

**Resource Use Efficiency in Vegetable Production under
Irrigation: The Case of Marutle Agricultural Cooperative
in the Limpopo Province of South Africa**

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ABSTRACT This study was conducted to determine the effect of socio-economic variables on gross return of cabbage production in the Marutle Cooperative irrigation scheme of Limpopo Province, South Africa. In all, 395 cabbage farmers were selected for the study in 2013/2014 cropping season. By applying a modified Cobb-Douglas function, the study showed that although the selected socio-economic variables were correlated with gross returns nevertheless; they showed low percentage changes to gross returns. Variables included costs pertaining to labour, seedlings, fertilizer and tillage, irrigation, and insecticide. In all, the production function indicated decreasing returns to scale. It was recommended that the availability and low cost of the identified production inputs should be of great concern to both farmers and policy makers in the study area. Further studies were recommended to include more variables that are likely to affect gross returns in the model to increase the coefficient of multiple determination.