

COMMUNITY PERCEPTION ON SUSTAINABLE UTILIZATION OF KADUWELA WETLAND FOR AGRICULTURE, SRI LANKA

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Wetland agriculture is one of the significant farming systems in many developing countries with lack of cultivable lands and increasing population. *Kaduwela* wetland is such an important wetland situated in Western Province of Sri Lanka. Production of paddy and other crops of nearby farming community are affected due to water scarcity during *Maha* season and flooding during *Yala* season in *Kaduwela* wetland area. A questionnaire survey to collect primary data was done using 120 farmers to identify the community perception towards sustainable utilization of *Kaduwela* wetland for agriculture. Qualitative and quantitative analysis were used in data analysis. Results revealed that, 57% of the farmers are willing while 43% of the farmers are not willing to cultivate crops in the wetland. Majority of the farmers (87%) who like to cultivate upland crops were males. Majority of the farmers (78%) utilized their home gardens (< 1 ac) for upland crops. Factor analysis proved that, constraints in supportive services, irrigation issues, marketing problems and lack of technology as the major constraints in adaptation of wetland cultivation. Land extent {Odds Ratio (OR)=0.387}, knowledge on environment friendly farming practices (OR=0.070), knowledge on traditional farming practices (OR=14.696), farming experience (OR=1.126), and access to extension services (OR=0.202) were recognized as significant factors ($p < 0.05$) influencing the adaptation for wetland cultivation whereas the occupation (OR=0.358) was significantly influencing at 10% significant level. The study also revealed that coping strategies like mixed cropping, intercropping, crop rotation, ridge and furrows, raised beds, incorporation of soil amendments, agroforestry practices with water logging condition, tolerant species and water conservation strategies are needed for sustainable utilization of *Kaduwela* wetland for agriculture. The study concludes that the majority in the community is willing to cultivate using suitable coping agricultural strategies in order to sustainably use the *Kaduwela* wetland for agriculture.

Keywords: Agriculture, Community perception, Wetland cultivation