(164)

The Importance of Forestry in the Pledge of Arriving at Carbon Neutrality in Sri Lanka

Ranasinghe D.M.S.H.K.

Department of Forestry and Environmental Science, University of Sri Jayewardenepura, Nugegoda, Sri Lanka hemanthi.ranasinghe@gmail.com

Abstract

According to Emissions Gap Report 2021, climate pledges combined with other mitigation measures put the world on track for a global temperature rise of 2.7° C by the end of the century which is above goals of the Paris climate agreement which intended to keep the global temperature rise less than 2° C. Sri Lanka had pledged to become carbon neutral by 2050 and has adopted a Low Carbon Development Strategy (LCDS) which is a timely requirement to reduce GHG emissions. It considered six key GHG emitting-sectors; energy, transport, industry, waste, agriculture and forestry. While all other sectors will contribute to the GHG emissions, forestry sector will be the only carbon sink. According to the Third National Communication for the UNFCCC submitted by the Climate Change Secretariat of the Ministry of Environment, by 2030 with the proposed mitigatory measures the GHG emissions from the energy (electricity, transport, household, commercial and manufacturing industries), industrial processes and products use, waste and agriculture will be 33,669 (GgCO₂eq) whilst the sinking potential of forests will be 3,873 (GgCO₂eq) which is 11.5%. Sri Lanka's forest cover (currently at 29.15% of land area) is comprised of dense forest, open and sparse forest, savannah and mangroves (Forest Department, 2015). Despite the fact that the rate of deforestation had been much reduced over time, still it is declining at the rate of about 7,500 ha/yr. The causes for this loss are cleared to make way for agriculture and plantations and for larger infrastructure projects (dams, roads, human settlement etc.), illegal felling, forest fires etc. In addition to the deforestation, a considerable extent of forests both natural and manmade had become degraded and with poor quality. The Nationally Determined Contributions (NDCs) submitted by Sri Lanka to the UNFCCC following the Paris Agreement in 2016 was recently updated for the period 2021-2030. The increase of the forest cover to 32% of the total land area, improvement of the growing stock of natural and manmade plantations, strengthening watersheds, improvement of the trees outside forests including home gardens, urban forestry etc. were included in these NDCs. This paper discusses the challenges to achieve these targets and the recommendations to overcome them.

Keywords: Carbon neutral, Forests, Nationally determined contributions, Low carbon development strategy