The Committee of Permanent Representatives to UNEP Briefing Session – Time: 10:00am – 12:00pm 16 March 2017 Gigiri, UN Office at Nairobi Conference Room 4

Event: TEEB CPR Presentation (10:00-12:00) Thursday 16.03.2017

What is TEEB?

- 1. The Economics of Ecosystems and Biodiversity (TEEB) is a global initiative focused on "making nature's values visible".
- 2. Its principal objective is to mainstream the values of biodiversity and ecosystem services into decision-making at all levels.
- 3. It aims to achieve this goal by following a structured approach to valuation that helps decision-makers **recognize** the wide range of benefits provided by ecosystems & biodiversity, **demonstrate** their values in economic terms and, where appropriate, suggest how to **capture** those values in decision-making.

History & Background

- 4. In March 2007, environment ministers from the G8+5 countries meeting in Potsdam, Germany proposed to initiate the process of analyzing the global economic benefit of biological diversity, the costs of the loss of biodiversity and the failure to take protective measures versus the costs of effective conservation.
- 5. In response to this proposal, a global study was jointly initiated that same year by the German Federal Ministry for the Environment (**BMUB**) and the European Commission (EC), to be led by **Pavan Sukhdev**.
- 6. TEEB might be considered to be the biodiversity-equivalent of the Stern Review of Climate Change
- 7. A lot has happened since the launch of the first tranche of TEEB Studies; this session provides an update of current and upcoming TEEB work

TEEB's Phase III

UN Environment TEEB Office is coordinating three main areas of work:

I. TEEB Country Studies. The project "Reflecting the Value of Ecosystems and Biodiversity in Policy-Making", financed by the European Commission and coordinated by TEEB Office, supports national and local capacity to produce assessments of ecosystem services, as well as guidance on how to include the recommendations into policy-making. **A TEEB Country Study** identifies the ecosystem services that are vital to meeting the country's policy priorities and makes recommendations on how these services can be integrated into policies. These recommendations depending on the country context, can include policies for poverty alleviation, subsidy reform, land use management, protected area management,

securing livelihoods, investment in natural infrastructure restoration and national accounting to include natural capital. **Bhutan, Ecuador, Liberia, Philippines** and **Tanzania**, expressed interest to participate in this three year project

- **II. TEEB for Agriculture & Food study** (TEEBAgriFood), led by the TEEB Office, will seek to bring together economists, business leaders, agriculturalists and experts in biodiversity and ecosystems to provide a comprehensive economic evaluation of the 'eco-agri-food systems' complex, and demonstrate that the economic environment in which farmers operate is distorted by significant externalities, both negative and positive, and a lack of awareness of dependency on natural capital.
- III. Natural Capital Accounting. The United Nations Statistical Division (UNSD) the United Nations Environment Programme (UNEP) TEEB Office and the Secretariat of the Convention on Biological Diversity have embarked on a project to advancing the System of Environmental-Economic Accounting (SEEA) Experimental Ecosystem Accounting (EEA). The project has reviewed data availability and measurement practices and develop plans for advancing Ecosystem Accounting in pilot countries: Bhutan, Chile, Indonesia, Mauritius, Mexico, South Africa, and Vietnam. The initial phase of the project has delivered: a five year Global Strategy for advancing the testing and research agenda of the SEEA Experimental Ecosystem counting; Guidelines on testing; Training material; and Country plans for the pilot countries.

Sectors and Biomes

TEEB seeks to provide a deeper analysis of the myriad values provided by biodiversity and ecosystems, either at the biome level, or more globally to better assess their value to specific economic sectors, and wider impacts on ecosystem and human well-being.

- **A) TEEB for Business** studies, at the national level, inform public policies, particularly as they relate to important economic sectors of the country. Specifically, a TEEB for Business project examines economic sectors at strategic or operational levels, identifying both risks and opportunities that biodiversity and ecosystem services pose to that particular sector
- **B) TEEB for Oceans & Coasts** project seek to draw attention to the economic benefits of ocean and coastal biodiversity and healthy ecosystems and emphasize the unrealized benefits of preserved and enhanced whole ecosystem structures, functions and processes to the well-being of humans and nature.
- C) TEEB for Water & Wetlands report is a standalone report builds on the TEEB approach to generate a better understanding of the ecosystem service values of water and wetlands and encourage improved decision making and business commitment for their conservation, investment and wise use.
- **D) TEEB Arctic** is a Scoping Study exploring the Economics of Ecosystems and Biodiversity (TEEB) in the Arctic. As a first step towards mainstreaming Arctic

biodiversity and ecosystem services into policy and decision-making processes, the TEEB Scoping study was initiated in 2014 under the lead of the Arctic Council's working group CAFF (Conservation of Arctic Flora and Fauna) and in partnership with the TEEB office, UNEP, WWF and GRID Arendal.

More information on www.teebweb.org

ANNEX on TEEBAgriFood

TEEBAgriFood study will seek to review the economic interdependencies outlined in the diagram below, mainly between human (economic and social) system', agriculture and food systems, and biodiversity and ecosystems. In doing so, it will address the economic invisibility of many of these links while exploring how biodiversity and key ecosystem services deliver benefits to the agriculture sector and also beyond, itself being a key contributor to human health, livelihoods and well-being.

TEEBAgriFood Valuation Framework

- The **TEEBAgriFood** valuation framework is a frame of analysis that can enable us to answer the question "what should we value, and why?"
- The framework ensures that nothing important is missed, and that the full range of impacts and dependencies (including externalities) from eco-agri-food systems can be individually examined and collectively evaluated for the application in question, be it a typology comparison, a policy evaluation, a business question or an accounting question.
- Using a universal framework such as the one recommended here, each type of food system, production alternative, or consumer choice can be held to a common form of assessment of all significant costs and benefits, whether they be economic, social or related to risks and uncertainty.

Value-Chain Stages	Production (and associated waste)			Processing and Distribution (and associated waste)			Consumption (and associated waste)
Visible and Invisible flows	Landscape	Infrastructure and Manufacturing	Farm	Wholesale	Food and Beverage	Retail	Industry/Household/ Hospitality
Captured by System of National Accounts (SNA) (Profits, Wages, Taxes net of Subsidies, etc.)							
Provisioning (Materials, Energy, etc.)							
Regulation and maintenance (Soil, Water, Habitat for biodiversity, etc.)							
Cultural (Heritage, Recreation, etc.)							
Health (Nutrition, Diseases, Antibiotic resistance, etc.)							
Pollution (Nitrates, Pesticides, Heavy metals, etc.)							
Emissions (CO ₂ , CH ₄ , etc.)							
Social values (Food security, Gender equality, etc.)							
Risks and uncertainties (Resilience, Health, etc.)							

Project Components

In order to produce impetus for the project overall, an 'Interim Report' will first set out to provide new and compelling (but balanced and science-based) evidence from a global meta-analysis as well as a number of studies on externalities-heavy agricultural sectors, including livestock, rice and palm oil.

A 'Scientific and Economic Foundations' report will address the core theoretical issues and controversies underpinning the evaluation of the nexus between the agri-food sector, biodiversity and ecosystem services and externalities from agriculture on a global scale. In essence it seeks to set the theoretical context for the evaluation of policy implementation.

A 'Policies, Production and Consumption' report will by definition focus on the evaluation of different agro-ecological production systems and policies in different socio-economic contexts. Since **TEEBAgriFood** concerns not only agriculture but entire food systems as well, the report will also consider food policies, including those targeting food waste and food safety along the entire food chain, from production to final disposal, as well as food quality in nutritional terms.

More information on www.teebweb.org/agriculture-and-food