THREAT OF TRASH TO ENVIRONMENTAL TOURISM IN AREA MANGROVE FOREST

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Abstract

Condition of mangrove forests that belong to the forest Prapat RTK 10 Badung Benoa Denpasar with an area of approximately 1373.50 hectares very need to be maintained continuity. The shift in the use of such value: activities shrimp ponds, landfills, waste dumps, construction of tourism accommodation facilities, estuary, will be able to threaten the integrity of forest land. A total of 15 kinds of development activities showed the existence of mangrove forest will be thinned or experience degradation as much as 412.27 hectares, so the remaining approximately 961.23 hectares. Additionally the activity of either human or animal life will issue a solid waste material. This waste will occur continuously and will accumulate around the environment. Wastewater and solid waste, especially plastic waste would threaten aquatic ecosystems during the rainy season and flooding all the material will be carried over to the mangrove forest. Mangrove forest on the development of sustainability development is quite alarming in terms of quantity about 30% of the breadth has been degraded by garbage. For that we need the community's concern and utilizing garbage management and spatial planning so that development should pay attention to the environment.

Key words: botanical forest park, tourism, environment, degradation

I. INTRODUCTION

All the activities of either human or animal life will issue a solid waste material. This waste will occur continuously, and will accumulate around the environment. Concern for reuse rubbish has not been done. Public awareness of the environmental impact resulting loss itself has not much to know. The worst impacts are felt their downstream areas that will be the final shelter, especially when it rains / flooding, hence the existence of waste can threaten the extinction of aquatic animals will also provide loss or threat to human life, among others, is the impact on groundwater quality, estitika environment and human health.

Condition of mangrove forests including forest groups Prapat Benoa RTK 10 Badung Denpasar with an area of approximately 1373.50 hectares very need to be maintained continuity. Mangrove forests have physical function indirectly plays a role stabilizing coastal waters, protect the shoreline against abrasion, resist and depositing silt and pollutants, prevent sea water intrusion. Organic ingredients produced in the form of litter, leaves, flowers, fruit, twigs and branches, some are food sources of marine life and some will decompose into nutrients are utilized for the survival of mangrove itself so that mangrove forests can thrive. In general, mangroves are often found in areas quiet choppy and muddy ground. Mangrove

forests thrive fly like a wildlife habitat of water birds and bats. Beside that is the habitat of reptiles such as crocodiles, lizards and species of insects. Other functions as a producer of a wide variety of fish, crabs, shrimp, and other animals. Public expectations surrounding fishermen, so that ecosystems in the mangrove forest as natural resources potential designated as a conservation area, as set forth in Law No. 5 of 1990 on the conservation of natural resources and ecosystems through: (1) protection life support systems; (2) preservation of diversity of plants and animals and their ecosystems; (3) sustainable use of natural resources and ecosystems.

Shifting values Tahura utilization of protected areas into ecotourism region, will be able to threaten the integrity of forest land. The impact of a shift in the value of area utilization forest park based on the Minister of Forestry No. 885 / KPTS-II / 1992 forest area RTK 10 is converted to the Nature Park Prapat Benoa Suwung that the layout area of Tahura highly positioned as a center for business growth and tourism in Bali and has the potential of natural scenery as an ecotourism area.

II. RESEARCH METHODS

The research location is situated RTK 10 mangrove forest area is geographically located at 42 S ° 42 '- 49 S ° LS and 115 ° 09 '- L55 ° l4' BT. Mangrove forest area is administratively located in two of the districts are districts northern South Denpasar and Kuta District Regency Badung regency of Bali province. Primary data was collected by conducting a survey to the field is by observing the condition of the physical environment, biological, social and cultural, and development activities in the field, the damage of mangrove forests and interviews with farmers who are the region's fishermen.

III. RESULTS AND DISCUSSION

Physical environmental conditions

Relatively flat topography thoroughly and strongly influenced by the tide with a height of 0-3 meters above sea level. The soil type consists of a kind of alluvial hidromorf and brown mediterranean drained poorly, this formation was formed by alluvial sedimentary rocks with a type of rock steps and coral reefs. This region is the estuary of the river Ngenjuang, Punggawan, Buji, Sama, Nangka, Dead, Bunpeg and river Whitening. Judging from the climate, this region including climate tiple E (Schmidt and Ferguson) with a ratio of 1 to 1.67 months of wet and dry. Classified into types of wet tropical climate with two distinct seasons. With an average annual rainfall of about 1647 mm with 138 rainy days. The rainy season lasts from October to April with an average monthly temperature 26,5oC and the average monthly relative air humidity of 79.3%, with an average wind speed of 2.6 m / sec. The average length of approximately 79.7% annual irradiation intensity of solar radiation is 307.3 W / m3.

Type waste material.

Water pollutants can be generally classified as shown in Figure 1. Not all waters contain contaminants that equal or contaminants.

Figure 1. Types of Domestic Waste

Table 1 Classification of Air Pollutants

Type Pollutants	Influence
Microscopic Elements	Health, Aquatic Biota
Compounds Metal Organ	Tranpor Metal
Inorganic Pollutants	Toxicity, Aquatic Biota
Asbestas	Human Health
Hara-Algae	Entrofication
Radionuclides	Toxicity
Acidity, Alkalinity, High Salinity	Water Quality, Aquatic Life
Microscopic Organic Pollutants	Toxicity
Pesticide	Toxicity, Aquatic Biota, Wildlife
PCB	Human Health
Carsinogen	Cause Cancer
Waste Oil	Wildlife, Aesthetic
Pathogens	Health
Detergents	Introfication, Aesthetic '
Sediment	Water Quality, Aesthetic
Taste, Smell, And Color	Aesthetic

Differences debit of water during the rainy season and the dry is very striking, but a puddle of water in the estuary is relatively constant due to the influence of the tide. At the time of the flood a small tributary carrying waste material such as soil, debris, chemicals, detergents, oils, foodstuffs (Table. 1) from the south Denpasar to the northern part of the bay. The great rivers including river Dead, Bunpeg and Punggawa flow throughout the year with the highest flow occurs in January through March occurred during the rainy season. ph or kaasaman sea water at low tides ranged from 8.0 to 8.5, whereas at high tide around 7.2 to 7.7. Salinity of sea water at high tide receded 20% - 32% and at high tide around 12.5% - 30%.

Threats plastic waste to the aquatic animals.

The impact of plastic on the environment is a negative result that must be borne by nature because of the presence of plastic

waste, since it is not derived from biological compounds. Plastic has the difficult nature of degraded (non-biodegradable). Plastic is estimated to take 100 to 500 years until it decomposes (decomposed) perfectly. Material plastics maker, (generally polymer polyvinyl) made of polichihlorinated biphenyl (PCB), which has a structure similar to DDT can cause impacts include: (1) The pollution of soil, groundwater and underground creatures; (2) Toxic toxins from plastics particles that enter the soil will kill the animals decomposers in the soil such as worms; (3) PCB tidk biodegradable although ingested by animals and plants will be toxic heavy; (4) Lowering soil fertility due to plastic also impede air circulation land; (5) A rising silting river so will cause flooding.

Figure 2 Types of solid waste plastic

The results of the analysis of vegetation, at the level of occupied trees occupied by three types of plants are dominated by Sonneratia alba with important values (NP = 186.34%), as well as at the level of the pole occupied by 6 types of plants are dominated by Sonneratia alba (NP = 64.87%), while on the stake level occupied by five species of plants are dominated by Rhizophora apiculata (NP = 103.32%) as well as at the level of seedling occupied by five species of plants that are dominated by Rhizophora apiculata (NP = 104.47%) ,

The total number of species that occupy these mangrove forest area by 22 species are grouped into two kinds namely the mangrove and mangrove plant group associations. From the results of the inventory of animals have found a wide variety of types such as birds, reptiles, insects, crabs, shrimps, snails and fish.

Impact on society

Piles of garbage overload can invite flies, the growth of micro-organisms - organisms that harm, pollute the air, soil and water. Spreading diseases such as diarrhea, cholera and typhoid. garbage eyesore. The high volume of waste is very tightly coupled to changes in use types such as building hotels, shopping malls, restaurants, tourist attractions. Based on observations in the field and extensive calculations in the area use this time as many as 15 kinds of development activities showed the existence of mangrove forest will be thinned or to experience as much as 412.27 hectares degradation so that the remaining approximately 961.23 hectares. Reduction of mangrove forest area will increase again when the utilization of approximately 10% utilization zone is as much as 44.5 per hectare that will remain approximately 916.73 hectares. This damage will greatly affect the mangrove forest ecosystem Prapat Benoa RTK 10. The area of the development plan Tahura obtained as many as 15 kinds of which a permit has been issued either by the

Minister of Forestry and Forestry Director General and Board Intag but the reality on the ground is very worrying because the lack of monitoring of local government. Communities around the region, such as the village of Benoa and Serangan village some still retain their original shape as the beach fishermen catch fish using nets and boats and fishing equipment. While villagers Bualu adjacent to the crowded center, the tourism area around Nusa Dua such as shops, hotels, restaurants, etc. they have switched professions and businesses a chance to grab dollars with various types of activities such as selling souvenirs, opening small kiosks to sell small plants, drinks.

Data collection and information about the state of the environment Prapat Benoa RTK region 10 can provide a clear picture of how the close relationship between the components of the environmental component of physical, biological, social, economic and cultural, which is a unique ecosystem, so the need to maintain continuity. In physical terms, namely geophysical chemistry is one of the factors in life support systems in addition to the flora, fauna which will affect human existence, especially directly adjacent to the area. Preserving the diversity of flora and fauna and its ecosystem, including human and physical factors of climate and soil that will support or sustain life. Ecological processes which contain life that need to be maintained and protected. The second element of the conservation of natural resources and ecosystems: the protection of life support systems and the preservation of diversity of plants and animals and their ecosystems will be able to survive in a sustainable manner if the use of natural resources and ecosystems conducted with sustainable use. So the concept of conservation of natural resources and ecosystems can be fulfilled as set out in Article 5 of Law KH 1990.

III. CONCLUSIONS

An area of mangrove forests to the development of sustainability development is quite alarming in terms of quantity about 30% of the breadth has been degraded. Waste plastic and liquid domestic waste greatly affect the various habitats of marine flora and fauna damage. Protection of natural resources and ecosystems and community care will save mangrove forests Prapat Benoa

Suggestion.

It needs serious monitoring of the development projects either already running or running in order to damage or pollution can be resolved. The need for close supervision of those authorities to the limits of mangrove forest area that is currently being implemented rapid development coincident with the area of mangrove forests.

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