

6<sup>th</sup> Global Summit on  
**AQUACULTURE AND FISHERIES 2017**  
May 25-26, 2017 Osaka, Japan

## Economic assessment and policy recommendations of fisheries development strategies in Vanuatu

Rowena Valmonte-Santos and Mark W Rosegrant

Environment and Production Technology Division – IFPRI, USA

**Statement of the Problem:** Small-scale fishers are negatively affected by climate change in Vanuatu. Livelihoods and health of coastal communities that heavily rely on farming and fishing for subsistence and incomes face serious risks. Aquaculture, marine protected areas through natural resource management (NRM), and low-cost inshore fish aggregating device (FAD) can improve the economic conditions of coastal communities in Vanuatu. The purpose of this study is to assess the fisheries development strategies in Vanuatu, determine any economic benefits, and provide some policy recommendations for consideration by the national government.

**Methodology:** A fish market supply–demand model was applied that assesses the impact of climate change supply shocks and policy responses on fish supply and demand and economic welfare. Data was collected through literature and focus group discussions. Results were presented and validated by different national agencies.

**Findings:** Baseline results indicate that aggregate fish consumption is expected to increase considerably in 2035 and 2050. Oceanic fish production is projected to increase, hence Vanuatu will remain a net exporter by 2050 but coastal production will decline in 2010-2050. Coastal fish will most likely be imported to augment rising demand from population and income growth. Combined low-cost FAD and NRM are projected to increase net exports and consumption of coastal fish. Coastal finfish and tuna contribute about 77% of current consumption, thus combined low-cost FAD and NRM will have positive impacts on poorer households. Estimated national level annual economic gains ranged from US\$4.5 million for aquaculture to US\$35 million for NRM+FAD (in 2009 US\$ constant price) in 2050 in Vanuatu.

**Conclusion & Significance:** The present government initiatives and level of investments are not sufficient to achieve significant impacts to minimize, if not reverse, the deteriorating fish productivity in Vanuatu. Expansions of aquaculture, NRM, and FAD can cost-effectively improve sectoral performance, promoting food security.

### Biography

Rowena Valmonte-Santos has over 30 years of experience in natural resource management research with emphasis on food security in developing countries, participatory approaches to community based fisheries management, and threats and opportunities of climate change in agriculture and fisheries sectors in Asia and Pacific. She conducted trainings on common tools used for surveys in social science research and water quality assessment in Asia and Pacific. She received over 10 awards including Distinguished Alumna Award for International Research and Development on Environmental and Natural Resource Management awarded by the School of Environmental Science and Management, University of the Philippines Los Baños; Best Published Paper in Marine Fisheries Category (co-author) awarded by Dr. Elvira O Tan Memorial Awards, National Academy of Science and Technology (NAST) Convention; and Outstanding Published Paper (co-author) awarded by NAST. She has authored or co-authored over 20 referred journal articles, a book, five book chapters, and over 40 technical reports.

r.valmonte-santos@cgiar.org

### Notes: