## A critical analysis on Education for Sustainable Development (ESD) in Science education at secondary level; a study based on Northern Province of Sri Lanka

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## Abstract

In most countries, there are ongoing processes of developing or implementing national strategies for sustainable development. Objectives of this study are to find the topics related to ESD in the secondary school science curriculum and analyze their relevance for sustainable development; to find strengths and weaknesses of the implementation of science education curriculum at secondary level; to find the perception of change agents on the contribution of the secondary school science curriculum for sustainable development and to suggest remedial measures for positive change. The sample of this study consists of 36 schools of the 12 Educational Zones of the Northern Province, 3 schools are selected from each zone. The implementation of the study was divided into two phases. Phase-I: Analysis of science education curriculum at secondary level by using documentary analysis and focus group discussion with Assistant Directors of Science, Inservice Advisors of Science and practicing teachers. In Phase-II, Field Survey was conducted at secondary level by using data collection techniques of interviews with principals, classroom observations and questionnaires to teachers. Qualitative data was analyzed by using methods of transcription, coding, categorizing, describing, analyzing and interpreting. This study gave clear understanding of social, economic and environmental issues. It was found that to what extent in Sri Lanka have integrated ESD policies, programs and practices into school educational settings. This study identified challenges and Barriers to ESD in Science Education. Further, it found out solutions for the above challenges and barriers.

## Keywords: Education, Sustainable Development, Secondary level.

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