FARMER PARTICIPATION IN PROJECT EXECUTION AND SUSTAINABILITY OF SMALLHOLDER IRRIGATION SCHEMES IN BUSIA COUNTY, KENYA

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ABSTRACT

In Kenya sustainability of smallholder irrigation schemes is low and hence the need to examine the extent to which farmer participation in project execution influence sustainability of smallholder irrigation schemes in Busia County, Kenya. If this is determined and addressed then plans to achieve 300,000ha of land under irrigation by 2030 may succeed. The purpose of the study was to determine the extent to which farmer participation in project execution influence sustainability of smallholder irrigation schemes in Busia County, Kenya. This study is grounded in citizen empowerment theory and guided by pragmatism paradigm. The study adopted descriptive cross sectional survey research design and correlation research design. A sample of 300 was selected using Cochran's formulae from 1,371 farmers spread out in 8 smallholder irrigation schemes and 14 project staff using censors approach to arrive at a sample size of 314. Quantitative data was collected using questionnaires and analyzed descriptively and inferentially while qualitative data was gathered using interview guide, observation schedule and documents analysis using patterns features and themes. Descriptive analyses such as arithmetic means and standard deviations and inferential statistics such as Pearson's Product Moment Correlation (r) and regression analysis (R^2) were used. *F*-test was used to test hypotheses that farmer participation in project implementation does not have significant influence on sustainability of smallholder irrigation schemes. Analysis showed that r = 0.431, F (1,272) = 62.01, R^2 = 0.1857 at p = 0.01 < 0.05, H_0 was rejected and it was concluded that farmer participation in project implementation has significant influence on sustainability of smallholder irrigation schemes. Analysis also showed that r = 0.666, F (1,272) = 204.53, R^2 = 0.4438 at p =0.01 < 0.05, H_0 was rejected and it was concluded that farmer participation in project control has significant influence on sustainability of smallholder irrigation schemes. Therefore in order to create project ownership, it is recommended that farmers be encouraged to contribute their resources at 90:10 government to farmer recommended contribution ratio. It is recommended TNA forms the basis for capacity development and that the 7 manuals used for farmer training be revised into 4 modules to that conform to the project management phases.

Keywords: Farmer participation, Project execution, Project implementation, Project control, Sustainability of irrigation schemes.