## Forests and Water: Valuation and Payments for Forest Ecosystem Services

Forests play a vital role in sustaining water resources. It has been estimated that nearly two-thirds of the global clean water supply comes from forests. The world's biggest cities draw a significant portion of their drinking water from forested areas. With growing world population and increasing demands for clean water, it is our duty to ensure that forest ecosystems are intact and able to meet the demand.



Forests capture rainfall and replenish and cleanse our

water supply. Forests and trees regulate sedimentation, surface and groundwater flows, provide natural filtration and water storage systems, and reduce water-related risks, such as landslides, mudslides, avalanches, floods and droughts. Forest ecosystems also play a major role in maintaining life and nutrient cycles and adding a cultural dimension through spiritual, recreational and aesthetic services. Thus forest ecosystems cover a whole range of provisioning, regulating, maintaining supporting and cultural services.

While the ecosystem services provided by forests are acknowledged and widely accepted, the economic value has been assigned only for a few of these services. Ecosystem services without clearly defined monetary values are often overlooked and difficult to be accounted for in the decision making process. Therefore measuring the economic value of forest ecosystem services can have a strong impact on planning and land use decisions at the local, regional and international level.

The Joint UNECE/FAO Forestry and Timber Section is planning to conduct a study on "Forests and Water: Valuation and Payments for Forest Ecosystem Services (FES)" in the region covering 56 countries in North America and the pan-European region. The study will provide an overview of the water related forest ecosystem services and present a number of different economic valuation and payment approaches for water related forest ecosystem services.

The study is linked to the theme of the International Day of Forests 2016 (21 March) dedicated to the topic of "Forests and Water" and is intended to raise awareness on the issue among general public, forest owners, forest managers, forestry experts, non-governmental organizations, private sector and ultimately decision makers responsible for the forest sector.

The Study "Forests and Water: Valuation and Payments for Forest Ecosystem Services" shall cover the following areas:

- ✓ The interrelation between forest and water in the region
- ✓ Valuation of water related forest ecosystem services: possible approaches and challenges related to valuation
- ✓ Payment schemes for water related forest ecosystem services: possible payment schemes and challenges related to payment schemes
- ✓ Application for the region: specific case studies from countries