

Distribution Chain Analysis of Aquaculture Products in Lanao del Norte, Southern Philippines

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Abstract

According to extant literature, the current supply of captured fisheries is inadequate to feed a fast-growing global population; thus, it is up to aquaculture to fill this gap. Because of aquaculture's potential in uplifting the lives of impoverished Filipinos, a study was conducted to assess the distribution chain of aquaculture products (i.e., crab, prawn, and milkfish) in Lanao del Norte, one of the top producing provinces of aquaculture products in the Northern Mindanao region where poverty is also prevalent. Primary data gathering involved personal interviews with 40 fishpond operators, 1 fishpond-trader, 11 traders, 4 truckers, 9 wholesalers-retailers, and 1 retailer. The overall distribution and transportation system was evaluated based on volume of product spoilage, travelling time, and the transportation cost incurred. In addition, value chain analysis was utilized to trace the different chains and the costs incurred by each player. Findings reveal an inefficient transportation and distribution system of aquaculture because of potential high alternative transportation costs if shipped to Manila (PhP 200/kg) coupled with huge economic losses along the current distribution chain (PhP 100,000 to 40 million per year) from spoilage alone plus annual estimated losses due to corruption (PhP 329,550). Moreover, the hours spent transporting products on unpaved roads was longer by one hour compared to paved roads. Lastly, the transportation cost incurred ranges from 4% to 6.3% relative to its selling price, which falls within the acceptable range. Technology and product development, improvement of postharvest facilities as well as road and transport infrastructure, enforcement of tighter security due to the presence of rebels in the highways, provision of timely and accurate market information, and swift release of transport permits are recommended.