Technology Management Challenges Facing Wind Pumping Projects in Tanzania

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Abstract

Wind energy resources provide a renewable energy, which is friendly to the environment and decentralized. There exist adequate wind energy resources in Tanzania; however technological base of supporting institutions is weak. Local commercial manufacturing attempts have so far failed and support to existing wind energy technology users remain low, therefore majority of wind energy systems installed have failed. Only 40% of installed systems are operational with poor management, inadequate maintenance and lack of spare parts contributing to this situation. As part of technology development oriented research project aiming at integrating water pumping and electricity generation applications, a study on issues affecting the diffusion of the technology was conducted. The issues include technical and socio-economic issues. A technology assessment model was used in assessing the fitness of the technology in relation to the pertaining situations. Primary data was collected in Kongwa District, Dodoma region. The study has revealed a big potential of wind energy applications and factors that hinder its wide spread. It also gives possible ways to overcome the barriers.

Keywords

Wind, energy, technology, management, applications