

Identification of Status and Value of Mangrove Ecosystem for Muaragembong Sustainable Development

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Abstract. The existence of mangrove ecosystem in *Kecamatan* Muaragembong Bekasi Regency is in decline along with the rise of development that change mangrove forest into settlement and agricultural area. To achieve sustainable development, preserving the mangrove forest should be aligned with community economic development efforts. There is a need to identify the status and value of mangrove ecosystem as the first step to know the role of mangrove in supporting society's economy system. Using groundcheck survey method and unstructured interview, this research reveals condition of the mangrove ecosystem that has already damaged with the tree density status ranging from 59 – 145 trees/ha. It reveals that there are many valueable components of the benefit of mangrove forest ecosystem identified using travel cost method and the willingness to pay for the use benefit.

Keywords: ecosystem status, value, sustainable development.

Introduction

Changes in coastal and sea areas is caused by natural phenomena and also is highly affected by human activity. Coastal area is an area that has the highest pressure compare with land area. This occurred because of the increasing development activities in line with the function of coastal areas in developing settlement activity, aquaculture (fishpond), trade, port and other activities. These activities either directly or indirectly provide for changes on the coastal and natural resources including among others the mangrove ecosystem.

The existence of mangrove ecosystem in coastal areas in *Kecamatan* Muaragembong Bekasi Regency has currently been declined in line with the increasing population and development activities that convert the mangrove ecosystem from its protective function into cultivation functions. This has provided the implication on the quality of environment in *Kecamatan* Muaragembong, particularly in coastal areas, since the mangrove ecosystem has an essential function in keeping the environmental balance and its ability to raise the income of the people

in that coastal areas.

In line with the increasing number of population in Muaragembong, development activities are also raising to meet the needs of the community's livelihood. Meanwhile, the land availability for the activities in the coastal areas of Muaragembong is limited because most of the land area is the conservation areas as mangrove forest. This condition has triggered the community to utilize mangrove forest to become settlement as well as ponds for fishery cultivation. This condition has also reduced quantity and quality of the mangrove ecosystem in Muaragembong, that eventually resulted in the impairment of the mangrove ecosystem functions, with the impact of declining the quality of the environment and the income of the community in Muaragembong.

The condition of mangrove ecosystem is directly proportional to the quality of the environment and the income of the community in accordance with its mangrove ecosystem function. The deeper the declining quality of mangrove, the faster the declining income levels of the community, so that it can lead to poverty. Furthermore, the

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