

Estimating the demand for traditional rice varieties: A case study in Gampaha District, Sri Lanka

K.A.K.D.P. Karunarathna¹ and R.M.W. Rathnayake¹

Abstract

Traditional rice varieties are one of valuable components of the biodiversity of Sri Lanka. These rice varieties are rich in medicinal and nutritional properties, which can contribute to the development of the well-being of the society. Due to market failures, there are several arbitrary values for the traditional rice varieties and the price changes occur very quickly in the market. Hence, due to the arbitrary price, traditional rice varieties may not be a preferred option for consumers, which in turn threaten the demand for traditional rice varieties in Sri Lanka. This study estimated the prices for selected traditional rice varieties due to their unique medicinal and nutritional properties. The study employed a Probit regression model based on the Contingent Valuation method (CVM) to calculate the prices for the traditional rice varieties. Single bounded choice approach was applied. Three hundred and ninety super market consumers from Gampaha district were interviewed using a pretested questionnaire. Five selected traditional rice varieties with their unique medicinal and nutritional properties were used for this study. They are *Suwandel*, *Pachchaperumal*, *Kuruluthuda*, *Kalu Heenati* and *Madathawalu*. Under the regression model household income and educational level of respondents were more significant. The Willingness To Pay (WTP) was calculated for the establishment of a price structure for the above five selected traditional rice varieties. The willingness to pay at household level was LKR. 346/-, LKR. 237/-, LKR. 234/-, LKR. 261/- and LKR 296/- per kg for *Suwandel*, *Pachchaperumal*, *Kuruluthuda*, *Kalu Heenati* and *Madathawalu* traditional rice varieties respectively. The resulted prices were slightly different (either higher or lower than) from the existing market prices. The findings of the study show that majority of the people were willing to pay traditional rice varieties due to the medicinal and nutritional properties. The estimated WTP can be used to introduce a new price structure for the traditional rice varieties at super market level.

Keywords: *Contingent Valuation Method (CVM), Medicinal and nutritional properties, Traditional rice varieties, Willingness to Pay (WTP)*

¹Department of Tourism Management, Faculty of Management Studies, Sabaragamuwa University of Sri Lanka. Corresponding author's email: warath1@gmail.com