



**Advancing organic farming through research,
development and innovation**



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Our mission

To strengthen research & innovation for organics and other agroecological approaches that contribute to sustainable food and farming systems

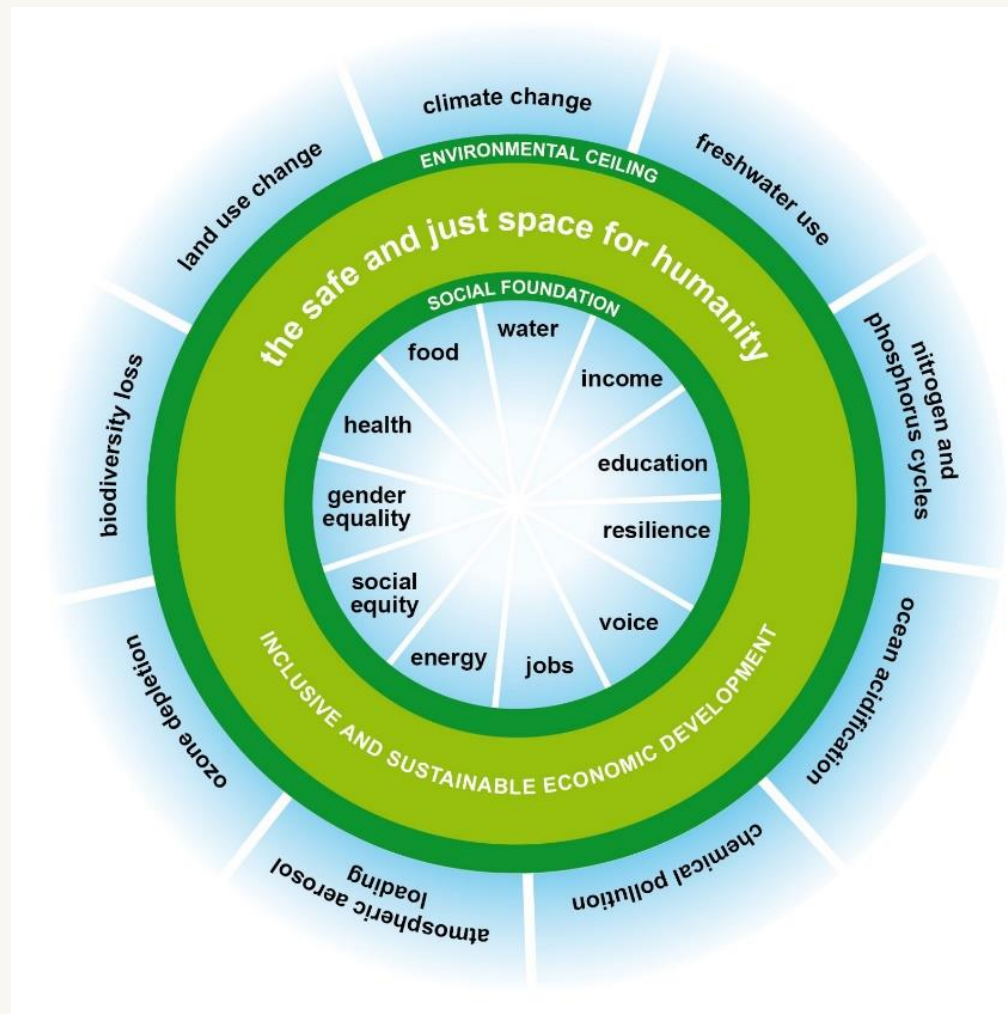
Growing political challenges



Transforming food and agriculture
is key to SDGs



A safe and just space for humanity



Source: Kate Raworth, 2012.

Transforming food and farming systems by 2030

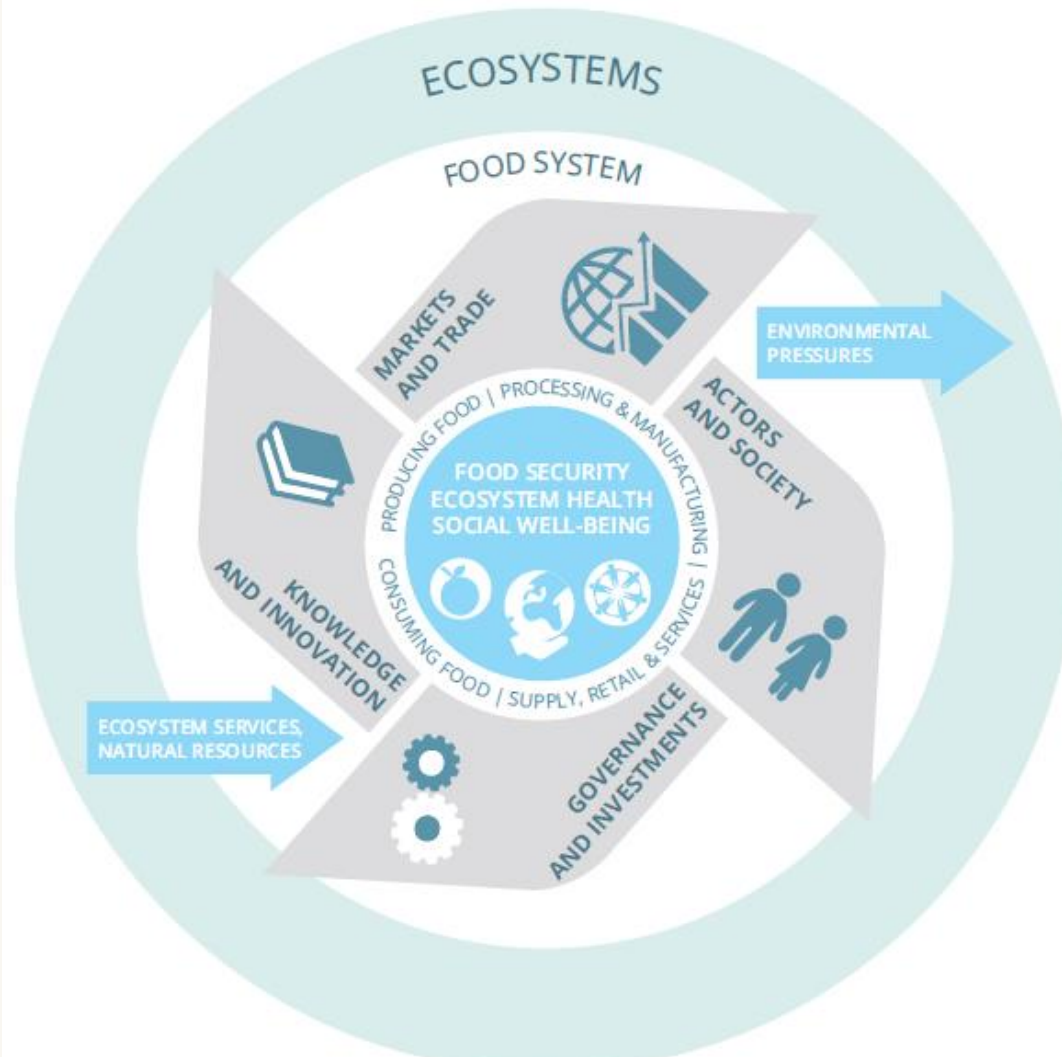
- » Three narratives
 - » Efficiency narrative
 - » Consistency narrative
 - » Sufficiency narrative

Efficiency narrative: producing more with less



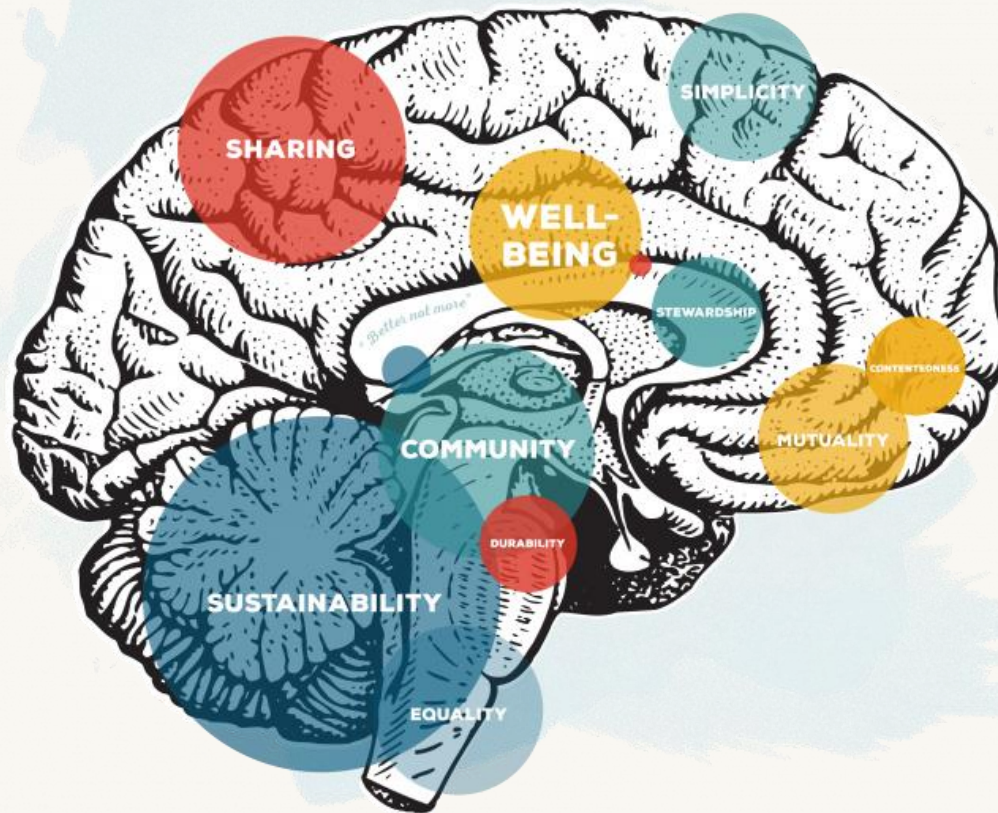
Source: <http://precisionagriculture.re/producing-more-with-less/>

Consistency narrative: respect boundaries of ecosystem

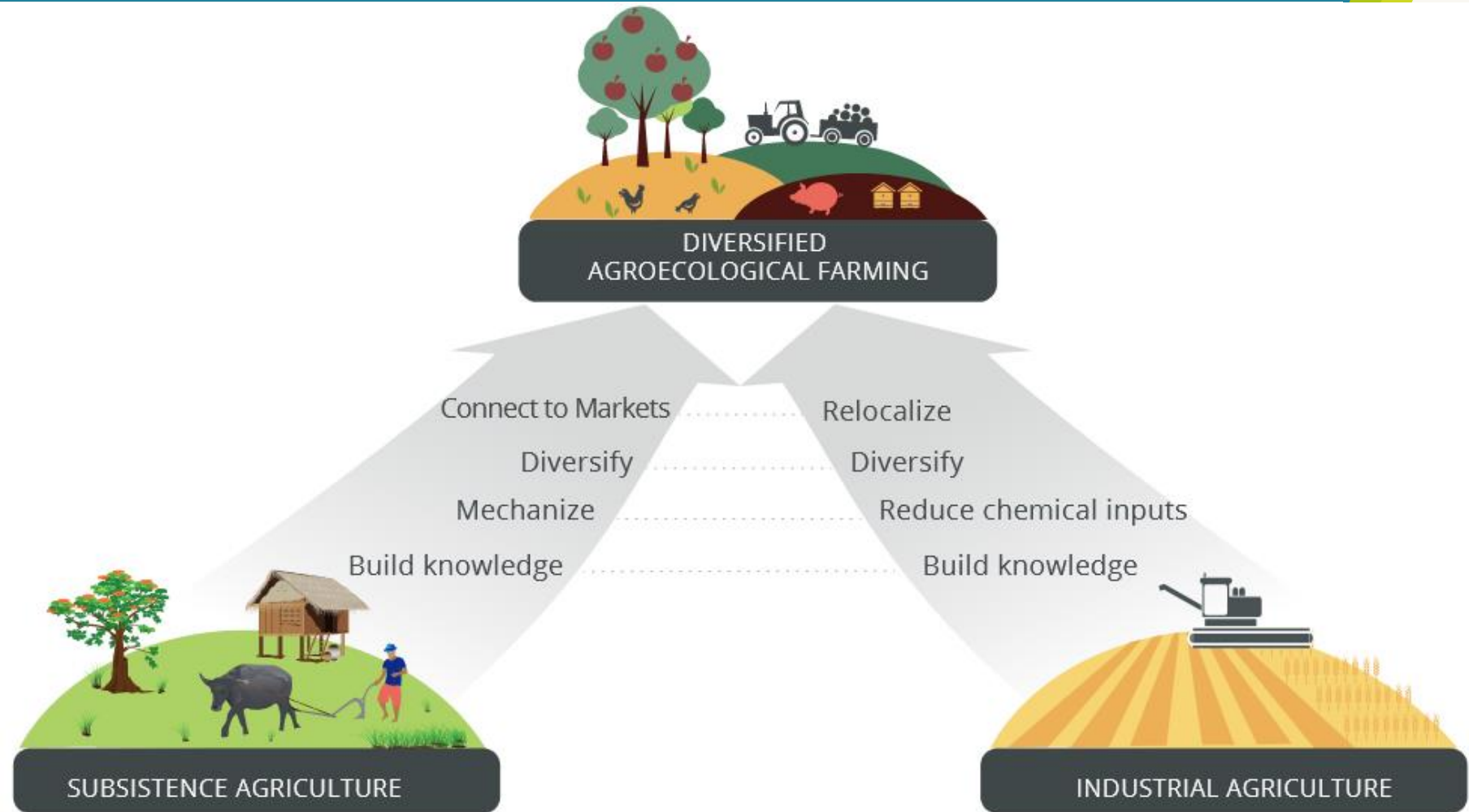


Source: EEA. 2016. Seafood in Europe — A food system approach for sustainability. European Environment Agency. Available at: <https://www.researchgate.net/publication/309395500>

Sufficiency narrative: avoid rebound effect



Diversified farming systems based on ecological approaches



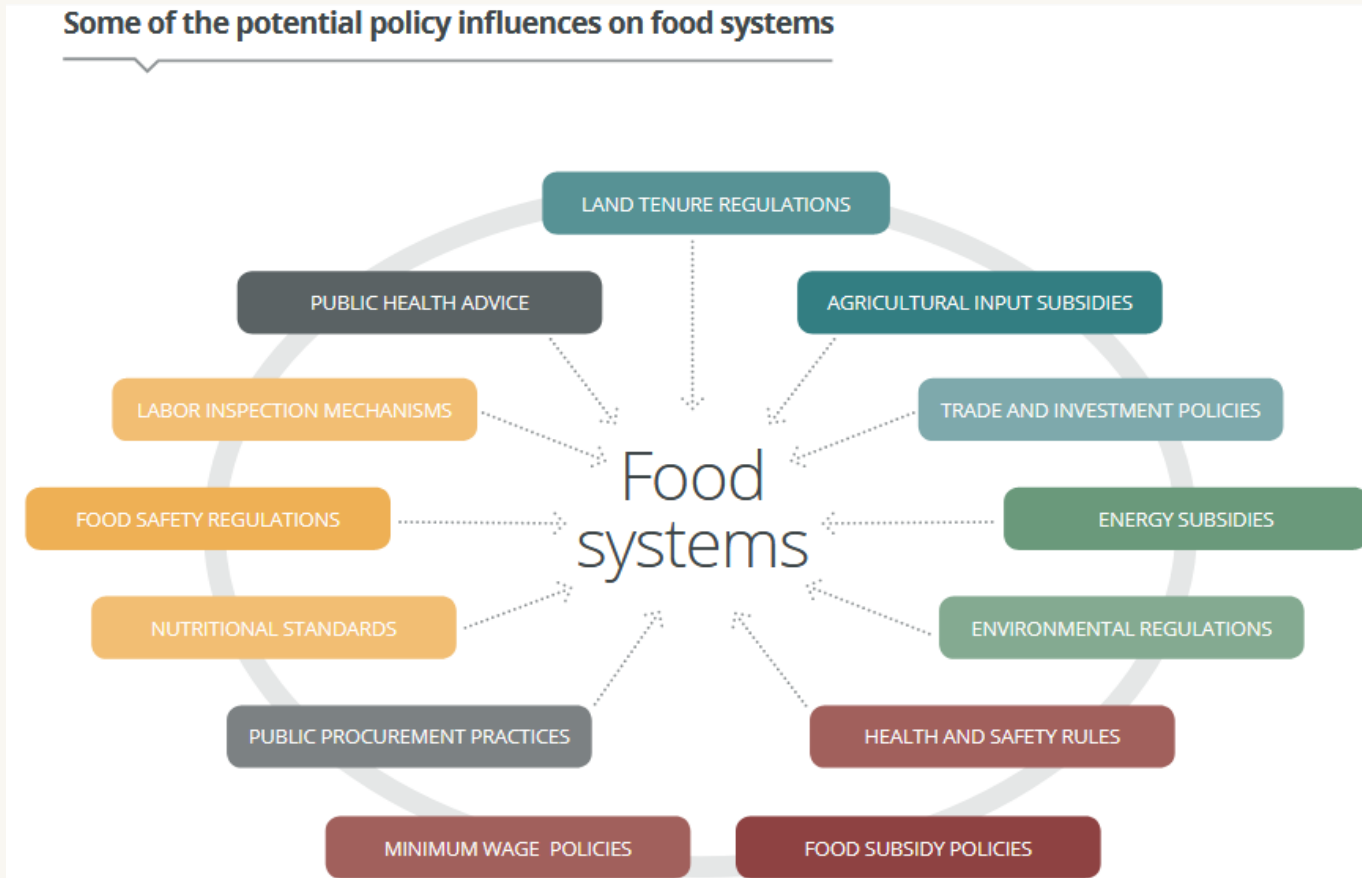
Source: IPES-Food. 2016. . From uniformity to diversity: a paradigm shift from industrial agriculture to diversified agroecological systems. The Global Alliance for the Future of Food and IPES-Food – Available at: http://www.ipes-food.org/images/Reports/UniformityToDiversity_FullReport.pdf

Diversified farming systems based on ecological approaches

Main research needs

- » Most organic research focuses on temperate zones
- » Need to combine local tradition with innovation for smallholder organic farming
- » Soil fertility building + tillage systems
- » Cultivars + breeds suitable for organic
- » Biocontrol + weeds
- » Aquaculture
- » Reduction of parasite pressure
- » Mastitis prevention and therapy methods

Redesign of food and agricultural policies



Source: IPES-Food. 2015. The new science of sustainable food systems. Overcoming Barriers to Food Systems Reform. The Global Alliance for the Future of Food and IPES-Food – Available at: http://www.ipes-food.org/images/Reports/IPES_report01_1505_web_br_pages.pdf

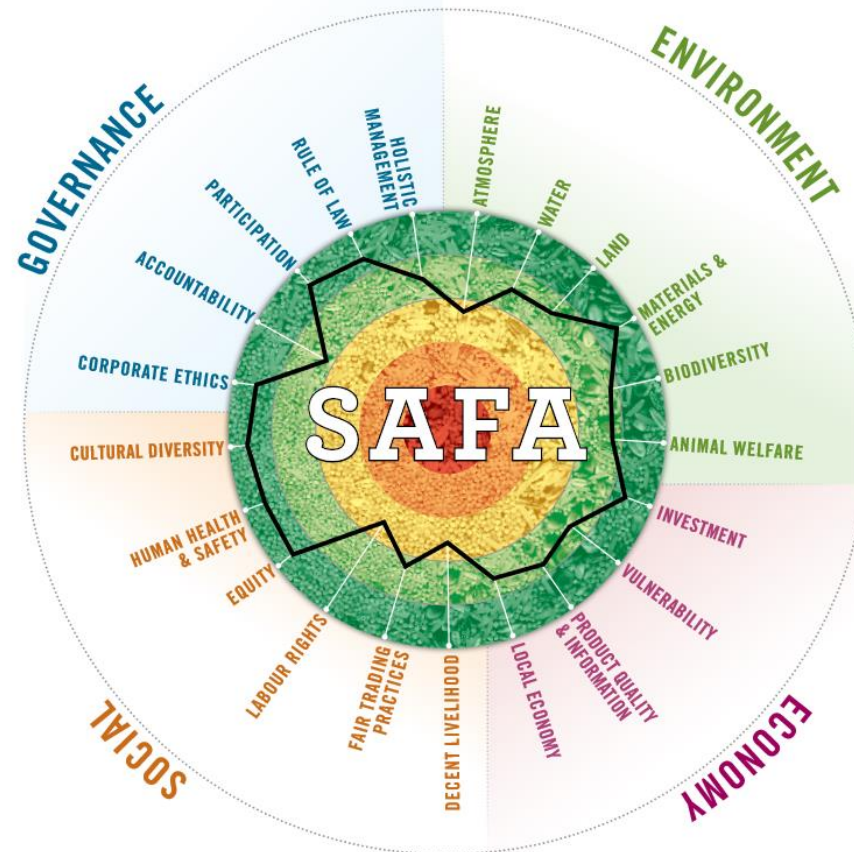
Redesign of food and agricultural policies

Main research needs

- » New policy mixes: sustainable food policies
- » Internalisation of external costs
 - » New calculations of food value – linking costs to carbon/water demand
 - » New methods rewarding public goods provided by farmers
- » Research on possible communication methods to reach policy makers and consumers

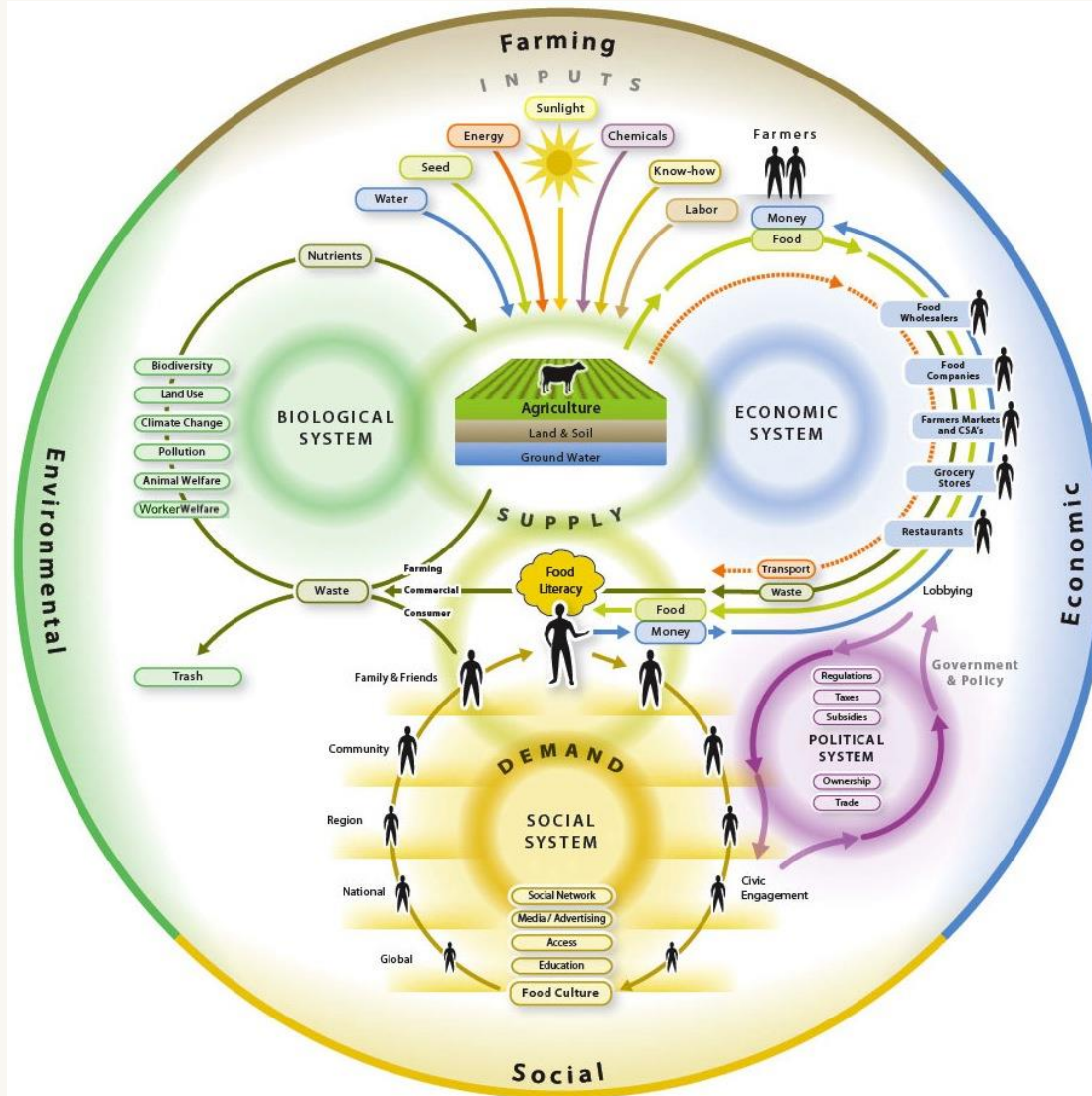
Redesign of food and agricultural policies Indicators (example SAFA guidelines)

EXAMPLE VISUALIZATION OF THE SAFA PERFORMANCE OF AN ENTERPRISE



Source: FAO symposium "Towards Sustainable Food Systems" (2013)

Sustainable food systems for sustainable consumption



Source:
<https://westoahu.hawaii.edu/ekamakanihou/wp-content/uploads/2017/05/Food-System.jpg>

Sustainable food systems for sustainable consumption

Main research needs

- » Assessing factors of consumer trust in different regions
- » Sustainable diets
- » Development of sustainable packaging materials
- » Reduction of food waste
- » Small-scale processing technologies for tropical products
 - » Efficient cracking of indigenous nuts
 - » Solar drying

Budget needed

- » Less than one percent of the budget for food and farming research is spent on organic
- » There is a lack of funding for basic and applied projects
- » This hinders development of innovations by scientists and farm advisors.

Beintema, N., Stads, G.J. and Fuglie, K. (2012): ASTI Global Assessment of Agricultural R&D Spending. International Food Policy Research Institute, Washington, DC, Agricultural Science and Technology Indicators, Rome, Italy, Global Forum on Agricultural Research, Rome, Italy.

Continent	Research (million US\$)	Extension	Networks	Farmland (million hectares)	Share of total farmland (%)	Markets (billion US\$)	Challenges
Africa	~ 5	poor	poor	1.7	0.1	<0.1	big, poorly addressed
Asia	~ 20	poor	insufficient	4.0	0.2	6.9	big, poorly addressed
Europe	~ 180	moderate	moderate	12.7	2.5	33.0	addressed with some progress
Latin America	~ 20	insufficient	moderate	6.7	0.9	<0.1	big, poorly addressed
North America	~ 60	insufficient	moderate	3.0	0.7	42.8	addressed, but insufficient
Oceania	~ 5	poor	poor	22.8	5.4	1.2	big, poorly addressed
World	~ 290	poor	poor	50.9	1.1	84.0	big, poorly addressed

Strategies to advance global organic agricultural research and innovation

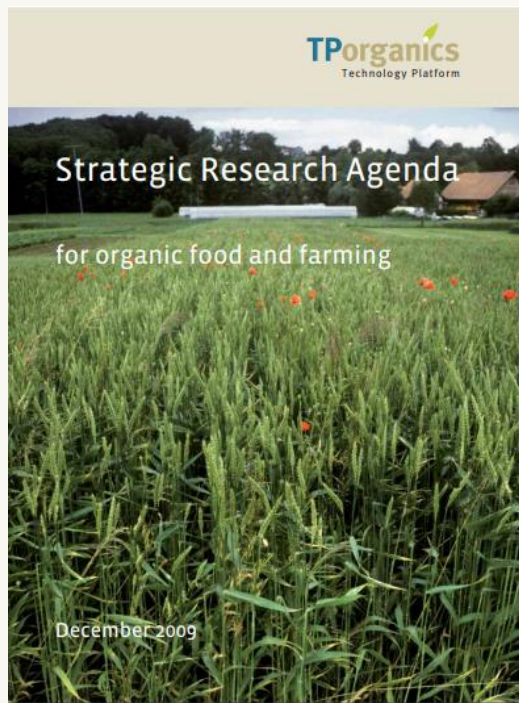
- » Development of research methods appropriate for organic farming systems and practices,
- » A renewed partnership between farmers, farm advisors, scientists, and consumers
- » Integration of technological, social, and ecological dimensions of innovation

Strategic Research and Innovation Agendas

2009

2014

2019



?



THANK YOU FOR YOUR ATTENTION

See you at Organic Innovation Days –
November 2019

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Knowledge exchange + picture of face to face knowledge exchange

The screenshot shows the AccessAgriculture website interface. At the top, there are navigation links for 'About us', 'Using this site', 'Other resources', 'Forum', and 'Impact'. Below these are language options: 'ENGLISH', 'FRANCAIS', and 'ESPAÑOL'. A search bar is present with the text 'Find videos in your language - click here' and a search icon. A 'Menu' button is on the left, and 'Login / Register' and 'Donate' buttons are on the right. The main content area is titled 'Home' and features a yellow banner for 'Roots, Tubers & Bananas'. Below the banner are two video thumbnails: 'Quality cassava planting material' (15:40) and 'Using sawdust to store potatoes' (8:42). A 'Categories' sidebar on the right lists various agricultural topics like Cereals, Legumes, and Livestock. At the bottom of the screenshot, the 'PANORAMA SOLUTIONS FOR A HEALTHY PLANET' logo is visible, along with navigation links for 'Explorer', 'Portals', 'About', 'Collaborators', 'News', and a 'Contribute Solution' button.



SEARCH TOOLBOX NEWS & EVENTS ▾ THEMES & DISCUSSIONS
CONTACT/SITE INFO

Hosted by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Rare, IFOAM - Organics International



Knowledge, enhance organic farming

Portals | All / Explorer | Protected areas | Marine and coastal | Ecosystem-based Adaptation | Agriculture and biodiversity | Business engagement

About the coordinator of this thematic community ▾

Agriculture and biodiversity Solutions

Explore 78 Solutions

