

Ecosystem Services for Poverty Alleviation Workshop

12-Months

ESPA Framework Project

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Mpingo
Conservation &
Development
Initiative

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Background

Various agendas have emerged from MA: links between ecosystem services and human wellbeing and poverty.

The ESPA research agenda can draw much from existing scholarship.

At this stage in the nascent research agenda, there is a particular need to **review existing conceptual approaches.**

Frameworks useful: assist with multidisciplinary analysis to make sense of complexity in dynamic situations.

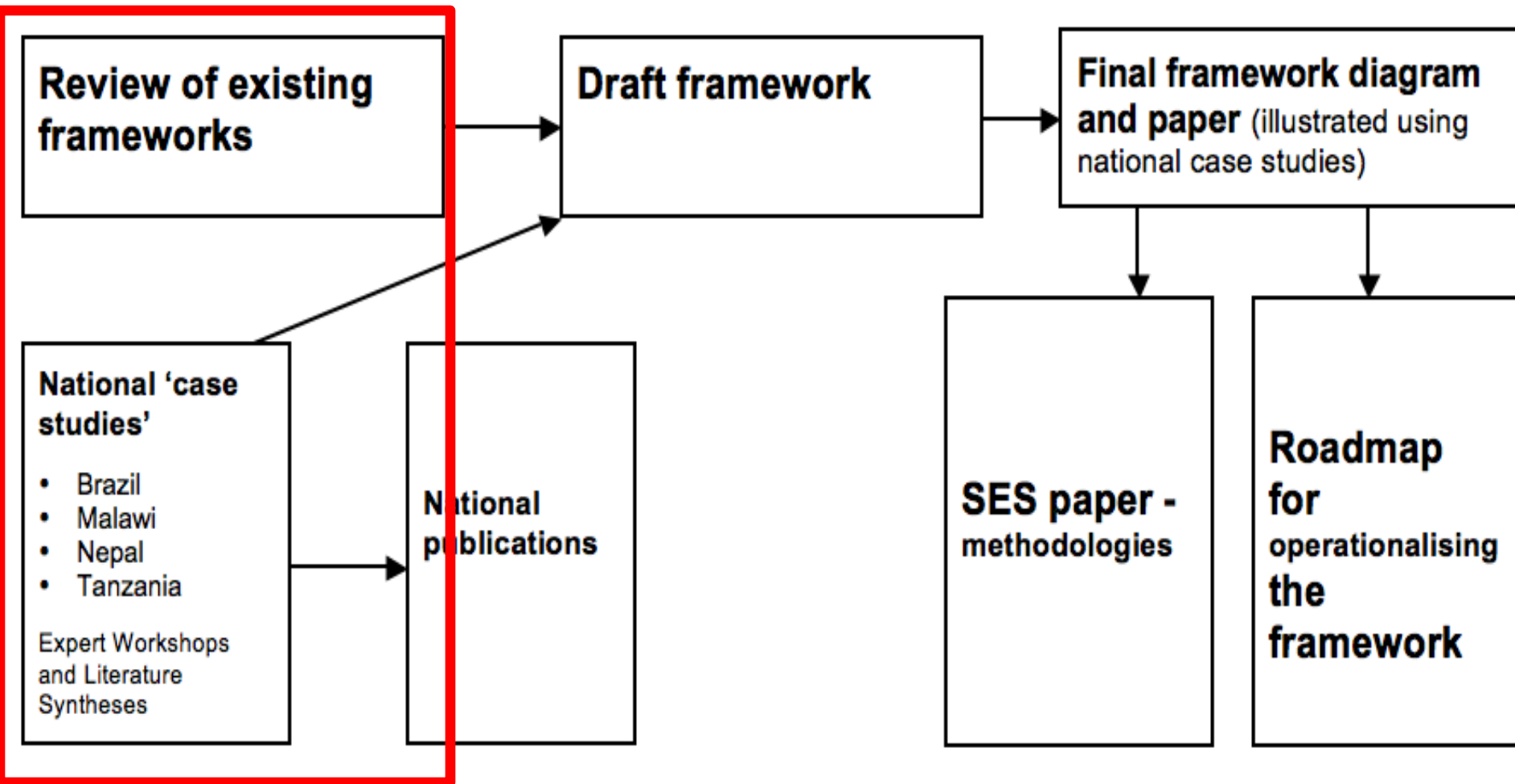
Conceptual frameworks

- Dearth in the literature: conceptual framework.
- Broad, not necessarily mutually exclusive, distinction between those providing conceptual insights, and those designed to support data collection.
- Empirically oriented traditions, frameworks operationalised through data collection. Serve as data classification templates, to aid synthesis.
- A second tradition: representation of key concepts and relationships, as a ‘thinking tool’

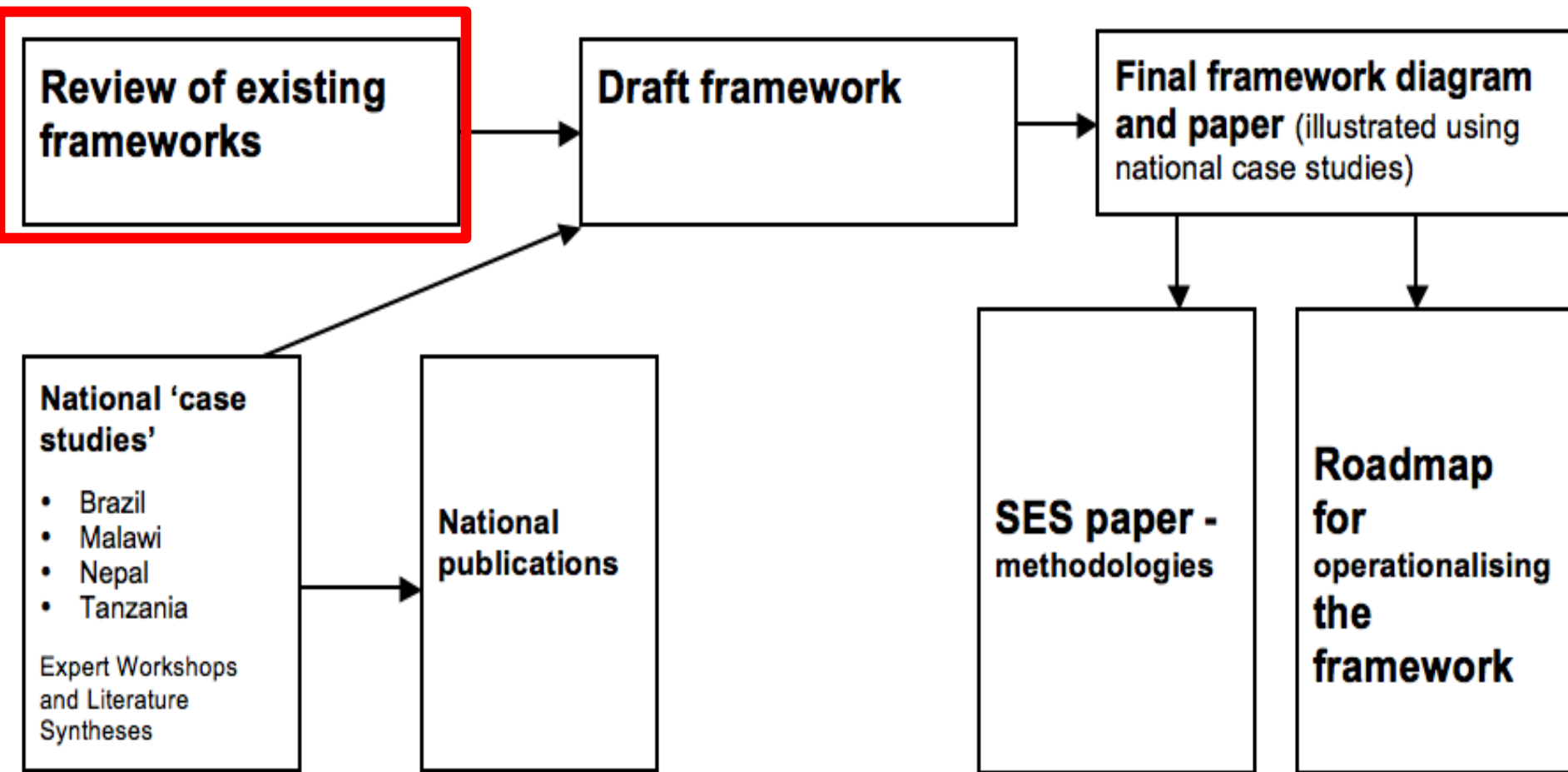
Research aim

To support the next generation of poverty-environment research, through the review of approaches and development of a conceptual framework.

Evidence base



Evidence base



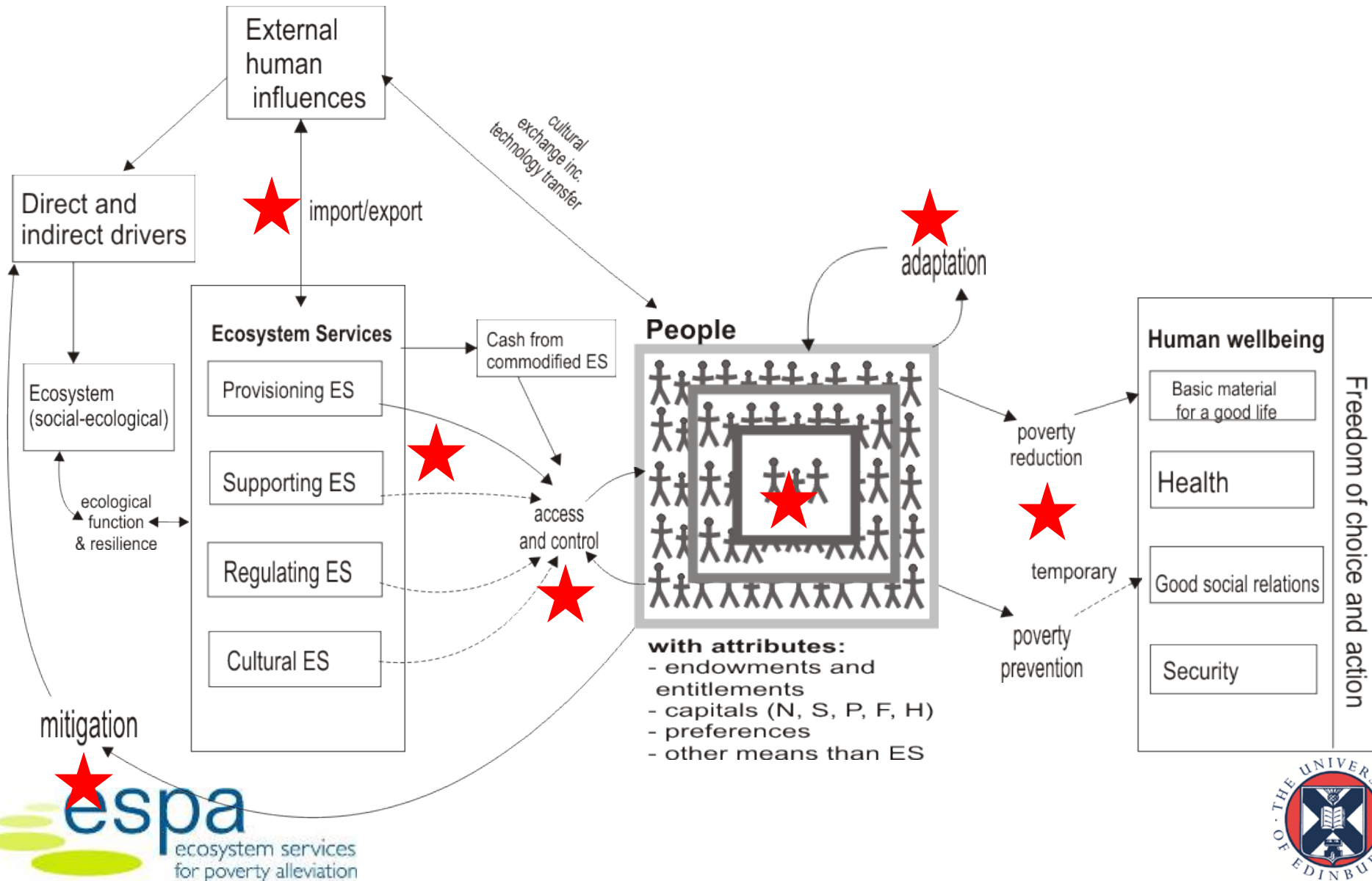
Evidence base

Review of Existing Frameworks

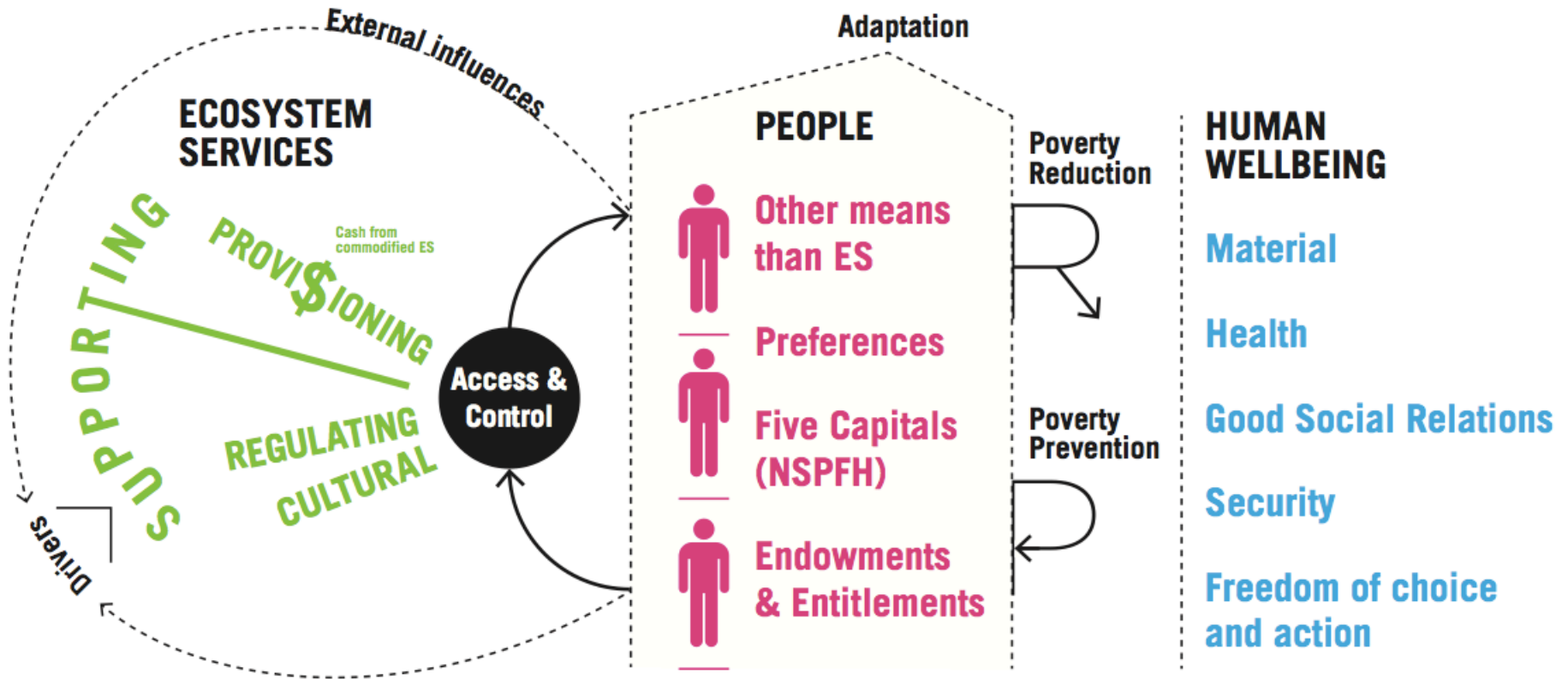
Assessing the contribution of the following frameworks to ecosystem services and poverty alleviation research:

- Environmental Entitlements (Leach et al., 1999)
- Framework for Ecosystem Services Provision (Rounsevell et al., 2010)
- Millennium Ecosystem Assessment (MEA, 2005)
- Political Ecology (e.g. Blaikie and Brookfield, 1987)
- Resilience (Holling, 1973; Folke, 2006)
- Sustainable Livelihoods (Chambers and Conway, 1992; Scoones, 1998)
- The Social Assessment of Protected areas (Schreckenberg et al., 2010)
- The Economics of Ecosystems and Biodiversity (TEEB, 2010)
- Vulnerability (Adger, 2006; Fussler, 2007)

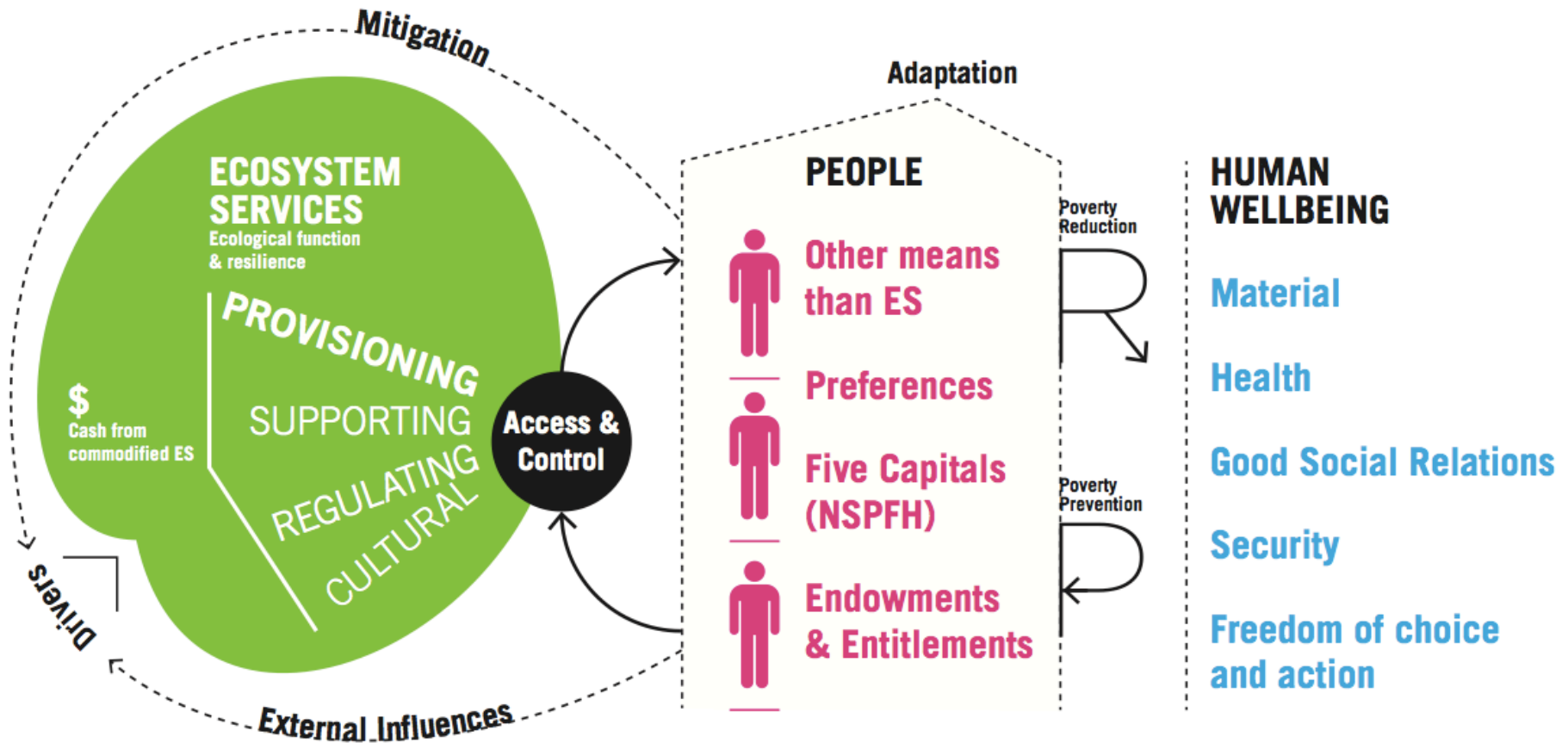
Iterations



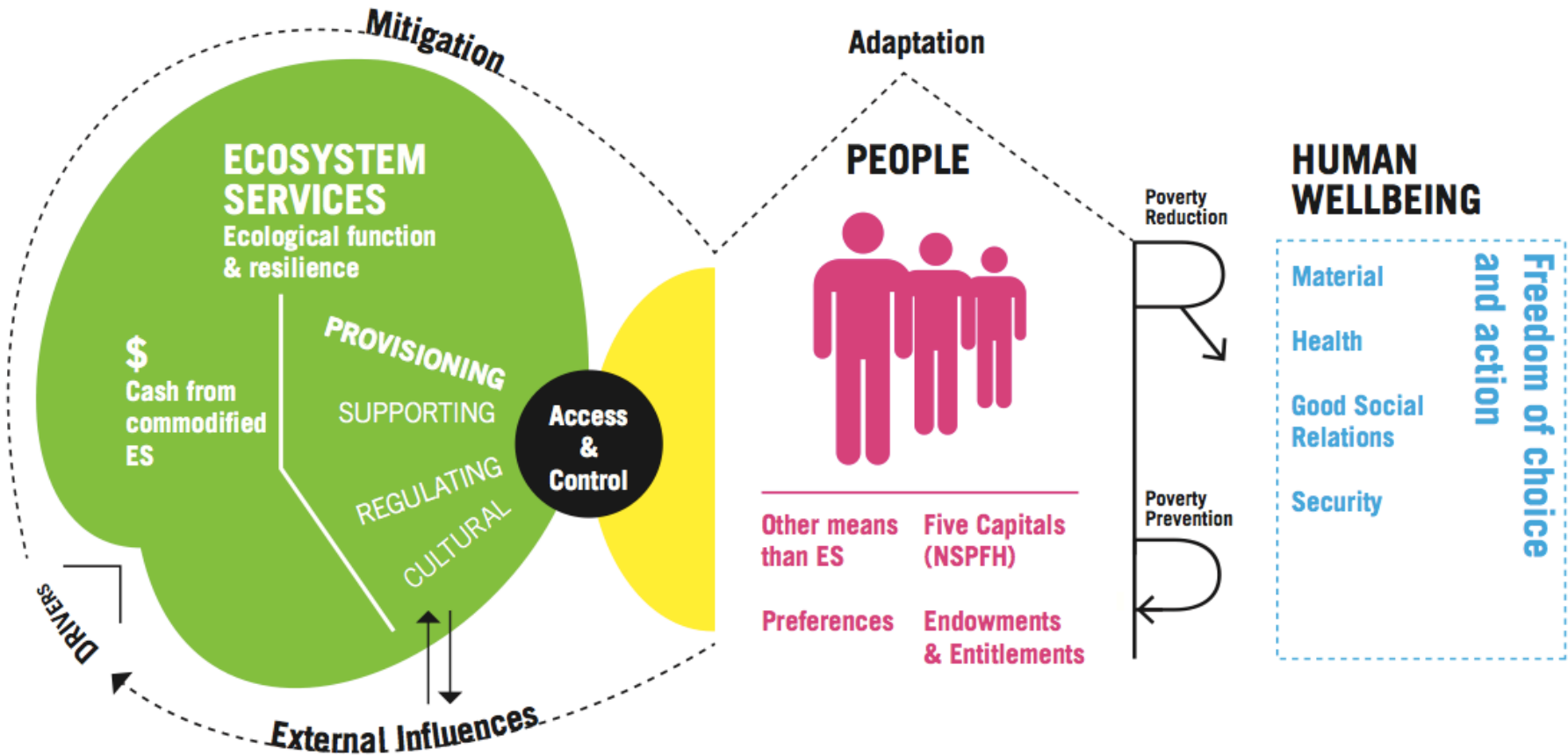
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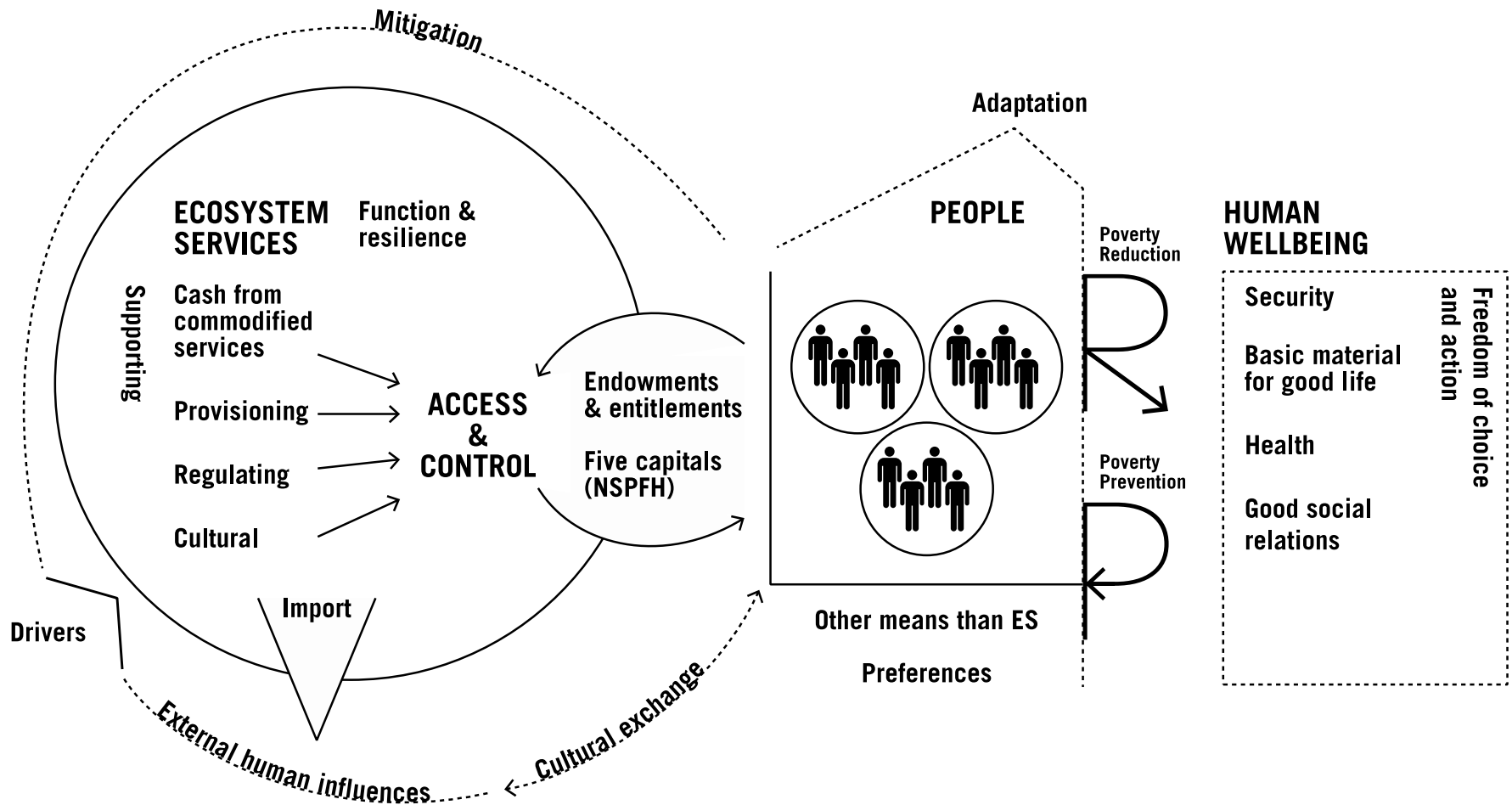
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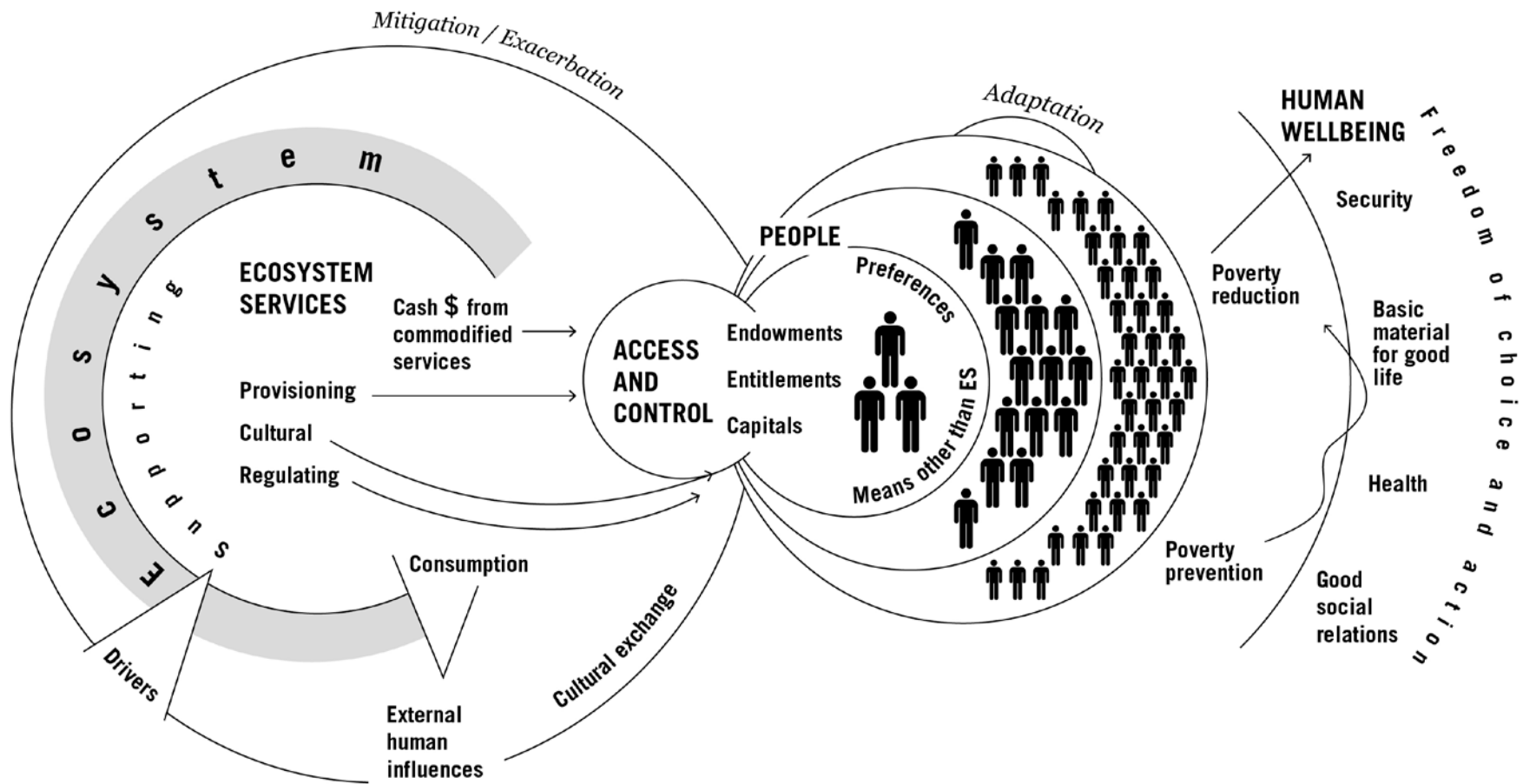
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Iterations



The conceptual framework



An ecosystem '...includ[es] not only the organism-complex, but also the whole complex of physical factors forming what we call the environment' (Tansley, 1935; 299).

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, entitlements, 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 MEA, 2005).

Poverty alleviation is composed of **poverty reduction**, a process by which people move above a notional poverty line, and **poverty prevention**, the maintenance of a minimum standard of living with immediate needs met, below a

notional poverty line (Angelsen and Wunder, 2003; 2).

Drivers are 'natural or human-induced factors that... unequivocally influence ecosystem processes' (MA, 2005; 64).

External human influences are anthropogenic

influences originating beyond the people sector.

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

Adaptation is a process of 'deliberate change in anticipation of, or in reaction to, external stimuli and stress'

(Nelson et al., 2007; 395).

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

Consumption represents the removal of ecosystem services by external human influences.

Cultural exchange represents the interaction between people and external human influences, for instance through technology transfer.

Innovations of framework

- Social differentiation: required for any discussion of poverty alleviation, attributes and scale interactions
- Access and control – often limit ES, rather than aggregate availability (for the poorest)
- Distinctions between ES categories, e.g. provisioning and cash particularly easy to control
- Poverty reduction versus prevention
- Adaptation and mitigation distinction
- External human influences (consumption and cultural exchanges)

Applications

- Analytical tool: displaying important relationships (more detail than MEA). Diagram more meaningful than checklist.
- Primary application – rural development (intra-community heterogeneity) + developed with subsistence communities in mind.
- Value comes from supporting operator to think through their application, and detail the important aspects and linkages.
 - Framework paper gives illustrations.
- Secondary applications: multidisciplinary research framework; policy appraisal; research planning
- Work needed to support the operationalisation of this framework... 'how to' guidance.

Limitations

- Complexity of this multi-disciplinary area:
 - good rationale for framework
 - but complex frameworks tend to be unwieldy!
- Drawing on experience of frameworks – Development and SES. Potentials/pitfalls.
- How to guard against this being used mechanistically or uncritically?
- Scope for enumeration – experience of SL

Research outputs

Submitted

Review Paper: Fisher, J. A., Patenaude, G., Meir, P., Nightingale, A., Rounsevell, M. D. A., Williams, M. & Woodhouse, I. H. (in review) **A review of conceptual frameworks** for ecosystem services and poverty alleviation research. Global Environmental Change.

Framework Paper: Fisher, J. A, et al. **A new conceptual framework** for investigating the contribution of ecosystem services to poverty alleviation. For submission to: Ecology and Society

Near Submission

SES Paper: Patenaude, G., et al. . **A primer on qualitative and quantitative social-ecological models** for application to research on ecosystem services for poverty alleviation. For submission to: GEC

Brazil Paper: Pinho P. et al. Myth or reality: can ecosystem services deliver poverty alleviation in the Brazilian Amazon

Nepal Paper: Giri K., et al. Community based forest management in Nepal: lessons and opportunity for ecosystem services and poverty alleviation

Nepal Paper: Dhungana H. et al. A survey of Nepal's forestry sector policies and practices: links between ecosystem services and poverty alleviation.

Tanzania Paper: Lewis, K. et al. Forest management for poverty alleviation or forest conservation? The case of Tanzania.

AND SEVERAL CONFERENCE PRESENTATIONS

Conceptualising Ecosystem Services for Poverty Alleviation

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