

Market participation effect on profitability of smallholder irrigation schemes in Eastern Cape Province of South Africa

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Profit accumulation is one of the key benefits associated with market access. However, market access tend to be the major challenge to many smallholder farmers and that ends up influencing their profitability. Irrigation schemes became one of the coping mechanisms for such farmers whereby they work collectively with the aim of overcoming the various technical and institutional constraints they confront. This study examined how profitability is influenced by market participation of irrigation schemes by identifying the market structures used by irrigation schemes and describing the challenges encountered by smallholder irrigation scheme members who operate in those markets and assessing the profitability of the identified market.

Primary data were collected using a comprehensive questionnaire made up of both open and closed ended questions. Data were collected from two irrigation schemes namely: Melani irrigation scheme (Alice) and Zanyokhwe irrigation scheme (Keiskammahoek). Multi-stage sampling procedure was employed to select 100 respondents. SPSS (version 22) and Microsoft Excel computer programmes were employed to conduct the wide range of descriptive and inferential analyses involved.

Frequencies, percentages and means were used for the descriptive results to describe the general characteristics and socioeconomic features of the respondents. A regression model (Binary logistic model) was done to examine how profitability is influenced by market participation. Furthermore, Gross Margin Analysis was conducted to find out the profitability of the market structures used by these irrigation schemes. The binary logistic regression model results revealed that there are five significant variables at different statistical levels. Age (10%), years of schooling (1%), distance to markets (1%), farming experience (5%) and the household income at (10%). These findings

suggest that an improvement in each of the significant variables can significantly influence farmer market participation decisions. Furthermore, based on the results of the study, policy recommendations are suggested, including improving dissemination of market information to farmers, encouraging farmers to seek markets before production and encouraging farmers to add value to their produce.

The Gross Margin Analysis that was performed showed that in Melani irrigation scheme farmers had positive gross margins and farmers in Zanyokhwe irrigation scheme had a negative gross margin. Therefore it can be concluded that the market that is available to Zanyokhwe irrigation scheme does not give good returns, suggesting a need for changing the market so as to ensure that farmers derive meaningful access.

Key Words: Gross margin, Market participation, Profitability Smallholder Irrigation Schemes