

Accepted Manuscript

Title: Biodiversity, Coastal Protection and Resource
Endowment: Policy options for improving ocean health

Authors: Kim Anh Thi Nguyen, Curtis M. Jolly, Brice Merlin
Nguelifack



PII: S0161-8938(18)30027-9
DOI: <https://doi.org/10.1016/j.jpolmod.2018.02.002>
Reference: JPO 6416

To appear in: *Journal of Policy Modeling*

Received date: 12-8-2017
Revised date: 10-1-2018
Accepted date: 12-2-2018

Please cite this article as: Nguyen, Kim Anh Thi., Jolly, Curtis M., & Nguelifack, Brice Merlin., Biodiversity, Coastal Protection and Resource Endowment: Policy options for improving ocean health. *Journal of Policy Modeling* <https://doi.org/10.1016/j.jpolmod.2018.02.002>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Biodiversity, Coastal Protection and Resource Endowment: Policy options for improving ocean health

Kim Anh Thi Nguyen¹

Curtis M. Jolly^{2*}

Brice Merlin Nguelifack³

¹Kim Anh Thi Nguyen is Associate Professor of Economics and Senior Lecturer at the Faculty of Fisheries Economics, Nha Trang University, Vietnam; ²Curtis M. Jolly is Emeritus Professor of Agricultural Economics at Auburn University, Alabama Agricultural Experiment Station, Alabama 36849; ³Brice Merlin Nguelifack is Assistant Professor in the Department of Mathematics at the United States Naval Academy, Maryland.

*Curtis M. Jolly is corresponding author, Tel#334-524-5092; Fax 334-844-5639; e-mail: cjolly@auburn.edu

Ocean health production functions using two stage regression

Abstract

The paper develops a production function for the Global Ocean Health Index (OHI) for 2013. Data from the Ocean Health Statistics, plus from the Human Development Index (HDI) for 151 countries are used. We employ two-stage regression model to conduct this evaluation. The tobit model, used to obtain the estimated dependent variable, results show Coastal Protection, Livelihoods and Economies, Tourism and Recreation, Iconic Species, Clean Water and Biodiversity, Food Provision, Artisanal Fisheries Opportunities, Natural Products, and Carbon Storage are significant variables. The rank regression in the second stage showed that HDI and Marine Protected Areas (MPAs) significantly influenced the predicted value of the OHI. Policy makers should note that biodiversity increases have the greatest effect on OHI,

Download English Version:

<https://daneshyari.com/en/article/7369048>

Download Persian Version:

<https://daneshyari.com/article/7369048>

[Daneshyari.com](https://daneshyari.com)