**International Symposium on valuation of forest ecosystems and their services**

This symposium is planned to be held on the 18th October, 2016 as a part of the International Conference on Climate Change organized by ‘Sri Lanka Next in the Blue-Green Era’ organized by the Ministry of Environment.

The theme of the symposium is the Valuation of forest ecosystem services for better-informed decision making and market-based mechanisms promoting sustainable conservation management of forest biodiversity in Sri Lanka.

Objectives –

* To synthesize the available knowledge base on ecosystem services of forests and their valuation,
* To introduce emerging global trends in ecosystem valuation (qualitative and/or quantitative) to the local context,
* To identify gaps in knowledge and research needs related to ecosystem valuation and make recommendations towards upgrading the knowledge base with a view to their implementation.

The concept note given below explains the need for assessing ecosystem services and their valuation in order to manage our forest ecosystems sustainably for provisioning ecosystem services in the future. The proposed symposium will serve as a step in Sri Lanka’s move towards a green economic environment.

In line with the TEEB methodology, the proceedings of the Symposium will be conducted under three broad sessions.

1. Identification of Ecosystem Services/Benefits in different forest types (reviews and case studies).
2. Demonstration of the economic value of forest ecosystems using economic tools and methods to make nature's services economically more visible.
3. Capturing the economic value of forest ecosystems by developing policies and methodologies to help sustain them.

Abstracts together with extended abstracts are invited from scholars to be considered under the two sessions for presentation at the symposium.

**Concept Note**

**Forest Ecosystem Services**

Forest ecosystems provide both tangible and intangible services and goods which sometimes are also called 'ecosystem benefits’ to human wellbeing which in common parlance is known as ‘health, wealth and happiness’. Ecosystem services have been defined as components of nature, directly enjoyed, consumed, or used to yield human well-being.

They include the most obvious ones like the food we eat, fresh water we drink and clean air we breathe, essentially the primary life support systems. Then we obtain plant materials such as fire-wood, medicinal (*Weni wel*, *Kothala himbutu etc*.) and aromatics (*Walla* of recent fame) and other forest raw materials for our industries and consumption. Though less obvious, forests and other such green spaces sustain processes that purify air and water, breakdown waste products, sequester carbon, cycle nutrients and maintain soil fertility, all of which we take for granted and hardly pay any attention to.

Forests also perform regulatory functions such as flood control, climate amelioration, air and water quality regulation, pest and disease control and supporting services such as pollination, seed dispersal, nutrient cycling and primary production of foods mostly by fixing carbon dioxide that is available in the atmosphere. Likewise, they also provide invaluable cultural services such as spiritual, aesthetic, recreational and educational values for the whole-some well-being of humans and all other living organisms. Yet today, all these life support systems, collectively known as ecosystem services, provided by forests and other such landscapes are largely taken for granted and perceived as ‘public benefits or free lunches’ in modern society’s balance sheet. Despite being fundamental to the well-being of human societies, critical contribution of ecosystem services have hitherto been overlooked in public, corporate and individual decision making processes.

A major challenge facing the delivery of the Forest Ecosystem Services (FES) is that many of the services provided are not traded in markets, making it difficult to observe their values directly. Also, where these goods and services are supplied to the society for free or at a price which is far below the production costs of equivalent goods and services, forest owners receive little or no monetary incentive to provide them. This can result in declines in both the quantity and quantity of these services. Possible solutions include applying regulations to enforce their provision or developing incentive mechanisms (including market-based instruments) which encourage forest/woodland owners to provide them.

**Valuation of Ecosystem Services**

The valuation of ecosystem services is becoming an increasingly important contribution to policy and decision making at scales from the local to the global. A global initiative on the economics of ecosystems and biodiversity, which started in 2007, has set a framework for valuing ecosystem services (TEEB 2008). The valuation of ecosystem services can contribute to better-informed decision-making and market-based mechanisms promoting biodiversity protection (as in the case of schemes for payment for ecosystem services).

From an economic point of view, biodiversity (and ecosystems) can broadly be seen as part of our natural capital, and the flow of ecosystem services is the ‘interest’ on that capital that society receives. We need to choose a level of biodiversity and natural capital that maintains future flows of ecosystem services in order to ensure enduring environmental quality and human well-being, including poverty alleviation.

Valuation plays an important role in creating markets for the conservation of biodiversity and
ecosystem services, for instance through Payments for Ecosystem Services. The Total Economic Value (TEV) of ecosystem services and biodiversity is determined by estimating their various components using different economic tools and valuation methods.

The valuation process defined by TEEB involves three levels: 1. recognising value, i.e. identifying the wide range of benefits/services in ecosystems, landscapes, species and other biodiversity-linked aspects; 2. demonstrating value, i.e. using economic tools and methods to make nature's services economically visible; 3. capturing value, i.e. incorporating ecosystem and biodiversity benefits into decision-making through incentives and price signals.

1. **Recognizing Value of the forest ecosystem services**

Benefits /services and their changes in forest ecosystems, landscapes and other biodiversity-linked aspects in biophysical terms (Recognising the provisioning, regulating, supporting and cultural values on which the wellbeing of human populations are dependent as per Millennium Ecosystem Assessment, 2005)

1. **Demonstrating Value of the Forest Ecosystem Services**

Use of economic tools and methods towards making nature’s services economically visible through assessment of economic benefits provided by ecosystems and/or the costs of their losses

1. **Capturing Value of the Forest Ecosystem Services**

Incorporating ecosystem and biodiversity benefits into decision-making through green economic incentives (Payment for Ecosystem Services) and reducing environmentally harmful subsidies as a result of government or institutional action/inaction