Agrotourism Land Suitability by ATBA method
Agrotourism as an accession of human needs has to be appropriated in term of sustainability, suitability, beautification and comfortability. Therefore, a research to evaluate this activity has been elaborated through a method of four aspects, namely agriculture, tourism, beautification and amenity (ATBA). It means the landscape development has to promote sustainable for agriculture, suitable for tourism activity, esthetically beautiful for environment and comfortable for amenity resources. The spatial approach was designed by combining the value of landscape element through LANDSAT satellite image. The aim of this research is to design an optimal land management scenario from four aspects of ATBA method. The result shows that the area of highest scale for each aspect, i.e. agriculture covers 14,624 ha (63.2% of total watershed area), tourism about 8,908 ha (38.5%), beautification occupies 9,302 ha (40.2%), and amenity reaches 7,103 ha (30.7%). The final result from overlay of all aspects is performed in four levels i.e. 3,355 ha (14.5%), moderate 12,657 (54.7%), low 5,946 (25.7%) and nil 1,180 (5.1%). In addition, statistical analysis for beautification aspect was summarized in linear regression between Scenic Beauty Estimation (SBE) and Beautification Rate Index (BRI) as SBE = -16.24 + 21.35BRI. Furthermore a stepwise regression was performed through eight variables i.e. slope variation (X₁), relief degree (X₂), relief contrast (X₃), land use concave (X₄), naturalness (X₅), land use compatibility (X₆), vegetation strata contrast (X₇), and internal variation of landscape cohesiveness (X₈). The stepwise regression is represented significantly by two variables: X₅ and X₆, which positively affect the value of SBE which formed SBE = -6.32 + 12.74X₅ + 11.58X₆. Correlation analysis both amenity rate index (ARI) and BRI was described in ARI = 2.64 + 2.82BRI. The planning and management concepts were derived from triple bottom line benefit strategic aspect: 1) environmental conservation which is implemented by agroforestry concept, 2) community welfare which is approached by landscape beautification management, and 3) landscape amenity services by the rate of comfortable scale.

**Keywords**: land evaluation; landscape services; remote sensing; scenic beauty estimation (SBE); triple bottom line benefit