

Title: Panel data estimation of principal factor of Fishermen Household Income in North of Madagascar in the different local governance

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Abstract

Seasonal change issues between capturing and not capturing seasons affects fishing activities and captures of traditional fishermen in Madagascar. Decreasing and low income is mainly the effect of these changes. In this presentation, we will provide evidence of this hypothesis by estimating affecting factors to household's income of the traditional fishermen in North of Madagascar. This study considers the role of income on livelihood choice, household education, poverty and inequality in the Northwest Region, the poorest region in Madagascar. We will also estimate the influence of local governance on household income using a mean regression approach. The traditional fishermen that have low income during recent decades are studied here as a study case. Using Quantile Regression analysis with exponential functions, adjusted R², hypothesis testing of the regression (F-test and t-test), and followed by classical assumption tests (multicollinearity and heteroscedasticity) of the cross-section data from fieldwork. The results found that the education of households head, education of fishermen's wife, number of dependents, dummy of differences housing of fishermen have been significant to affect household income of the traditional fishermen, whereas the age of the head household and the local governance of the area (Marine protection Area or national governance) are not significant to household income.

Notably, the study provides significant outcome mainly the evidence that there is a significant variation in the returns on local governance across income distribution, with higher returns for households with higher levels of per capita income. This implies that education has an increasing effect on within-level income inequality in absolute terms and raises challenges for the conventional view of investment in education, in which local governance improves income equality in the long run, other things being equal.