

There Are Still Forest In Forest Park Forest Soeharto Hill

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ABSTRACT: The forest area in Indonesia is divided into three sections: production forests, protected forests and conservation forests, in forest conservation in the two longer a natural forest conservation and forest preserves. For forest park included in the group of forest conservation of nature as well as the area of Forest Park Soeharto Hill who are forest areas designated by the government as a conservation area with the purpose of collection of plants and animals that are natural and not natural, kind of original and not original used for the sake of research, science, education, cultivation support, tourism and recreation. In a period that is long enough area use Forest Park Soeharto Hill much degradation in because human development and policy changes by the government as a result of forest remaining in the forest park Suharto hill from 2010 to 2015 tended to decrease the remaining forests of which: in 2010 amount of 60236.38 ha, equivalent to 88.89% of the total area, in 2011 amount of 45.959,09 ha, equivalent to 67.82% of the total area, in 2012 amounted to 40534.93 ha, equivalent to 59.82% of wide area, the year 2013 amounted to 57901.57 ha, equivalent to 85.44% of the total area, in 2014 amounted to 54683.20 ha, equivalent to 80.69% of the total area and 2015 amounted to 53.336,94 ha, equivalent to 78.71% of the total area.

Keywords: Forest Park Soeharto Hill, Forest, amount.

Introduction

Forest is an ecosystem unity in the form of land containing natural resources dominated by trees in their natural environment is one that can not be separated. With divided into three forests in Indonesia, Forest Park Soeharto Hill became part of conservation forest area established by the government of the republic of Indonesia through the Ministry of Forestry and now the Ministry of Environment and Forestry set by No. SK.577 / Menhut-II / 2009 dated 29 September 2009 regarding the Stipulation of Forest Park Soeharto Hill located in Kutai Kertanegara district Penajam Paser Utara district, East Kalimantan province, covering an area of 67 766 (sixty seven thousand seven hundred and sixty six) hectares. Known formation neighborhood Forest Park Soeharto Hill was originally a form of production forest area and protected forest areas and a little non-cultivation area of forestry. But the area in early form in the dominance of the forest and very little disruption to the forest. Forest Park Soeharto Hill has a complete forest ecosystem of the beach to the hills, which include among others: a mixture of lowland *dipterocarp* forest, heath forest, swamp forest, coastal forest. As time goes so far that originally this area serves as a conservation area that aims for research, science, education, cultivation support, tour and leisure become damaged due to increasing human activities in and around the Forest Park Soeharto Hill As a result of these activities the forest area Forest Park Soeharto Hill has decreased with the aesthetic value, the amount of open area, the decline in the number of flora and fauna, loss of function and others hydrology From the loss of forest function, the researcher wishes charted how many remaining forests in Forest Park Hill Soeharto and to see how the number and extent of remaining truly in accordance with the land use itself.

Material and Method

A. location

The study was conducted in the Forest Park Soeharto Hill is located in two districts namely Kutai Kertanegara district and Penajam Paser Utara districts of East Kalimantan province in Indonesian

B. Materials and Equipment

Materials and equipment used in this study is:

- Checklist Assessment Criteria and indicators and the Tally Sheet Research
- Thematic maps Forest Park Soeharto Hill
- Map Administration
- Closing Vegetation Map
- RBI maps

Equipment used:

- Binoculars, camera
- Clinometer
- Ranging (distance measuring instrument), tape measure and meter (50 m)
- Compass
- GPS

C. Method

Image interpretation performed interdependence (interdependency system), where the interpretation of a map or the previous data into a reference in the interpretation of satellite imagery runs. Resolution satellite imagery interpretation is being done in a visual way, namely the manufacture of each class limit land cover done by delineation on the computer screen (on screen digitizing) using a data card image processing software and geographic information system (Geographic Information System). Wide measurement on a map aims to realize the extent of use of the area. After a survey of the area locations have been determined can be mapped, and then for a further discussion can be combined with satellite images or aerial photographs latest. From mapping the region to the next can be done extensive measurements with the help of geographic information systems (GIS) GIS

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program ArcView 3.3 and 3.3 Mapping method is a mapping method to do that manually and digital (computer). The mapping is closely related to the data source. The data obtained are distinguished based data acquisition systems and technologies used are:

a. Data

Based on the data acquisition system is divided into two parts:

1. Method terrestrial (acquisition of data by direct measurements in the field).
2. Method fitogrametri (data acquisition through images or aerial photographs)

b. Technology

Based on the technology used is two:

1. Conventional (acquisition of data by way of a joint venture, direct measurements by means of optical-electronic)
2. Digital (acquisition of measurement data by using digital tools)

Data processing for polygon compass as follows:

- Calculate the delta X and delta Y;

$$\Delta X = \sin a \times D$$

$$\Delta Y = \cos a \times D$$
 Where: Δ = Delta
 a = Azimut / Angle majors
 D = distance flat
- Calculating the correction delta X and delta Y correction;

$$\text{Correction } \Delta X = \frac{\text{Distance} \times \sum \text{Correction X} (-1)}{\sum \text{Distance}}$$

$$\text{Correction } \Delta Y = \frac{\text{Distance} \times \sum \text{Correction Y} (-1)}{\sum \text{Distance}}$$
- Calculate the coordinates of each point:
 Coordinate X = X previously + ΔX + Correction ΔX
 Coordinate Y = Y previously + ΔY + Correction ΔY
- Calculating the extent or length results that have measurable, comprehensive calculation formula:
 Large L = $(X_n - Y_{n+1}) - (Y_n - X_{n+1})$
- Calculating the overall area;
 Large L = L1 + Ln

RESULTS AND DISCUSSION

Forest Park Soeharto Hill is located between 0°41'LS until 1°05 'LS and 116°36' BT until 117°10 'BT. Forest Park Soeharto Hill is a conservation area and a tropical rainforest ecosystem lowland Kalimantan dominated types of the *Dipterocarpaceae*.

a. Mapping Forest Park Soeharto Hill

Researchers classify the forest into two namely thickets and swamps where these two types of forest is a part that can not be separated from the existence of the forest itself. From the research results obtained in the field in the remaining forests, woods Forest Park Soeharto Hill can be seen in the table below, namely:

Table 1: Forest area and its range from 2010 to 2015

No	Year	Thicket area / ha	Swamp Size / ha	Amount / ha
1	2010	60.207,88	28,50	60.236,38
2	2011	45.907,33	51,76	45.959,09
3	2012	40.495,72	39,21	40.534,93
4	2013	57.850,53	51,04	57.901,57
5	2014	54.505,02	178,18	54.683,20
6	2015	53.151,00	185,94	53.336,94

From table 1 above can be seen in the forest areas Forest Park Soeharto Hill:

For the region as a grove by the graph below:

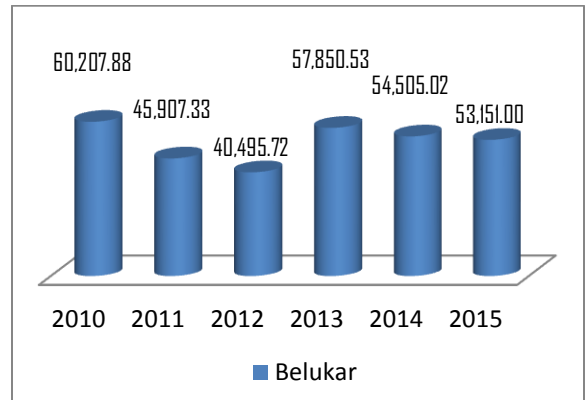


Figure 1: Graph grove in the area of Forest Park Soeharto Hill

As for the swamp forest can be seen its development from 2010 to 2015 as below:

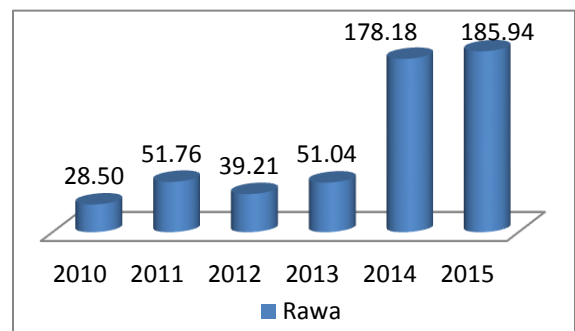


Figure 2: Graph forests in swamp forest area Forest Park Soeharto Hill

And for the whole area of forest neighborhood in Forest Park Soeharto Hill in the graph are as follows:

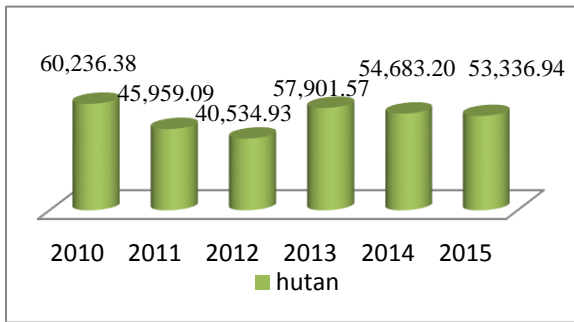


Figure 3: Graph of the forests in the Forest Park Soeharto Hill

From Figure 1 above can be seen remaining forest within the forest area Forest Park Soeharto Hill suffered fluctuation is because the number of activities undertaken in the region that resulted in the woods was lost and did not work in accordance with the land use as a forest park Kingdom or the conservation area. Where the existence of the forest from: In 2010 a number of 60236.38 ha, in 2011 a number of 45959.09 ha, in 2012 amounted to 40534.93 ha, in 2013 amounted to 57901.57 ha, in 2014 amounted to 54683.20 ha and 2015 amounted to 53 336, 94 ha. And if the calculated percentage of the area of area Forest Park Soeharto Hill total 67 766 ha (sixty seven thousand seven hundred and sixty-six hectares) then obtained, for the year 2010 obtained 88.89% of the total area, in 2011 acquired 67.82 % of the total area, in 2012 acquired 59.82% of the total area, in 2013 acquired 85.44% of the total area, in 2014 acquired 80.69% of the total area and in 2015 obtained 78.71% of the total area. Can be seen in the year 2010 the number of remaining forest is 60236.38, equivalent to 88.89% of the total area of forest remaining but the most lowest in 2012 with the number of equivalent area of 40,534,93 ha or 59.82% of the total area and back recovered due to the forest Park area of tropical forests that are faster then the recovery period in 2013 increased again to the forest area of 57901.57 hectares, equivalent to 85.44% of the total area and as time went by the many activities undertaken in the area of forest Park Soeharto Hill, where such activity outside the functions of these conservation areas include mining, resettlement, transmigration, agriculture, fisheries and others so that by 2015 the remaining forest becomes 53336.94 ha, equivalent to 78.71% of the total area and up today continues to decline or slump existence of the forest in forest Park Soeharto Hill To further clarify then we can see as forest maps in 2014 and 2015 below:

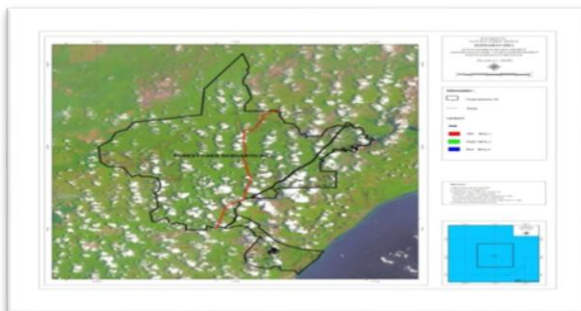


Figure 4: The forest area in 2014 at forest Park Soeharto Hill

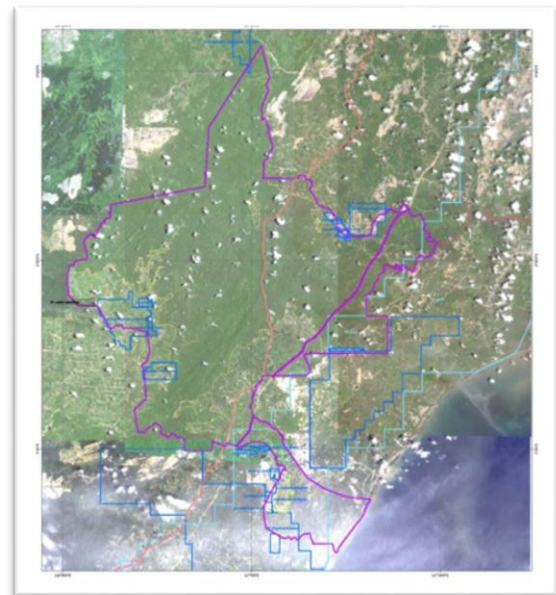


Figure 5: The forest area in 2015 at forest Park Soeharto Hill

CONCLUSION

Based on the results of research conducted in the area of Forest Park Soeharto Hill, the remaining forests in the year 2010 to 2015 experienced a fall up and down where in 2010 the forest there are a number 60236.38 ha, equivalent to 88.89% of the total area, year 2011 forest remaining amount of 45959.09 ha, equivalent to 67.82% of the total area, in 2012 the remaining forests amounted to 40534.93 ha, equivalent to 59.82% of the total area, in 2013 the existing forests amounted to 57901.57 ha or equivalent of 85.44% of the total area, in 2014 the existing forest area of 54683.20 hectares, equivalent to 80.69% of the total area and forests existing in 2015 amounted to 53336.94 ha, equivalent to 78.71% of the total area. Where the existence of the forest in Hill Soeharto Forest Park is affected by human activities that have activities outside the functions of forests Kingdom Park area, resulting in the loss of forest or forest switch to another function.

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