ABSTRACT

DWI SULISTIAWATI. Model of Tourism-Fisheries Integration on Batudaka Islands Tojo Una-Una Regency Central Sulawesi Province. Under supervision of LUKY ADRIANTO, ISMUDI MUCHSIN, and A. MASYAHORO.

Social and ecological characteristics are very important for small-island management and development. The objectives of the study are: 1) to analyze marine ecological character interactions and to estimate resource carrying capacity, and 2) to formulate tourism-fisheries integration on Batudaka islands. The DPSIR (drivers - pressures - states - impacts - responses) framework was used in scoping biodiversity management issues and problems. Data were analyzed using spatial analysis with GIS (Geographic Information System) approach, TEF (Touristic Ecological Footprint) and FEF (Fisheries Ecological Footprint), HANPP (Human Appropriation of Net Primary Productivity), CLSA (Coastal Livelihood System Analysis), supply-demand approach for economic valuation and dynamic simulation using Stella software. Results of the study showed that the suitability index obtained on the category of tourism (diving, snorkeling) and fisheries (reef fishes, seagrass) were in accordance with the carrying capacity utilization of 23,195 tourists per year. Rate of marine fisheries exploitation was 0.04 ha/capita (local scale/Una-Una district), or 0.3 ha/capita (regional scale/Tojo Una-Una regency). This supported HANPP to higher regional level appealed by local level. The available CLSA strategies were alternative employment creation, proximity to capital source, new technological introduction, market, collectivity and solidarity action on society. Analysis of supply demand obtained a consumer surplus value of US$ 21,817 per individual per year and the region’s economic value of US$ 58,273. The model of tourism-fisheries integration indicated that ecological surplus can be maintained at the level of 5,917 tourists on the end simulation with surplus fisheries area, as sustainable indicator on tourism and fisheries activity.

Key words: tourism, fisheries, Batudaka islands, integration model