



## **Community-Based Cashew Agroforestry As A Multidisciplinary Strategy For Sustainable Watershed And Lake Management In Gorontalo, Indonesia**

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**Abstract.** Sustainable lake management depends on the ecological integrity of upstream watersheds and the socioeconomic resilience of their communities. This research examines the implementation of the cashew agroforestry model under Indonesia's Forest and Land Rehabilitation (RHL) and Community Nursery Garden (KBR) programs in Gorontalo Province. Focusing on the Tolotio and Totopo villages—critical parts of the Bone Bolango watershed—this research combines economic evaluation and participatory analysis to assess impacts on livelihoods and ecosystem services. Results indicate that the Huyula farmer group in Tolotio earned an average profit of IDR 13.5 million per hectare per year with an R/C Ratio of 12.8, making the practice highly profitable. Ecologically, cashew agroforestry reduces erosion and enhances carbon sequestration. Community-led enterprises like “Maitora” further demonstrate downstream value chain opportunities. This multidisciplinary approach provides a viable model for integrating community livelihoods into sustainable watershed and lake basin management.

**Keywords:** cashew agroforestry, RHL, KBR, lake basin, community engagement, watershed rehabilitation, Gorontalo