Landscapes in the Changing Wealth of Nations

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Changing Wealth of Nations 2020: From Accounting to Managing Assets

Manage the macroeconomy better by

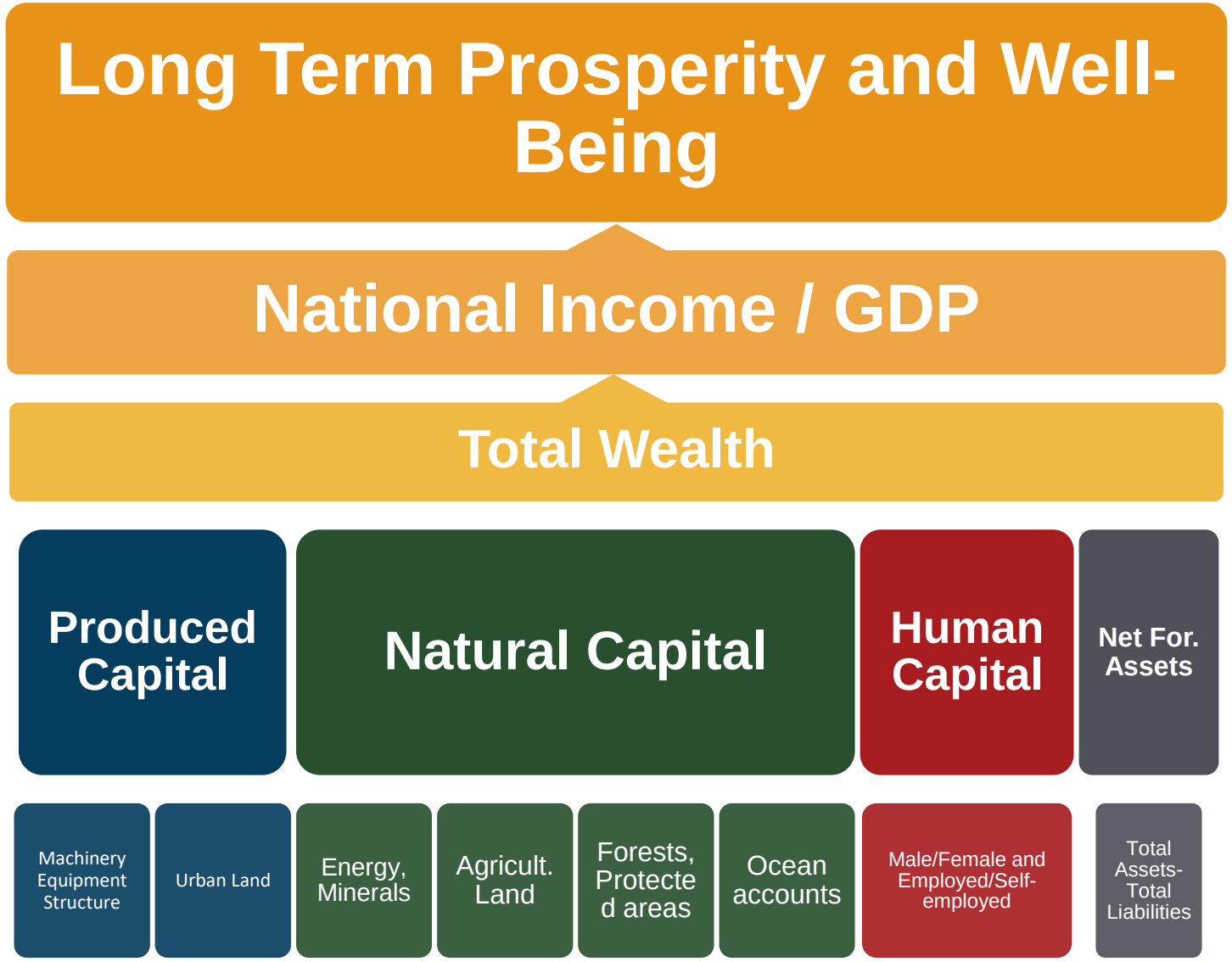
Full accounting for natural capital's ecosystem services

Identify benefits from policy reform in managing natural capital

Influence of climate change: adapting to risks

Message for CBDCoP: Implement Natural Capital Accounting

Wealth accounts for 150 countries, 1995 to 2017



CWON's Natural capital accounts and Landscape management

CWON Ecosystem/Landscape approach clusters:

- Forest (agriculture and protected areas)
- Coastal/marine (Ocean accounts)

Ecosystem accounts are

- Estimated at grid cell level that can also support subnational, landscape approach
- Estimate benefits from policy reform/improved management
- Include scenarios about the impact of climate change

Inform the macroeconomic picture, complementing more detailed, landscape analyses

Build on database that can be used at subnational level

Coastal/marine ecosystem accounts:

Fisheries

- Build on exploratory work in CWON 2018, partner with Univ of British Columbia plus data from FAO, OECD to develop fisheries accounts

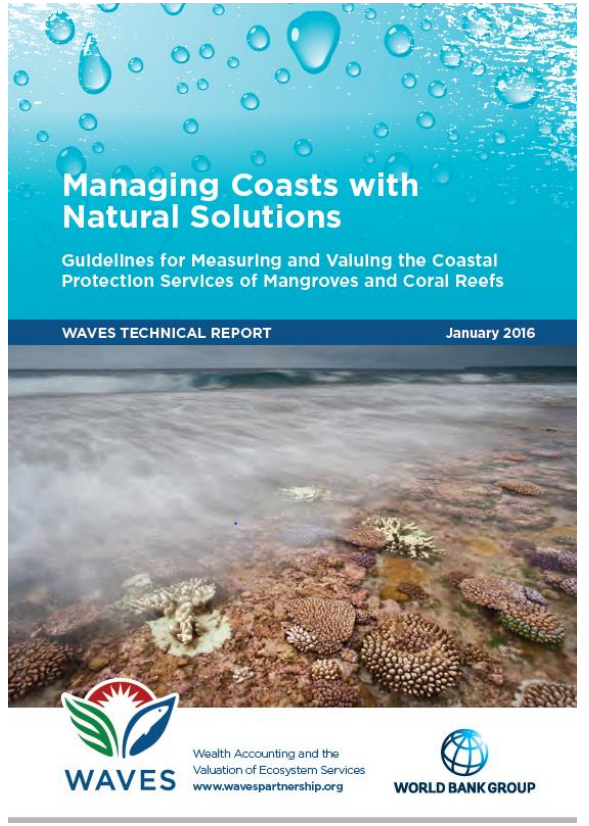
Policy analysis: Benefits from fisheries sector reform: removing harmful subsidies and restoring fisheries to sustainable management

Mangroves and coral reefs

- Develop asset accounts - account for potential impacts of climate change, building on previous work done with our partners (TNC, others)

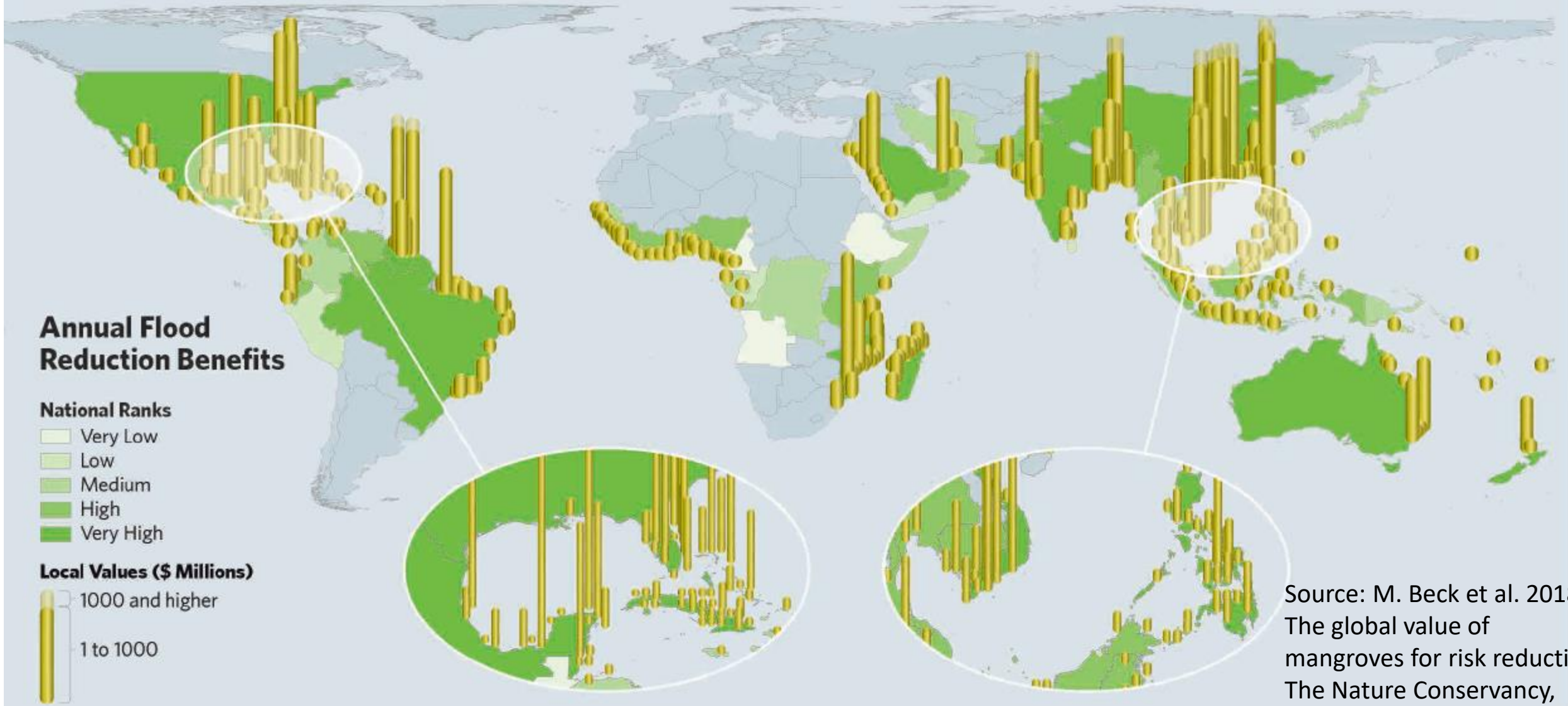
Policy analysis: Identify priority sites to conserve existing mangroves and opportunities for restoration

Mangroves reduce global flooding damage



Source: M. Beck et al. 2018. The global value of mangroves for risk reduction. The Nature Conservancy, Berlin.

Value of mangroves for flood reduction



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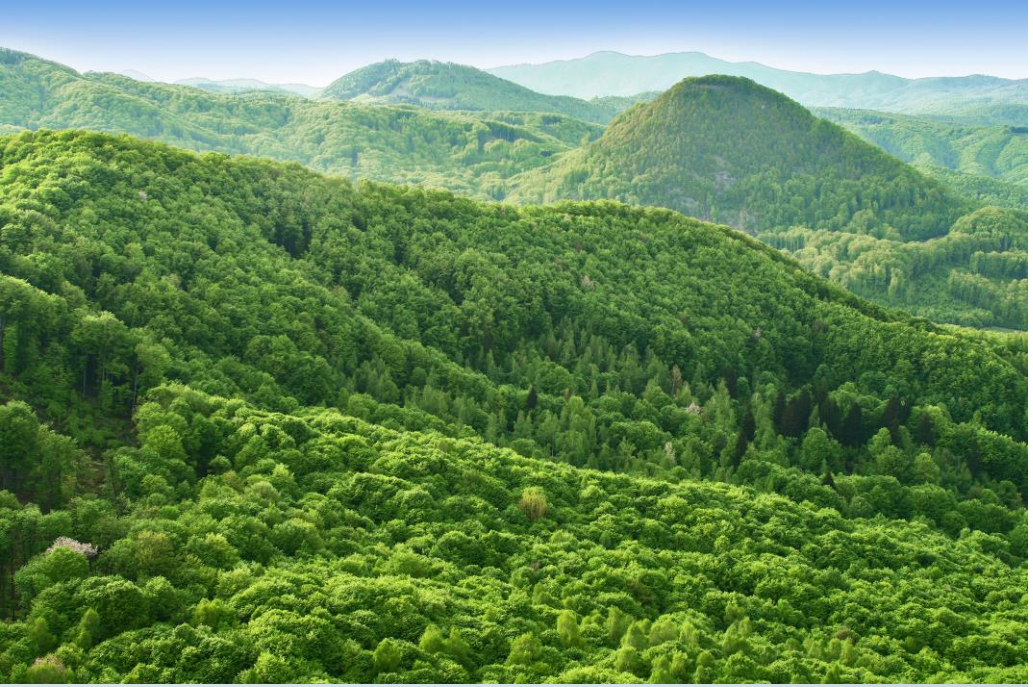


Forests and agricultural land: ecosystem services and land degradation

Forest ecosystems

- New meta data analysis to greatly improve valuation estimates for forest ecosystem services: NTFP, watershed services, recreation
- Include forest degradation

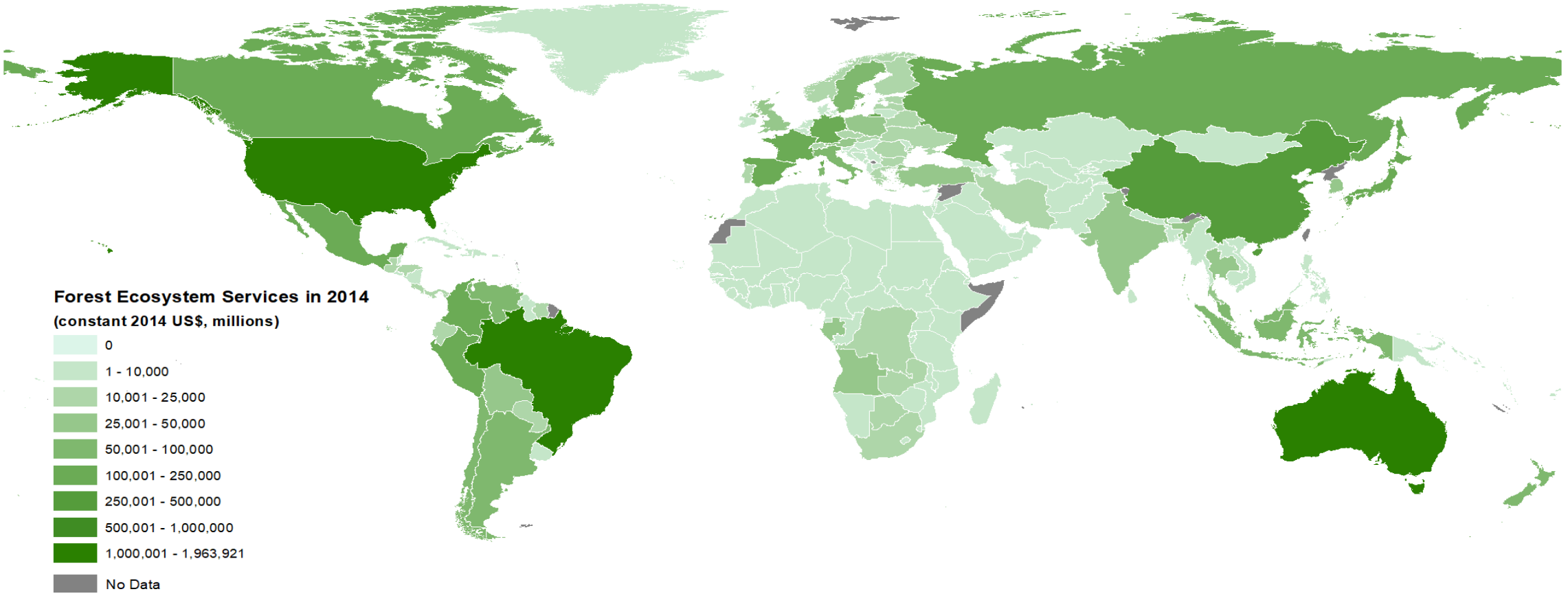
Agricultural land

- Changing yields & land value under impact of climate change, land degradation

Policy analysis:

- Tradeoffs between agr land expansion and deforestation
- Identify policies (e.g., subsidies, tenure insecurity,) that facilitate or discourage land use changes

Value of forest ecosystem services, 2014



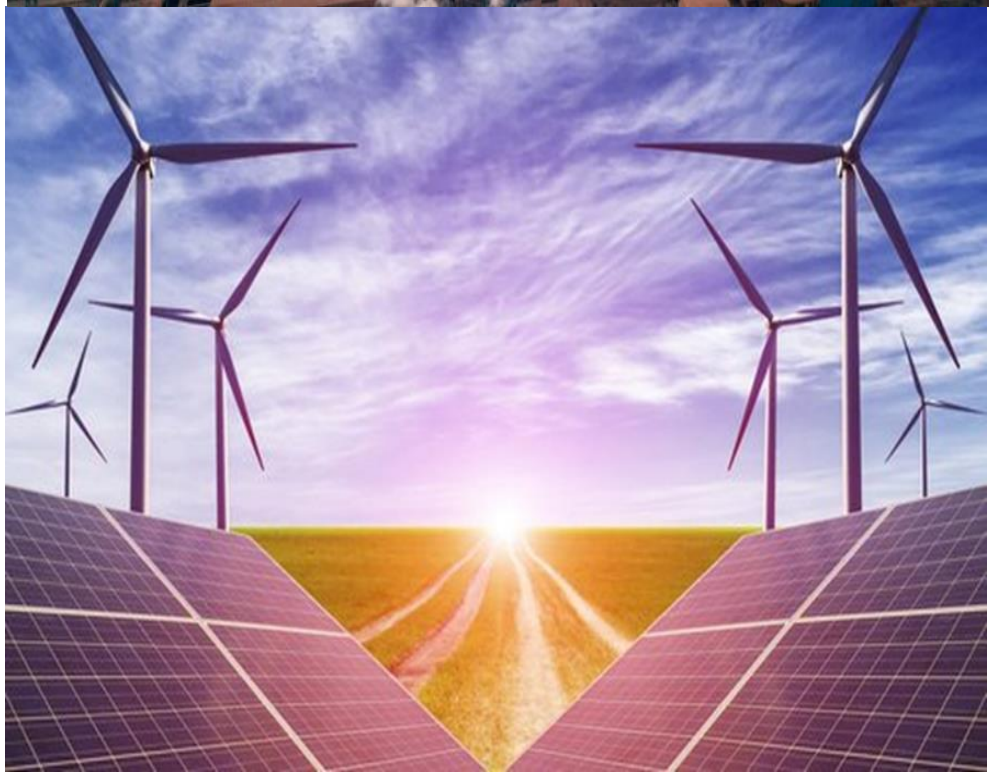
Renewable energy add to both marine-coastal and terrestrial accounts

Renewable energy

- Value of potential of renewable energy resources (hydro, solar, wind)
- Assessment of potential for expansion and benefits in terms of lower GHG emissions

Policy analysis: Identify policies, and benefits, that

- Would reduce the human capital costs from air pollution
- Stand in the way of developing renewable energy



How to use information from CWON:

Primary audience is Ministries of Finance, Planning, Public works…

1. Address the **priorities** of Ministries of Finance
2. Demonstrate **how the economy benefits** from better management of Natural Capital
3. Identify the **costs of the reforms**/interventions needed

Macro picture complements analysis of specific landscapes

1. Priorities of Ministries of Finance

MACRO-ECONOMIC BENEFITS:

- Contribution to GDP, Foreign exchange earnings, employment
- Are these contributions **sustainable**, will they support long-term economic growth?

FISCAL POLICY IMPLICATIONS:

- How much does natural capital, including value chain, contribute to govt revenue?
- Insurance against natural disasters: how much does Nature-based infrastructure reduce the fiscal costs of natural disasters?

POVERTY REDUCTION—EMPLOYMENT--LIVELIHOODS:

- How much do seascape activities currently contribute to incomes & food security of different households?

MACRO PICTURE COMPLEMENTS ANALYSIS OF SPECIFIC LANDSCAPES:

- Weigh trade-offs across multiple landscapes for policy reform, investments

2. Demonstrate the benefits from better management of Natural Capital

- How much revenue/rent is lost through poor management,
- How much could **revenue be increased** through better management, including adaptation measures for climate change?
- How much would **jobs and income increase** with better management of fisheries;
- Can the **fiscal costs of natural disasters** be reduced by managing Nature-based infrastructure for resilience, in combination with gray infrastructure?
- Who is affected by different policies—identify **winners and losers**

3. Identify the costs of the reforms needed

- How do benefits/costs of natural capital policy reform compare to interventions in other sectors?

- What support programs are needed by stakeholders to compensate ‘loser’s’ during a transition to sustainable management, including income support programs

Thank you!