

## **Economic value of water functioning system of paddy field in Sri Lanka**

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### **Abstract**

Paddy farming in Sri Lanka can be divided in to tree schemes according to the source of water availability for farming. In addition scale of cultivation depends on the schemes. Naturally paddy field acts as a multifunctional surface due to its structure. Then paddy field helps to mitigating flood, recharging groundwater and purifying water which was determined previous studies. Then, the study focused on estimating economic value of those non-market benefits and find out how does the magnitude effects of those benefits vary within the cultivation schemes in Sri Lanka based on non-market evaluation methods of Replacement Cost Method (RCM) and Contingent Valuation Method (CVM). Primary data was collected by using structured interview method and experiment method. Further one-way ANOVA was utilized to achieve the objective of the study. Further the result shows that the Economic Water Functioning system of Paddy Field is vary within the cultivation schemes and allocated as 172421.8LKR, 63320.7LKR and 32996.66 in major irrigated scheme, minor irrigated scheme and rain-fed scheme respectively per acre.

***Key words: Paddy farming, Economic value, Non-market, Replacement Cost Method, Contingent Valuation Method, External benefits***

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