MIXED GARDEN MANAGEMENT AND ITS CONTRIBUTION TO HOUSEHOLD INCOME OF FARMERS IN HEGARMANAH VILLAGE, SUB-DISTRICT OF CICANTAYAN, SUKABUMI DISTRICT

Nurheni Wijayanto
Laboratory of Forestry Socio-Economics and Policy
The Department of Forest Management
Faculty of Forestry, Bogor Agricultural University
PO Box 168, Bogor 16001, Indonesia
Email: nurheniw@indo.net.id

Introduction

People of Hegarmanah village- located in Gunung Walat Educational Forest- employed agroforestry system in the land utilization, in a form of mixed garden. This mixed garden is expected to have important roles, such as in providing vegetables and fruits, medicinal herbs, building material, fences, as well as firewood. Other advantages of mixed garden are in creating micro climate and as windbreaker. Therefore, it is important to make a deep review on the management of mixed garden and its possible contribution for household income.

Objectives

This study aimed to observe mixed garden management and its contribution for household income.

Methods

This study focused on background of species selection in mixed gardens, identification of plants and products yielded, and reviewing revenue from mixed garden to total income. Respondents were represented by 40 samples which are household or family who cultivated mixed garden based on land ownership stratum I, II, and III (>0.5 ha land; 0.25 -0.5 ha land; and < 0.25 ha land, respectively). Samples were determined by stratified random sampling. Data collection was done by observation as well as in depth interview.

Results and Discussion

Home gardens in the study area was planted by fruit trees such as Durian (*Durio zibethinus*), Duku (*Lansium domesticum*), Mangosteen (*Garcinia mangostana*), Pimplemus (*Citrus* sp.), Rambutan (*Neppelium lappaceum*), kedondong (*Sapondias dulcis*), jackfruit (*Artocarpus heterophyllus*), jengkol (*Ptelobium lobatum*), cengkeh (*Eugenia aromatica*); and palm trees such as coconut (*Cocos nucifera*), and aren (*Arenga pinnata*). Home gardens were also consisted of agricultural crops such as banana, cassava, pepper and pineapples; medicinal plants such as cardamom (*Amomum cardamom*) and nutmeg (*Myristica fragrans*), as well as ornamental plants. Woody trees dominating in home gardens were Sengon (*Paraserianthes falcataria*), Ki Afrika (*Maesopsis eminii*), Bambu (*Gigantochloa apus*), fruit trees, and palm trees.

Activities in managing traditional mixed gardens were only parts of farming activities. Management of mixed gardens with appropriate silvicultural techniques has not been carried out by peasants. There was no effort to develop gardens into more profitable farms. According to the peasants, the reasons practicing a traditional mixed garden were only for a low management risk and high social benefit. The dominant plant species in the mixed garden were fruit trees, for their fast growing, easy maintenance, resistance to pest and disease, suitability to the soil type, good price and easy to be sold (by a middleman).

Conclusions

Average income contribution from mixed garden was Rp. 2,308,368/ha/year or about 38.5% of the total income. According to the land ownership, stratum I, II, and II farmers earned from their mixed gardens to the total income Rp. 3,733,500/ha/year (58%), Rp. 1,670,911/ha/year (58%), and Rp. 1,520,690/ha/year (68.6%), respectively. Factors influencing income contribution were land ownership, soil condition/fertility, and farmers' knowledge, number of species planted, and arrangement and management of plants.

Reference

AAK. 1975. Bertanam Pohon Buah-Buahan Jilid II. Kanisius.Jakarta

Achlil, M.R. 1981. Beberapa Masalah dan Langkah Pembinaan dan Pengembangan Hutan Serbaguna. Prosiding Lokakarya Pembinaan dan Pengembangan Hutan Serbaguna. BPH Disti dan UGM Yogyakarta

Arnold,J.E.M. 1983. Manfaat dan Peluang Agroforestry. Jakarta

Ashari, S. 1995. Holtikultura Aspek Budidaya. Universitas Indonesia Press. Jakarta

Birowo, A.T dan Suyono, 1982. Distribusi Pendapatan di Pedesaan Padi Sawah di Jawa Tengah dalam Bunga Rampai Perekonomian Desa. Yayasan Obor Indonesia. Jakarta

Biro Pusat Statistika. 1990. Hasil Pencacahan Lengkap Sensus Penduduk Indonesia Menurut Provinsi dan Kabupaten/Kodya Seri No. 1. Jakarta

Departemen Kehutanan RI. 1989. Hutan dan Kehutanan. Jakarta

___________. 1992. Manual Kehutanan. Jakarta

Desa Hegarmanah. 2000. Buku Monografi Desa. Kecamatan Cicantayan Dati II Sukabumi. Jawa Barat

Husaeni, E dan Ontaryo Y. 1981. Studi Peningkatan DAS di Gunung Walat. Fakultas Kehutanan. Institut Pertanian Bogor.Bogor

Hernanto, F. 1991. Ilmu Usaha Tani. Penebar Swadaya. Jakarta

Kartasubrata, J. 1986. Partisipasi Rakyat dalam Pengelolaan dan Pemanfaatan Hutan di Jawa. Desertasi Fakultas Pasca sarjana Institut Pertanian Bogor. Tidak diterbitkan.

King, K.F.S dan M.T. Chandler. 1978. The Wasted Lans: The Program of The Work of The International Council for Research in Agroforestry. ICRAF. Kenya.

Munchon, G. 1983. Village Forest Garden in West Java. Institut Botanique Montpellier. Prancis.