Transformation of our Food Systems

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北京中建雁栖湖景酒店
The SDGs offer the transformational pathway the IAASTD was suggesting.

- Why
- What
- How
- Who

_It always seems impossible until it’s done._ Mandela
The International Assessment of Agricultural Knowledge, Science and Technology for Development

11 Years

«Business as usual is not an option» (IAASTD 2009)

http://www.weltagrarbericht.de
Back in 2009, IAASTD requested a system change: agroecology.
What are the issues?

Transformation of our food systems

The making of a paradigm shift

Agroecological approaches for sustainable agriculture that enhance food security and reduce environmental degradation

A report

High Level Panel of Experts on Food Security and Nutrition

UNEP

Data

Updates

Reports

With contributions from:

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Reflections since IAASTD – 10 years on
The food system today and future......
Too much production, too much waste

Food waste is 527 calories per day per person in the world in 2015......
Broad recognition that the global food system is not functioning effectively

From FAO infographic
What can agroecology and organic farming contribute?
...but first, how did we create these problems?

....cheap food and profit above all
...the issues with our food system are summarized in this landmark presentation.... Threatening the planet’s capacity to provide for all

From Rockstrom et al 2015

From Campbell et al 2017
Diets need to change, for various reasons

Current Diets vs Planetary Health Diet

Global

EAT – Lancet Commission on healthy diets from sustainable food systems, 2019
The food system today and future......

....unless changes are made
Transformation at all levels, from field to fork
Transformation process

Diversified Agroecological Farming

Subsistence Agriculture
- Connect to Markets
- Diversify
- Mechanize
- Build knowledge

Industrial Agriculture
- Relocalize
- Diversify
- Reduce chemical inputs
- Build knowledge
The So(i)lution is literally ....in the soil.

It sounds like an idea plucked from science fiction, but the reality is that trees and plants already do it.
....and above
Push-Pull system
What and who stands in the transformation's way?
Agroecology ....and other alternatives

https://www.agroecology-pool.org/methodology/
Applying what we know to the transformation process

Level 5: Rebuild the global food system so that it is sustainable and equitable for all

Level 4: Re-establish connections between growers and eaters, develop alternative food networks

Level 3: Redesign whole agro-ecosystems

Level 2: Substitute alternative practices and inputs

Level 1: Increase efficiency of industrial inputs

Level 0: No agroecological integration

This is the name of the Conference

Gliessman, 2015
FAO 2018
Investments in change......or is it the status quo?

- **UK**: Ag ODA (DFID) (Pimbert & Moeller, 2018)
  - 5% Funding flows contributing to an agroecological transformation
  - 95% Status quo

- **Belgium**: Ag ODA (Enabel, FBSA, and others)
  - 16% Funding flows contributing to an agroecological transformation
  - 84% Status quo

- **Denmark**: Direct bilateral Ag ODA (Danida)
  - 1% Funding flows contributing to an agroecological transformation
  - 99% Status quo

- **EU**: DG DEVCO to FAO, IFAD, WFP (CIDSE and CAWR, 2020)
  - 3% Funding flows contributing to an agroecological transformation
  - 97% Status quo

- **France**: Ag Bilateral flows to developing countries (AFD, Proparco, BPI)
  - 13% Funding flows contributing to an agroecological transformation
  - 87% Status quo

- **Switzerland**: AgR4D to Sub-Saharan Africa (SDC, SNSF)
  - 51% Funding flows contributing to an agroecological transformation
  - 49% Status quo

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Funding flows contributing to an agroecological transformation
How agroecology impacts the realization of the SDGs

«Agroecology contributes positively to ten of the 17 SDGs»

50 case studies from 22 African countries
Farrelly et al. 2016

Impact of an agroecological policy scenario
Biovision / Millennium Institute 2019
.... and the transformation of our food system to agroecology is a great part of the solution
Setting agriculture and food systems right

From problem....
- Greenhouse gas emissions
- Soil erosion
- Biodiversity loss
- Water crisis
- Rural poverty
- Non-communicable diseases (NCDs)
- Chemical residues

.... to solution
- Carbon sequestration
- Localization
- Food sovereignty
- Soil fertility
- Agro-biodiversity
- Water retention
- Rural incomes
- Healthy nutrition
- Equity
...transformational lever: Full cost accounting

Report just published by UNITED NATIONS ENVIRONMENT:

.. Yes, changing course is possible.....but it’s everyone's responsibility

You cannot solve the problem with the same kind of thinking that created the problem

*Albert Einstein*

Thank you

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