

## **Exploring the potential of silviculture agroforestry regime as a compatible management in Southern Gunung Merapi National Park, Java, Indonesia.**

### **Abstract**

Silviculture Agroforestry Regime (SAR) is a compatible management model between the local community agroforestry with the intensive buffer zone and Gunung Merapi National Park (GMNP) through forest rehabilitation and renewal zonation system. The aims of this study: to assess the prospects of SAR among the stakeholders, i.e. the local community, the government and the researchers, as well as the challenges on its implementation. This study employed the SWOT analysis (i.e. strengths, weaknesses, opportunities and threats), synergized with the Analysis of Hierarchy Process (AHP) approach to quantitative the potential of SAR. The results revealed that SAR has a high potential for implementation in GMNP as a compatible management approach. In accordance with the stakeholders' perception, the strengths and opportunities outweigh the model's weaknesses and threats. SAR is potential for encouraging prospective buffer zone with intensive agroforestry management and also for accelerating forest rehabilitation and renewal zoning system of GMNP. Nonetheless, the implementation of SAR must be integrated with various strategies, for instance, the capacity building, documentation process and outcome, participative monitoring and evaluation, back up policy, experimental plot, compensation programme and skill improvement of silviculture agroforestry. Hence, SAR is serving as a "window opportunity" for learning model that includes the reference outside the national park as a promising buffer zone for developing this new Indonesia's national park, which avoids the image of 'paper park'.

**Keyword:** Silviculture agroforestry; Compatible management.