



Tropentag, September 15-17, 2021, hybrid conference

“Towards shifting paradigms in agriculture
for a healthy and sustainable future”

A Disaggregated Analysis of Fish Demand in Myanmar

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Abstract

The rapidly growing aquaculture sector and concurrent stagnation of capture fishery production are observed globally. Myanmar is one of the major consumers of fish worldwide and its fish demand has been increasing rapidly over the years, but no study has investigated its fish demand parameters at the household level in particular. We estimate demand elasticities for fish in Myanmar by fish supply sources (aquaculture, freshwater capture, marine capture, and dried fish) and household groups (wealth group and household location). A multi-stage budgeting framework combined with the Quadratic Almost Ideal Demand System (QUAIDS) is applied to provide the micro-level evidence of fish demand in Myanmar using household survey data from 2015. Our findings show that fish demand from all sources and household groups has increased with income, but less than unity in all cases, showing that all sources of fish in Myanmar are normal goods. A substantial share of increasing demand for all fish groups is likely to come from poor and rural households because the income elasticity of demand for all fish groups is higher for poor (0.40) and rural households (0.32) than non-poor (0.26) and urban households (0.29). Aquaculture fish consumption is the most income-responsive in all household groups. Compensated own-price elasticities by all household groups reveal a downward-sloping demand curve for all sources of fish. Demand for fish tends to be less price elastic for poor and rural households in most cases because fish is their cheapest animal protein source, and substitutes are limited. Effective management policies and new technologies are essential to sustain fish supply from capture fisheries and aquaculture to meet the increasing fish demand in Myanmar. Interventions that increase aquaculture production will have the most effective and significant effects on household's food and nutrition security.

Keywords: Fish demand elasticities, Myanmar, QUAIDS model, three-stage budgeting framework