Developing an index to evaluate tea estate performance in up-country region of Sri Lanka

T.D. Nuwarapaksha¹, K.L.D.B.P. Liyanage¹, A.W.S. Pushpakumara¹, K.S. Weerasinghe², L.B. Dunsford³ and B. Gajanayake^{1*}

¹Department of Plantation Management, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka ²ICT Centre, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka ³Airport & Aviation Services (Sri Lanka) Ltd., Rathmalana, Sri Lanka

Abstract

Sri Lanka is the fourth-largest tea producer in the world. In the Sri Lankan economy, tea plays a key role contributing 2% to the GDP and foreign exchange earnings. The tea industry consists of large-scale estates managed by Regional Plantation Companies (RPC) and tea small-holders. The tea industry's contribution to the country's economy is said to be flawed. Among many problems the industry faces, there is a significant variation among the estate performances even under the same management. Also, very limited research studies have been conducted to evaluate the performance of tea estate in Sri Lanka. Thus, this study aimed at developing a performance index to evaluate the performance of selected tea estates in the upcountry region of Sri Lanka. It further investigated the factors associated with the enhancement of the performance of estates. An analytical and descriptive type study focusing on the qualitative approach were conducted with an open-ended and interview-type questionnaire combining the quantitative method. Eleven variables were identified as the most important in performance evaluation through direct interviews with five plantation experts selected purposely. Using the selected variable and the weighted values assigned for each variable an index was formulated as Tea Estate Performance Index (TEPI). Five-year average data (2013-2018) of each variable for all seven estates were collected and the average values were calculated. The values were normalized to take them into the same scale. Results show that Estate "1" has shown an excellent performance in labour out turn (V5), percentage of made tea out-turn (V6), percentage of main grades (V7), and cost of production (V10). Even though, the estate has done fairly good in many variables, the percentage of vegetatively propagated plants (V1), plucker intake in the estate (V3), and output per factory worker (V9) showed low values. The Estate "2" has shown good performances according to the percentage of vegetative propagation of plants (V1) and percentage of labour out turn (V5), it has poor performance in the percentage of made tea out turn (V6), percentage of main grades (V7), output per factory worker (V9), cost of production (V10) and profit per ha (V11). Considering all the variables, it is observed that Estate "1" has ranked number one in selected sample, the Estate "2" has ranked seven in the upcountry region. In conclusion, proposed index can be used to evaluate and compare the performance of tea estates and the management can take strategic management decisions accordingly to improve estate productivity.

Keywords: Labour productivity, Performance Index, Plantations, Profitability, Tea estates

*Corresponding Author: gajawyb@yahoo.com