

A woman with curly hair, wearing a blue sleeveless dress, stands in a lush garden. She is looking upwards with her hands raised in a gesture of awe or prayer. The garden is filled with large green banana plants and several bright orange flowers. The background shows more greenery and a wooden fence.

Implementation of the World Agriculture Report and SDGs: How far along are we?

Prof. Dr. Hans R. Herren

*President Millennium Institute, Washington;
Founder and President Biovision Foundation, Zurich*

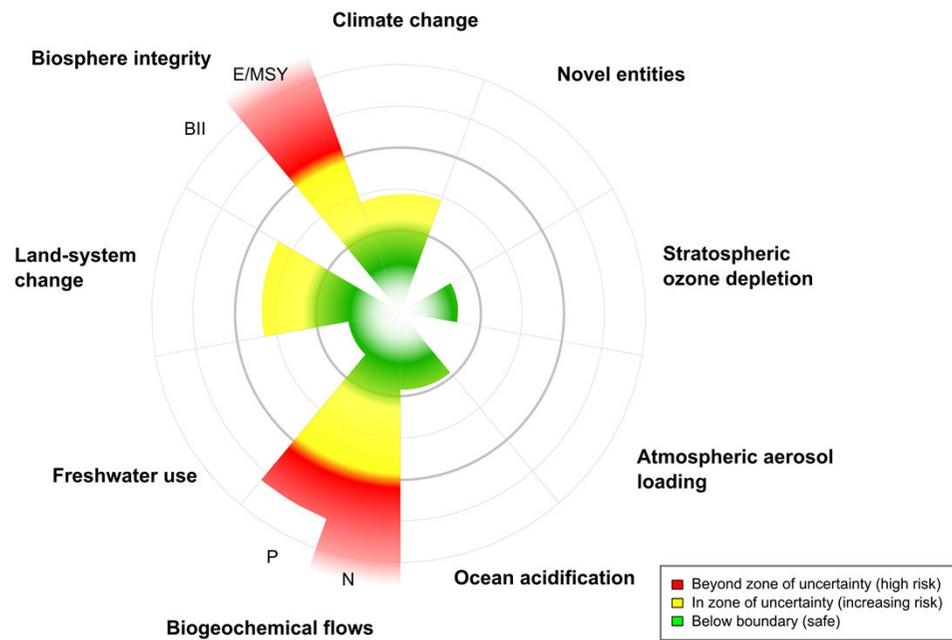
The SDGs offer the transformational pathway the IAASTD was suggesting

- Why
- What
- How
- Who

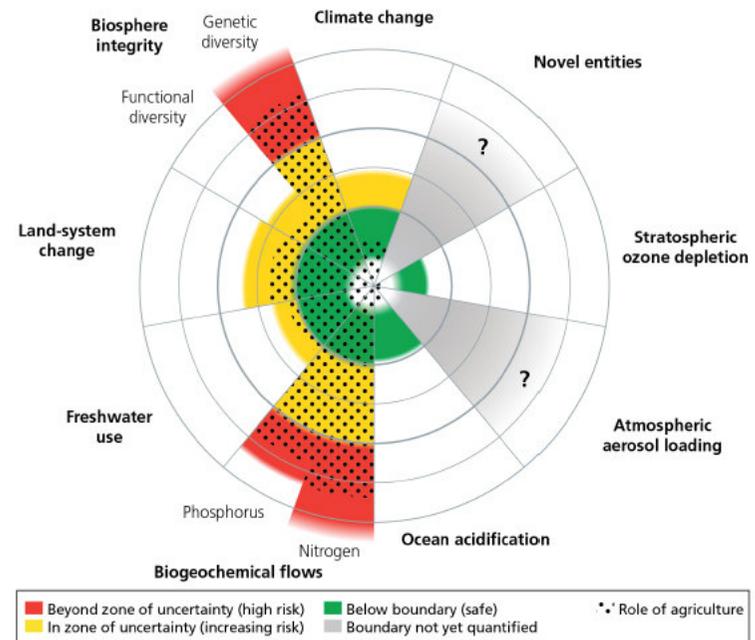


It always seems impossible until it's done. Mandela

...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

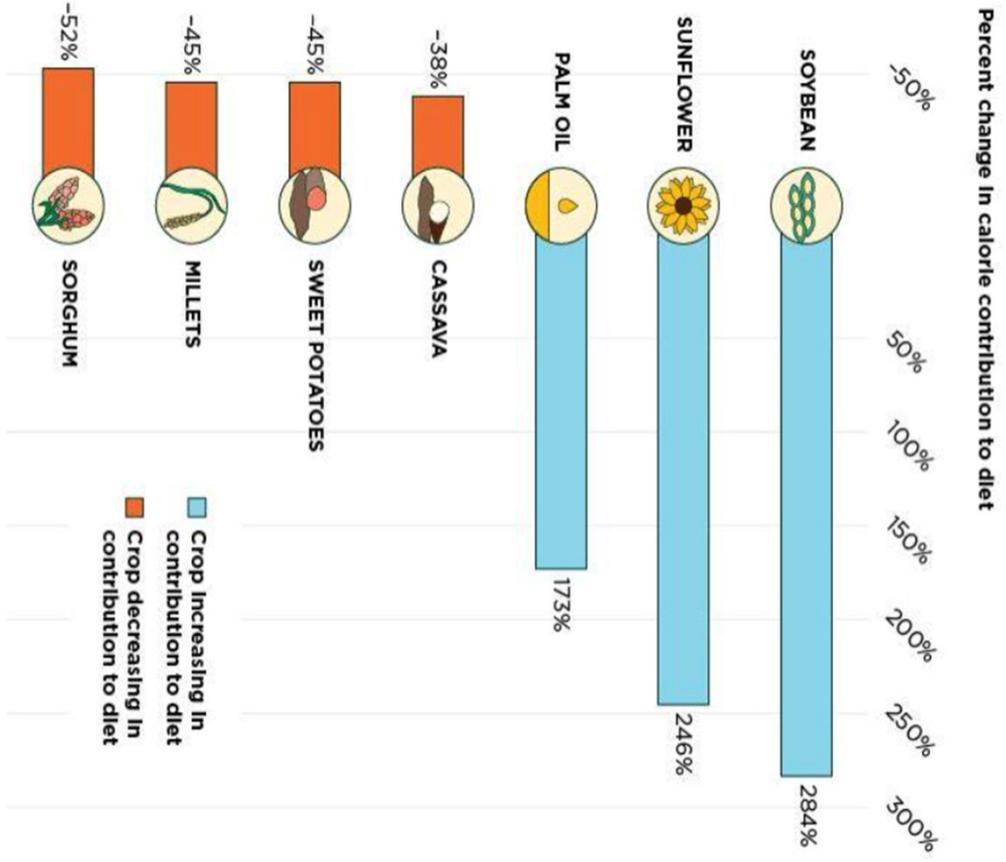


From Campbell et al 2017

Broad recognition that the global food system is not functioning effectively

Over the last 50 years, the global diet has shifted dramatically, including greater amounts of major oil crops and lesser quantities of regionally important staples.

Average change in the calories from crops in national diets worldwide, 1961-2009



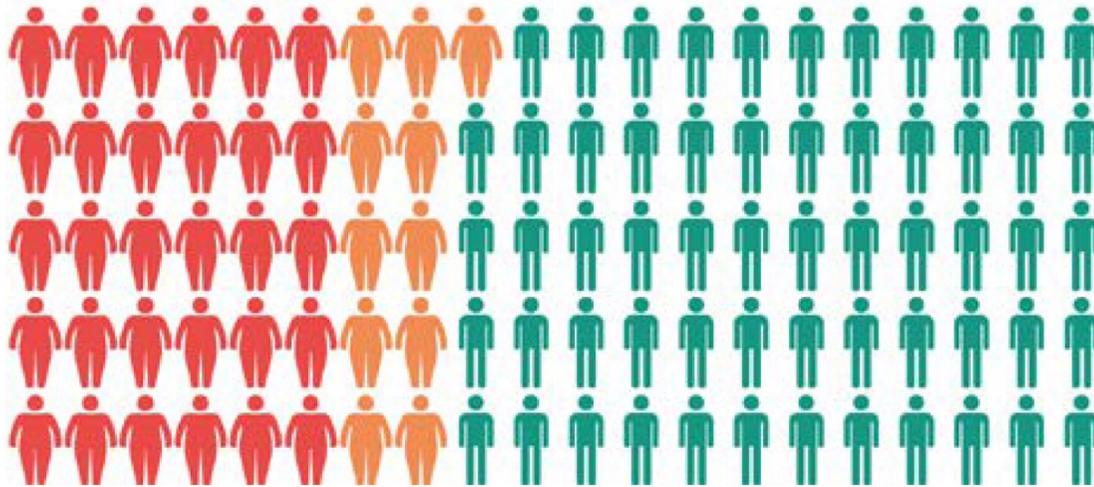
Source: Khoury et al. 2014. Proc. Natl. Acad. Sci. USA.

Broad recognition that the global food system is not functioning effectively

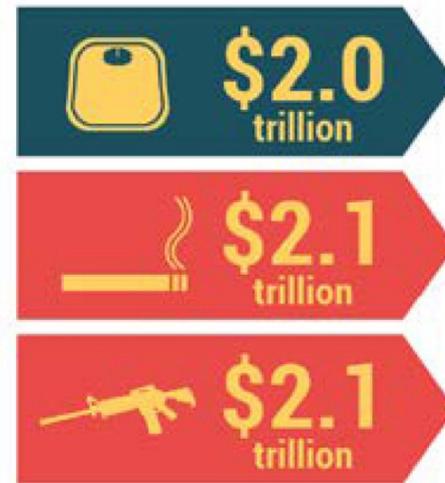
Percentage of global population that is overweight or obese (today and in 2030) and its economic impact

Today:
30%

In 2030:
41%



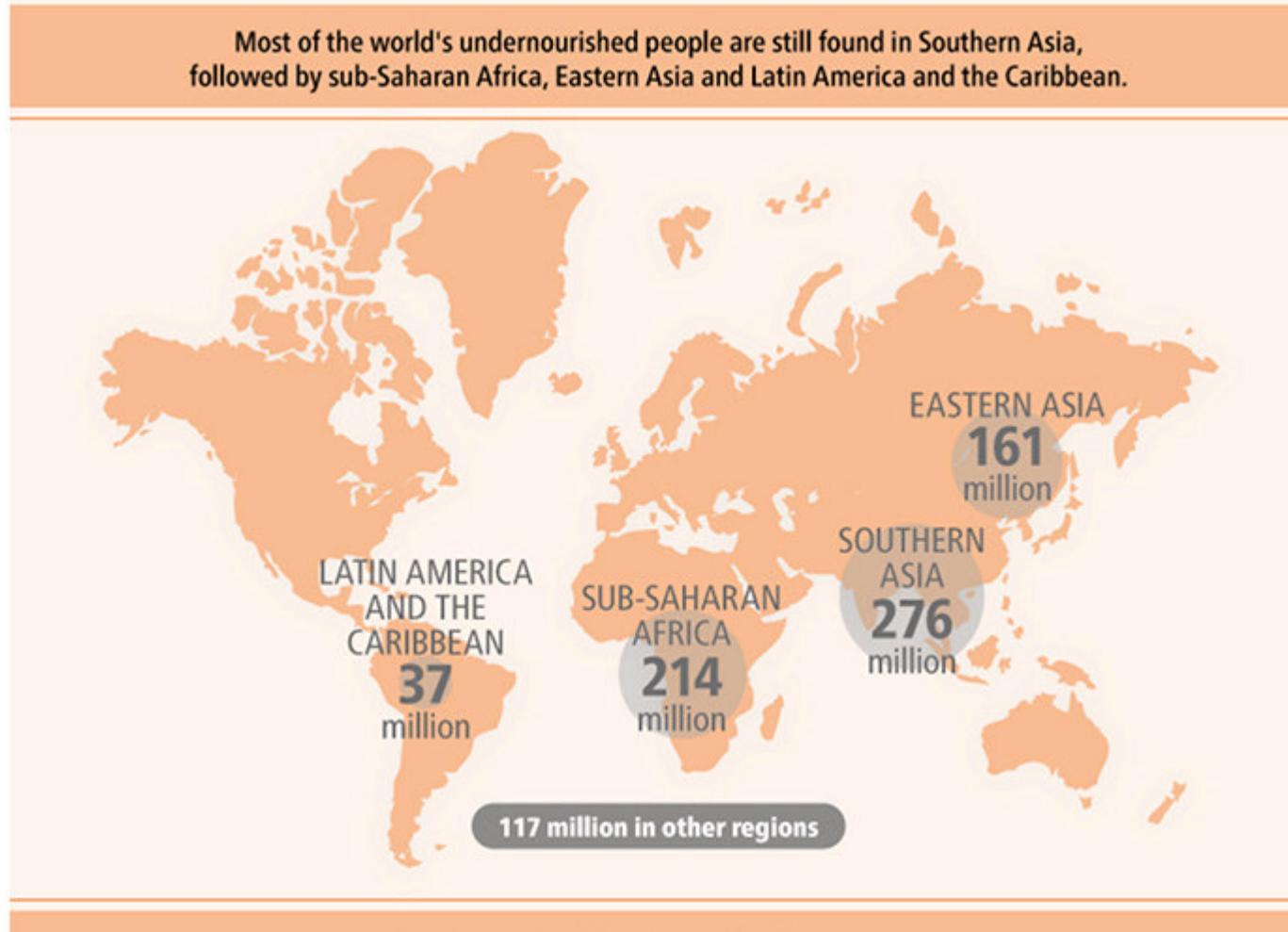
Obesity has roughly the same economic impact as smoking or armed conflict



Source: Dobbs, R. et al. (2014) *Overcoming obesity: an initial economic analysis - discussion paper*, McKinsey Global Institute.

From <http://www.who.int/mediacentre/factsheets/fs311/en/>

Broad recognition that the global food system is not functioning effectively

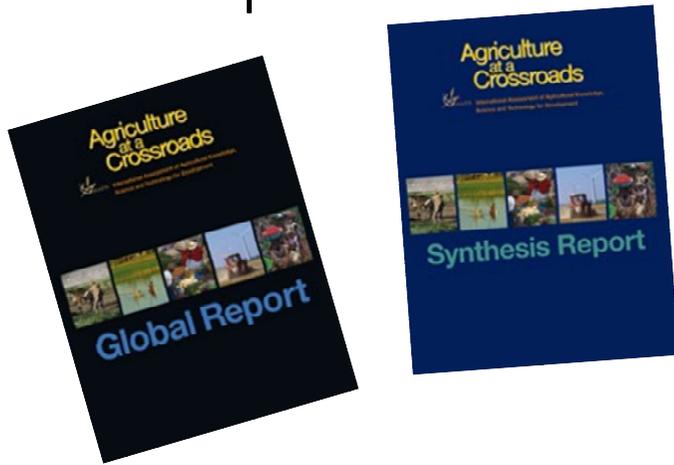


From FAO infographic

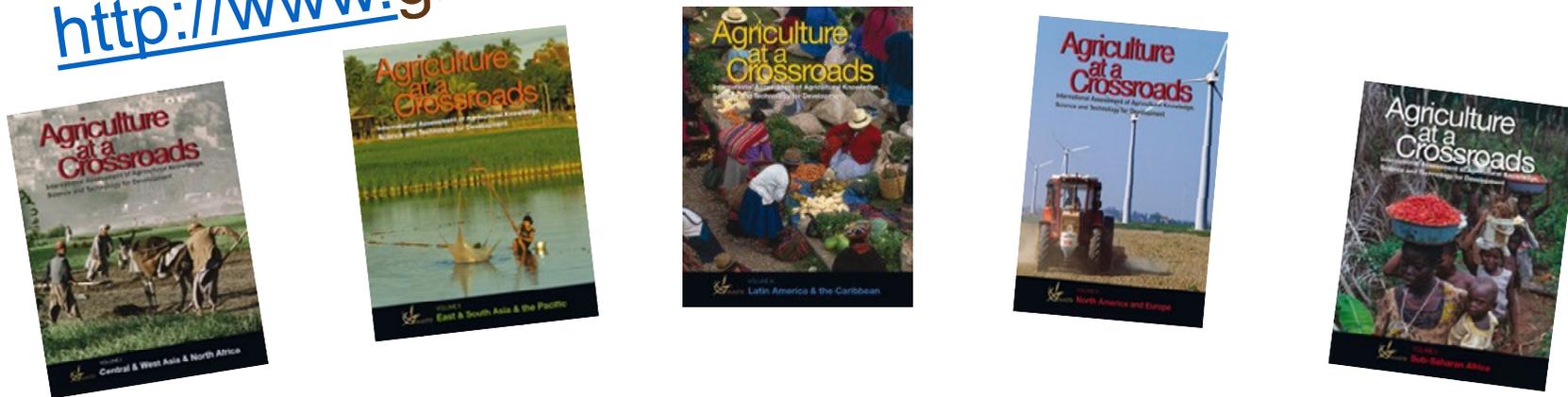
The International Assessment of Agricultural Knowledge, Science and Technology for Development

● **12 Years**

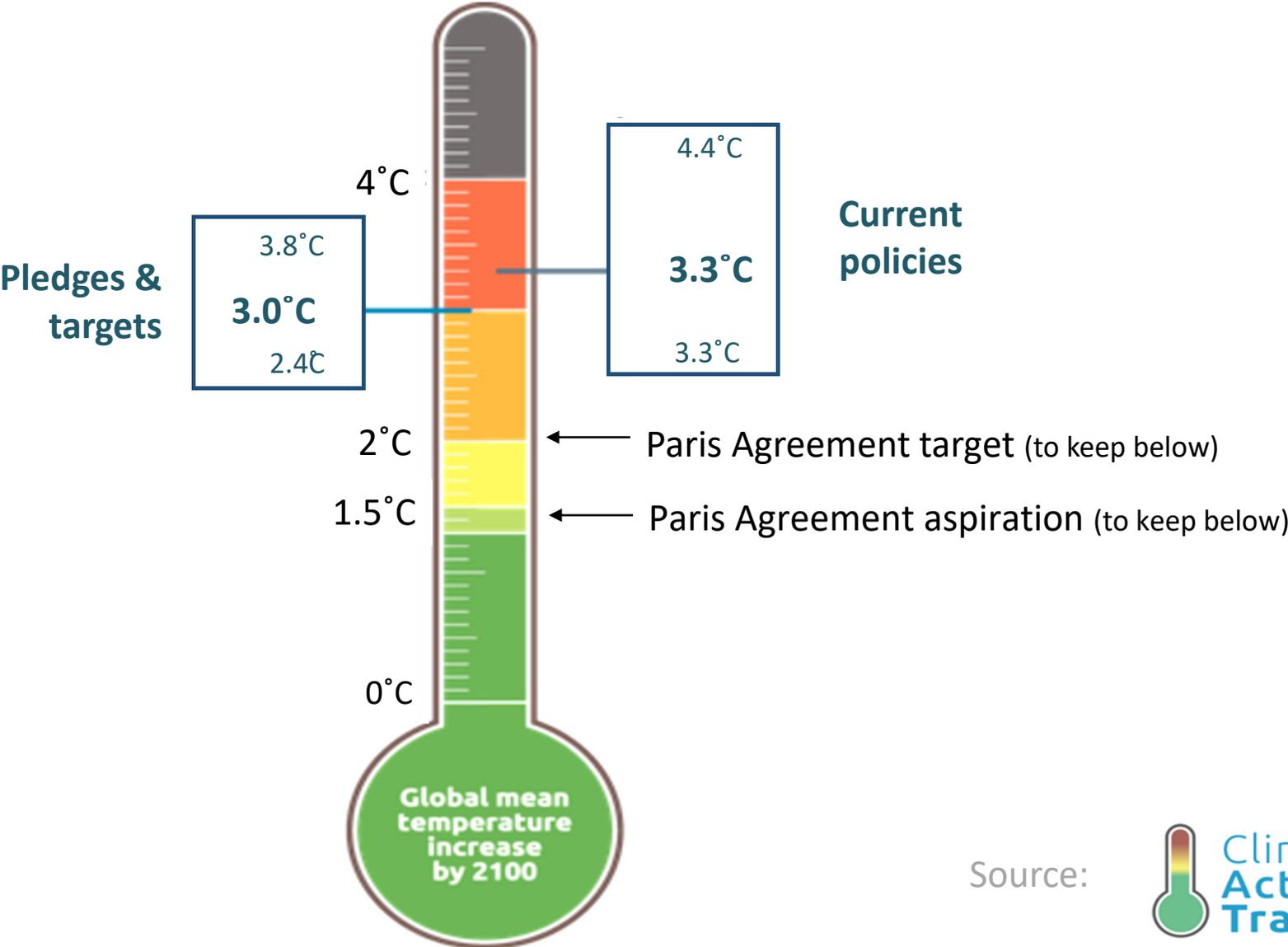
**6 UN Agencies and the WB
+ 400 Authors**



«Business as usual is not an option» (IAASTD 2009)
<http://www.globalagriculture.org>



We have the data.....why are we so slow in making the changes??



Source:  Climate Action Tracker



Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition

A report commissioned by the Committee on World Food Security
Developed by the High Level Panel of Experts on Food Security and Nutrition of the CFS
(presented and accepted to the CFS on July 3, 2019)

AGENDA FOR SUSTAINABLE DEVELOPMENT

get

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BREAKING NEWS

New report says 'far-reaching and unprecedented changes in all aspects of society' would be needed

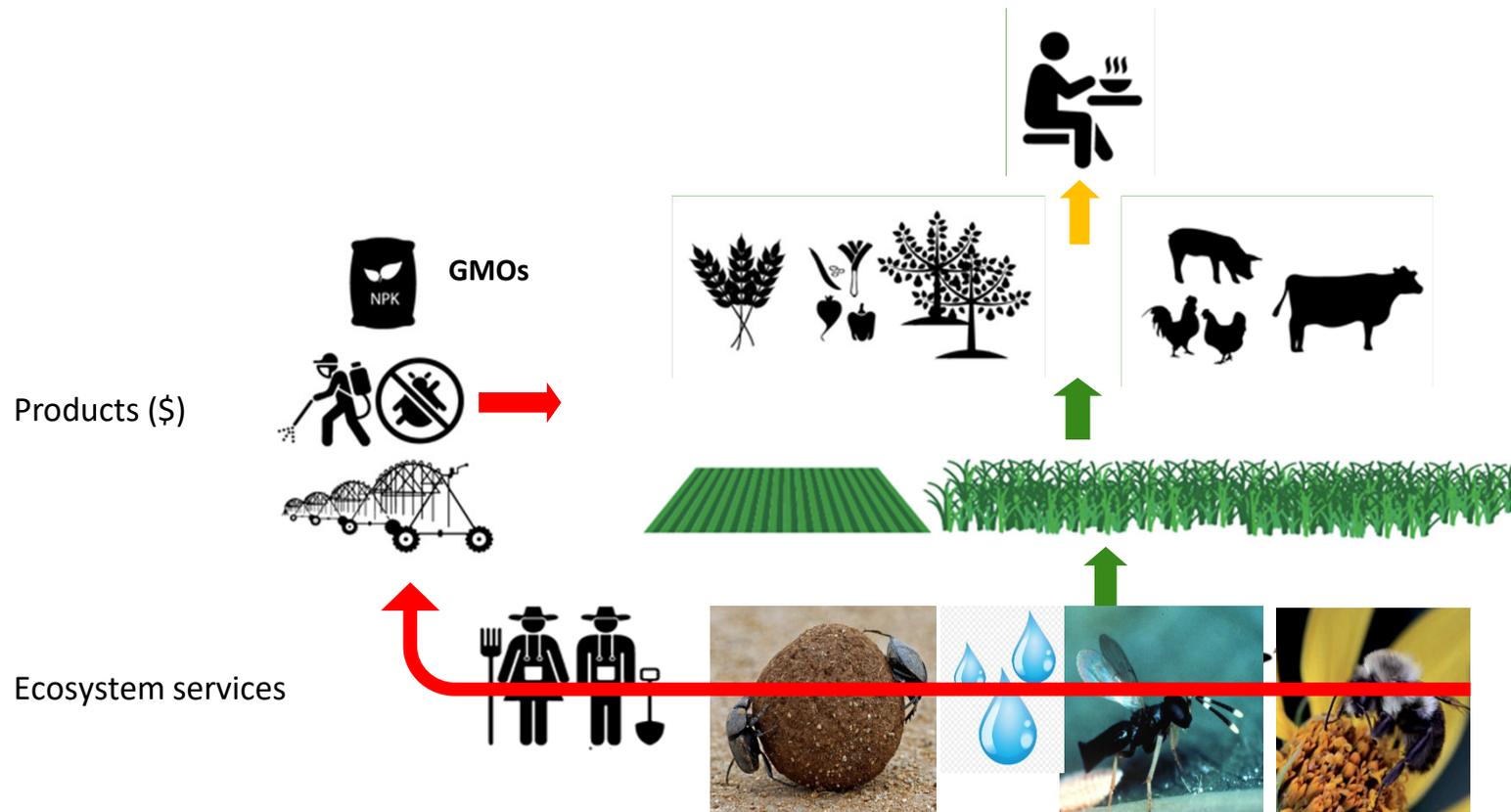
WG I | WG II | WG III

Intergovernmental Panel on Climate Change found.



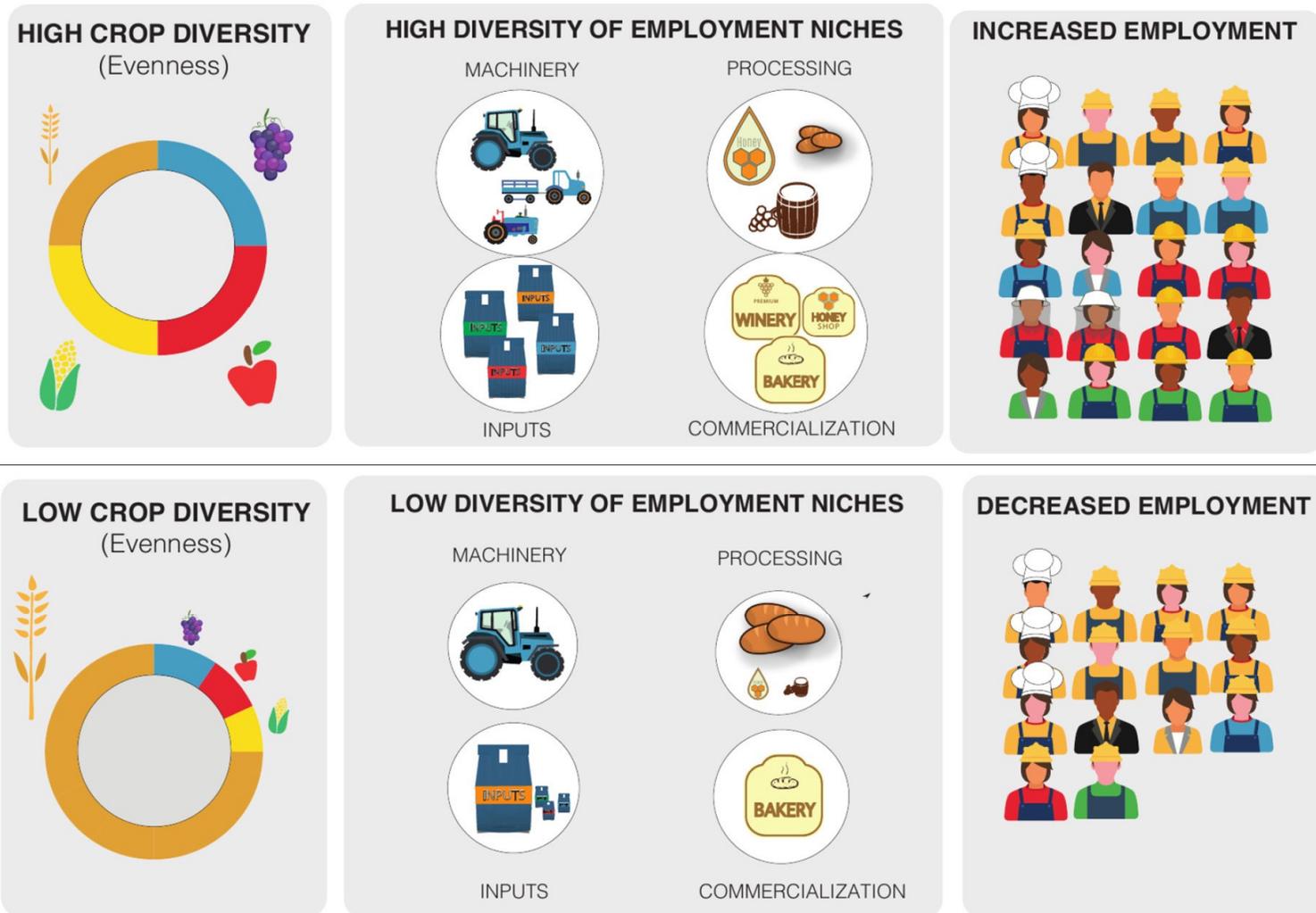
required to hold the U.N.

...but first, how did we create these problems?

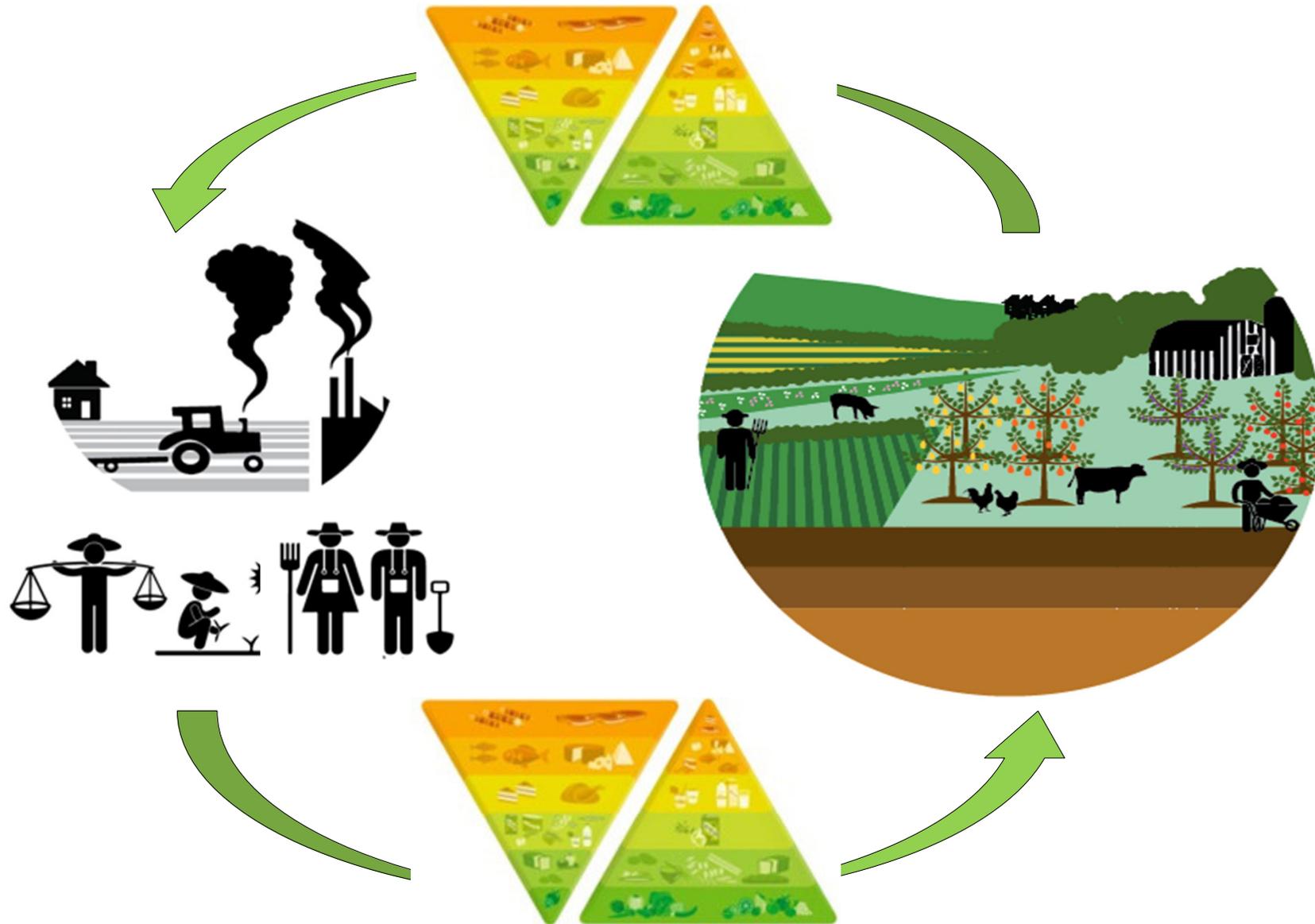


....cheap food and profit above all

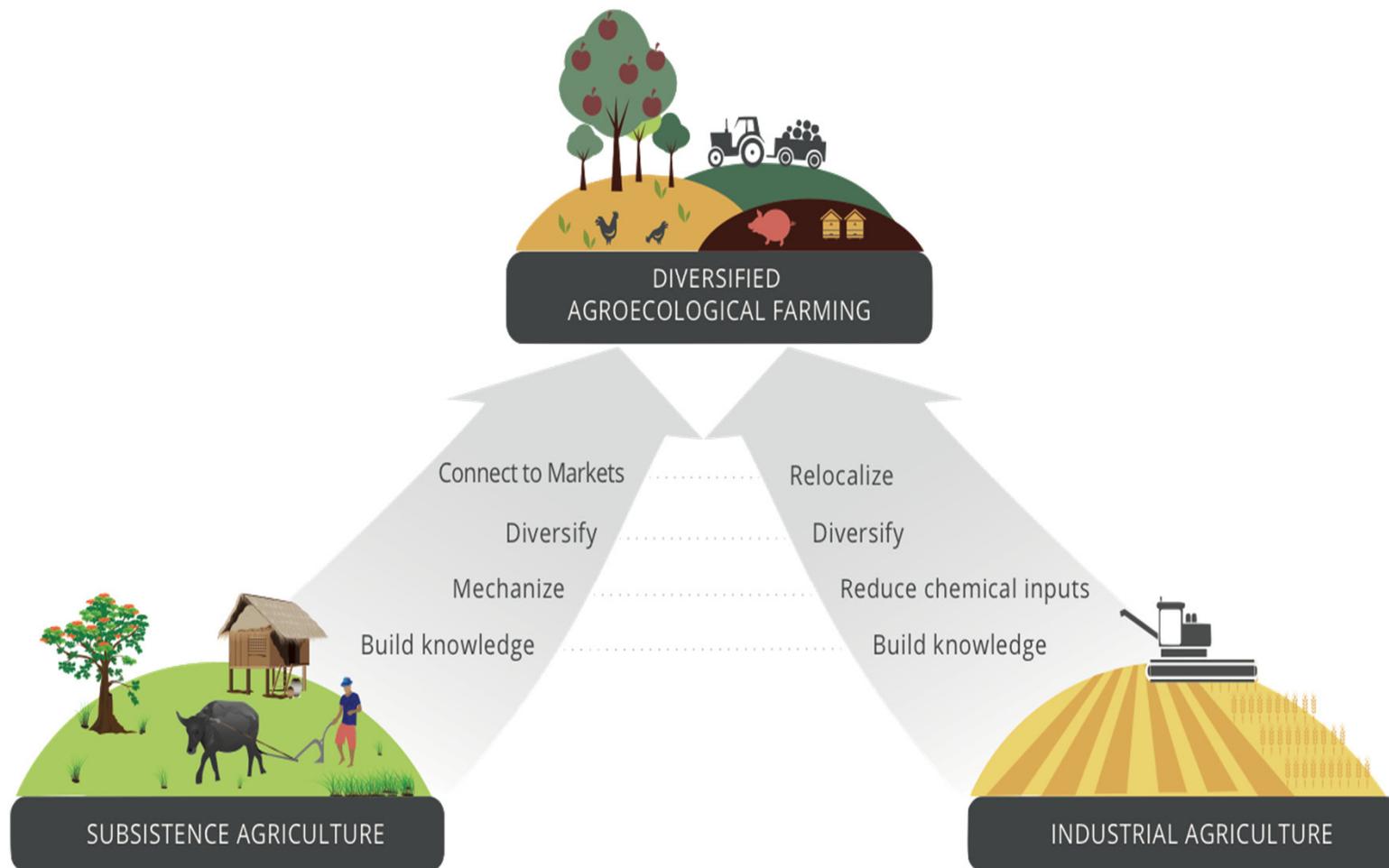
(Bio)-Diversity is Key to sustainability and resilience



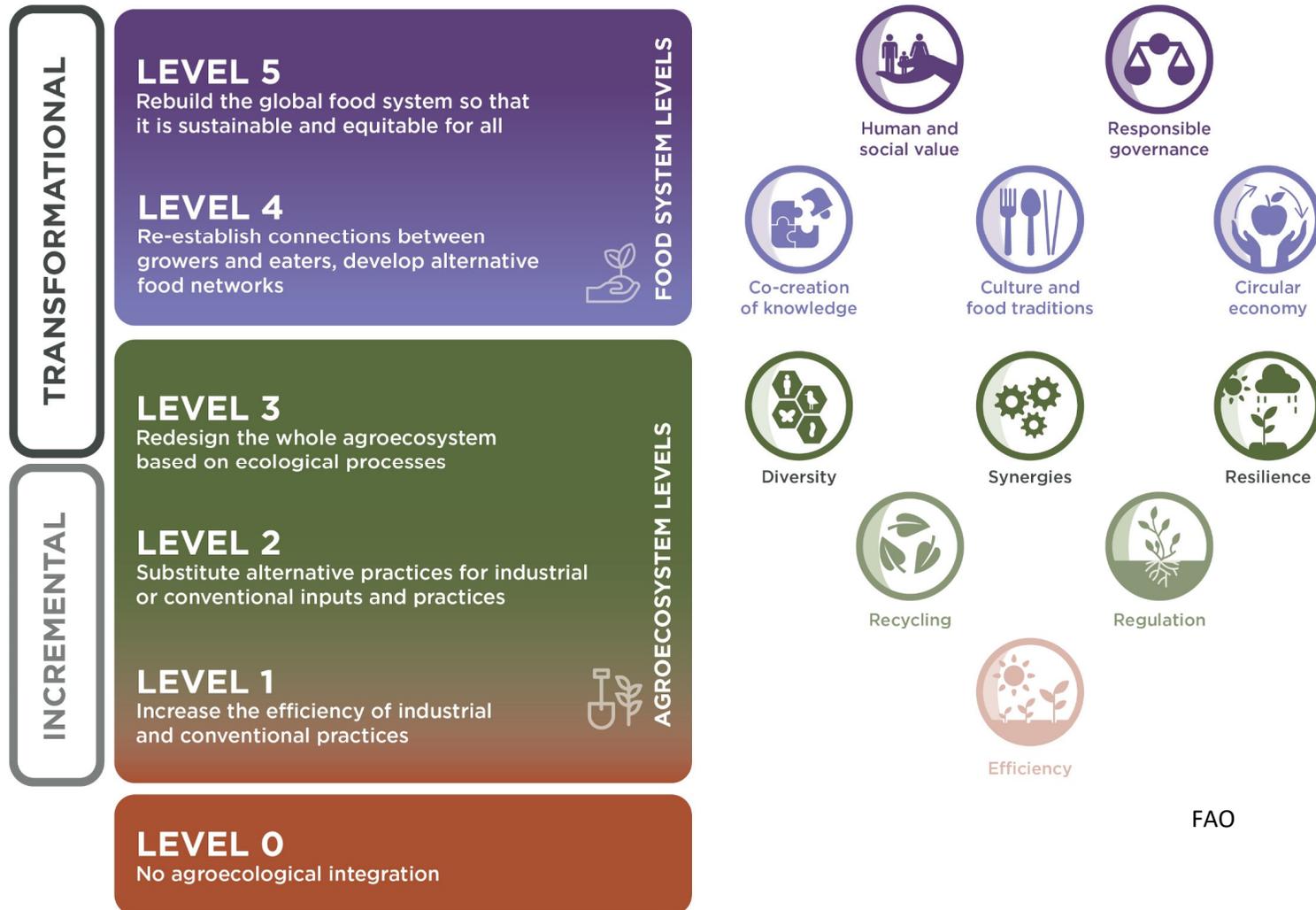
Transformation at all levels, from seed to compost



Transformation process, from traditional, conventional and industrial to Agroecology



The 5 Agroecology levels and ten Elements

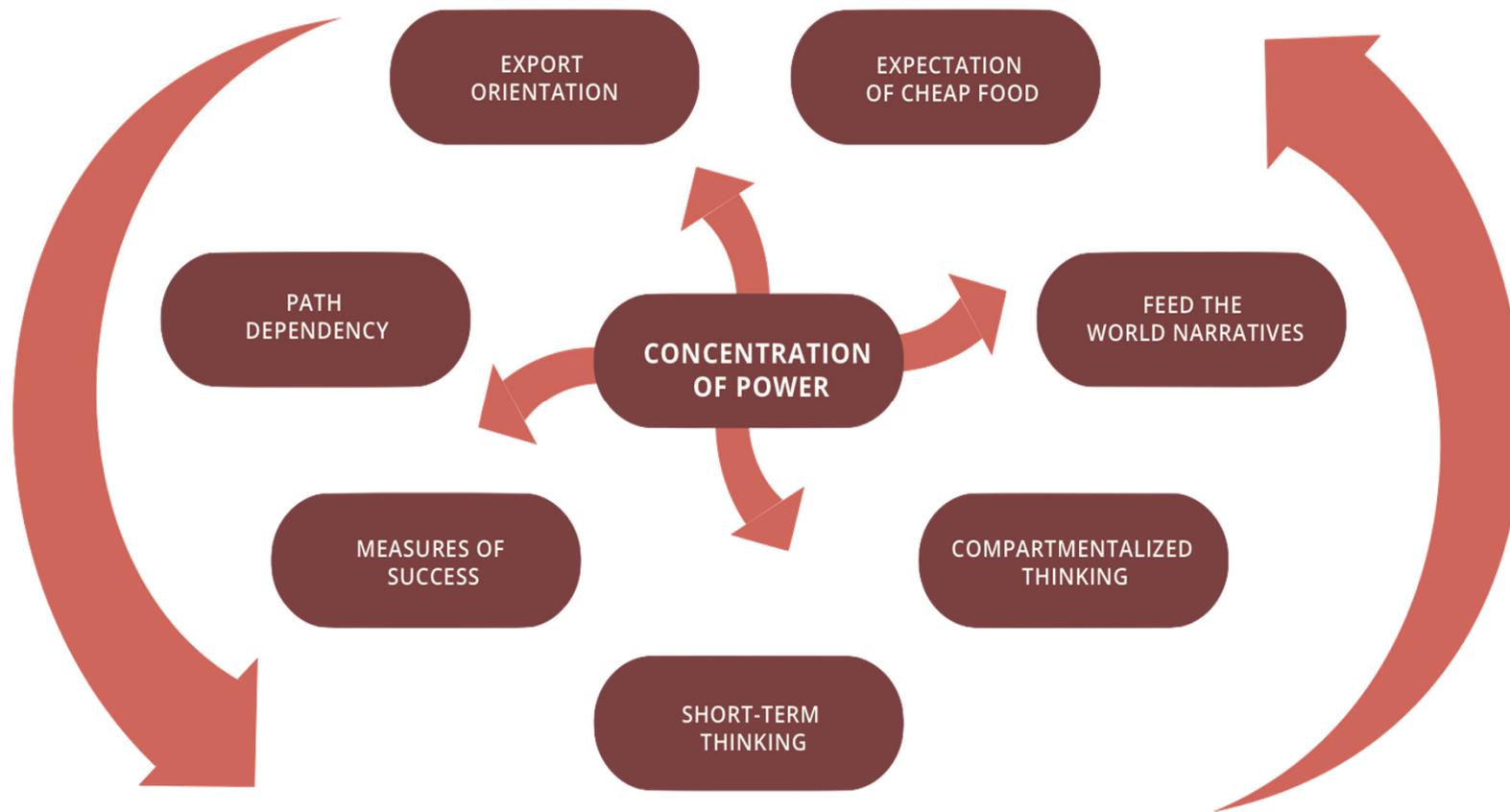


FAO

[Agroecology-pool.org/methodology](https://agroecology-pool.org/methodology)

S. Gliessman

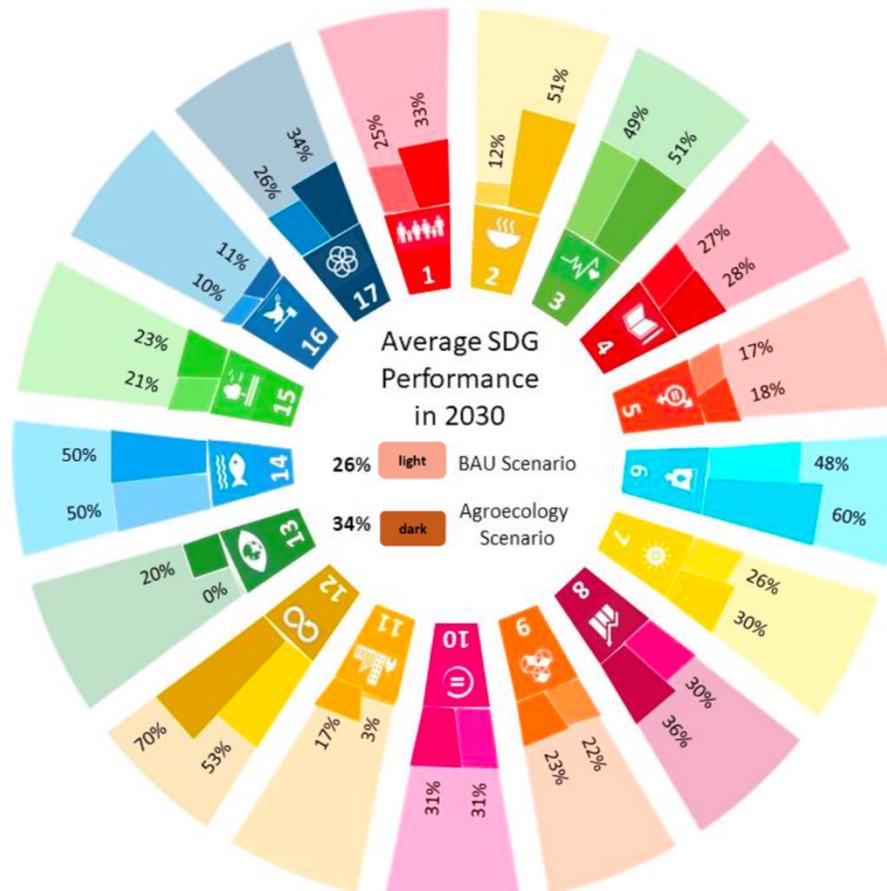
What / who stands in the transformation's way?



Food systems provide a key lever for change and help in meeting the set targets in almost all goals



How agroecology impacts the realization of the SDGs



..taking a system's approach with the Millennium Institute's iSDG system model

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 PB solution

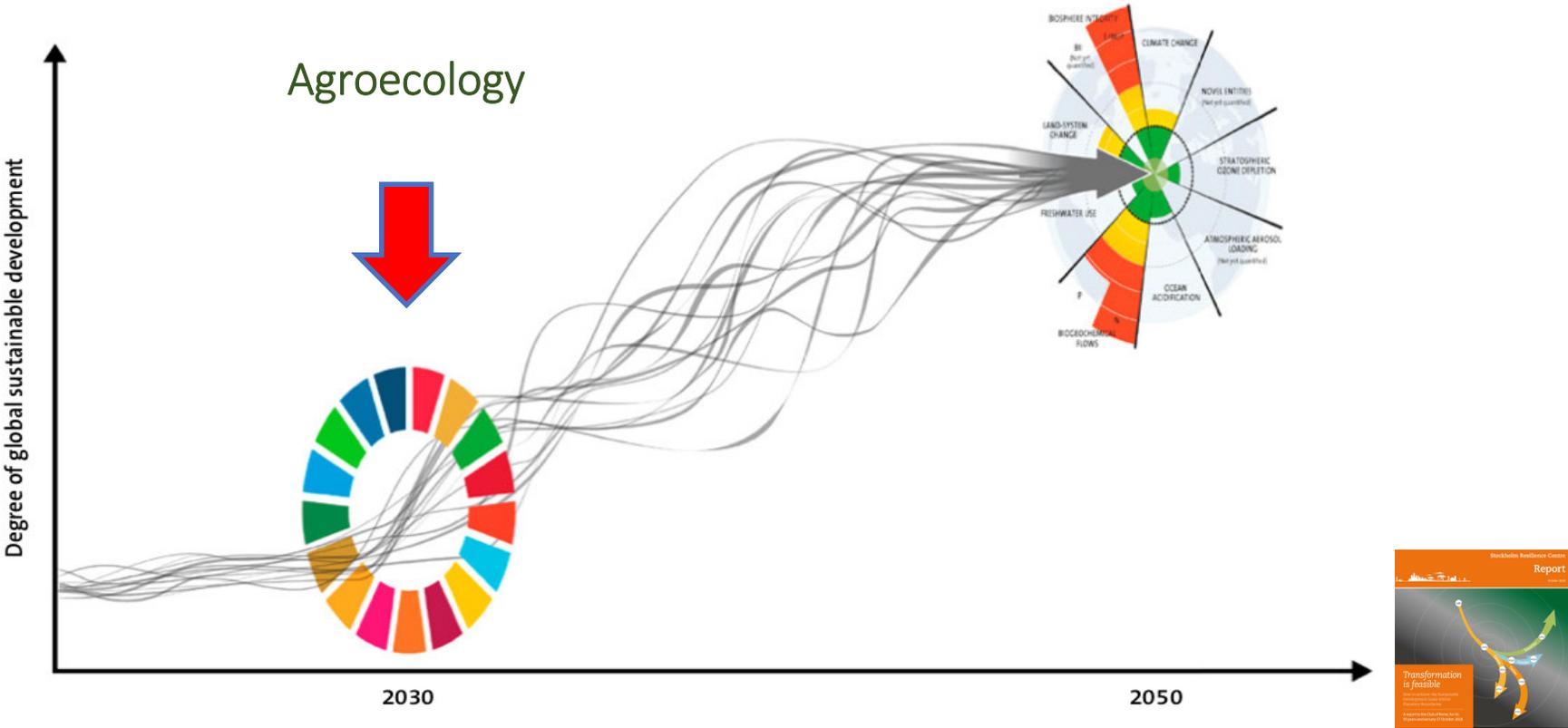


Figure 1.1 What pathways can lead to achieving the SDGs within planetary boundaries in 2050?

What has to change?

Favorable policy environment for Agroecology

I. Research and Innovation

- Transdisciplinary, integrated and agroecological approach
- Co-creation of knowledge
- Invest in AE R&D (only)

II. Coherent policies that drive food system transformation

- Sharing of experience between policy makers on integrated agroecological policies

III. Contribution of agroecology to global/regional/national commitments

- Impact of policies on SDGs
- Climate Change and NDCs

Targeted investing in research and innovation 4 AE



Money Flows:

What is holding back investment in agroecological research for Africa?

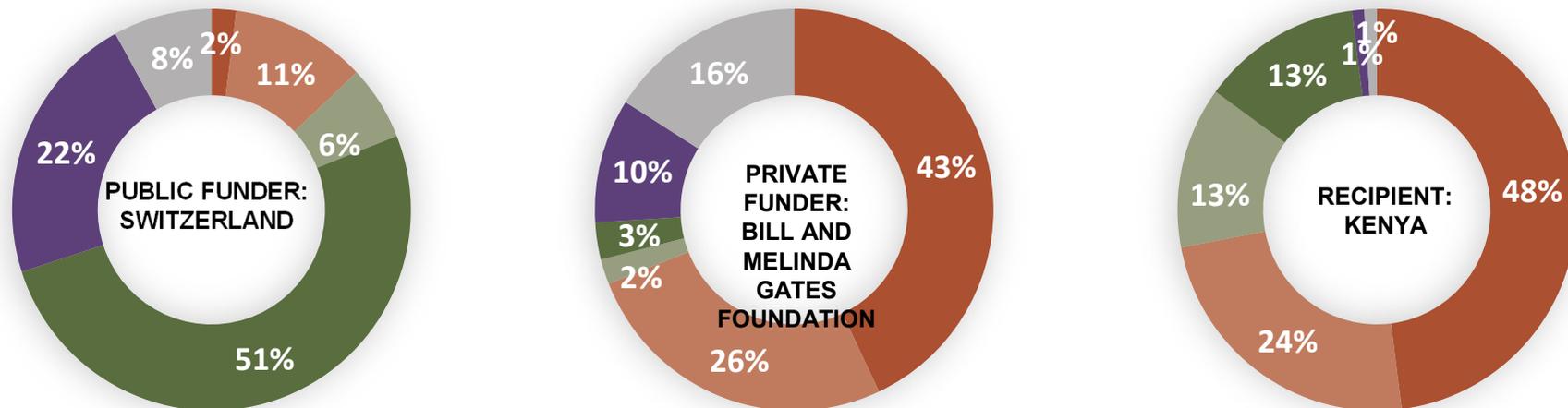
agroecology-pool.org/moneyflowsreport

Supported by

**STIFTUNG
MERCATOR
SCHWEIZ**

Targeted investing in research and innovation 4 AE

Degree to which agroecology has been integrated in Agri Research for Development projects



- Majority of research for development funding still goes to **industrial agriculture**
- Agroecological practices and concepts often addressed **in isolation**
- **Range of constraints** holding back donors from putting agroecology at the centre of strategies
- Current research trajectories are 'locked in' on multiple fronts, but there are **several openings** – particularly the climate crisis

How far are we with the transformation?



Food and Agriculture Organization of the United Nations



THE POTENTIAL OF AGROECOLOGY TO BUILD CLIMATE-RESILIENT LIVELIHOODS AND FOOD SYSTEMS

Integrating agroecological production in a robust post-2020 Global Biodiversity Framework

To the Editor — The 15th Conference of the Parties (COP) meeting to the Convention on Biological Diversity in China — now to be held in 2021 due to the coronavirus pandemic — will provide new opportunities for biodiversity conservation (<https://go.nature.com/31YAVNPF>) through the decision on the post-2020 Global Biodiversity Framework (GBF). In short, the GBF is a global and solution-oriented framework aiming for transformative action by governments, civil society and businesses,



Agroecology Info Pool
an initiative by Biovision

Business Case

The Economic Viability of Agroecology

HLPE REPORT 14

Agroecological and other innovative approaches

for sustainable agriculture and food systems that enhance food security and nutrition



UNRAVELLING THE FOOD-HEALTH NEXUS

ADDRESSING PRACTICES, POLITICAL ECONOMY, AND POWER RELATIONS TO BUILD HEALTHIER FOOD SYSTEMS

EXECUTIVE SUMMARY

Full Report available at www.futurefood.org



Journal of Rural Studies

Volume 71, October 2019, Pages 46-61

The economic potential of agroecology: Empirical evidence from Europe



Transformative Partnership Platform (TPP)



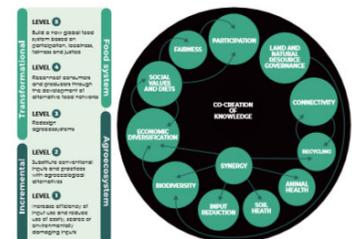
Agroecological approaches to building resilience of livelihoods and landscapes



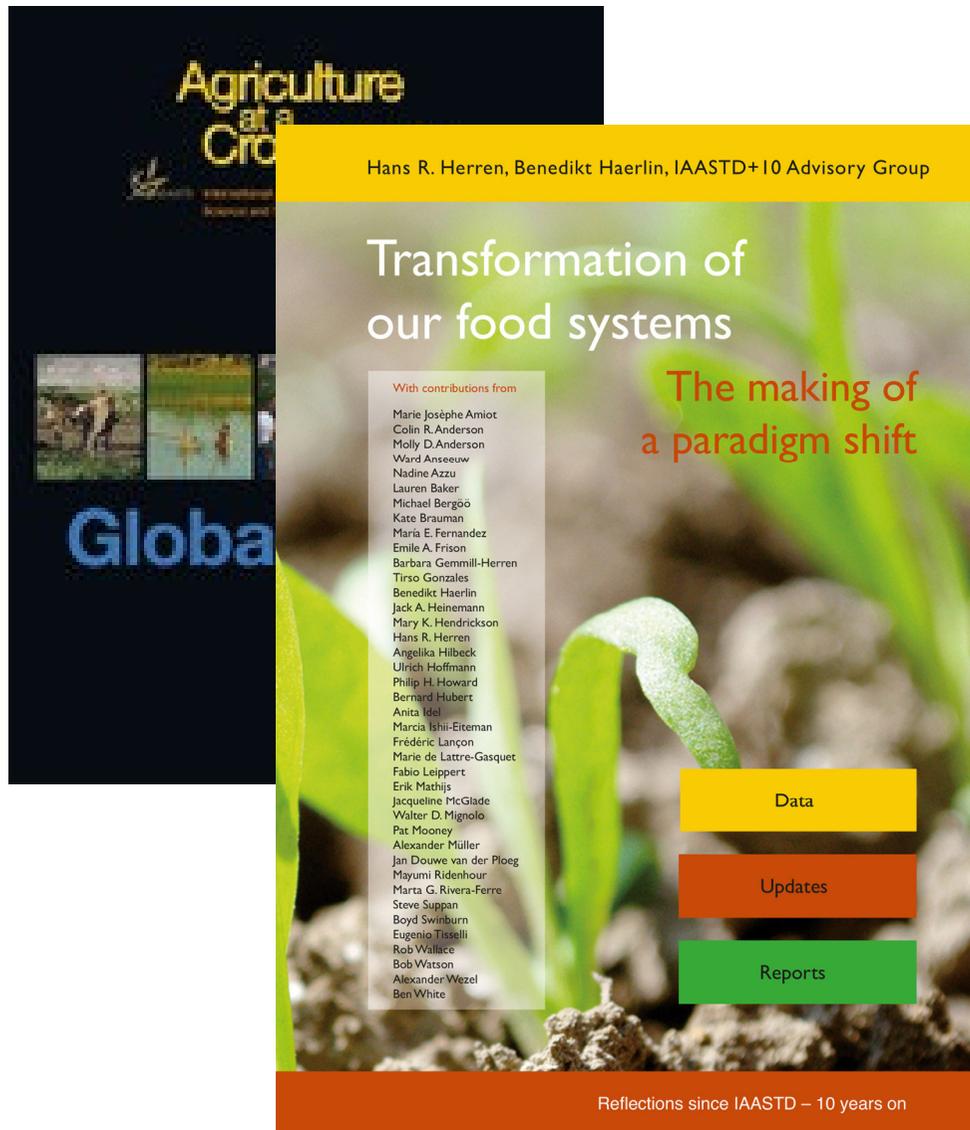
Context

Given recent reports placing agriculture at the centre of human and planetary health (Willett et al., 2019), indicating an impending climate emergency (IPCC, 2018) and alarming loss of biodiversity (IPBES, 2019), it is increasingly recognised that a fundamental transformation of the global food system is required to ensure food and nutrition security for all (SDG2) while reversing degradation of land and water resources and restoring rather than further damaging the environment.

Agroecological principles, as shown in Figure 1, are increasingly seen as being able to make a key contribution to transitioning to sustainable agriculture.



How far are we with the transformation?



13 Essays summarizing highly regarded reports published after the IAASTD

and 16 contributions from former IAASTD authors highlighting what has been achieved and what still needs to be done.....

Key Messages:

“Today, decisive action is no longer ‘an option’, it’s an imperative”

- Business as usual” is (still) not an option. A radical transformation of food systems is necessary.
- Failure to make progress at national and global levels is due primarily to lack of political will, power imbalances and system lock-ins.
- We cannot solve today’s multiple, converging and accelerating crises with unidimensional, linear, reductionist or mechanistic responses.
- Progress towards a livable and viable future requires deeply participatory democratic processes and cannot be attained without attention to basic rights – in particular the rights of farmers, women, Indigenous peoples and other people working in rural areas
- Stabilizing climate and reversing trends in biodiversity losses requires transforming agri-food systems toward agroecological systems, reducing food waste and loss as well as meat consumption in most regions, and prioritizing and valuing natural, social and human capital

Key Messages:

“Today, decisive action is no longer ‘an option’, it’s an imperative”

- Stabilizing climate and reversing trends in biodiversity losses requires transforming agri-food systems toward agroecological systems, reducing food waste and loss as well as meat consumption in most regions, and prioritizing and valuing natural, social and human capital
- Promotion of healthy, diversified and sustainable diets can both reduce the major forms of malnutrition and offer multiple reinforcing co-benefits to human and ecological health.
- Rebalancing power in the agri-food system requires action to both curtail the power of dominant corporations and large businesses that underpin the industrial food system and to provide space for different trade and marketing systems that empower and allow small-scale and peasant farmers, Indigenous peoples, women, and rural and urban communities to flourish.
- Systems transformation requires a re-visioning and re-centering of values of equity, reciprocity and solidarity; principles of democracy, justice and collectivity; and the recognition that humans exist within, not outside of, nature.

..but headwind is building up...the transformation process, from traditional, conventional and industrial to Agroecology is under threat

NOT yet another reductionistic term.....



Action Track 3 Boost Nature-Positive Production

.. 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

