

Examining the potential of indigenous knowledge for conservation of biodiversity in Sri Lanka

Extended abstract

HAANK Hettiarachchi¹

Background

Over centuries, human being is facing substantial challenges to perpetuate and nurture the environment which results from the increase of consumerism and the development of a nation. Biodiversity has emerged at the centre of one of the most contentious global debates of this century. Sri Lanka is regarded as one of the hot spots of biodiversity. Sri Lankans have a strong traditional culture in the conservation of nature. However, recent environmental change is affected to the loss of biodiversity. Lack of the knowledge and attitudes about protection of nature aggravate the situation. Further, Sri Lanka possesses long history with indigenous knowledge and valuable techniques for conservation of nature. Indigenous people with a historical continuity of resources use practices often possess a broad knowledge base of the behaviour of the complex ecological systems on their own localities. This knowledge has accumulated through a long series of observations transmitted from generation to generation. This argument is closely related to the question of how biodiversity and traditional knowledge among indigenous people could establish meaningful collaboration towards biodiversity conservation in Sri Lanka.

Ancient people always depend on the environment. It is the core of their life. There are historical evidences to support the fact that the ancient rulers of Sri Lanka have taken steps to preserve the environment, including its flora and fauna. Use of Indigenous knowledge is a vital recourse in future way of the country. Indigenous knowledge and biodiversity are complementary phenomena essential to human development. Therefore, that interrelationship between indigenous knowledge and bio diversity are vital for the conserve the threaten medicine plants in Sri Lanka. The concept of Maha mega Wana is suggested that in meeting the requirements there would be a system for regeneration of the plant communities

Objectives

General objective of this study was to examine one of the concepts of indigenous knowledge with potential for conservation of bio diversity in Sri Lanka, to give special attention for the conservation of medicine plants. Particularly, the “Maha Megha Wana” (Rain cloud Park concept).

Specific objectives of this study were to identify values of medicine plant species in ancient Sri Lanka, to describe the indigenous practices contributing to biodiversity conservation in the area, to identify that the best conservation method of medicine plants, Elicit information on perceived status and challenges to the use of indigenous knowledge in biodiversity conservation, to assist the government, policy makers and other stakeholders in designing and implementing appropriate programs towards efficient and effective biodiversity conservation framework.

Methodology

This study was based on literature to the objective and followed methodology of conducting thematic analysis. As well as secondary data was a used historical book like Mahwamshaya. The main references were confined to the books, journal articles and intellectual contributions which related to biodiversity, indigenous knowledge (IK), history of other relevant areas.

Results

This research identified values of medicine plant species in ancient Sri Lanka, Identified the indigenous practices contributing to biodiversity conservation in the area and found that the best conservation method of medicine plants through literature reviews.

Conclusion & recommendation

Biodiversity also contributes to humankind through stabilizing effect on the environmental; an ecological function that is so crucial in maintaining and preserving the survival of many living species that form our biological heritage. Analysis of information reveals that the indigenous hospitals were attached to the Buddhist temples and the large quantity and diversity of medicinal plants and other resources were found in the park (Uyana) around the temple.

It is suggested that in meeting the requirements there would be a system for regeneration of the plant communities. This concept can be applied for conservation of threatened species and medicinal

¹ Department of Environmental Management, Rajarata University of Sri Lanka, Mihintale, Sri Lanka.

plants with high demand as an ex-situ conservation strategy. Therefore, it can be concluded that Buddhist temple lands at present around the country can be used for biodiversity conservation and augmentation.

Keywords: diachronic observation, enhancing bio diversity, time tested, belief system, community-based.

References

Amarasekara, H., 2014. Bio diversity man and environment. kottawa: bio diversity study centre.

Bio diversity conservation in Sri Lanka,1999. ministry of forestry and environment,

Gadgil, m., 1993. Indigenous knowledge for bio diversity conservation. Springer on behalf of royal swedish academy of science.

Gunasinghe, K. G., 2011. Conservation of bio diversity and sustainability of the tourism industry in Sri Lanka.