

FARMER PARTICIPATION IN PROJECT FORMULATION 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 identification 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 objective of the study was to determine the extend farmer participation in project formulation 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 through using the 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 used were 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 identification does not have significant influence on sustainability of smallholder irrigation schemes. Analysis showed that $r = 0.385$, $F(1,272) = 46.5$, $R^2 = 0.1449$ at $p = 0.01 < 0.05$, H_{01} was rejected and it was concluded that farmer participation in project identification has influence on sustainability of smallholder irrigation schemes. Analysis also showed that $r = 0.327$, $F(1,272) = 32.53$, $R^2 = 0.1068$ at $p = 0.01 < 0.05$, H_0 was rejected and it was concluded that farmer participation in project planning has influence on sustainability of smallholder irrigation schemes. It is recommended that extensive community mobilization be undertaken to ensure increased farmer participation in feasibility study to inform selection and authorization of projects. It is recommended that farmers be empowered for enhanced information dissemination for decision making in order to inform their participation in activity scheduling and project approval.

Keywords: Farmer participation, Project formulation, Project identification, Project planning, Sustainability of irrigation schemes.