



VANTAGE Bulletin

A Summary Report of the International Conference on Valuation and Accounting of Natural Capital for Green Economy (VANTAGE) in Africa

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SUMMARY OF THE INTERNATIONAL CONFERENCE ON VALUATION AND ACCOUNTING OF NATURAL CAPITAL FOR GREEN ECONOMY (VANTAGE) IN AFRICA: 3-4 DECEMBER 2013

The International Conference on Valuation and Accounting of Natural Capital for Green Economy (VANTAGE) in Africa was held from 3-4 December 2013, at the headquarters of the UN Environment Programme (UNEP) in Nairobi, Kenya. The conference was convened by UNEP, in partnership with the World Bank, the UN Statistics Division and the African Union Commission (AUC), and brought together 116 experts, government delegates from Africa and around the world, and representatives of several UN agencies and bodies.

The overall objective of the conference was to showcase successful efforts by countries and organizations in the pursuit of valuation and accounting of natural capital, and to promote awareness of, and participation in, future efforts.

The first day of the conference was dedicated to a capacity building workshop on VANTAGE, during which participants discussed experiences and lessons learned from key international initiatives on ecosystem valuation and measurement. On the second day, participants convened in a high-level policy forum to discuss African experiences with natural wealth valuation and accounting. The meeting resulted in a draft outcome document that takes stock of progress to date and barriers to implementation, and makes recommendations on increasing implementation of VANTAGE in Africa.

This report summarizes the presentations and discussions held during the conference.

A BRIEF HISTORY OF VANTAGE

In recent years, the importance of assigning value to natural capital and incorporating this into national accounting practices has gained widespread acceptance. In Africa, it has also been recognized that this approach should be integrated into development efforts in order to transition to a green economy.

In May 2012, in Gaborone, Botswana, at the Summit for Sustainability in Africa, governments of ten African countries, along with various public and private sector organizations, adopted the Gaborone Declaration. This Declaration contains principles and development goals for considering the value of natural capital in development planning processes and acknowledging that ecosystem services should be fully accounted for and integrated into development planning processes.

At the UN Conference on Sustainable Development (Rio+20) held in Rio de Janeiro, Brazil, in June 2012, the importance of a green economy approach to sustainable



View of the VANTAGE plenary session

development gained recognition, and figured prominently in the outcome document, *The Future We Want*. Other international processes, such as the International Platform on Biodiversity and Ecosystem Services (IPBES), are also expected to contribute to national and international efforts on valuation and accounting of natural capital.

UNEP's Ecosystem Services Economics (ESE) Unit, among other things, supports governments and other stakeholders in incorporating ecosystem services into their national economic and development planning and policy choices. Some of the Unit's main areas of work include: economic valuation of ecosystem services; developing indicators, such as the Inclusive Wealth Index; and encouraging the integration of ecological services into planning. In response to the Gaborone Declaration and the Rio+20 outcome, the ESE initiated the VANTAGE programme.

VANTAGE specifically focuses on: economic valuation of ecosystem services; natural capital accounting; macroeconomic policy and ecosystem linkages; economic instruments and

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incentives; capacity development in valuation and accounting; and advisory services, with a focus on economic valuation, accounting, and policy linkages.

It has established linkages with several relevant organizations, including the GEF-funded Project for Ecosystem Services, the UN Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD), the UN Convention to Combat Desertification, Wealth Accounting and the Valuation of Ecosystem Services and the UN Statistics Division's System of Environmental-Economic Accounting.

The VANTAGE programme has also published a guidance manual for ecosystem services valuation and contributed to methodological development of tools for design of payment for ecosystem services and non-market-based valuation. On valuation and accounting, VANTAGE is: conducting studies on the socio-economic role of forest ecosystems in national economies in collaboration with UN-REDD; and implementing the Inclusive Wealth Report (IWR) initiative to provide quantitative information and analysis to transition to sustainability, among others.

VANTAGE also carries out activities on trade-off analysis, such as between ecosystems and food security, and provides input on the science-policy interface, including with its partners. VANTAGE has carried out several country pilot studies on assessing ecosystem services by applying valuation and accounting methodologies to test scientific findings, including in Chile, South Africa, Trinidad and Tobago, and Viet Nam.

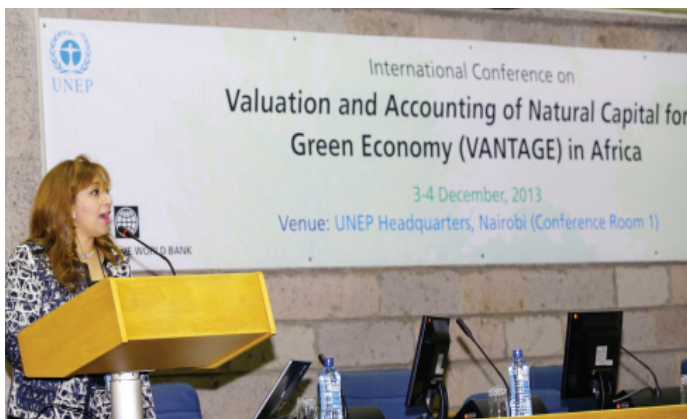
REPORT OF THE MEETING

The International Conference on Valuation and Accounting of Natural Capital for Green Economy (VANTAGE) in Africa convened from 3-4 December and was divided into two broad sessions: a capacity building workshop on VANTAGE held on 3 December; and a high-level policy forum held on 4 December. This report is organized around these two broad sessions.

CAPACITY BUILDING WORKSHOP ON VANTAGE

OPENING SESSION

On Tuesday, 3 December, Shereen Zorba, Head, News Desk, Division of Communication and Public Information, UN Environment Programme (UNEP), opened the International Conference on VANTAGE, outlining its objectives, including encouraging implementation of natural capital accounting at national and regional levels.



Shereen Zorba, Head, News Desk, Division of Communication and Public Information, UNEP

Mounkaila Goumandakoye, Director, Regional Office for Africa, UNEP, emphasized the need to bridge economic, policy and scientific approaches to managing ecosystem services in order to promote human wellbeing. Noting Africa faces multi-dimensional challenges to inclusive, sustainable growth, he recommended building on natural assets to deliver sustained prosperity for all.



Mounkaila Goumandakoye, Director, Regional Office for Africa, UNEP

Pushpam Kumar, Chief, Ecosystem Services Economics, UNEP, challenged participants to consider how to make economic arguments, social accounting and natural capital frameworks useable and convincing for policymakers.

ECONOMY AND ECOSYSTEM: MEASUREMENT AND AGGREGATES

Jacqueline McGlade, UNEP, moderated this session. Robert Costanza, Australian National University, highlighted



Jacqueline McGlade, UNEP

the need to recognize that all human activity is dependent on the earth's natural life support systems, stressing that "we must live within planetary boundaries." He underlined the importance of pursuing sustainable and equitable wellbeing, based on a new



Robert Costanza, Australian National University

development paradigm that recognizes natural capital and uses full cost accounting.

Costanza highlighted various private sector and NGO initiatives that have incorporated this new approach and called for a new indicator of human wellbeing that acknowledges alternative types of capital. He encouraged an integrated systems approach that recognizes non-linear relationships in natural systems.

Anantha Duraiappah, International Human Dimensions Programme on Global Environmental Change, UN University (UNU-IHDP), reflected on findings from the UNU-IHDP and UNEP *Inclusive Wealth Report*, highlighting key policy concerns, such as regarding health, security, food, employment and water. Citing case studies from Kenya, South Africa and Nigeria, he discussed how countries have differed in their investment in produced capital, and how they have drawn down their natural capital over time. Duraiappah urged the integration of environmental policies into investment initiatives, and called for the development of a consistent evaluation framework to allow for comparison.



Anantha Duraiappah, UNU-IHDP



Ivo Havinga, UN Statistics Division

Glenn-Marie Lange, Wealth Accounting and the Valuation of Ecosystem Services (WAVES), emphasized the need to demonstrate policy linkages between natural capital accounting and decision-making. She highlighted lessons learned from WAVES, *inter alia*: ecosystem services such as carbon storage and hydrological services can be reliably measured and valued while other services are still in the experimental stage; and national natural capital accounting can increase ministers' ability to argue for budget allocations.

Ivo Havinga, UN Statistics Division, described monitoring and reporting systems as critical in galvanizing development through goals and indicators. He said the statistics community is working to advance existing accounting frameworks that capture economic, environmental and social dimensions, noting that the System of Environmental-Economic Accounting (SEEA) is the official statistical standard. He identified challenges, including the need to integrate data and work across ministries.

ECONOMIC VALUATION IN AN ACCOUNTING FRAMEWORK: EXPERIENCES AND LESSONS LEARNED FROM AFRICA

Michel Masozera, Wildlife Conservation Society, Rwanda, moderated this panel. Patrick Birungi, National Planning Authority, Uganda, highlighted his country's reliance on natural resources, with 66% of economic activity arising from the agriculture, forestry and fisheries sectors. He outlined Uganda's Vision 2040, which provides the basis for a green economy.

Birungi described national initiatives undertaken, including valuation of urban wetlands, forests and biodiversity. He noted methodological challenges, including a lack of accurate data and uncertain monetary values, and lamented that ecosystem services have yet to be granted adequate consideration in decision-making. He urged the integration of environmental-economic accounting into national development planning processes.

Bernard Okumu, Ministry of Devolution and Planning, Kenya, cautioned that the absence of natural wealth valuation can lead to "brown" growth and "killing the goose that lays the golden egg." He said the green economy is an important tool for achieving sustainable development and poverty reduction.



L-R: Michel Masozera, Wildlife Conservation Society, Rwanda; Patrick Birungi, National Planning Authority, Uganda; Bernard Okumu, Ministry of Devolution and Planning, Kenya; Juma Mgoo, Tanzanian Forest Services Agency; and Eric Mungatana, UNEP



L-R: Ersin Esen, UNEP; Mike Christie, Aberystwyth University, UK; Rodney Smith, University of Minnesota, US; Jean-Louis Weber, European Environment Agency Scientific Committee; and Luke Brander, Environmental Economist, Hong Kong University of Science and Technology

Okumu noted the lack of comprehensive and holistic natural capital indicators, required for international comparison, and called for standardization in data collection. He highlighted a model used to integrate alternative forms of wealth, using a dynamic systems approach to link society, the environment and the economy.

Juma Mgoo, Tanzanian Forest Services Agency, said Tanzania remains very dependent on its forest sector, particularly for biomass for fuel. He outlined non-use forest values not reflected in gross domestic product (GDP) figures, including US\$360 million in watershed services, US\$7 million in tourism values, and US\$34.5 million in carbon storage. He said that if these values were considered, the total value of forest goods and services would be US\$2.2 billion, or 20.1% of Tanzania's GDP.

Eric Mungatana, UNEP, presented case studies from East and South Africa from the *Implementing Environmental Accounts* report, with a focus on the mineral accounts of Tanzania. He noted challenges associated with inadequate data and data confidentiality.

METHODOLOGIES AND DATA NEEDS FOR ECONOMIC VALUATION OF ECOSYSTEM SERVICES

Rodney Smith, University of Minnesota, US, moderated this session. Ersin Esen, UNEP, described the Project for Ecosystem Services (ProEcoServ), underscoring its aim to mainstream ecosystem services into development and policy making. He said valuation may only be practical every five years because complex valuation studies can be costly, and identified several challenges, including scaling up ecosystem services to the national level.

Mike Christie, Aberystwyth University, UK, stressed the importance of natural science in ecosystem services frameworks, underscoring its role in understanding physical changes. He discussed the benefits and limitations of different data types, noting empirical data is valuable but expensive.

Jean-Louis Weber, European Environment Agency Scientific Committee, recommended creating shared environmental information systems and implementing integrated physical accounts to facilitate further work on assessment, modeling and valuation of ecosystem services.

Luke Brander, Environmental Economist, Hong Kong University of Science and Technology, described value transfer methods, which use existing value information from one study site to estimate value at a new policy site. He emphasized the applicability of value transfer in scaling up values from site-specific studies to the national level.

In the ensuing discussion, participants commented on, *inter alia*: data collection with limited resources; existence of knowledge gaps in biophysical data; the need for statistical specificity; the potential of green gross national product; and the costs of unsustainable consumption. On the limitations of value transfer, Brander noted more sophisticated functions and methods have been developed but cautioned that it is also important to be aware of uncertainties.

Esen emphasized the importance of recognizing tradeoffs between conservation and use values. Smith noted some natural resource processes are better understood than others.

COUNTRY EXPERIENCES IN THE USE OF NON-ECONOMIC AND NON-MARKET TECHNIQUES

Caroline Kayonga, Ministry of Natural Resources, Rwanda, moderated this session. Ashbindu Singh, former Chief and Regional Coordinator for North America, Division of Early Warning and Assessment, UNEP, described new measurement tools and methodologies, including satellite imagery, remote sensing, and web-based 'crowd-sourcing' tools. He described the UNEP Atlas series, which monitors 200 hotspots of rapid environmental change, including the retreat of African glaciers, urban expansion, and receding shorelines. He emphasized the need to communicate the importance of this work to a broader audience.



Caroline Kayonga, Ministry of Natural Resources, Rwanda

John Gowdy, Rensselaer Polytechnic Institute, noted that there is consensus that the natural environment has been severely degraded in a short timeframe and that social and behavioral constraints to change exist. He explained that research on community-based natural resource management has shown that people make decisions differently depending on how they relate to each other, and that the concept of a 'global' community is a relatively new one.



John Gowdy, Rensselaer Polytechnic Institute



Franz Gatzweiler, University of Bonn, Germany

Gowdy further noted that rent-seeking can be an obstacle to institution building, resulting in the 'resource curse' phenomenon.

Franz Gatzweiler, University of Bonn, Germany, emphasized that marginality and poverty are largely man-made phenomena, and that externalities need to be integrated using a more intelligent framework, in order to avoid negative outcomes for the environment and society. He noted the importance of properly assigning property rights and valuing social capital.

THE ROLE OF ECONOMIC VALUATION AND NATURAL CAPITAL ACCOUNTING IN ACHIEVING A GREEN ECONOMY

Salman Hussein, Scotland's Rural College, UK, moderated this panel. Peter North, University of Liverpool, UK,



Salman Hussein, Scotland's Rural College, UK

encouraged participants to consider bigger picture questions such as the reasons for seeking to value nature in economic terms. He highlighted that the term 'nature' itself is a social construct, and noted the need to consider intrinsic value. North described various ways that can be used to encourage alternative valuation.

Gunnar Köhlin, University of Gothenburg, Sweden, discussed the implications of VANTAGE, the need for capacity building, and the emerging consensus that the environment is important to the green economy and development. He called for greater investment in data collection, organization and analysis, highlighting that these will help to properly inform policy research.



Gunnar Köhlin, University of Gothenburg, Sweden

Köhlin further cautioned that country-specific policy analysis is resource-intensive, but said that drawing upon academic institutions can assist in this regard and provide a good repository of data.

Paul van Gardingen, Director, Ecosystem Services for Poverty Alleviation Programme, UK, called for policies to recognize the relationship between the economy, the environment and human wellbeing, in order to ensure equitable benefits for the poor. He stressed that valuation must consider people and said new methodologies are necessary to predict the impacts of policy options on the climate, land use and environmental change.

Mark Schauer, Coordinator, Economics of Land Degradation (ELD) Initiative, Germany, said ELD focuses on poverty alleviation, food security and sustainable land management. He described African case studies that show the benefits of investing in sustainable land management.

In the subsequent discussion, participants considered, *inter alia*: methodologies for ecosystem services valuation, including contingent valuation, production function approaches and coupled systems modeling; behavioral science and political ecology approaches; and scaling up from case studies to regional and global levels.

Van Gardingen described the challenges of contingent valuation approaches, noting donors and policymakers rarely evaluate the long-term effects of policies, and stressed the importance of cross-system, multi-disciplinary approaches to valuation. Köhlin agreed that evaluations of interventions are critical and recommended carrying out baseline assessments and evaluations more frequently.



Paul van Gardingen, Director, Ecosystem Services for Poverty Alleviation Programme, UK



Mark Schauer, Coordinator, ELD Initiative, Germany

CONCLUDING SESSION

Kumar summarized the day's discussions. On measurement, he emphasized the role of science in analyzing asset interaction and wealth generation, and the importance of monitoring and reporting on targets. On African experiences, he noted the lack of accurate, reliable data and communication, and the limited awareness of ecosystem services by policymakers.



Pushpam Kumar, Chief, Ecosystem Services Economics, UNEP

Regarding methodologies and data needs, Kumar said economic valuation requires a sound biophysical foundation and noted

that opportunities exist to construct integrated ecosystem accounts and natural capital accounting. On economic and non-market techniques, Kumar highlighted, *inter alia*: limitations in discounting approaches for assessing long-term costs and benefits, such as biodiversity loss and climate change; and the critical role of institutions in sustainable development.

On priorities, Kumar emphasized the need for: capacity building to facilitate uptake of policy prescriptions; cross-disciplinary networks to share knowledge; frameworks to generate and share data; and systematic approaches to ecosystem service valuation. He said while some tools already exist to transition to wealth accounting, others will require more time for development.

HIGH-LEVEL POLICY FORUM ON VANTAGE

OPENING SESSION AND KEYNOTE ADDRESS

On Wednesday, 4 December, Nick Nuttall, Director, Division of Communication and Public Information, UNEP, opened the high-level policy forum on VANTAGE and introduced participants.

Stephen Wainaina, Economics Planning Secretariat, Ministry of Devolution and Planning, Kenya, speaking on behalf of Anne Waiguru, Cabinet Secretary, Ministry of Devolution and Planning, Kenya, noted that Africa is presently discovering its natural wealth and that a green approach to development needs to be encouraged. He said the African Green Economy initiative seeks to sustain livelihoods in the long term, but



Achim Steiner, Executive Director, UNEP

faces challenges such as: a lack of accurate, holistic and internationally comparable indicators; limited capacity for accounting; and competing national priorities.

Wainaina noted that Africa requires a shared policy and legal framework to manage the exploitation of its resources and to resolve conflicts caused by discovery of high value resources in transboundary areas. He called on participants to work together to overcome these challenges, and highlighted Kenya's Vision 2030 approach to developing its resources, based on a series of medium-term plans.

Achim Steiner, Executive Director, UNEP, provided an overview of UNEP's work, and lamented the continued decline of the world's environment. He emphasized the need to steer the development agenda towards a green economy and to address inequality in order to avoid political instability, stressing that resource constraints and loss of agricultural land will affect the future of development and food production.

Noting that progress has previously been defined by humanity's ability to master nature, Steiner said that in the future, progress will be measured by humanity's ability to live within the limits of nature. He underlined that Africa has the opportunity to choose a green development path, and that valuing natural capital should be part of that.



Nick Nuttall, Director, Division of Communication and Public Information, UNEP, Master of Ceremonies of the opening session of the VANTAGE High-Level Policy Forum



Partha Dasgupta, Frank Ramsey Professor Emeritus of Economics, University of Cambridge, UK

Pushpam Kumar summarized the first day's discussions and recommended, *inter alia*: changing the fundamental compass of development; making nature visible by capturing its values in fiscal reforms and monetary policy; measuring better in order to manage better; and changing incentive structures.

KEYNOTE ADDRESS

In a keynote address, Partha Dasgupta, Frank Ramsey Professor Emeritus of Economics, University of Cambridge, UK, discussed the role of national natural capital accounting in policy and sustainability analyses. He outlined components of sustainability analysis, including capital assets such as produced, human and natural capital, and enabling assets, such as institutions, knowledge, social capital and time.

Dasgupta argued for adding new indicators while retaining conventional indicators such as GDP to measure the wealth of nations and social wellbeing across present and future generations.

POLICY DIALOGUE ON VANTAGE

Belete Tafere, Minister of Environment and Forests, Ethiopia, chaired the session. Laila Rashed Iskandar, Minister of Environment, Egypt, presented on progress towards achieving a green economy in Egypt, including: assessing wind and solar energy potential; assessing environmental, biodiversity and climate change risk; and establishing an information clearinghouse. She noted the need to reflect the social and environmental costs of industries such as cement manufacturing, and highlighted challenges associated with incentivizing private investment.

Caroline Kayonga, Permanent Secretary, Ministry of Natural Resources, Rwanda, described Rwanda's Vision 2020 plan, explaining that it commits Rwanda to achieving specific sustainable development goals, such as poverty reduction and economic development. She further highlighted that Rwanda's Cabinet has approved green growth and climate resilience strategies and that Rwanda's energy strategy includes environmental options.



L-R: Belete Tafere, Minister of Environment and Forests, Ethiopia; Caroline Kayonga, Permanent Secretary, Ministry of Natural Resources, Rwanda; and Laila Rashed Iskandar, Minister of Environment, Egypt



CBD Executive Secretary **Braulio Ferreira de Souza Dias**, delivering his statement via video

Kayonga listed several challenges, including dependence on fossil fuels, lack of private sector investment, high population growth and regional harmonization. She noted the need to create: a policy environment conducive to meeting green economy goals; and an action plan for natural capital accounting and integration into national development planning systems.

In a video message, Braulio Ferreira de Souza Dias, Executive Secretary, Convention on Biological Diversity (CBD), described economic valuation of ecosystem services and biodiversity as key in realizing a green economy. He called for achieving social and economic goals while improving natural capital stocks in ways that recognize the role of indigenous communities as custodians of natural capital.

In the subsequent ministerial dialogue session, Mohamed Halifa, Delegate in charge of Agriculture and Fisheries with



Mohamed Halifa, Delegate in charge of Agriculture and Fisheries with the Vice-Presidency in charge of the Ministry of Production, Environment, Energy, Industry and Handicrafts, Comoros

the Vice-Presidency in charge of the Ministry of Production, Environment, Energy, Industry and Handicrafts, Comoros, described poverty as an obstacle to development in Comoros. Pohamba Shifeta, Deputy Minister, Ministry of Environment and Tourism, Namibia, said his country is working to integrate environmental and natural capital accounting across sectors.

Andrew Mutaba Mwali, Minister for Land, Natural Resources and Environmental Protection, Zambia, stressed the need for data and information to support natural resource arguments. He looked forward to agreement on a roadmap for evaluation and accounting of natural capital.

DRAFT OUTCOME DOCUMENT

In the afternoon, Tafere presented the draft outcome document of the meeting (UNEP/DEPI/CONF/VANTG/2).

The document recognizes the importance of valuation and natural capital accounting, and the role it can play in moving Africa towards a green economy. It takes stock of the various international efforts to promote this approach, including the

Gaborone Declaration, the Aichi Biodiversity Target 2, the outcome document of the UN Conference on Sustainable Development, and the International Platform on Biodiversity and Ecosystem Services (IPBES).

The document lists limitations to implementation, including: the inadequacy of current measures of economic performance, such as GDP; the need for more research, data and political will; and the need for better quality and comparability of data, and coordinating international efforts in this regard. It recommends promoting efforts by African countries to mainstream valuation and accounting of natural capital, and encouraging UN bodies and agencies, international financial institutions and stakeholders to assist in such efforts.

The document further recommends a series of specific activities to be undertaken, *inter alia*: promoting environmental policy as part of economic stimulus packages; building capacity in the field of valuation and accounting of natural capital, including via academic collaboration; providing relevant tools and methodologies; facilitating the collection and organization of data; promoting knowledge sharing; and mobilizing financial and technical assistance to support implementation in Africa.

Kayonga invited comments on the draft outcome document. Robert Costanza proposed including Ecosystem Services Partnership as a partner. The Maldives suggested involving national finance and planning ministries. The Gambia cautioned that prioritizing environmental policies within stimulus packages may affect food security and Mauritania encouraged the involvement of civil society. Several participants emphasized the need to link VANTAGE to concrete policies, development goals and poverty reduction.

THE WAY FORWARD

In a plenary discussion on recommendations and the way forward, Glenn-Marie Lange informed participants about WAVES activities and explained that WAVES is in the process of producing a knowledge platform with an ecosystem accounting resource section.

Ivo Havinga emphasized linking development to policy in order to ensure sustainability and noted that the post-2015 UN development agenda will require transformational statistics at the national and international levels, including the use of 'big data.' Kumar suggested that the African Union consider expressing support for the VANTAGE outcome document at its next summit.



Pushpam Kumar, UNEP, led further discussions on the draft outcome document

Participants expressed appreciation for the exchange of experiences during the conference and supported forwarding the VANTAGE outcome document to the African Union for its consideration. Participants also agreed that data needs to be available, reliable and useful for policy.

In response to a question on the difference between natural capital accounting and SEEA, Lange agreed that different terminologies could lead to confusion. She said WAVES is an institutional mechanism that promotes the concept of natural capital accounting and that SEEA is the methodology used. One participant stressed an immediate need for capacity building on natural capital accounting methodologies.

Participants also discussed pricing versus valuing, with one participant emphasizing that both monetary and non-monetary valuations are useful for decision-making. Niger stressed monetary values are necessary to show the productivity of a sector, sharing experiences from his country's land sector.

In response to a question from the Seychelles about methodologies for valuing transboundary resources such as tuna, Lange described an example from Iceland, Norway and the Russian Federation, where the regional fisheries management organization played a role in assessing national fish stocks. She said management is critical when valuing transboundary resources, noting problems arise when there is no management of regional stocks.

Kumar closed the conference at 5:10pm, thanking everyone for their participation and engagement.



View of VANTAGE participants during the High-Level Policy Forum

UPCOMING MEETINGS

IPBES-2: The second meeting of the IPBES Plenary will address, *inter alia* the IPBES initial work programme, financial and budgetary arrangements, and operational rules and procedures. **dates:** 9-14 December 2013 **venue:** Rixos Sungate Hotel **location:** Antalya, Turkey **contact:** UNEP Secretariat **e-mail:** ipbes.unep@unep.org **www:** <http://www.ipbes.net/plenary/registration-ipbes-2.html>

Consultative Workshop on Measuring Progress in the Post-2015 Development Framework: This meeting, the Consultative Workshop on Measuring Progress in the Post-2015 Development Framework: Environmental Performance Indicators and Environmental Welfare Indicators, is organized by the UN Office for Sustainable Development (UNOSD) as the first step in the 'Study on Measuring Sustainability in three Dimensions: Society, Economy and Environment (SEE).' The consultation will bring together around 30 policy-makers to discuss how a diagnostic system and indicators may be developed to measure urban sustainability. **dates:** 10-11 December 2013 **venue:** Yonsei University International Campus **location:** Incheon, Republic of Korea **contact:** Jong-soo Yoon **phone:** +82-32-822-9088 **fax:** +82-32-822-9089 **email:** unosd@un.org **www:** http://www.unosd.org/content/documents/216Agenda_consultative%20workshop%20on%20measuring%20progress.pdf

First Global Conference on UN Partnership for Action on Green Economy (PAGE): The inaugural PAGE conference will provide an opportunity to review progress on implementing the green economy in the context of sustainable development and poverty eradication following the Rio+20 Conference, as well as a chance to consider how greener economies can contribute to the emerging post-2015 development agenda and new global architecture for sustainability. **dates:** 4-5 March 2014 **location:** Dubai, United Arab Emirates **contact:** Leigh Ann Hurt **e-mail:** Leigh-Ann.Hurt@unep.org **www:** <http://www.unep.org/newscentre/Default.aspx?DocumentID=2755&ArticleID=9676&l=en>

International Forum on Payments for Environmental Services of Tropical Forests: This forum is jointly organized by the International Tropical Timber Organization (ITTO), the UN Food and Agriculture Organization and the National Forest Financing Fund of Costa Rica. It aims to highlight the importance of developing and implementing PES mechanisms in tropical countries, and to share best practices and lessons

learned. The Forum is expected to recommend actions at local, national and international levels for the development and effective implementation of PES mechanisms in support of sustainable forest management in the tropics. **dates:** 7-10 April 2014 **location:** San Jose, Costa Rica **contact:** Ma Hwan-ok, ITTO **email:** ma@itto.int or FO-PES-forum@fao.org **www:** <http://www.fao.org/forestry/84884/en/>

Sustainable Development Transition Forum: UNOSD will host the first annual Sustainable Development Transition Forum (SDTF) (formerly Sustainable Development Implementation Forum). The SDTF aims to serve as a global platform for sharing knowledge in the formulation and implementation of sustainability programmes, reviewing evidence of impact, and charting new and improved pathways for implementation. **dates:** 9-11 April 2014 **location:** Incheon, Republic of Korea **contact:** UNOSD **phone:** +82-32-822-9088 **fax:** +82-32-822-9089 **e-mail:** unosd@un.org **www:** <http://www.unosd.org/index.php?page=view&type=13&nr=16&menu=177>

CBD COP 12: The 12th meeting of the Conference of the Parties (COP 12) to the CBD will engage in a mid-term review of the implementation of the Strategic Plan and the Aichi targets. The theme of the meeting will be 'Biodiversity for Sustainable Development.' The Meeting of the Parties to the Cartagena Protocol on Biosafety (COP/MOP 7) will immediately precede COP 12. **dates:** 6-17 October 2014 **location:** PyeongChang, Republic of Korea **contact:** CBD Secretariat **phone:** +1-514-288-2220 **fax:** +1 514-288-6588 **e-mail:** secretariat@cbd.int **www:** <http://bch.cbd.int/protocol/e-doc/?notification=2036>

GLOSSARY

CBD	Convention on Biological Diversity
ESE	UNEP Ecosystem Services Economics Unit
GDP	Gross Domestic Product
SEEA	System of Environmental-Economic Accounting
UNEP	United Nations Environment Programme
VANTAGE	Valuation and Accounting of Natural Capital for Green Economy
WAVES	Wealth Accounting and the Valuation of Ecosystem Services



VANTAGE participants pose for a group photo