

International Assessment of Agricultural Science and Technology for Development

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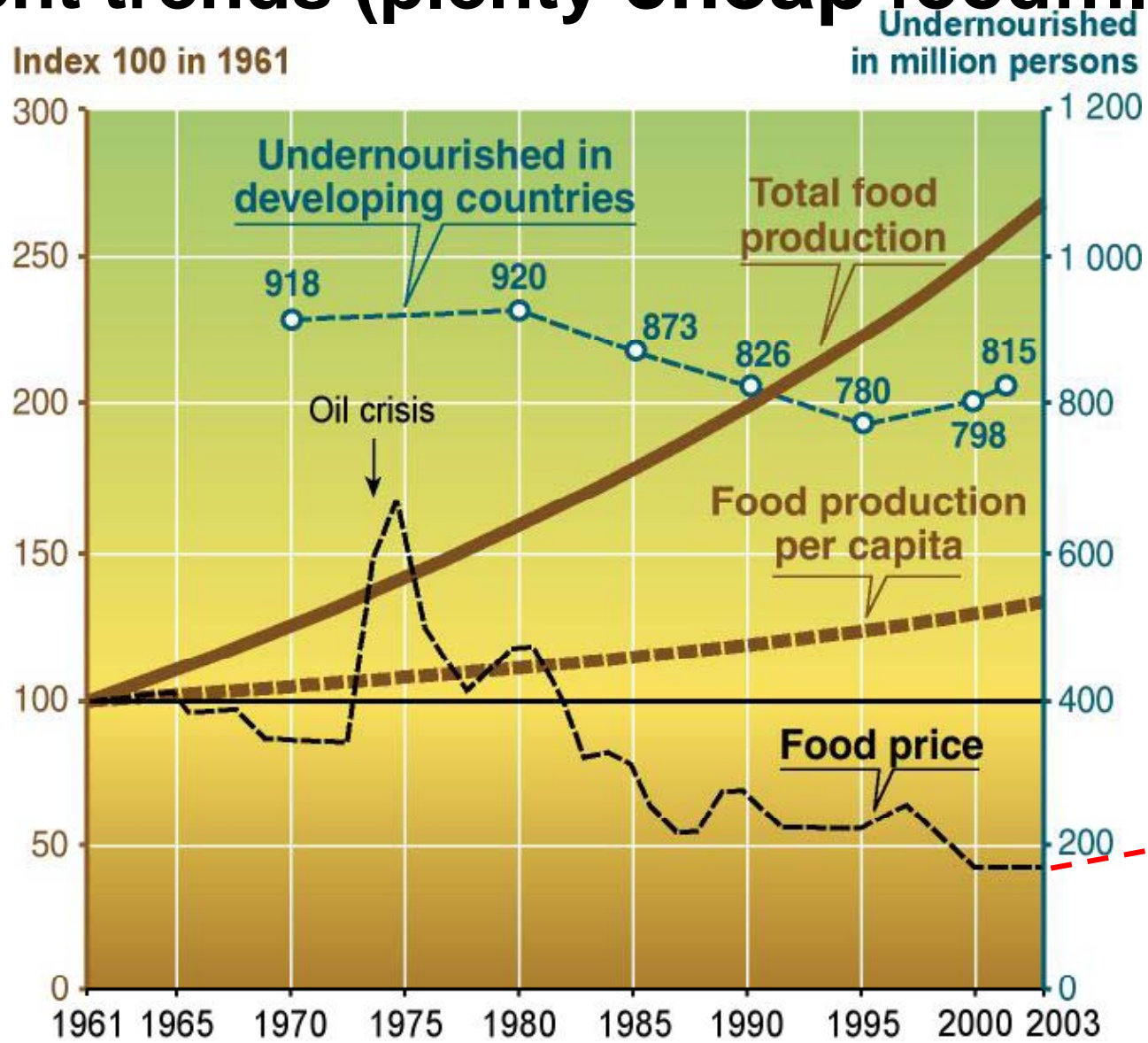
International Assessment of Agricultural Science and Technology for Development

The IAASTD

- **What is IAASTD?**
- **Global context and recent trends**
- **What's the problem?**
- **Options for action**



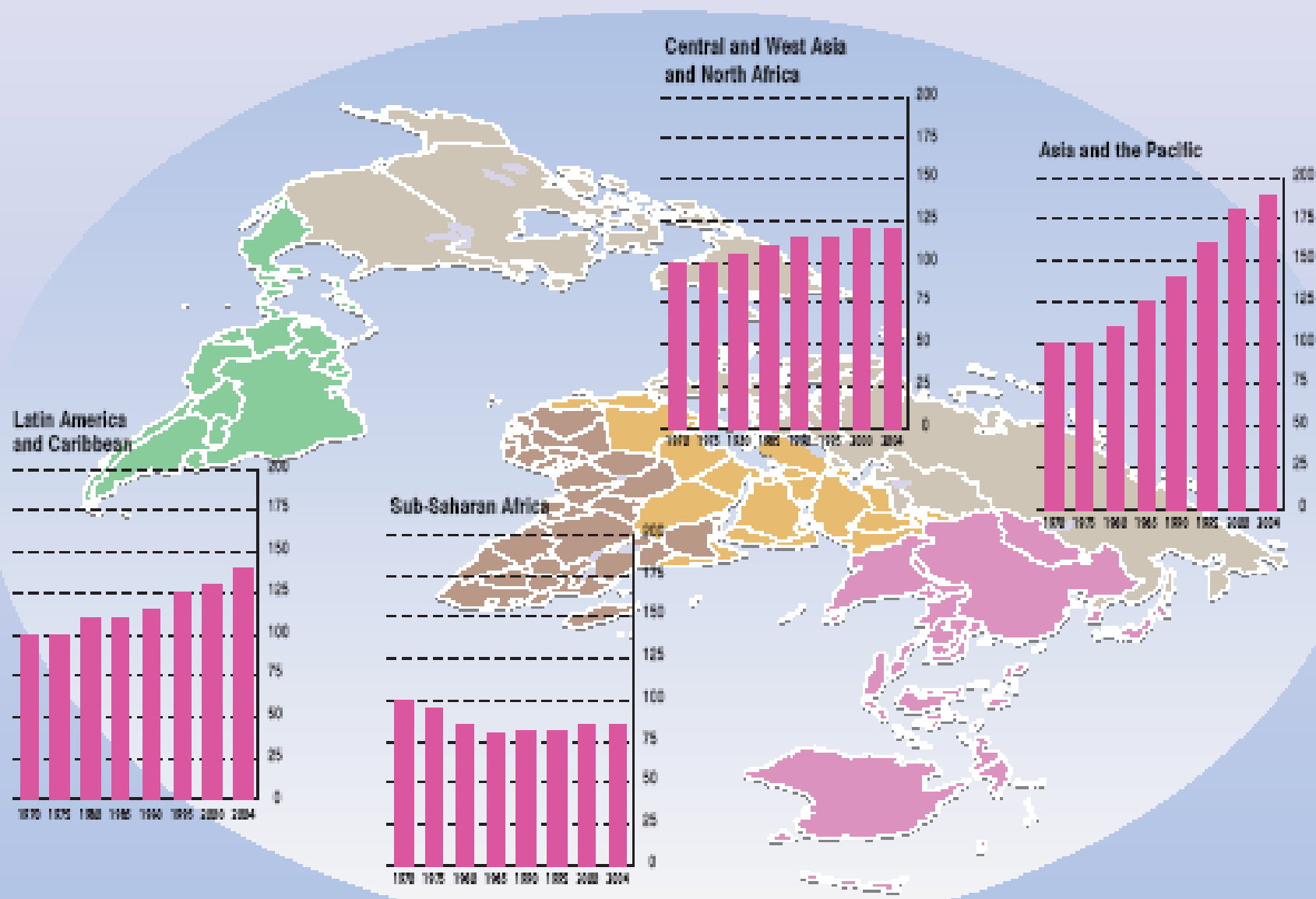
Recent trends (plenty cheap food.....)



Sources: FAOSTATS, SOFI, Millennium Ecosystem Assessment

Total agricultural output 1970–2004

1970 = 100



SOURCE: The State of Food and Agriculture 2005, FAO Conference, 33rd session, 19–26 Nov. 2005, FAO, Rome, Italy

WFP/FAO/UNEP/UNEP/FAO/UNEP/FAO

Status of Agriculture:



~~Characterized by Disconnects, both the in developed and developing world~~

Disconnects between **agriculture** and the **environment**.

Disconnects between **consumers** and **farmers** or land and cities;

Disconnects between **policies** and **expectations**.

Do not disconnect.

Status of Agriculture:



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Disconnects between **agriculture** and the **environment**:

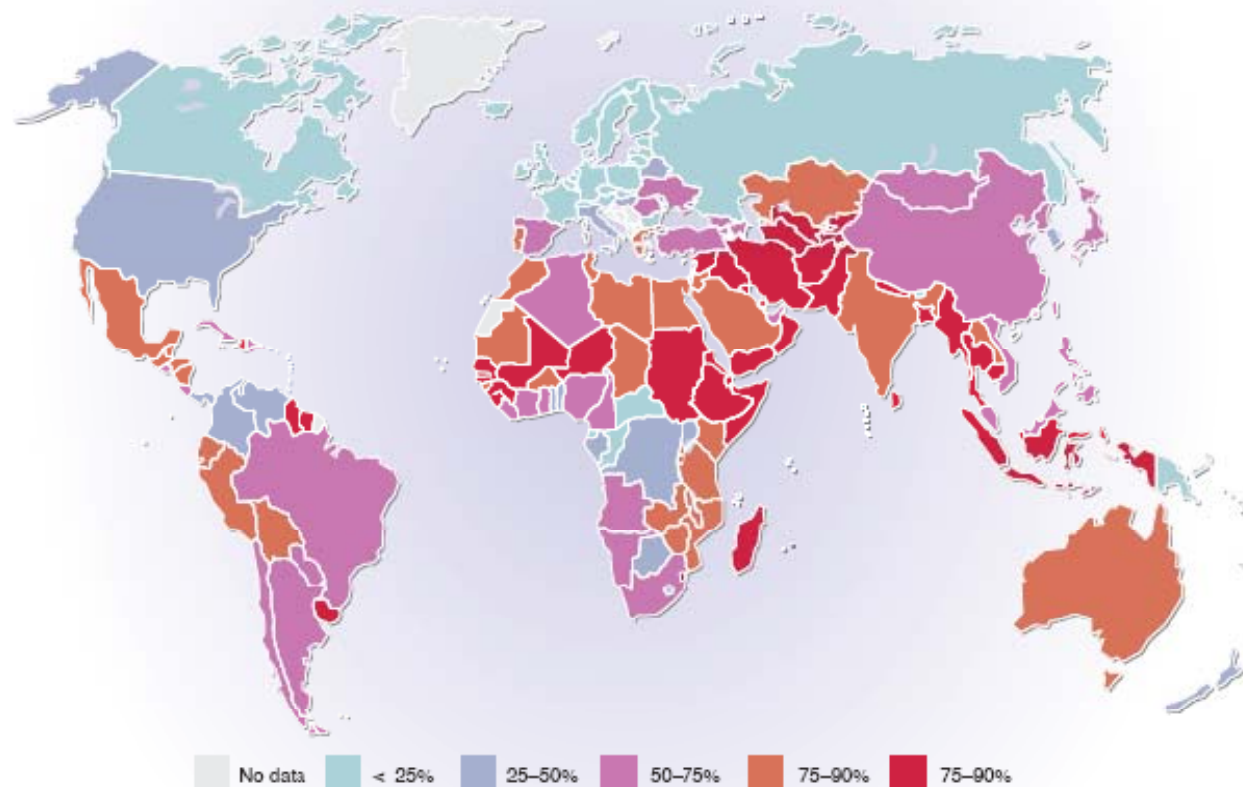
- water
- energy
- biodiversity
- soil
- productivity / sustainability
- ecosystem service / multi-functionality



Do not disconnect.

A Critical Challenge - Water

Proportion of water withdrawal for agriculture, 2001



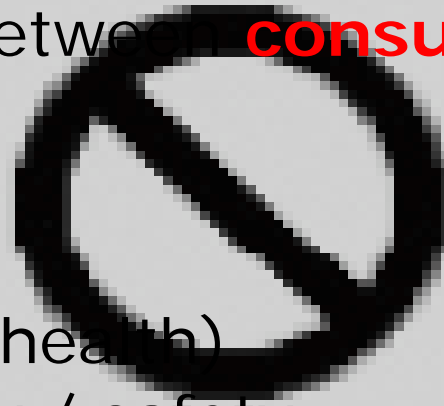
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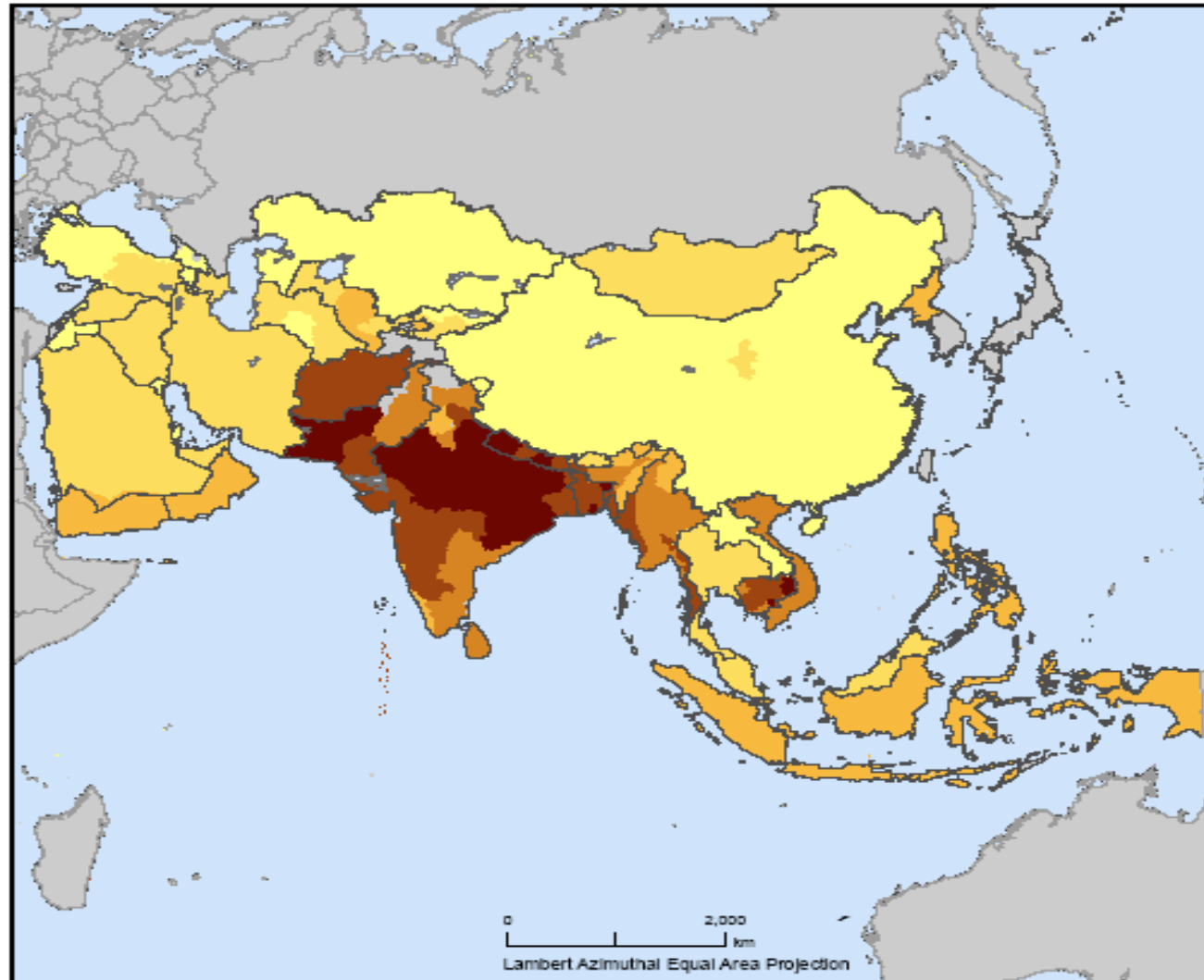
~~Characterized by Disconnects, both the in developed and developing world~~

Disconnects between **consumers** and **farmers**:

- food prices
- externalities (health)
- trust in quality / safety



Do not disconnect.



Asia

By Subnational Administrative Level

Measures of Poverty

Child Malnutrition

Children are defined as underweight if their weight-for-age z-scores are more than two standard deviations (2 SD) below the median of the NCHS/CDC/WHO International Reference Population.

*Percent of Children
Age 0-5 Underweight*

less than 10.0

10.1 - 20.0

20.1 - 30.0

30.1 - 40.0

40.1 - 50.0

more than 50.0

No Data

Status of Agriculture:



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Disconnects between **policies** and **expectations**.

- investments in research & education
- pro-poor investments
- investments in infrastructure
- trade
- incentives



ot

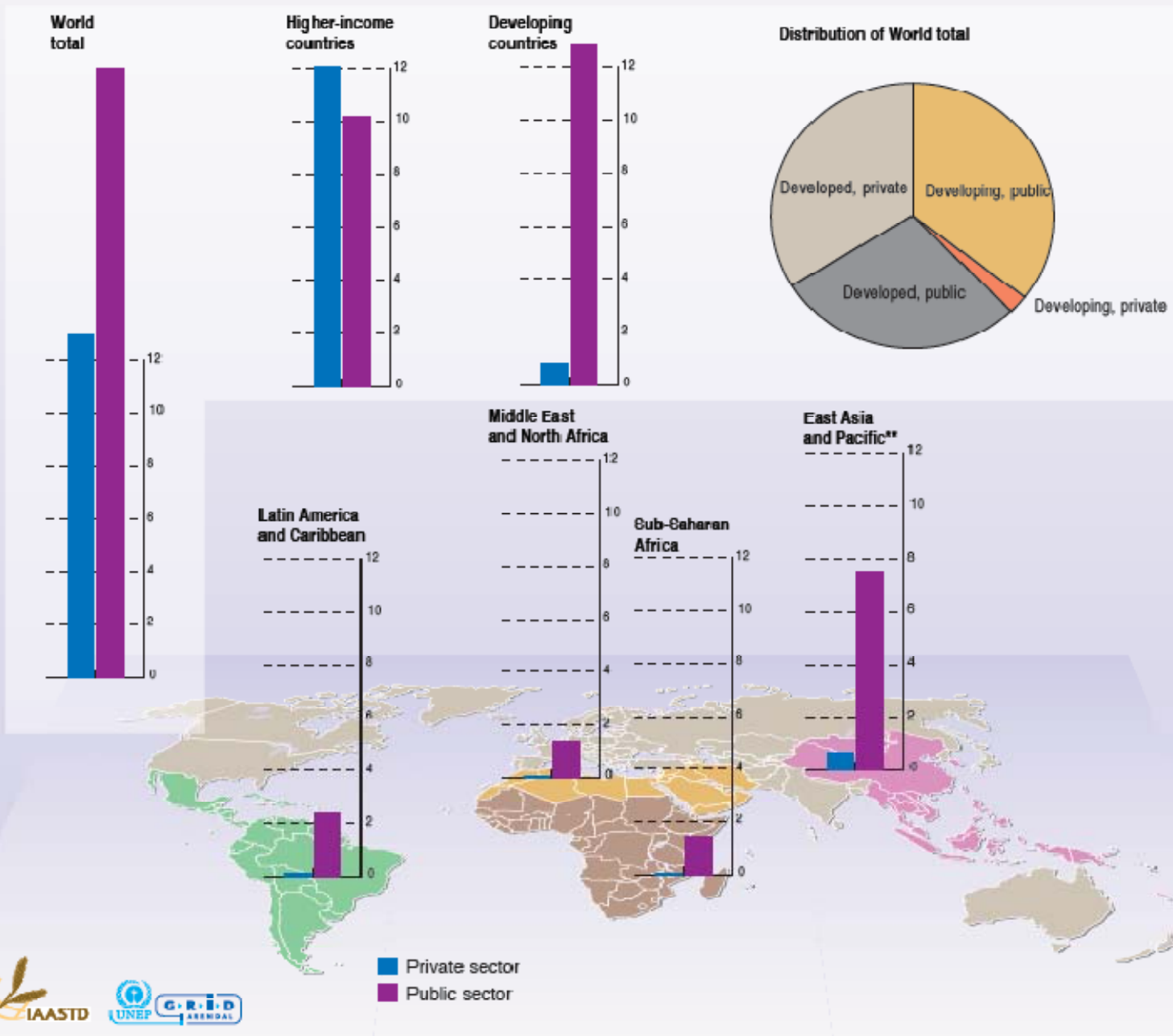


on



Public and private agricultural R&D spending by region, 2000

Billon dollars, international prices year 2000.

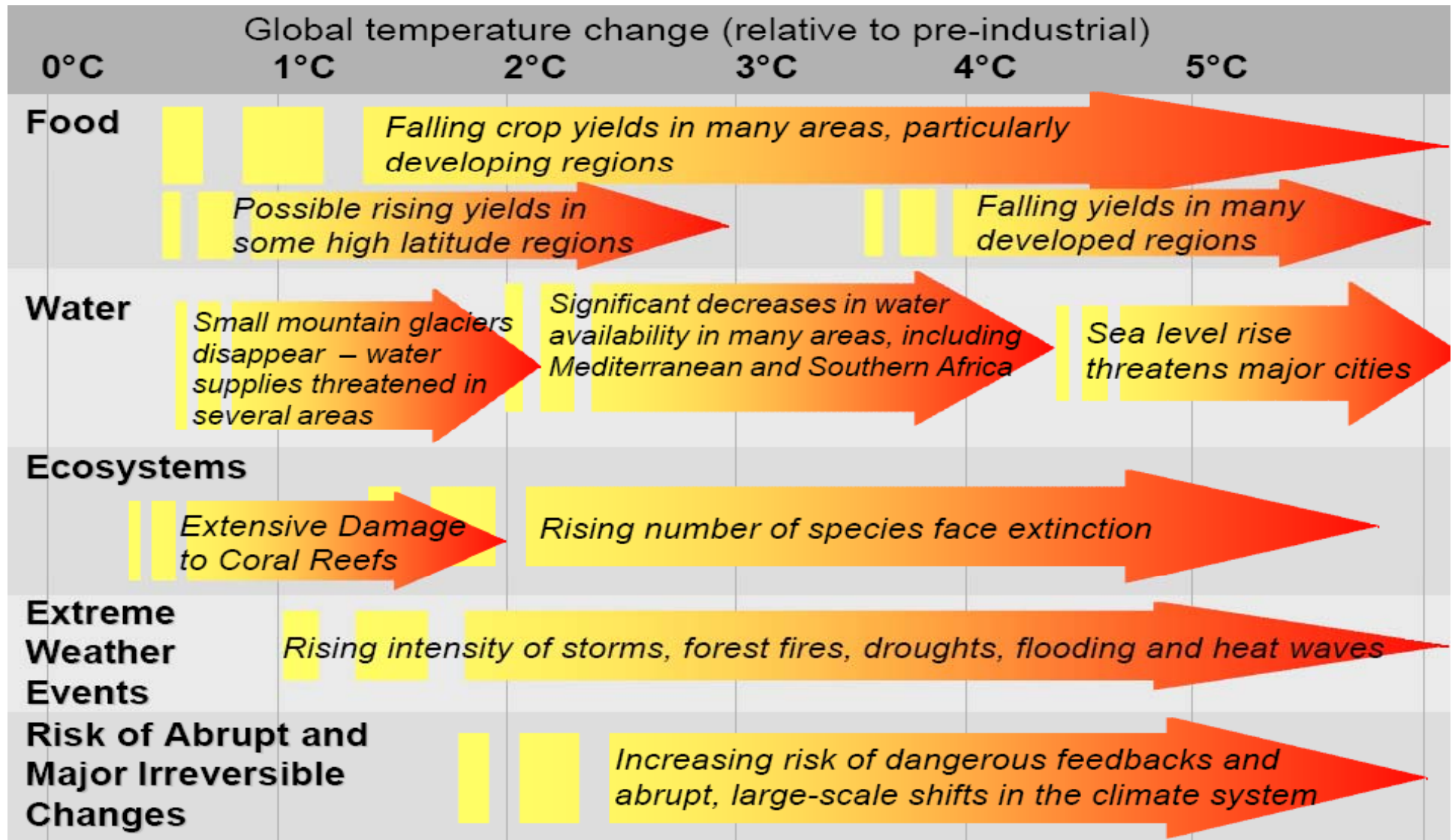


Future Challenges

- Demand for food will double within the next 25-50 years, primarily in developing countries
- We need sustained growth in the agricultural sector
 - to feed the world
 - to enhance rural livelihoods
 - to stimulate economic growth
- Meet food safety standards

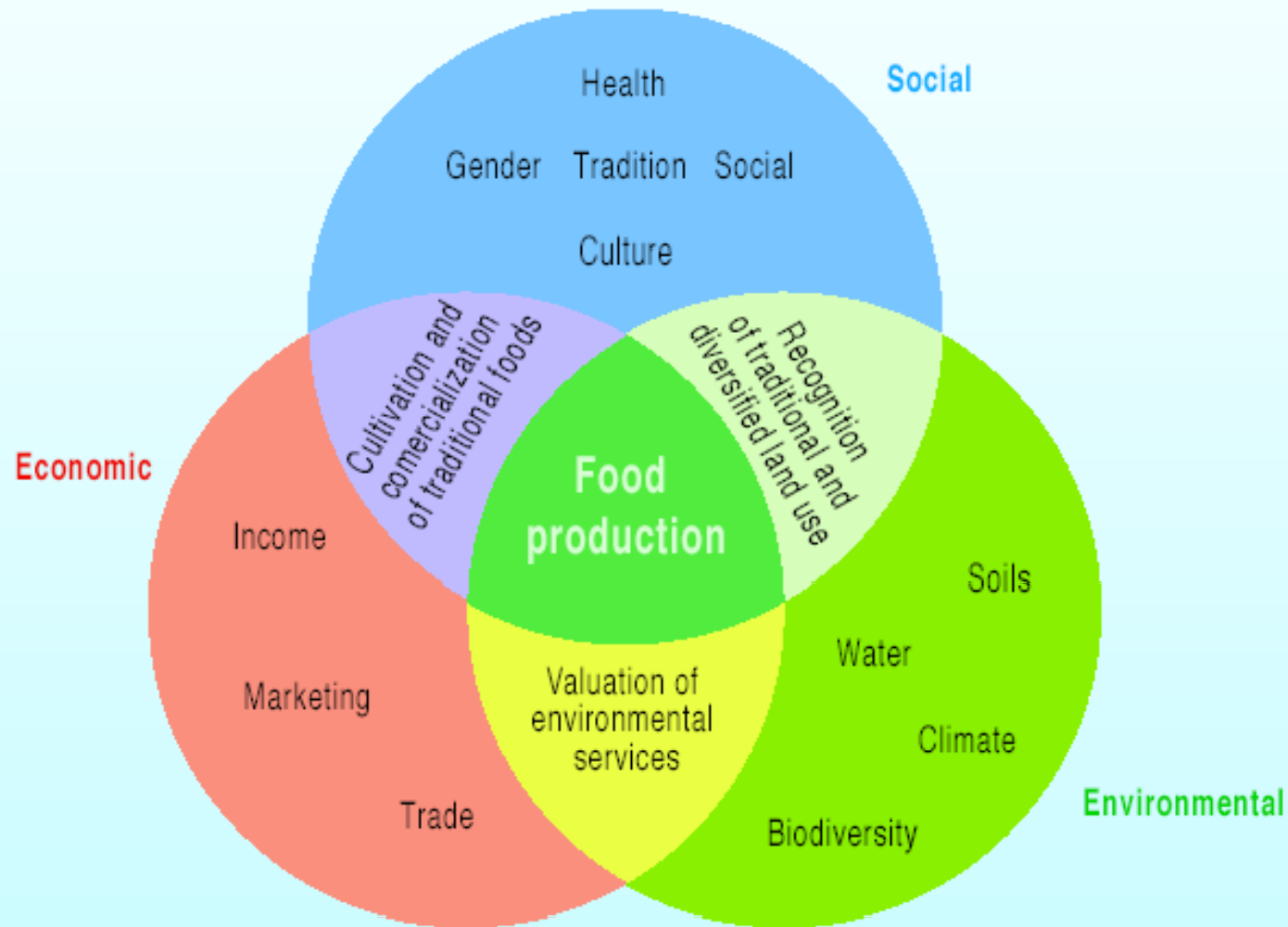
In an environmentally and socially sustainable manner

Projected Impacts of Climate Change

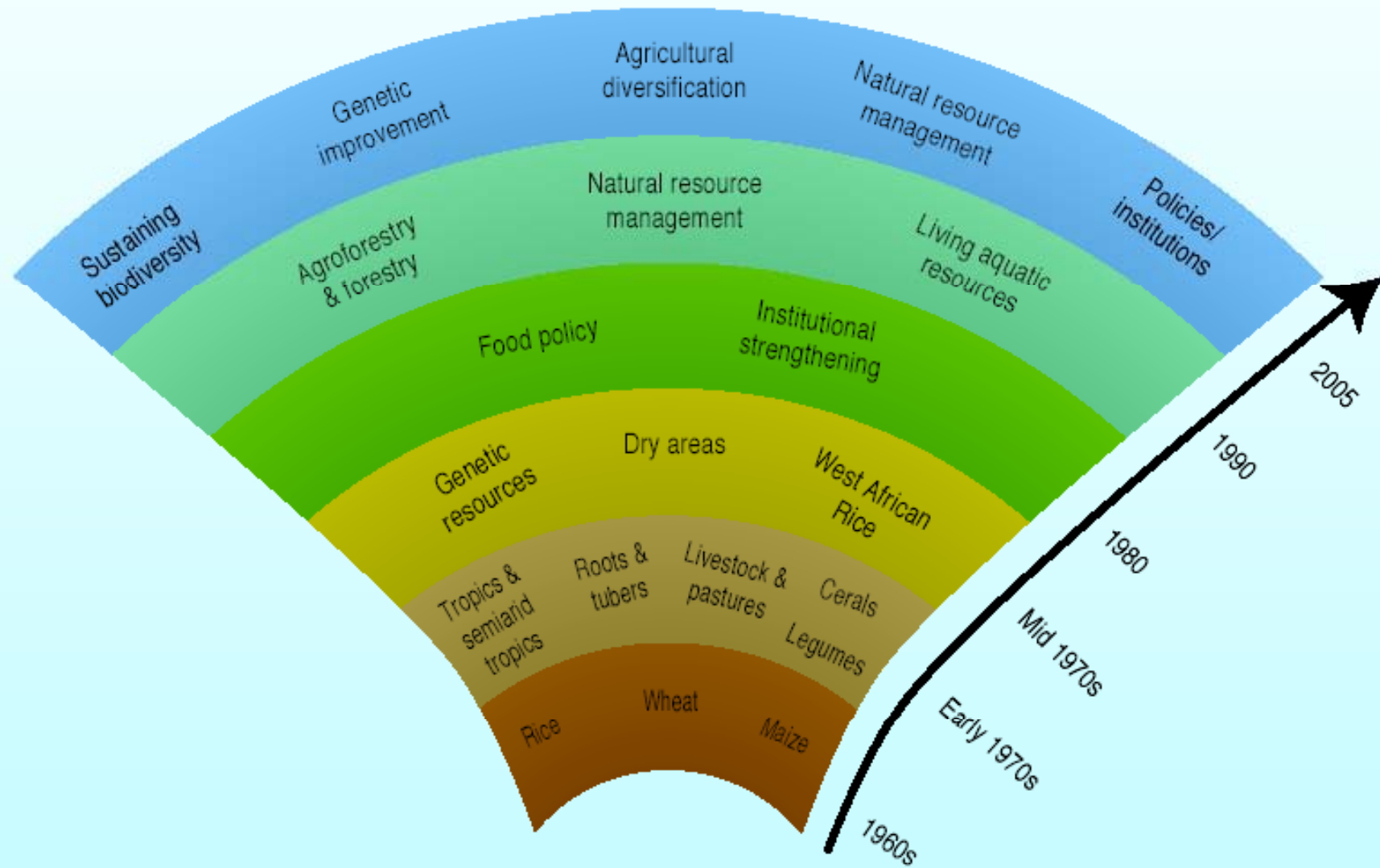


Multifunctional agriculture

The inescapable interconnectedness of agriculture's different roles and functions



Pathway to the current conception of modern agriculture



Immediate/Short Term Suggestions for decision-makers

- **Increase AKST focus on drylands, fisheries, Mountain and Coastal ecosystems, orphan crops, crop-livestock systems, and climate change impacts**
- **Increase national public investment and regional co-operation in AKST**
- **Build rural safety nets and non-farm rural employment**
- **Enhance basic sciences, technological and institutional changes to address water and land problems**

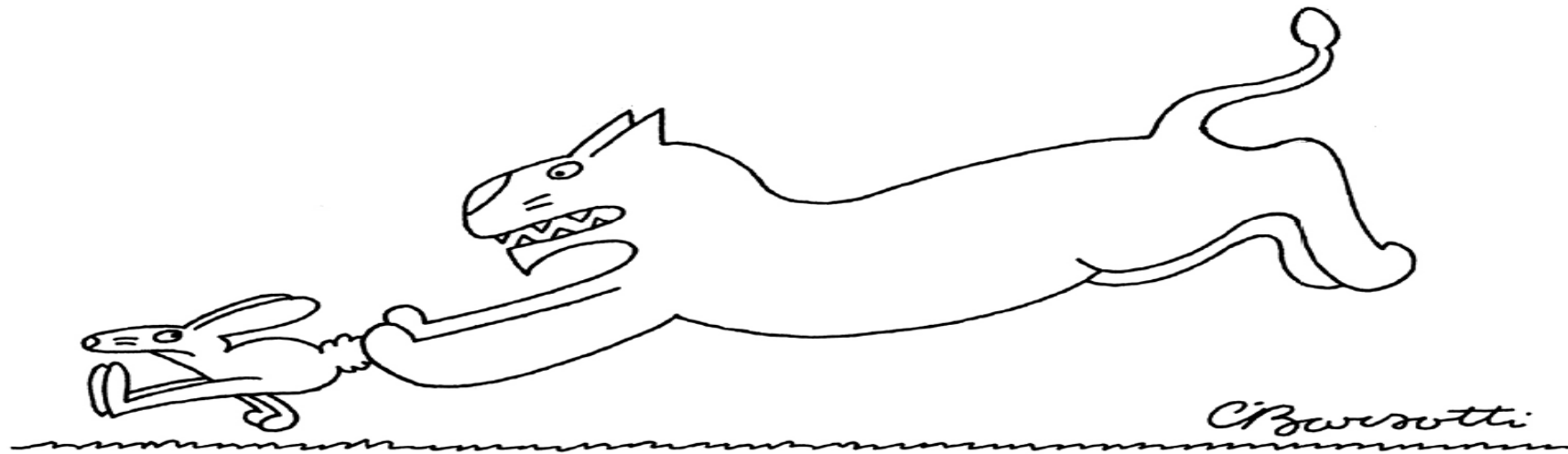


Medium/Long Term Suggestions for decision-makers

- Improve public-private-CSO involvement in AKST with accountability for social and environmental outcomes**
- Develop macro-level policy changes to enable AKST linkages with development goals**
- Shift focus from production technologies to understanding and enhancing the production and adapting to environmental climate change impacts**
- Build and reform AKST skill base (basic sciences, social, political and legal knowledge) and innovation capacities of rural communities and consumers**



Trade Issues



“What are you complaining about? It’s a level playing field.”

Opening national agricultural markets to international competition can offer economic benefits, but can lead to long term negative effects on poverty alleviation, food security and the environment without basic national institutions and infrastructure being in place

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

...there is only one!

