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Judul : Estimation of Economic Value in Ngebel Lake Ponorogo Regency, East Java, Indonesia

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ESTIMATION OF ECONOMIC VALUE IN NGEBEL LAKE PONOROGO REGENCY, EAST JAVA, INDONESIA

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BACKGROUND

Increasing the number of visits in Ponorogo Regency, East Java caused by unspoiled natural potential. (Government office of Tourism in Ponorogo regency, 2019).

Telaga Ngebel is one of natural tourism in Ponorogo Regency, it has a function as a protected area.

Increasing the number of tourists can encourage the creation of economic transactions. (Government office of Tourism in Ponorogo Regency, 2019).

GOALS

Estimating the economic value of Ngebel Lake tourism in Ponorogo Regency.

TRAVEL COST METHOD

(Fauzi, 2014)

Is one of the oldest method that can be used to measure the economic value of natural resources in a tourist area indirectly. The steps to determine TCM are as follows :

1 Travel Cost

$$TC = TRC + CC + VPC + EF + AF + OF$$

Information:
TRC : Transportation Cost
CC : Consumption Cost
VPC : Vehicle Parking Cost
EF : Entrance Fee
AF : Attraction Fee
OF : Other Fee

2 Demand Function

$$Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + c$$

Information:
y : number of visit
b₀-b₄ : coefficient
e : error
x₁ : Travel Cost
x₂ : Age
x₃ : Distance
x₄ : Level of Education

3 Consumer Surplus

$$Cs = v^2 / 2b_1$$

Information:
Cs : Consumer Surplus
v : The number of visits made by individuals
b₁ : Coefficient of a travel variable

4 Economic Value

$$EV = CS \times TNV$$

Information:
EV : Economic Value
CS : Consumer Surplus
TNV : Total number of visits in one year

RESULT

Travel cost per visit is IDR 41,519

$$Y = 9,412 - 0,0000122 X_1 - 0,032 X_2 - 0,975 X_3 - 0,194 X_4 - 0,183 X_5$$

Costumer surplus per visit is IDR 40,883

Economic value of IDR 10.179.785,234

CONCLUSION

Ngebel lake has a considerable economic values a producer of tourism services. This value will be lost if the environment in Ngebel lake does not managed properly.

REFERENCE

Fauzi A. 2014. *Valuasi Ekonomi dan Penilaian Sumber Daya Alam dan Lingkungan*. Bogor (ID): IPB Press.
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