

**SITE-SPECIFIC FERTILIZER APPLICATION IN PADDY:
IMPLEMENTATION GUIDANCE FOR POLICYMAKERS**

A dissertation submitted to the
Faculty of Animal Science and Export Agriculture
Uva Wellassa University
In partial fulfillment of the requirements for the award of
Bachelor of Science in Export Agriculture

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**Export Agriculture Degree Programme
Faculty of Animal Science and Export Agriculture
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2017

ABSTRACT

Application of the correct dose of fertilizer is vital to replenish the soil nutrients, which are lost due to the continuous cultivation. The Department of Agriculture has identified site-specific fertilizer recommendation as a strategy to supplement the nutrients based on the properties of specific soils and it is more suitable than the existing blanket fertilizer recommendation for paddy. A controversial issue still exists on the “optimal use” of fertilizers. Among different views, soil practitioners believe that the soil test based fertilizer recommendation is the best in terms of maximum utilization of fertilizers and cost cut-off. This study was conducted to analyze the farmers’ perspectives on site-specific fertilizer application and to estimate the farmers’ willingness to pay for soil testing. A survey was conducted in 2017 and collect data from 110 farmers in Polonnaruwa and Anuradhapura districts following a multi-stage random sampling. Eleven different statements on farmer’s perspectives with five point Likert scale were assessed by factor analysis followed by a multiple regression. Farmer’s willingness to pay for a soil testing was elicited using Single-Bounded Dichotomous Choice questions (3 bid values; based on value of soil test kit) of Contingent Valuation Method and estimated using probit regression. The farmer’s perspectives were significantly associated with age, education, training received and type of district. The estimated marginal willingness to pay for a soil test were Rs. 347 and Rs. 302 for Polonnaruwa and Anuradhapura, respectively, while age, farming status, farming experience and per hectare fertilizer cost, type of district and the bid value significantly influenced the decision. Results showed that, with the incremental bid value, farmer preference for paying a soil test decreases. The study revealed that, trainings received has a significant influence on the positive perception on the technology. The policy implications highlight that, training can enhance the diffusion and adoption of the proposed technology in the targeted community.

Keywords: Paddy, Site-specific fertilizer application, Contingent valuation method, Willingness to pay