Resilience offers escape from trapped thinking on poverty alleviation

Steven Lade

Institute of Australian Geographers Conference

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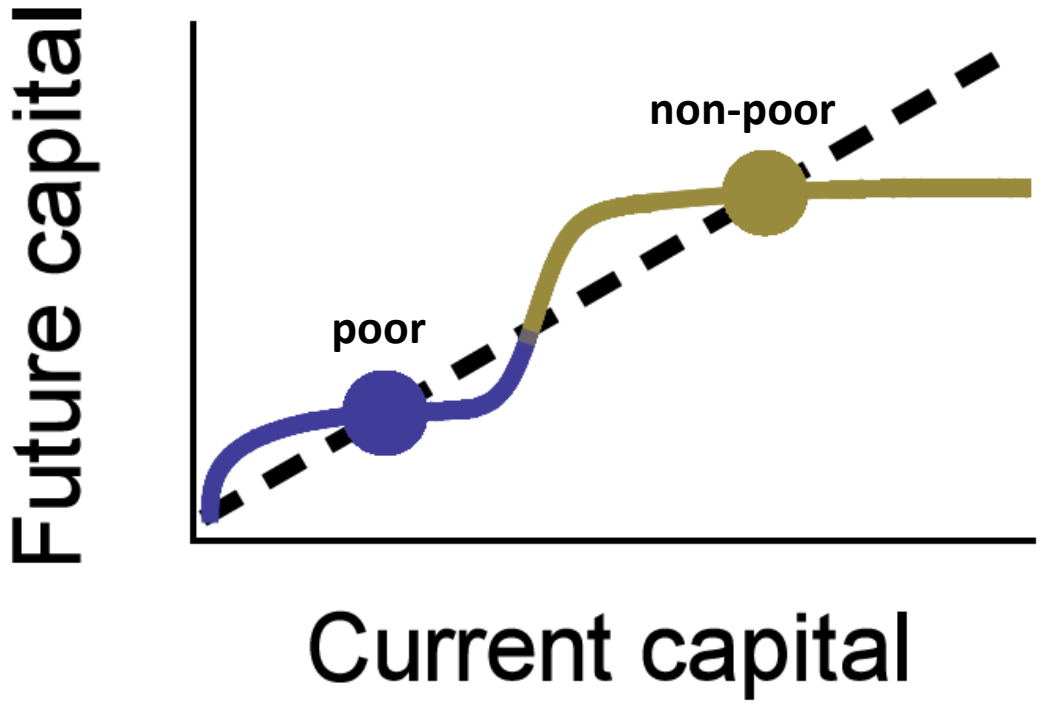
Poverty traps

A situation in which self-reinforcing mechanisms maintain poverty



This representation:

+ Encourages focus on persistent poverty

- Ignores the multiple dimensions of poverty

- Encourages interventions based around asset inputs that can backfire (Easterly 2006)

Goals

Even when playing on economists' turf, to:

- Challenge and extend the dominant narrative about poverty traps
- Show how conventional asset inputs are not always effective (even under narrow economic understandings of poverty)
- Highlight under-represented narratives about poverty
- Study how effective poverty alleviation depends on context

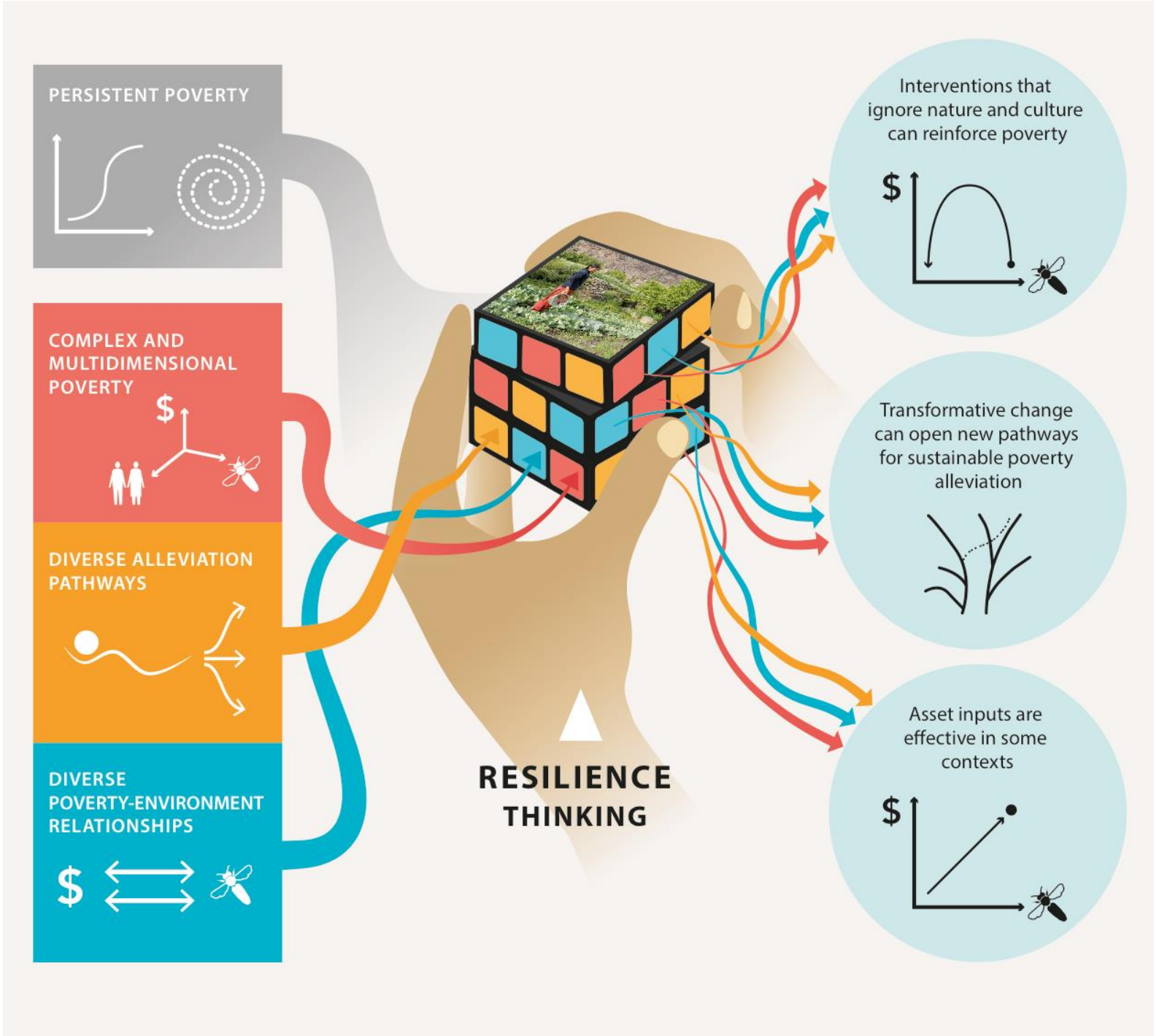
SCIENCE ADVANCES | REVIEW

DEVELOPMENTAL ECONOMICS

Resilience offers escape from trapped thinking on poverty alleviation

Steven J. Lade,[1,2*†] L. Jamila Haider,[1*†] Gustav Engström,[3] Maja Schlüter[1]

Lade *et al.*, *Sci. Adv.* 2017;**3**:e1603043 3 May 2017


PERSISTENT POVERTY
COMPLEX AND MULTIDIMENSIONAL POVERTY
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DIVERSE ALLEVIATION PATHWAYS
DIVERSE POVERTY-ENVIRONMENT RELATIONSHIPS
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RESILIENCE THINKING
Interventions that ignore nature and culture can reinforce poverty
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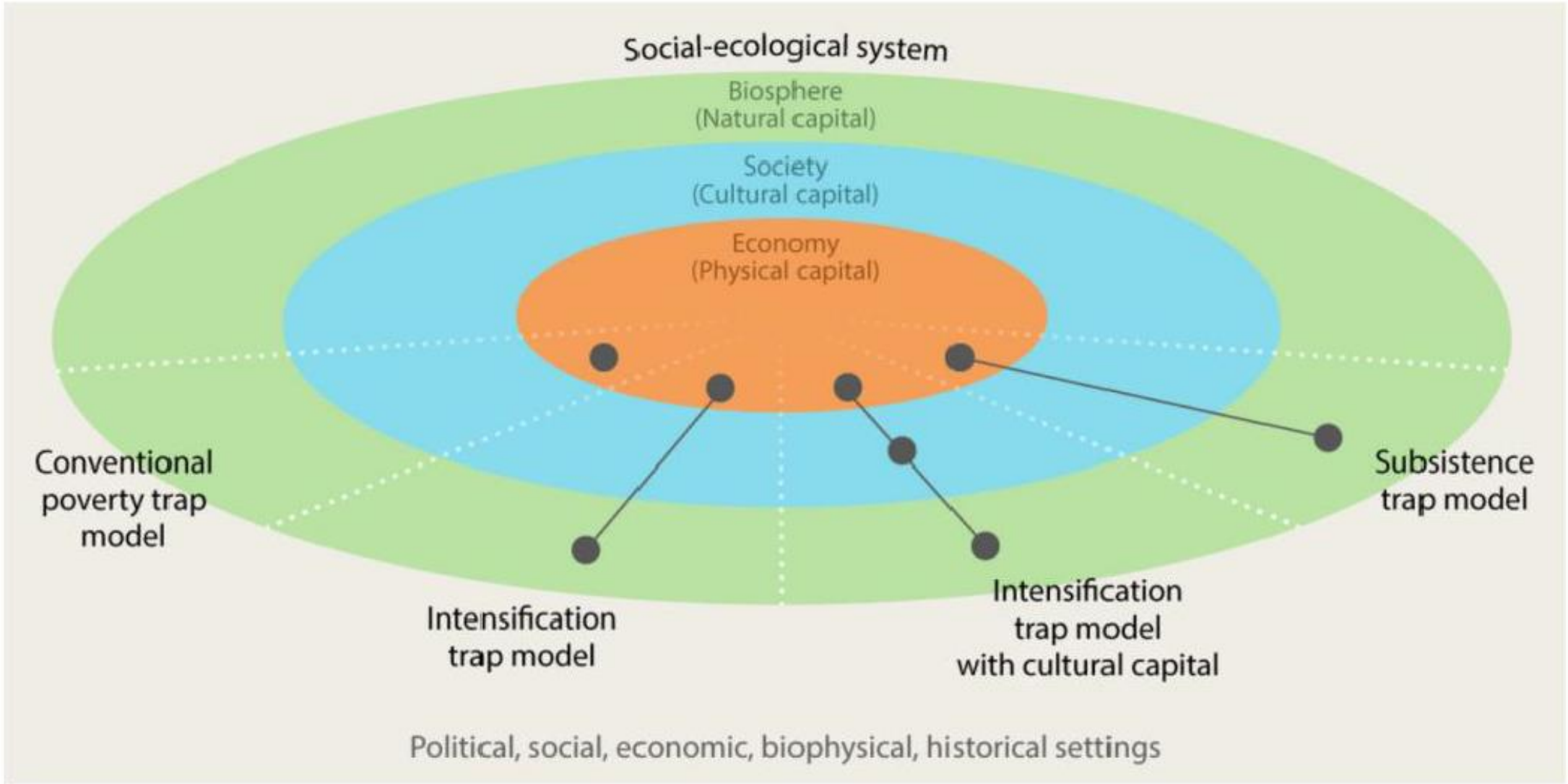
Transformative change can open new pathways for sustainable poverty alleviation
Asset inputs are effective in some contexts
$

Photo:
Jamila Haider

Middle-range theory (Merton)

- From empirical cases, construct theories that apply across a range of cases
- But do not aim to be universal

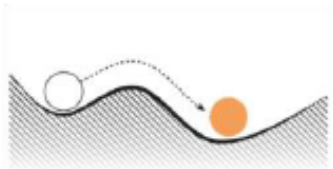
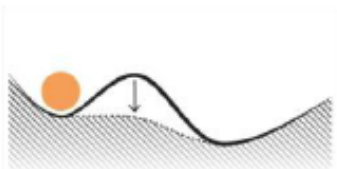
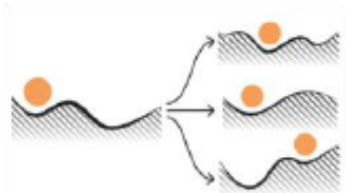
COMPLEX AND MULTIDIMENSIONAL POVERTY



Social, economic, political and environmental contexts (such as power relationships) influence which relationship holds in a given place

Relationship	Assumption/Observation
Poverty and environmental degradation	• **Poor people degrade the environment** (e.g. due to political and socio-economic relations) • **Poor people do not degrade the environment**
Conventional agricultural intensification and environmental degradation	• **Intensification degrades** • **Intensification does not degrade**
Sustainable intensification and environmental degradation	• Sustainable intensification works • Sustainable intensification can be 'greenwash'
Economic development and environmental degradation	• Environmental Kuznets curve holds • Environmental Kuznets curve does not hold
Traditional knowledge and environmental conservation	• **Traditional knowledge and practice conserve the environment** • People should decouple from agricultural land to conserve the environment

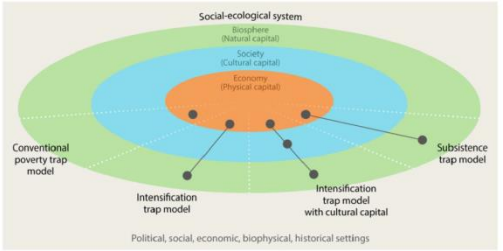
DIVERSE ALLEVIATION PATHWAYS

	Type I Push over the barrier	Type II Lower the barrier	Type III Transform the system
Description	External asset input to the poor state to move it over the barrier	Change in practice to lower the barrier to an existing non poor state	Reconfiguration of system structure in fundamentally novel ways
Ball and cup representation (93)			
Examples (we focus on agricultural systems; additional examples provided in shaded area)	Agricultural inputs: improved seeds, fertilizer, machinery Cash transfers	Access to markets Market liberalisation Savings groups	Agroecological farming principles or movement to conserve or enhance ecological system while promoting social justice (51). Often endogenously driven. Fair trade (50): Social and environmental justice through changes in relationship of labour and production
	Natural resources: dam for extra water supply	Change in practice to maintain soil moisture Improvements in irrigation efficiency	
	Health facilities: Hospitals, bed nets	Behavioural changes that reduce disease transmission	
	Educational facilities: schools, books, computers	Trained and educated teachers/doctors for school/hospital	
Mathematical implementation	Input to capitals	Changing parameters that change strengths of existing mechanisms	Modify or add processes Change system goals

Stylised dynamical model

1. Start from conventional poverty trap model of physical capital
2. Add natural and cultural capital dimensions
3. Use relationships from literature to code causal mechanisms in model
4. Apply different poverty alleviation pathways
5. Find emergent result

$$\frac{dk_P}{dt} = s(k_P)f(k_P) - (\delta_P + n)k_P$$



Relationship	Assumption/Observation
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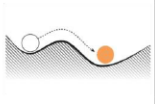
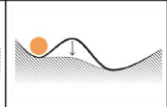
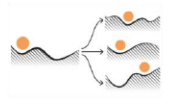
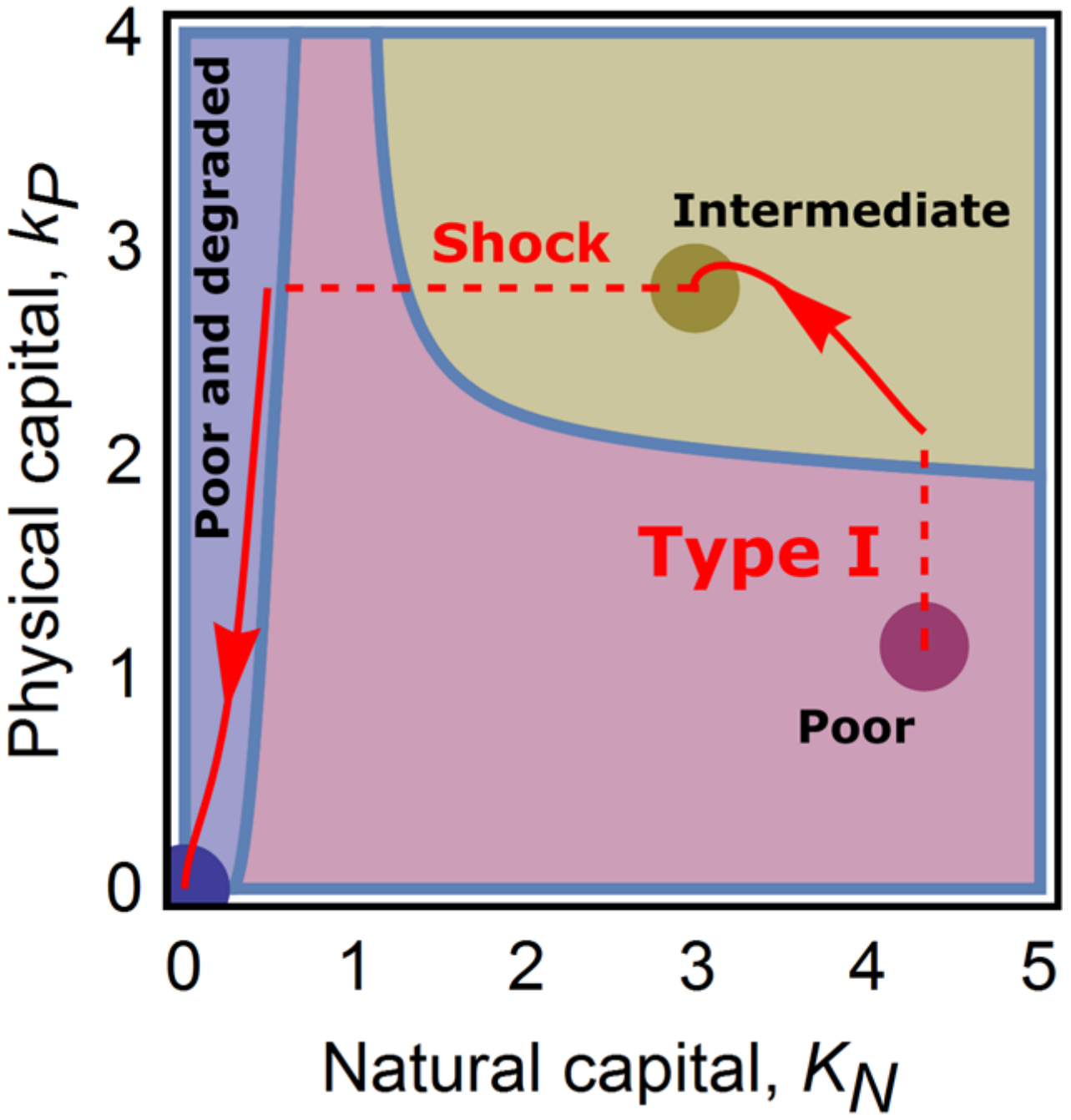
Ball and cup representation (93)			

Physical capital
Natural capital

Poor do not degrade
Intensification degrades

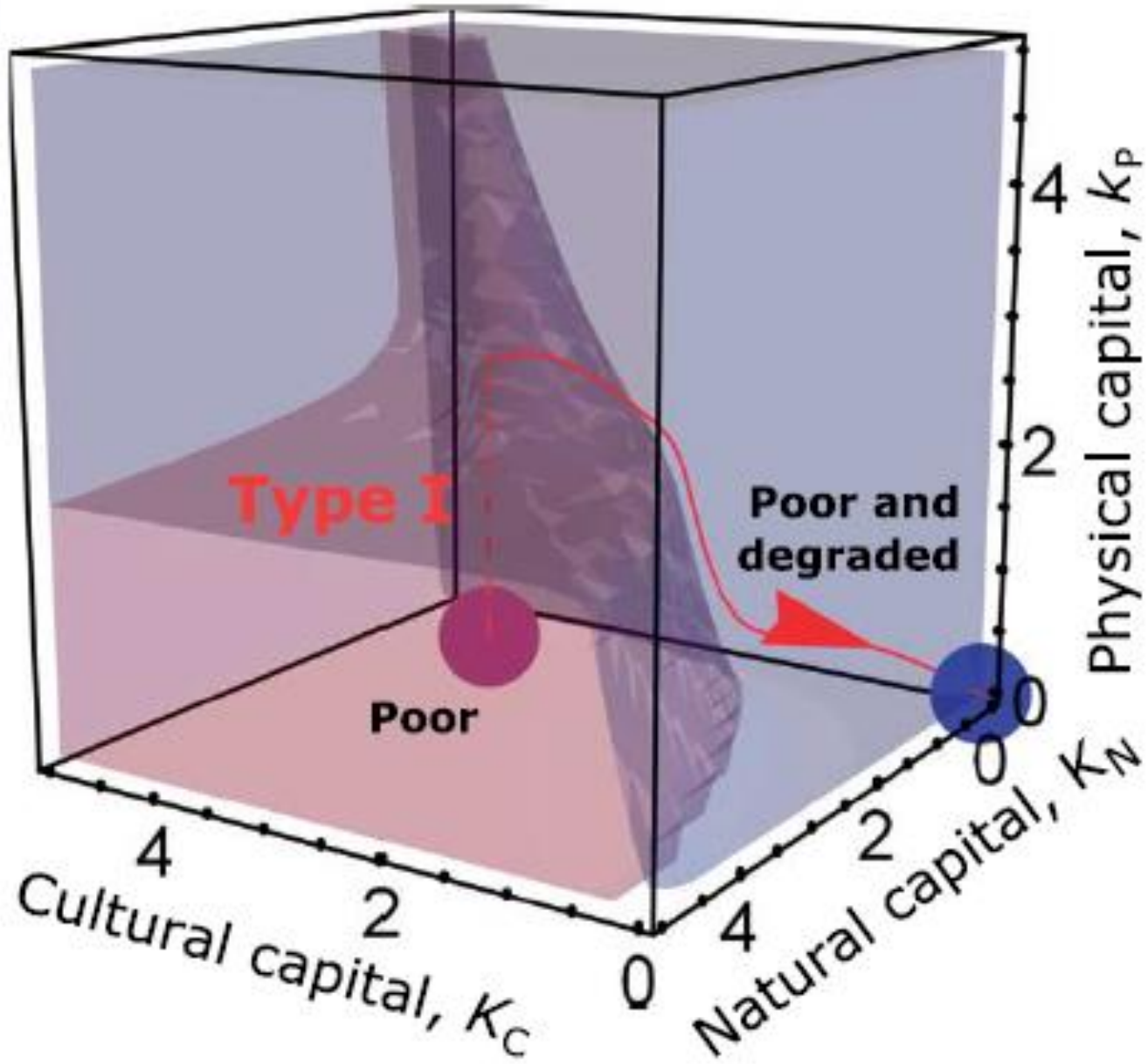
Conventional asset input



Physical capital
Natural capital
Cultural capital

Poor do not degrade
Intensification degrades

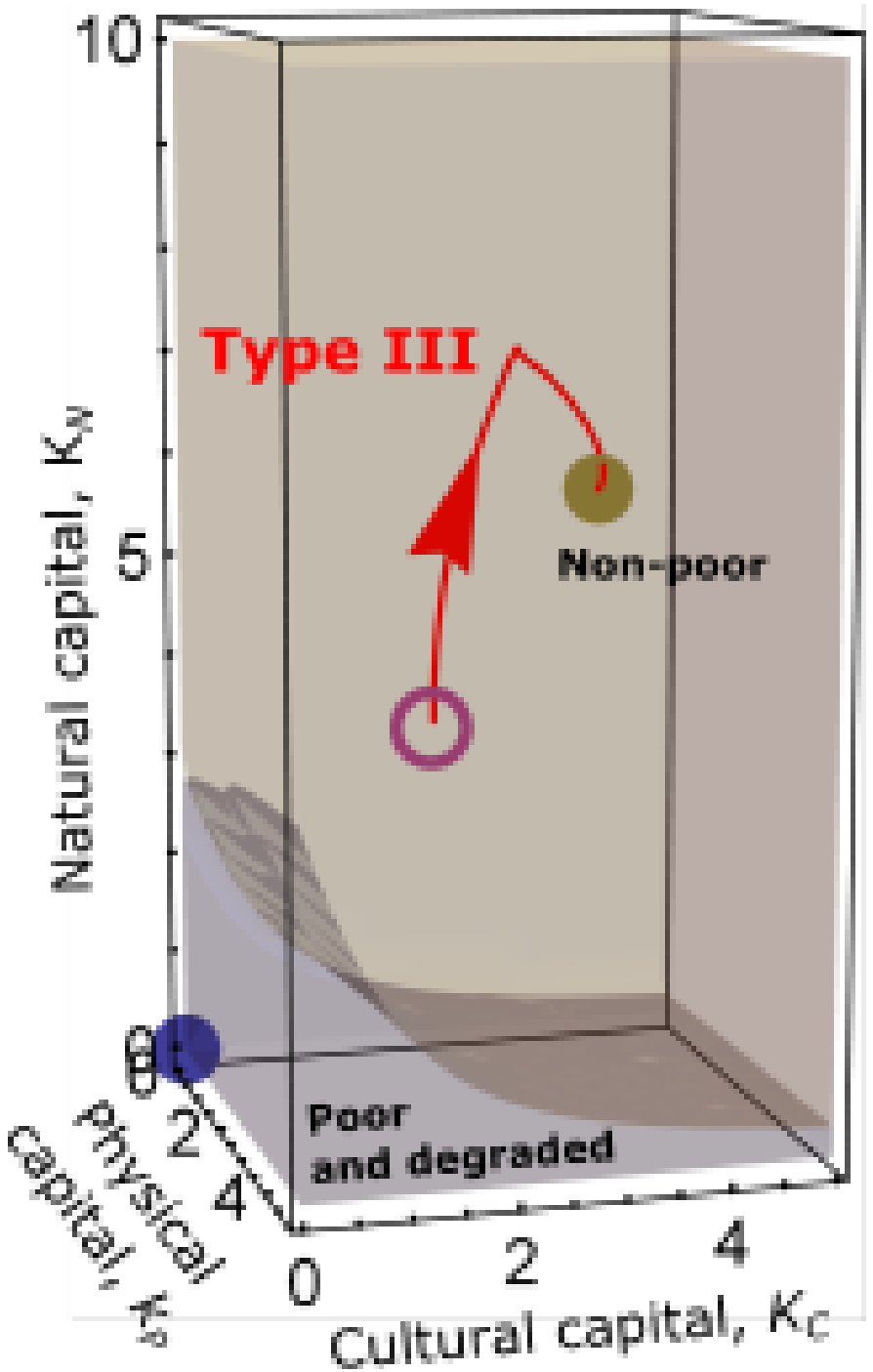
Conventional asset input



Physical capital
Natural capital
Cultural capital

Poor do not degrade
Intensification degrades

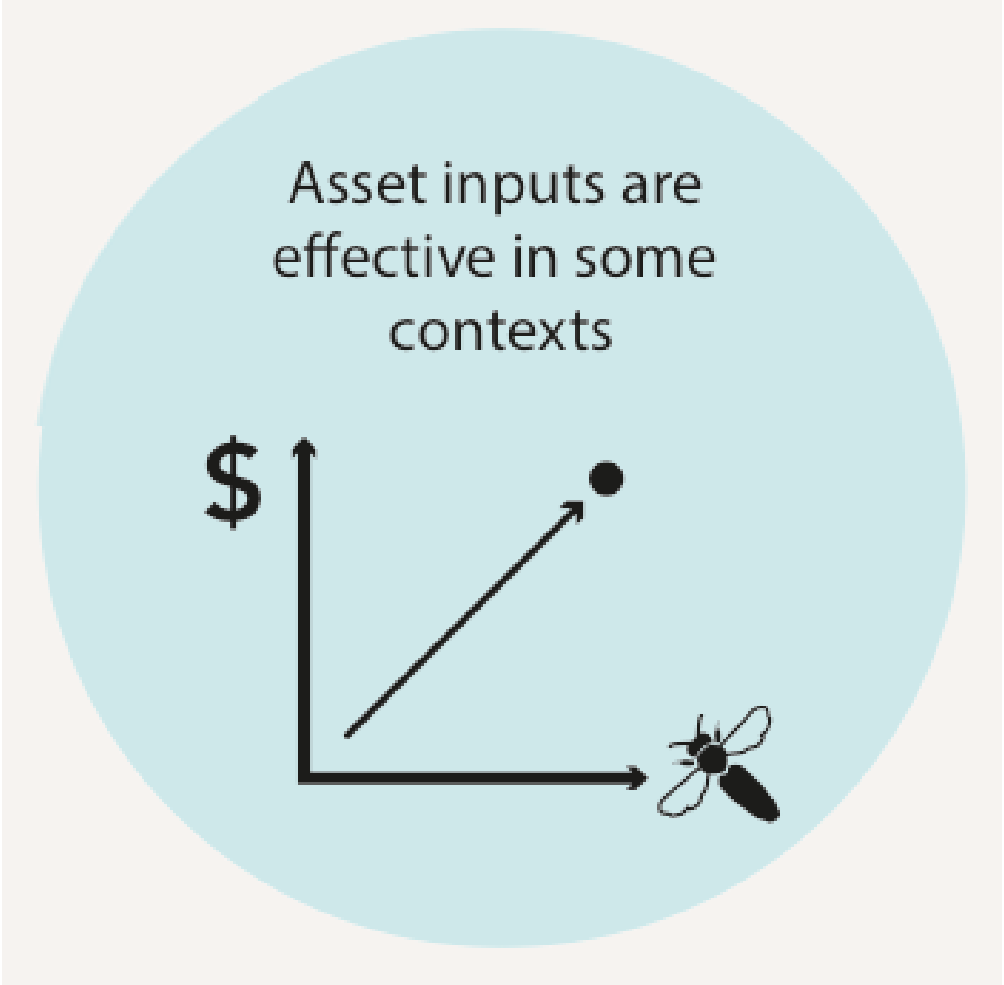
Transformation

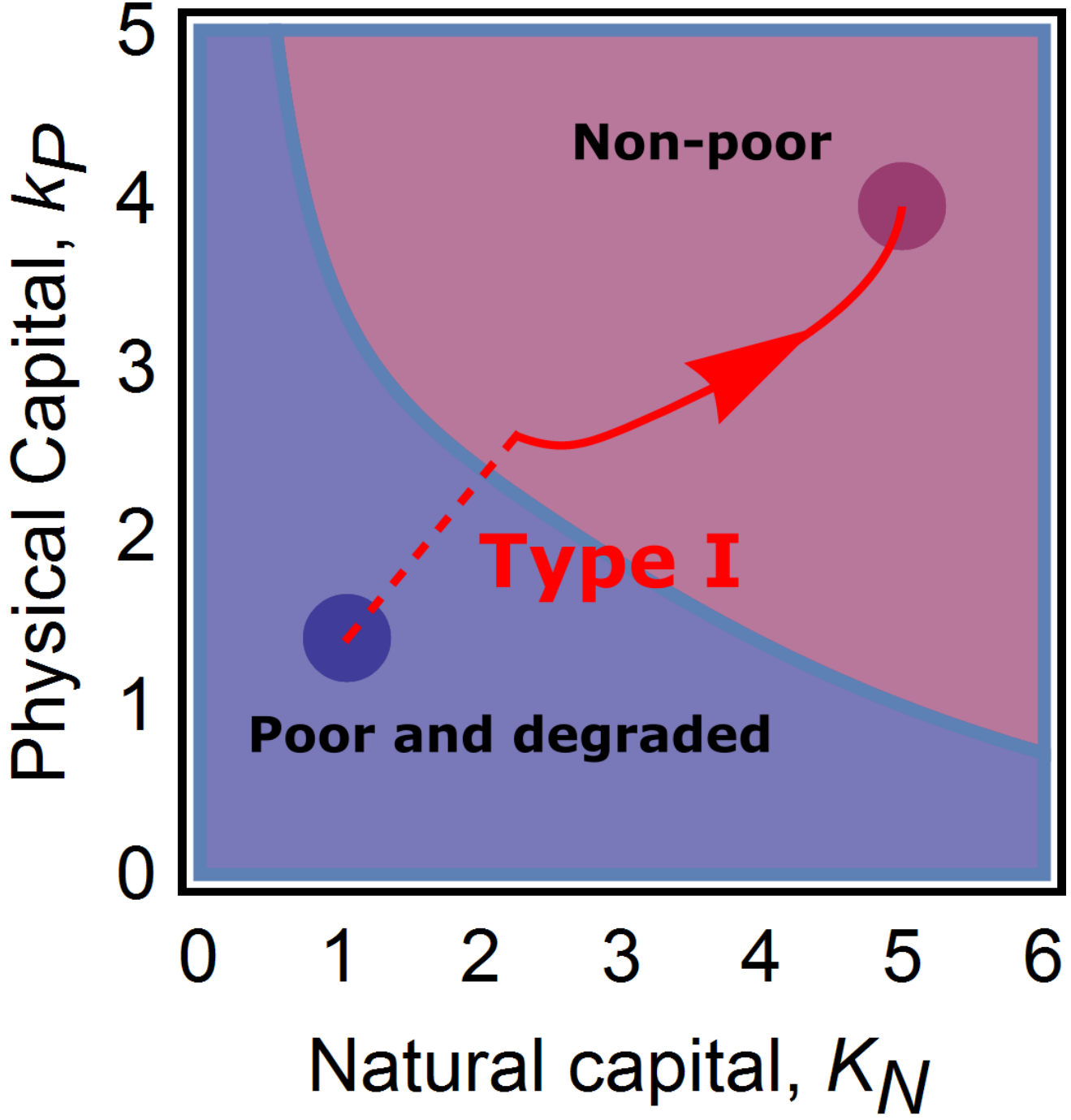


Physical capital
Natural capital

Poor people degrade
Sust. intensification works

Conventional asset input



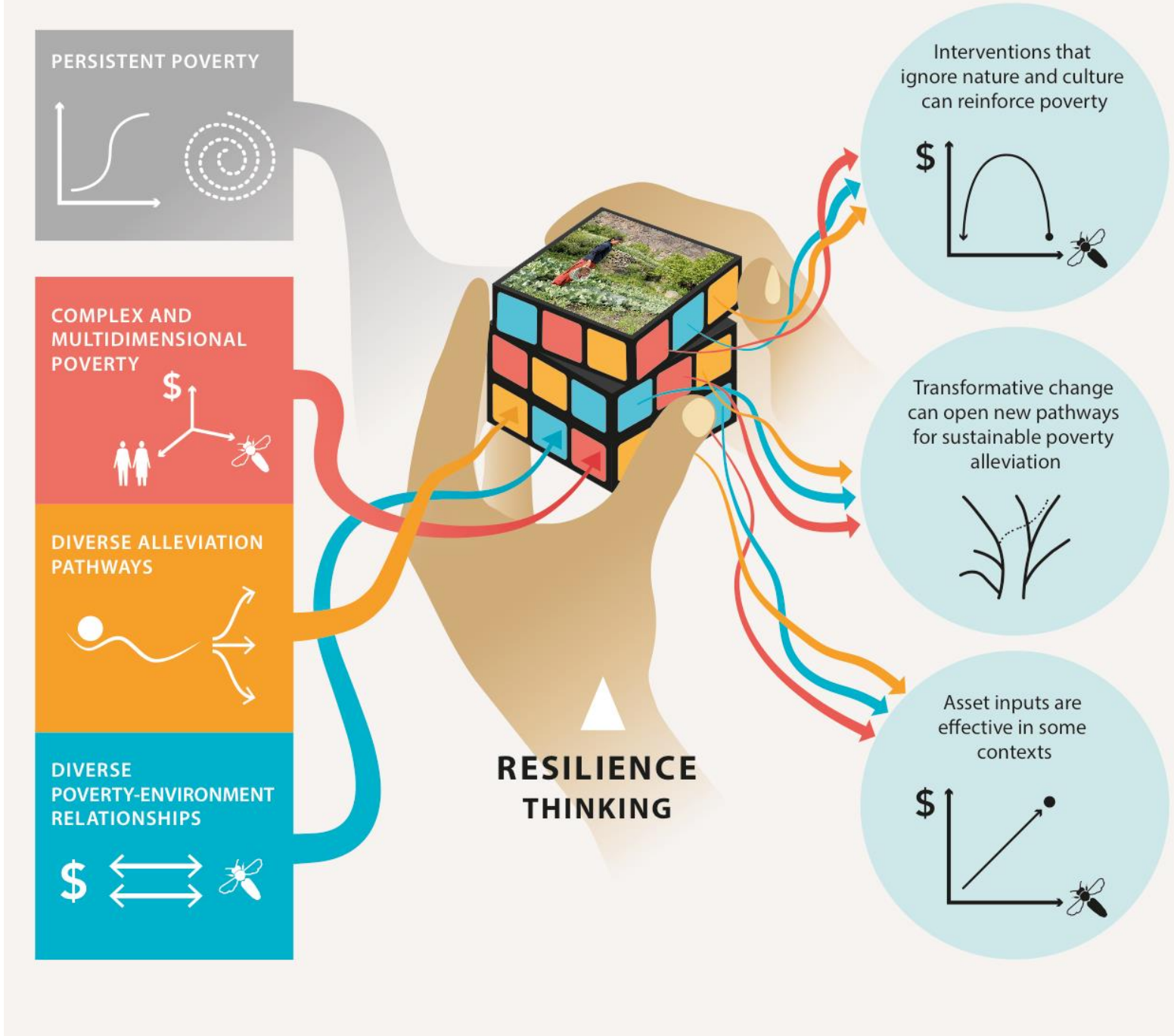


Implications

- Demonstrate that interactions *between* multiple dimensions of poverty are vital
- Help legitimise in economic modelling discourse underrepresented pathways such as food sovereignty
- Use stylised poverty trap models to make transparent assumptions and explore consequences of assumptions
- Use resilience thinking to integrate diverse perspectives on poverty

Future research

- Test using set of empirical cases
- Nutrient-water-soil quality traps and role of sequencing (current postdoc)
- More dimensions: health, education
- Power and history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Thank you!

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