

INTISARI

Penelitian ini bertujuan :1) mengetahui keterkaitan antara kerapatan *eceng gondok* terhadap pendangkalan Danau Sentani; 2) mengetahui keterkaitan antara pendangkalan danau terhadap hasil tangkapan ikan dan pendapatan yang diperoleh penduduk; 3) mengetahui sikap penduduk terhadap tumbuhan *eceng gondok* di perairan danau.

Cara penelitian yang digunakan ialah melakukan pengukuran dan perhitungan komponen fisik lingkungan seperti: tingkat kerapatan *eceng gondok*, ketebalan sedimen, kedalaman danau dan hasil tangkapan ikan. Data primer dan sekunder kondisi sosial ekonomi penduduk diperoleh dari penyebaran angket (kuesioner), wawancara dan pencatatan data pada instansi terkait.

Pengolahan data dilakukan dengan program SPSS/PC+ untuk menghasilkan hasil analisis statistik dalam memperhitungkan koefisien korelasi (r), regresi ganda, uji signifikansi (uji t) dan uji khi-kuadrat.

Hasil penelitian menunjukkan bahwa keterkaitan antara kerapatan *eceng gondok* dan pendangkalan danau terdapat nilai korelasi yang tinggi yaitu $-0,9642$ atau $96,4\%$, sedangkan antara pendangkalan danau dengan hasil tangkapan ikan dan pendapatan penduduk terdapat nilai korelasi yang tinggi yaitu $0,8093$ atau $80,9\%$. Selain itu sikap masyarakat terhadap tumbuhan *eceng gondok* terdapat perbedaan yang dibuktikan atau diuji dengan analisis khi-kuadrat yang menyatakan bahwa nilai hitung khi-kuadrat $3,05$ lebih kecil daripada nilai tabel distribusi khi-kuadrat $11,14$. Dengan demikian hipotesis nol (H_0) yang menyatakan tidak terdapat perbedaan pengetahuan, sikap dan tindakan antara penduduk terhadap *eceng gondok* diterima.

Kesimpulan yang diperoleh dari penelitian ini ialah tingkat kerapatan *eceng gondok* sebagai penyebab pendangkalan perairan danau, ternyata berpengaruh terhadap hasil tangkapan ikan dan pendapatan penduduk. Sikap, pengetahuan dan tindakan penduduk terhadap tumbuhan *eceng gondok* sama pada ketiga desa penelitian. Tidak terdapat perbedaan disebabkan oleh : 1) tingkat pendidikan yang rendah, 2) pengetahuan tentang *eceng gondok* rendah; 3) sikap apatis terhadap kondisi lingkungan sekitarnya.

Kata Kunci : *eceng gondok*, pendangkalan danau, hasil tangkapan ikan.

ABSTRACT

This research aims to : 1). find out the effect of the density of *eceng gondok* on the shallowing process of Lake Sentani; 2). find out the effect of the shallowing process of the lake on the fishermen's catch and their incomes; 3). find out the local people's attitudes to the growth of *eceng gondok* in the lake.

The method used in this research was measuring and calculating the physical components of the environment, namely the density level of *eceng gondok*, the thickness of sediment, the depth of lake, and the catch of fish. Primary and secondary data on the socio-economic conditions of the local people were obtained from questionnaires, interviews, and record of data from related agencies.

Data processing was done by using SPSS/PC+ program to produce a statistical analysis in finding the coefficient of the correlation (r), multiple regression, the significance test (t -test) and chi-square test.

The results of the research that between the density level of *eceng gondok* and the shallowing process of the lake there is a high correlation, i.e. -0.9642 or 96.4%, and between the shallowing process and the catch of fish and the local people's incomes there is also a high correlation, i.e. 0.8093 or 80.9%. In addition, there are differences in attitude among the people to *eceng gondok*, which are verified by a chi-square analysis showing that the value of chi-square is 3.05, which is small than the value of the distribution table of chi-square, i.e. 11.14. Therefore, the zero hypothesis (H_0) that there is uniformity of knowledge, attitude and action among the local people to *eceng gondok* is acceptance.

The conclusion reached from this research is that the density level of *eceng gondok* as the cause of the shallowing process has an effect on the catch of fish and population density. The local people's attitudes, knowledge and action to *eceng gondok* is equally of the three villages. Not variation is caused by : 1) inadequate levels of education, 2) inadequate knowledge of *eceng gondok*, 3) an apathetic attitude to the condition of their environment.

Keywords : *eceng gondok*, shallowing of lake, catch of fish