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Performance Evaluation of Coconut (*Cocos nucifera* L.) Nurseries in Kurunegala District of Sri Lanka**Pushpakumara A.W.S., Madhurasinghe B., Nuwarapaksha T.D., Liyanage K.L.D.B.P.,
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Abstract

Coconut (*Cocos nucifera* L.) is the most widely cultivated plantation crop in Sri Lanka, occupying about 416,000 ha of the total cultivated area. Success of establishment of coconut plantation starts with the production of good quality planting materials. Providing high quality seedlings for coconut cultivation has become a challenge to the development of coconut industry in Sri Lanka. Kurunegala is identified as the main coconut growing district in Sri Lanka and 21 established nurseries fulfill the seedlings requirement. These nurseries are categorised in to four categories as Coconut Research Institute Recommended Nurseries (CRIRN), Coconut Cultivation Board Seedling Nurseries (CCBSN), Coconut Cultivation Board Model Garden Nurseries (CCBMGN) and Private Nurseries (PVTN). Formulating a strategic plan for development of high quality seedlings is vital. This study was conducted with the general objective of evaluating the performance of coconut nurseries. This was fulfilled with the specific objectives of identifying the key variables associated with nursery performances in different nurseries and to develop an index (Coconut Nursery Performance Index, CNPI) to quantify the performance and finally rank the estates. In order to investigate the performance of coconut nurseries in Kurunegala district, ten (10). variables were identified namely cost of Production (COP), out turn percentage, land area, labour units, managers' educational qualifications, managers' experience, degree of mechanisation, availability of irrigation technology, distance from main road, and infrastructure. Data were collected using a semi-structured pretested questionnaire from 21 nurseries in Kurunegala district. The developed index (CNPI) was used to quantify the performance of the different categories of coconut nurseries. According to the developed performance index, nursery categories CRIN, PVTN, CCBN and CMGN showed the percentages of performance as 22%, 20%, 29% and 29% respectively in Kurunegala district. The lowest COP was recorded in Ibbagamuwa nursery and the highest COP was recorded in Kumari nursery. Lower trend was observed in purchasing coconut seedlings from PVTN. Higher out turn percentage was found in Dodangaslanda, Nikaweratiya and Ibbagamuwa nurseries. In contrast, the lowest out turn percentage was recorded in Melsiripura nursery. It is highlighted that the high education level and experience of managers, availability of new irrigation technology and availability of infrastructures, land area, degree of mechanisation and sufficient labours has significantly contributed in achieving higher performances in coconut nurseries.

Keywords: Coconut, Coconut nurseries, Cost of production, Out- turn, Performance index