

INTISARI

Bambu merupakan salah satu jenis yang mudah ditemukan di hutan rakyat Jawa Barat. Produktivitas hutan rakyat yang dikelola secara tradisional masih rendah. Oleh sebab itu, perlu ditingkatkan produktivitasnya dengan menerapkan intensifikasi yang memperhatikan aspek lingkungan (eco intensif). Penelitian bertujuan untuk: 1. Mengetahui model dan dinamika kunci pengelolaan tradisional agroforestri bambu di hutan rakyat. 2. Mengetahui pengaruh penerapan eco intensif agroforestri bambu-padi gogo terhadap produktivitas lahan; 3. Menyusun strategi eco intensif agroforestri bambu-padi gogo yang produktif dan berkelanjutan di hutan rakyat.

Pengambilan data komposisi jenis hutan rakyat dengan metode survei menggunakan 37 petak pengamatan. Data sosial ekonomi pengelola hutan rakyat diperoleh melalui wawancara dengan 30 responden. Penelitian agroforestri bambu dan tanaman pangan dilakukan secara eksperimen dengan menanam 3 varietas padi gogo (*Oryza sativa* L.) di bawah tegakan bambu betung (*Dendrocalamus asper*), bambu hitam (*Gigantochloa atroviolacea*) dan bambu ampel (*Bambusa vulgaris*). Pada Agroforestri bambu hitam dan bambu ampel ditambahkan perlakuan intensitas pemanenan bambu (berat, sedang, ringan). Tiga varietas padi yaitu Rindang 2, Protani dan Unsoed. Data pola dan komposisi jenis hutan rakyat dianalisis menggunakan analisis Penskalaan Multidimensi Non-metrik. Data hasil wawancara dianalisis menggunakan metode deskriptif yang disajikan dalam bentuk tabel dan grafik. Data pertumbuhan dan produksi tanaman dianalisis menggunakan analisis keragaman.

Pengelolaan hutan rakyat bambu di Kabupaten Ciamis dapat lestari karena dikembangkan pola agroforestri dengan mempertahankan keanekaragaman jenis tanaman penghasil kayu, bambu, buah-buahan, komoditas perkebunan, hortikultura dan pangan, selain itu petani memperoleh manfaat langsung baik secara ekologi (konservasi tanah dan air), ekonomi (bahan bangunan, alat pertanian dan kerajinan) dan sosial (bagian dari budaya). Penerapan rekayasa eco-intensif pola agroforestri bambu dan tanaman pangan mampu meningkatkan kesuburan tanah, pertumbuhan bambu dan kualitas batang bambu betung, hitam dan ampel. Eco intensif bambu memiliki nilai LER dan ATER > 1 sehingga layak diusahakan karena lebih efisien dalam pemanfaatan lahan dibandingkan pola monokultur.

Strategi penerapan eco intensif hutan rakyat melalui tiga skenario yaitu: 1) Hutan rakyat agroforestri bambu produktif dengan memanipulasi lingkungan dan penerapan konservasi tanah dan air, pemeliharaan lebih intensif meskipun input rendah serta pemanenan yang terencana, 2) Eco intensif agroforestri bambu+tanaman pangan produktif dengan menerapkan intensifikasi pertanian: penggunaan benih unggul, pemeliharaan intensif dan pemanenan terencana. 3) Eco intensif agroforestri bambu+tanaman pangan prospektif dengan input lebih tinggi serta pengolahan dan diversifikasi produk.

Kata kunci: Agroforestri, bambu, eco-intensif, hutan rakyat, padi gogo

ABSTRACT

Bamboo is one of the constituent species of community forests in West Java. The productivity of traditionally managed community forests is still low. The productivity of community forests can be increased by implementing intensification that considers environmental aspects (eco-intensive). The research aims to 1. To determine the model and key dynamics of traditional management of bamboo agroforestry in community forests. 2. To determine the effect of applying eco-intensive upland bamboo-paddy agroforestry on land productivity; 3. To develop an eco-intensive strategy for productive and sustainable upland bamboo-paddy agroforestry in community forests.

*Data collection on community forest species composition using survey method using 37 observation plots. Socio-economic data on community forest managers were obtained through interviews with 30 respondents. Bamboo and food crop agroforestry research was conducted experimentally by planting 3 upland rice varieties (*Oryza sativa* L.) under a stand of betung bamboo (*Dendrocalamus asper*). Black bamboo (*Gigantochloa atrovioleacea*) and ampel bamboo (*Bambusa vulgaris*) were treated with harvesting intensity (heavy, medium, light), and 3 rice varieties (Rindang 2, Protani, and Unsoed). Data on the pattern and composition of community forest species were analyzed using Non-metric Multidimensional Scaling analysis. Interview data were analyzed using descriptive methods presented in tables and graphs. Plant growth and production data were analyzed using diversity analysis.*

Bamboo community forest management in Ciamis Regency can be sustainable because agroforestry patterns are developed by maintaining the diversity of types of plants producing wood, bamboo, fruits, plantation commodities, horticulture and food, in addition farmers gain direct benefits both ecologically (soil and water conservation), economically (building materials, agricultural tools and crafts) and socially (part of culture). The application of eco intensive of bamboo agroforestry patterns and food crops can increase soil fertility, bamboo growth and the quality of bamboo stems, black and ampel. Eco intensive bamboo has LER and ATER values > 1 so it is worth cultivating because it is more efficient in land use compared to monoculture patterns. The strategy for implementing eco-intensive community forests through three scenarios, namely: 1) Productive bamboo agroforestry community forest by manipulating the environment and implementing soil and water conservation, more intensive maintenance despite low input and planned harvesting, 2) Productive bamboo+food crop agroforestry eco intensive by applying agricultural intensification: use of superior seeds, intensive maintenance, and harvesting according to market needs. 3) Eco-intensive bamboo+food crop agroforestry is prospective by incorporating higher inputs and product processing and diversification.

Keywords: Agroforestry, bamboo, eco-intensive, upland rice