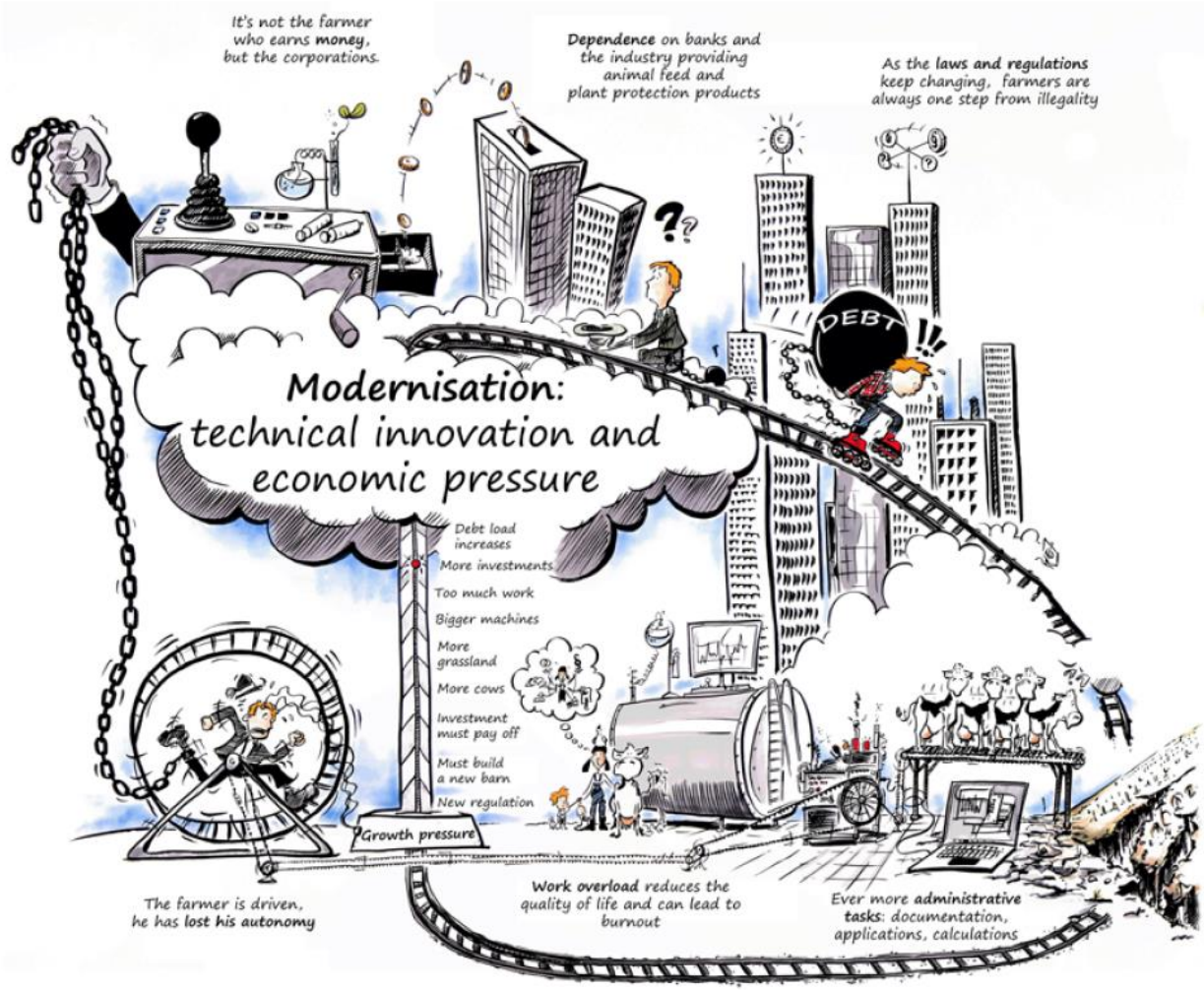
NEED FOR POLICY FRAMEWORKS THAT SUPPORT MORE RESILIENT AGRICULTURAL AND FOOD SYSTEMS

Karlheinz Knickel

Évora University, Portugal

1. Limits to the industrialisation of agriculture
2. RETHINK – rethinking the links between farm modernisation, rural development and resilience
   - Three quick examples on agricultural, rural and food systems sustainability and resilience
3. Implications

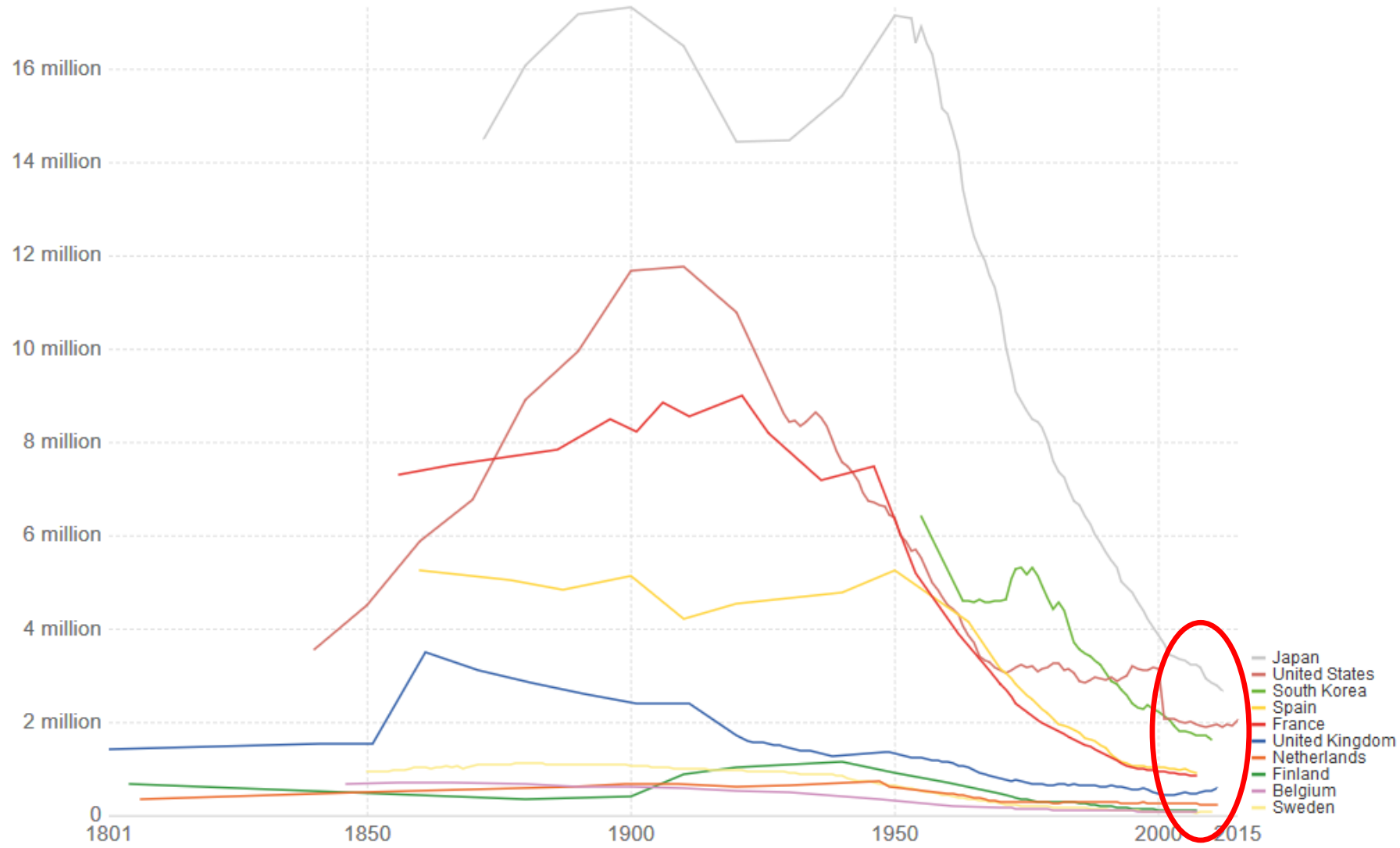
LIMITS TO INDUSTRIALISATION



from: RETHINK Case Study Report Austria – Agnes Strauch & Ika Darnhofer

Number of people employed in agriculture since 1800

The total number of individuals in agricultural employment across select countries from the year 1800.



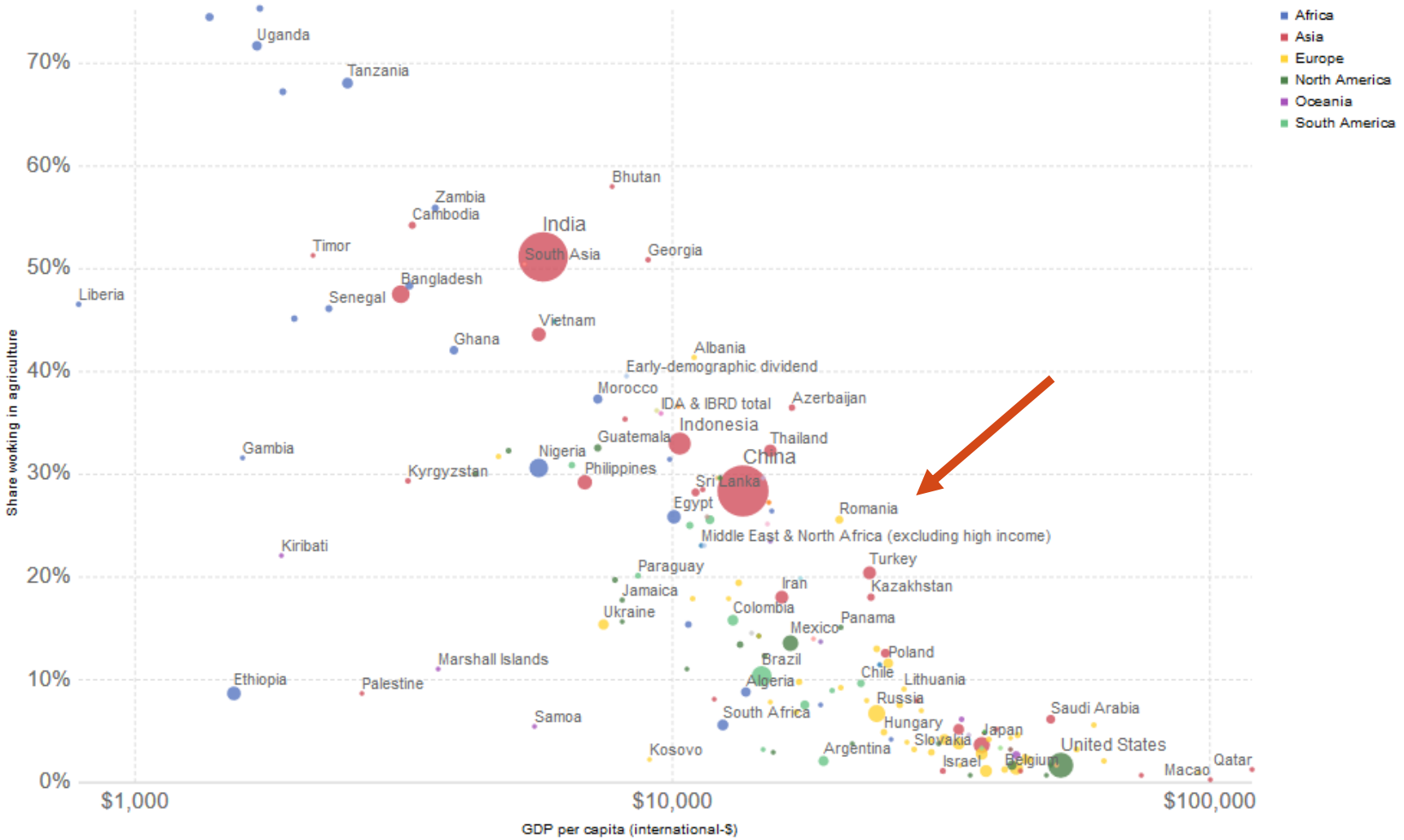
Source: Our World In Data based on Herrendorf et al. (2014)

OurWorldInData.org/employment-in-agriculture • CC BY-SA

Employment in agriculture vs GDP per capita, 2015

Share of persons of working age who were engaged in any activity to produce goods or provide services for pay or profit in the agriculture sector (agriculture, hunting, forestry and fishing).

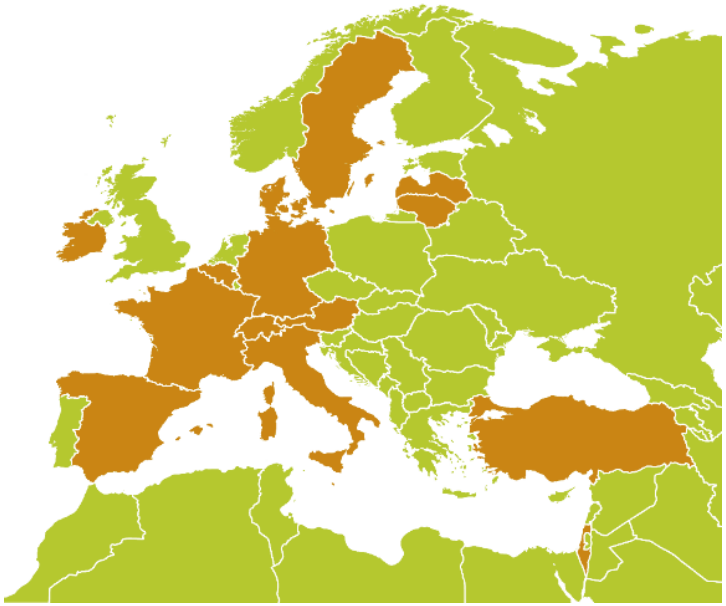
Our World in Data



Source: World Bank – WDI: GDP per capita, PPP (constant 2011 international $), World Bank – WDI: Employment in agriculture (% of total employment)
OurWorldInData.org/employment-in-agriculture • CC BY-SA

RETHINK

RETHINKING THE LINKS BETWEEN FARM MODERNISATION, RURAL DEVELOPMENT AND RESILIENCE IN A WORLD OF INCREASING DEMANDS AND FINITE RESOURCES



RURAGRI
ERA-NET

**The price of inequality:
how today's divided society
endangers our future
(Joseph Stiglitz)**

**Prosperity without growth:
economics for a finite planet

(Tim Jackson)**

1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
THE GLOBAL GOALS
For Sustainable Development
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE AND JUSTICE STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS

RESILIENCE OF AGRICULTURAL AND FOOD SYSTEMS

- Economic pressures, increasing vulnerabilities, inequalities, differences in access to resources
- Socio-economic well-being … quality of life
- Food production … sustainable food and nutrition security
- Environmental sustainability … resource use efficiency
- Climate change mitigation, adaptation … low carbon economy … resilience of social-ecological systems

THREE QUICK EXAMPLES

- The "bio-based" economy
- Milk production
- Rural communities

THE "BIO-BASED" ECONOMY

Biodiesel, ethanol: industrial scale

"Smaller-scale" distributed systems

MILK PRODUCTION

Holstein Frisians, 10,000 kg milk per year

Brown Swiss, 6,000 kg, with farm-based cheese making

RURAL COMMUNITIES

40 ha business area for a logistics company

Development of SMEs and knock-on effects

KEY QUESTION: WHAT IS IT REALLY ABOUT?

- Income opportunities for all people, families, regions
- Livelihoods, … decent work and incomes, quality of life
- We need to look at interconnectedness (of causes, problems)
  - Concentration of production in some regions and businesses
  - Marginalisation of others – the "less favoured areas", mountainous areas, the periphery distant from "markets", … the less competitive, the less qualified, capable
- "Competitiveness" and profit?
  – take care of the time and of the societal dimension!

EURACTIV

Login / Register Events EURACTIV Network Search

Agrifood Digital Economy & Jobs Energy & Environment Global Europe Health Politics Transport

Digital revolution forces rethink of labour and welfare

By Jorge Valero | EURACTIV.com

Sep 15, 2017 (updated: Sep 15, 2017)

Spot welding of BMW 3 series car bodies with KUKA industrial robots. [BMW Werk Leipzig/Wikimedia]

Technological advances?

NEED FOR STRICT SUSTAINABILITY / FUTURE PROOFING

Possible consequences

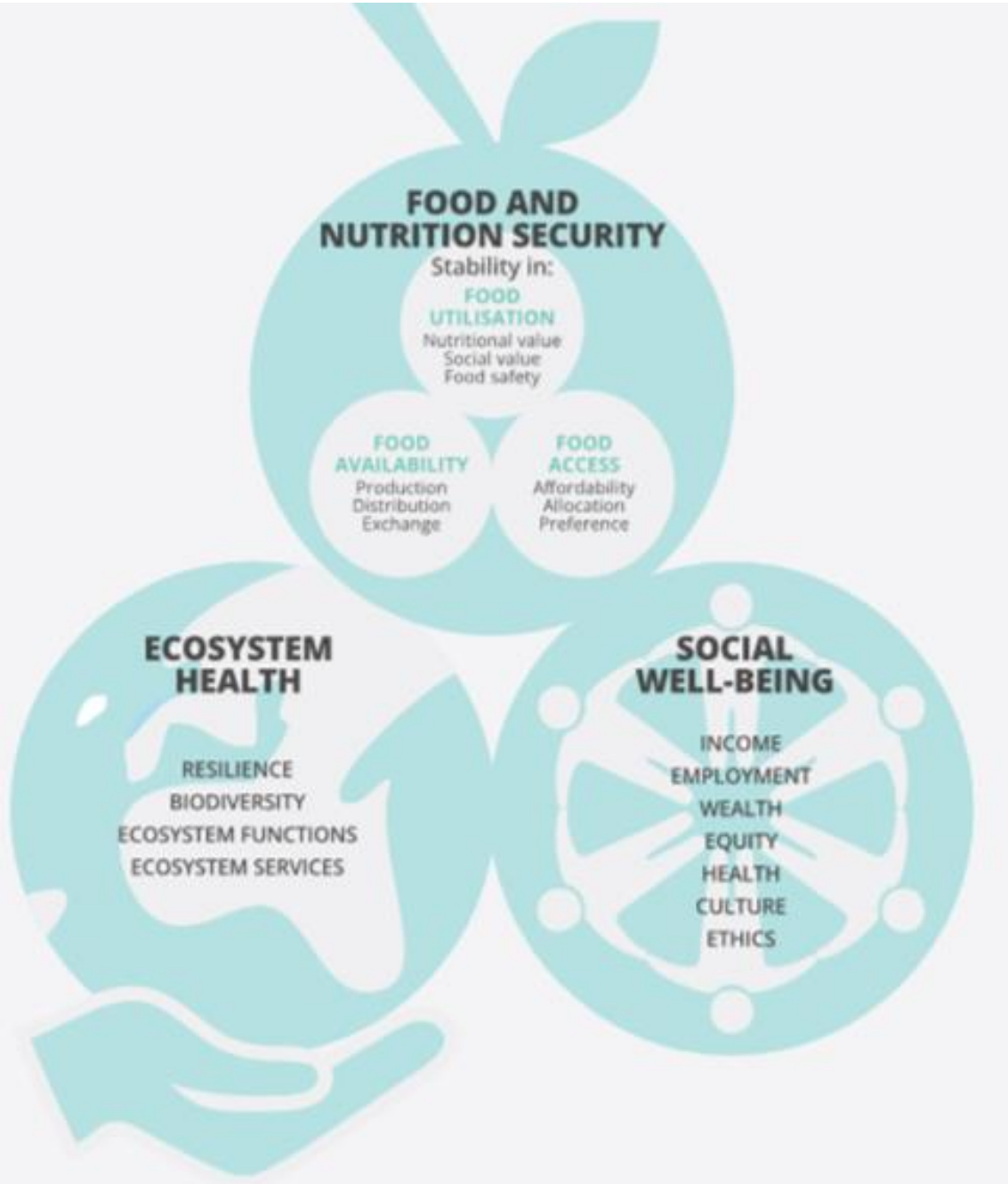
- on small and medium size farms

- on the food system as a whole

- on marginalization of regions and groups

REFLEXIVE MODERNIZATION POLICY NEEDED

- **Modernizing agriculture means very different trajectories**
  - It means far more than the application of technological advances
  - Need to expose policy jargon, ensure clarify
- Enormous need for **strict sustainability / future proofing** and more meaningful ex-ante impact assessments
  - Civil society / CSOs should be very actively involved in this
  - System boundaries and time dimensions matter!
- What could a **better agricultural and food policy** look like?
  - Many excellent ideas already existing
  - Unique opportunity for mobilizing – and uniting – very diverse stakeholders for better policy frameworks



IMPORTANCE OF CONNECTING DIFFERENT AGENDAS, INTERESTS AND STAKEHOLDERS

(EEA, 2017,
Food in a green light)

rethink

Farm Modernisation
and Rural Resilience

WWW.RETHINK-NET.EU

KARLHEINZ.KNICKEL@GMAIL.COM