**SESSION DESCRIPTION**

**ID: S1a**
Navigating Natural Capital and Inclusive Wealth for gaining sustainability and wellbeing for the farming community (businesses, supply chain and consumers)

**Hosts:**

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| --- | --- | --- | --- | --- |
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**Abstract:**

Background

The Natural Capital (NC) approach is becoming a dominant paradigm for achieving sustainability for corporate and public decision making by adding the natural capital and ecosystem services dimension to traditional evaluation tools such as cost benefit analysis, cost-effectiveness analysis or multi-criteria decision aid or deliberative approaches. The implementation of NC builds on physical and monetary accounting of some environmental assets like renewable (e.g., forests) or abiotic resources (e.g., water), mainly at national scale, to inform the contribution of nature to our economy (UN, 2014), but protocols to account for ecosystems are also emerging (UNSC, 2021). Other UK initiatives are proposing protocols for testing the NC approach for corporate (Natural Capital Coalition, 2016) or guidance such as the initiative Enabling a Natural Capital Approach (DEFRA, 2021) to help understand natural capital at scales lower than national one and link it to private schemes financing nature-based solutions.

More recently, the international scientific community is calling for a more inclusive approach to wealth (Dasgupta review, 2021), and national policies such as the Scottish “Land Use Strategy 2021-2026” underline the importance of providing a holistic strategy explaining the contribution of natural capital to sustainability and societal wellbeing through its integration with human-induced capitals (human, social, and physical). Recent progress in environmental accounting entails the correction of the GDP as the standard national wealth measure by accounting for the decline in natural capital and the net gains of human and reproducible capitals (Barbier 2019). However, efforts towards inclusive wealth at scale of corporate or of land use policies operating at landscape scale are in their infancy. Attempts to work with the four capitals (natural, social, human, and produced) are proposed by the Capitals Coalition (https://capitalscoalition.org/), however, it is not straightforward for an organisation to identify and apply indicators for the four capitals in an integrated manner.

There is need to improve our understanding on the capacity of these tools to support decision making and on the factors that may limit or enable the mainstreaming of more complete and inclusive indicators systems to evaluate the performance of an economy or a business and their positive and negative effects on the productive factors that support them (natural and human) and the transition to more sustainable productions systems and economies.

Session scope

This session builds on the contribution offered by the H2020 project FRAMEwork (https://www.framework-biodiversity.eu) in advancing a NC approach for the European biodiversity sensitive farming systems. The project promotes the formation of Farmer Clusters where groups of farmers can work collectively via participative and deliberative process to generate effective, targeted, and efficient management plans in collaboration with scientists and local stakeholders at a catchment or regional scale. Under the FRAMEwork approach the dynamics of actors is modelled by reconstructing the socio-ecological systems using the narrative of NC also taking into consideration the consequences of farmers’ collective actions as part of the agro-food system and landscape management in enhancing human and social capital.

Building on the experience of the FRAMEwork project, in this session we want to open a discussion underpinning the implementation of NC under different lenses, exploring the relationships with human-induced capitals, the link with socio-ecological systems and the need to downscale accounting approaches for the management of land use to take account of local cultural-related aspects. During the session, the general discussion on the role of natural capital in achieving sustainability will be interspersed with presentations targeting NC at different scales, from businesses to the analysis of land use polices. We are calling for papers exploring NC approaches that embed monetary and non-monetary strategies and provide paradigmatic examples that can help business strategists or land use decision makers to achieve sustainability and to raise awareness of the importance of different natural capital to the vast public. Finally, to enhance our communication outputs we will offer insights gained from knowledge exchange and communications strategies to a vast public as matured in the FRAMEwork project by the formulation of media content (an innovative example of podcasts, as already developed in FRAMEwork, can be found here: https://linktr.ee/prophets\_wizards\_pod). Taskscape Associates Ltd. (hereafter taskscape), partner in FRAMEwork with long-lasting expertise in research communication (https://www.taskscape.org.uk/), will join the session and support the Team in these outreach activities.

References

Barbier, E. 2019. The concept of Natural capital, Oxford Review of Economic Policy, 35(1), 14-36.

Dasgupta, P. 2021. The economics of biodiversity. HM Treasury, UK.

Defra, 2021. Enabling a Natural Capital Approach guidance. Available at Enabling a Natural Capital Approach guidance - GOV.UK (www.gov.uk)

Natural Capital Coalition, 2016. Natural Capital Protocol. (Online) Available at: www.naturalcapitalcoalition.org/protocol

OECD, 2022. Measuring the non-financial performance of firms through the lens of the OECD Well-being Framework: A common measurement framework for “Scope 1” Social performance. OECD papers on Wellbeing and Inequalities N.3. https://dx.doi.org/10.1787/28850c7f-en.

Stebbings, E., Hooper, T., Austen, M.C., Papathanasopoulou, E. Yan, X. 2021. Accounting for benefits from natural capital: Applying a novel composite indicator framework to the marine environment. Ecosystem Services 50, 101308.

UN, 2014. System of Environmental-Economic Accounting 2012 Experimental Ecosystem Accounting. New York.

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**Goals and objectives of the session:**

The session aims to stimulate debate and knowledge exchange on the implementation of Natural Capital approaches in the agricultural sector exploring the relationships with human, social and cultural aspects of agro-ecosystems. The objectives of this session are:

1. to consider the NC approach at different scales (from national to smaller tiers);
2. to raise the importance of an integrated capital approach to achieve strong sustainability;
3. to propose approaches that focus on integrated monetary and non-monetary estimates of natural capital and wealth in terrestrial sectors focusing mainly on agriculture;
4. to consider how the natural capital can be implemented in social-ecological models;
5. to consider innovative ways to address natural capital based on participatory approaches through the integration of techniques (e.g., participatory, analytical, visualization, digital mapping, use of app for collecting data through citizen science approaches) that may offer a holistic understanding of NC as complex systems and advance the synergy effects and trade-offs between their various components.
6. to effectively reach a broad audience, raise societal awareness of natural capital, ecosystem services, ontological aspects and cultural approaches embedded in different societies that may be useful to address solutions for the protection of biodiversity and the promotion of wellbeing.

**Planned output / Deliverables:**

The overarching output of this session is an innovative communication on the importance of natural capital blending traditional presentations and more general discussion that will be captured by:

* the publication of scientific papers on a special issue targeting the natural capital approach under different lenses as per objects detailed above.
* a special episode of an interdisciplinary knowledge exchange podcast that currently reaches around 1,000 organic listeners per month and that has been designed to generate resources for educators across FRAMEwork’s core topics <https://linktr.ee/prophets_wizards_pod>

Among the journals to be targeted, we have identified the following three potential candidates:

* Ecosystem Services (<https://www.sciencedirect.com/journal/ecosystem-services>)
* The international Journal of Biodiversity Science, Ecosystem Services and Management (<https://www.tandfonline.com/journals/tbsm21>)
* Ecosystem and People (<https://www.tandfonline.com/journals/tbsm22>)

Presentations will be selected on the quality of the abstracts and adherence to the objectives above mentioned. One of the presentations will be based on natural capital strategies developed in the FRAMEwork project. The final contribution by Taskscape will share and discuss insight gained from knowledge exchange and communications activity embarked on with actors and audiences engaging with facets of the Capitals approach while tackling FRAMEwork project challenges.

The presentations will be proposed inside the general discussion of topics addressing the role of natural capital and ecosystem services from an ontological, epistemological and cultural perspectives, touching also the role of monetary valuation and accounting, as a pathway to sustainability.

**Session format:**

Other (Discussion with panellists and short presentations, interspersed within the discussion)

**Voluntary contributions accepted:**

Yes, I allow any abstract to be submitted to my session for review

**Related to ESP Working Group/National Network:**

[**Sectoral Working Groups: SWG 1 – ES in Agricultural production systems**](https://www.es-partnership.org/community/workings-groups/sectoral-working-groups/swg-1-agricultural-production-systems/)