



Natural Capital: Specifying the Value of Nature

Parsa Mohammadpour

Background of the PhD

- The UK's Industrial Strategy is foundation of the Government's plan for the future of the economy. Aiming to develop a partnership between the public and private sector to tackle the key challenges we face.
- Local Industrial Strategies build on national approach the Government is taking, allowing to deepen partnerships between national and local government.
- As part of this, LEPs are being encouraged by Government to assess the role that natural capital may play
 in contributing towards economic growth For SWLEP this a key objective within their Emerging Local
 Industrial Strategy.

Previous Project

Building on **previous successful collaboration** between **SWLEP** and the **Department of Economics** at University of Bath (July – September 2019):

Academic Team led by Maik (including Dr Alistair Hunt and Dr Kerry Papps) developed:

- Evidence base for SWLIS regarding Local Skills
 Analysis
- Policy Implications for LIS



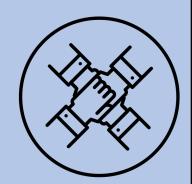
Natural Capital PhD Project Team

Academic Lead: Dr Maik T Schneider

Senior Lecturer, Department of Economics at the University of Bath

Key Expertise: Economic Growth, Innovation and Environmental Economics

 Second Supervisor: Dr. Alistair Hunt, Expert in Environmental Economics







Key messages and importance for SWLEP ...

Environmental Protection and Climate Change is a Key Priority for the Government and Parliament

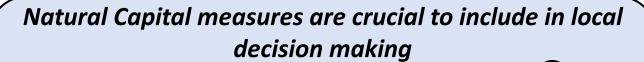
Environmental protection is at the centre of public debates (pre- and post COVID!):

- UK Government's Ten point plan for a Green Industrial Revolution (Nov 2020),
- Refreshing the Green Book guidance on appraising environmental impacts (Nov 2020);
- Publication of Energy white paper, setting the marker for the net-zero targets (Dec 2020)
- Net Zero Review publishes initial analysis of green transition (Dec 2020)
- The Dasgupta Review, assess the economics of biodiversity (Apr 2020)
- Hosting COP26 and G7 presidency (2021)



The environment is centre of future economic growth

 SWLIS recognises this importance and aims to seize the associated opportunities with clean growth.



- **Central benefits** from PhD project **for SWLEP**:
 - Time series measurement of Natural Capital in SWLEP area
 - Conceptual Framework of how Natural Capital can inform local decision making





About me ...

Key Projects:

- Worked with the Scottish Government on NC and marine environment valuation;
- Coordination of IS and LIS analysis in the department;
- Worked on 'greening' the Industrial Strategy.





Key Projects:

- Development of the UK's first Sovereign Green Bond;
- Fiscal modelling for cost involved in achieving Net Zero;
- Development of Green & Energy goods tariffs schedule as part the UKGT.

Key Projects:

- Development of the Trade and Balance of Payment statistics;
- Understanding the UK's net IIP.







Connection to S&W:

Grew up in the Swindon and Wilshire.
 Have a personal affinity with outcomes of the project and future impacts to the local area.

Educational Background:

- Pure economics with a focus on public policy;
- Fascinated with the application of economics to real world problem and solutions.





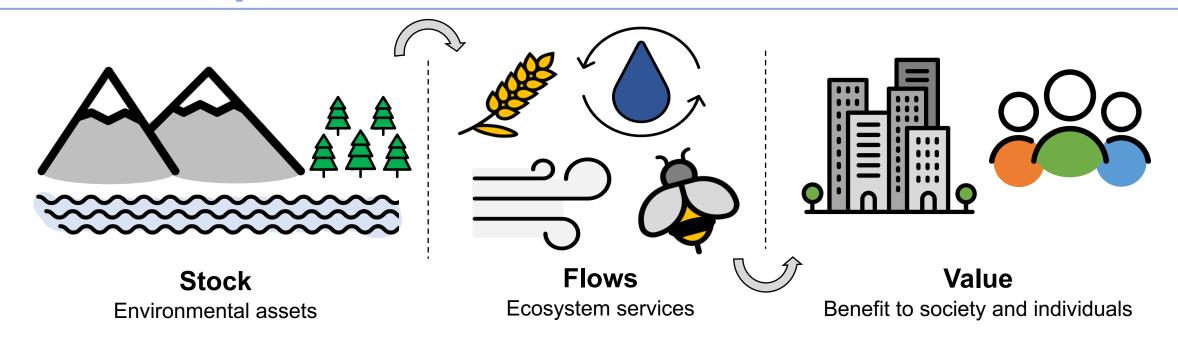
Future Aspirations:

 Environmental economic research within an international organization (i.e. OECD, World Bank etc)





Why is it vital to think about the environment and Natural Capital on a local level ...



- In the UK adaptation and mitigation actions to climate change have predominantly been at a national level, but will in large part be delivered locally. This means policy decisions have to be context specific to the local area and their nature needs.
- By Swindon & Wiltshire taking action to the value of Natural Capital in the allowing for policies and decisions to be tailored to the local situation, understanding a greater extent of who benefits, potential risks and future opportunities they present.



How can Natural Capital contribute to SWLEP's local industrial strategy ...?

- Understanding Natural Capital captures the potential environmental impact of policy decisions, which are currently limited or nil. This is essential to finding out:
 - Who might burden cost / reap the benefits of different options and over what duration;
 - The trade-offs and implications to the environment of different policy options.
- Benefit of Natural Capital opportunities for protecting and enhancing local economic growth may include:

Protecting infrastructure from climate risks, such as flooding,
drought and extreme temperatures



Securing industrial supply chains against climate-induced shortages of raw materials.



Providing opportunities for environmental net gain through the planning system



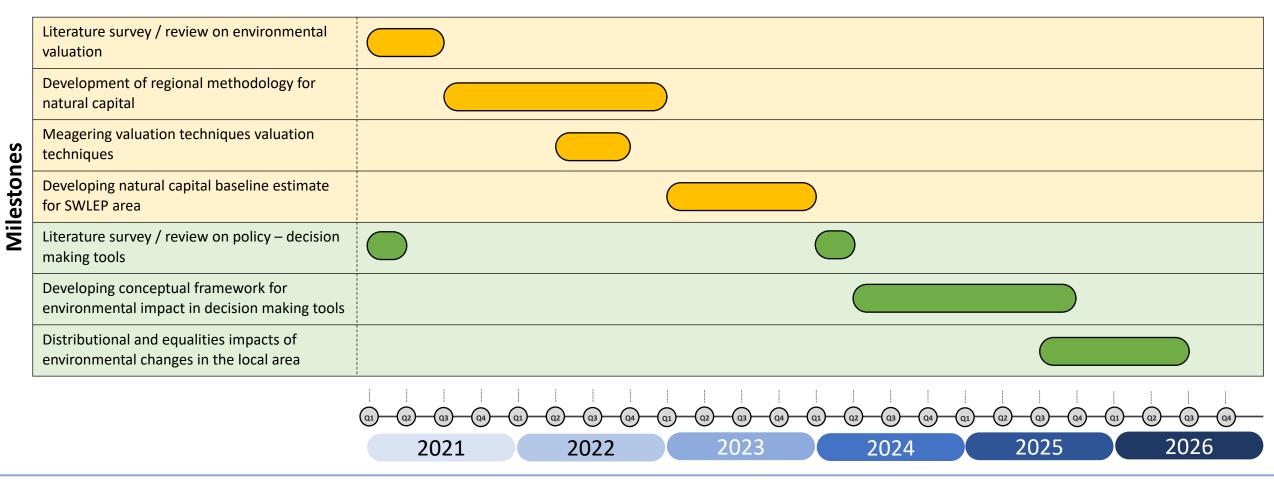
Increasing competitive advantage of a local economy by creating healthy places people want to live, work and visit





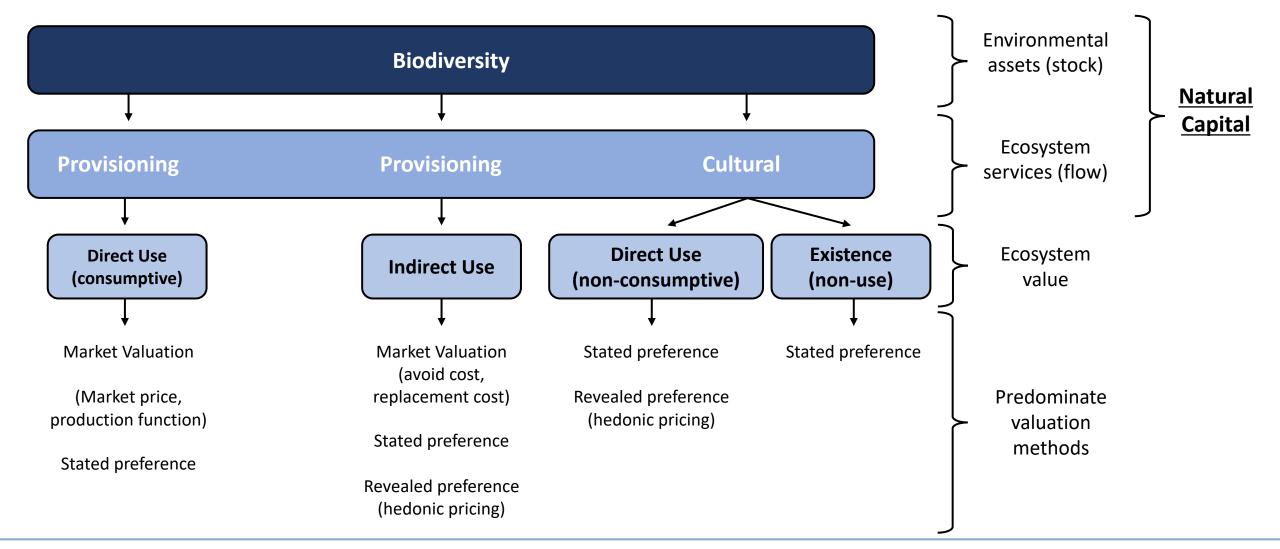
PhD project milestones and timelines ...

Milestones and timelines relating to developing the Natural Capital baseline time series for SWLEP can be seen in Yellow section, the Green section relates to the conceptual Framework of how Natural Capital can inform local decision making.





The focus so far has been on identifying the potential techniques available to estimate Natural Capital ...







Concluding remarks...



The Government is giving significant attention to protecting natural environment across its legislative and spending programme.



Its vital we recognise the environment as our most important asset and the key for future local economic growth.



Understanding Natural
Capital will help with
the local decisionmaking, in determining
if intervention or
certain policies are
justified, or set
priorities.



We will be back at this board meeting in six months, where we would expect to be finishing the first milestone of the PhD project.



