

Abstract

SESSION 2:

Accelerating Actions for
Sustainable Development and
Climate Change

WORKSHOP 3:

Valuation of Coastal
Ecosystem Services and
Benefits and Coastal Use
Zoning: Tools for Better
Planning and Implementation

Mapping and Valuing Pelagic Fisheries for Tourism in the Lesser Sunda Ecoregion: Preliminary Results on Manta Rays

Luky Adrianto

Center for Coastal and Marine Resources Studies
Bogor Agricultural University

Yudi Wahyudin

Center for Coastal and Marine Resources Studies
Bogor Agricultural University

Benny Osta Nababan

Center for Coastal and Marine Resources Studies
Bogor Agricultural University



One of the services of ecological systems and the natural capital stocks of pelagic fisheries system contributed by the tourism activities. Manta ray is one of the famous pelagic species which contributes to tourism. This species contribute to human welfare, both directly and indirectly, and therefore represent part of the ecosystem services value of the pelagic fisheries tourism in the Lesser Sunda Ecoregion. Manta rays are found the Lesser Sunda Ecoregion, such as around Nusa Penida, Gili-Gili, Northwestern of Lombok, Komodo National Park, Sumba, and Rote islands.

From the perspective value of pelagic services, manta rays in the Lesser Sunda Ecoregion has contributed to regional income amounting to US\$ 1-15 million per year. While this is a result of a rapid value estimation and despite the uncertainties, this must be considered a minimum estimation. However, manta rays are faced with challenges from local fishermen who are hunting them for daily production. Estimated benefit from this activity is only US\$ 200 per tail. A better approach to sustainable and tactical management should be considered in collaboration with public, private and local people.



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About Luky Adrianto:

Dr. Luky Adrianto is Associate Professor in Social-Ecological System Analysis of the Coastal and Marine Resources Governance at the Graduate School of Coastal and Marine Resources Management, Faculty of Fisheries and Marine Sciences, Bogor Agricultural University (IPB) where he is now the director of the school. He is appointed by the President of IPB as Director of Center for Coastal and Marine Resources Studies, since 2013. His first academic degree (B.Sc) was granted from IPB in Fisheries Sciences (major in Fisheries Socio-Economics) in 1993, and then M.Sc. in Fisheries Sciences in 2000 from Graduate School of Fisheries Sciences, Kagoshima University, Japan. His PhD was taken from the United Graduate School of Marine Environmental Sciences, Kagoshima University, Japan with major in Fisheries Resources Management in 2004. He has been working for more than 15 years in the field of coastal and marine resources management, including fisheries. His publications appeared in the *Journal of Marine Policy*, *Environmental Impact Assessment Review*, *Environment, Development and Sustainability* as well as in some reputable journals on related studies in Indonesia. In 2010, he published FAO's Technical Book on Mainstreaming Fisheries Co-Management in Indonesia and funded by ICSF published book entitled *Local Construction of Fisheries Management in Indonesia*. With other colleagues from ZMT Bremen, he co-led SPICE II Cluster 6 on Social-Ecological System Analysis for Coastal and Marine Resources Governance 2005-2010. The other publication include *Coral Governance in Indonesia* (IPB Press, 2013), *Mainstreaming Marine Conservation Governance for Sustainable Fisheries in Indonesia* (IPB Press, 2015). Since 2010, he is acting as Regional Task Force in Integrated Coastal Management (ICM) for the PEMSEA (Partnership of the Environmental Management of the Seas of East Asia) which he has been involving in the capacity building program for Cambodia, Thailand and Timor Leste, and since 2014, he is also coordinating a Learning Networks of Ecosystem Approach to Fisheries Management (EAFM) in his country.