

**SUSTAINABILITY ASSESSMENT OF LOW INPUT PADDY-
LIVESTOCK INTEGRATED FARMING SYSTEM IN
ANURADHAPURA DISTRICT, SRI LANKA**

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Sustainable development in agriculture pays more attention to integrated farming systems with crops, animals, soils, water and other management practices. Paddy and livestock integration is prominent system in the dry zone of Sri Lanka which escalates the socio-economic environment and well being of the farmers. Hence this study attempted to evaluate aggregate economic, social and environmental sustainability of the paddy livestock farming system in Anuradhapura district. Stratified random sampling method was occupied to select 100 farmers from three divisional secretariat divisions. Data were analyzed descriptively and quantitatively. According to the results, 83% were males, 98% were married and 84% reported having moderate housing facilities. Many respondents (46%) attended to formal secondary education followed by primary education (28%) respectively. Many farmer families (46%) consisted with four household members in average. Paddy farming was dominant (80%) as the primary occupation while rearing cattle was a supplementary income source. Mean age of the respondents was 48 years with LKR 264,356.00 seasonal income per acre in average. Further, majority of respondents (92%) cultivated 2.5 acres of their own lands in average. Of all respondents, 86% did not maintain separate pasture lands for their animals. According to Total Sustainability Index (TSI), 86% of farmers were under the sustainable category. Regression results revealed that education level, total household income, total cost of production per acre, total profit per acre, women's participation, level of good agricultural practices, level of integrated pest management, distance for agrarian service centers and crop rotation significantly ($p < 0.05$) influence the sustainability of paddy livestock farming system. The study enfold that paddy livestock integration system in Anuradhapura district is sustainable, but need more intensification with improved breeds, concentrated feed, farmers' awareness and extension facilities for further development.

Keywords: Farming system, Paddy livestock integration, Sustainability