Abstract

The proposed study will provide empirical evidence on the impact of production risk on the welfare of smallholders' adopters of integrated aquaculture farming system in western, central and eastern regions of Kenya (Kakamega, Nyeri, Machakos and Taita Taveta), representing contrasting fish culture input systems, agro-ecological and socio-economic conditions for rural Kenya. The study will control for unobserved heterogeneities, which could lead to biased estimates. A cross-section of randomly selected 312 smallholders will be sampled. The Just and Pope (JP) framework, Heckman two-step model and the Endogenous Switching Regression (ESR) model will be adopted to tackle the research objectives. The proposed study will be critical in laying down development strategies and contribute to the framework of the Kenya Climate-Smart Agriculture Project (KCSAP). Finding from the study will help policymakers design financial and institutional-based policies to expand integrated aquaculture farming systems in Kenya. The study will have the advantage of covering climate-smart counties in Kenya, representing varied agro-ecological zones. Therefore, policy recommendations will apply to any rural areas that are suitable for integrated aquaculture. Finally, the study will strengthen farming households' capacity through learning-by-doing of new farming techniques, and consumers of crop, livestock, and fish products will have a further advantage of benefiting from increased availability of quality and diverse products.