

A STUDY ON MANUFACTURING A SUSTAINABLE PRODUCT USING COCONUT SHELLS – SPECIAL REFERENCE TO BORALESGAMUWA AREA

Dias R. A.

*Department of Environmental Management, Faculty of Social Sciences & Humanities, University of Rajarata, Sri Lanka
riviniavankadias@gmail.com*

Sustainable products are those that have positive advantages on environmental, economy and society through the entire product lifecycle. Coconut is a seed or a fruit which comes from coconut tree under the palm family tree which is the only living species in the Cocos genus. A coconut shell is the strongest part which covers the entire coconut seed and located between the husk and flesh. Coconut shell is basically considered as waste which disposes without gaining the maximum use of it. This research aims to study on manufacturing sustainable coconut cups as a product using coconut shells to provide an alternative solution to reduce plastic waste and to enhance manufacturing this product as self-employment to enhance woman empowerment. The researcher selected the study area as Boralesgamuwa. Population was the residencies of the relevant area and 35 households were selected as the sample using simple random sampling technique. The study employs a questionnaire-based approach including interviews. Collected primary data was analyzed using Microsoft excel, by importing and removing duplicate data to achieve the percentages. Secondary data was obtained through journal articles, websites, product reports and books. Results of the survey revealed that most of the participants are household women who are interested in self – employment and coconut shells can be used as an alternative solution to plastic paper cups or a serving material which takes less cost to produce. To manufacture coconut shell cup products, 76% of women are in favor if the knowledge of producing coconut shell cup is provided which is essential in producing the product hence 4% are interested if the materials and equipment are supplied instead of knowledge. Furthermore 20% women are interested if both are given which is crucial to produce the exact sustainable coconut cup product. Acknowledging women to manufacture coconut shell cup products are important as women can engage as a self - employment strategy, increasing their financial status. Educating knowledge, materials and equipment is also crucial to gain a positive manufacturing outcome hence, the percentages suggest the lack of exact process of manufacturing of a sustainable coconut cup product. Research findings suggest that initiating workshops and introducing manufacturing standards about producing sustainable coconut cup products will develop the lack of knowledge and skills of women. Furthermore, for the women who are willing to engage in manufacturing, providing funds through the Samurdhi authority are suitable solutions. The study recommends enhancing the recognition for the coconut shell products as it reduces plastic wastage, enhance recycling, promotes sustainability, less manufacturing and labor costs, and create business opportunities.

Keywords: *Alternative solution, Boralesgamuwa. Coconut shells, Manufacturing, Women empowerment.*