ABSTRACT

The study was objectively assessing risks and recommending mitigation measures that can be taken during transportation of uranium oxide in Tanzania.

A total of 64 of respondents were interviewed. Non probabilistic procedures were used and both primary and secondary data were collected and analyzed. Questionnaire was employed as a major instrument in collection of primary data while books, journals, booklets and technical reports were used for secondary data. Regression analysis and Chi square test were used in analysis of data. The type of study was explorative using multi-case analysis.

The study has revealed that, terrorism, and a combination factors like financial risks, accidents, drum damage, societal protests against the project, driver sabotage, spillage of drums and theft as major risks factors in transportation of Uranium Oxide in Tanzania.

The study has shown that, several bodies are regulating uranium mining and its transportation; some of which have interference in mandates, like the Atomic Energy Act (AEA) No.7 of 2003 under the Tanzania Atomic Energy Commission (TAEC) and the Mining Act of Tanzania (MAT) of 2010 under the Ministry of Energy and Minerals (MEM) and their prevailing regulations.

The study has revealed that there is positive perception with regard to uranium transportation; however, there is a need of having more awareness campaigns and seminars to the general public and other stakeholders through media like televisions, radios, and newspapers.

The study has also revealed some challenges associated with uranium transportation in Tanzania faces some challenges including, poor roads conditions in rural areas, geographical location of mine sites, political and societal groups' protests and the regulatory framework.

The study has further, revealed that risks can be mitigated through the following ways like; avoiding inhalation, maintaining high level of proper hygiene, reducing time spent with radiation sources and the use shielding specially for gamma rays, simply risks mitigation measures include distance, time and shielding.