

IFA
Agriculture
Conference

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Sustainable Development
from the Ground Up

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International Fertilizer Industry Association



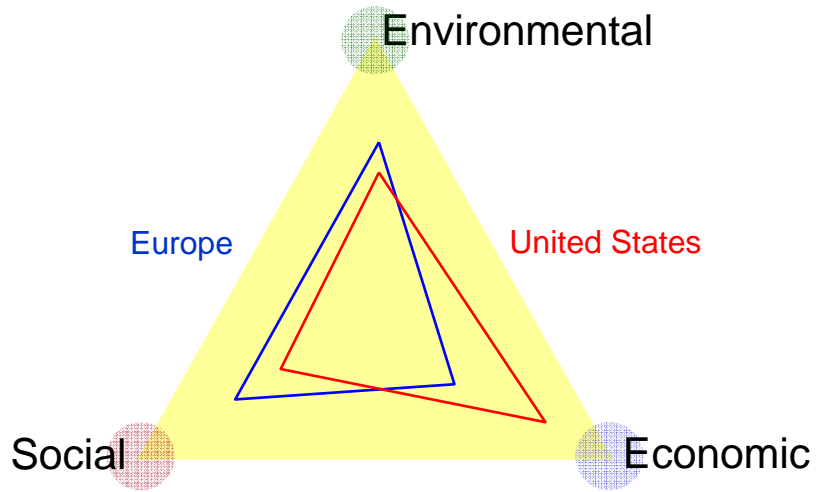
Defining sustainable development...

*"Sustainable development... meets the
needs of the present without
compromising the ability of future
generations to meet their own needs."*

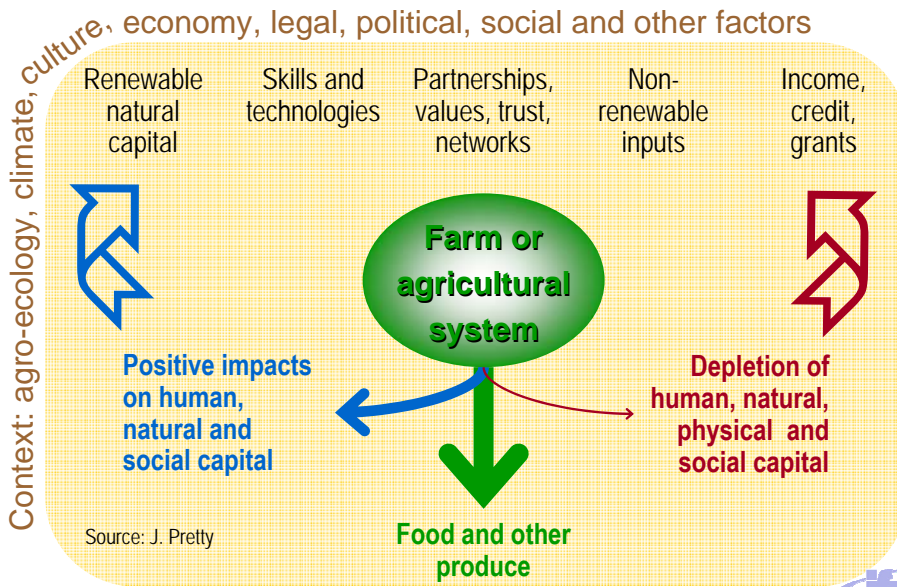
"Our Common Future"
The Brundtland Commission



Pillars of sustainability



Capital and risks...



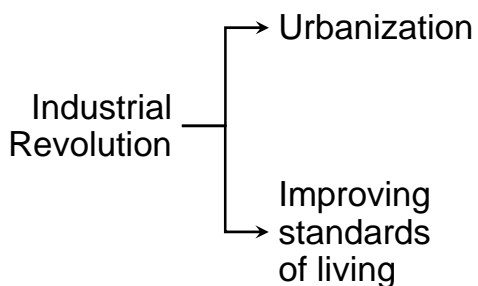
Supporting the population

in 2005	Population millions	People per sq. km
Asia	3905	123
Europe	728	32
Africa	906	30
Latin America and the Caribbean	561	27
North America (USA)	331	15 (31)

Source: United Nations Population Division



Sustainability over time...



Consequences

- ▶ Belief that technology is all-powerful
- ▶ Disassociation from natural processes
- ▶ Romanticized view of agriculture and food production
- ▶ Reduced capacity for delayed gratification



Definitions of food security...

- ✓ Food as a human right (no hunger)
- ✓ Avoiding dependence (territorial security)
- ✓ Non-contamination of the food chain
- ✓ High-quality food
- ✓ Subjective preferences for certain production processes (organic, fair trade, etc.)



WEHAB

Water

- Agrochemicals in bodies of water
- Productivity gains through irrigation / water scarcity a brake on irrigation
- Enhanced water use efficiency to save resources

Energy

- Energy consumption for agricultural machinery and transport
- Bioenergy production
- Climate change adaptation and mitigation

Health

- Improved maternal health
- Enhanced nutrient intake
- Globalization of animal diseases
- Impacts of pesticides on health

Biodiversity

- Dependence on landraces and genetic variety
- Monoculture production fosters loss of variety
- On-farm habitats

Agriculture

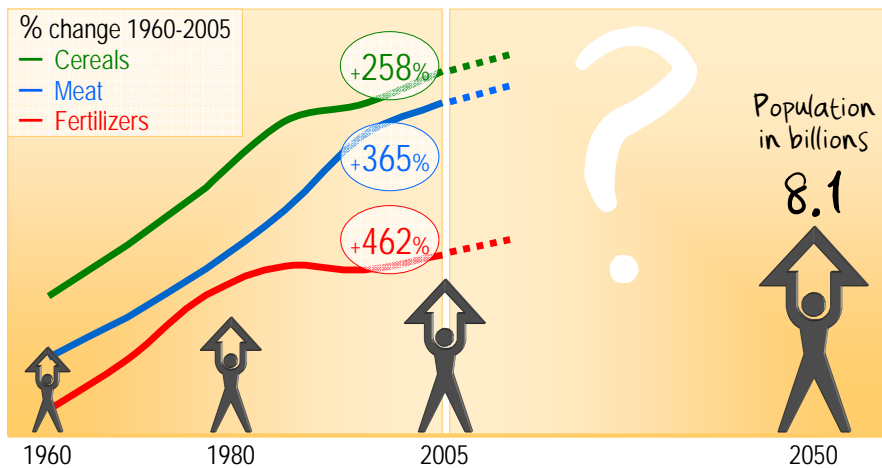
- Hunger and malnutrition
- Natural resource management
- Infrastructure to build and institutions to reform
- Access to capital and markets



Back to basics...



Feeding a growing population



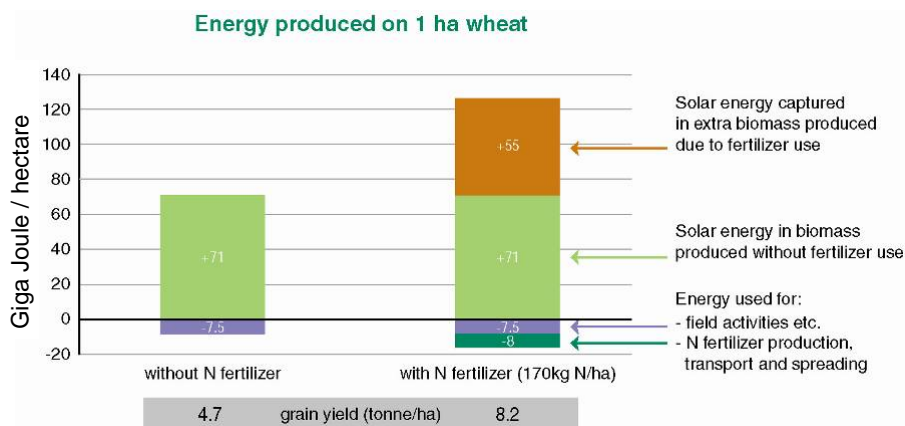
Source: FAO, IFA



Beyond food security



Addressing climate change at the roots



Source: EFMA



When water quality has nothing to do with water



Stemming the tide of desertification



Teeming with life



Building sustainability... ...from the ground up

Food production

