INTISARI

EVALUASI KESESUAIAN LAHAN SUB DAS WURYANTORO DAN SEKITARNYA DAS SOLO DI DAERAH TANGKAPAN AIR WADUK GAJAH MUNGKUR JAWA TENGAH

Oleh : Khuswantoro Akhadi

Meningkatnya kebutuhan dan persaingan lahan baik untuk pertanian maupun non pertanian memerlukan pemikiran yang seksama dalam menentukan pemanfaatan yang paling sesuai dengan kondisi fisik dan biofisik lahan. Penelitian ini bertujuan untuk menganalisis kesesuaian lahan terhadap beberapa jenis tanaman untuk pola agroforestry di daerah tangkapan air waduk Gajah Mungkur. Tanaman yang dianalisis adalah jati *(Tectona grandis)*, mahoni *(Swietenia macrophylla)*, akasia *(Akasia mangium)*, padi *(Oryza sativa)*, jagung *(Zea mays)*, dan ubi kayu *(Manihot esculenta)* .

Metode yang digunakan adalah metode matching dengan bantuan piranti GIS. Pengambilan sampel dengan teknik *purposive sampling*. Data primer diambil langsung di lapangan Data sosial ekonomi dikumpulkan melalui angket dan wawancara. Satuan lahan dibentuk dengan cara *mengoverlaykan* antara peta kelerengan, peta jenis tanah dan peta intensitas curah hujan yang kemudian dicocokan dengan syarat tumbuh masing-masing jenis tanaman.

Ada 22 satuan lahan yang ditemukan dengan karakteristik lahan yang berbeda. Jati masuk klas kesesuaian S2 = 5025,23 ha (67,51%); S3 = 1017,429 ha (13,67%): N = 1400,84 ha (18,81%). Mahoni masuk klas kesesuaian S2 = 4233,02 ha (56,73%); S3 = 1270,21 ha (17,06%); N = 1950,27 ha (26,01%). Akasia masuk klas kesesuaian S2 = 4233,02 ha (56,73%); S3 = 1270,21 ha (17,06%); N = 1950,27 ha (26,01%). Padi masuk klas kesesuaian S2 = 3977,17 ha (52,74%); S3 = 296,041 ha (3,97%); N = 3220,32 ha (26,21%). Jagung masuk klas kesesuaian S2 = 4233,02 ha (56,73%); S3 = 1270,21 ha (17,06%); N = 1950,27 ha (26,01%). Ubi kayu masuk klas kesesuaian S2 = 3926,77 ha (52,75%); S3 = 296,42 ha (3,98%); N = 3220,28 ha (26,01%). Faktor pembatas yang umum berupa ketersediaan air, bahaya erosi, kedalaman efektif tanah dan kelerengan. Pengelolaan yang ditawarkan berupa pengelolaan tanah, pembuatan bangunan fisik, perbaikan sistem tanam yang benar menurut kaidah konservasi dan penanaman dengan sistem campur/agroforestry tergantung dengan kondisi fisik yang ada

Kata kunci : karakteristik lahan, syarat tumbuh tanaman dan kesesuaian lahan.

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ABSTRACT

THE EVALUATIO OF FIELD FIT OF SUB DAS WURYANTORO AND THE SURROUNDING DAS SOLO IN THE WATER CAVITY AREA OF GAJAH MUNGKUR RUMEN IN CENTRAL JAVA

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The rapid increase of field need and competition, whether for agriculture or non agriculture need a careful consideration in determining the most suitable with the phisycal and biophisycal condition of field. This study was aimed to analyze the field fit for several kinds of plant for the agroforestry pattern in the water cavity of Gajah Mungkur rumen. The plant observed were teak (*Tectona grandis*), mahagony (*Switenia macrophylla*), acacia (*Acacia mangium*), rice (*Oryza sativa*), corn (*Zea mays*), and casava (*Manihot esculenta*).

The method used was matching method with assitance of GIS equipments. The sampling was carried out using purposive sampling. The primary data was taken directly from the field. The socio-economy data was colected through questionnaire and interview. The field unit was formed by ovelaying between the slope map, soil type's map, and rainfall intensity map, which was fitted the requirement growth of each type of plant.

There was 22 fields unit found with different field characteristic. Teak is included in fit class S2 = 5025,23 ha (67,51%); S3 = 1017,429 ha (13,67%): N = 1400,84 ha (18,81%). Mahogony is included in the fit class S2 = 4233,02 ha (56,73%); S3 = 1270,21 ha (17,06%); N = 1950,27 ha (26,01%). Acacia is included in the fit class S2 = 4233,02 ha (56,73%); S3 = 1270,21 ha (17,06%); N = 1950,27 ha (26,01%). Rice is included in the fit class S2 = 3977,17 ha (52,74%); S3 = 296,041 ha (3,97%); N = 3220,32 ha (26,21%). Corn is included in the fit class S2 = 4233,02 ha (56,73%); S3 = 1270,21 ha (17,06%); N = 1950,27 ha (26,01%). Cassava is included in the fit class S2 = 3926,77 ha (52,75%); S3 = 296,42 ha (3,98%); N = 3220,28 ha (26,01%). The eliminating factors generally are in the form of water reservoir, erosion danger, soil effetive depth, and the slope. The cultivations offered are in the form of soil management; physical building making, the adjusment of correct planting system according to the conservatiaon rules and planting using mixed/agroforestry system depend on the existing physical condition.

Key works : field carracteristic; the requeirement of plant growth, and fied fit.

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