

Domain Engineering for Weather Information Services

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Goal

Main Objective

To improve user experience in accessing and receiving of personalized, timely weather information to enhance decision making

Specific Objectives

Focus on:

- Analyze the weather dissemination domain to identify specific information needs for stakeholders - domain analysis



Objective 1

- Data collection through focus group discussions (FGDs) with farmers and guided questionnaires with agricultural extension workers
 - Pretest with women farmers from Kombaboga
 - Four FGDs with 2 women-only farmer groups, 2 men-only farmer groups, and one guided questionnaire session with extension workers
 - Currently in Mbale for six FGDs (2 (gender disaggregated) for each of the three regions - upstream, midstream and downstream), and one guided questionnaire session with district agricultural extensionists



Rationale

- Number chosen for FGDs from Rakai study is sufficient, as we realized the respondents mentioned the exact same issues, we believe even if more were added, we would get the same information (perhaps phrased differently)
- Rakai was chosen because it is composed of over 80% farmers (also confirmed by CAO and DAO)
- Mbale is on the opposite side of the country, and would provide sufficient basis for comparisons of common and variable aspects.
 - It has three regions and farmers have been selected randomly to be representative of the regions
- Rakai and Mbale experience different weather conditions



Pretest FGD

Findings/observations:

- All women participated in farming for subsistence, and commercial purposes
- All participants own and carried a mobile phone, all were interested in receiving weather information as long as it is beneficial for them, and were even willing to pay for the information (only if the service is initiated by them)
- All of them also reared some animals for supplementing income
- All agree that seasons have changed and cannot depend on Indigenous Knowledge anymore

Recommendations

- Open up from only crop production farmers to cater for those that rear animals - build appropriate farmer profiles and identify common and variable points



Rakai Sessions

- Transcriptions done, pending analysis

Preliminary observations

- Commonest mode of dissemination is radio, but mobile phone is more prevalent, mobile phone services are welcome
 - Some had smart mobile phones (touch)
- Most farmers are willing to pay for weather information services through messages which are self-initiated (supporting the pull, rather than push mechanism)
- Decisions currently made by chance so any information that eases this is a plus
- Want to be involved as stakeholders all the way



Achievements towards Objective 1

- Better understanding of stakeholders (farmers), can identify clearly their weather information needs, helps to understand the human processes and make things explicit
 - Decisions they make - when to plant, what to plant, need for irrigation, when to apply fertilizers, pesticides, food security, water harvesting
 - Factors influencing decisions - space available for cultivation, availability of inputs (seeds, fertilizers)
 - Mechanisms for dissemination - mobile phone (messages preferred because they eliminate third person, information comes directly to farmers), radio, extensionists, places of worship
 - Parameters of interest - when it will rain (from, to), how heavy rain will be
 - Messages should be in local language, easy to understand



Way forward

- Used topic guides for sessions, looking for fitting these into research themes (domain analysis), and address research questions for targeted publication
 - Write story line using natural language information, identify what data and processing is involved
- Build logic into the story, showing the transformation from weather information to decision-making, mechanism to organize the information
- Complete analysis of information gathered
 - Input for publication (more than one publication possible, depending on chosen perspective)
 - Provide report to support discussions for interviews with UNMA who are also key stakeholders



Administrative Matters

- Received full admission from Makerere University
- Applied for study leave



Thank you! Comments, suggestions, questions, reactions?

