

Food System Transitions

Ivo Demmers, Programme Lead

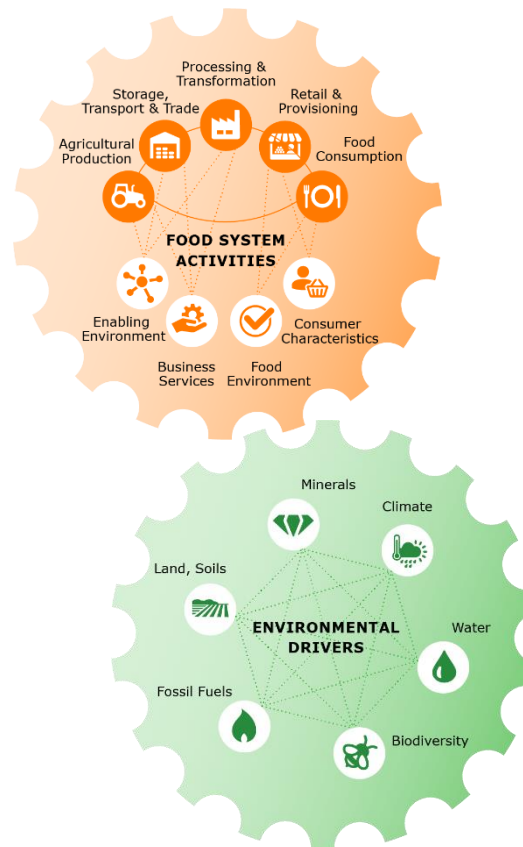
Food Security and Valuing Water Research Programme

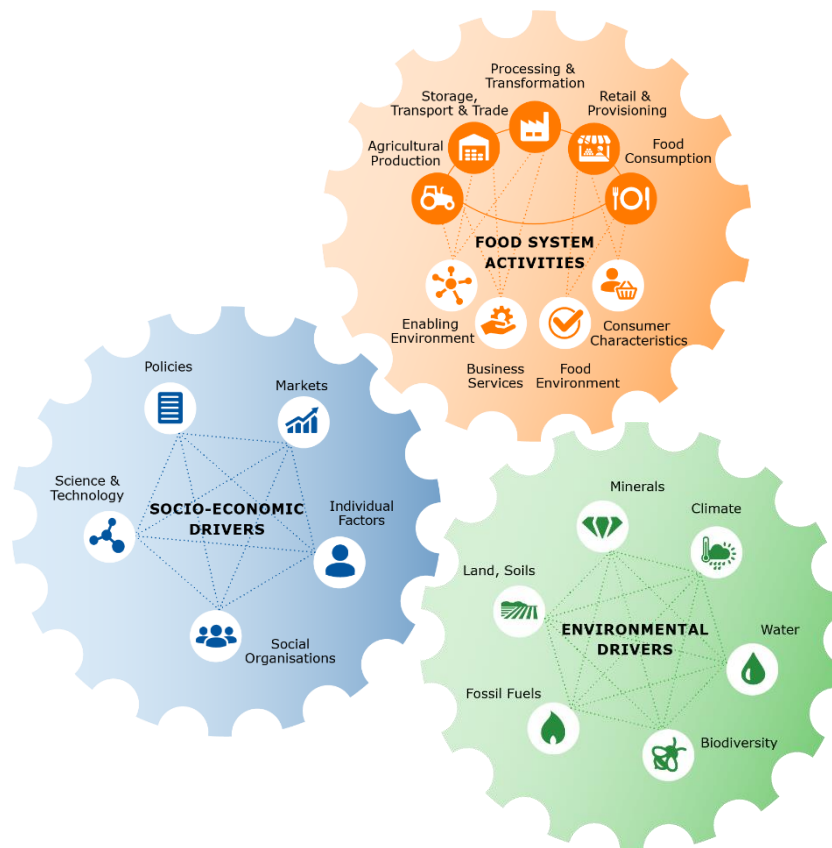
December 2022

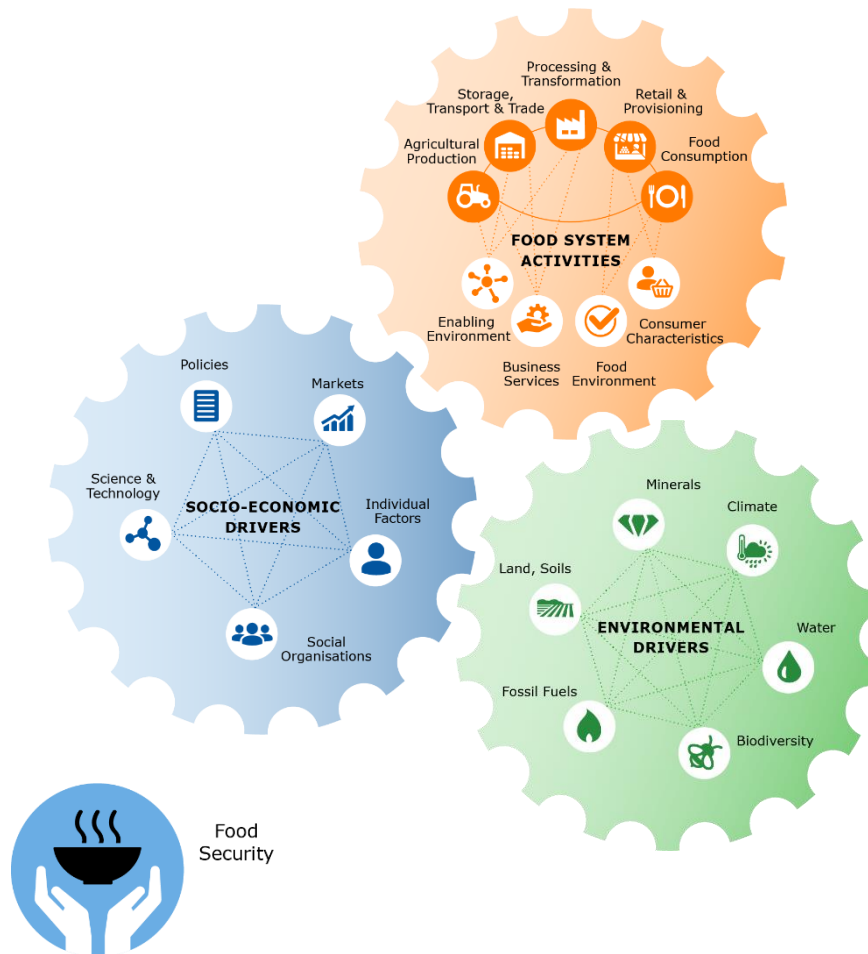


The food system ...



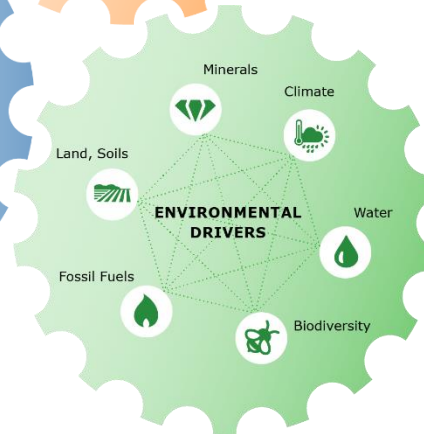
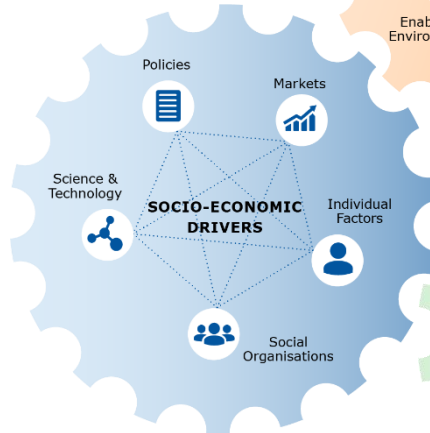




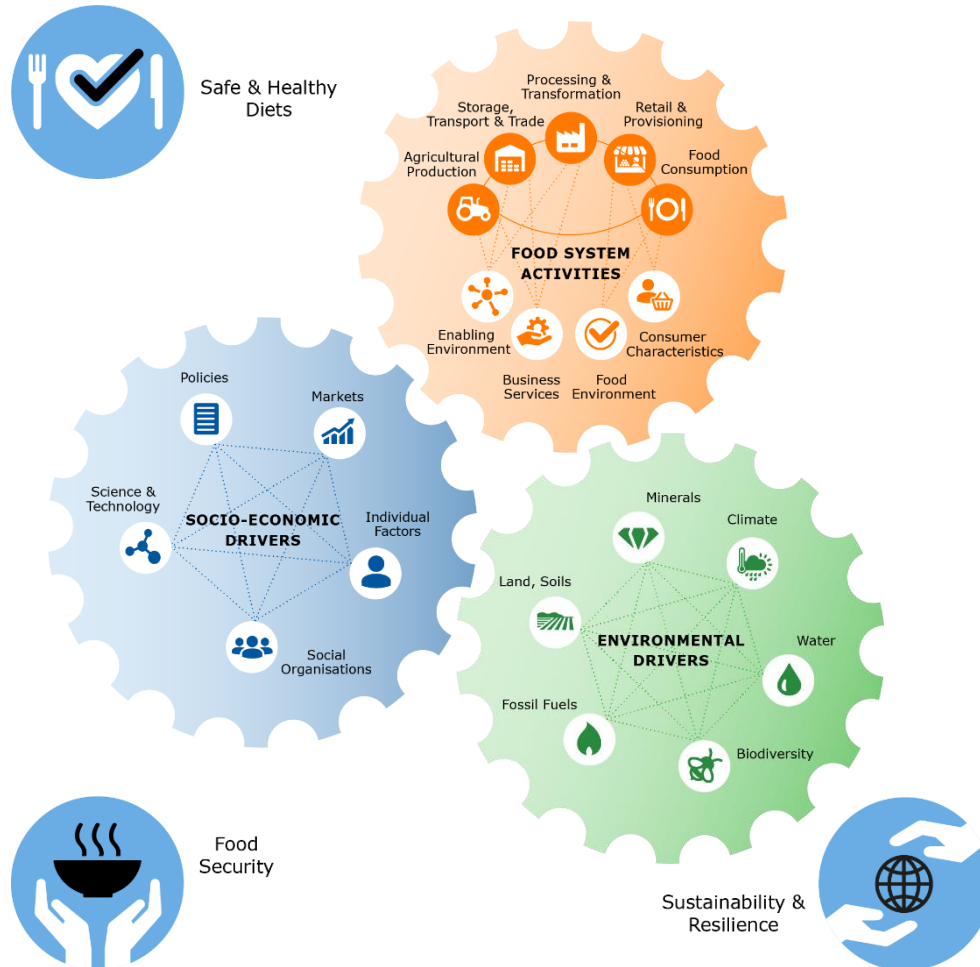


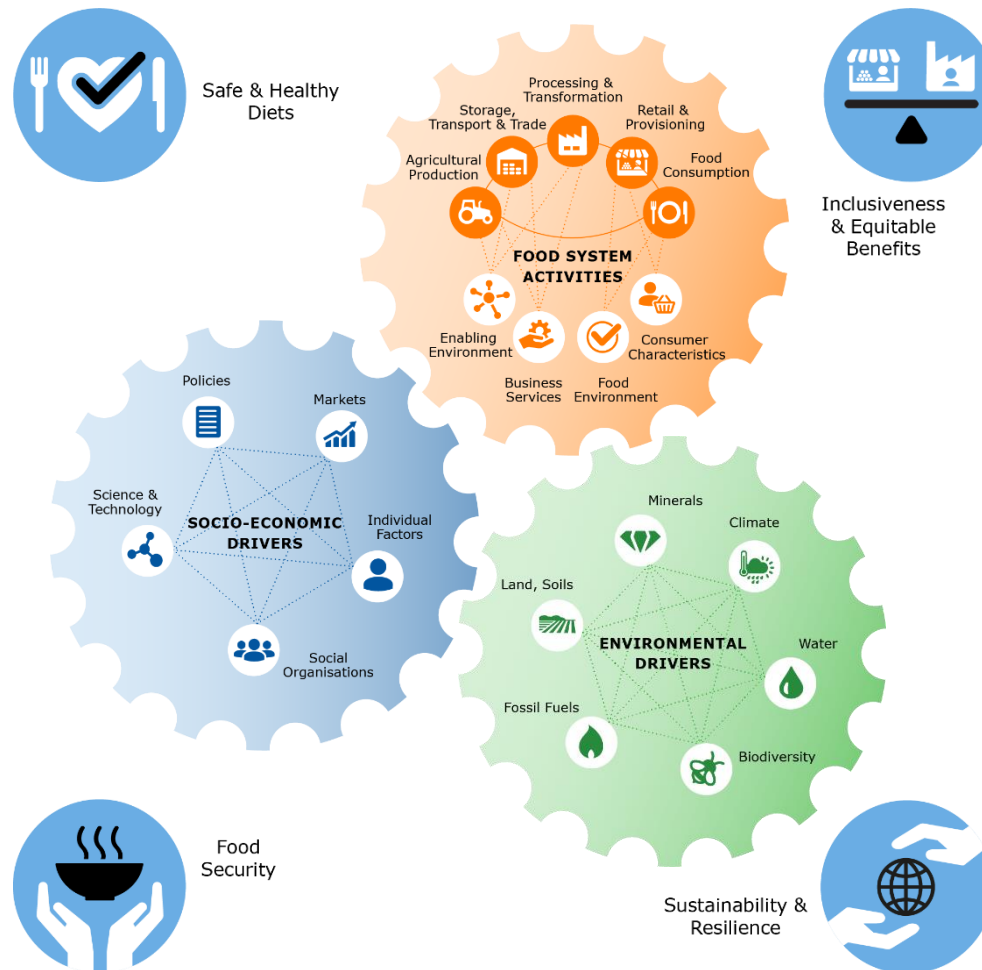


Safe & Healthy
Diets



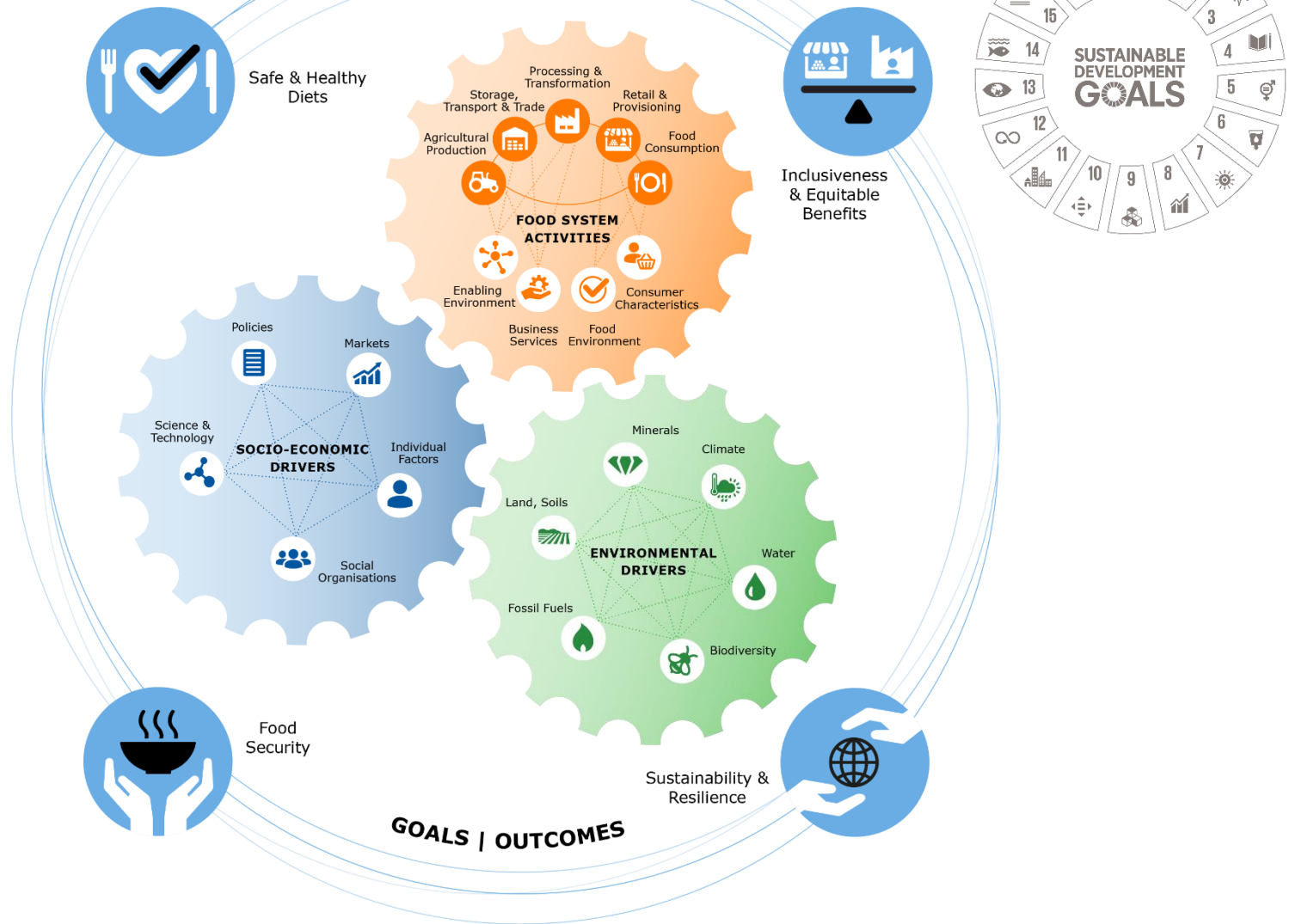
Food
Security





Food systems framework

Van Berkum et al. 2018, Wageningen University & Research



And we waste 30% of the food
we produce ...



We need a transition in our Food System



Important role for biodiversity

Biodiversity is our 'safety net' because it increases resilience:

Biodiversity loss will reduce the ability of ecosystems to regulate temperature, water availability and greenhouse gas emissions



We can make a change

**We
all are
part**

**Food
System
at core**

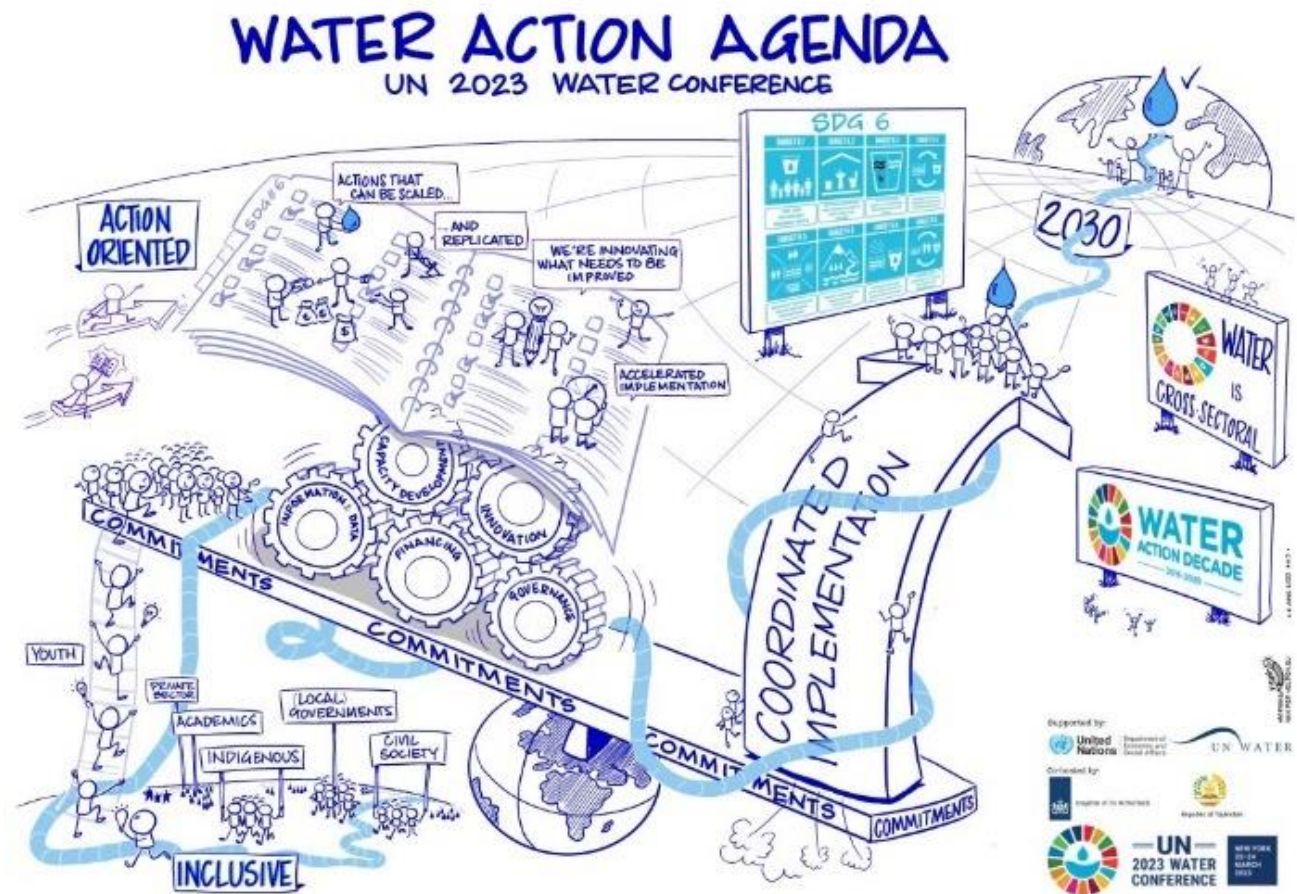
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WAGENINGEN
UNIVERSITY & RESEARCH

Food and Water @UN Water Conference

2 Action perspectives, focussing on commitments



1: Make water pivotal in the Food System Pathways

- **Resilient agricultural food production systems;** a.o. seeds, mixed systems, agronomy for water & soil, biodiversity
- **Circular food systems;** A.o. N, P, K reclamation (in the value chain), re-use of water in densely populated areas
- Dietary change & Food Loss and Waste reduction



e.g. Mekong Delta

From: Mekong Delta Plan, focus on climate change around water:

a.o. too salt, too little, too much, too dirty



To: Agricultural Transformation, focus on fruit, vegetables, aquaculture, infrastructure, logistics and trade

2: Prioritization of water (re)allocation in National Water Roadmaps

Rethink water allocation

- For example in Jordan, and other countries (a.o. Foresight for Food System Transformation (FaST), also WFP)
- Value of water for: a.o. GDP and/or stability

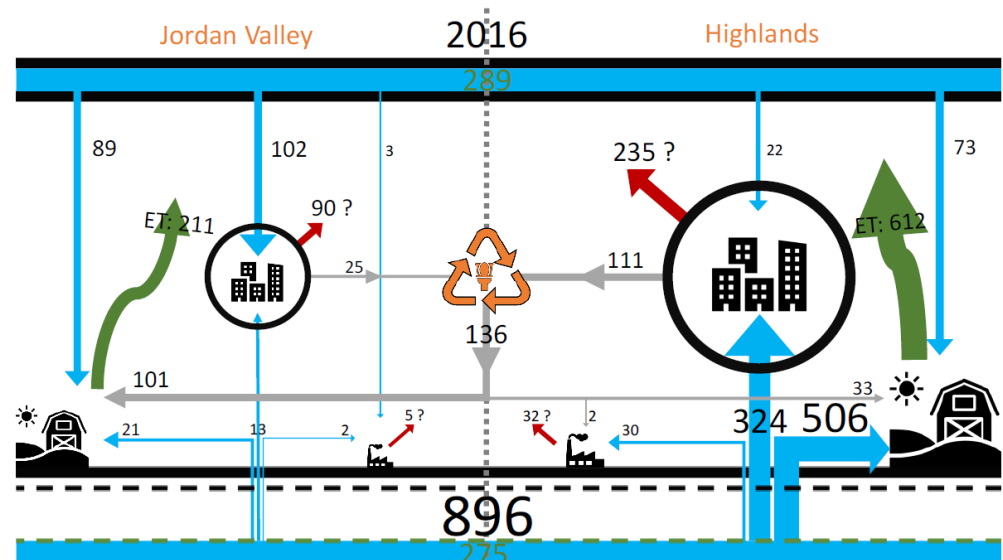
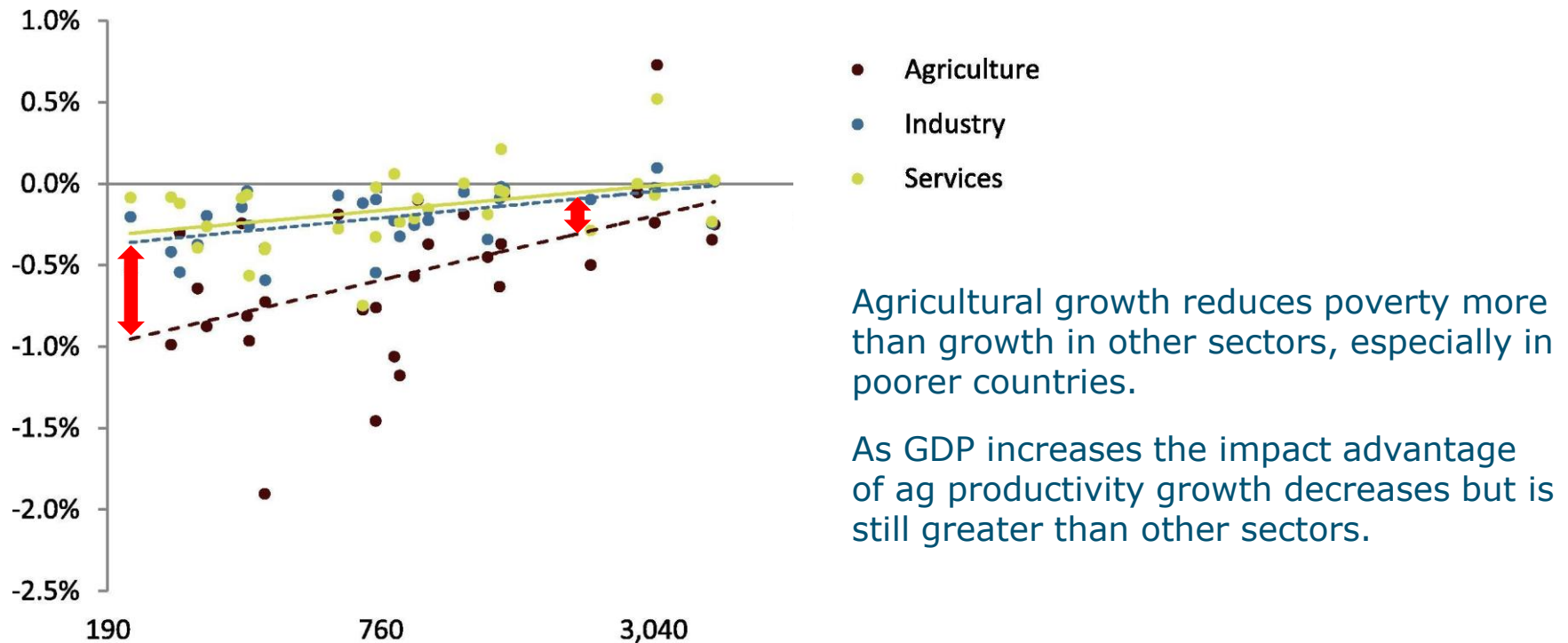


Figure 3: Water balance 2016 (Values in MCM)

Agricultural growth and poverty reduction



- Percentage change in (reduction of) poverty rate from a 1% increase in sector productivity (in GDP) (Ivanic & Martin, 2018).
- Agricultural productivity growth has stronger effect on poverty alleviation than growth in other sectors

Thank you

"A ship is always safe
at the shore, but that is
not what it is built for."

Albert Einstein



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