

Systems thinking and Foresight

What future for economically inclusive and sustainable food systems in the Eastern Indo Gangetic Plane

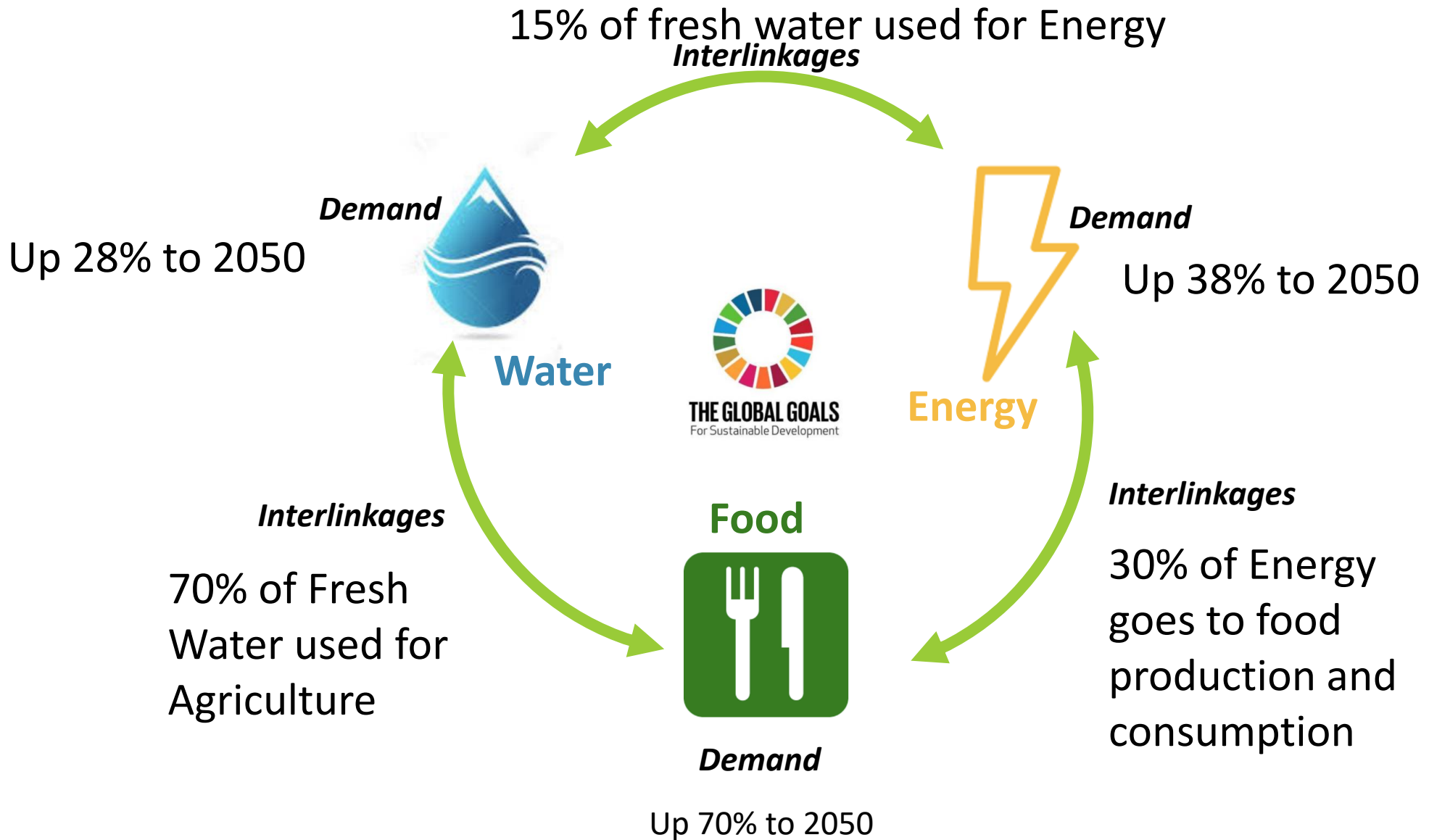


Foresight

What might the **future** hold for peoples lives and the environment into the the future?

How do we make wise decisions **now** for a better future?

Water Energy Food - The Big Picture



Part of a Global Food Systems Foresight Initiative



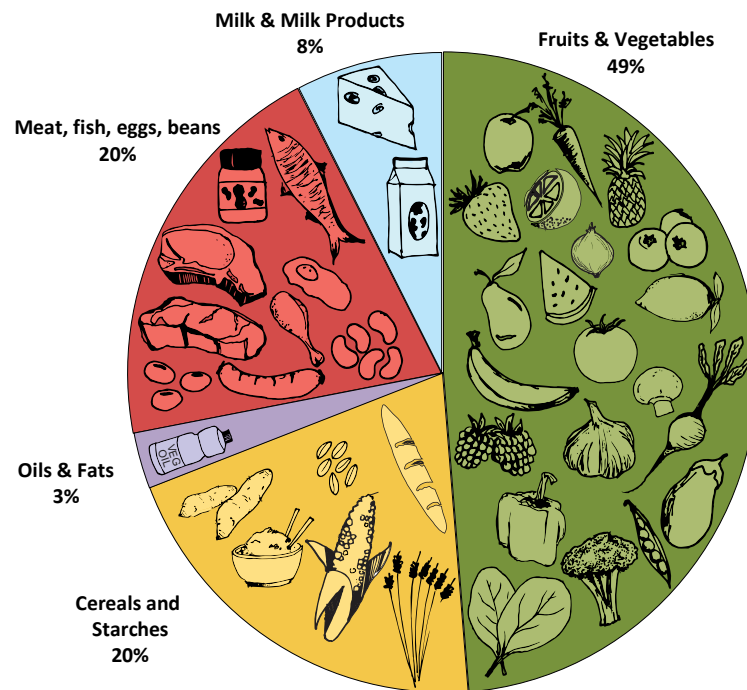
Foresight4Food

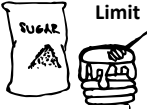
International Collaborative Initiative

- Enhanced foresight is critical to underpin dialogue and decisions regarding food systems transformation
- Foresight work is often fragmented and/or one-off
 - Range of assumptions which vary from exercise to exercise and drive different conclusions
 - Global or geographically or economically specific (e.g. developing world facing): but every food system is a mixture of both
- There is limited synthesis and communication of foresight work from an overall food systems perspective
- Weak and limited connections within and between foresight users and providers

What we Eat and What we Produce

What we should be eating (Harvard's Healthy Eating Plate Model)




Limit
WHO <
5%

Seeing the Links - Virtual Water Trade

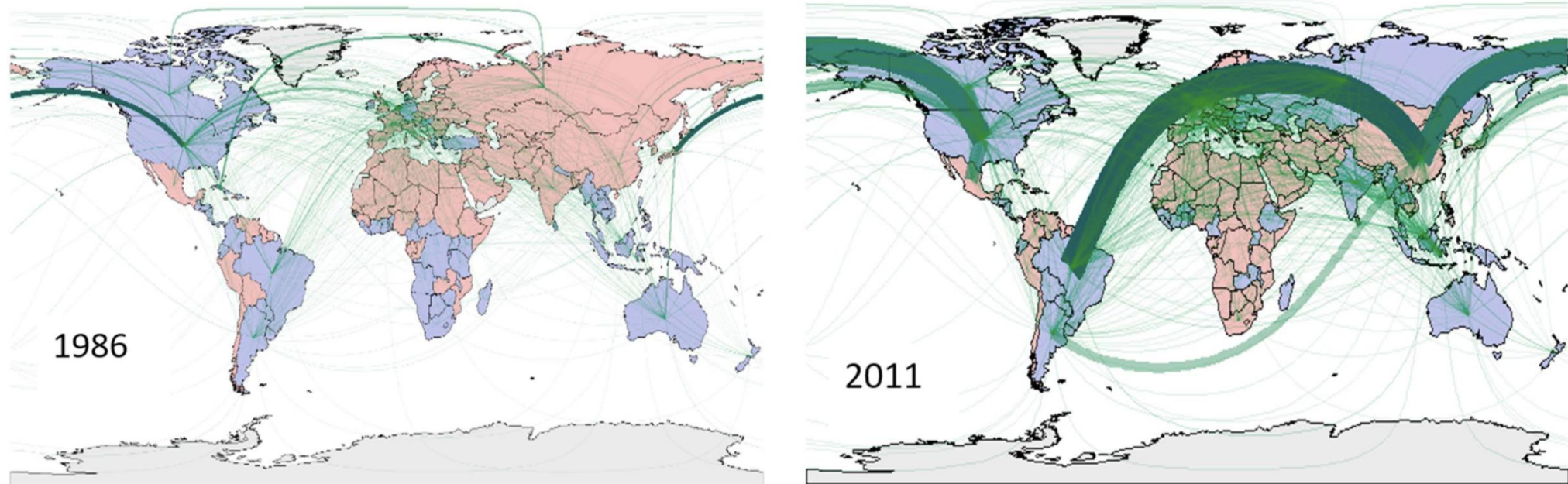
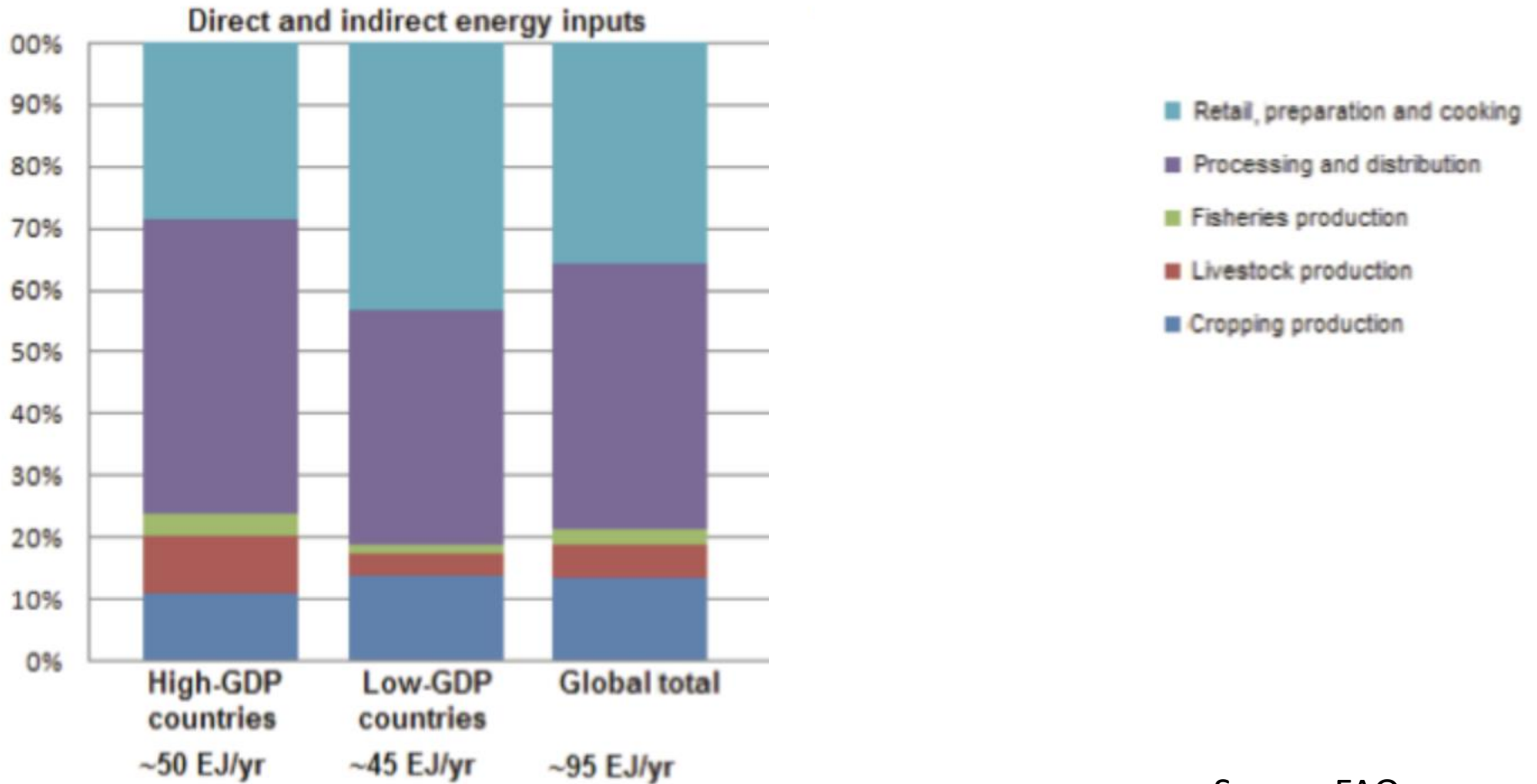


Figure 21. Global patterns of virtual water trade. Countries in pink are net importers, and countries in purple are net exporters (after Carr & D’Odorico, 2017).

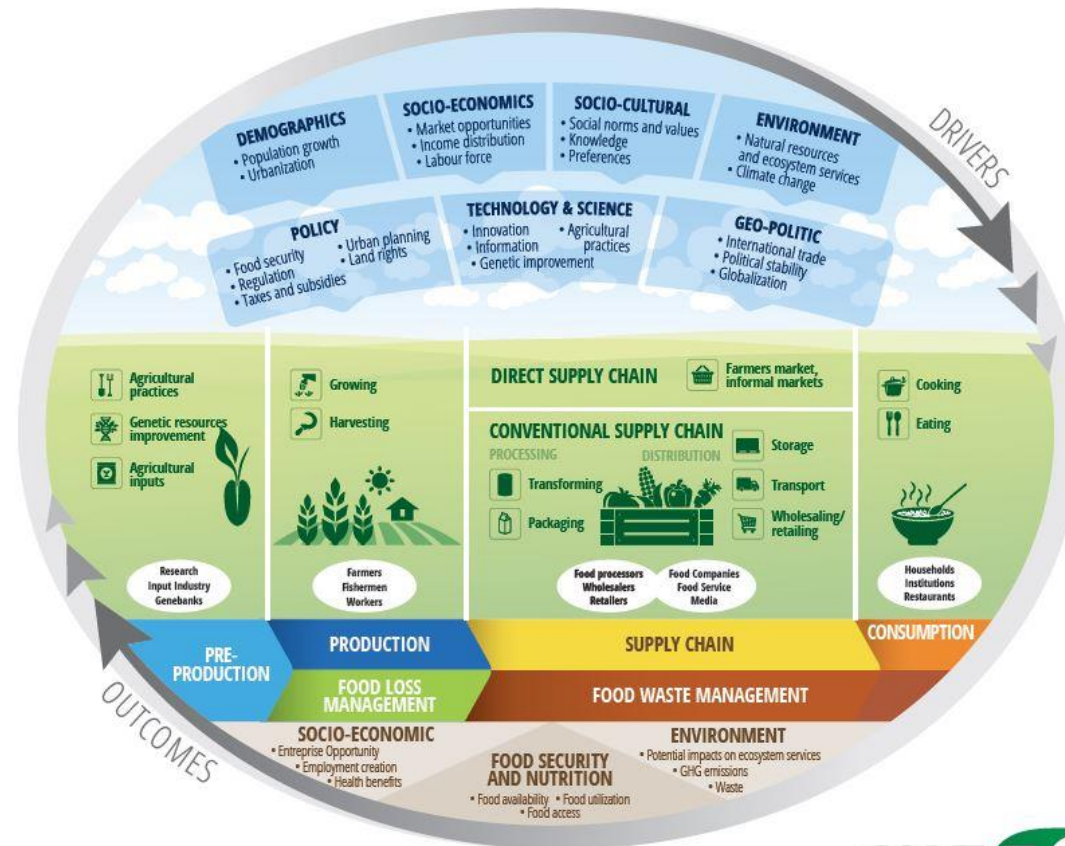
Energy Use and Food



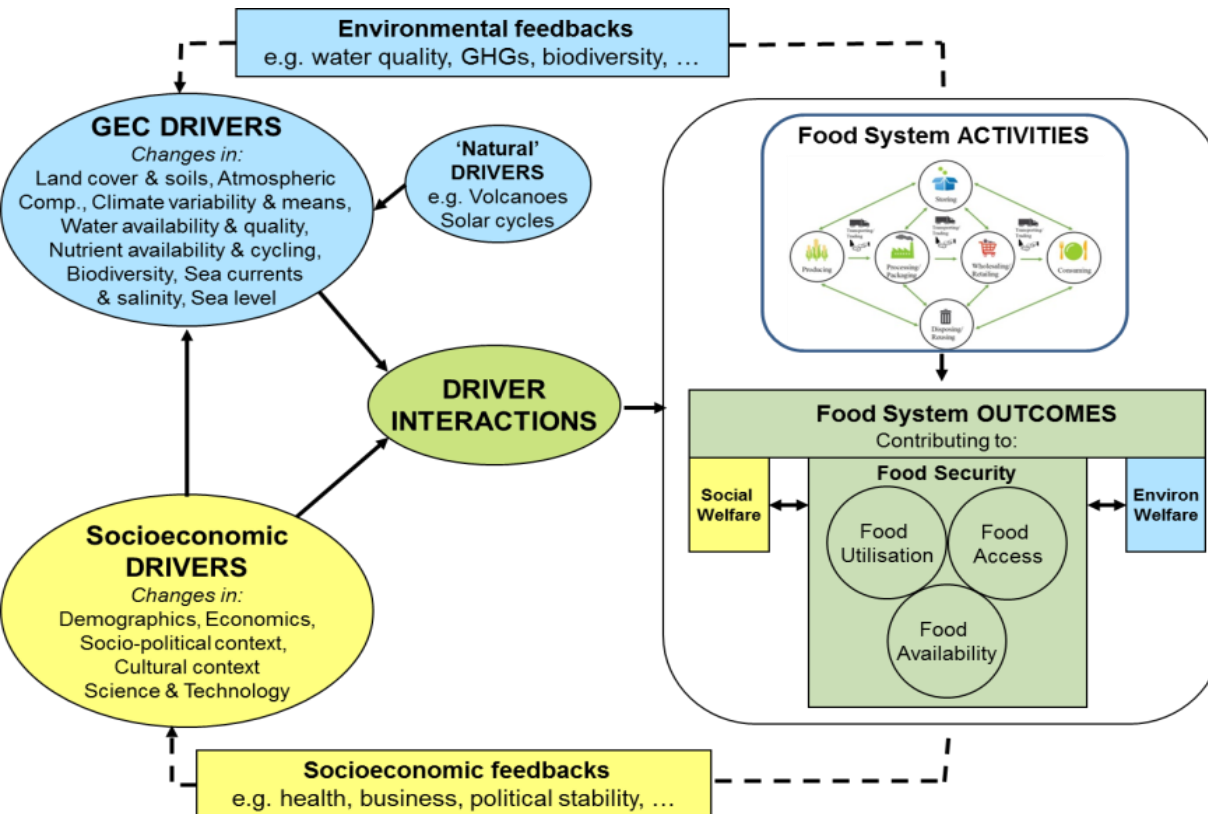
Source FAO

THE FOOD SYSTEM

DRIVERS • ACTIVITIES • ACTORS • OUTCOMES



Food Systems



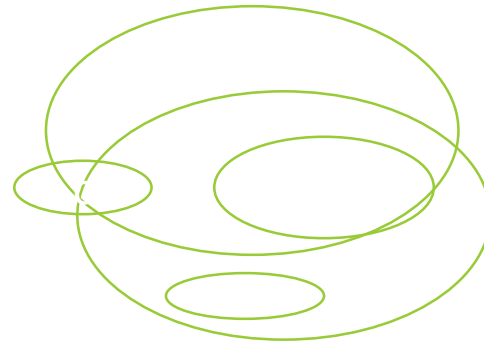
- Drivers
 - Direct
 - Indirect
- Food System Activities
 - Producing
 - Processing
 - Storing
 - Distributing
 - Consuming
 - Disposing
- Actors
 - Interests
 - Relations
- Outcomes
 - Food availability
 - Food access
 - Food utilization
 - Social/economic welfare
 - Environmental welfare

Key Elements of System

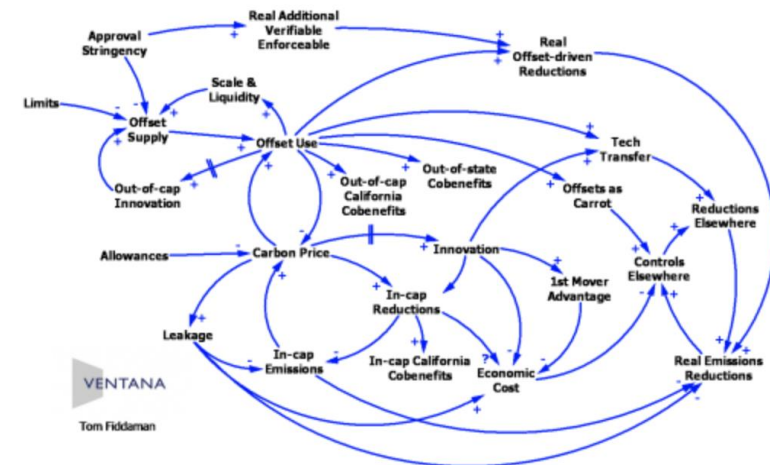
➤ Perspectives



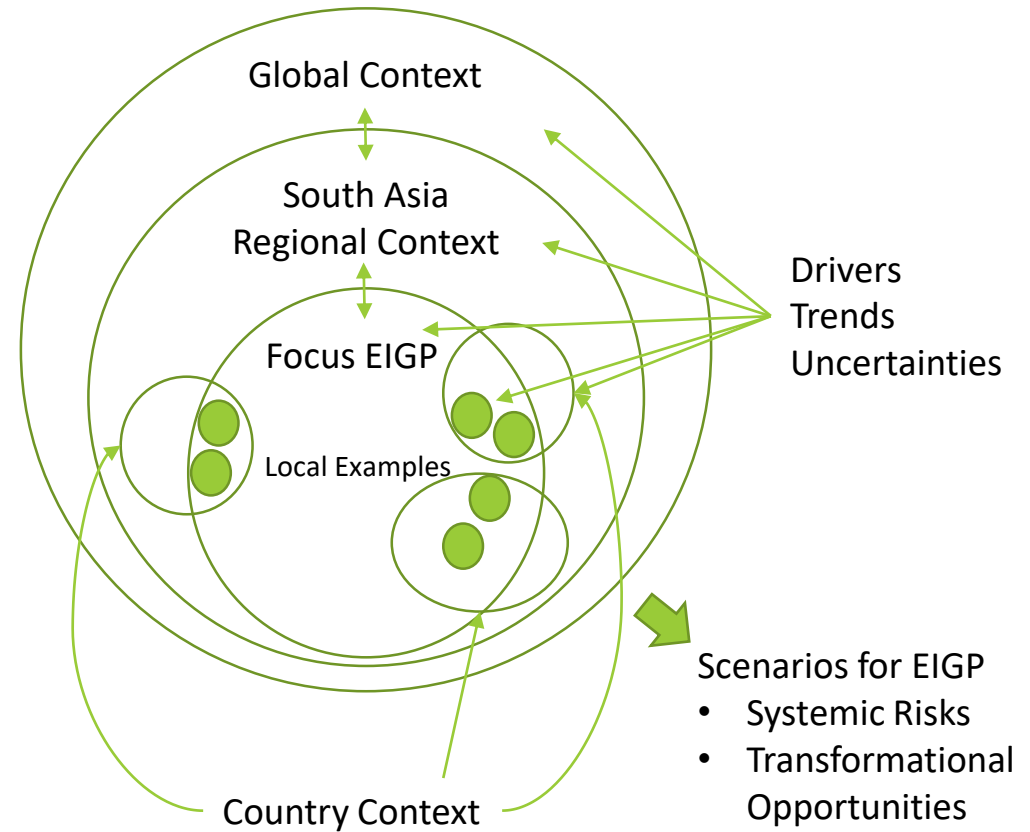
➤ Boundaries



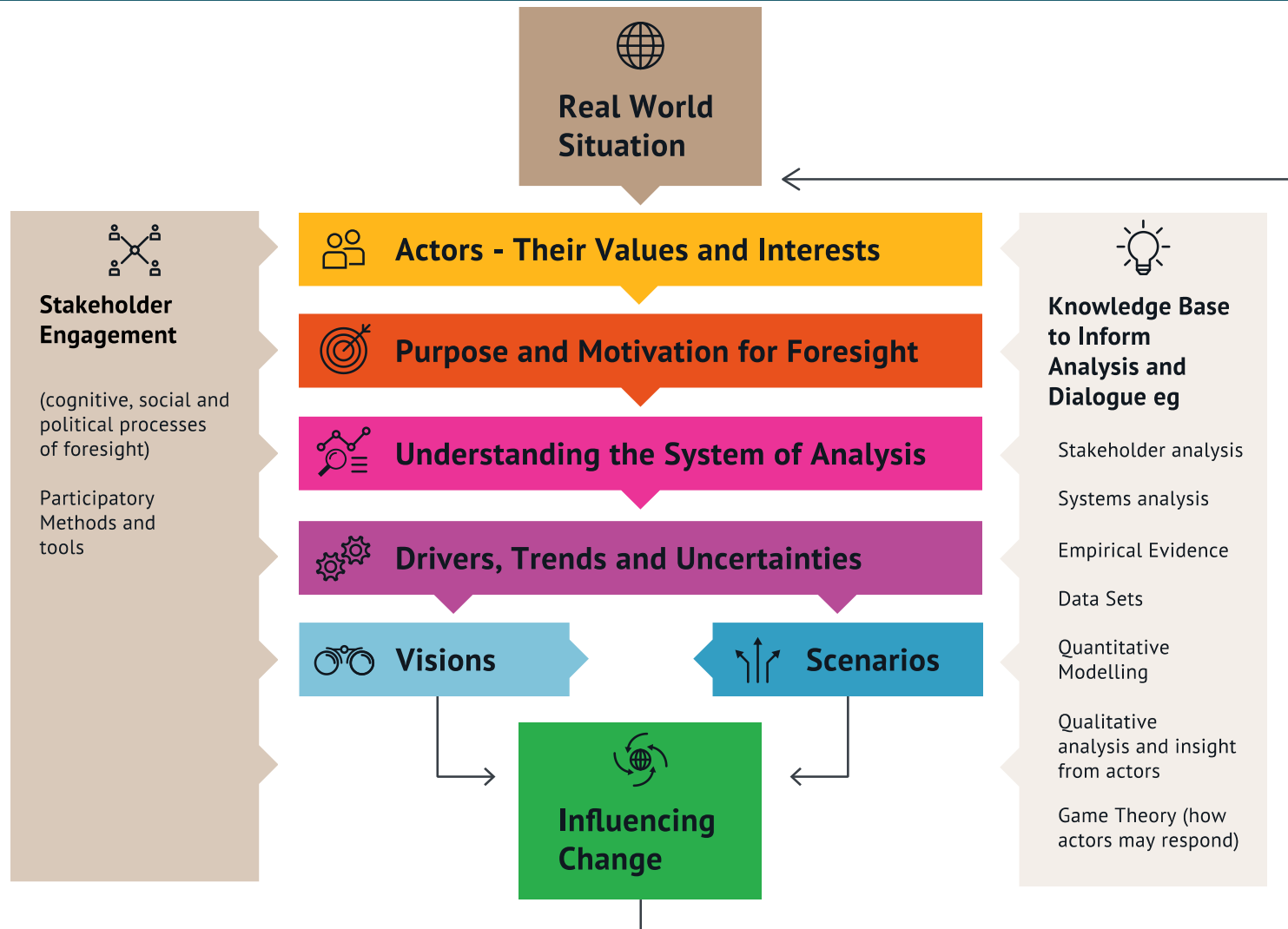
➤ Relationships



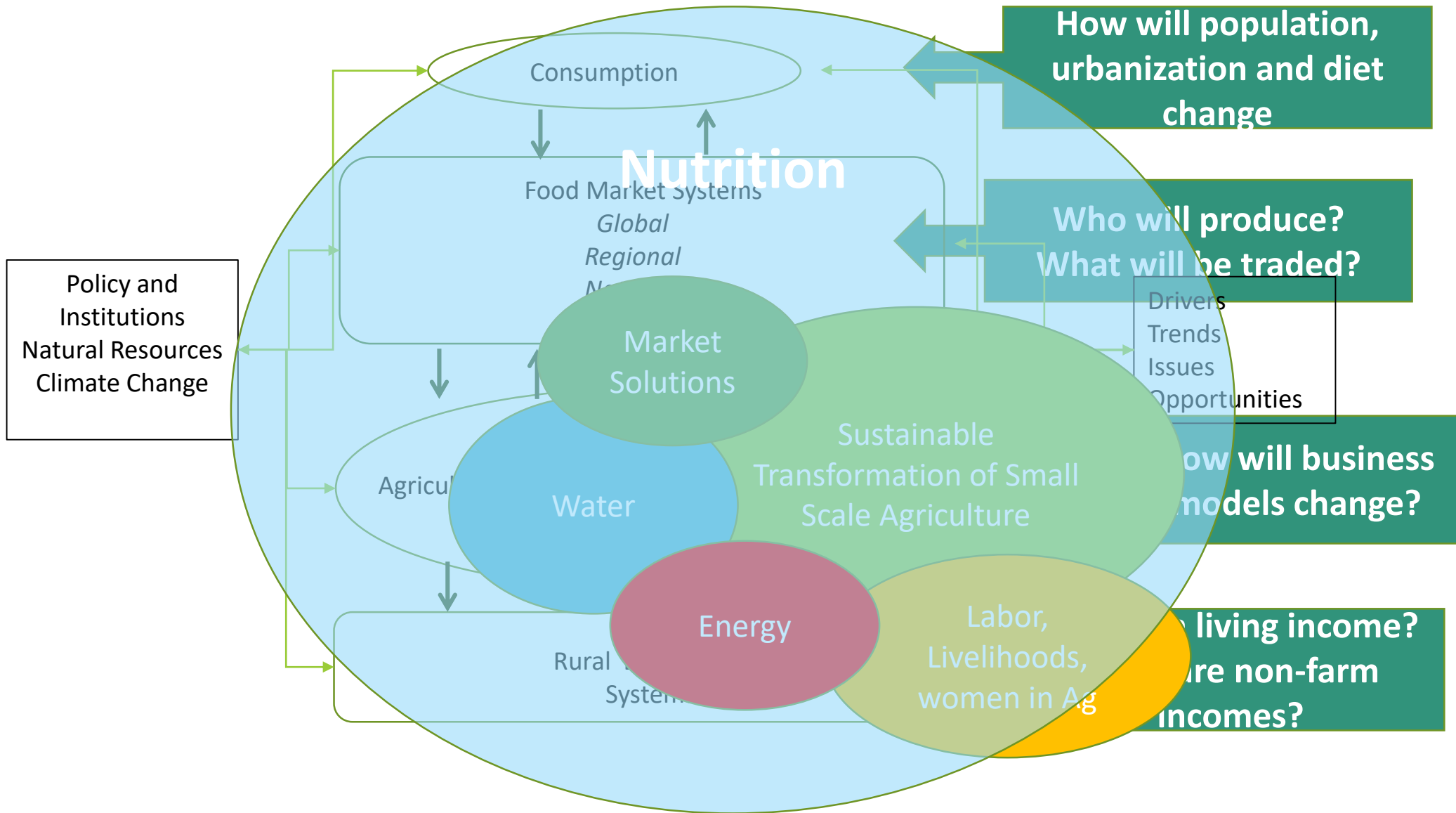
Focus and Context



Thinking about the Future – “Foresight”



System of Interest



Transformation of Small-Scale Agriculture

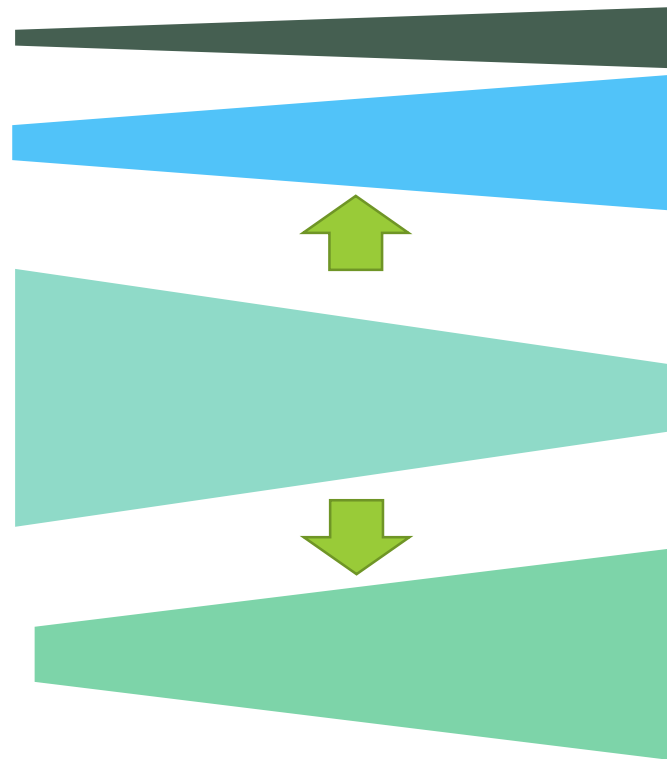
Living income

Stepping In

Stepping Up

Hanging-In

Moving-out



Getting the Policy Mix Right

Policies to support small-scale farmers to be commercial and competitive

Policies to help farmers trade-up or move out

Social protection to help those in poverty

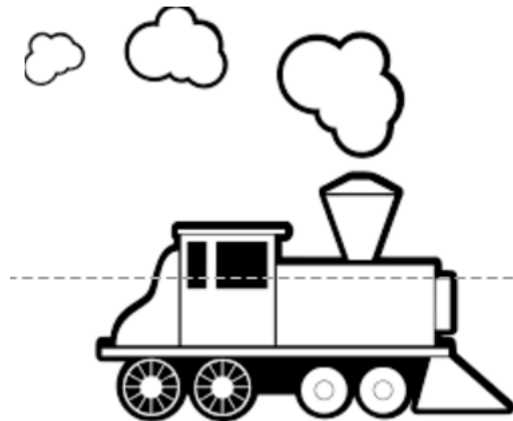
Policies to create decent jobs and provide skills

Social protection to help those in poverty

What scale of change over what period makes sense ?

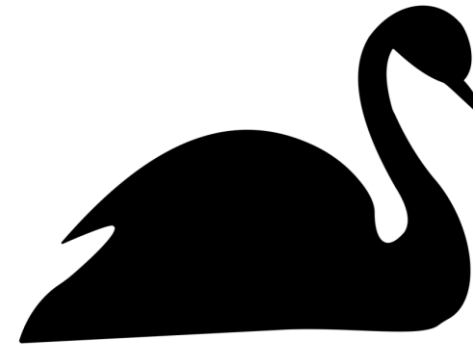
Drivers, Trends and Uncertainties

“Steam Trains”



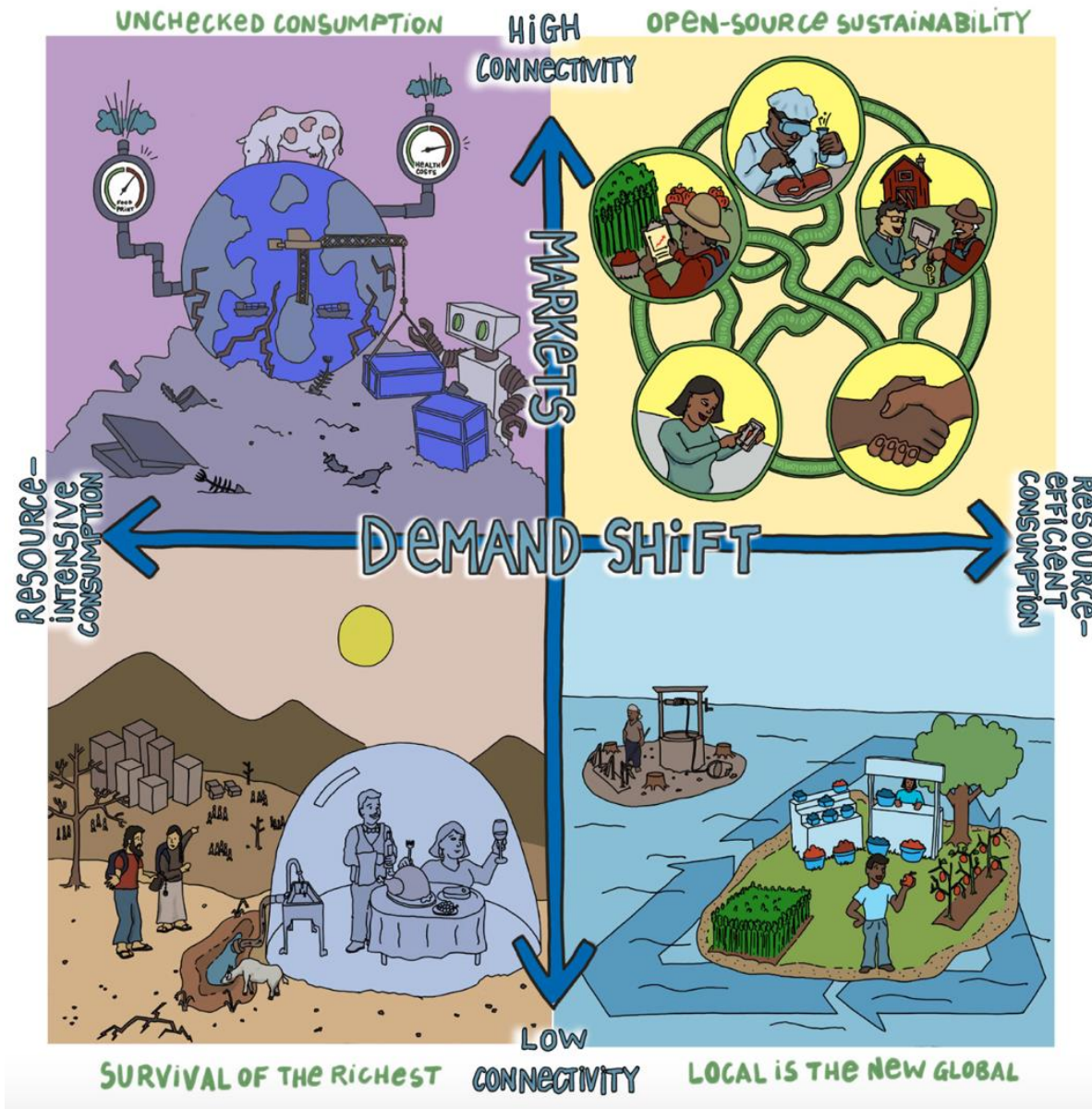
Easily perceived drivers and trends that will influence change - direct and indirect

“Black Swans”



Rare and/or unpredictable events that have a big impact

Scenarios for Exploring the future



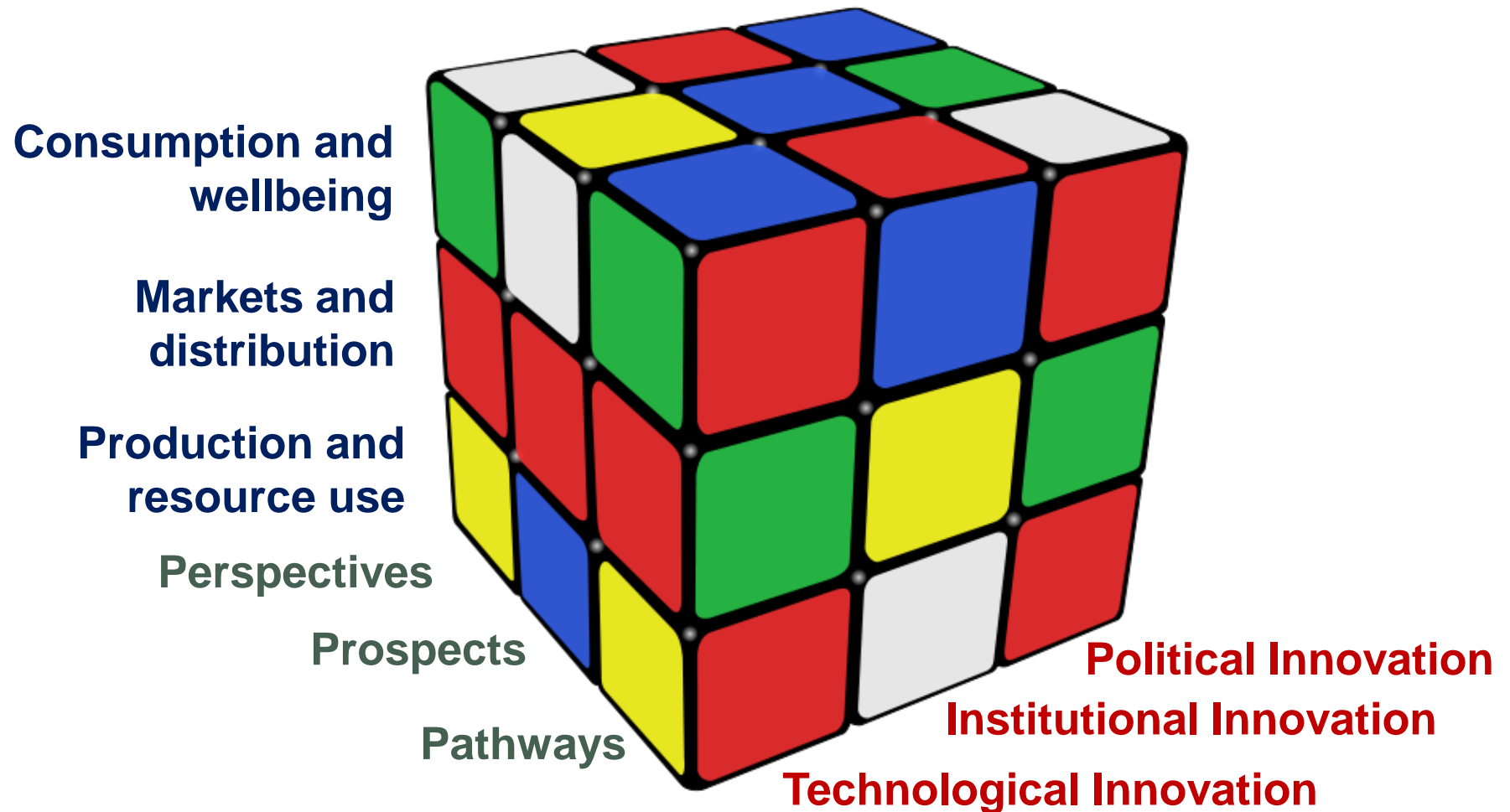
Shaping the Future of
Global Food Systems:
A Scenarios Analysis

Rich picture

- A drawing of a situation that illustrates the main elements and relationships that need to be considered in trying to intervene to create some improvement.
- A rich picture helps us to understand the complexity of an entire situation. It is a way of thinking holistically. A rich picture helps us to see relationships and connections that we may otherwise miss.
- It is called a rich picture because it illustrates the richness and complexity of a situation.



A Rubics Cube of Nexus Thinking



Thankyou

