

## **Economic-ecological values of non-tidal swamp ecosystem: case study in Tapin district, Kalimantan, Indonesia**

### **ABSTRACT**

This article would like to describe the economic and ecological benefits, as well as analyzing the total economic value of non-tidal swamps. Non-tidal swamps in the District Tapin are interested to be studied because of the use of non-tidal swamp in this area for people, especially ethnic Banjar since over a hundred years ago. But since 2011 the South Kalimantan local government has set a palm oil plantation development plans (*Elaeis guineensis*) on the area. Assessment has been conducted with a total valuation approach (total valuation). We found that the ecosystem has economic benefits in the form of functions of water supply for rice paddy (*Oryza sativa*), timber plants (*Melaleuca cajuputi*), fisheries, Purun plants (*Eleocharis dulcis*), and functions as a source of domestic water. It has also ecological benefits in the form of biological functions such as: the provision of feed (feeding ground), where fish rearing, timber Galam (nursery ground), and hatchery fish (spawning ground), as storage and recycle of water, and function options (option value) in the form of biodiversity. Based on the results of the assessment are known, the total economic value amounted to 22.7 million per hectare, with the ratio of the economic value of only 7.14% compared to the ecological value of 92.86%. Therefore non-tidal swamps conversion plan into another function not only the loss of economic value (direct benefits) that had been in the swamp enjoy the surrounding community, but also a greater loss in the form of loss of ecological value (indirect benefits).

**Keyword:** Swamp; Total valuation; Economic-ecological value