Abstract

Climate variability and extreme climate events is one of the many challenges faced by fish farmers. The present study was carried out to assess and compare the socio-economic vulnerability and adaptations of fish farmers to climate variability and extreme climate events in arid and semi-arid lands of Central and Eastern parts of Kitui County, Kenya. Both study sites were purposively selected and the descriptive research design adopted. A total of 60 fish farming households were randomly selected to form the sample size for the study. The socio-economic vulnerability analysis of the fish farmers was based on an index constructed from carefully selected indicators for adaptive capacity. Principal Component Analysis was used to give weights to the indicators. The overall adaptive capacity index results revealed that possession of various assets varied between the two study sites, implying a spatial difference in socio-economic vulnerability between the two study sites. Regarding adaptation, results revealed that the level of adoption of various adaptation strategies to climate variability and extreme climate events also differed significantly between the two study sites and was subject to the adaptive capacity of the fish farmer. Therefore, this study recommends that the socio-economic vulnerability profile of the fish farmers inform any adaptation actions to be taken on fish farmers in arid and semi-arid lands.