ABSTRACT


Critical area of land is increasing from year to year, this occurs because of inappropriate management of the land area. One effort which may overcome this problem is applying agroforestry systems. However, the agroforestry system still have problems on how far the farmers performance and the determiners of the performance which will affect to the sustainability of the agroforestry systems on critical lands. Research objectives are: (1) to analyze the farmers performance and the determiners of the performance that will affect to the sustainability of the agroforestry systems on degraded lands, (2) to analyze the forestry extension support to the determiners of the farmer performance, and (3) to develop appropriate strategy for extension activities in order to improve the farmer performance. Data are analyzed through three methode: (1) biplot, (2) descriptive statistics, (3) and SEM (Structural Equation Modeling). The result of the study could be summarized as follows: (1) The farmer performance of Pegunungan Kendeng are still low. This condition are reflected on the: (a) low level income, (b) limited types of food diversity, and (c) absence of business network in agroforestry system. Nevertheless, the farmer performance has significant and positive impact to the sustainability of agroforestry systems. The condition of the performance determinants is in a relatively strong level; this condition is reflected on (a) the farmer motivation is relatively strong, (b) enough availability of farmer’s opportunities (c) the acceptable farmer’s skills. This reflects that the farmer determinants positively and significantly affect to the farmer performance. (2) The support of forestry extension is still considered low; this condition is reflected on their low level on basic competence and on technical mastery. Nonetheless, the forestry extension supports are significantly and positively affect to the farmer motivation and opportunities. (3) In designing the strategy of forestry extension to improve the farmer performance and the sustainability of the agroforestry system, it needs to consider: the farmer motivation, the farmer work opportunities and the farmer capabilities.

Keywords: performance, farmer around forest, agroforestry systems, and critical land management.