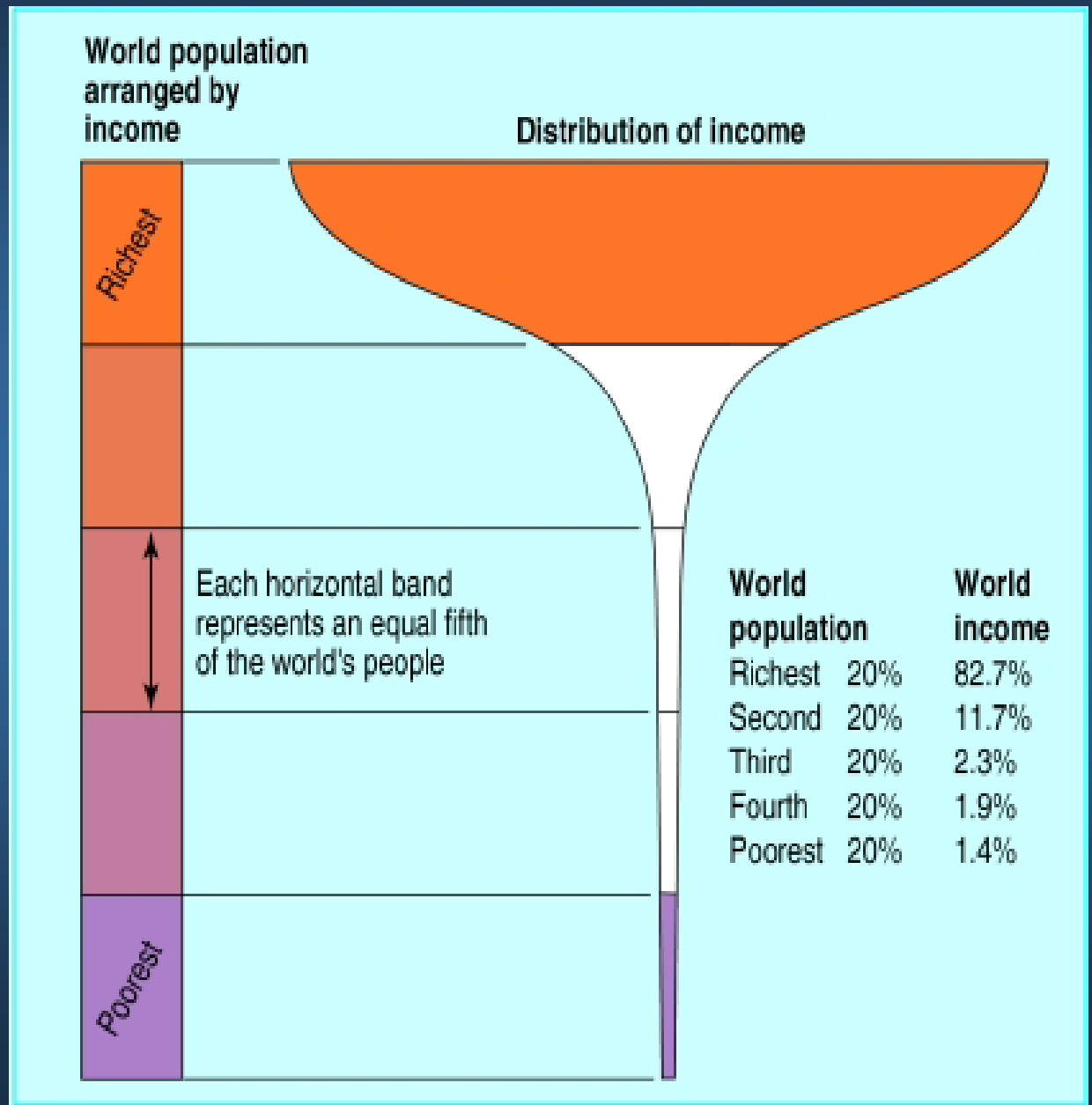
Today's agriculture uses **70 %**
of all fresh water withdrawals
globally, and up to **95 %** in
Several developing countries.

Global Water Scarcity



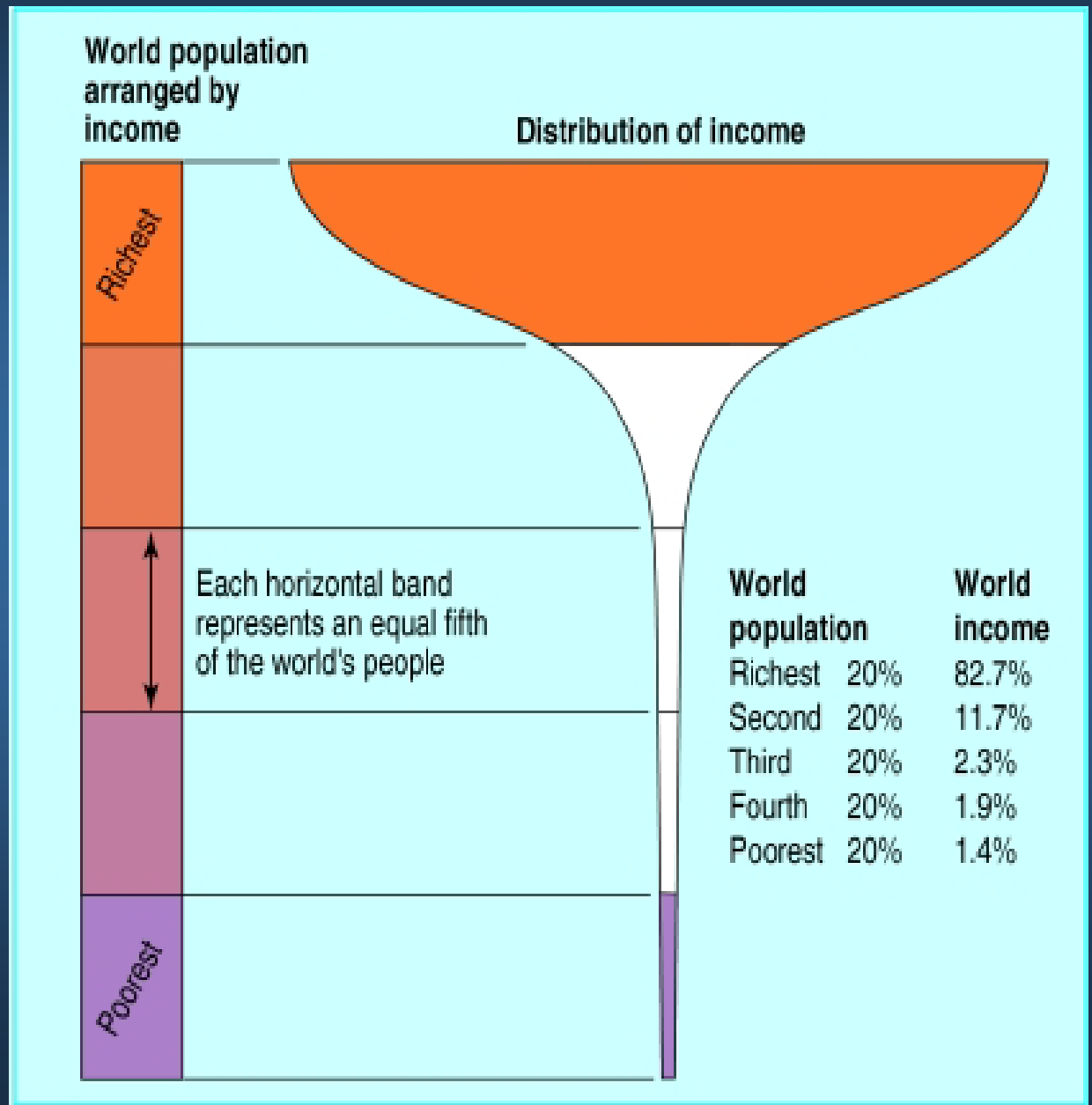
2000

Unequal Distribution of Income



Unequal Distribution of Income

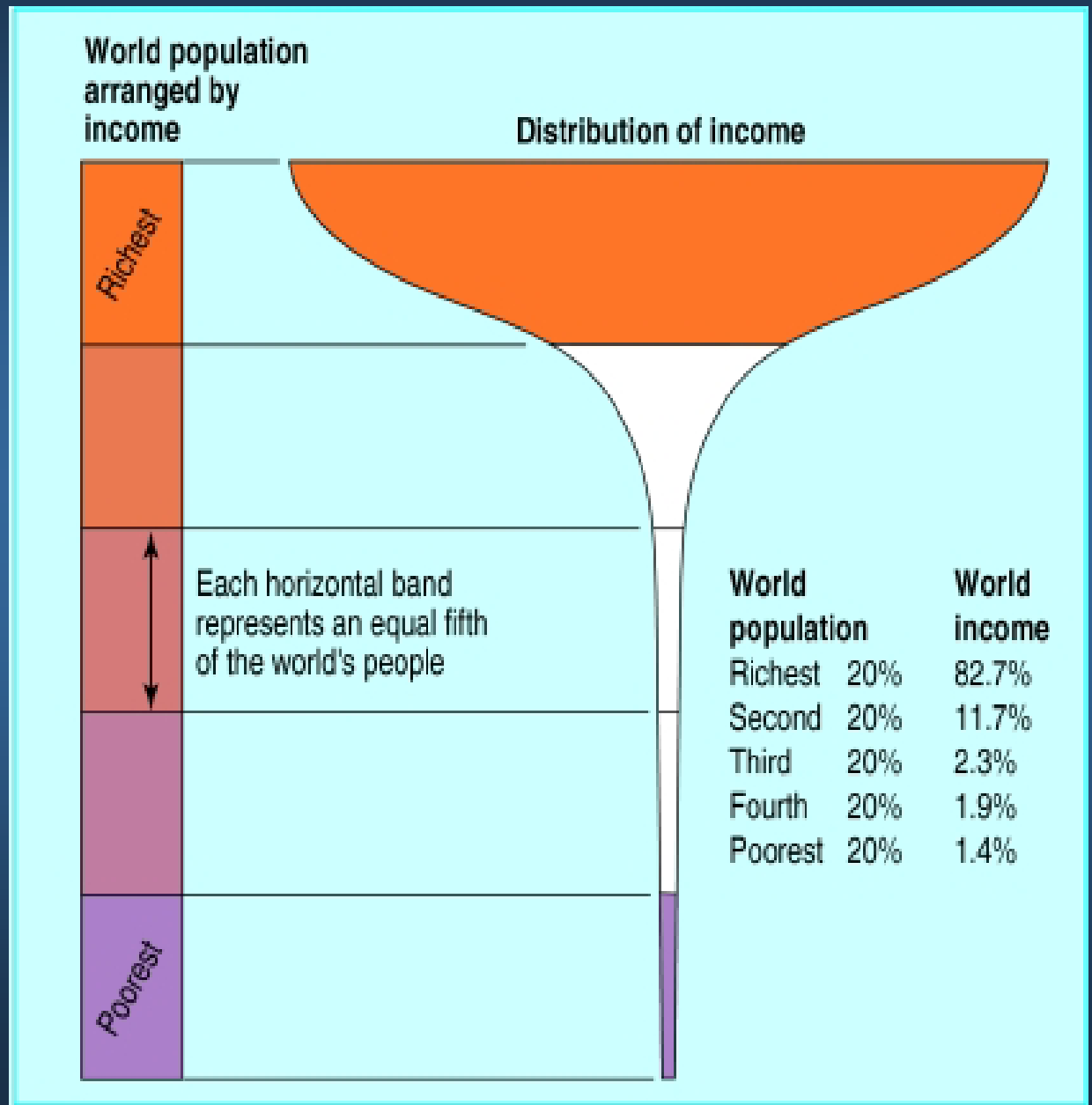
2009 global GDP reached US\$58.22 trillion but almost 80% of humanity continues to live on less than US\$ 10/day.



Unequal Distribution of Income

2009 global GDP reached US\$58.22 trillion but almost 80% of humanity continues to live on less than US\$ 10/day.

The poorest 40 percent of the world's population produce less than 5 percent of global income



The Makeup of Total Food Waste

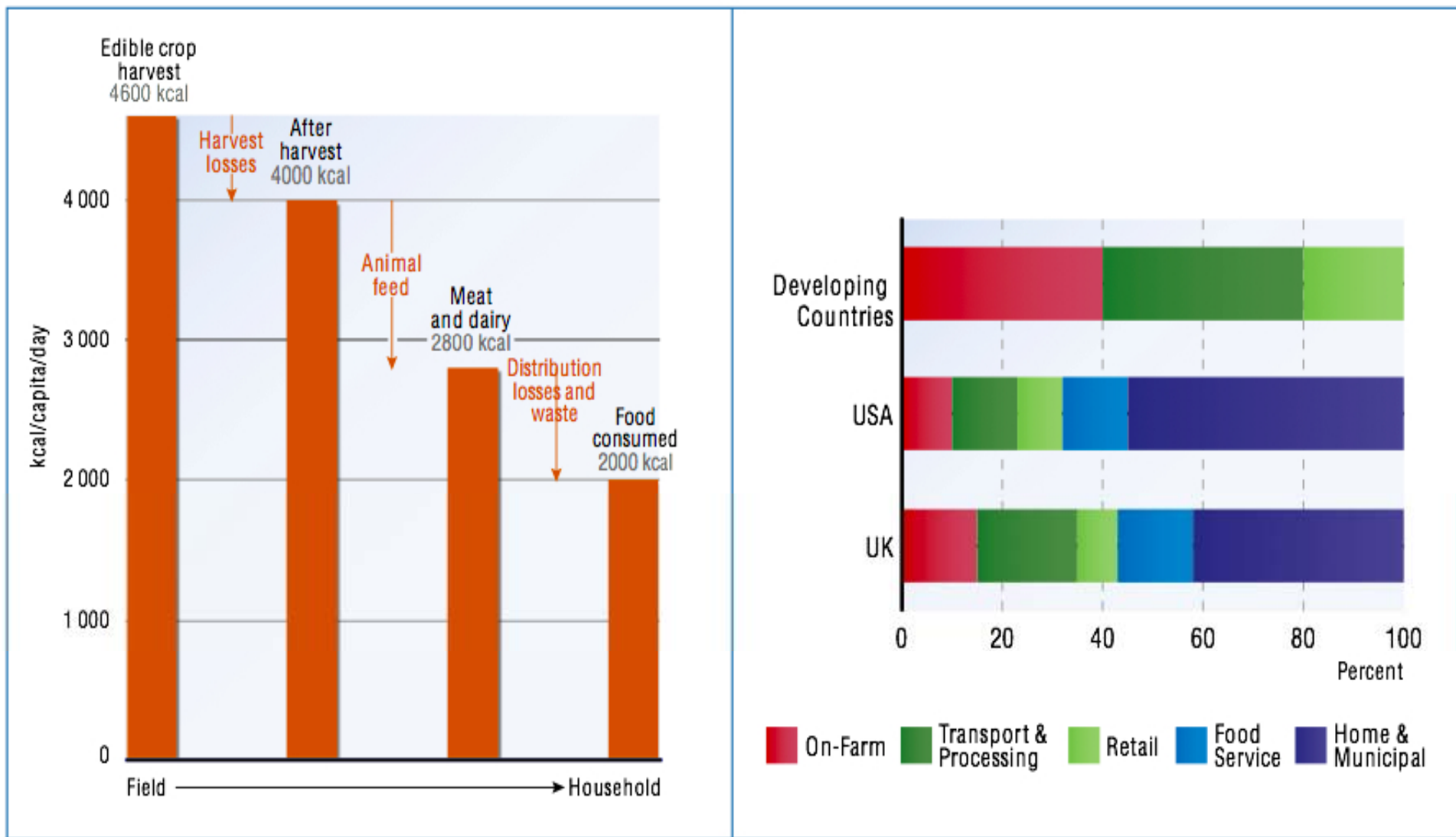
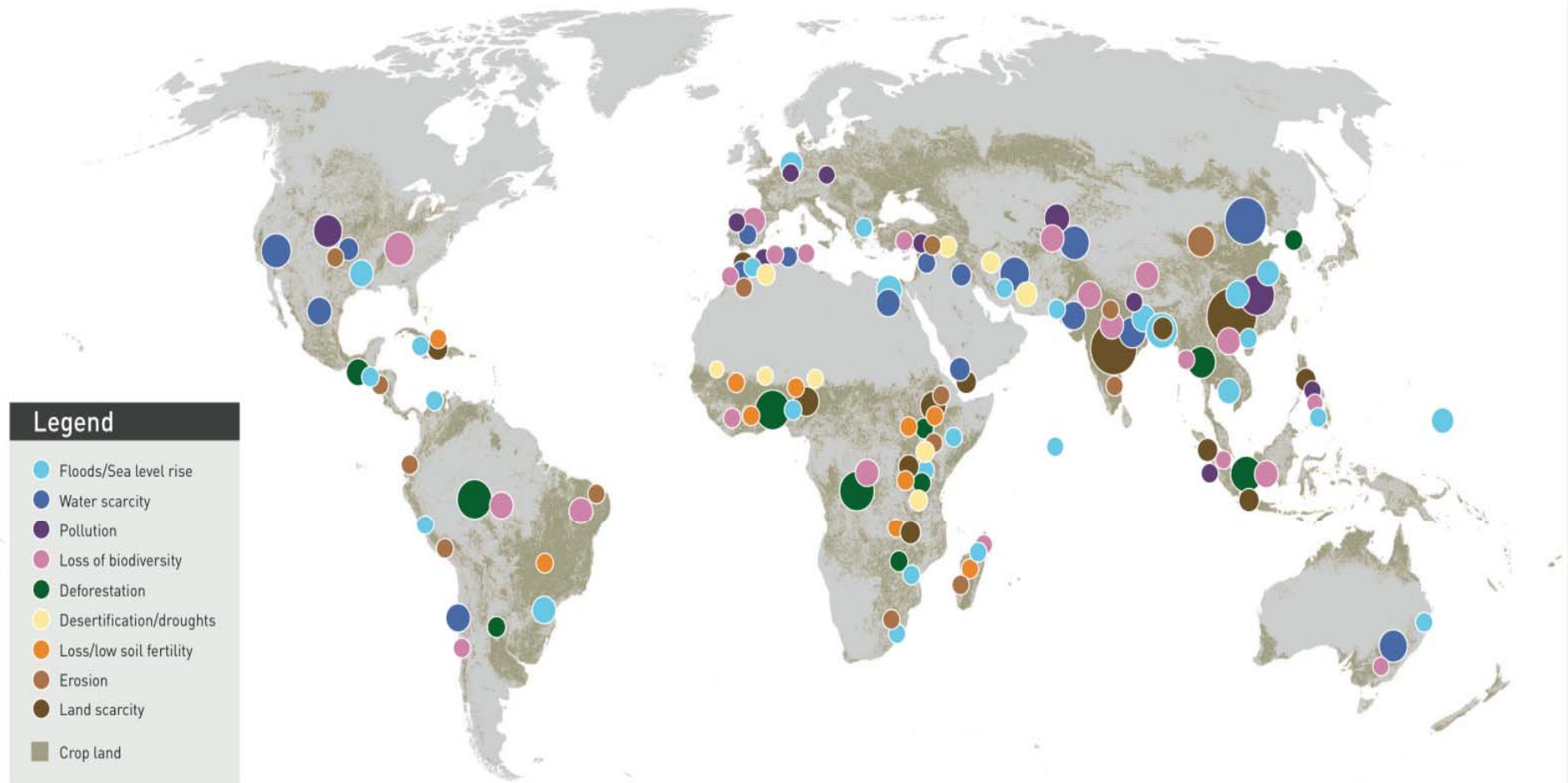


Figure 9a-b: The makeup of total food waste¹¹

Source: Lundqvist et al., Godfray

State of the World's Land and Water Resources for Food and Agriculture



As the single largest sector using natural resources and providing livelihoods for 2.6 billion people, the food and agriculture sector is critical to achieving a green economy

Sustainable food and agriculture systems

Good for Nature

Good for people

Greening the Economy



Greening the Economy with Agriculture (GEA)

GEA refers to ensuring the right to adequate food, as well as food and nutrition security – in terms of food availability, access, stability and utilization – and contributing to the quality of rural livelihoods, while efficiently using natural resources and improving resilience and equity throughout the food supply chain, taking into account countries' individual circumstances.

FOOD AND NUTRITION SECURITY



Availability

From scarcities
to equitable distribution

Access

From conflict and
marginalization to rights

Stability

From shocks
to safety nets

Utilization

From waste
to sustainable
diets



A NEW MODEL: GEA



Environmental

Production intensification for low-footprint food systems

Social

Improving rural livelihoods and healthy food systems

Economic

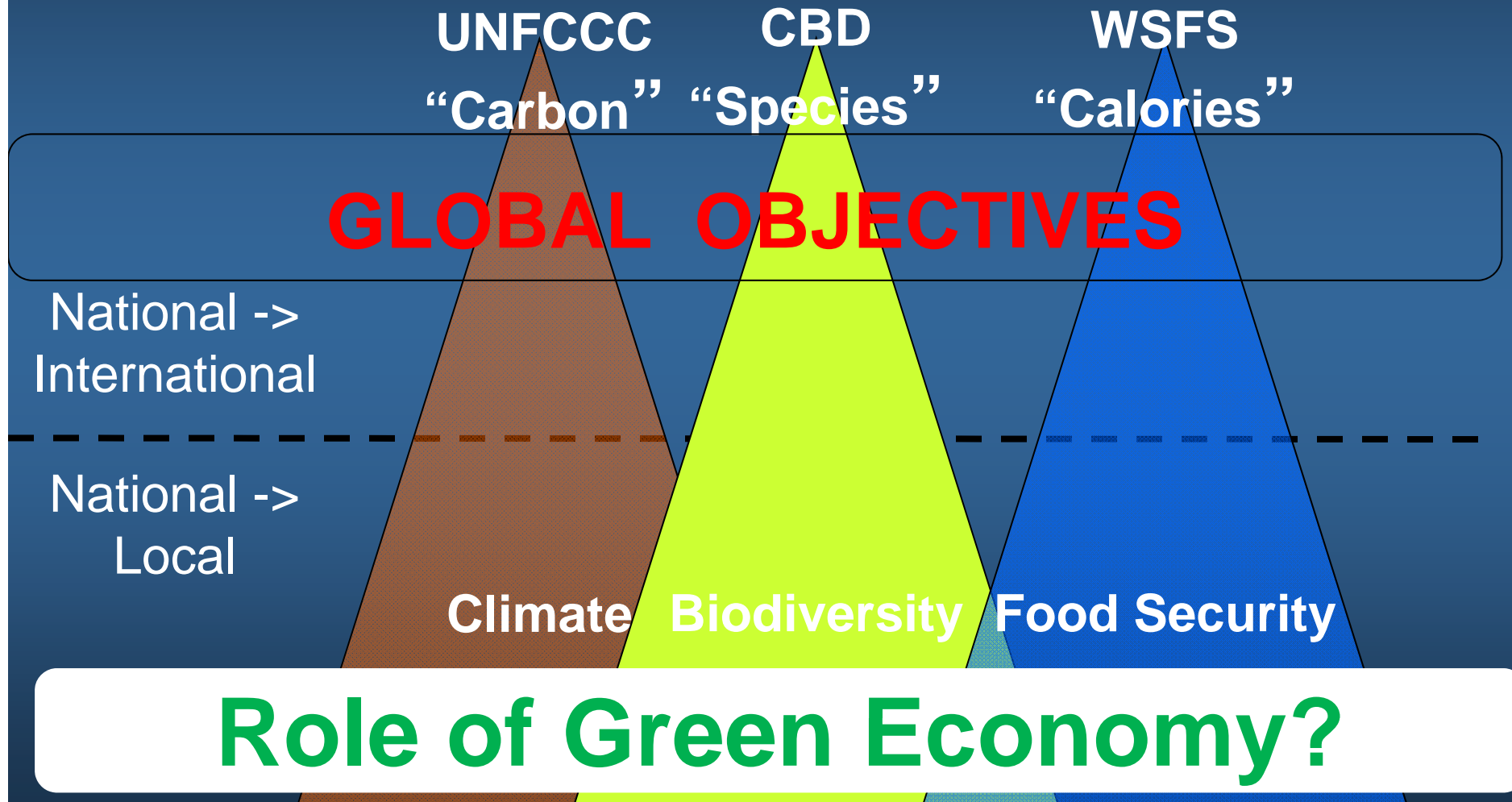
Working markets and resilient smallholders

Governance

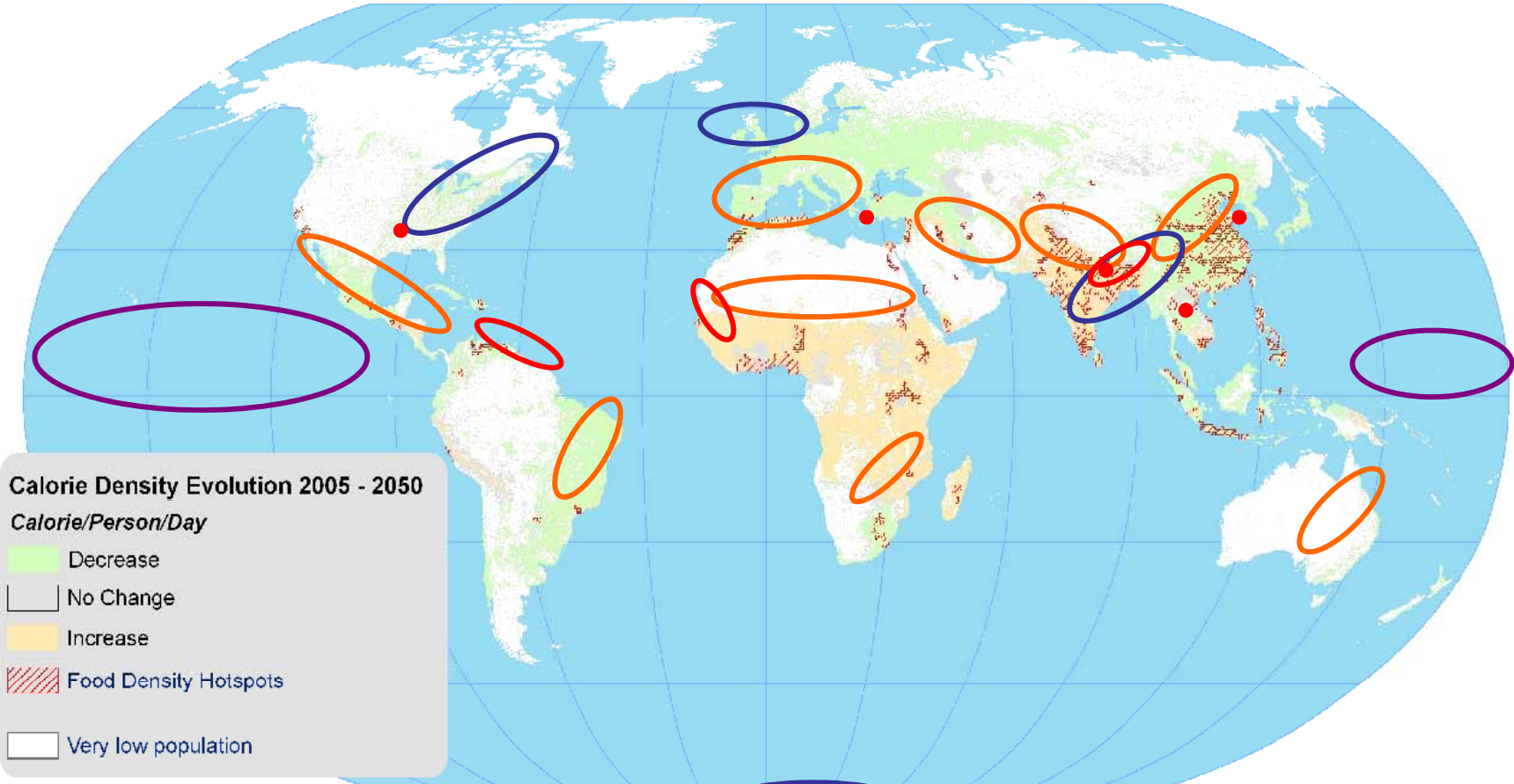
Responsibility and accountability throughout the food supply chain



The Sustainable Development Landscape



Global Calorie Density Evolution and Food Density Hotspots (2005 and projection for 2050)



Drought



Cyclones/Extreme events



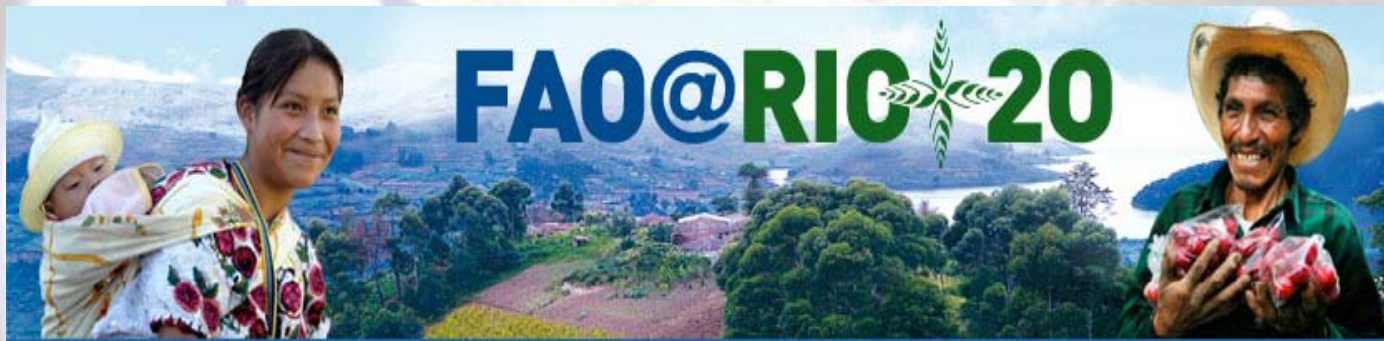
SIDS



**Sea level rise incidence
(mangroves/deltas/SIDS)**



THANK YOU



www.fao.org/rio20