

https://dspace.org/

Urban-rural interactions for diffusion of sustainability business model for food, energy and water: case study of Tshwane food and energy centre (TFEC, Gauteng) and kwaSwayimane (KZN)

Khanyile, Sphelele

2018

https://hdl.handle.net/10539/25952

Khanyile, Sphelele (2018) Urban-rural interactions for diffusion of sustainability business model for food, energy and water :the case of Tshwane Food Energy Centre (TFEC, Gauteng) and kwaSwayimane (KZN), University of the Witwatersrand, Johannesburg, <http://hdl.handle.net/10539/25952>

Downloaded from a DSpace repository. https://dspace.org/

ABSTRACT

The study is rooted in the food-security and job-creation drive for urban areas as urbanisation and unemployment intensifies thus driving urban-agriculture innovations that focus on small-scale crop and animal production. In contrast, several rural areas with high potential agricultural land are stagnating mainly due to a lack of farming knowledge and skills especially as the younger generation migrate to cities. As a result, an opportunity emerges for the diffusion of innovations in sustainable agricultural practices from innovative urban-agriculture farmers to the slow-to-innovate rural farmers. This study therefore substantiates on this scenario based on diffusion opportunity from urban-to-rural case study communities in South Africa

Based on a qualitative study approach and case-study method as well as interviews with purposely selected respondents, the study appraised and compared status-quo practices in the Tshwane Food and Energy Centre (TFEC) and kwaSwayimane communities. Primary data were also collected through direct observation based on field visits to the two case studies. Secondary data on purposely-selected reported cases on diffusion of innovation models/processes in various sectors were also captured and analysed. Data analyses were guided mainly by a comparative approach where status-quo practices across both case studies were compared, variations in practices were applied as the guide to diffusion opportunities, and secondary data on models guided the conceptualisation of the diffusion model.

Following on the comparative data analysis, the study finds that even though the initially planned innovation practices for TFEC were not sustained beyond a period of about two months, the case study still serves the diffusion opportunity by demonstrating the integration/synthesis of interventions and optimisation of the economies-of-scale-benefits. Equally, the diffusion shortfalls in the project highlight areas for caution especially with regard to the critical significance of provision for initial piloting at small-scale before scale-up, security system, beneficiary-selection criteria/process and sustaining/expanding on initial networks. Coupled with additional insights from secondary data analysis of reported diffusion models/processes, the study conceptualised a two-phase model (partnering and piloting) for innovation diffusion to host community in kwaSwayimane. As part of the findings, guidelines towards implementation of the model were also conceptualised and substantiated. Besides the innovation diffusion model to be shared with the actors in the diffusion opportunity, the other key recommendation of the study is that innovations such as the integrated sustainability interventions and cooperative business model diffused into the TFEC are adaptable through reinvention towards the uplifting of rural communities such as kwaSwayimane.

Key words: Diffusion of innovation, sustainability practices/interventions, sustainable agriculture, cooperative business model, innovation, communication channels.