Analysis of the factors determining productivity in small-scale irrigation schemes; A Zimbabwean case study

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Small-scale irrigation is mostly used in developing countries like Zimbabwe to address the problem of food insecurity. However, there are conflicting conclusions given on the viability and sustainability of small-scale schemes in the country because of its disappointing performance in many cases. This study analyses the major factors that contribute to productivity of the small-scale irrigation schemes. A random sample of 150 farmers was selected from 485 small-scale irrigation farmers. The selected farmers were interviewed using a pre-tested, semi-structured interview questionnaire. The information collected included biographical characteristics of the farmers, production methods, land size and tenure and available supporting institutions. A binary logistic regression model was used to analyse data. The results revealed that gender, level of education, plot size, availability of labour, technology, access to credit and extension services were significant factors that influence productivity in the small-scale irrigation schemes. The study recommends that female farmers should be encouraged to participate in irrigation farming and be provided with some basic education to increase productivity in the schemes. Access to credit should also be made easier to farmers so that they get adequate capital for better productivity in the schemes and more extension workers should be placed in small-scale irrigation schemes. The study further recommends that new innovative technology should be made available to small-scale farmers.

Biography
Langelihle Ndlovu has completed her Bachelor of Agribusiness degree at the age of 24 years from the University of Venda and is currently pursuing her Master of Science degree in Agricultural Economics at the same university.

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