

WIMEA-ICT Project Monthly Progress March 2018

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March Progress

- Refinement of methodology
- Supervised WDR work

Topic: working title

- Modeling the value of meteorological information to health sector in Uganda

Problem

- Goals towards eradicating weather-sensitive diseases such as malaria remain unmet in a context where meteorological (weather & climate) information is available

General Objective

- The study aims at modeling relationships between key variables, which are necessary to achieve value from meteorological information in the health sector. The models will provide a shared understanding about the contribution of key stakeholders in order to guide health sector

Methodology

- Received feedback on methodology section from supervisors
 - Analysed research approaches
 - Math modeling
 - Design science research
 - Laboratory experiments
 - Experimental Simulation
 - Case study
 - Field study
 - Adaptive experiments
 - Opinion research
 - Action research (SD falls here- changing structure of problem environment)

SD stages: methods & outputs

- Problem identification: lit & doc analysis: generic causal loop diagrams (CLDs) & historical behaviour (reference modes)
- Case study: malaria incidence & prevalence
 - policy/sectoral report document and lit analysis, focus groups validate CLDs, interviews with stakeholders: VHTs, policy makers, malaria incidence & prevalence
- Model building:
 - group model building to compare with/validate generic CLDs
 - Identification of Stocks, flows & mathematical formulations
 - Translation of CLDs into SFDs
- Simulation experiments
 - What-if scenarios
 - Sensitivity analysis
 - Reproduction of reference modes
- Model use & theory extension:
 - What-if scenarios for policy design
 - Explanation for reference modes &
- Implementation
- Learning interface

April 2018 Plans

- Resubmit proposal & Present to HDRC – 13th May 2018

- Thank You