

**United Nations side-event COP 17
Durban, 30 November, 2011**

ENERGY-SMART FOOD for People and Climate

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Issue paper at

<http://www.fao.org/docrep/014/i2454e/i2454e00.pdf>



**"ENERGY-SMART" FOOD
FOR PEOPLE AND CLIMATE**
ISSUE PAPER



Policy brief: "The Case for Energy Smart Food Systems" at

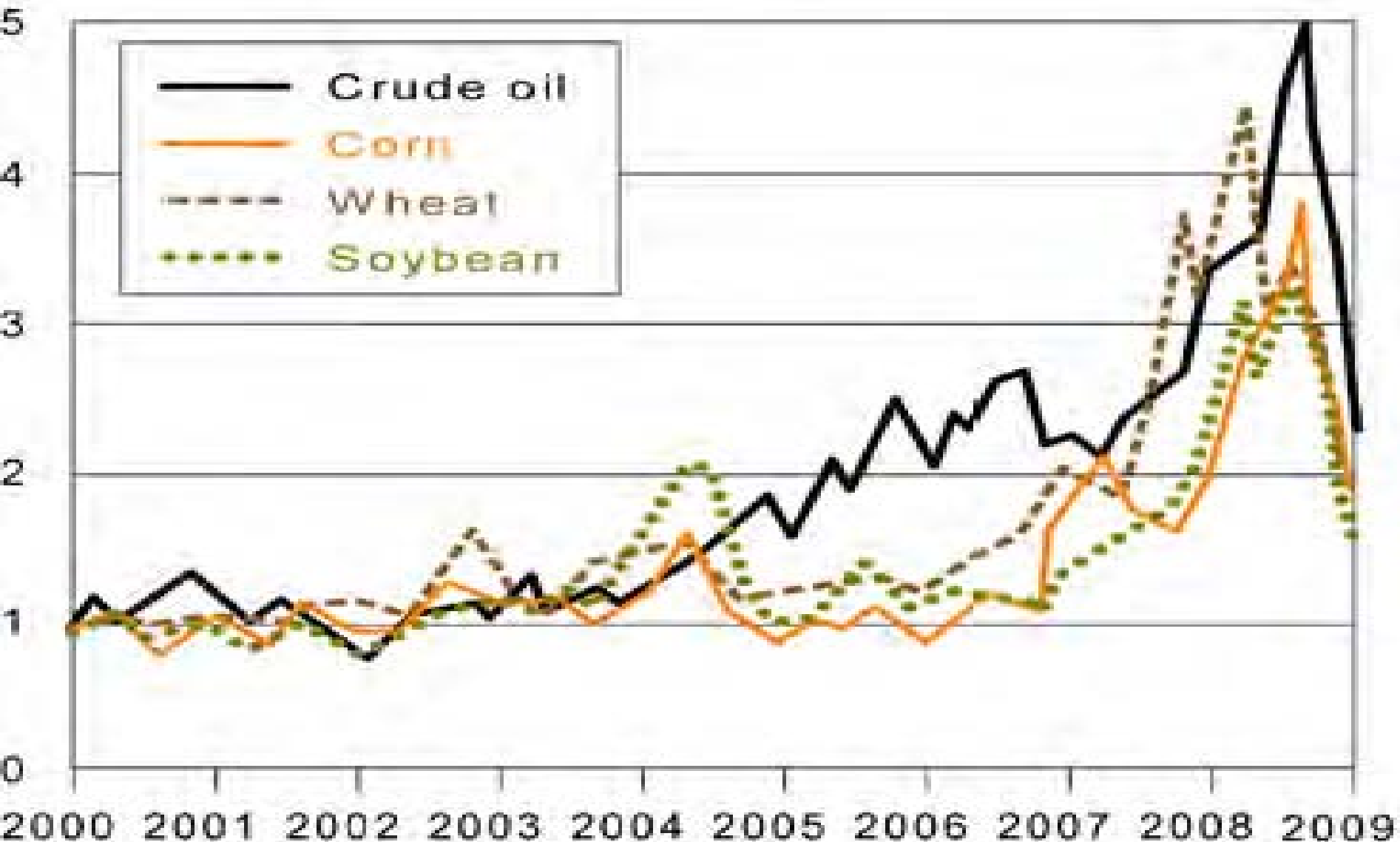
<http://www.fao.org/docrep/014/i2456e/i2456e00.pdf>

What is the problem?

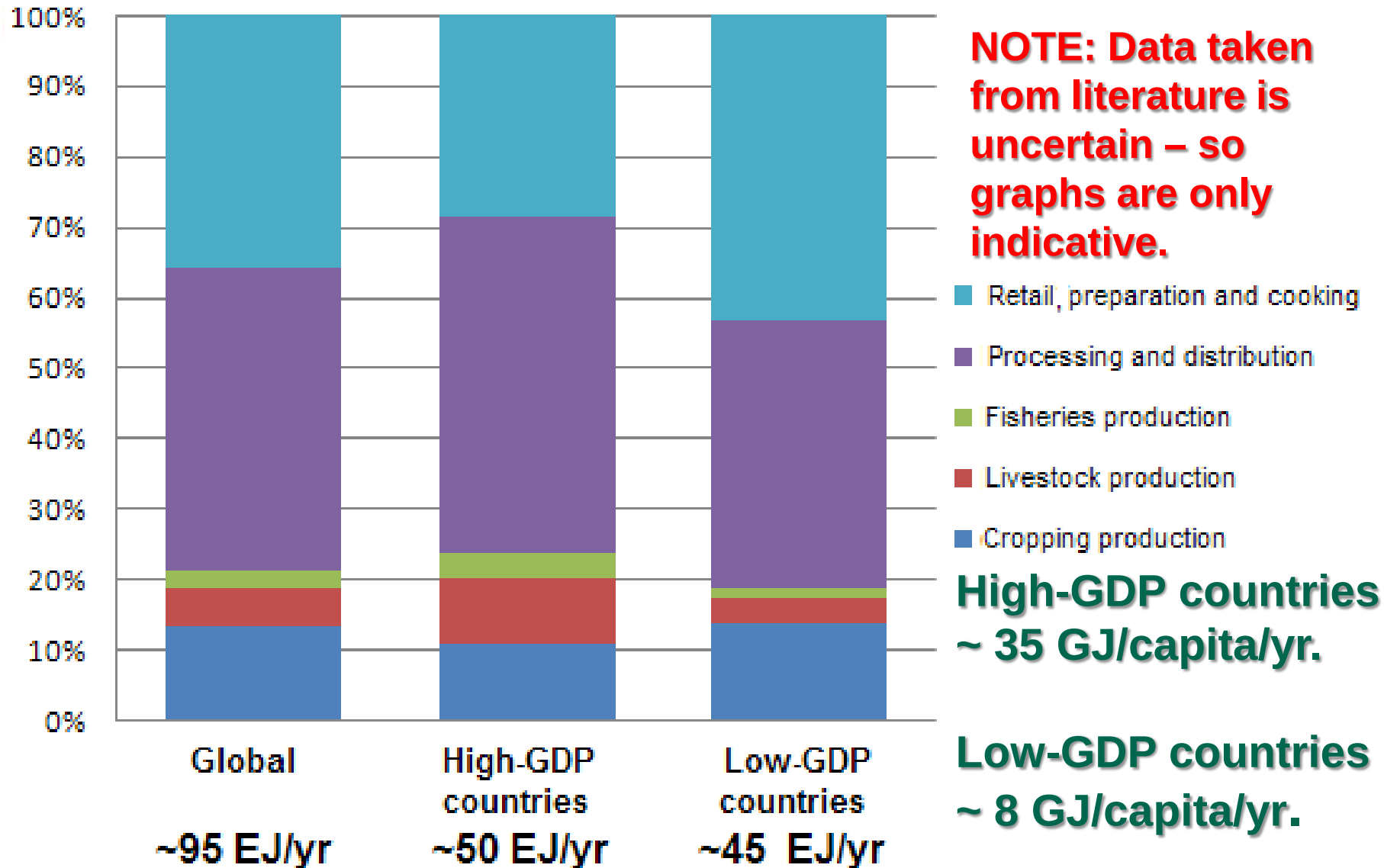


The global agri-food supply chain (from “paddock-to-plate”) is heavily dependent on fossil fuel inputs – both direct and indirect.

Food prices have recently become strongly linked with oil/gas prices.



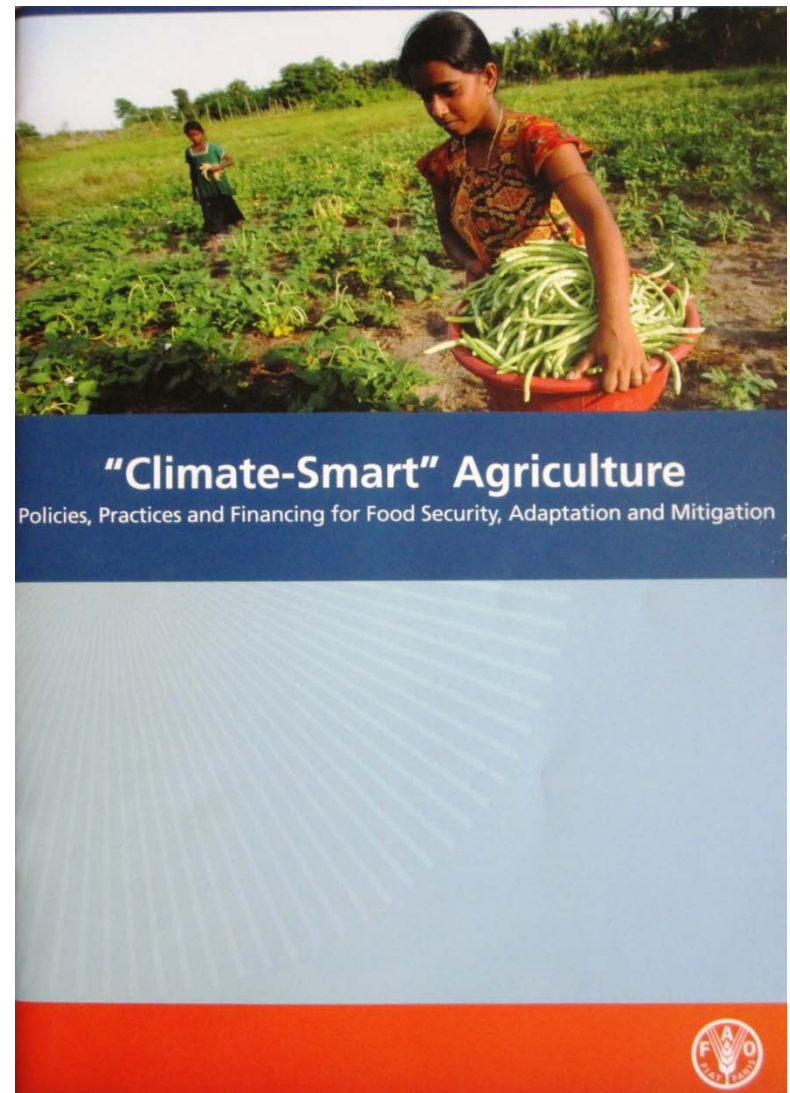
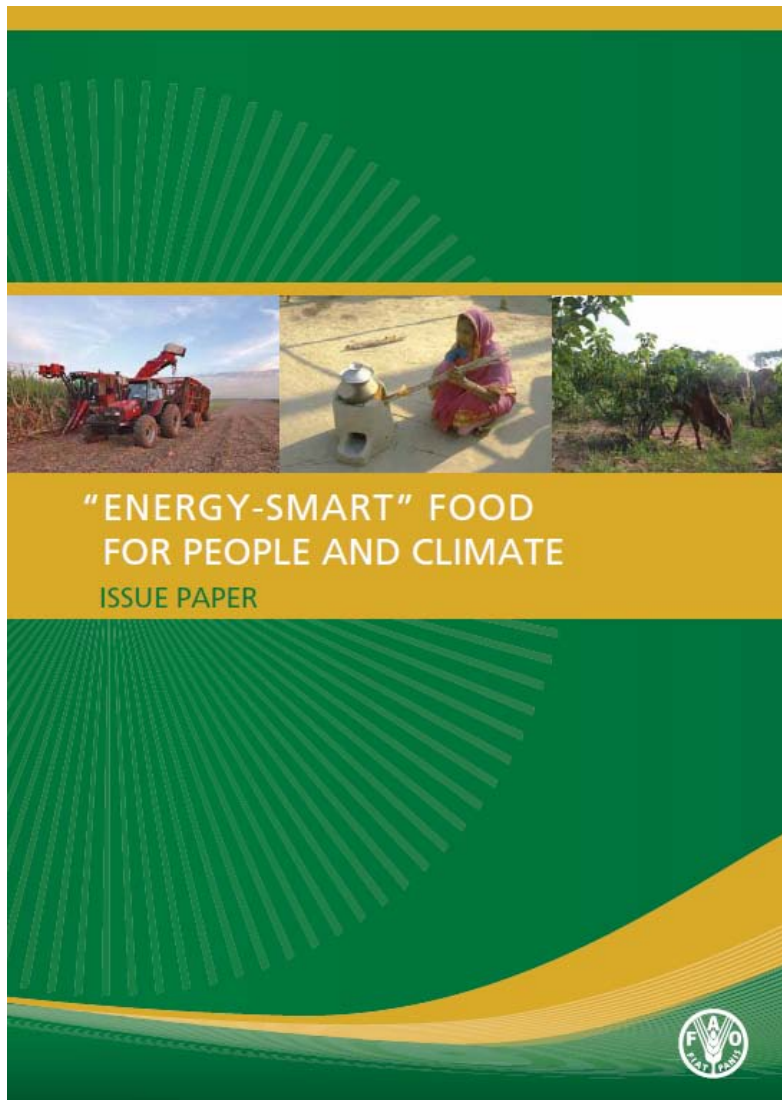
Shares of energy in Agri-food supply chain



Around 32% of the total global end-use energy demand of ~300 EJ/yr is used for providing food.

Decoupling food from fossil fuels.

“Energy-Smart is Climate-Smart”

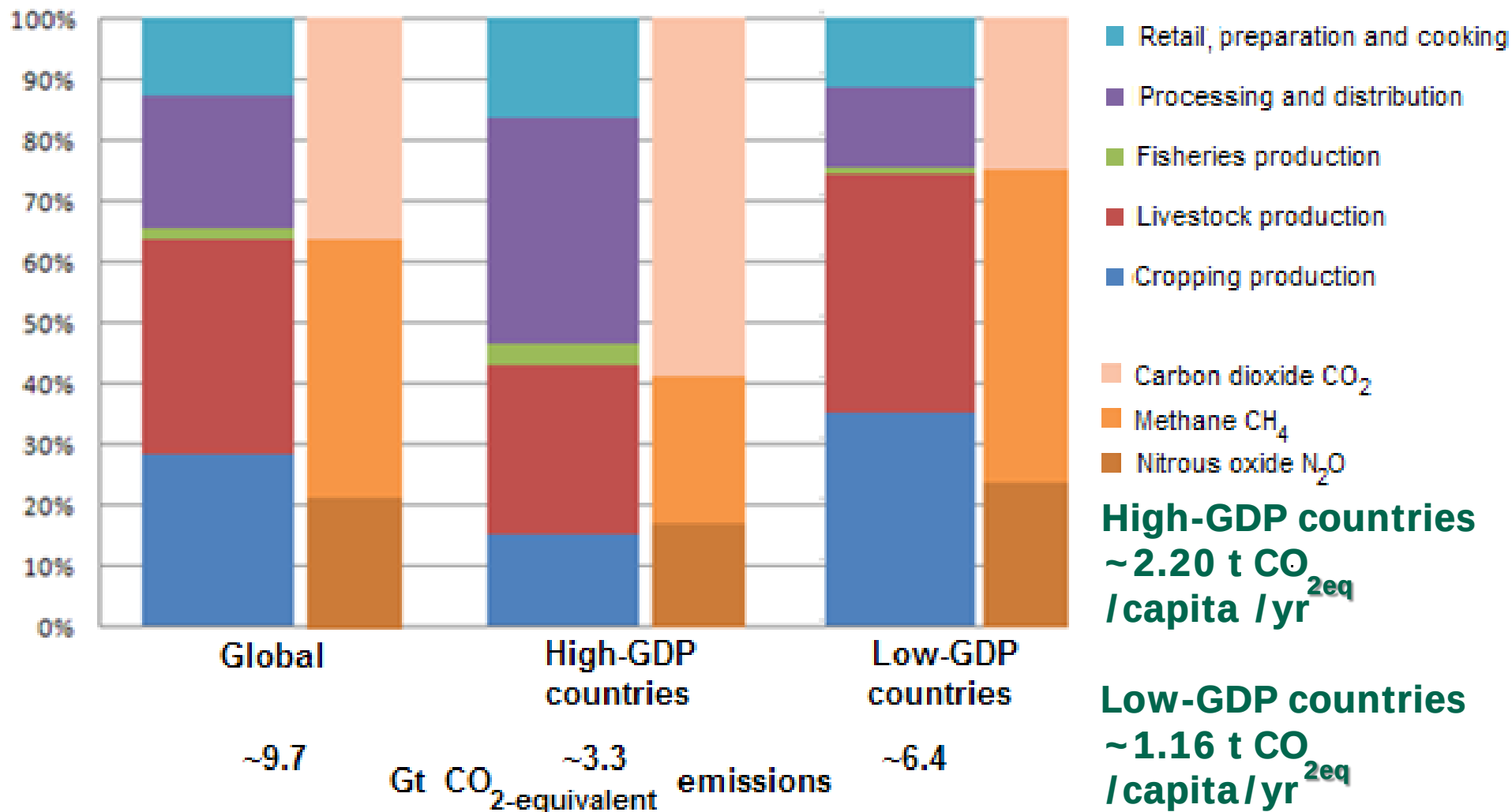


Energy-Smart food:

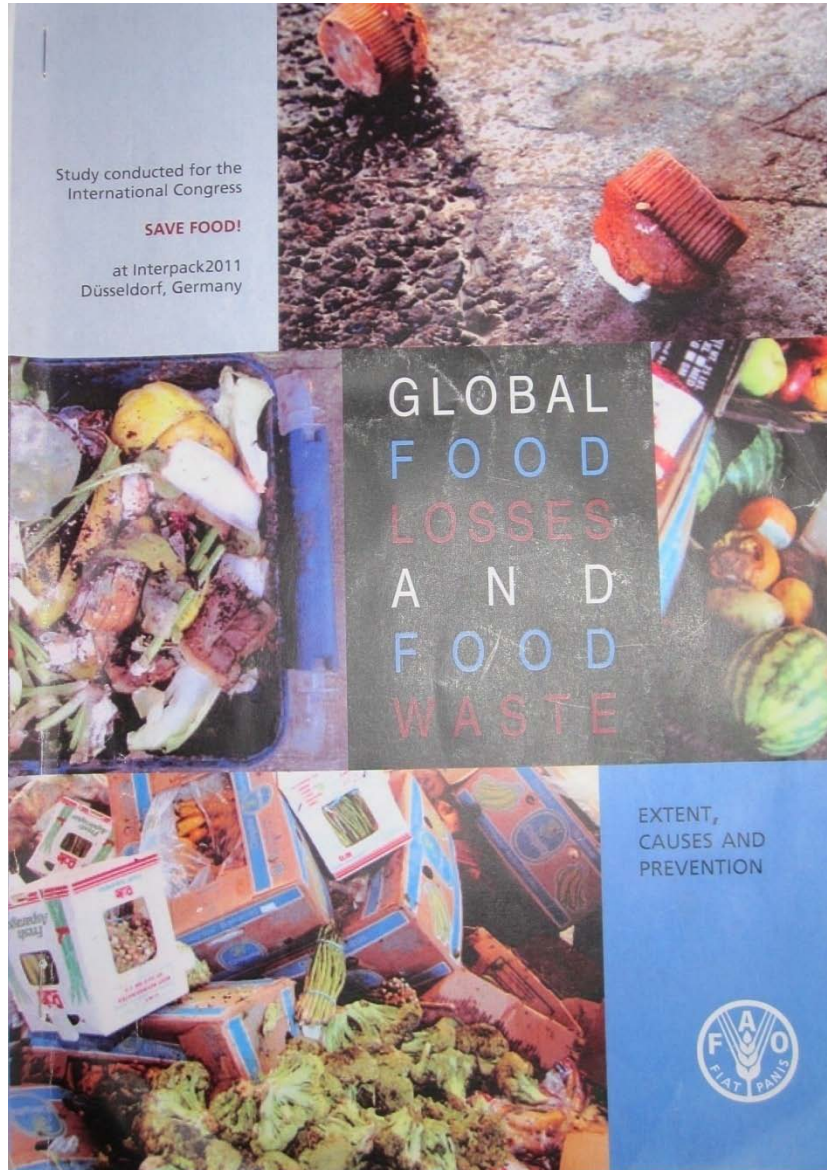
- Improves access to modern energy services for energy-poor subsistence farmers and fishers to provide increased food supply and security.
- Ensures energy inputs, from whatever sources, are used more efficiently than at present along the entire agri-food supply chain.
- Reduces the energy intensity (MJ / kg of food product) of both direct and indirect energy inputs.
- Captures the renewable energy sources available and uses them to displace fossil fuels.
- Simultaneously enhances food security, sustainable development, climate change mitigation, and resilience by reducing GHGs.

Shares of greenhouse gas emissions

**Around 22% of total global GHG emissions
(~45 Gt CO₂-equiv /yr) arise from the agri-food chain.**



Global food losses and food waste



We fail to consume around one third of all food produced.

This wastes scarce land, water and energy resources.

Renewable energy:

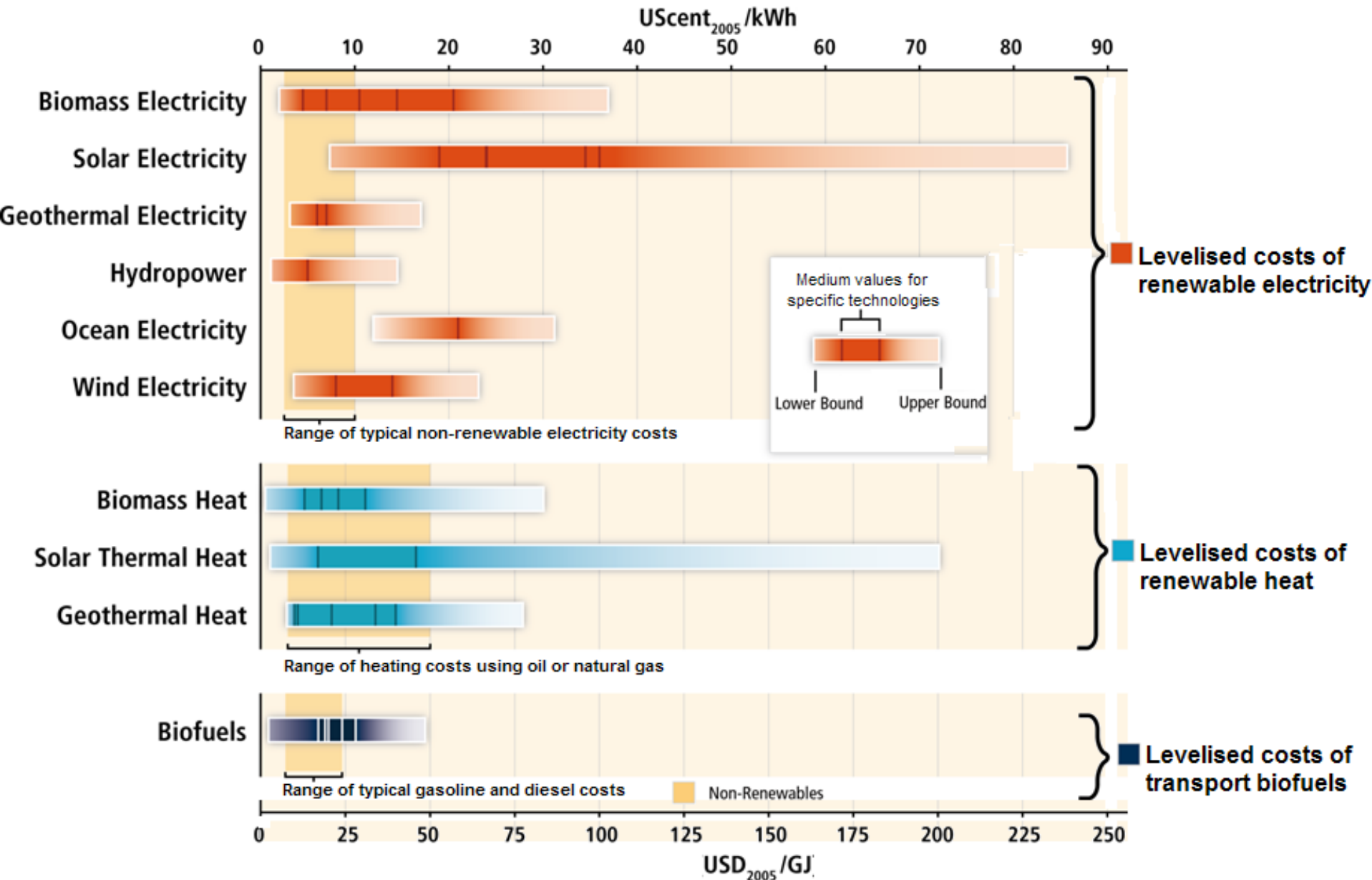
- can enhance access to reliable, affordable and clean modern energy services;
- is particularly well-suited for remote rural populations; and
- in many instances can provide the lowest cost option for energy access.

**IPCC - Special Report on
Renewable Energy**

July, 2011.

www.ipcc.ch

RE costs are often higher than current energy prices but can be competitive in various settings. ¹¹





**FAO is proposing a multi-partner
programme on
Energy-Smart and Climate-Smart
food systems to be launched in 2012.**

**FOR MORE INFORMATION ON THE
PROGRAMME CONTACT:**

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In summary

- The global agri-food supply chain can be decoupled from its dependency on fossil fuels in order to meet future food demands.
- Reducing energy intensity is technically possible at all levels along the supply chain.
- Renewable energy technologies can help improve energy access, food security, price fluctuations and climate change impacts.
- Policy development to drive the transition to Energy-Smart food and reduce food losses needs a long-term vision.
- We are running out of time.....