

Measuring Planetary Health and Human Well-Being

Societal progress and human well-being are dependent on planetary health, reflected by a stable climate, thriving biodiversity, and the proper management of chemicals and pollution.

The gap between science and policy, however, hinders the potential impact of work on measuring planetary health and its role in human well-being. The relationship between the two should be a priority for the effective design and implementation of policies for achieving the Sustainable Development Goals. As we measure these, so we need to share our knowledge and inspire others to act on the evidence. Progress depends on a strong community of practitioners at local, national and global levels.

The quarterly *Measuring Planetary Health and Human Wellbeing* aims to compile and present some of the most interesting recent progress in this field.

Specifically, its objectives are to:

- Provide succinct, relevant updates on emerging and existing measures of economic progress, planetary health and human well-being in the United Nations, multilateral institutions, trust funds, conservation organizations, national treasuries and international finance institutions on measuring inclusive wealth and related policy.
- Provide a platform to build consensus around methodological development in wealth metrics by scientists, economists and practitioners.
- Promote exchange of information and data for better implementation of measurement and policy.

Needless to say, your feedback, suggestions and guidance are key to achieving these objectives.

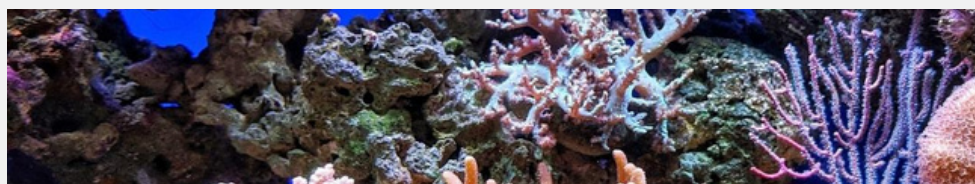


"We must place true value on the environment and go beyond GDP as a measure of human progress and well-being."

Let us not forget that when we destroy a forest, we are creating GDP. When we over-fish, we are creating GDP. GDP is not a way to measure richness in the present situation in the world."

~ António Guterres

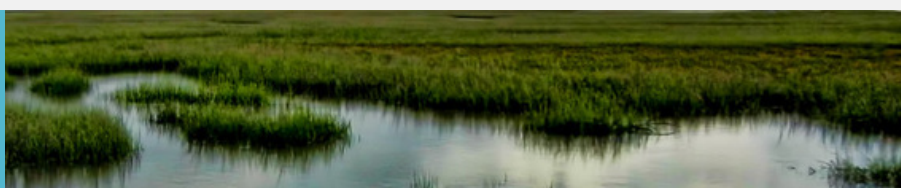
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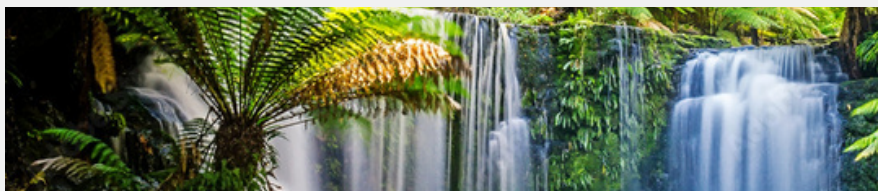
Inclusive Wealth Report 2022

- **Pushpam Kumar & Shunsuke Managi**
Inclusive Wealth Report 2022

Wealth and Natural Capital in the United Nations



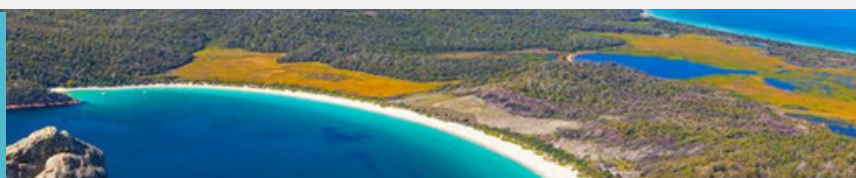
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PUSHPAM KUMAR

SHUNSUKE MANAGI



Senior Economic Advisor

United Nations Environment
Programme

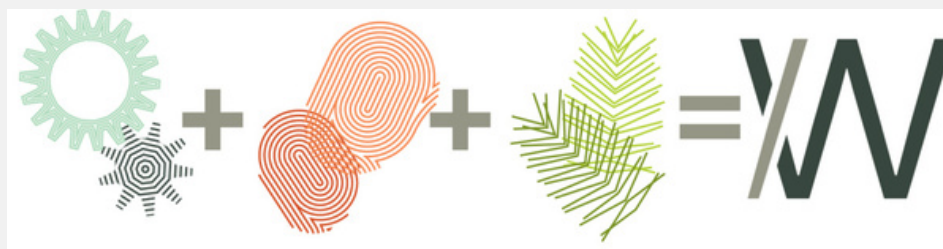


Director

Urban Institute, Kyushu
University

Inclusive Wealth Report 2022

The Inclusive Wealth Index is the United Nations Environment Programme's flagship metric in response to the global call to move beyond GDP. The index is a multi-purpose indicator capable of measuring not only traditional stocks of wealth but also those less tangible – such as skill sets, health care, and environmental assets – which support all human progress and ultimately set the parameters for sustainable development. A country's inclusive wealth is calculated as the social value of all its capital assets, comprising natural, human and produced capital.



Produced Capital + Human Capital + Natural Capital = Inclusive Wealth

Inclusive wealth analyses have demonstrated the unfortunate trend that although some countries have managed rapid accumulation of human and produced capital with relatively minor depletion of natural capital, most have significantly depleted their natural capital in achieving growth. In per capita terms, global natural capital has dropped by over 50 per cent between 1990 and 2019.

Following previous iterations (IWR [2012](#), [2014](#), and [2018](#)), the Inclusive Wealth Report 2022, which will be launched later this year, undertakes a comprehensive global assessment of 163 countries for 1992–2019. The 2022 report adds an explicit focus on the nexus between inequalities and natural capital, highlighting that the loss of nature impacts rural and poor communities in developing countries most directly and most acutely. Countries therefore need to consider their developmental pathway individually – as substitutability between types of capital may not be equitable between countries.

Measuring inclusive wealth is key to driving sustainable investments across all policy areas. As the United Kingdom's Treasury's 2021 [Dasgupta Review: The Economics of Biodiversity](#) noted, “[judging] whether the path of economic development...is sustainable [requires nations to adopt] inclusive measure[s] of their wealth”.

The Inclusive Wealth Index and its application to national, regional, and global fiscal policy is transformative in its approach to economic progress and therefore holds significant potential to support the Post-2020 Global Biodiversity Framework, Our Common Agenda, the 2030 Agenda and NDCs under the Paris Agreement.



MAAIKE JANSEN

Secretary, High-Level Committee on Programmes

United Nations System Chief Executives Board for Coordination

United Nations Moves Beyond GDP

The United Nations System Chief Executives Board for Coordination discussed at its second session of 2021 complementary measures for progressing beyond the single indicator of GDP. The Board tasked its High-level Committee on Programmes to develop a United Nations system-wide contribution on beyond GDP by the third quarter of 2022. This is in support of the 2030 Agenda for Sustainable Development, in particular target 17.19, which states that: "By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries".

It will also support the follow up to the [Our Common Agenda](#) report released by the United Nations Secretary-General in 2021, which states that new complementary measures to GDP will help people gain a full understanding of the ways in which business activities impact the environment, and how we can and must do better to support people and our planet.

Guided by the 2030 Agenda, this system-wide contribution across the United Nations aims to support the Secretary-General to articulate a vision for progress beyond GDP that is country owned and integrates all dimensions of sustainable development, feeding into relevant intergovernmental processes.





RACHAEL BEAVEN

Director, Statistics Division

The Economic and Social Commission for Asia and the Pacific

The Global Ocean Accounts Partnership

Data and statistics for assessing the oceans is fragmented, and international statistical standards are yet to be developed. In this context, the ocean accounting initiative set out to develop guidance through national experimentation and regional-scale experience sharing. The initiative soon gained global interest, and the Economic and Social Commission for Asia and the Pacific therefore established the Global Ocean Accounts Partnership as a global hub for the initiative. The Global Ocean Accounts Partnership is hosted by the University of New South Wales, Australia, and co-chaired by Fisheries and Ocean, Canada, and the Economic and Social Commission for Asia and the Pacific.

The partnership brings together governments, international organizations and research institutions to build a global community of practice for ocean accounting. It strongly urges stakeholders to measure and manage progress towards sustainable use of the oceans by taking an explicitly 'beyond GDP' approach to economic development.

Key activities and achievements of the partnership include the following:

- Pilot projects across Asia and the Pacific. China developed harmonized ecosystem maps and carbon stock assessments of Beihai Bay; Malaysia examined food security risk along the Straits of Malacca under climate variability and changes in ecosystems; and the sustainable tourism focus of Samoa, Thailand and Viet Nam enhanced the understanding of links between tourism income, natural resource use, land-based pollution, and ecosystem impacts.
- The "Technical Guidance on Ocean Accounting" builds on the pilots and supports countries in selecting, prioritizing and standardizing data of national, regional and global importance so it can provide comprehensive information for decision-making.
- Acknowledgement of the efforts by the United Nations Statistical Commission, followed by the establishment of the United Nations Committee of Experts on Environmental-Economic Accounting Working Group on the System of Environmental-Economic Accounting Ocean, chaired by Australia.

More information on the initiative is available here:

- Economic and Social Commission for Asia and the Pacific [regional ocean accounts](#) platform
- [The Global Ocean Accounts](#) platform





ALESSANDRA ALFIERI

Chief, Environmental Economic Accounts, Statistics Division
United Nations Department of Economic and Social Affairs

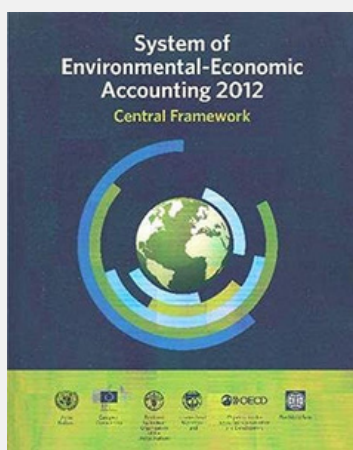
System of Environmental Economic Accounting (SEEA)

The System of Environmental-Economic Accounting (SEEA) is the international statistical standard for natural capital accounting. It provides a framework for organizing and presenting statistics on the environment and its relationship with the economy using an internationally agreed set of concepts, definitions, classifications, accounting rules and tables to produce internationally comparable statistics.

There are two main parts to the SEEA – the SEEA Central Framework and the SEEA Ecosystem Accounting. The [SEEA Central Framework](#), adopted by the United Nations Statistical Commission in 2012, focuses on individual environmental assets, such as energy and water, to account for how these assets are extracted from the environment, used within the economy, and returned to the environment (i.e., as waste and emissions). It comprises several subsystems, including energy, air emissions, environmental protection expenditures, and environmental taxes, helping to elucidate the economic trade-offs and synergies involved in the use of natural resources as well as the effectiveness of economic responses.

The [SEEA Ecosystem Accounting](#), adopted in 2021, complements the Central Framework by providing spatially explicit presentation of data on the extent and condition of ecosystems and flows of ecosystem services in both biophysical and monetary terms. The spatial explicit nature of the SEEA Ecosystem Accounting allows for identification of the location of critical ecosystem assets and services along with their specific beneficiaries (households, businesses and governments), highlighting the contributions of ecosystems to well-being and the benefits of conservation. Likewise, it shows where degradation is taking place and who is suffering the consequences for the degradation.

Together, the Central Framework and Ecosystem Accounting provide a comprehensive view of the environmental-economy nexus and make nature's invisible contributions to society visible. The SEEA plays an important role in assisting governments to move beyond GDP, supporting the conservation of nature through institutionalizing natural asset accounting, and taking into account the contribution of the environment to well-being.



MAKIYO YASHIRO



*Asia-Pacific Regional Coordinator
for Nature Action Subprogramme*

Regional Office for Asia and the
Pacific – United Nations
Environment Programme

PUSHPAM KUMAR



Senior Economic Advisor

United Nations Environment
Programme

Inclusive Wealth of Thailand

Over the past decades, Thailand has made significant progress in social and economic development. However, rapid economic expansion in the country has been largely pursued at the expense of the natural resource base and ecosystem health, and there is growing recognition of the need for the nation to explore new economic pathways that are more sustainable and inclusive.

The Inclusive Wealth Interim Assessment Report for Thailand is being developed to provide a brief overview of the status and trends of the inclusive wealth of Thailand, including produced, human and natural capitals and ultimately provide guidance for economic and holistic recovery post-COVID-19. The preliminary findings of the study highlight that Thailand has experienced consistent growth in inclusive wealth per capita for almost three decades. These improvements in inclusive wealth have primarily been driven and supported by strong growth in produced capital and human capital. On the other hand, the persistent and rapid decline in natural capital has demonstrated the urgent need for more effective and targeted management of natural resources in the long term. The findings of the Inclusive Wealth Interim Assessment Report, once finalized, will be used as a tool to engage key stakeholders in Thailand in the dialogues on the need to go 'beyond GDP' and the effectiveness of Inclusive Wealth Index as an alternative measurement of the wealth of nations to guide policies and development planning processes in Thailand.





KIRPAL SINGH CHAUHAN

Office of Innovation and Change Challenge Team

International Monetary Fund

Climate Innovation Challenge

At the IMF, climate change is now at the heart of our work on economic and financial stability, growth, and jobs. Policy innovation is central to helping member countries reduce emissions, build resilience, and capture the opportunities for greener growth. A key question to answer then, is how to go about integrating climate change into economic analysis to promote green policies.

To help build momentum in answering this question, the IMF organized an innovation challenge on the economic and financial stability aspects of climate change. The challenge was sponsored by the Swiss State Secretariat for Economic Affairs. Participants included country authorities and agencies, think tanks, IMF staff, the World Bank, and international organizations, and the proposals were developed around practical solutions to further integrate climate into the IMF's core activities. The winning teams provided insights, models, and frameworks related to climate change and disaster resilience, including macro-economic modelling, scenario analysis, and machine learning-based tool-boxes for policy action.

Please click [here](#) to see a recording of the Climate Innovation Challenge pitch event where finalists pitched their ideas to a panel of judges for practical solutions to further integrate climate into the Fund's core activities.





STEFANIE ONDER

Senior Environmental Economist

The World Bank

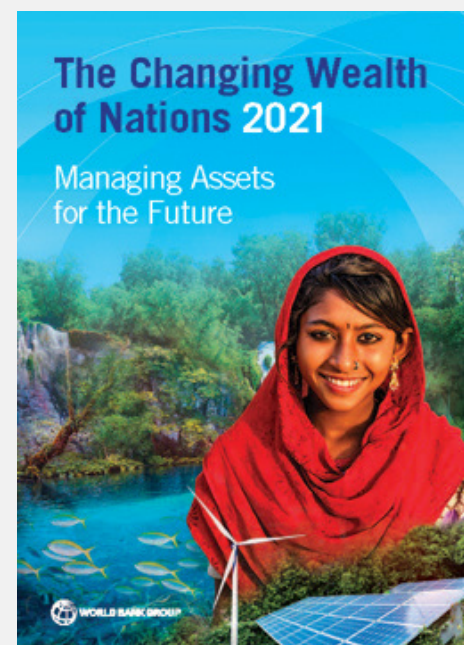
The Changing Wealth of Nations

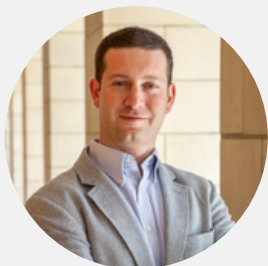
The World Bank has developed wealth accounts for more than 15 years using a methodology that is consistent with the System of National Accounts and the System of Environmental-Economic Accounting. This initiative is driven by the recognition that renewable natural capital and human capital should be given the same importance as more traditional sources of economic capital – that which is manufactured.

The World Bank's comprehensive wealth metric includes produced, human, and renewable and non-renewable natural capital, as well as net foreign assets. It is regularly updated as part of the [Changing Wealth of Nations](#) series and currently assesses the wealth of 146 countries for 1995–2018. Changes in wealth per capita are a critical metric of economic sustainability and are complementary to economic flow indicators, such as GDP. They can signal the sustainability of economic growth and development over long time-horizons, whether growth has been accompanied by investments in assets or from the liquidation of assets, and whether asset accumulation has kept pace with population growth. Further, they indicate economic resilience, showing whether nation states are effective asset managers with a diversified portfolio of assets, or whether wealth is concentrated and vulnerable to external or unanticipated shocks.

The 2021 iteration of the Changing Wealth of Nations report breaks new ground by expanding the types of capital included and improving the methodology. These include the application of Purchasing Power Parity (PPP) prices to wealth, applying decomposition analysis to delineate what drives changes in wealth, and introducing blue natural capital (e.g., fisheries and mangroves) to the core accounts.

Changing Wealth of Nations 2021 also focuses strongly on policy implications and recommendations that may be inferred from the comprehensive wealth accounts. These include how to manage assets under risk and uncertainty and considerations of how climate policies might affect the value of assets under different future scenarios.





ELI FENICHEL

Assistant Director, Natural Resource Economics and Accounting

White House Office of Science and Technology Policy, Washington D.C.

Natural capital accounting in the USA

A major barrier to achieving sustainable economic prosperity is that the value and services of nature are not included in our economic models and indicators. Many of nature's benefits are public goods and not easily exchanged on the market so are therefore often forgotten, despite the clear and important linkages between the quality of our environment and the economy. These natural capital assets, from minerals to bees, contribute essential value to the economy in various forms. They are the first links in supply chains for industries and households, the filters of pollutants from water and air, and the places that provide opportunity for outdoor recreation.

Over the last 30 years particularly, experts have repeatedly called for the need to recognize nature as a foundational asset to the economy and to develop ways to measure it accordingly.

The United States is responding to the need to better account for natural assets and ecosystem services. On Earth Day (22 April) 2022, the White House announced an initiative to organize, compile, and maintain natural capital accounts and associated environmental-economic statistics for the United States.

For the first time, these accounts will allow the United States to comprehensively partition the role of natural assets and environmental services in gross output (i.e., GDP), incorporate natural assets in measures that account for changes in national wealth such as net economic output (i.e., net domestic product), and enable measurement of changes in economic opportunity and wealth that go beyond GDP.





LIVIA BIZIKOVA

Lead, Monitoring and Governance

International Institute for Sustainable Development

Measuring Comprehensive Wealth to Promote Inclusive and Sustainable Development

According to the G7, the United Nations, the World Bank, the OECD, the World Economic Forum, and leading researchers, the time has come to move beyond GDP. To quote the United Nations Secretary-General, “We know that GDP fails to account for human well-being, planetary sustainability, and non-market services and care, and it fails to consider the distributional dimensions of economic activity. It is time to collectively commit to complementary indicators.”

Doing so would restore balance in public policies, ensuring that the environmental and social determinants of well-being are given full consideration alongside economic imperatives. Measuring ‘wealth’ in this broad sense – considering human, natural, social, produced, and financial capital – would give countries new and important insights into the sustainability of their policies.

The focus of the International Institute for Sustainable Development, with the support of the International Development Research Institute, is to work with a team of experienced professional economists and statisticians, a project advisory committee, and a peer-review process to calculate inclusive index. The project, [Measuring Wealth to Promote Sustainable Development](#), aims to build capacity in three developing countries, Ethiopia, Indonesia, and Trinidad and Tobago, to develop inclusive wealth estimates and identify their relevance to policymaking. Priority is placed on ensuring that capacity is developed in national experts for both the compilation and analysis of inclusive wealth measures. The International Institute for Sustainable Development works closely with experts within and outside government (e.g., national statistical agencies, ministries, universities, think tanks) in partner country institutions to develop inclusive wealth measures using as much as possible existing national data.





GARRY PETERSON

Professor of Environmental Science
Stockholm Resilience Centre

Swedish Foundation for Strategic Environmental Research Finance to Revive Biodiversity

The financial system is a major force in undermining biosphere resilience, but it also has the potential to promote and restore nature. The Stockholm Resilience Centre at Stockholm University will host a new multi-partner research programme that will help the global financial sector develop strategies to protect nature and halt current biodiversity loss.

The Swedish Foundation for Strategic Environmental Research (Mistra) Finance to Revive Biodiversity Programme ([FinBio](#)) will conduct transdisciplinary research to enhance the capacity of the financial sector to contribute significantly and meaningfully to the creation of a nature-positive economy. Becoming nature positive requires the development of techniques for identifying business models that safeguard existing biodiversity, as well as those that integrate and enhance biodiversity through their practices – reflecting two complementary overarching goals that the World Bank terms ‘greening finance and financing green.’

The four-year programme builds on considerable research already conducted by the Stockholm Resilience Centre and its partners, such as the Global Economic Dynamics and the Biosphere programme at the Swedish Royal Academy. The programme will capitalize on other Mistra programmes such as Mistra Food Futures, and Fairtrans.

The programme is managed by researchers from the natural sciences, philosophy, economics, social sciences and sustainability science, with a track-record of science-policy research, and substantial experience working across disciplines. These researchers are based at the Stockholm Resilience Centre, the Swedish Environmental Research Institute, the University of Gothenburg, the United Kingdom Centre for Greening Finance and Investment at Oxford University, and the museum of Natural History, Stockholm. The programme facilitates collaboration with non-academic partners with expertise in innovative thinking and new approaches to finance, such as the rapidly accelerating regulatory and policy momentum for going ‘beyond carbon’ in finance, are Pictet Asset Management, Finance for Biodiversity Foundation, Principles for Responsible Investment, Swedish Investors for Sustainable Investment, 2050 Venture Capital Fund, Sustainable Finance Lab and the Natural Capital Project, Stanford University.



Postface

News in Leadership



Bert Kroese, the Chair of the United Nations Committee of Experts on Environmental-Economic Accounting who steered the adoption of the new ecosystem accounting framework, has been appointed as Chief Statistician and Data Officer of the International Monetary Fund.

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Contact

For queries, feedback, or if you have interest in contributing to a future issue, please get in touch!

Amelia Holmes

United Nations Environment Programme
amelia.holmes@un.org

Co-ordinating Editor

Pushpam Kumar, United Nations Environment Programme

Deputy Editor

Deborah Kirby, United Nations Environment Programme

Design

Amelia Holmes, United Nations Environment Programme

