## STUDY ON ADOPTION OF TRADITIONAL RICE CULTIVATION IN ANURADHAPURA DISTRICT

## B.M.A.M.C. Kumari, G.A.S. Ginigaddara and A.P.S. Fernando

Department of Agricultural Systems, Faculty of Agriculture, Rajarata University of Sri Lanka, Puliyankulama, Anuradhapura, Sri Lanka

Increasing health threats in Anuradhapura district is a common problem among both rice growers and consumers. As a solution for this situation, farmers tend to cultivate traditional rice at least in a small plot in their paddy field for their family consumption. This study explored the factors affecting the adoption of traditional rice cultivation in Anuradhapura district with the objectives of identifying factors affecting willingness to adopt traditional rice cultivation and their varietal selection in Anuradhapura district. A sample of 150 rice farmers including 100 traditional rice growers and 50 non-traditional rice growers was selected based on quota sampling method. Structured and pre-tested questionnaire was used in data collection and data were analyzed by logistic regression, factor analysis and descriptive analytical methods. The results revealed that awareness of medicinal value in traditional rice, non-communicable diseases present in family members, land extent, farming system, farm gate price, family labour availability and age of the farmers affect the willingness to cultivate traditional rice in Anuradhapura District. The factor analysis revealed that five factors affect varietal selection of traditional rice. Availability and price of seed paddy was the first factor affecting. Second was related to tolerance of the varieties to drought, salinity and pest and diseases. The third factor was personal factors, which included farmers' age, gender and non-communicable diseases present in family. The fourth factor was production factors including yield, land extent, availability of buyers. The fifth was living standards of farmers, which consisted of education level and off-farming activities. The descriptive analysis showed that 72% of the adoption was among male farmers compared to female farmers and 59% adoption was observed among families with non-communicable diseases present compared to healthy families. It can be concluded from results that there is a trend in adopting traditional rice cultivation among rice farmers in Anuradhapura district and selection of variety is most affected by the availability of seed paddy and their prices.

Keywords: Adoption, Anuradhapura district, Traditional rice, Varieties