

**FACTORS AFFECTING LOW PRODUCTIVITY OF PADDY LANDS:
CASE STUDY IN GAMPAHA DISTRICT, SRI LANKA**

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Paddy (*Oryza sativa*) plays a significant role in the Sri Lankan economy in terms of food security, livelihood, imports and exports, and gross domestic production. Recently, a yield gap has been observed between actual (2.8 tha^{-1}) and potential ($6\text{-}7 \text{ tha}^{-1}$) paddy productivity in Gampaha district. Since technical factors have already been identified by previous studies, main emphasis was given on identifying socio-economic and demographic factors affecting low productivity of paddy lands. A pre-tested structured questionnaire survey was carried out with randomly selected 90 paddy farmers. Collected data were analyzed using descriptive statistics and a multiple linear regression model. Accordingly, majority of the respondents were more than 50 years of age plus have more than 30 years of experience in commercial paddy farming. Average cultivated land size was 2 acres with an average yield of 3.12 tha^{-1} . The results of the regression analysis revealed that type of fertilizer ($p=0.03$), purpose of cultivation ($p=0.007$), cultivation extent ($p=0.04$) had a significantly positive relationship ($p<0.05$) while labor availability ($p=0.088$) had a significantly negative relationship with land productivity ($p<0.1$). Land productivity was significantly higher in paddy lands, where respondents use both organic and inorganic fertilizer. However, years of experience in paddy farming ($p=0.391$), access to credit ($p=0.566$), and access to extension ($p=0.963$) did not have any significant impact on land productivity ($p<0.05$). Major constraints identified by respondents for poor land productivity were flooding condition, access to water sources during dry periods and insufficient fertilizer subsidies. According to the findings of this study, it is recommended to adapt risk mitigating strategies such as adjusting cultivation according to rainy seasons, use of flood tolerant and high yielding varieties and practicing crop diversification to increase paddy productivity. Moreover, actions need to be taken to minimize flooding condition in the area through proper land management practices.

Keywords: Land productivity, Paddy farming, Socio-economic factors