A socio-economic impact assessment of a project to identify and implement best management practices at the Zanyokwe Irrigation Scheme at farm level

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Abstract

The main aim of this study was to assess the impact of the Best Management Practices (BMP) project on social and economic wellbeing at the Zanyokwe Irrigation Scheme (ZIS) in central Eastern Cape Province. The BMP project is a knowledge-based initiative aimed at introducing management practices in order to improve production and livelihoods in the study area. The study employed a survey to collect socio-economic data amongst farming households. The 2005 (pre-BMP project) baseline study based on the same respondents allowed for the tracking of changes after the implementation of the project. A socio-economic impact assessment (SEIA) framework was used to assess the impacts. The results showed the BMP project to have impacted on social and economic wellbeing of households. Skills introduced were in the areas of water management, agronomic practices, marketing and institutional arrangements. In 2007 more than half of farmers worked on their farms daily, an improvement on 2005, when none of the farmers reported working over weekends. The average time spent on the farms per day also increased from 4 (in 2005) to 7 h (in 2007). Agriculture's contribution to household income improved from 71% in 2005 to 81% in 2007 and reduced household poverty and food insecurity levels. The number of households earning incomes below the poverty line dropped from 61% in 2005 to 38% in 2007. A marked increase was noted in winter land use, which was almost non-existent in 2005. The on-farm trials introduced by the BMP team improved the farmers': maize planting time, plant population density, fertiliser management, crop yield and participation in community activities. Seedling transplanting was preferred to direct maize seeding. Positive impacts on institutions were seen in the restructuring of the management system; improved marketing systems; institutional arrangements for managing water; and institutions for maintaining irrigation infrastructure.

Keywords: Small-scale irrigation; livelihoods; best management practices; social and economic impacts, poverty levels, household incomes.