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## Determinants of Farm and Non-Farm Employment among Smallholder Farmers in Yayu Biosphere Reserve, South-West Ethiopia: Implications for Future Agriculture?

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### Abstract

Enhancing agricultural productivity has remained to be one of the major challenges in sub-Saharan Africa, where Ethiopia is not an exception. Although agriculture is the main stay of the Ethiopian economy contributing for half of the GDP and 50 % of exports, the sector is characterised by its subsistence nature and incapacity to attain food and nutrition security at national level, resulting small holder farmers to diversify their livelihoods to non-farm employment as a coping strategy. This study aims at analysing the determinants of farm and non-farm employment for smallholder farmers in Yayu biosphere reserve of South-West Ethiopia. A household survey was undertaken to collect gender disaggregated data from 334 small holder farmers and supported by qualitative data collected from 28 Focus group discussions and 6 key informant interviews. Gender disaggregated tobit regression analysis followed by marginal effect computations were employed to capture the probability and extent of determinant variables in predicting farm and non-farm employment. Augmented production factors particularly farm physical capital and land ownership along with total agricultural productivity have been found to increase the probability and intensity of farm engagement positively and significantly for both male and female headed households. For every unit increase in total agricultural productivity, there has been a 2.1 % and 4.3 % increase in the extent of farm engagement for both male and female headed households, respectively. Similarly, the level of farm engagement increased significantly for every unit increase in farm land, farm physical capital, access to credit and irrigation, ownership of non-farm assets and labour support system practised in the area. On the contrary, a higher level of education, increment in non-farm income and household expenditure, incidence of crop damage by wild animals as well as pests and diseases were found to influence farm engagement negatively and increased non-farm employment significantly. The results implied that engagement in farm is highly dependent on availability and efficient use of scarce farm production factors, productivity of the farming sector and the presence of external farm challenges. These call for sustainable and holistic approaches to improve the future productivity of small holder agriculture.

**Keywords:** Agricultural productivity, determinants, farm employment, non-farm employment, production factors, South-West Ethiopia