

Empirical validation of reliability of triangulation methods of mixed-method mode research: Quality improvement strategies for trypanosomiasis control

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ABSTRACT:

This paper presents a continuum of triangulation designs ranging from Participatory Rural Appraisal (PRA), surveys, parasitological to satellite data for a holistic approach to a research on trypanosomiasis – a disease affecting human and livestock. The purpose is to combine several methods to improve the quality of trypanosomiasis control in the coastal savannah. This is the most extensive work on trypanosomiasis in an African coastal savannah ecosystem, covering eleven districts in Ghana. In this study, quantitative results were supplemented by qualitative methods to improve on the validity and reliability. The study focused on farmers' production objectives, constraints associated with the use of Berenil® to control trypanosomiasis, and satellite data for mapping areas at the risk of diseases for appropriate targeting, predictions and control. This mixed-method studies seeks convergence (triangulation), of results by examining different aspects of a phenomena (complementarity) on using methods sequentially (development) on discovering paradox and fresh perspectives (initiation), and on adding breadth and scope to a project (expansion). In this paper, issues of triangulation, validity and reliability has been discussed.

Keywords:

Triangulation, Tsetse, Trypanosomiasis, Berenil, Dosage, Mixed-Method.