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Food production and conflicts Land use not land exhaustion

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Threats to food production

- Water scarcity
- Droughts
- Declining biodiversity
- Soil degrading and erosion
- Unpredictable climate changes
- Land grabbing
- Economic model
- => causes conflicts, hunger, migration,

IAASTD

- International Assessment of Agricultural Knowledge, Science and Technology for Development
- approved by the Intergovernmental Plenary in Johannesburg, South Africa (7-11 April 2008)

Main Points IAASTD

- Hunger and Poverty is a distribution problem
- Problem of wrong agricultural practice
-> regional and global
- Step out
of the concept of multifunctional agriculture
with high technological input, unification for
industrial production, feasible for global
markets, high energy and land consuming

AGRICULTURE & FOOD PRODUCTION

The **CHALLENGE** before us:

Competing (economic) models of land use



Locally different systems, tailored to environment, low input, low tech – sustainable

Closed cycles, local direct marketing, subsistence



Uniform industrial production system – one model fits all, environmental differences are made to fit the needs of industrial agriculture. High input, high tech - unsustainable

Extraction/mining – industrial value chains

Proposal of the IAASTD

- Reconnection of agriculture to the regional cultural, societal and ecological conditions and circumstance
- Using traditional knowledge and crops
- Varying crops, crops rotation
- Producing for local markets not for the uniformed international markets
- Increase the amount of calories per hectares instead the amount of crops
- Agriculture similar to gardens, urban gardening
- Food sovereignty for countries

Water – Conflicts 1/2

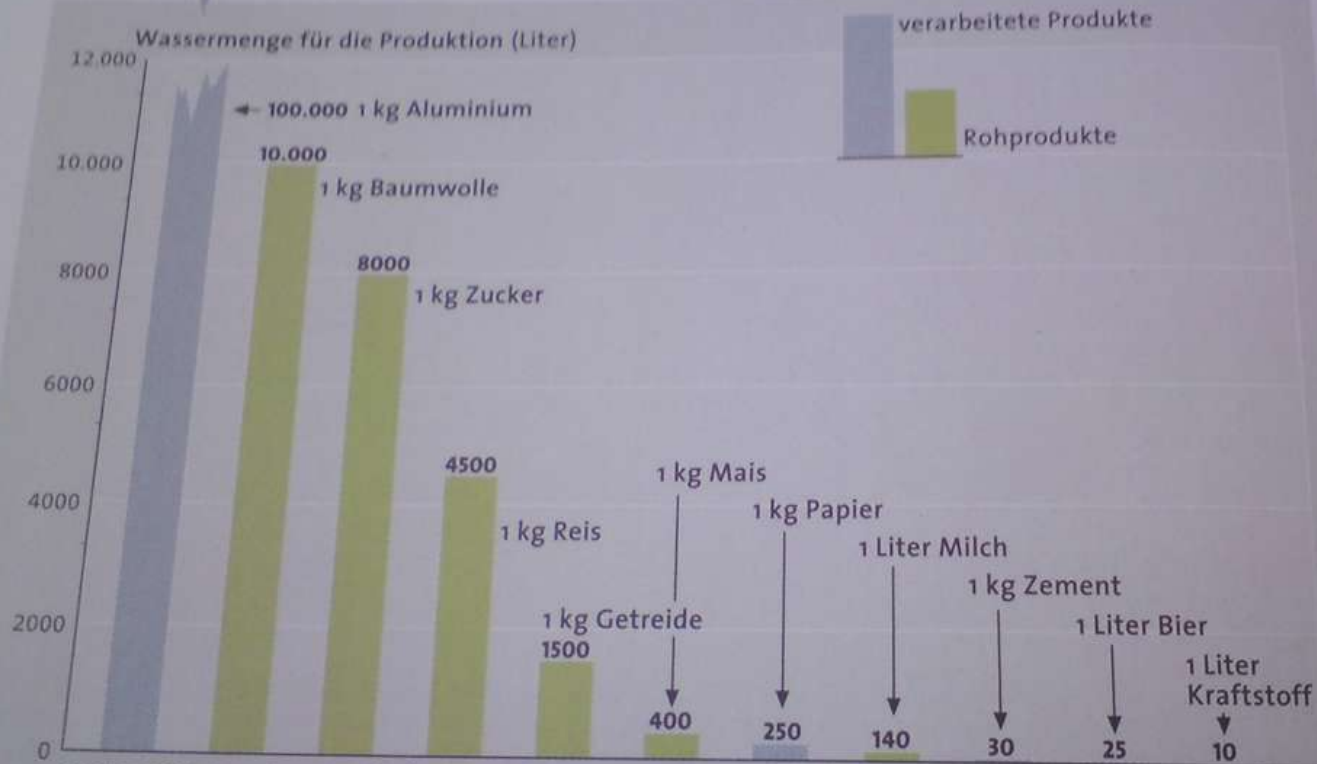
- Water is necessary for agriculture
- Traditional industrialized agriculture exhausted water
- Pollution of water by chemical fertilizers
- High technology and GMO seeds need more water than traditional seeds
- Power control over the seed is by the transnational not by the local people

Water - Conflicts 2/2

- Water is used for energy production
- => Dams
- Energy production in which interests – mostly not for regional agriculture and subsistence
- Examples - Conflicts around the Nil or Tigris,
- => Dams shorten the water in other parts and damage the fertility there

Virtual Water

► Alltägliche Produkte verbrauchen astronomische Mengen Wasser



Quellen: Cité des sciences et de l'industrie, Paris; Universität Genf.

Land grabbing

- Investment from out side
- Buying land for agricultural production for export and agro fuels
- Banish the traditional communities
- Industrialized agriculture, GMO, unified, exhausting land
- => destroying forests, degradation, erosions, droughts

Agro fuels

CONFLICT!



“Corn prices ... are intimately tied to energy prices, because corn is used to make [ethanol](#), an additive in gasoline.”

<http://www.wikininvest.com/commodity/Corn>

Migration

- Migration from the rural areas to the cities
- No jobs, no social security
- Destroying the existing communities and solidarity
- -> violence

Alternative Example

- Trees for the desert
- Koutal / western Senegal
- Planting trees in degenerated, salted ground
- Work done by women – men migrated to cities looking for jobs
- Additional traditional plants for daily food (vegetables and sorghum)
- Green wall project – working only with local participation

AGRICULTURE & FOOD PRODUCTION

The **CHALLENGE** is **global**:



URGENTLY needed:

Simultaneously paradigm shift to sustainable, modern agricultural systems functioning **WITHIN** ecological limits, **local** ecological intensification within a **global** context and connection.

Developed bottom-up with farmer participations