

Supply Chain and Cost-Benefit Analyses of the Community-Based Sea Cucumber Hatchery in Davao del Sur, Philippines

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Abstract

Sea cucumbers provide an important contribution to the livelihoods of some coastal communities in the Philippines. Due to high and increasing demand in the export market, which led to the depletion of wild stocks, increased hatchery efforts are done to restore production. In Brgy. Bato, Sta. Cruz, Davao del Sur, a community-based sea cucumber hatchery was established. This study aims to determine the status of sea cucumber trade in the area through supply chain analysis. Moreover, to identify the sustainability of its operation and for a potential scale-up, cost-benefit analysis was employed. Cost of production is based on the projected cost by the hatchery operation and not the actual financial support provided by the funding agencies to eliminate the issue of over-compensation. Results of the study revealed that sea cucumbers are marketed in two forms: wet (unprocessed) and dried (processed). The study also identified and described the actors involved in the supply chain, namely, gleaners, divers, fishers, middlemen, traders, exporters, and consumers. The cost-benefit analysis showed that the profit per production cycle is PhP 62,355. From an initial investment cost amounting to PhP 171,405, the return on investment was at 36.38%. The break-even point in terms of revenue is at PhP 10,997, having a safety margin of 87%. The study shows that community-based sea cucumber hatchery is a viable option especially for smallholder fishers. However, it may only work with proper management and adequate support from relevant government agencies, private stakeholders, and non-government organizations.