

11-12 FEBRUARY 2025

RABAT, MOROCCO

Institut Agronomique et Vétérinaire Hassan II



WEFE NEXUS INTERNATIONAL CONFERENCE

**EXPLORING AND BRIDGING NEXUS FOR
A SUSTAINABLE FUTURE**



These projects are part of the
PRIMA programme supported
by the European Union.

WEFE NEXUS INTERNATIONAL CONFERENCE

Day 1 – 11th February 2025

SELECTED PRESENTATIONS ON GOVERNANCE AND POLICIES LINKED TO WEFE NEXUS



Unlocking sustainable pathways in the Mediterranean:
system archetypes within the WEFE Nexus.

Irene Pérez-Ramírez, Paula Antunes, Rita Lopes, Jessica Loureiro, Nuno Videira, Rui Ferrera dos Santos

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Unlocking sustainable pathways in the Mediterranean: system archetypes within the WEF E Nexus

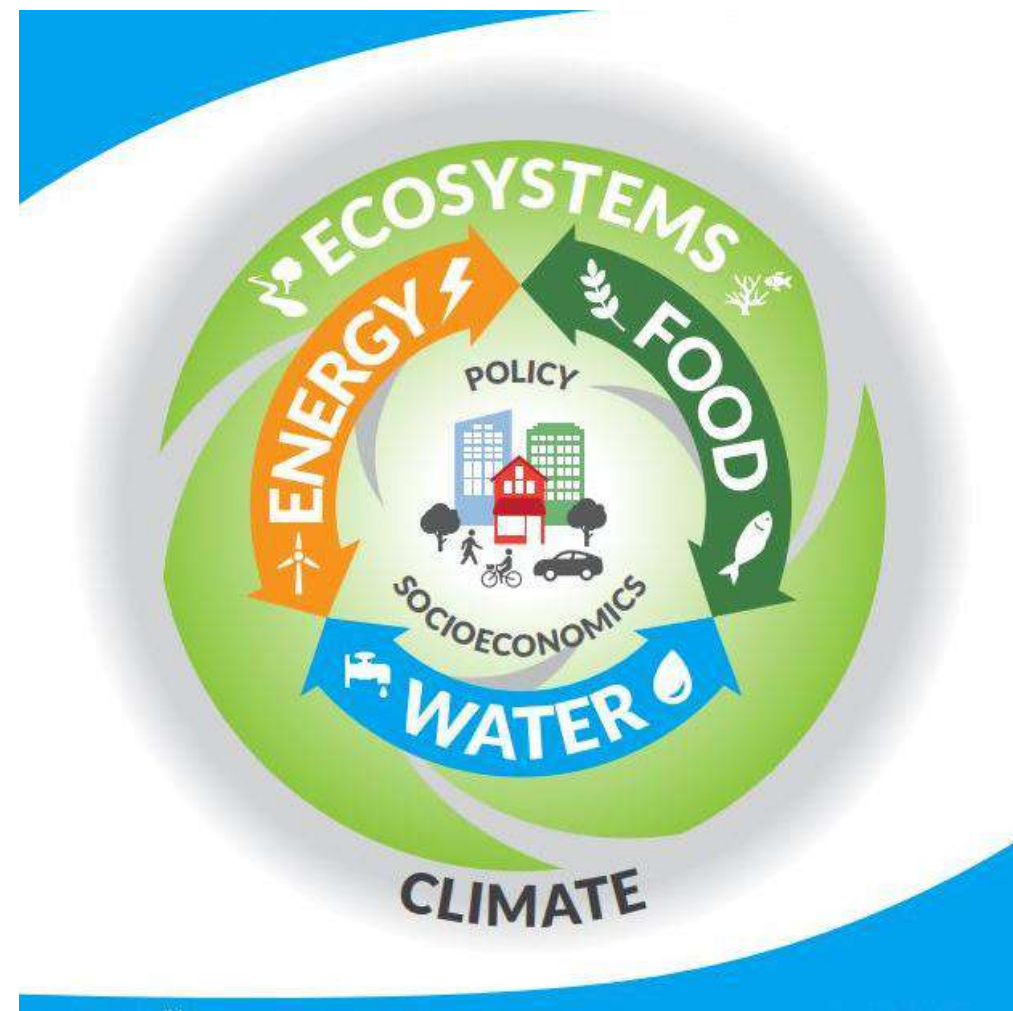
Irene Pérez-Ramírez, Paula Antunes, Rita Lopes, Jessica Loureiro, Rui Ferreira dos Santos, Nuno Videira



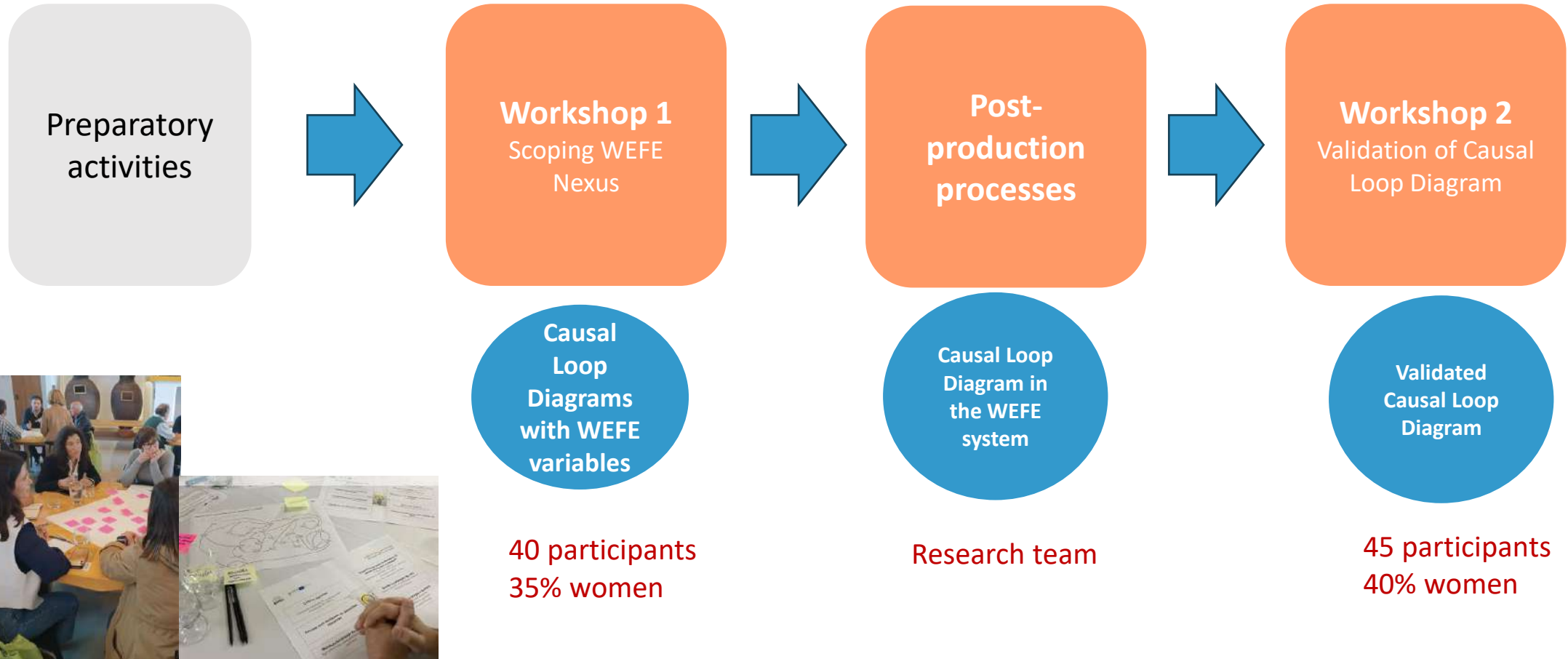
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WEFE nexus

There is extensive literature on the concept of the WEFE nexus, but the tools to support its implementation in policy-making are still not well developed



Participatory process through system thinking

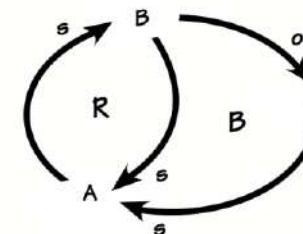




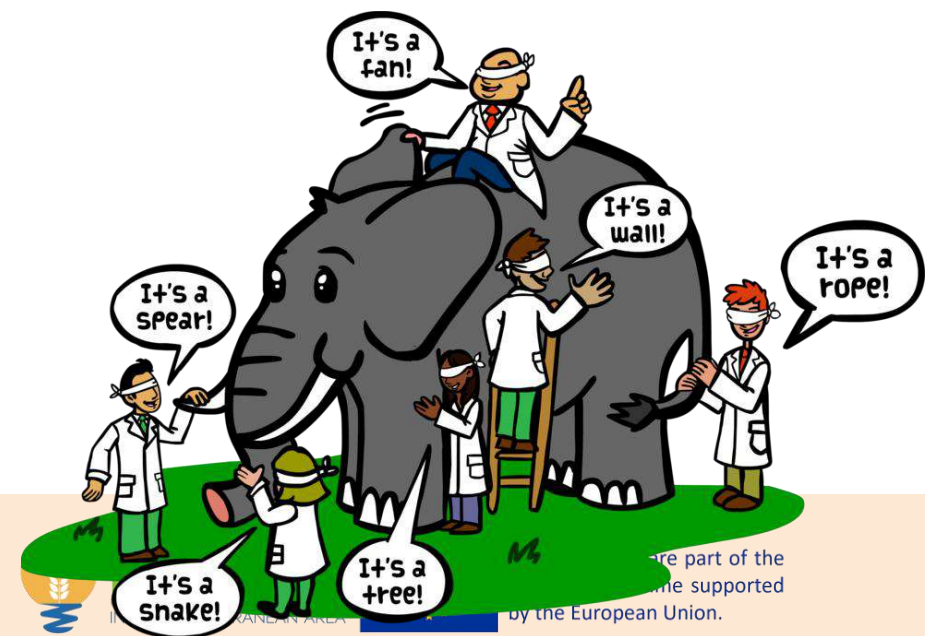
Why system thinking?

- Systemic thinking is the ability **to see the world as a complex system** in which everything is connected to everything else
- It helps us understand and **analyze complex problems**
- It allows us to see how different systems develop at **different points in time**
- It is a **communication tool**

Causal Loop Diagram



Ford A. Modelling the Environment: An introduction to Systems Dynamics Modeling. 1999

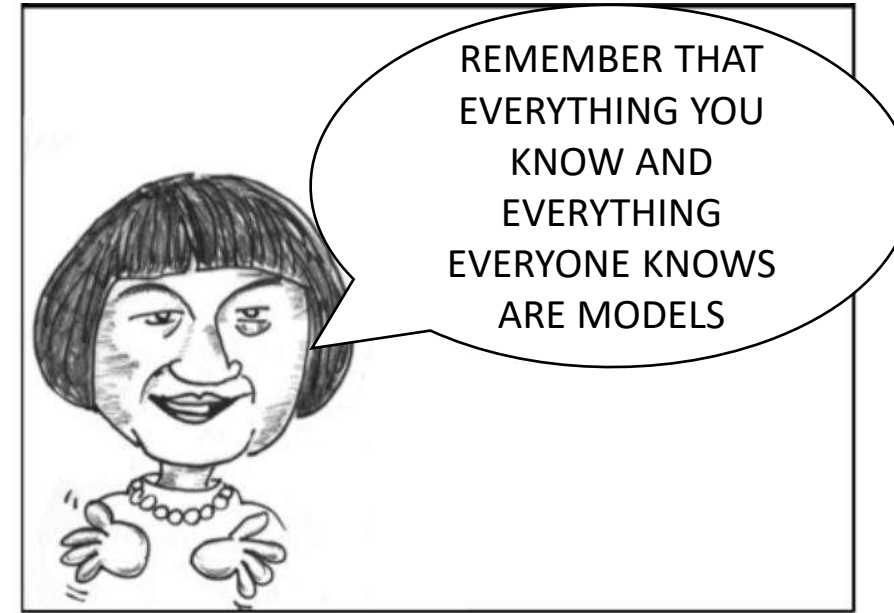


Why Archetypes?

“When subjected to the same system structure, people, even with different profiles, tend to produce similar results”

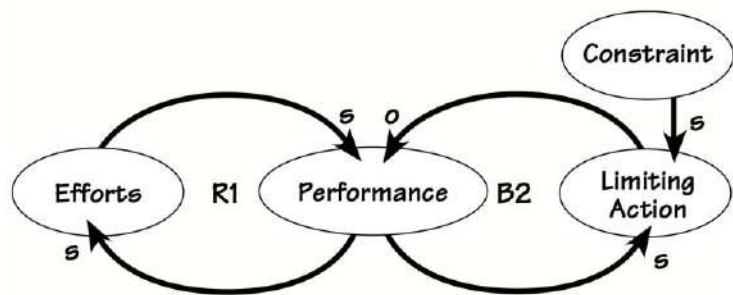
Peter S. *The Fifth Discipline* (1990)

- They are **common system structures** that produce characteristic behavior patterns.
- They aim **to understand the patterns** that determine how different systems behave, interact, and influence each other.

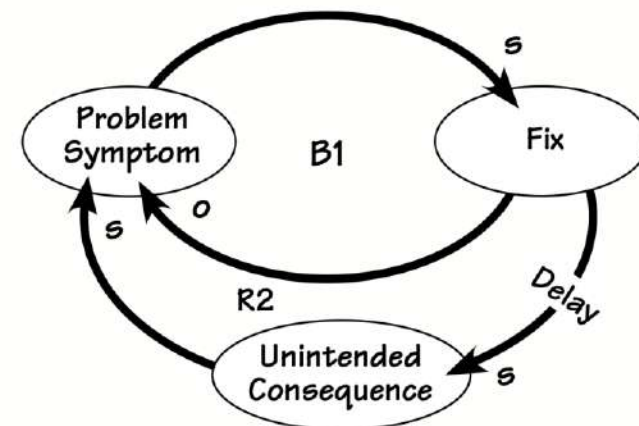


Meadows D. *Thinking in Systems* (2010)

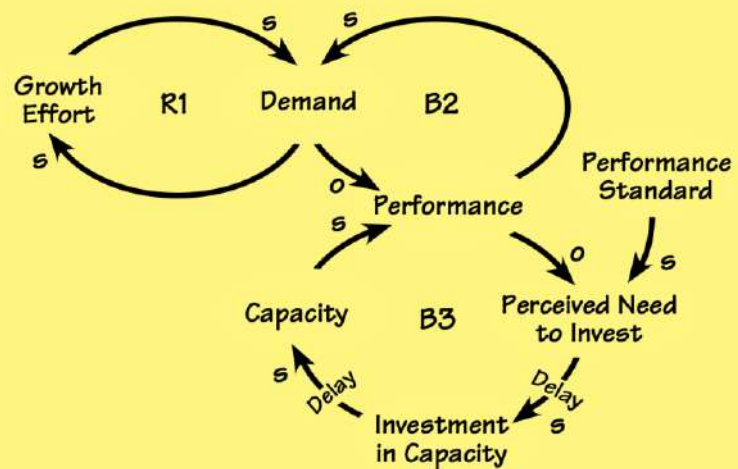
Limits to Success



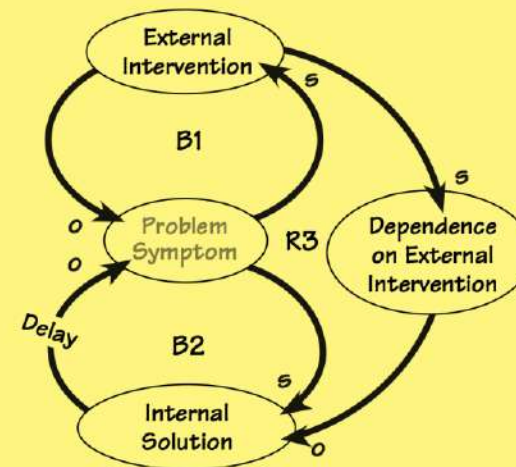
Fixes That Fail



Growth and Underinvestment

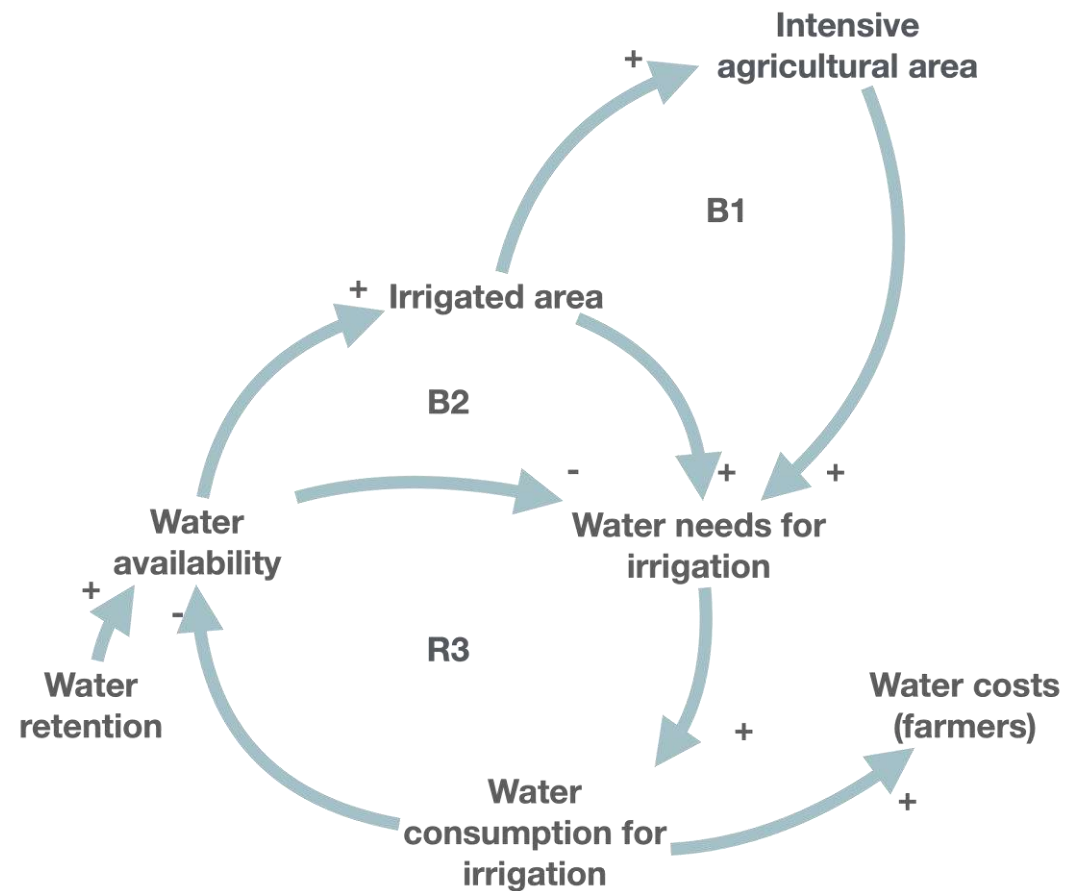
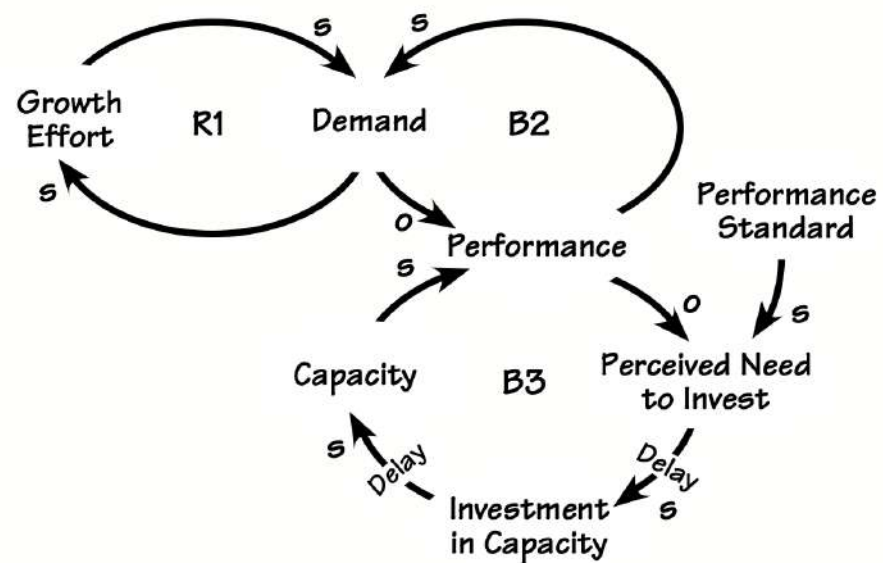


Shifting the Burden/Addiction



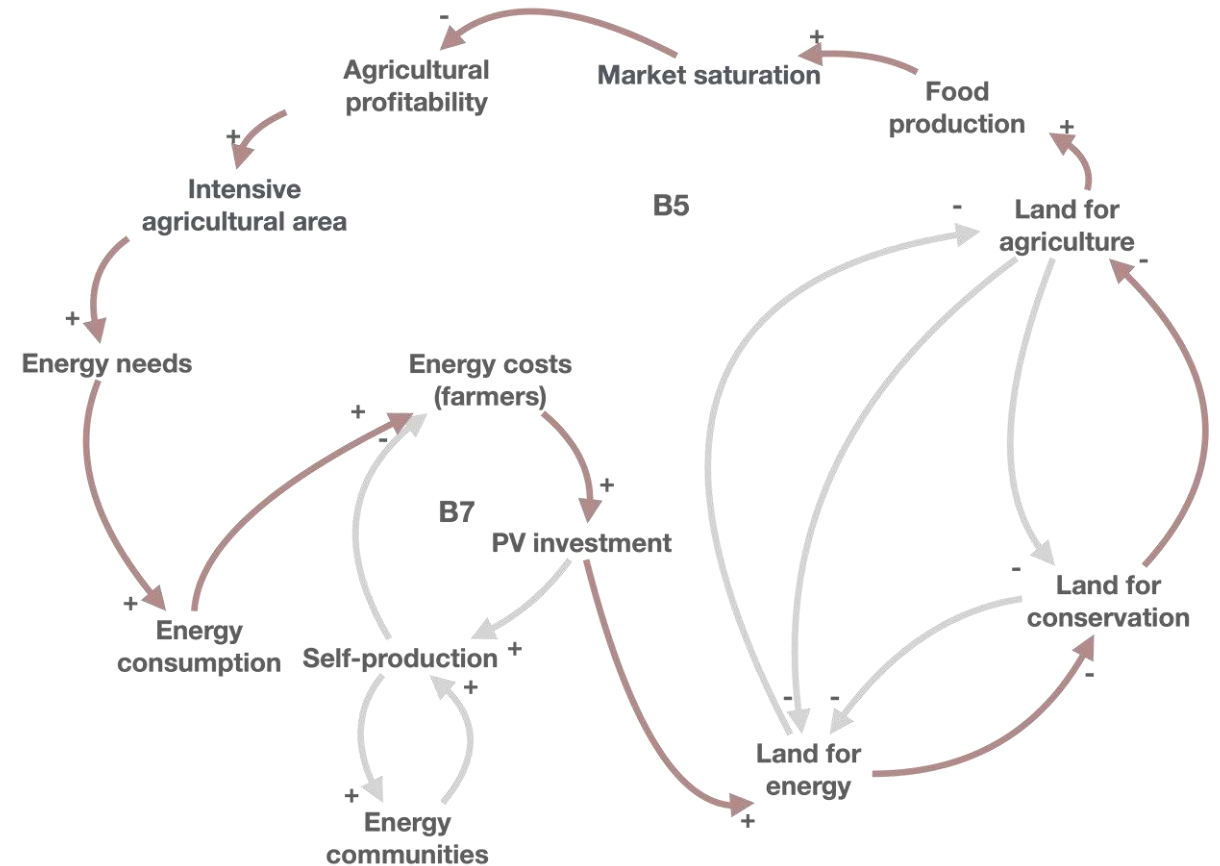
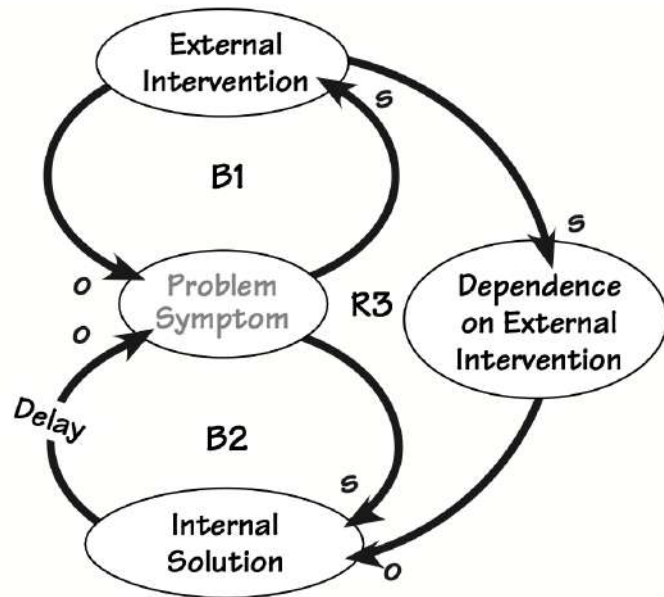
Growth and Underinvestment

Growth and Underinvestment

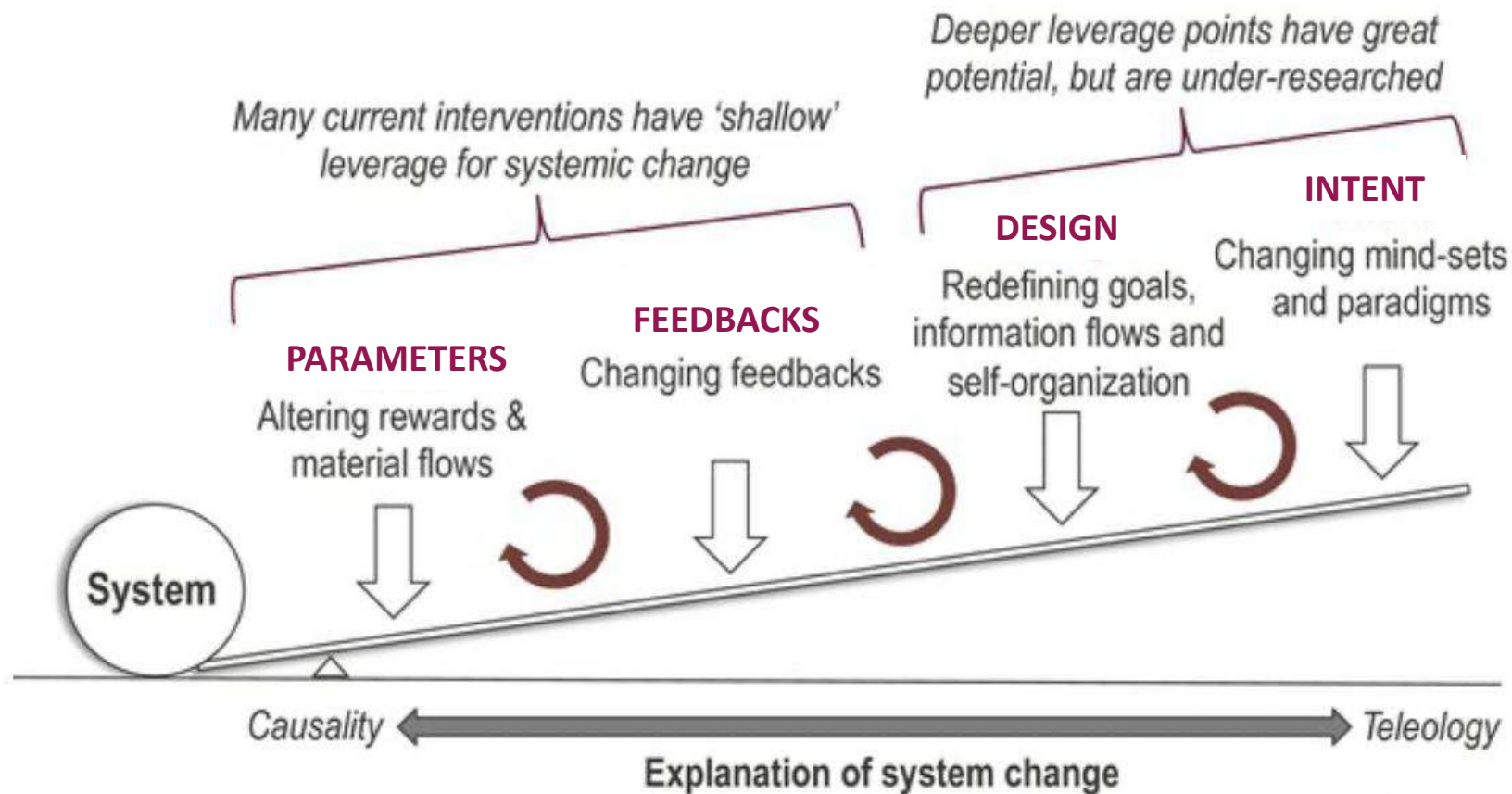


Shifting the burden

Shifting the Burden/Addiction



Leverage point for resolving the archetype



Fischer and Riechers 2019

Leverage point for resolving the archetype

Growth and Underinvestment

Feedback

Strengthen balancing loops
Reduce the strength of reinforcing loops

Water efficiency

Irrigation plan suited to the state of the crops and weather conditions

Water storage infrastructures

Reuse of waste water for irrigation

Design

Information flow
Self-organisation

Agricultural valorisation strategies:

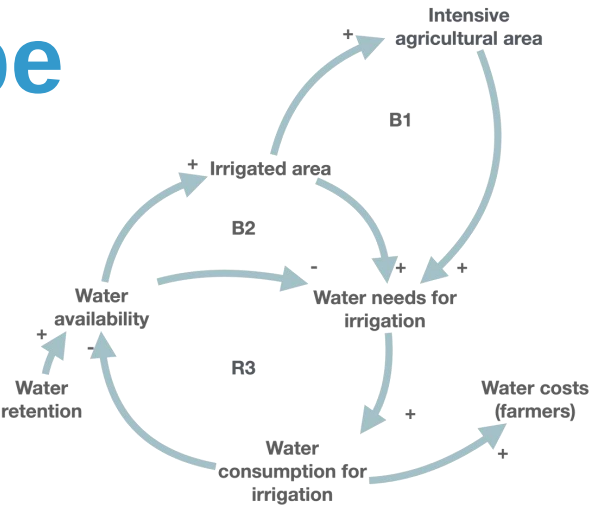
National and local market valorisation

Individual consumer choice and awareness

Environmental education and awareness

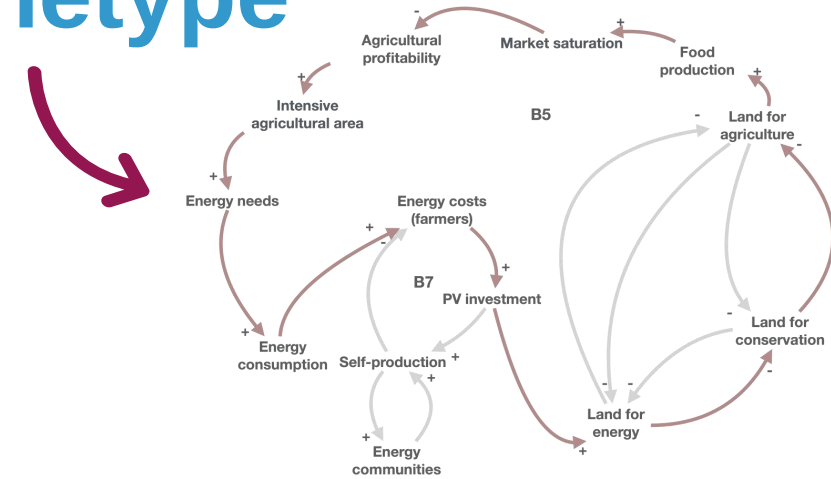
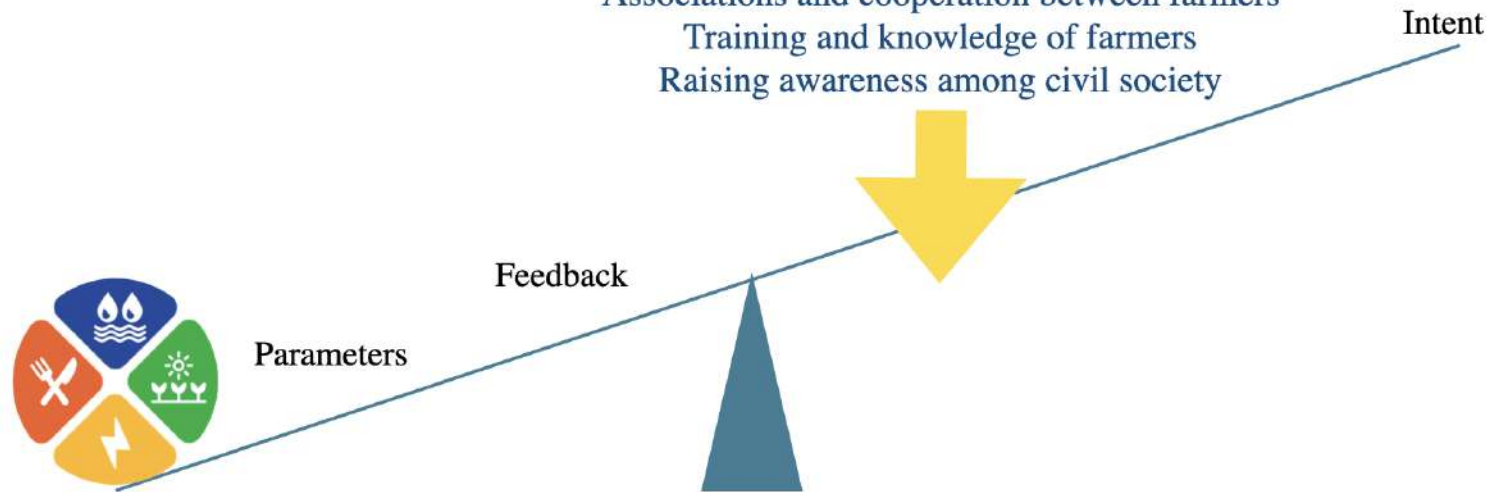
Intent

Parameters



Leverage point for resolving the archetype

Shifting the Burden





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@PrimaProgram