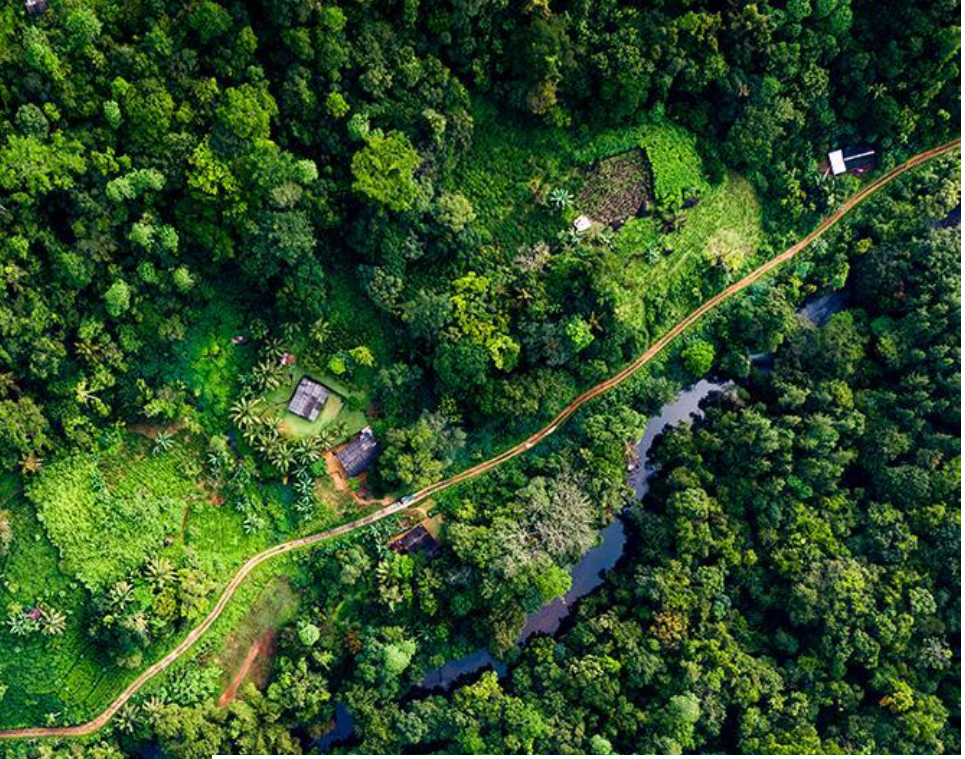

Natural capital approaches for sustainable development and investments in

Sri Lanka

Rafael J. P. Schmitt, Ph.D.

Natural Capital Project & Stanford University

University of Peradeniya, Sri Lanka
5/31/2023

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Coastal Protection

Clean Water & Energy

Climate Security

Our mission:
Leveraging ecosystem services and natural capital for sustainable development

Flood Control

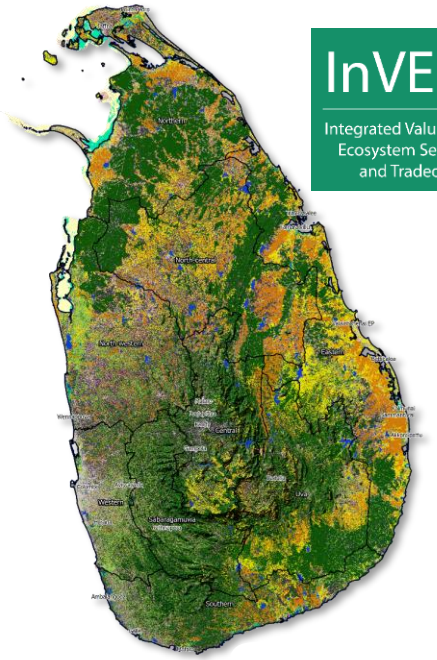
Urban Cooling

Food Production

Health

Rapid natural capital assessment for Sri Lanka

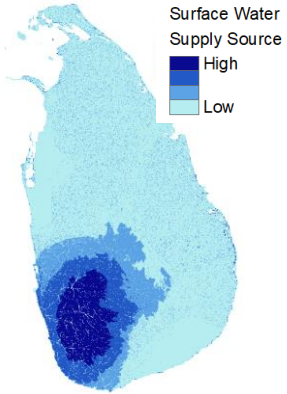
Global biophysical information (landuse, climate, topography…)



InVEST
Integrated Valuation of Ecosystem Services and Tradeoffs

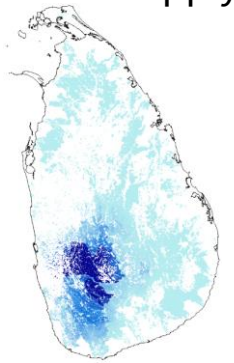
Modeling ecosystem services

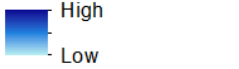
Water supply



Who benefits?

Water supply service





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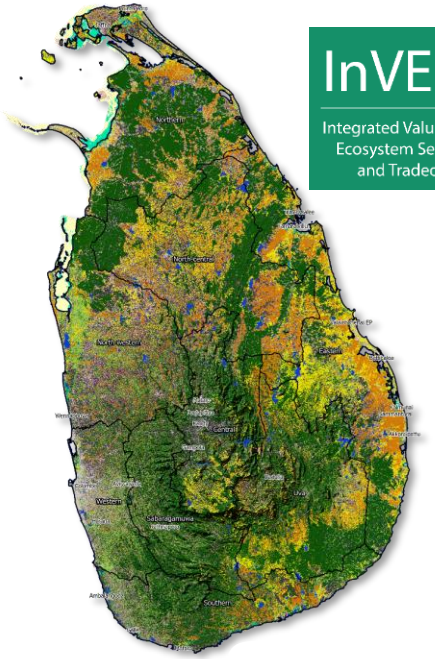
Rapid natural capital assessment for Sri Lanka

Global biophysical information (landuse, climate, topography…)



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Integrated Valuation of Ecosystem Services and Tradeoffs

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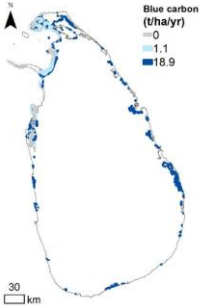
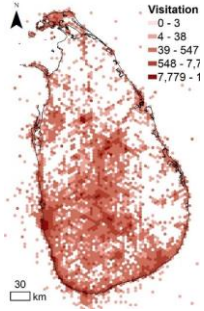
Blue Carbon



Tourism



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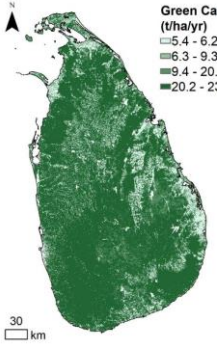
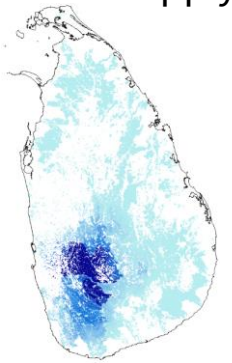


Water supply service



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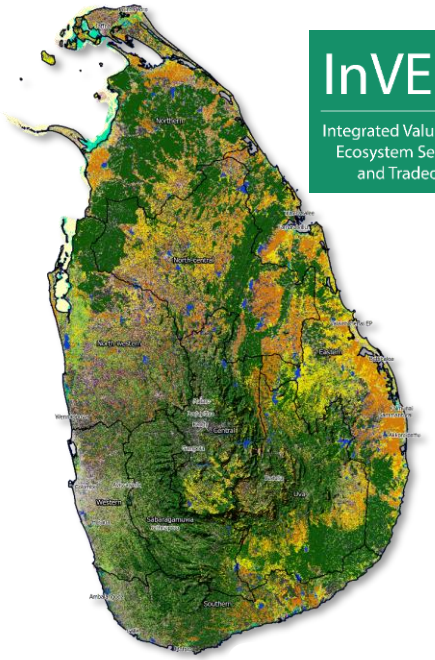

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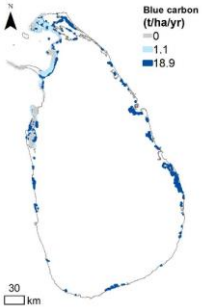

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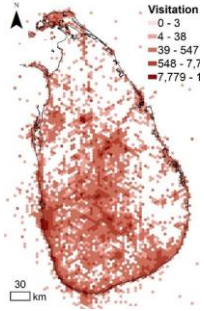

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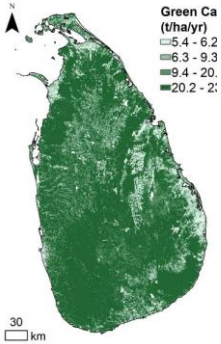
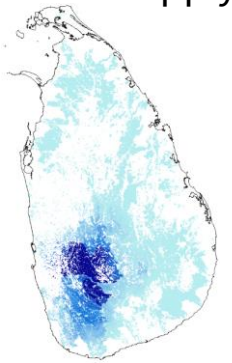
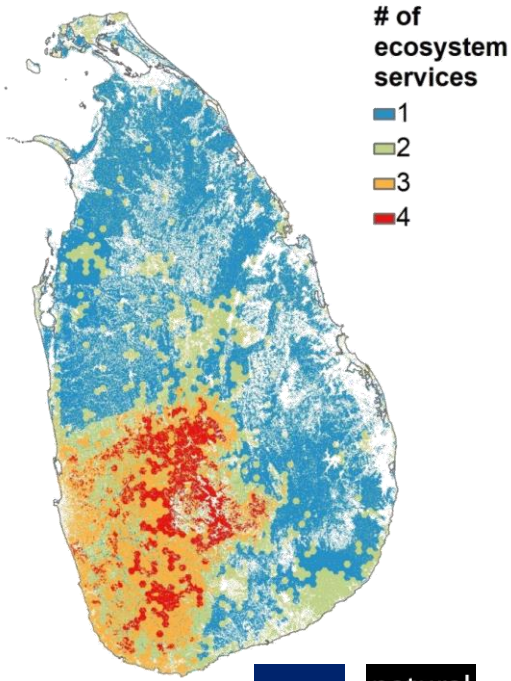


Water supply service



Mapping ecosystem priority areas



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Identifying natural capital investment opportunities

Natural capital investments via diverse mechanisms, accross scales, and stakeholders

Mapping ecosystem priority areas

MECHANISMS

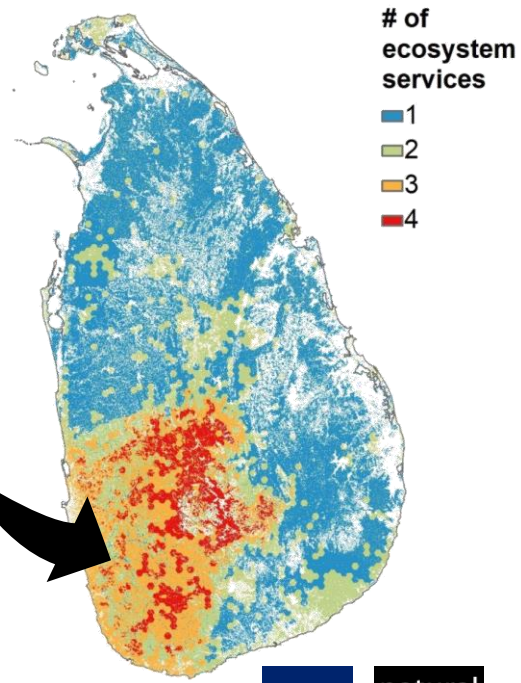
- Spatial planning and zoning
- Integrated watershed management and PES
- Market-based mechanisms
- Nature-based climate adaptation
- Regulatory mechanisms
- Multilateral and bilateral agreements

SCALES

- Local
- Watershed
- Provincial
- National
- Global

ACTORS

- Governments
- Civil Society
- Private landholders
- NGOs
- Financial institution
- Utilities



Refine assessments

Monetary/non-monetary valuation

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Identifying natural capital investment opportunities

NatCap's approach to cost effective watershed investments

Determine where natural capital measures can be implemented

Model changes in service flows

Quantify costs and benefits

Cost-effective investments into watersheds, with benefits for people and nature.

Inputs from stakeholder groups and potential investors

Biophysical modeling. Data on beneficiaries, e.g., reservoirs, water supply systems, downstream population

InVEST
Integrated Valuation of Ecosystem Services and Tradeoffs

Data on implementation, maintenance. Data on direct and indirect benefits

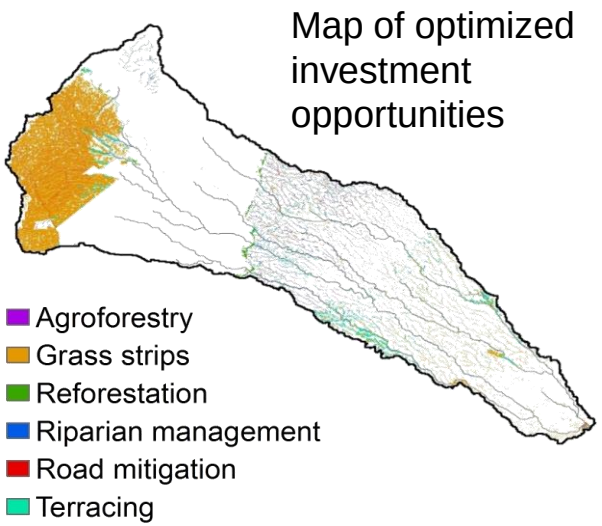
Geo-spatial optimization: where do investments maximize marginal returns?

Leverage socio-economic data and state-of-the art science

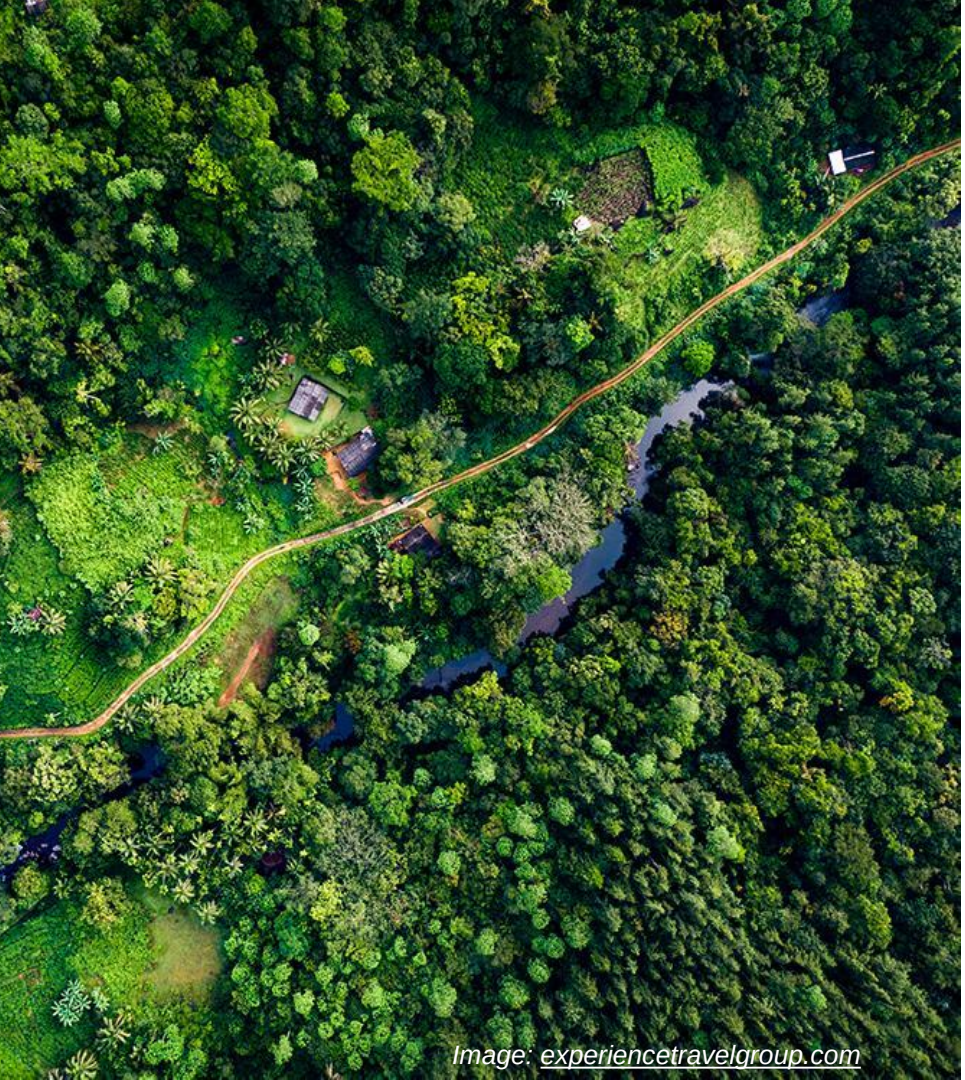
Identifying natural capital investment opportunities

Tana Water Funds

- Invest in better agricultural practices to improve farming outcomes and water quality
- Prioritize where to invest $10 million dollars over 10 years
- Maximize return on investment: $15 million benefits for upstream farmers and downstream water and power utilities



RESULT: Water Fund launched in 2015 with contributions from the private and public sectors and continues today to invest in watershed management



Thank you!

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rschmitt@stanford.edu

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Stanford WOODS INSTITUTE for the ENVIRONMENT

Stanford Doerr School of Sustainability

Next steps: Identifying policy and investment opportunities through rapid natural capital assessments.

Objectives

Support Sri Lanka and 14 other countries to integrate natural capital into policy and investment decisions.

Contribute to the mainstreaming of natural capital through mainstreaming Natural Capital Assessment and Accounting (NCAA) in science-policy processes for informed decisions.

Provide the Global Environment Facility (GEF) Partnership with a standardized framework, customizable tools, and training curricula for rapid NCAA approaches

IDB Inter-American Development Bank

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gef