

## ANALYSIS OF THE EMISSION TRADING POTENTIAL IN SRI LANKA FOR GLOBAL GREENHOUSE GAS MARKET UNDER THE KYOTO PROTOCOL

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Under the United Nations Framework Convention of Climate Change (UNFCCC) reduction of Green House Gas (GHG) emissions become a global good with shared and differentiated responsibility vested with member countries. The Kyoto Protocol was adopted in 1997 as the legally binding instrument to achieve the objectives of UNFCCC. This protocol introduced three controversial mechanisms namely Joint Implementation (JI, Article 6), Clean Development Mechanism (CDM, Article 12) and the emission trading (Article 17) for the establishment of markets for GHG emission reduction.

Under the Annex 1 of UNFCCC countries are obliged to reduce their GHG by 5.2% from the total 1990 level. Global commitments under the common but differentiated responsibility principle of UNFCCC for reducing the emissions vary and depends on the country's level of emission. Accordingly Annex 1 countries were given emission reduction targets e.g. Japan 6%, EU 8% and US 7%. This issue has drawn attention of the developed countries since it could alter their lifestyles drastically. The flexible mechanism permits developed countries to purchase GHG emission potential from developing countries.

Selling GHG emission potential (although an income source) has been viewed as selling development potential of developing countries. This puts the developing countries in a dilemma in making decisions on emission trading. Therefore an in-depth knowledge on market potential of GHG is important.

The objective of this paper is to review the flexible mechanisms under the Kyoto Protocol i.e. JI, CDM and emission trading along with principles, modalities and procedures in relation to Sri Lankan environmental conditions and to estimate the total GHG market potential for Sri Lanka if the country decides to participate in the global GHG market. This paper presents an economic analysis of GHG market in Sri Lanka with an attempt to investigate the relationship between rate of emission and economic growth. This venture essentially creates an equity problem which is discussed using different discount rates.

Data from secondary sources, in particular GHG inventories for Sri Lanka for 1994 & 1995 years are used to estimate Sri Lankan emission trading potential. These figures will be useful for predicting Sri Lankan contribution to the emission trading market. Sinks and Sources and the sectors of emission are discussed separately in order to identify the most important sectors in terms of emission trading. The paper also discusses the disadvantages of emission trading, particularly whether this would limit our development potential and sovereignty, the major criticisms against the emission trading. Finally, this paper presents the relationship between GHG emission, emission trading potential and economic development under various scenarios.