

The Art of Irrigation on Salt-Affected Soils in the Chókwè Irrigation Scheme, Mozambique

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Worldwide, food production to feed the increasing population growth is still a big challenge, especially in arid and semi-arid areas of Africa where about 70% of the rural population depend on agriculture for their livelihood. Chemical and physical land degradation processes aggravate the declining crop production in these areas. Therefore, efficient use of water and nutrients is a priority to guarantee sustainable crop production and improve the livelihoods of poor rural farmers. This article will focus on understanding and assessing the supply-demand issues in relation to irrigation water as well as the management strategies under different soil salinity conditions in the Chókwè Irrigation Scheme (CIS) located in the Limpopo River Basin, Mozambique. In the CIS, crop yields are variable and declining, mainly due to soil salinization and other agronomic practices that include poor water management. This is aggravated by the semi-arid climatic conditions and climate change phenomena which affects the availability of water and increases the occurrence of floods and droughts in the region. The present study is intended to contribute to improving the livelihoods of poor rural farmers in the CIS through the provision of additional knowledge that will enable an improvement in the long-term agricultural water productivity.

Key Words: Livelihoods, soil salinity, water management, water productivity

Targeted Sub theme: Water and Land

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