



Upscaling socio-technical bundles of innovation based on nature positive or agro-ecological principles : theory, methods and feedback from experience

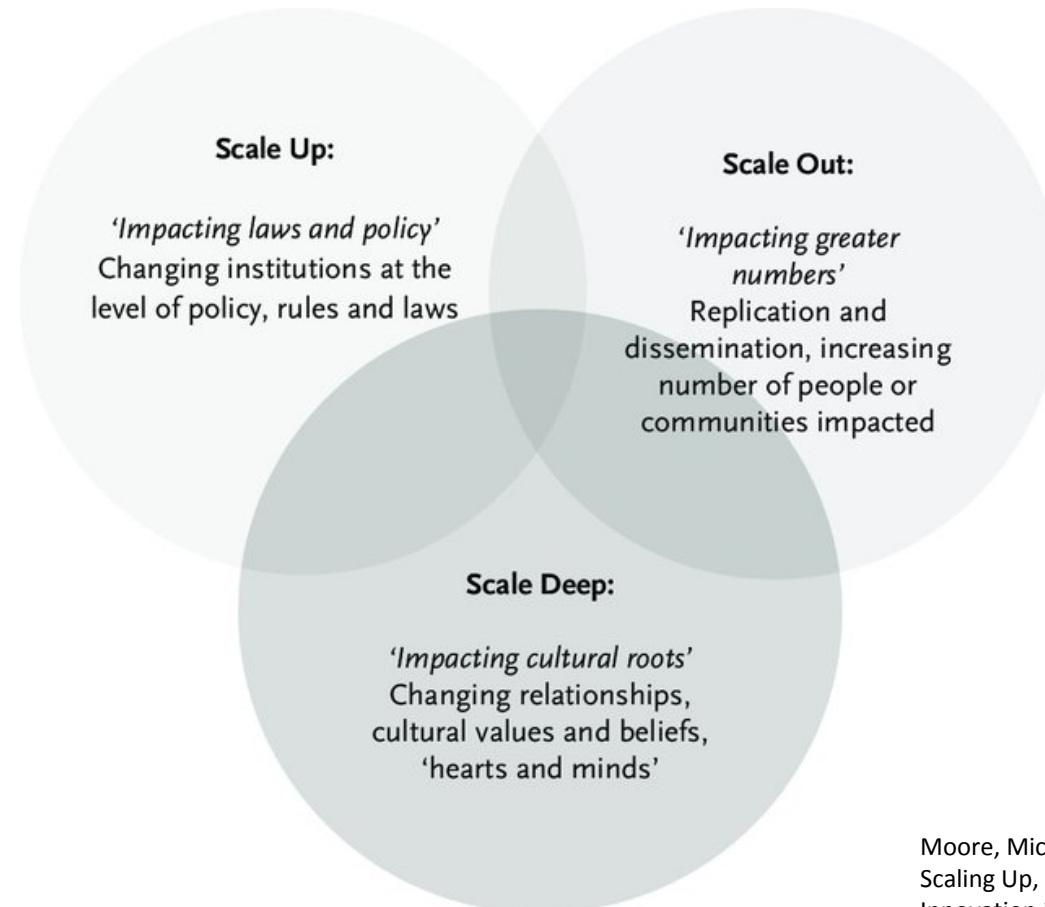
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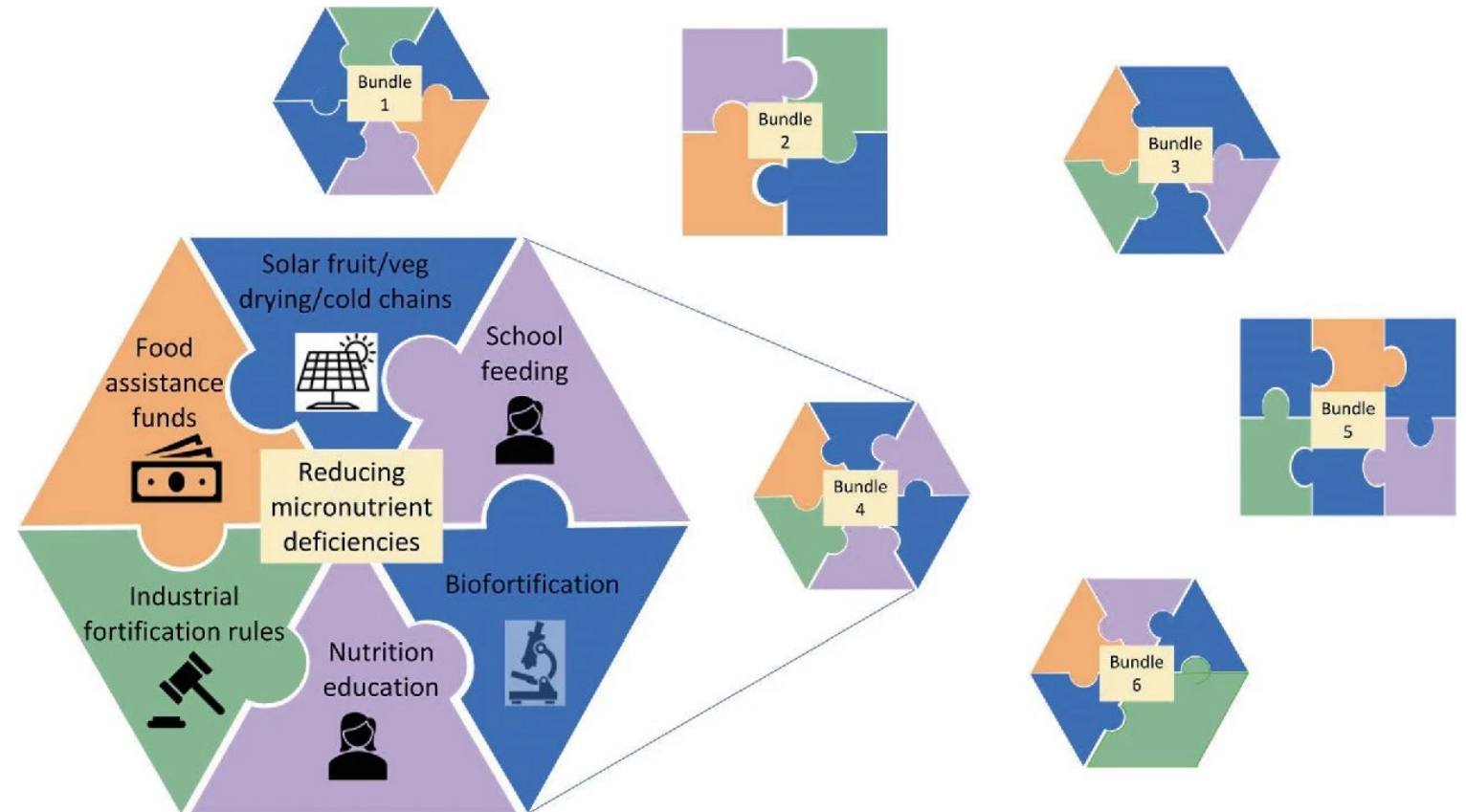
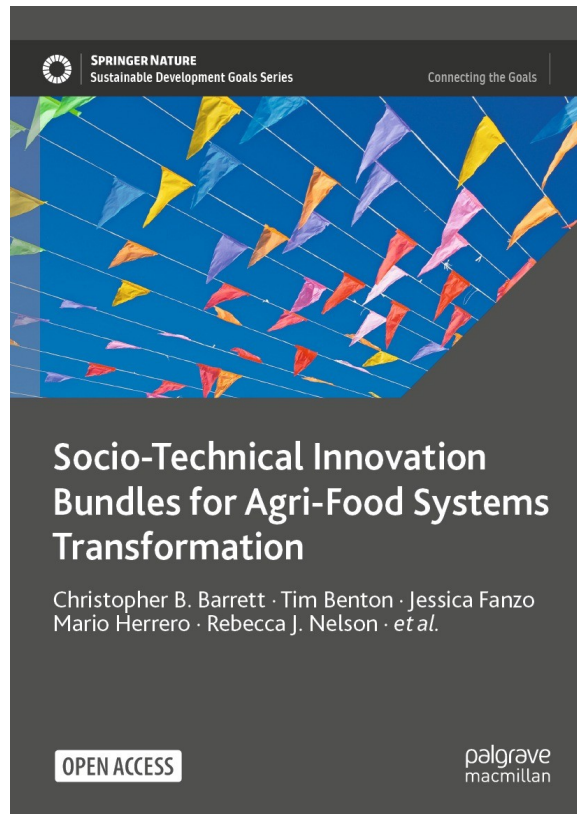
Upscaling

Outscaling refers to the spreading of something within the same sphere (replication, multiplication, mainstreaming and expansion) while **Upscaling** refers to the creation of conducive conditions and policies (institutionalization) for scaling.



Socio-technical innovation bundles (STIBs)

Socio-technical innovation bundles (STIBs) are contextualized combinations of interrelated technical advances and social, organizational and policy/institutional enablers that are packaged for impactful implementation and scaling.



Barrett, C.B. *et al.* (2022). Socio-Technical Innovation Bundles for Agri-Food Systems Transformation. In: Socio-Technical Innovation Bundles for Agri-Food Systems Transformation. Sustainable Development Goals Series. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-88802-2_1

What is Nature-Positive Agriculture?

UN Food Systems Summit Definition

- Agriculture system based on **regenerative, non-depleting and nondestructive use of natural resources**
- **Stewardship** of the environment and biodiversity (in the face of climate change and other global environmental challenges like deforestation)
- **Protect, sustainably manage and restore** the productive system
- Ensure **food security and nutrition** for a growing population

Agroecology



Sustainable
Intensification of
Mixed Farming Systems



DIVERSITY



CO-CREATION AND
SHARING KNOWLEDGE



SYNERGIES



EFFICIENCY



RECYCLING



RESILIENCE



HUMAN AND
SOCIAL VALUES



CULTURE AND
FOOD TRADITIONS

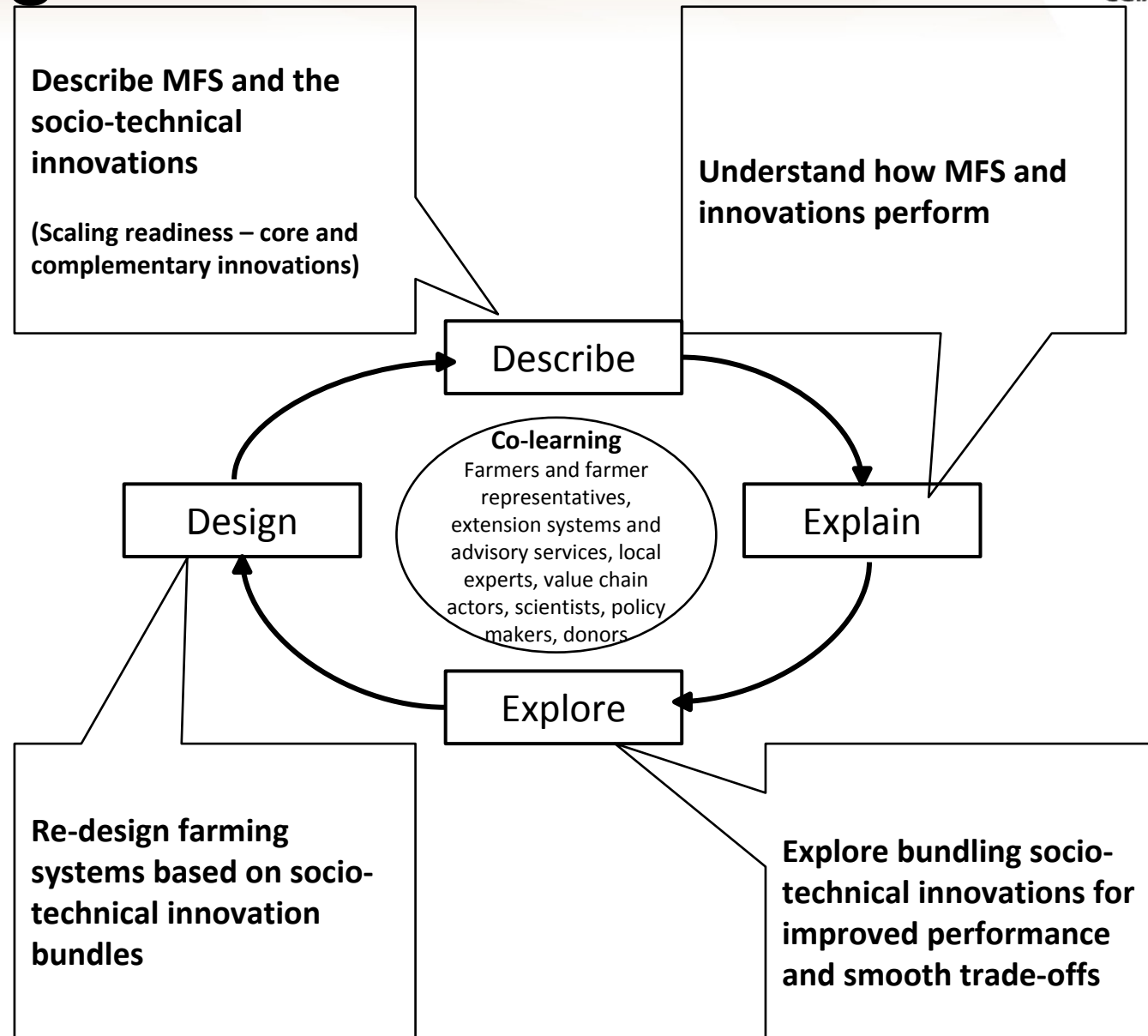


RESPONSIBLE
GOVERNANCE



CIRCULAR AND
SOLIDARITY ECONOMY

DEED in Si-MFS



Sembrando Vida in Mexico

- National policy on reforestation to strengthen rural communities
- Payment to farmers to establish trees
- Eco-regional selection of species and (agro)forestry systems.
- Production and distribution of seedlings by the state
- Technical advice and on-ground implementation/monitoring by governmental state extension.



Sembrando Vida in Mexico

National policy on reforestation to strengthen rural communities
Payment to farmers to establish trees
Eco-regional selection of species and (agro)forestry systems.
Production and distribution of seedlings by the state
Technical advice and on-ground implementation/monitoring by governmental state extension.

Some criticism:

Too vertical and state dependent
Too expensive
With un-intended effects (deforestation)
Sometimes non-adapted to local reality (e.g mixed-crop livestock systems)



CA in NW India (IGP)



Sustainable
Intensification of
Mixed Farming Systems

Improved agronomic practices (CA) for W-R cropping system

Credit schemes and subsidies for machinery acquisition

Capacity development of farmers, services providers, extension agents and machinery manufacturers



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Important impact:

Increased overall performance of the cropping system (Higher yield and yield stability, increased RUE, lower less environmental externalities and room for diversification and intensification)

More than 1 Million Ha under improved system in a decade

www.cgiar.org



Concluding remarks (interrogations)

Upscaling socio-technical bundles of innovation based on nature positive or agro-ecological principles

Upscaling implies transforming norms and institutions (e.g. markets, programs and policies)

Socio-technical innovation bundles are very context specific (Agroecology and nature+) and will take different forms (innovations and the way there are bundled)

Generic frameworks with specific (fit for purpose and context) methods and tools may help in the support of guide the development of socio-technical bundles.

BUT:

Are the different concepts (upscaling, STIBs) irreconcilable?

What is the level or scale at which these two concepts can be aligned?



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THANK YOU