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Mitigating the Vulnerability of Subsistence Farmers through Ground Water Optimisation

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Abstract : The majoritant of the South African rural populace are directly or indirectly engaged in agricultural practices for a livelihood. However, impediments such as the climate change and inadequacy of governmental support has undermined the once thriving subsistence farming communities of South Africa. Furthermore, the poor leadership in hydrology, coupled with lack of depths in skills to facilitate the understanding and acceptance of groundwater from national level to local governance has made it near impossible for subsistence farmers to optimally benefit from the groundwater beneath their feet. The 2012 drought experienced in South Africa paralysed the farming activities across several subsistence farming communities across the KwaZulu-Natal Province. To revamp subsistence farming, a variety of interventions and strategies such as the Resource Poor Farmers (RPF) and Water Allocation Reforms (WAR) have been launched by the Department of Water and Sanitation (DWS) as an agendum to galvanising the defunct subsistence farming communities of KwaZulu-Natal as well as other subsistence farming communities across South Africa. Despite the enormous resources expended on the subsistence farming communities whom often fall under the Historically Disadvantaged Individuals (HDI); indicators such as the unsustainable farming practices, poor crop yield, pitiable living condition as well as the poor standard of living, are evidential to the claim that these afore cited interventions and a host of other similar strategies indicates that these initiatives have not yield the desired result. Thus, this paper seeks to suggest practicable interventions aimed at salvaging the vulnerability of subsistence farmers within the province understudy. The study pursued a qualitative approach as the view of experts on ground water and similarly related fields from the DWS were solicited as an agendum to obtaining in-depth perspective into the current study. Some of the core challenges undermining the sustainability and growth of subsistence farming in the area of study were - inadequacy of experts (engineers, scientist, researchers) in ground water; water shortages; lack of political will as well as lack of coordination among stakeholders. As an agendum to optimising the ground water usage for subsistence farming, this paper advocates the strengthening of geohydrological skills, development of technical training capacity, interactive participation among stakeholders as well as the initiation of Participatory Action Research as an agenda to optimising the available ground water in KwaZulu-Natal which is intended to orchestrate a sustainable and viable subsistence farming practice within the province.

Keywords : subsistence farming, ground water optimisation, resource poor farmers, and water allocation reforms, hydrology
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