Quality management of the bamboo resource and its contribution to environmental conservation in Malaysia

Abstract

Purpose - The aim of this study was to contribute towards the systematic management of the natural stand bamboo resource at Nami, Kedah, Malaysia and to improve the forest environment rather than leaving it neglected and unmanaged. In addition, the study examines the commercial value of the abundant bamboo culms for a sustained industry in Malaysia. Design/methodology/approach - A one-hectare experimental plot of Gigantochloa scortechinii (buluh semantan) was established with a split plot design of fertilizer treatments 0, 2 and 5 kg of NPK 15:15:15 and felling intensities of 0, 40, 60 and 80 percent. The experiment was conducted for four years. Parameters such as the number of shoots, culms and basal area were observed throughout the study. Findings -From this study significant results were obtained and management principles were formulated. Due to the effect of fertilizer application, there was an increment of 30 percent of shoots sprouted per clump per application. Thinning should be done selectively and mature culms aged more than three years old well spaced within the clump need to be felled first. Originality/value - This new knowledge would be of value to managers and policy makers in formulating the proper management plan for the exploitation of future resources in the country. © Emerald Group Publishing Limited.