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The Paradox of Crop Selection in Semi Arid Chivi District, Zimbabwe

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Abstract

Climatic conditions in Chivi district are typically semi-arid while the soils have inherent low fertility. Occurrence of recurrent droughts in recent years has negatively affected agricultural production. In a bid to increase productivity, farmers are shifting from crops that are more efficient in water utilisation, such as sorghum, towards less drought tolerant crops, like maize. However, research has shown that the yield potential of maize in the district remains low ($<1.5 \text{ t ha}^{-1}$). Could the current livelihoods insecurity be attributed to this shift? What would be the way out of this paradoxical situation? This study was carried out to explore farmer crop selection in semi-arid Chivi district. Participatory methodology was used to collect data in four wards of Chivi district in 2006. This was coupled with an analysis of institutional reports over the period 1996–2006. Results indicated that farmers are dedicating more land to maize production though yields of this crop remain far below its yield potential. Crop selection among farmers in the district is not based on compatibility with soils, climatic conditions and available resources. The prioritisation of maize could be attributed to modernisation-based development planning, leading to the promotion of maize production at the expense of small grains. The other factor could be a perceived unavailability of a ready market for small grains. To improve livelihood security and efficient water utilisation (grain output per drop) under the semi-arid conditions, farmers need to focus more on small grains production. There is need to revisit the current crop pricing policy in favour of small grains. Small grains are not only feasible under the climatic conditions in Chivi district but also have the potential of reducing the rural household food deficit.

Keywords: Climate change, maize production, livelihood security