# Chapter 6 Incorporating Indigenous Knowledge Systems (IKS) in Enhancing Sustainable Agriculture in Selected Rural Areas of Zimbabwe

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## ABSTRACT

The purpose of the study was to explore how Indigenous knowledge systems (IKS) could be integrated with modern farming techniques in order to enhance sustainable agriculture in selected rural areas. The sustainable livelihoods approach and post-colonial theory were used as the theoretical framework for the study. The interpretive approach was adopted for data generation by the researchers. Data were generated using individual interviews, focus group discussions (FGD), and field observations. Data were presented and analyzed using thematic approach. The study found that sustainable indigenous farming strategies including indigenous land management strategies, indigenous water conservation methods, and biodiversity management strategies could be integrated with modern farming techniques to reduce land degradation, loss of biodiversity, and lessen the impacts of climatic change in rural communities. The study recommends that farmers incorporate indigenous strategies with modern forms of farming in enhancing sustainable agriculture. DOI: 10.4018/979-8-3693-2011-2.ch006

## INTRODUCTION AND BACKGROUND TO THE STUDY

This paper argues that disregard of indigenous methods of land conservation and management particularly through modern agriculture and agricultural commercialization has resulted in massive deforestation, land degradation and loss of biodiversity in Zimbabwe. The situation has been worsened by excessive emission of greenhouse gases into the atmosphere from the use of agricultural machinery, excessive use of chemicals and fertilizers which is causing global warming and climate change (Risiro et al., 2013). In the Eastern parts of Zimbabwe stretching from Nyanga to Chimanimani, tracts of land have been cleared to give way to timber, tea and coffee plantations. The drier South East Lowveld and the Zambezi valley have not been spared for commercial activities such as growing of cotton. Commercial agriculture has destroyed natural forests and displaced some animals while others died due to lack of proper habitats. This chapter therefore proposes the integration of indigenous knowledge with modern methods of farming in order to promote sustainable agriculture. Modernisation in agriculture disregarded existing sacred places, taboos and cultural beliefs on environmental management within indigenous communities (Risiro et al., 2013). Worse so, the colonial British government in Zimbabwe did little to integrate IK on environmental practices as observed by Masaka (2016), Ogunniyi (2016) and Pedzisai (2013There is need to give due importance to indigenous knowledge systems to safeguard the environment.

### Indigenous Knowledge

Indigenous/local knowledge is knowledge that a particular community possess which determine their decisions (Hewson & Ogunniyi, 2011;Tefflo, 2013; UNESCO, 2017;). It has been defined as knowledge of people of a geographical area that has survived for a long period of time (Mawere, 2015; Mapara, 2009; UNESCO, 2017). Several authors define IK in different ways. It has been referred to as "ways of knowing" (Nyota & Mapara, 2008, p.190) "local knowledge" (Graham & Ireland, 2008, p. 32). Mawere (2015) and Shizha (2010) perceive IK as constituting people's culture, the activities they practice and their beliefs. Pedzisai (2013, p.245) views IK as "community knowledge unique for a given culture that solves societal problems."

The current study is guided by the definitions given by Shizha's (2010) and Mapara (2009). Shizha (2010, p. 28) views IK as "African indigenous science which is culturally specific including their knowledge on culture, their lives, spiritual world, natural environment and the activities they carry out such as farming."

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