

# Understanding the relationships between ecosystem services and poverty alleviation: a conceptual framework

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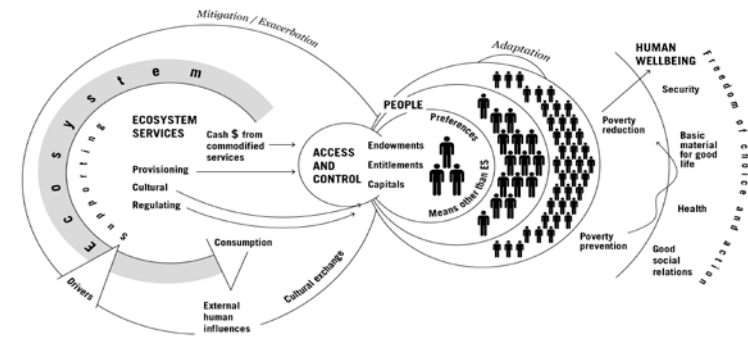


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# Conceptual framework review

Strengthening conceptual foundations: Analysing frameworks for ecosystem services and poverty alleviation research

## Development of new conceptual framework



**An ecosystem** ... understood not only the organism-complex, but also the whole complex of physical factors forming what we call the environment" (Chapin, 1955, 295).

**Ecosystem Services** are the benefits people obtain from ecosystems" (MA, 2005, v).

**Access and control** form the social and political dynamic through which people interact around ecosystem services.

**People** are represented at different scales. They are differentiated by characteristics: endowments, capitals, preferences and means

other than ecosystem services, influencing their ability to access and control ecosystem services.

**Human wellbeing** incorporates material, health and security factors, good social relations and freedom of choice and action (from Narayan et al. 1999, 2000, adopted by MA, 2005).

Poverty alleviation is composed of **poverty reduction**, a process by which people move above a national poverty line, and **poverty prevention**, the maintenance of a minimum standard of living with immediate needs met, below a national poverty line (Agathos and Wuyler, 2003, 2).

**Drivers** are "natural or human-induced factors that unidirectionally influence ecosystem processes" (MA, 2005, 64).

**External human influences** are anthropogenic influences originating beyond the people sector.

Through **mitigation or exacerbation**, people (unintentionally) reduce, or increase drivers.

**Adaptation** is a process of systematic change in anticipation of, or in reaction to, external stimuli and stress" (Nelson et al., 2001, 396).

**Cash from commodified services** represents income gained from selling ecosystem-derived commodities, through conventional commodity markets, or more novel payments for ecosystem services.

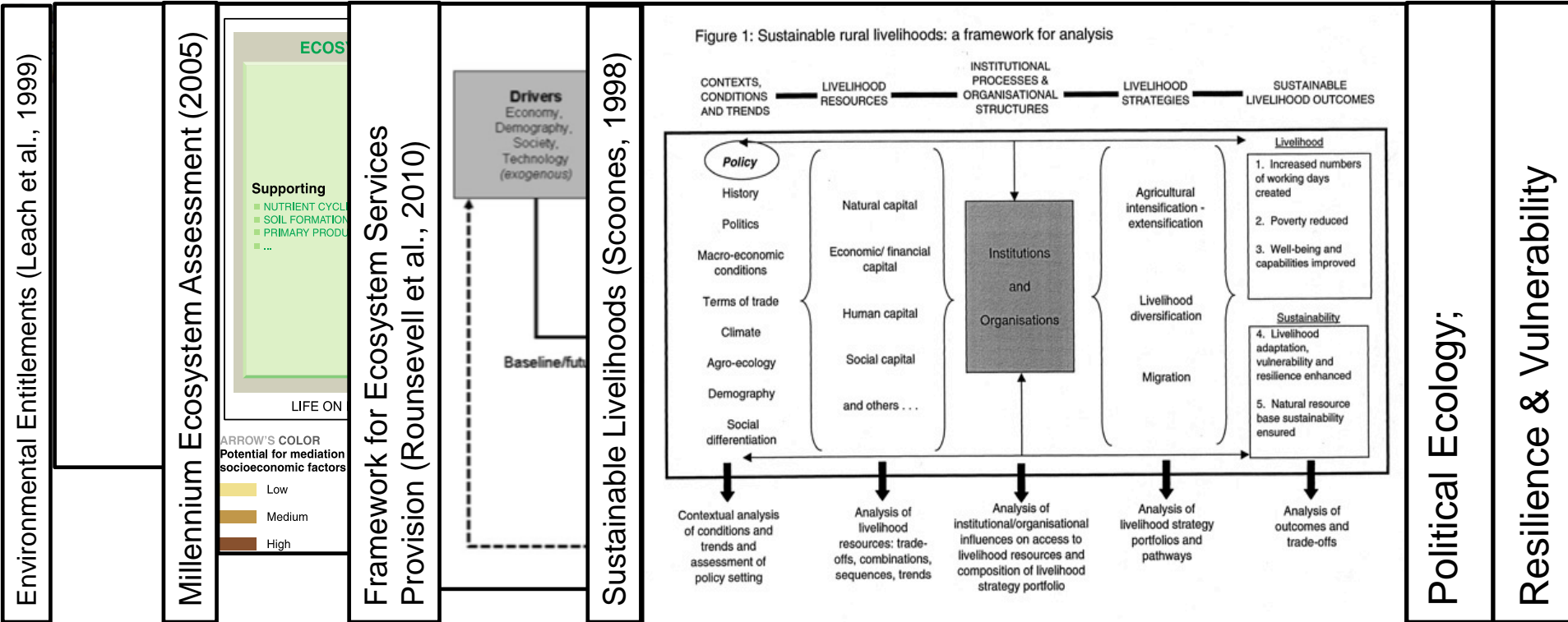
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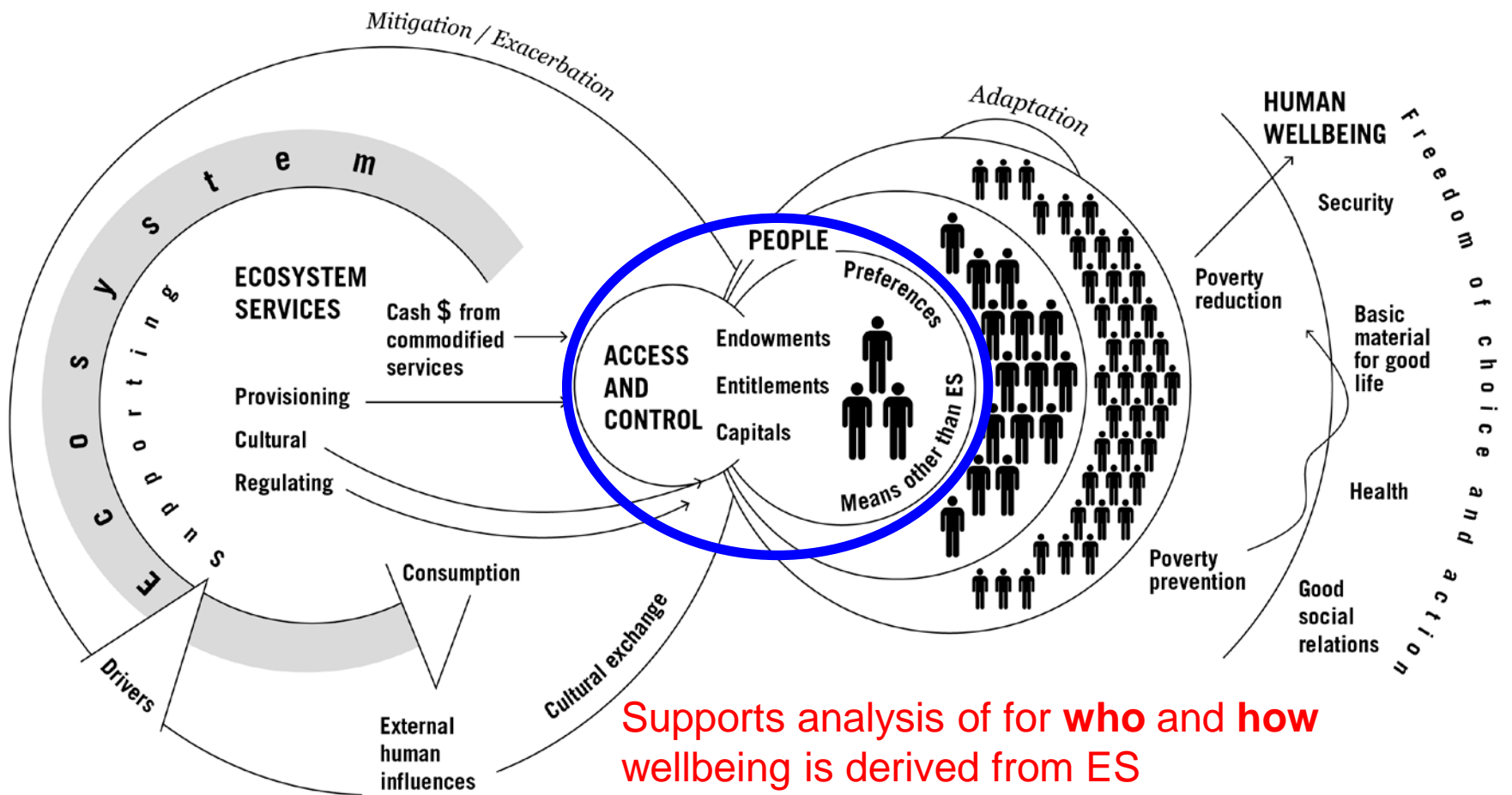
## Empirical adaptation of framework

# ACES: Abrupt changes in ecosystem services and wellbeing in Mozambican woodlands?

## Strengthening conceptual foundations: Analysing frameworks for ecosystem services and poverty alleviation research

Janet A. Fisher<sup>a,\*</sup>, Genevieve Patenaude<sup>b</sup>, Patrick Meir<sup>b</sup>, Andrea J. Nightingale<sup>c</sup>, Mark D.A. Rounsevell<sup>b</sup>, Mathew Williams<sup>b</sup>, Iain H. Woodhouse<sup>b</sup>





**An ecosystem**  
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(Fisher et al, in press: *Ecosystem Services*)

# What can this framework do?

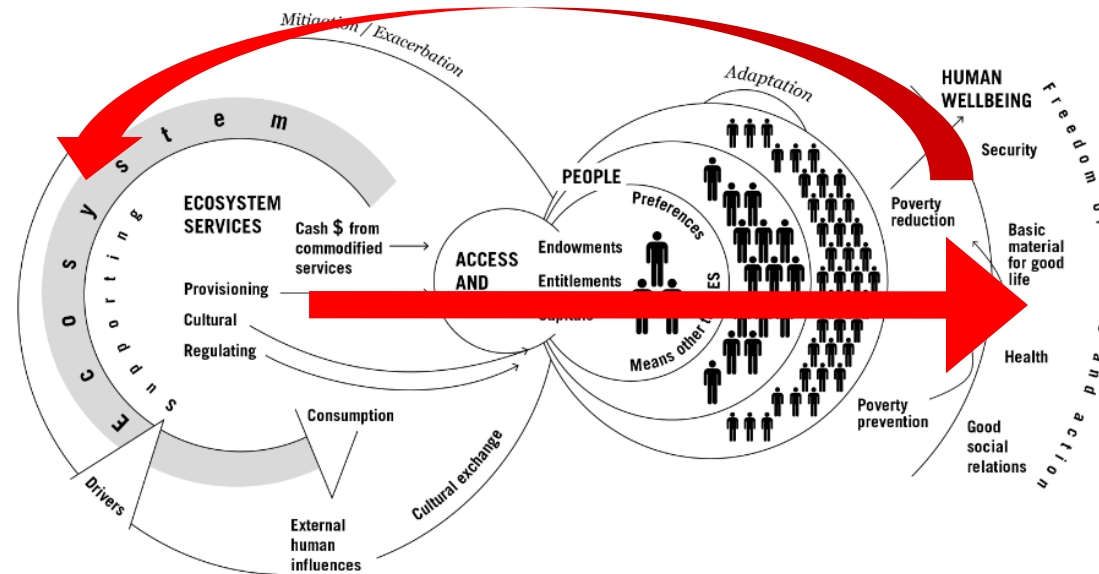
Interdisciplinary thinking tool

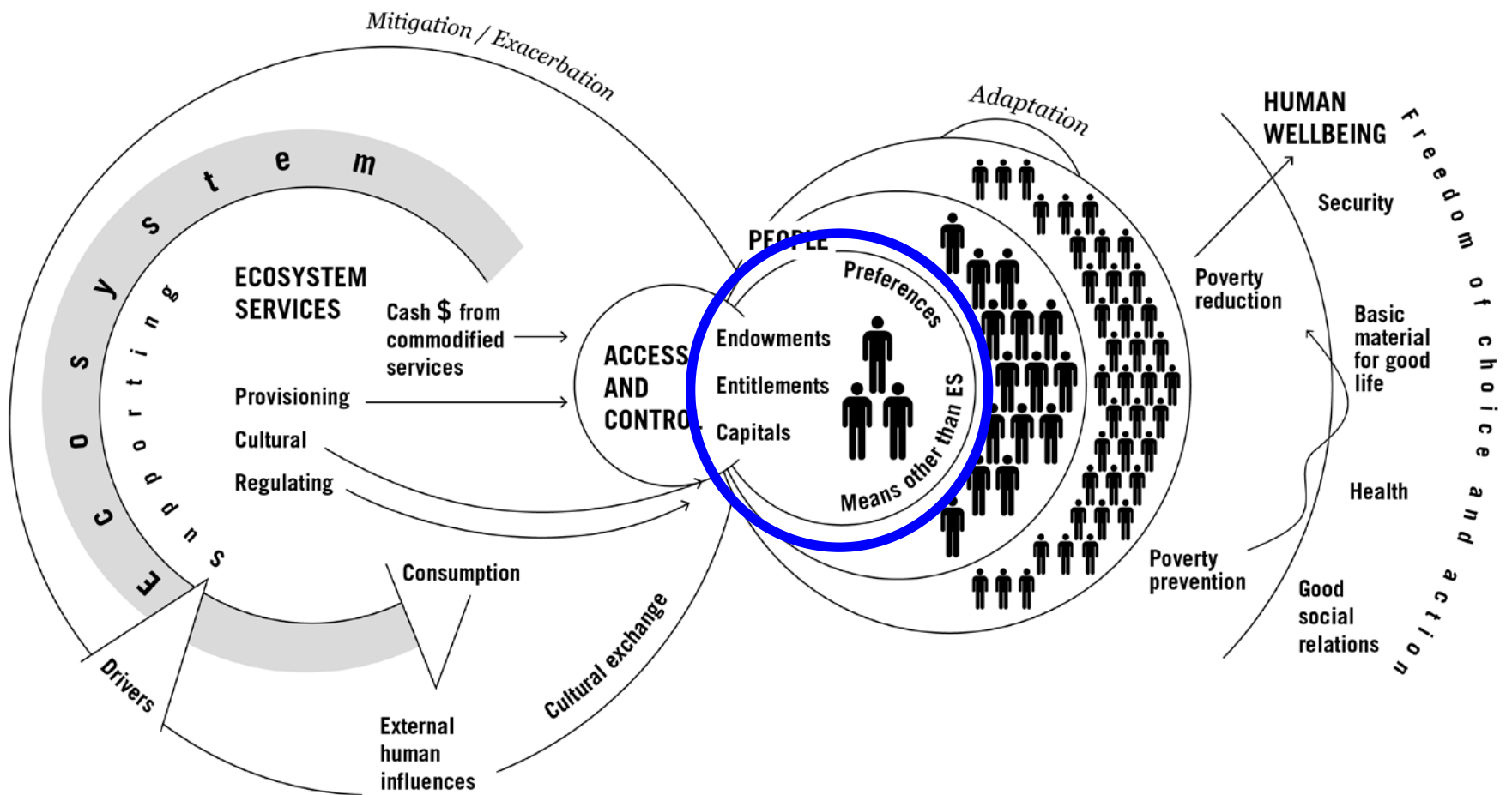
Inductive tool to structure enquiry in the field

Qualitatively-orientated, but may develop more quantitative/mixed iterations

– system layout allows it to support analysis of dynamics

We'll use it in  
ACES > develop  
applied guidance





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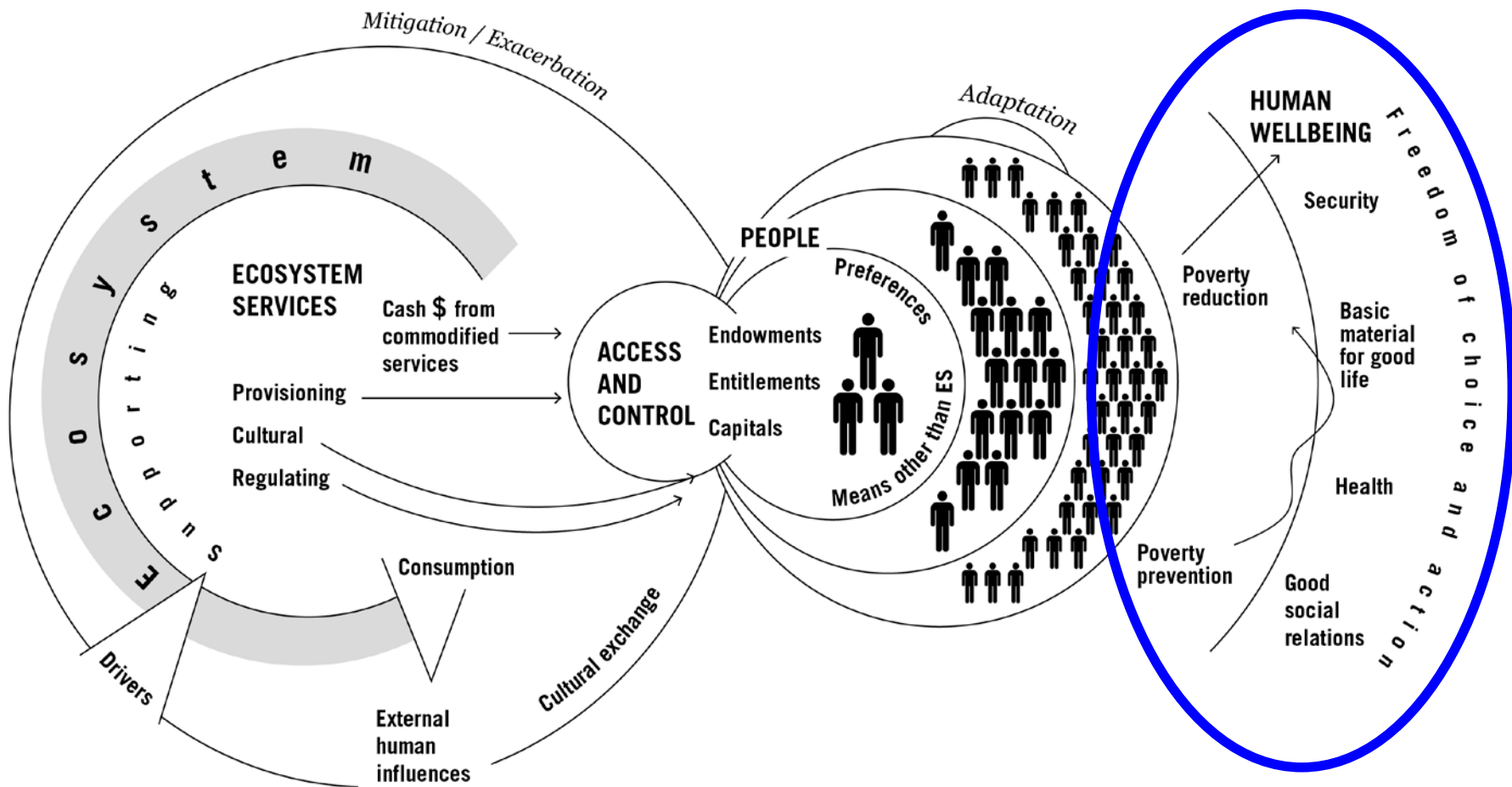
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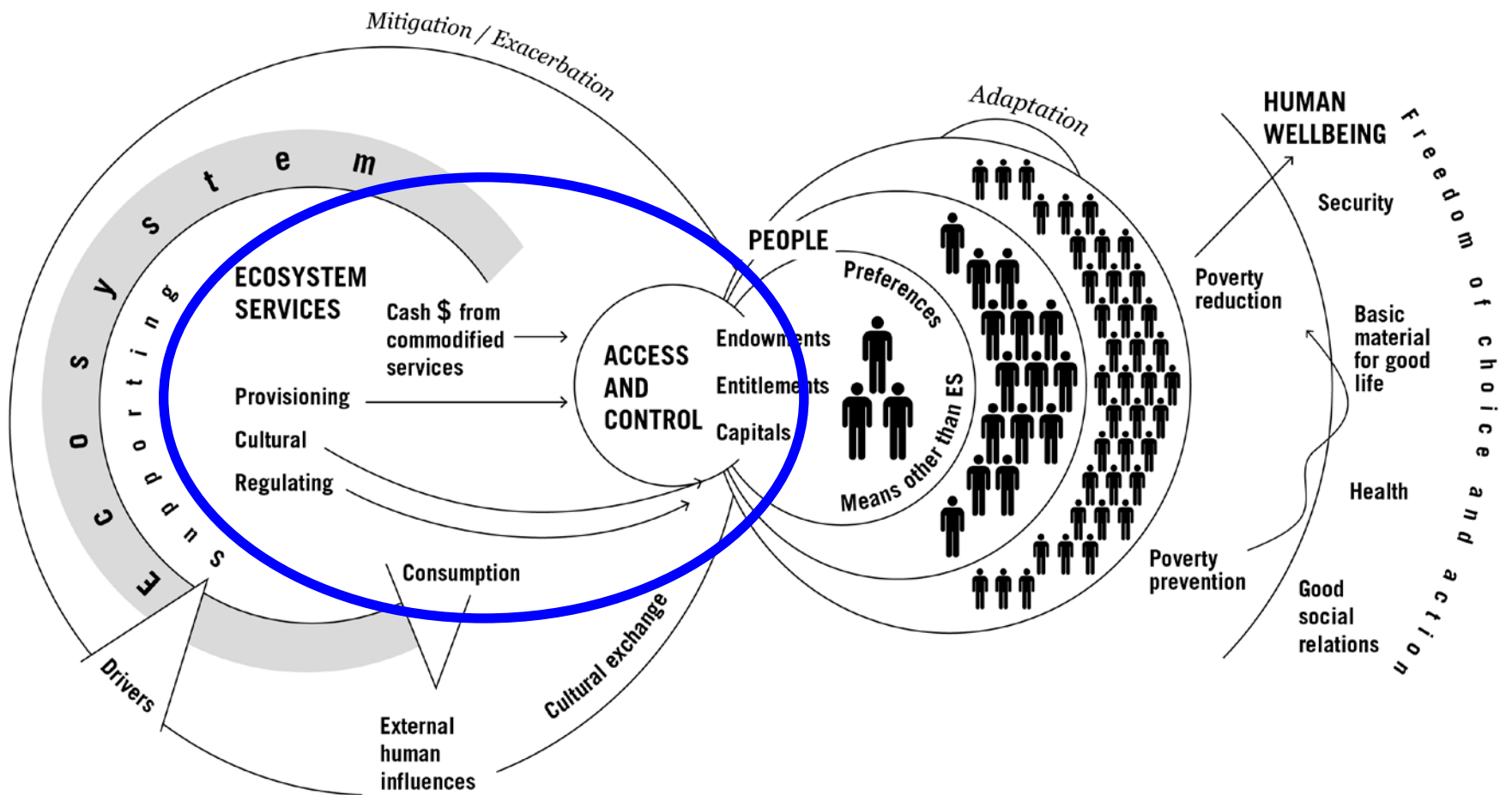
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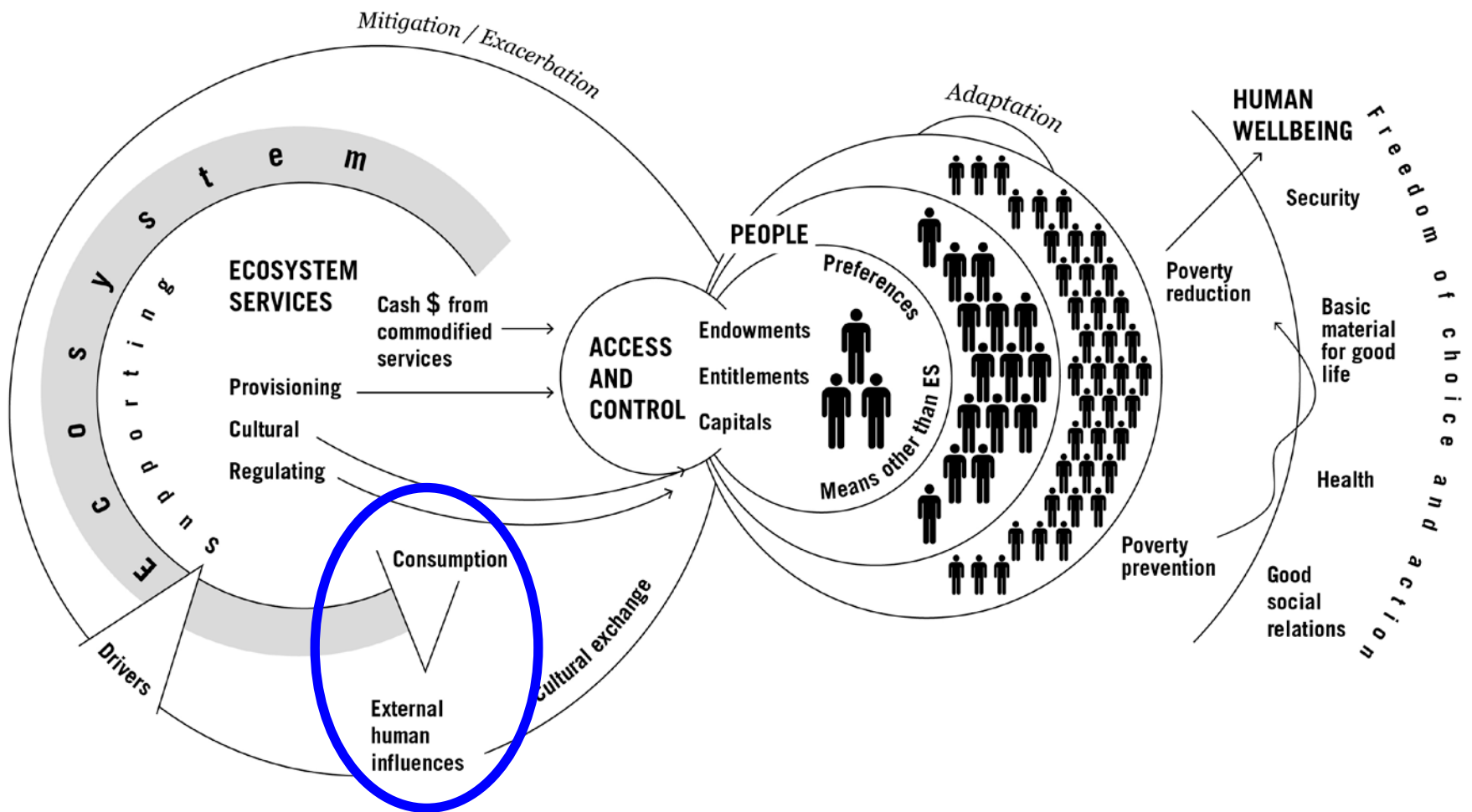
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# Trade-off analysis?

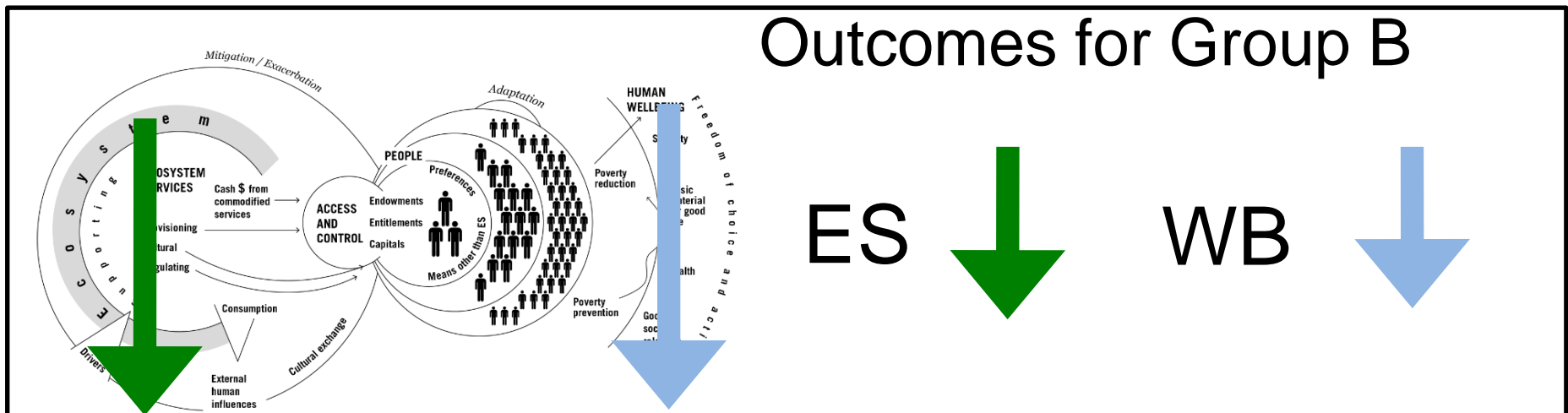
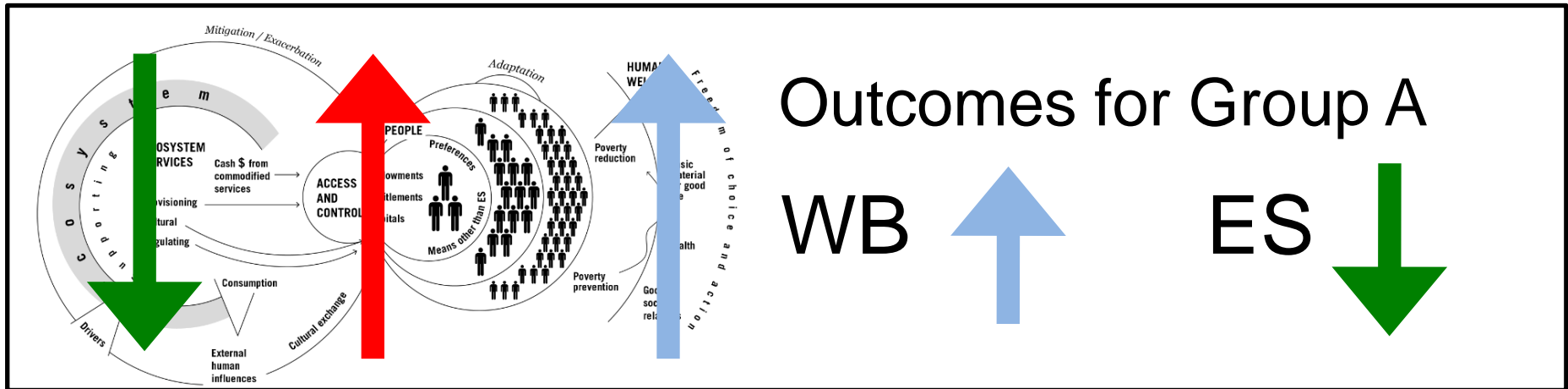
Not designed specifically for trade-off analysis

But, trade-off analysis requires:

Step 1: thorough understanding current situation

Step 2: implications of proposed/actual changes for different groups

# Access improves for Group A



Basis of a social-ecological trade-off analysis

Focus on groups > allows prioritisation

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