## EFFECTIVENESS OF FARMER ORGANIZATIONS IN MAINTAINING MINOR IRRIGATION SYSTEMS: A CASE STUDY IN SIWALAKULAMA CASCADE, GALENBINDUNUWEWA, SRI LANKA

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Minor Irrigation Systems (MISs) play a vital role in Sri Lanka's agriculture. MISs are administered by the Department of Agrarian Development, and primarily maintained by Farmer Organizations (FOs). Performance of FOs under today context was focused for this study which is on the evaluation of effectiveness of FOs in maintaining MISs in Siwalakulama cascade system, Galenbindunuwewa, Sri Lanka, based on FOs' mandated task accomplishment under Agrarian Development Act (ADA), and governance principles (participation, responsiveness, accountability, and transparency). Data were collected from a survey of randomly selected sample of 82 farmers representing 7 FOs of the Siwalakulama cascade system through a pre-tested questionnaire and focused group discussions with farmers, FOs' leaders, and responsible government officers. Results of descriptive data analysis revealed a partial accomplishment of few mandated tasks under the ADA by all FOs, namely regular maintenance of MISs infrastructure (weeding and bushing of irrigation tank bunds), issues existing on timely completion (57%), and free-rider problems (63%). Many of the mandated tasks, namely collective engagement for regular desilting (6%), MIS ecosystem-maintenance (24%), encroachment prevention (32%), and protecting MISs (31%) were less practiced. Traditional labor sharing "Aththam" (17%) and land sharing "Bethma" (22%) were also less practiced due to climate change challenges (82%), demographic and socio-economic factors including farming being a secondary income source (86%). Poor farmer participation was rated a key issue for maintaining MISs (79%). FOs' less responsiveness of members (76%), lack of transparency of operations and decisions (74%), lack of accountability of FO officers and members (71%) were amongst the key governance issues. Findings conclude that the FOs are less effective in maintaining MISs due to weak accomplishment of mandated tasks by the Agrarian Development Act, and governance issues. It is recommended to introduce a novel maintenance system for MISs considering socio-economic, demographic changes, and new challenges exposed by climate change upon dry zone communities.

Keywords: Effectiveness, Farmer organization, Governance, Minor irrigation system