

Report on Inauguration of Eco club



Prof M.K Ramesh inaugurating the occasion by watering the plant

On 16th August 2019 Prof M.K Ramesh, NLSIU inaugurated the Eco club and delivered a special lecture on **Eco System Service**. Addressing the gathering he said- Ecosystem services are the many and varied benefits that humans freely gain from the natural environment and from properly-functioning ecosystems. Such ecosystems include, for example, agroecosystems, forest ecosystems, grassland ecosystems and aquatic ecosystems. These ecosystems functioning properly provide such things like agricultural produce, timber, and aquatic organisms such as fishes and crabs. Collectively, these benefits are becoming known as 'ecosystem services', and are often integral to the provisioning of clean drinking water, the decomposition of wastes, and the natural pollination of crops and other plants.

The term "environmental services" was introduced in a 1970 report of the Study of Critical Environmental Problems, which listed services including insect pollination, fisheries, climate regulation and flood control. In following years, variations of the term were used, but eventually 'ecosystem services' became the standard in scientific literature. The ecosystem services concept has continued to expand and includes socio-

economic and conservation objectives, which are discussed below. A history of the concepts and terminology of ecosystem services as of 1997 can be found in Daily's book "Nature's Services: Societal Dependence on Natural Ecosystems.



Ecosystem services are grouped into four broad categories: provisioning, such as the production of food and water; regulating, such as the control of climate and disease; supporting, such as nutrient cycles and oxygen production; and cultural, such as spiritual and recreational benefits. To help inform decision-makers, many ecosystem services are being assigned economic values.

Understanding of ecosystem services requires a strong foundation in ecology, which describes the underlying principles and interactions of organisms and the environment. Since the scales at which these entities interact can vary from microbes to landscapes, milliseconds to millions of years, one of the greatest remaining challenges is the descriptive characterization of energy and material flow between them. For example, the area of a forest floor, the detritus upon it, the microorganisms in the soil and characteristics of the soil itself will all contribute to the abilities

of that forest for providing ecosystem services like carbon sequestration, water purification, and erosion prevention to other areas within the watershed.



Ecosystem services decisions require making complex choices at the intersection of ecology, technology, society and the economy. The process of making ecosystem services decisions must consider the interaction of many types of information, honor all stakeholder viewpoints, including regulatory agencies, proposal proponents, decision makers, residents, NGOs, and measure the impacts on all four parts of the intersection. These decisions are usually spatial, always multi-objective, and based on uncertain data, models, and estimates. Often it is the combination of the best science combined with the stakeholder values, estimates and opinions that drive the process.

A vote of thanks was proposed by the Prof T.M Prashanth, Coordinator, Eco Club.