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**Title:** Farmers’ socio-economic structure in Myanmar with regard to closing rice yield gaps

Yield gaps remain an important issue in agriculture regarding food security. Closing rice yield gaps in Southeast Asia could increase annual production and support efforts to establish food security. Yield gaps are caused by biotic factors such as pests, and abiotic factors e.g. inadequate soil fertility and allocative efficiency gaps. Furthermore, the negative environmental consequences of agricultural intensification increase the risk of future yield gaps.

In order to better understand the complexity of yield gaps, this study focuses on the socio-economic parameters influencing rice yield productivity and yield gaps in the Bago region in Myanmar. In Myanmar, yield gaps are high due to different geographical conditions, the use of traditional rice varieties and little fertilizer as well as poor access to inputs, high input prices, and few risk aversion activities. These factors severely impact yield productivity and hence demonstrate low agricultural profitability. Embedded in the second phase of the CORIGAP project (Closing rice yield gaps in Asia with reduced environmental footprint) funded by the Swiss Agency for Development and Cooperation (SDC) the main objective is to analyze the socio-economic structure of farmers and investigate their characteristics with regard to farming methods, management practices, and yield output. Data will come from household surveys conducted in Myanmar in 2012 and 2017. 200 farmers participated in the study; results will be analyzed using univariate and multivariate statistics. Investigating the farmers’ income level, land preparation techniques, management practices and geographical setting with the output performance shall demonstrate the significance of their socio-economic situation towards yield productivity. For example, farmers using improved rice varieties and optimized levels of fertilizer demonstrate higher yields. Nonetheless, natural conditions, as well as economic and social constraints, play an important role in the way farmers are able to cultivate their land. Therefore, yield output, allocative efficiency, and profitability might also be heavily influenced by exterior factors which have to be taken into consideration for the analysis. In this context, the political transition in Myanmar and evolution of the agriculture sector may strongly impact the farmers’ possibilities and opportunities.