

Pathway to food system transformation in Africa

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President Millennium Institute and
Biovision Foundation

A transformational pathway



- Why
- What
- How
- Who



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The food system today and future, unless.....



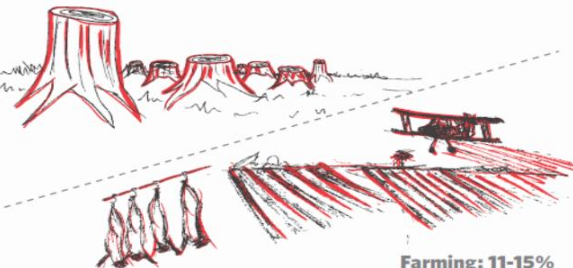
GỖ NHỮNG ĐỒ CHỨA NHIỆM NHIỆM



Other-non food
related emissions: 43-56%

Deforestation: 15-18%

Before the planting starts, the bulldozers do their job. Worldwide, industrial agriculture is pushing into savannas, wetlands and forests, ploughing under huge amounts of land. The FAO says the expansion of the agricultural frontier accounts for 70-90% of global deforestation, at least half of that for the production of a few agricultural commodities for export. Agriculture's contribution to deforestation thus accounts for 15-18% of global GHG emissions.



Farming: 11-15%

It is generally acknowledged that farming itself contributes 11-15% of all greenhouse gases produced globally. Most of these emissions result from the use of industrial inputs, such as chemical fertilisers and petrol to run tractors and irrigation machinery, as well as the excess manure generated by intensive livestock keeping.

Transport: 5-6%

The industrial food system acts like a global travel agency. Crops for animal feed may be grown in Argentina and fed to chickens in Chile that are exported to China for processing and eventually eaten in a McDonald's in the US. Much of our food, grown under industrial conditions in faraway places, travels thousands of kilometres before it reaches our plates. We can conservatively estimate that the transportation of food accounts for a quarter of global GHG emissions linked to transportation, or 5-6% of all global GHG emissions.

Processing & Packing: 8-10%

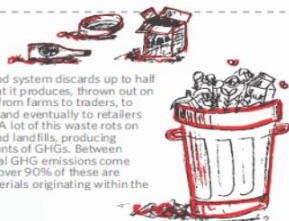
Processing is the next, highly profitable, step in the industrial food chain. The transformation of foods into ready-made meals, snacks and beverages requires an enormous amount of energy, mostly in the form of carbon. So does the packaging and canning of these foods. Processing and packaging enables the food industry to stack the shelves of supermarkets and convenience stores with hundreds of different formats and brands, but it also generates a huge amount of greenhouse gas emissions - some 8 to 10% of the global total.

Freezing & Retail: 2-4%

Refrigeration is the lynchpin of the modern supermarket and fast food chains' vast global procurement systems. Wherever the industrial food system goes, so do cold chains. Considering that cooling is responsible for 15 percent of all electricity consumption worldwide, and that leaks of chemical refrigerants are a major source of GHGs, we can safely say that the refrigeration of foods accounts for some 1-2% of all global greenhouse gas emissions. The retailing of food's accounts for another 1-2%.

Waste: 3-4%

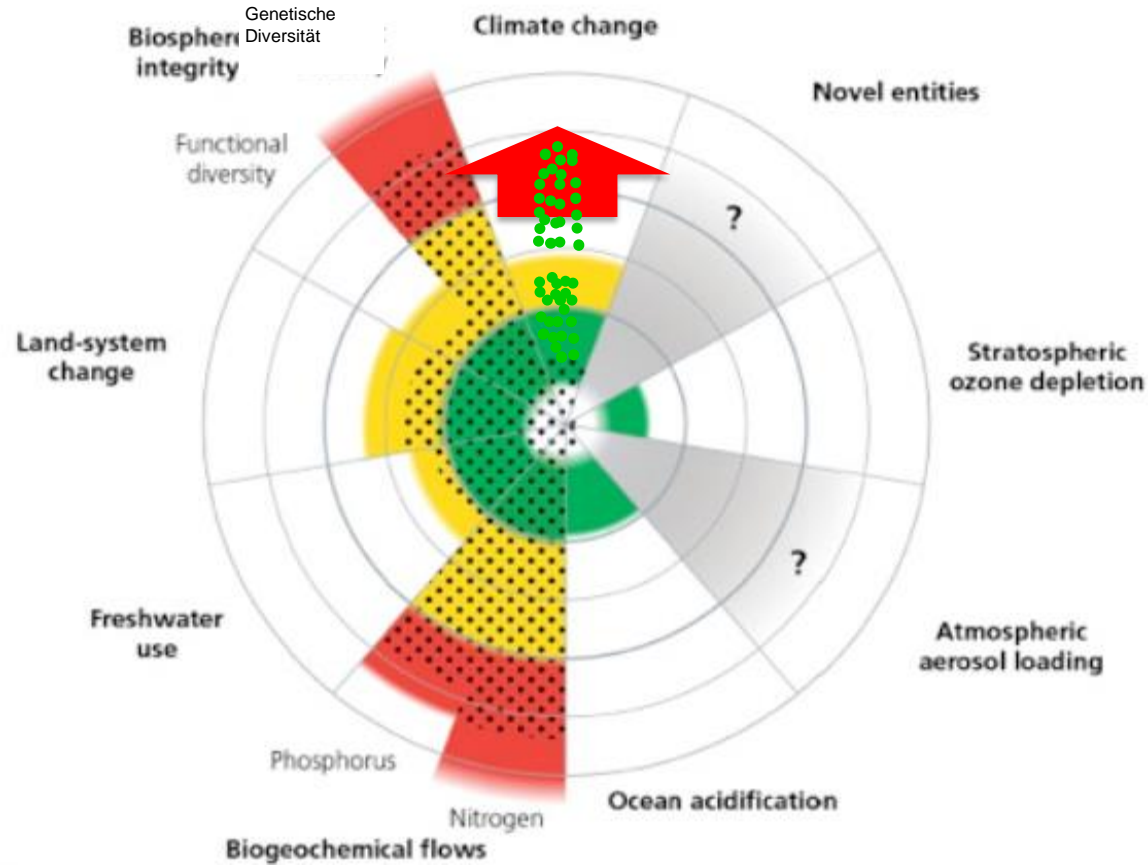
The industrial food system discards up to half of all the food that it produces, thrown out on the long journey from farms to traders, to food processors, and eventually to retailers and restaurants. A lot of this waste rots on garbage heaps and landfills, producing substantial amounts of GHGs. Between 3.5-4.5% of global GHG emissions come from waste, and over 90% of these are produced by materials originating within the food system.



GRAIN

Food sovereignty: 5 steps to feed the planet and feed its people:
<http://grain.org/5002>

Threatening the planet's capacity to provide for all



We depend on the ecosystem services....bees
are just the tip of the iceberg



Published on Thursday, May 23, 2019 by Common Dreams

'What Could Be More Important?': World Leaders, Media Ignore Biodiversity Report Detailing Mass Extinction Event Now Underway

"The health of ecosystems on which we and all other species depend is deteriorating more rapidly than ever."

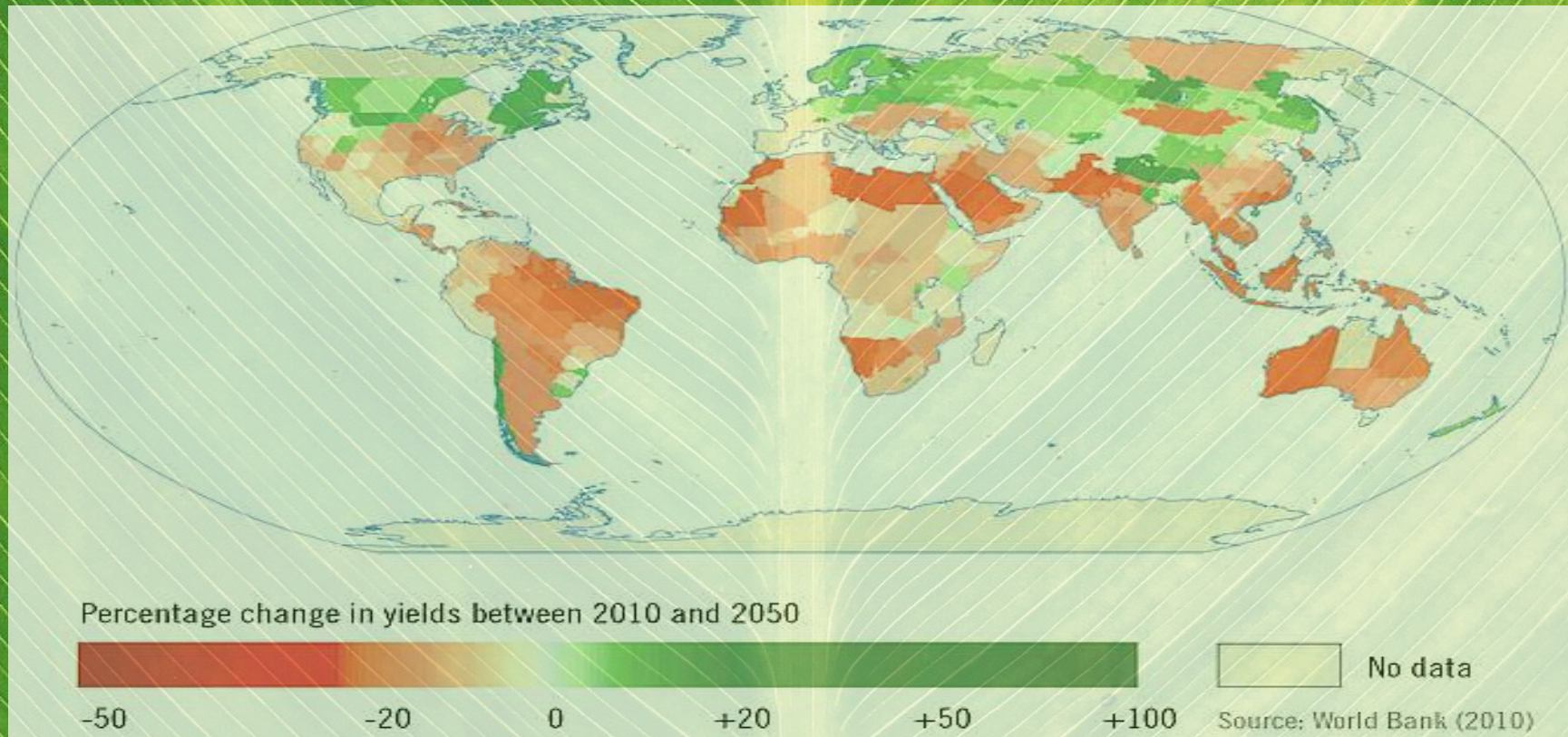
by Julia Conley, staff writer



Land degradation



Ἰ ΟΕΝΘΗΝΡΟΙΔΙΑΝΘΟΝΡ...ΩΘΝΟΕ ΕΙJAΘΝΑΘ

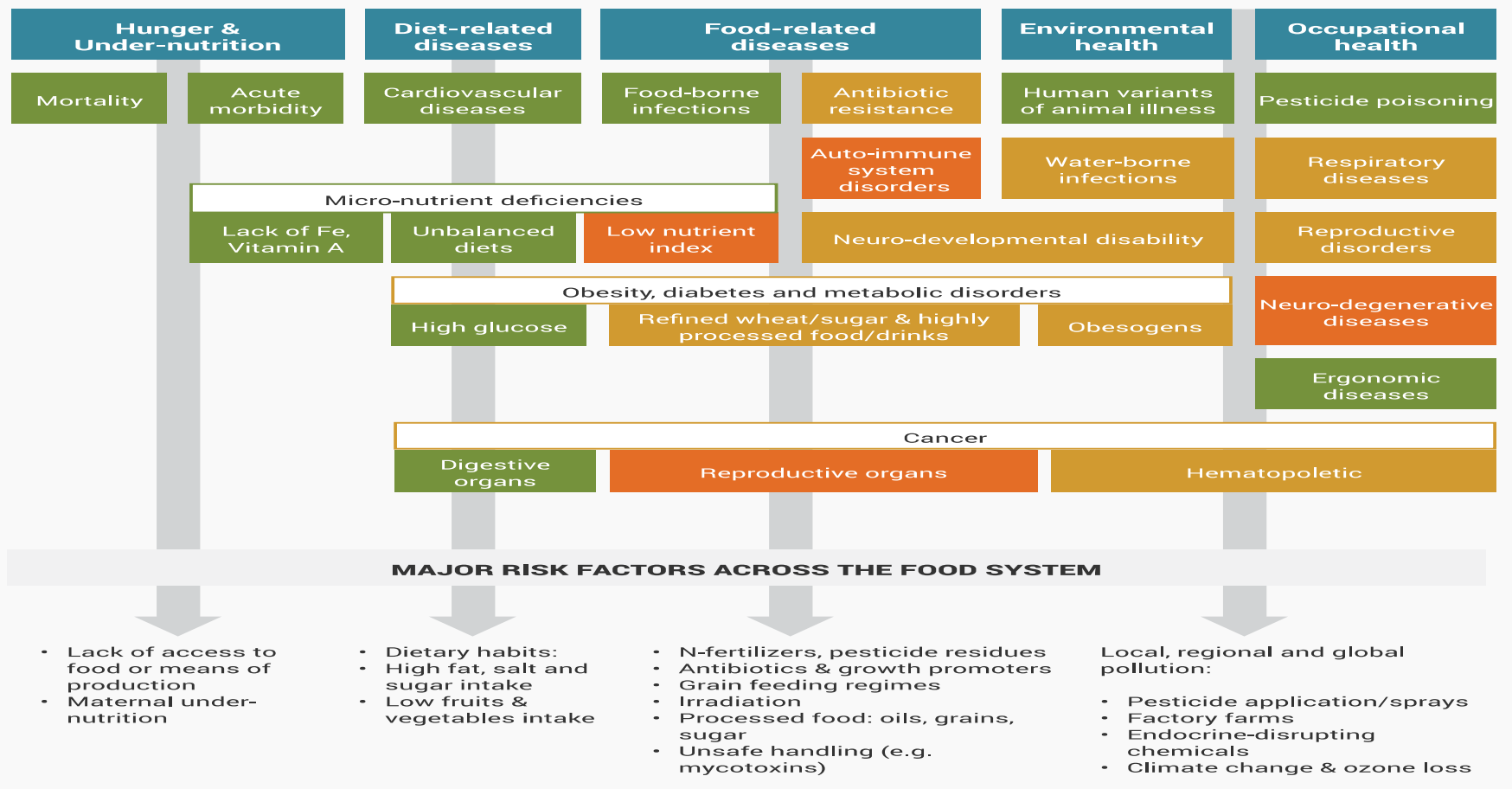


The Africa we know will cease to exist by 2050

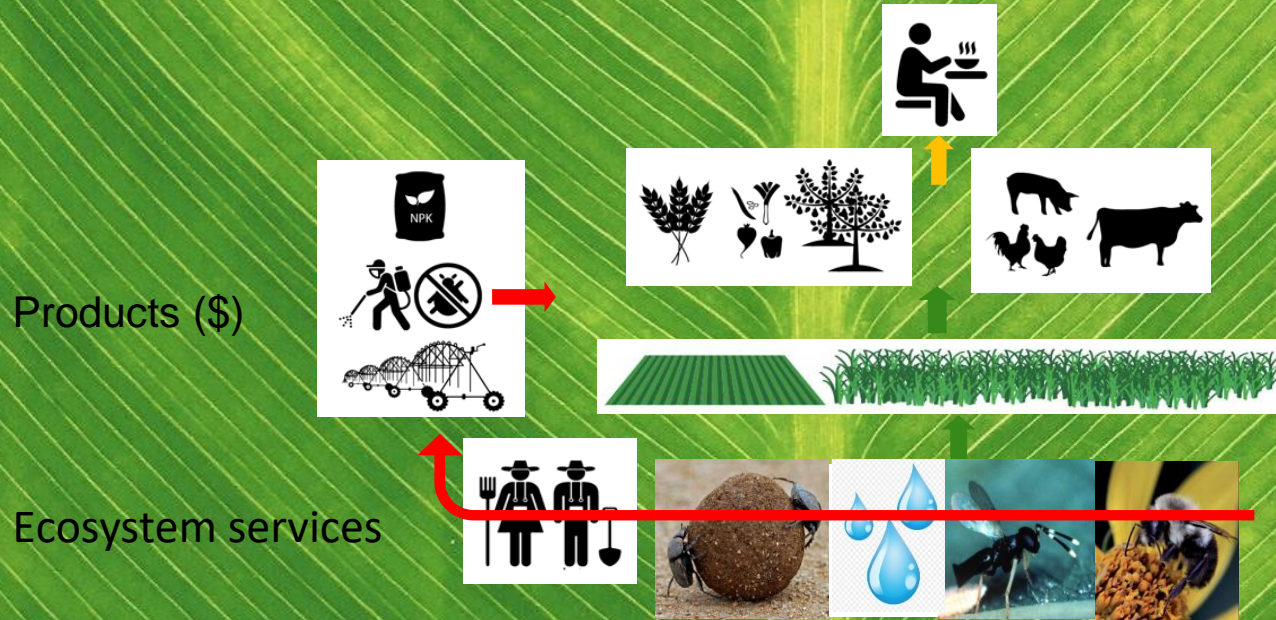
Lumumba d'Aping, Ambassador Sudan

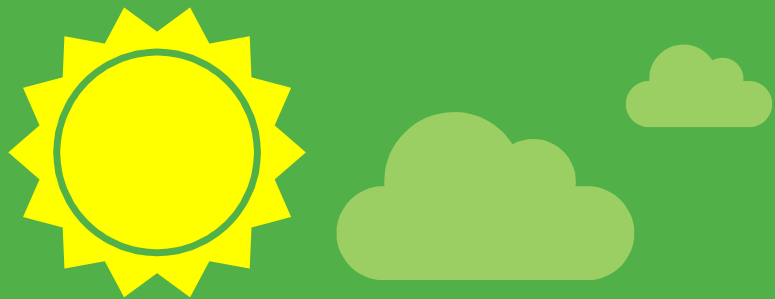


Health impact examples of today's food system



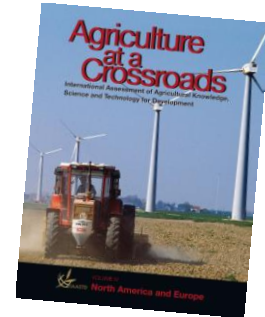
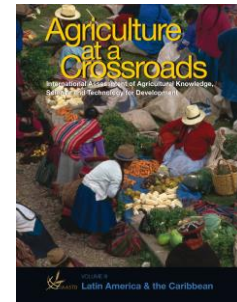
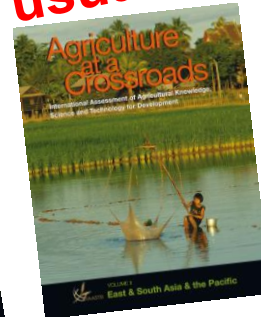
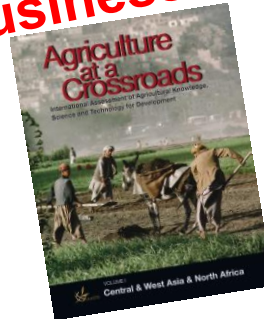
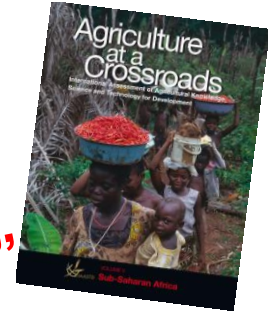
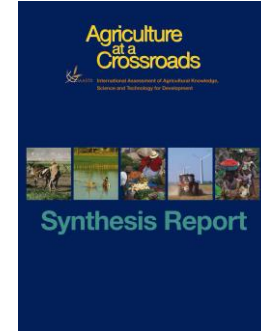
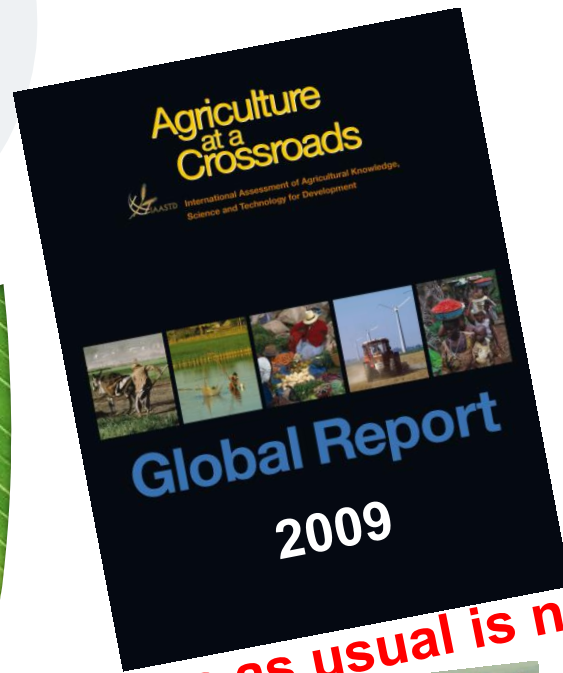
How did we create these problems?



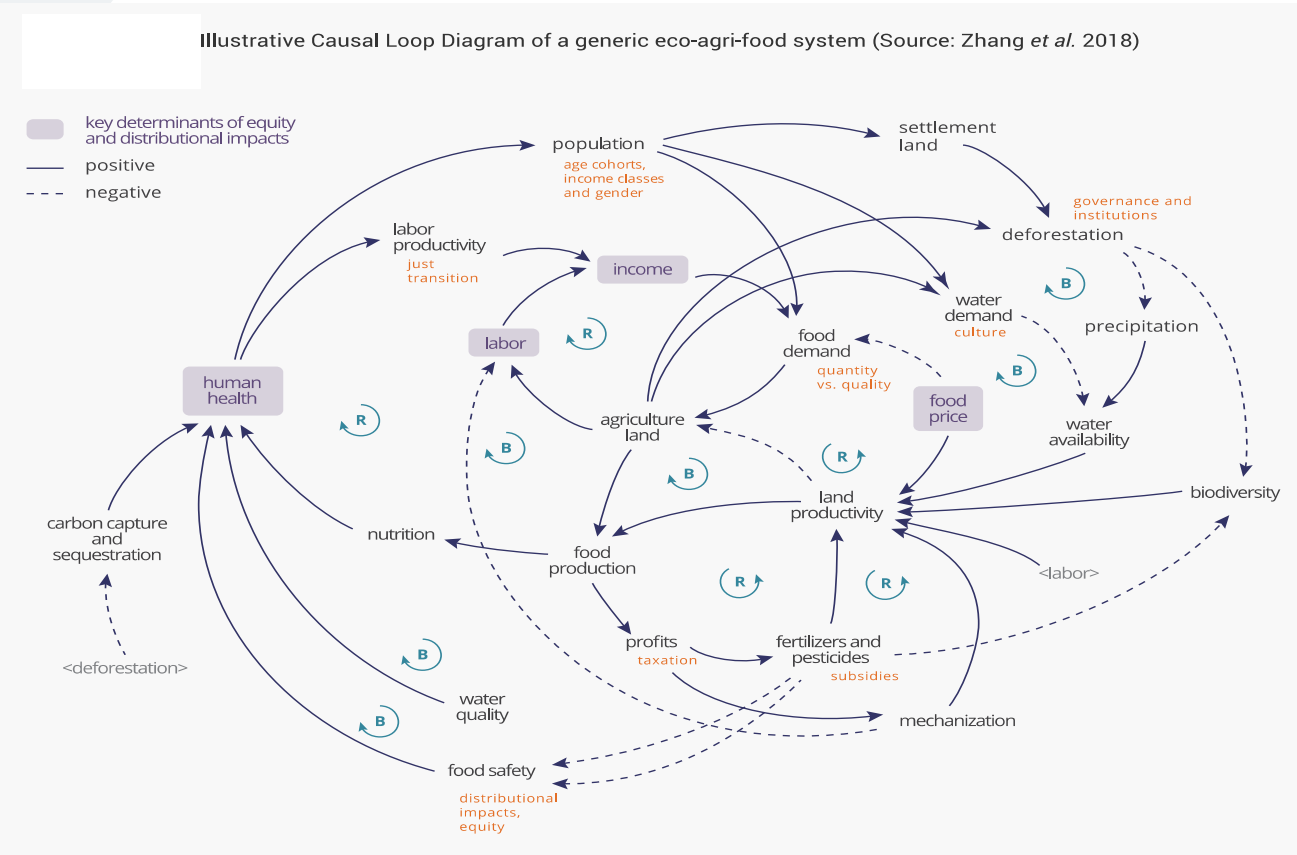


How should
we move
forward?

"Business as usual is not an option"



A decorative graphic featuring two stylized green leaves and two light grey circles. One leaf is solid green, while the other is a darker green with visible veins. The circles are partially visible at the top and bottom edges.

[illegible]

Food system change

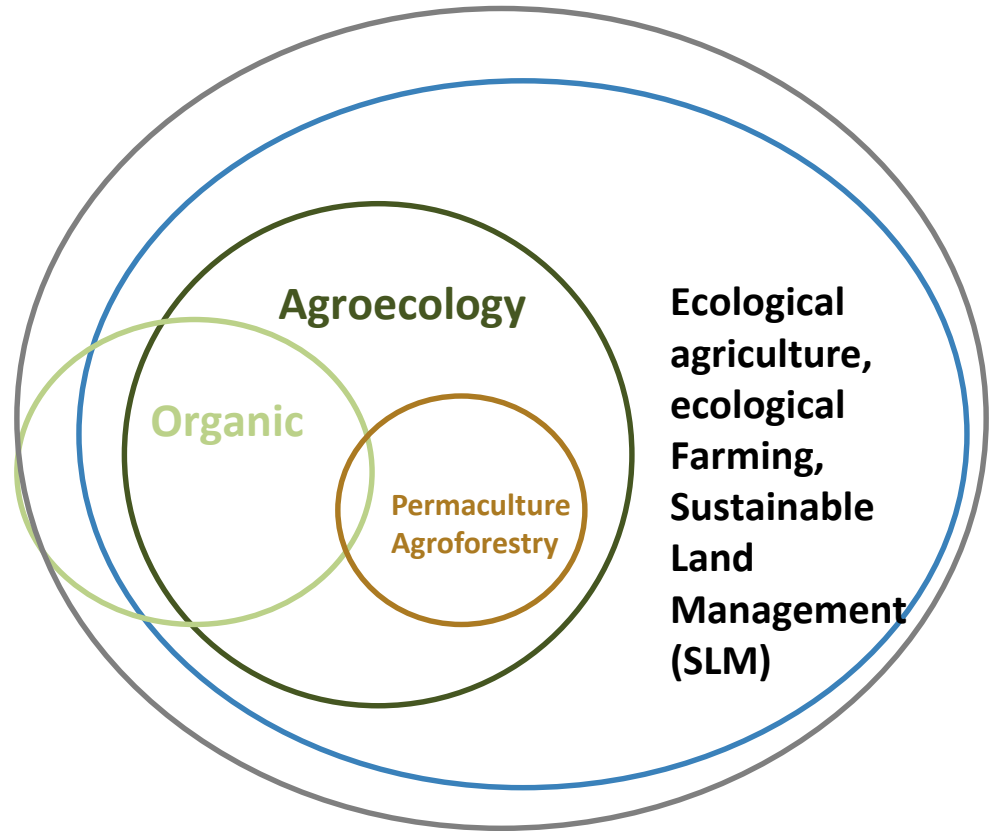
Business

The new plan to remove a trillion tons of carbon dioxide from the atmosphere: Bury it

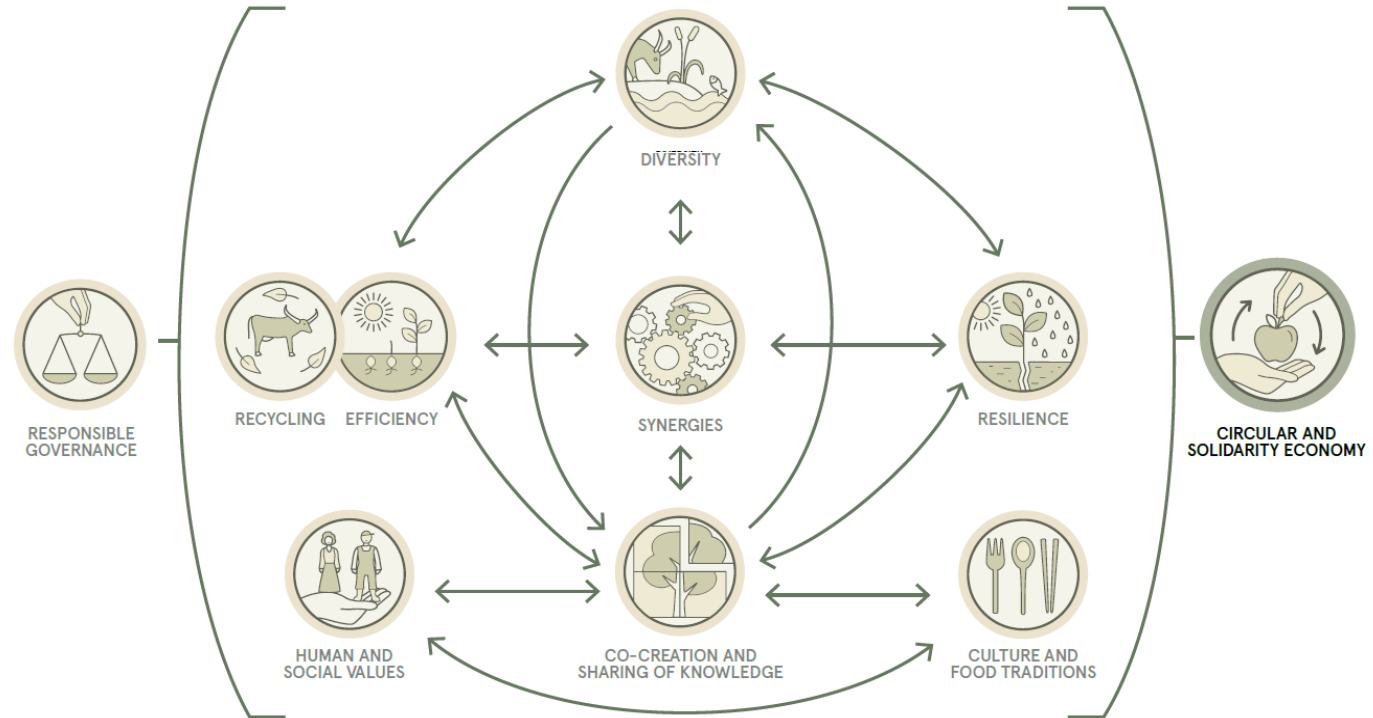
It sounds like an idea plucked from science fiction, but the reality is that trees and plants already do it.



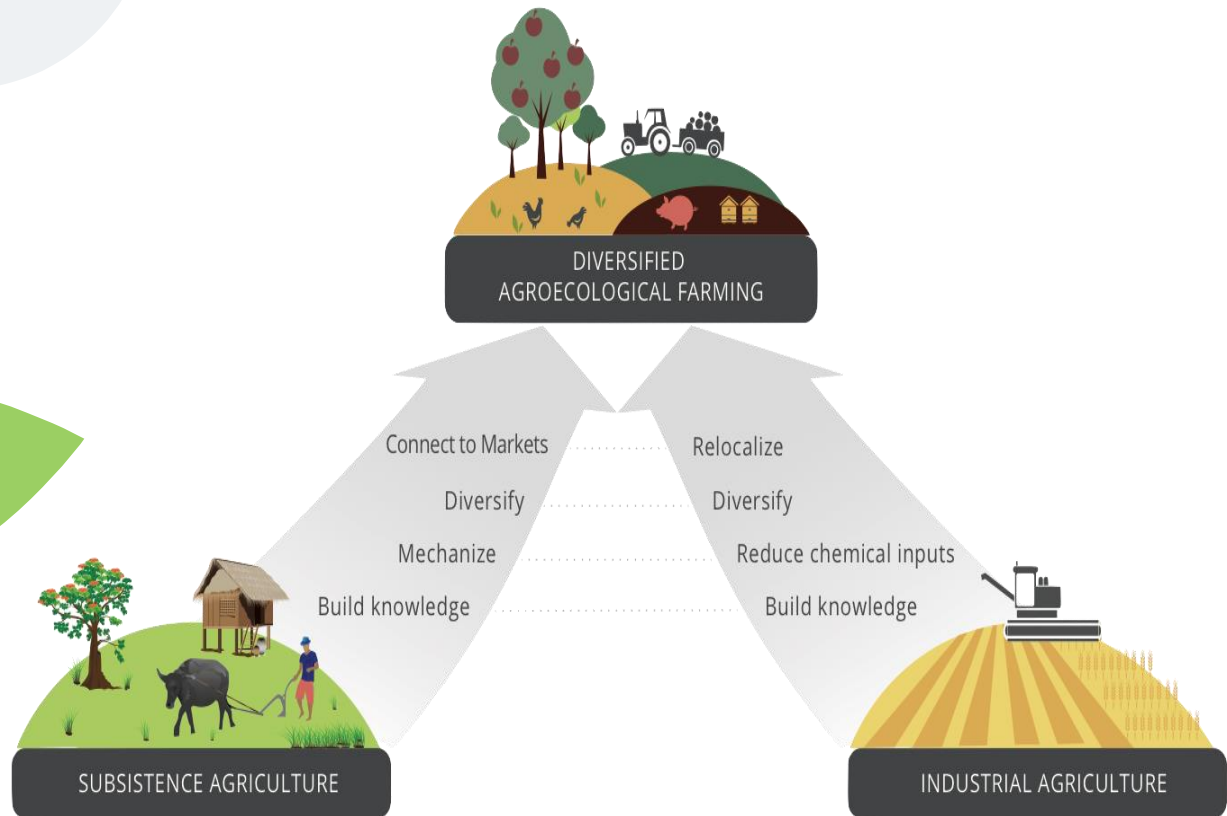
Sustainable agriculture and food systems



10 elements of agroecology (FAO)



Ἰ. ΓΕΩΡΓΙΚΕ ΝΕΟΛΟΓΙΣΜΕΝΕΣ ΠΡΑΚΤΙΚΕΣ



From Uniformity to Diversity (IPES-Food)



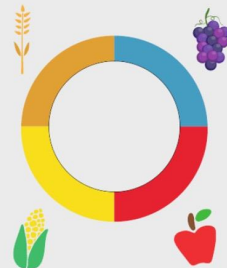
(Bio)-Diversity is Key to sustainability



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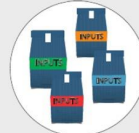


HIGH CROP DIVERSITY (Evenness)



HIGH DIVERSITY OF EMPLOYMENT NICHES

MACHINERY



INPUTS

PROCESSING

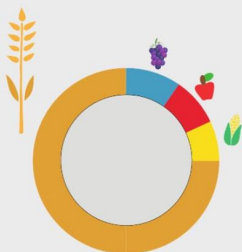


COMMERCIALIZATION

INCREASED EMPLOYMENT



LOW CROP DIVERSITY (Evenness)



LOW DIVERSITY OF EMPLOYMENT NICHES

MACHINERY



INPUTS

PROCESSING

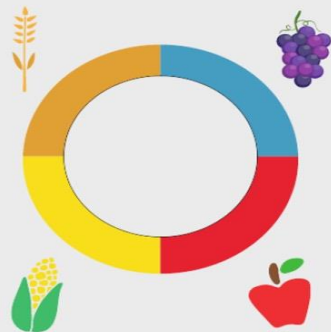


COMMERCIALIZATION

DECREASED EMPLOYMENT



HIGH CROP DIVERSITY (Evenness)

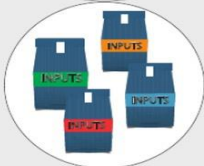


HIGH DIVERSITY OF EMPLOYMENT NICHES

MACHINERY



INPUTS



PROCESSING



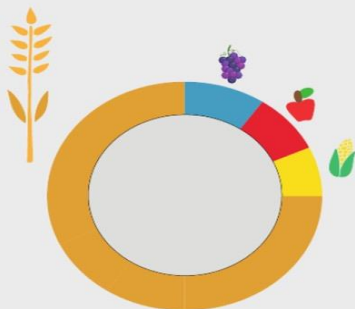
COMMERCIALIZATION



INCREASED EMPLOYMENT



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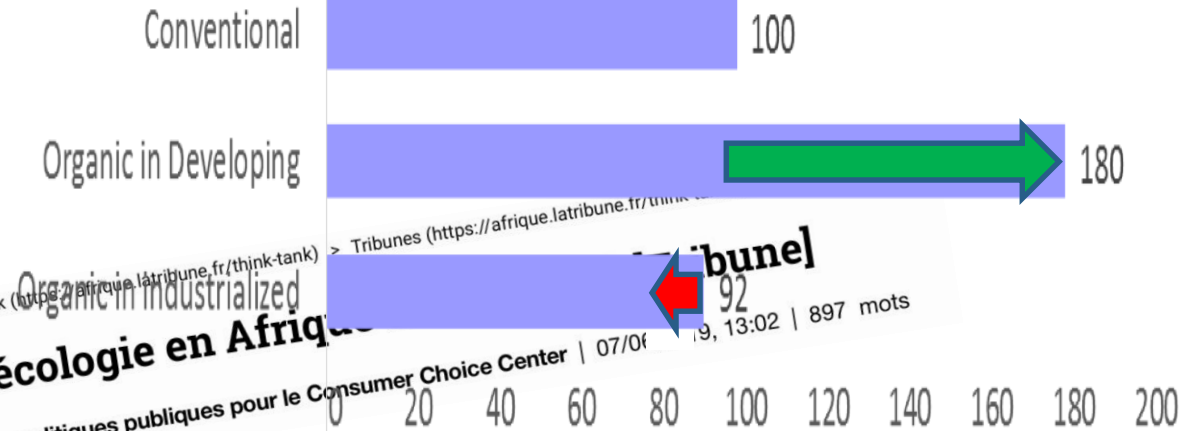
COMMERCIALIZATION



DECREASED EMPLOYMENT



Agroecology can nourish the people....well



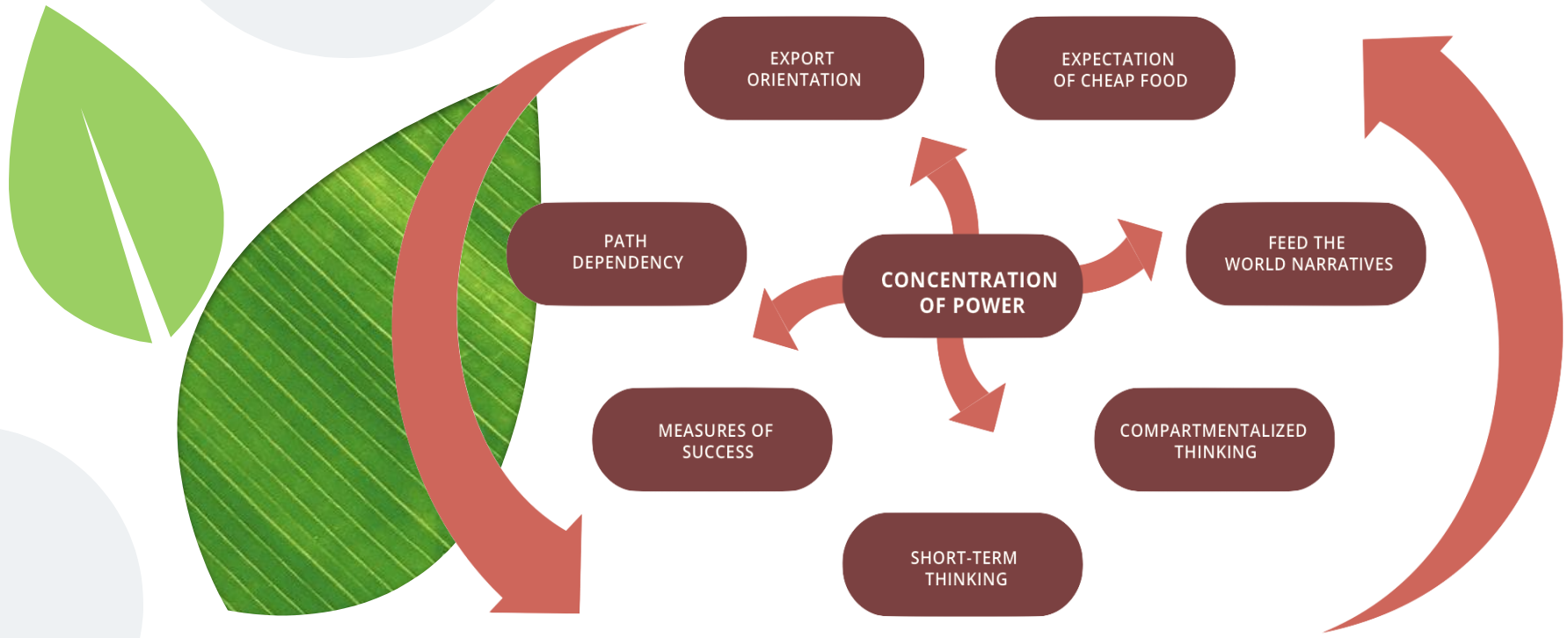
↑ (<https://afrique.latribune.fr>) > Think-Tank (<https://afrique.latribune.fr/think-tank>) > Tribunes (<https://afrique.latribune.fr/tribunes>)

Exporter l'agroécologie en Afrique

Par Bill Wirtz, analyste des politiques publiques pour le Consumer Choice Center | 07/06/2019, 13:02 | 897 mots




What and who stands in the transformation's way?





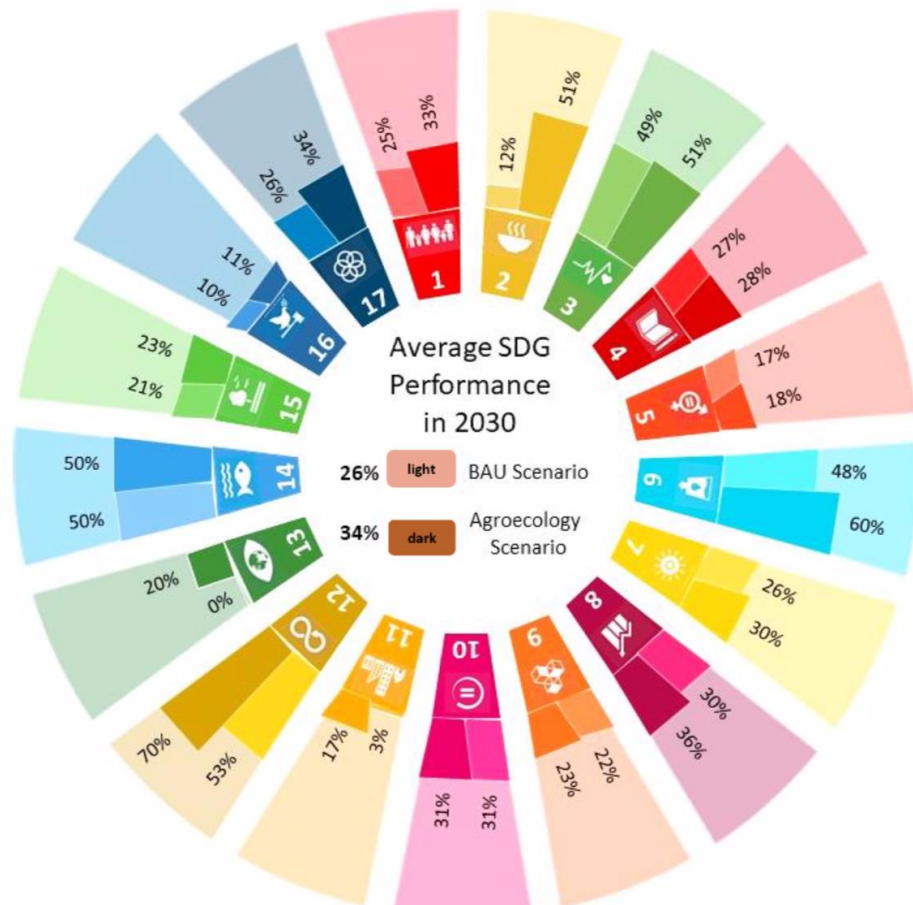
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- Carbon sequestration
- Soil fertility
- Agro-biodiversity
- Water retention
- Rural incomes
- Healthy nutrition



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*First they ignore you,
then they laugh at you,
then they fight you,
then you win.*

Mahatma Gandhi

Thanks!

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Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
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Swedish Society
for Nature Conservation



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IFOAM
ORGANICS
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Hivos
people unlimited

