

KARAKTERISTIK DAN PELUANG KEBERLANJUTAN AGROFORESTRI TEGALAN DI LERENG SELATAN TAMAN NASIONAL GUNUNG MERAPI LIMA TAHUN PASCA ERUPSI

Oleh :
Dewi Anita¹

INTISARI

Erupsi Gunung Merapi tahun 2010 memberikan dampak kerusakan ekosistem hutan pada kawasan Taman Nasional Gunung Merapi (TNGM) maupun pada kawasan hutan rakyat mulai dari tingkat ringan sampai berat. Masyarakat melaksanakan percepatan pemulihan lahan berbasis agroforestri tegalan pada berbagai dampak erupsi, namun belum diketahui bentuk adaptasi pola tanam, komposisi dan struktur serta peluang keberlanjutannya di masa mendatang. Penelitian ini bertujuan untuk mengetahui pola tanam, komposisi, struktur jenis tanaman dan peluang keberlanjutan agroforestri tegalan berdasarkan tiga zona tingkat kerusakan yaitu kerusakan ringan, sedang dan berat.

Penelitian ini dilakukan di Desa Glagaharjo. Metode pengambilan data dilakukan secara *purposive sampling* pada 30 lahan yang menerapkan agroforestri tegalan dan dikelola oleh petani responden. Pengambilan data menggunakan petak ukur 20 x 20 m. Data yang diambil berupa pola tanam, komposisi dan struktur tanaman agroforestri tegalan. Informasi peluang keberlanjutan agroforestri tegalan dilakukan dengan wawancara terhadap responden. Analisis data meliputi INP, indeks diversitas, analisis struktur vertikal dan horizontal dengan *SExi-FS*. Analisis peluang keberlanjutan agroforestri tegalan dilakukan secara deskriptif kuantitatif dengan skoring yang dikategorikan menjadi peluang keberlanjutan rendah, sedang dan tinggi.

Hasil penelitian menunjukkan bahwa lima tahun pasca erupsi Gunung Merapi, pola tanam agroforestri tegalan di zona kerusakan ringan dan sedang didominasi pola *random mixture* sedangkan di zona kerusakan berat dengan pola *alternate rows*. Komposisi jenis di zona kerusakan ringan didominasi kelapa, kopi dan sengon dengan INP 86,75; 94,47 dan 121,32%. Zona kerusakan sedang dan berat didominasi sengon dengan INP 56,88 dan 258,86%. Hasil dari *SExi-FS* menunjukkan lapisan tajuk agroforestri tegalan di zona kerusakan ringan tersusun atas lima lapisan tajuk, zona kerusakan sedang tersusun atas empat lapisan tajuk dan zona kerusakan berat atas tiga lapisan tajuk. Peluang keberlanjutan agroforestri tegalan di lereng selatan TNGM termasuk dalam keberlanjutan sedang dengan nilai 12,27 pada skala 11-15 sehingga perlu ditingkatkan melalui penerapan silvikultur intensif.

Kata kunci : agroforestri tegalan, pola tanam, komposisi, struktur, pasca, erupsi

1. Mahasiswi Fakultas Kehutanan Universitas Gadjah Mada

CHARACTERISTICS AND SUSTAINABILITY OF DRY LAND AGROFORESTRY IN THE SOUTHERN OF MERAPI VOLCANO NATIONAL PARK FIVE YEARS POST ERUPTION

By :
Dewi Anita¹

ABSTRACT

Merapi Volcano eruption in 2010 has caused damage to the forest ecosystem in either Merapi Volcano National Park (MVNP) or the community forest between the range of light to heavy. Villagers hastened dry land agroforestry based reforestation on various impacts of the eruption, but it was not known the cropping pattern adaptation, composition, structure of plant species and opportunities of the sustainability. This study aimed to determine the cropping pattern, composition, structure of plant species and the sustainable opportunity of dry land agroforestry according to three damage level, which are light, medium and heavy.

This research was implemented in Glagaharjo village. Research done by purposive sampling on 30 dry land agroforestry managed by farmer respondents. The data collection done by 20 x 20 m measuring box. The data measured were cropping pattern, composition and structure of plant species in dry land agroforestry. The informations of sustainable opportunity of dry land agroforestry collected by holding interview to respondents. The data analysis used covered Important Value Index (IVI), index of diversity, vertical and horizontal structure analysis with SExi-FS. Besides, analysis the sustainable opportunity of dry land agroforestry were done by means of quantitative descriptive by scoring and categorized into low, medium or high opportunity.

The research shows that five years post Merapi Volcano eruption, the pattern of dry land agroforestry in light and medium damaged zone is dominated by random mixture while in heavy damaged zone is dominated by alternative rows pattern. The typical composition in light damaged zone is dominated by coconut, coffee, and albizia with IVI 86,75; 94,47; and 121,32%. Meanwhile, the typical composition in the medium and heavy damaged zone is dominated by albizia with IVI 56,88 and 256,86%. The results of SExi-FS show that the crown layer in light damage zone consists of five crown layers, the medium four crown layers and the heavy three crown layers. The dry land agroforestry sustainable opportunity in the southern of GMNP belongs to the medium sustainability level with the mark of 12.27 in scale 11-15, so that needs intensive silviculture.

Keywords : dry land agroforestry, cropping pattern, composition, structure, post, eruption

1. Student of Faculty of Forestry Gadjah Mada University