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## Ecosystem Services of Second-Growth Vegetation among Rural Settlers in Central Amazonia

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Second-growth vegetation (*capoeira*) is an important part of the rural landscape in Amazon with ecological and social functions such as the recovery of soil fertility in agricultural land, protection of water and soil resources, maintenance of the biogeochemical cycles and as carbon sink through biomass accumulation. Although the temporary abandonment of agricultural land to natural regeneration in order to increase soil fertility is a common practice among rural people in Amazonia, this practice has been changing and could compromise the beneficial role these *capoeiras* in the areas. In this study we investigated the current use of *capoeiras* for agriculture and their role in accumulating biomass in 240 rural properties of urban-originated settlers in the Tarumã Mirim agrarian-reform Settlement, near Manaus Amazonas. Around 67 % of the families were not involved in agriculture activities prior moving to the settlement. Abandonment time of agricultural land was shorter than the average for rural people in Amazonia with the secondary growth vegetation being burned after only 1.9 ( $\pm 0,12$ ) years of age. Of all *capoeiras* present in all properties, 89 % was burned before 4 years of age. The average area of *capoeira* vegetation in each family agricultural parcel was 0,89 ha ( $\pm 0,1$ ) and 100 of the 240 lots did not have any *capoeira* vegetation. Eighty percent of the settlers interviewed did not relate *capoeira* vegetation to recuperation of soil fertility. Only 20 % of the *capoeira* species were named by the land owners and only 10 % of them knew of some use for those species. Average aboveground biomass accumulation was 4,7 t/ha dry weight and 17 t/ha dry weight for *capoeiras* aging up to 1 and 2 years of age, respectively. These averages are not enough to qualitatively increase ecological conditions in those properties. *Capoeiras* 4 or more years old had much higher biomass accumulation (30 t/ha). Government technical assistance for settlers is needed in order to implement sustainable management of *capoeiras*.

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