Penataan kawasan konservasi Cekungan Bandung dengan pendekatan konsep bioregional planning

Lia Warlina, author

Abstrak

Management of Conservation Region in Bandung Basin using Bioregional Planning ApproachThe title of the research thesis is "Management of Conservation Region in Bandung Basin using Bioregional Planning Approach". The research objective is to understand the change of bio-geophysical aspects according to time and spatial dimensions. In general, regional planning is attempted by partial approach, i.e. sectors. Therefore, the benefit is not for longer term of development. Having such a limitation, one could consider more comprehensive approach. Bioregional planning concerns with bio-geophysical and social aspects in managing the region. This might be more appropriate for longer term regional development plan. In this research, the element of land use taken account was the forest region. So that, in managing conservation area in Bandung Basin, bioregional planning approach was applied. In this research, the conservation considered was the forest region.

The method of research was using geographical information system application and regression analysis. Variables measured were land-uses in 1986, 1993 and 1997; and changes for the periods. Other variables were slope and altitude. Variables of social aspects used were population density and population proportion for agriculture.

To measure land use change, overlaying technique was applied. The result showed that forest area in 1986 - 1993 reduced rapidly and changed for settlement, encroaching about 1 331.49 hectares covered 25 kecamatan. The largest part of this area was in Kecamatan Cimenyan. The change in period of 1993 to 1997 was 13.79 hectares; this occurred only in Kecamatan Cimenyan. Overlaying method of slope and land use, gave result in that there were settlements in region with slope of more than 50% and covering about 135.64 hectares in 1993 and 58.87 hectares in 1997.

The result of regression analysis was the forest area in 1986 related closely to population density. This was concluded from R-square of more than 0.5 in the first and second segment of the selected study areas. The co-relation of forest area variables and population percentage in agricultural sector gave a good result in the third segment in 1997. This concluded that the major driving force of reduction in forest area was due mainly to the population percentage in agricultural sector, not to the population density upon forested area.

In conclusion, the information can be used as an input for regional planning because it concerns with biological components caring for sustainable managing conservation in Bandung Basin. Further research might be expanded to involve some aspects, especially on the community participation for agricultural sector and vegetation analysis for biodiversity study.