African Highlands Initiative

Working Paper

A Framework for Strengthening Site-Regional Research Linkages

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By: L. German, A. Stroud, T. Amede, C. Opondo & J. Mowo
AHI Regional Research Team

Available at:
AHI Regional Office
P.O. Box 26416
Kampala, Uganda
Email: ahikamp@infocom.co.ug
FORWARD

The impetus for this document comes from internal thinking and discussions among members of AHI’s Regional Research Team (RRT), in recognition of the need to: a) improve and streamline research questions, b) satisfy the ongoing need and concern for improving research quality within AHI, and c) have a robust regional framework that enables us to answer our main questions and to synthesize information across sites to inform ourselves and other R&D actors. However, the RRT’s concern has been to ensure continuity and coherence in the process of developing research questions, given several iterations, and to limit the number of research questions so that greater effort may be given to research quality. We therefore needed two fundamental steps, namely: a process for building upon previous efforts of the site and regional teams to develop research questions, and a process to “filter” and prioritise these questions so as to discern major research thrusts at each step of the work plan.

We realized while undertaking the process of creating a research framework that it is important to be able to improve methods as we go, including ways of defining and carrying out research; that we need to build upon the best practices that we identify as we go along; and that it is important to share these best practices and ideas across sites so that they can update their own approaches. We found the process to be robust in assisting to screen and verify main concerns. We also saw that it does increase transaction costs and does rely upon a good communications strategy and participation in order to keep up with the iterations, and to explain and test these with site teams.

While the concern for research quality has been ongoing, the topic became a major item on the agenda for the regional Think Tank II meeting, held in Kampala from February 20-22, 2003. Significant progress was made during and after this meeting to improve: a) our conceptual thinking on research quality and site-to-regional research linkages, b) the process to be used to iteratively develop high-quality research questions together with site teams, and c) testing of the resulting regional research framework. These are explained in more detail in Section II, below.

This document covers the conceptual background on research quality and site-regional research linkages, the methods used to derive the research framework and an example of the framework itself.

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I. BACKGROUND

It should be noted that conventional research goals (quality data, high quality scientific publications, replicable findings, etc.) and development goals (community empowerment, integrating research targets and findings into ongoing development processes, etc.) have been kept separate in the past – with research organizations in charge of the former and development organizations the latter. However, given the general failure of conventional "wisdom" and methods to ensure that both in fact happen, AHI charged itself with exploring alternatives. For this reason, participatory action research was chosen as a possible research approach that might apply itself to both goals: the participatory action to the latter and the research to the former.

AHI practitioners have notably been more used to using the conventional or formal type of research process, which has greater acceptance in their own community and institutions. However, as stated, limited impact and change has driven us to try other methods. During phase 2, research teams embarked upon testing participatory research through a participatory technology development (PTD) process. However, emphasis on the participatory weakened emphasis on the research – particularly in non-traditional research areas (social dynamics, institutional change, etc.). Thus we saw limitations in data quality and application of science to the development process. This limited our assurance that the methods used were actually leading to something more robust, and left our ability to achieve both goals wanting despite clear anecdotal evidence of change and technological adoption.

We also saw limitations to the focus of the research, e.g. only on technology development, as there were many other burning issues arising that needed attention from research. In 2001/02 we embarked upon trying to broaden the focus – which started with defining new types of research questions aimed at finding ways to inform and achieve development objectives, and to improve the targeting of the research.

At the onset, defining broader research questions was very difficult, despite our research backgrounds. However, once the imagination was kindled through fieldwork and discussions, we had an abundance of questions that needed to be dealt with. At this point, we met with limited skills to sort out these questions, particularly in areas that were not technology-focused. We needed to improve the articulation of the questions, to better marry them to the methods or types of research needed, and in the process ensure quality so as to conclusively live up to both goals. Therefore, the Regional Research Team (RRT) has thought through how to better target and improve the quality of diverse research approaches.

Recently, the RRT has drawn the following conclusions on how to improve research quality, how to use formal and process research iteratively, and how to ensure the synergies between a) research, b) process and c) products. Following observations and insights by Laura German, Ann Stroud and Diane Russell (ICRAF), the RRT noted that although AHI has been promoting participatory action research, there is a need to combine a range of research methods that may be classified into two main types of inquiry: a) process-related research and b) formal or empirical research. In addition, it was realized that we need guidance to better determine the difference between research questions and non-research questions, and the type of inquiry that is best suited to answer them. These distinctions are outlined below.
II. SORTING THE RESEARCH QUESTIONS

1) Discriminating between Formal/Empirical and Action/Process Research Questions

**Empirical or formal research** questions are those that are best answered using an empirical research framework similar to those used in the biophysical sciences, with clearly defined research design including: objectives, research questions, justification, methodology, data collection, and analytical framework. This type of research follows basic science principles and methods including comparison, replication, rigorous sampling and controls (to eliminate random occurrences from consideration). These robust methods lead to the collection of systematic data sets, and use comparison and replication to ensure the validity of findings. They are used when the object of study lends itself to a methodology that can be fixed ahead of time, according to known scientific principles for research within the area of inquiry (biophysical, social or other).¹

**Process or action research** questions are those that are best answered through a troubleshooting process that involves interaction with rural communities and “real” life application and testing. In this research approach, “best bet” approaches are designed to reach stated objectives or outcomes (based on a desired state and using principles from the literature and prior experience), tested (where response to the methods in relation to the objectives determines success or not), reflected upon and improved upon (adjusting actions to better meet objectives given knowledge gained). For these types of questions, research findings (i.e. how to best do “x”) emerge after generalization (analysis and synthesis) as lessons are learned from the application of the approach in diverse field settings. Process questions are generally designed for areas in which new approaches are being developed and “best practices” are lacking, either because we are working in an innovative area or because socio-political contexts are dynamic and existing approaches may not be validated in the context in which we are working. Examples of research inquiry types with associated questions are summarized in Table 1.

<table>
<thead>
<tr>
<th>Table 1. Process and Formal Research Questions from Phase I of Watershed Work (see Appendix II)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process (Action Research) Questions</strong></td>
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<tr>
<td>- How do we ensure that all stakeholders are involved?</td>
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<tr>
<td>- How do we involve the key stakeholders in uncovering the complexities of the issues?</td>
</tr>
<tr>
<td>- How do we combine the community/group concerns and our priorities?</td>
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<tr>
<td>- What methods do we use to inform leaders, to clarify expectations? To identify the basic social units and stakeholders?</td>
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</tbody>
</table>

From the table, it can be noted that the formal research questions are often the “what” questions (What are the major causes of “x”? What are the major types of “y” existing in the

¹ Some types of inquiry that fall into this category might be considered as “informal” data collection – such as using PRA techniques and focus group discussions; however, we would rather refer to this as a “qualitative method” for formal research (as opposed to a “quantitative” method – which would be more numerical tabulations of data).
III. DERIVING A REGIONAL RESEARCH FRAMEWORK

It was clear that guidelines were needed for:

i) Filtering questions (What should be considered research questions? Why?),

ii) Prioritising research questions (Which formal and action research questions should be given most priority? Why?),

iii) Developing robust methodologies to effectively address them, and

iv) Determining which questions need to be addressed at regional level, how they are linked (or not) to the site research questions, and implications for research design.

The purpose of the framework is to clearly determine: (i) the commonalities/differences between sites and systems; (ii) the regional dimension and links to sites; (iii) the entry points for empirical research; and (iv) a means to clarify links between regional and site agendas.

The following steps were followed for filtering and prioritising research questions (i and ii, above). The initial iteration (by Laura) was subject to peer review (RRT) and validated in the field (with Lushoto, Kenya and Ginchi site teams). Validation consisted of ensuring that the Draft framework encompassed site thinking (research questions developed during the preliminary exploration of the watershed and included in existing site work plans) and the regional synthesis of site research questions (Table I, Appendix II). This resulted in the regional research framework in Table 1 (page 9, below).

Step 1. Discriminate among Process and Formal Research Questions\(^2\) using the following framework:

<table>
<thead>
<tr>
<th>STEP</th>
<th>SITE RESEARCH QUESTIONS</th>
<th>REGIONAL DIMENSION (P&amp;C)</th>
<th>MODALITY (site, regional, collaborative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 3</td>
<td>Process (action) (let it happen) “empirical/formal” (pre-planned)</td>
<td>Rephrased questions – more generic</td>
<td></td>
</tr>
</tbody>
</table>

Step 2. Filter, prioritise and “Nest” Research Existing Questions. For this step, a slightly modified “Watershed Dimension” framework was used by taking each research domain (process, formal) and identifying overarching, primary research questions under which others could be logically “nested” as sub-questions. The primary questions were either identified from existing questions, or generated to encompass existing questions.

Step 3. Conceptualize How Formal and Process Questions Fit Together. The next step was to visualize how these different forms of inquiry fit together as parts of the logical steps to a participatory watershed management process. The following generic diagram (Figure 1) demonstrates how formal research contributions (below the loop line) can inform community development or watershed management processes taking place through participatory interactions on the ground (loop part of the diagram).

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\(^2\) Research questions coming from the following documents were sorted according to this new division: The Regional Workshop for Operationalizing Phase 3 (see Table “Generic Steps for Phases I and II of Watershed Work”), Combined Site Team Plans (Stroud 2002), and Transitions Workshop Synthesis 3-03 (German et al. 2003, a compilation of questions generated by each site team for the preliminary exploration of the watershed), as outlined in Appendices I to III.
For example, using step 3 in the watershed work, natural resource management concerns identified by diverse social groups (by age, gender, wealth, landscape position, etc.), as collected through a formal research process, are seen as basic information needed to undertake an informed and equitable watershed management planning process at the local level. Formal research questions are used (as stated in guide above) when a formal type of inquiry is needed to: (i) inform the action process and the actors involved in the process; (ii) to provide other types of information related to this stage to answer other regional research questions; or (iii) provide information necessary to complete a synthesis and provide greater insight into an action process and its impact. Action or process research dimensions are represented by the loop itself. We enter the loop once we engage the community in planning, action and reflection. In the case of step 3, the “entry” stage of the diagram (far left) includes any action designed to inform the community of AHI’s objectives in the watershed and to bring them on board. These steps are depicted in the following diagram (Figure 2), which is more specific to Step 3. The diagram is developed as an illustration and requires validation as site teams learn to combine formal research and process elements on the ground.
Step 4. Developing robust methodologies and quality research designs
At the request of the site teams and to answer the desire for better quality research, the RRT members are taking the lead in designing several protocol guides to assist in thinking through the design of more formal research that includes biophysical and social aspects on the one hand, and for designing process or participatory action research on the other (ref point iii above). The first of these includes a layout for scientific protocol components similar to that already used by NARI researchers. We realize that the design of formal inquiry in social science, and the design of process research are relatively new for most biophysical scientists; however, we have all realized the need to expand our “toolboxes” and scope of research – so this is a step in this direction. The RRT will avail themselves to work with site teams in testing and applying these protocols as part of the reach for quality. The aim is also to provide research audiences with more robust research, including research conducted in an action learning mode, and to ensure that the investment made pays off. There are now two completed documents: Protocol Guide for Major Research Questions: Empirical Research for Improving Watershed Management (German and Stroud 2003a) and Protocol Guide for Major Research Questions: Process or Action Research for Improved Watershed Management (German and Stroud 2003b); and a third is under development Protocol Guide for Major Research Questions: Empirical Research for Enhancing Systems Integration (Amede and Stroud 2003c).

IV. SPECIFY SITE AND REGIONAL LINKAGES & RESPONSIBILITIES

Another dimension to the regional framework is better articulation and delineation of “site” and “regional” research, their links and related responsibilities. To follow up on the Moshi workshop and subsequent site team iterations of their work plans, which included more thoughtful research questions, the RRT decided that there was need to revisit the regional framework (see Appendix 3) for the purpose of: a) ensuring that AHI can provide answers or results to the main questions, b) enabling analysis/synthesis of information across sites, and c) attaining the desired products at site and regional levels. It was agreed that we need to carefully balance the “top-down” methodology (for creating comparable data sets that assists in cross-site analysis) with “bottom-up” creativity and determinism.

In principle we have all agreed that all research questions should arise from the grassroots and in some cases through observation by outsiders of what research contributions are necessary to enable grassroots processes. It was recognized that these may be different or the same in the different research sites. Divergent questions could strongly influence the process, which is positive as they may assist in contrasting cases across sites; therefore, flexibility should be allowed in what emerges. These issues will emerge through the watershed (or other levels of) exploration that is currently being undertaken and will add to the issues that are already known from past work. This said, there are generic areas of interest related to methodology development that will be undertaken regardless of the specific site issues.

The RRT felt that there was need to strategically identify the research areas that were “regionally” important, to demonstrate clear linkages with site research questions (and therefore synthesize data derived from sites) – to simultaneously add value to site knowledge and experience and share with wider audiences. The team felt it is important to keep in mind the end users of information generated, less formal research become purely an academic exercise. Information may be important for farmers on the ground, but should also be used to inform R&D actors about key elements of a robust participatory watershed management process.
The following scenarios were identified for the sites:
- sites have different research questions with associated methods
- sites have similar research questions but different methods
- sites have similar research questions and methods

Implications for regional scenarios include:
1. cross site synthesis on common areas
2. cross site synthesis around shared “areas” of inquiry even though sites did in different ways
3. regional questions – should be more generic and related to main analytical issues
4. regional questions – might require additional research rigour and/or data collection (to be negotiated with site)

1) The process to sort out regional and site research questions
The following process used can be repeated iteratively for other areas of the AHI framework as well as future major steps in the watershed work:

Step 1. Regional analytical framework guides site teams into areas of inquiry.

Step 2. Site teams devise work plans including research questions that are of interest and/or importance to them within both empirical and action research domains. These are revised or developed as we move along.

Step 3. The RRT reviews the inputs from the site teams, synthesizes and organizes/nests the information, and circulates back to the site teams so that the site teams can review and revise given potentially new ideas and critique. At the same time the RRT makes suggestions back to the site teams for inclusion of the regional dimension – either data aspects to include so synthesis can be produced across sites; new research areas suggested for collaborative investigation between site and regional team; or research areas that the regional team member(s) would do on their own – with students, field assistants, etc.

Step 4. The site teams would give further feedback and upon agreement, would launch into protocol development. The RRT members in charge of selected research areas would assist sites in developing related protocols.

Step 5. The framework would be added to and circulated to ensure that everyone can see where they and what others are contributing.

2) Regional team tasks
The Regional Team’s tasks would include:
- Synthesize questions across sites, demonstrate the strengths (findings) of questions that were unique to 1 or 2 sites, and give other sites an idea of other areas that could also be explored. On principle, syntheses should either involve relevant site team members OR be fed back to site teams for their comments, use and reflection.
- Provide information on methodological tools/approaches, and assist site teams to combine approaches and develop a robust research protocol(s) – trying to stay with the originally proposed research framework/ideas.
- Make recommendations on the basis of recurrent research questions from group discussions, while taking into consideration work done on this in the past.
• Compile information periodically across sites and share back to sites so they can get ideas from other sites and see how to upgrade their work. (This was done by Ann with the amalgamated work plans, and by the RRT with the synthesis of the watershed exploration workshops.)

• Update regional analytical framework periodically.

3) Site team tasks
These tasks and steps may appear cumbersome compared to the normal research definition processes, but there is a general feeling that they are important to follow at this stage, until site teams develop more competence in these areas. After several iterations, the process can then be reviewed by all sites and the RRT.

• Ensure that research questions are logical and sorted from their perspective using the regional analytical framework as a guide.

• Site coordinator to act as liaison with the RRT and ensure good iterative communication on the revision of research questions.

• Site coordinator and RRT to work hand-in-hand with the research team to revise work plans and research questions and to assist RRT to make appropriate links with site team and other researchers.

• Site research team members and site coordinator, with assistance of RRT, to draw up protocols for major research areas and submits to RRT for comments and ultimate revision.

• Participate in regional research protocols and data collection, serve as co-authors and are involved in analysis and syntheses.

See Table 1 below.

V. ENSURING RESEARCH QUALITY

The following bullet points indicate a multiple pronged strategy that will be followed to improve quality and assist in building capacity and institutionalizing the INRM approach.

1) General mechanisms

• Research protocol format should be used in the design and definition of research. Examples will be provided as guides. The research protocols based on a major research question. It needs to be robust and illustrate how different methods proposed are robust in producing the desired end result. The protocol will layout a major outline with content developed for each area.

• AHI management ensure that a good protocol is available before releasing funds and ensure peer review plans are in the work plans (SC)

• Improve input and rigor in planning and review sessions.
  o The site coordinator and team are encouraged to systematically invite outsiders to assist and in time. This is fundamental and should in principle appear in site work plans (schedule – who, etc), so their strategic involvement is thought through from the beginning. Use RRT members to comment, other site coordinators might be invited as well as other relevant experts.
<table>
<thead>
<tr>
<th>STEP</th>
<th>PROCESS (ACTION) RESEARCH QUESTIONS (“let it happen”, “learn as you go”)</th>
<th>EMPIRICAL/FORMAL RESEARCH QUESTIONS (“pre-planned”)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Site Research Questions</td>
<td>Regional Research Questions</td>
</tr>
<tr>
<td></td>
<td>• Question</td>
<td>• Question</td>
</tr>
</tbody>
</table>
| Step 2 | 1. What are the parameters or issues that must be considered in defining the area of influence?  
- What methods do we use to inform leaders/communities, to clarify expectations?  
- How do we ensure that we are trusted, are provided with good information, and get cooperation?  
- How do we combine social and biophysical aspects in our definition of the area of influence?  
- How do we incorporate and address community concerns in relation to the above?  
| Step 2 | • Process Documentation Areas  
- Criteria used to define the watershed / area of influence, & the reasoning or justification.  
- How was the new approach communicated to existing & new communities?  
| Ongoing:  
- How did the ‘area of influence’ & watershed concept change through practice (research & action), and in response to community concerns?  
- Approaches used and their strengths & weaknesses.  
- Effectiveness of the chosen mix of formal & participatory methods.  
- Local buy-in, trust & stakeholder involvement & how to improve.  
- Key challenges and insights.  
| Step 2 | 1. How did site team approaches to defining the area of influence compare initially (watershed delineation process & criteria)?  
| Ongoing:  
- 1. How did the ‘area of influence’ change through practice (research & action)?  
- 2. In hindsight, what were the important issues or parameters to consider in defining the area of influence? In deciding whether watershed approach is a relevant unit of analysis? |
### SITE-REGIONAL RESEARCH LINKAGES: Enabling Community-Based Watershed Management

<table>
<thead>
<tr>
<th>Site Research Questions</th>
<th>Regional Research Questions</th>
<th>Site Research Questions</th>
<th>Regional Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 3</strong></td>
<td><strong>Process (Action) Research Questions</strong></td>
<td><strong>Debrief &amp; Formal Research Questions</strong></td>
<td><strong>Regional Research Questions</strong></td>
</tr>
<tr>
<td><strong>Question</strong></td>
<td><strong>Areas</strong></td>
<td><strong>Approach:</strong></td>
<td><strong>Process</strong></td>
</tr>
<tr>
<td>1. What methods do we use to identify the key biophysical issues, and the social and policy constraints &amp; opportunities for enabling collective action in the watershed?</td>
<td>- How do the key issues and stakeholders interact?</td>
<td>- How do we involve the key stakeholders in uncovering the complexities of the issues?</td>
<td>- How do we create awareness of the communities in the issues, and at the same time build upon local knowledge?</td>
</tr>
<tr>
<td>2. How do we keep the interest of the communities while we take time to</td>
<td><strong>Findings:</strong></td>
<td>- What recommendations do the communities make for building upon social capital to spread new technologies with minimal outsider involvement? Who is interested in testing what technologies?</td>
<td><strong>Ongoing:</strong></td>
</tr>
<tr>
<td>explore watershed issues?</td>
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<td>--------------------------</td>
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<td></td>
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<tr>
<td>- What working relationships are used?</td>
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<tr>
<td>- What technologies are selected for testing, and by whom?</td>
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<tr>
<td>- How do we integrate current trends in uptake into the WS approach?</td>
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<tr>
<td>3. What approach is used to integrate formal research and the development process?</td>
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<table>
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<tr>
<th>stakeholder involvement.</th>
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<tbody>
<tr>
<td>- Key challenges and insights.</td>
</tr>
<tr>
<td>- How is the relationship between biophysical issues &amp; social units envisioned by researchers &amp; stakeholders?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social &amp; Policy (background knowledge that cross-cuts biophysical issues):</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. What are the key opportunities (social capital, policy mechanisms) and constraints (social &amp; policy barriers) for enabling collective action in the watershed?</td>
</tr>
</tbody>
</table>

<p>| - What are the local social units (internal) and institutions (external)? Their history? Their strengths &amp; weaknesses? How do they tend to cooperate with other groups? What are members' obligations? Their objectives / activities? How are decisions made? How important are they to diverse social actors? Are they involved in any NRM activities? |
| - Are there any traditional practices or beliefs influencing NRM? |
| - Are there any NRM conflicts? Are there any traditional mechanisms for conflict resolution &amp; decision-making? |
| - Who are the influential individuals in the communities? How effective are they in community mobilization? |
| - Are there mutual support practices in the village? |
| - What brings people together for CA/cooperation? |
| - Is there anything that keeps people from cooperating? What is the history of these problems? The cause? Consequence? |
| - How do local/district/national policies influence land management &amp; use of communal resources? |
| - Are there any policy bottlenecks hindering collective action? |
| - What strengths &amp; limitations exist for by-law enforcement? |
| - Are there any coping strategies for finding a better outlet for your produce? |</p>
<table>
<thead>
<tr>
<th>STEP</th>
<th>PROCESS (ACTION) RESEARCH QUESTIONS</th>
<th>EMPIRICAL/FORMAL RESEARCH QUESTIONS (&quot;as planned&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Research Questions</td>
<td>Regional Research Questions</td>
<td>Site Research Questions</td>
</tr>
<tr>
<td>• Question</td>
<td>Process Documentation Areas</td>
<td>• Question</td>
</tr>
</tbody>
</table>

**Step 4**

**Prioritising Watershed Issues:**
1. What approaches & criteria & whose perspectives should be used to prioritize issues?
2. How do we handle issues that go beyond our resources/capacity?
3. What are gaps in our knowledge?

**Participatory 4R:**
1. What are strategies to explore issues in detail with communities / stakeholders?
2. How do we create awareness while building upon local knowledge?
3. Which local institutions are more relevant for addressing the issues? How can we overcome their weaknesses?
4. How can we build upon local social capital as we seek solutions?
5. How do we facilitate the community to undertake collective action?

**Step 4:**
- Insights on the processes used to prioritise biophysical issues (choices & trade-offs)
- Insights into the merits & challenges of building upon existing social capital.
- What are the strengths / weaknesses of the exploration findings? How can it be made more efficient? More participatory?

**Ongoing:**
- Approaches used and their strengths & weaknesses.
- Effectiveness of the chosen mix of formal & participatory methods.
- Local buy-in & stakeholder involvement.
- Key challenges and insights.

1. What are the relative merits of diverse strategies for prioritising biophysical issues?
2. What were the strengths and limitations of diverse site strategies for:
   - identifying the relevant stakeholders for the prioritised issues?
   - integrating local & scientific knowledge & priorities?
   - addressing local concerns that lie beyond researcher capacity?
   - communication & feedback with communities?
   - exploring the use of social capital for solutions?
   - local empowerment?
3. What were the critical stumbling blocks for researchers, and how were these resolved?

For prioritised biophysical issues:
1. What are the causes, history & trends of the prioritised NRM issues?
2. What are the modes of cooperation for each biophysical issue?
   - What are the by-laws / norms affecting each resource? Are norms followed? Are there sanctions for non-compliance? What are the enforcement bottlenecks?
   - Are there use conflicts?
   - Who are the stakeholders?
   - Who is most affected by the issue? How do their views differ on the problems & solutions?
   - How do stakeholders & diverse local institutions interact? What are the power relations relating to the issue?
   - What is the community knowledge about the issue, and what are the gaps?
   - What are the external conditions that make it conducive or not to solve the issues?
5. What biophysical research is required to better understand the issue & possible solutions?

1. What were commonalities & differences between sites regarding:
   - prioritised issues, trends, underlying causes, affected & responsible groups (with analysis)?
   - existence & enforcement of local bylaws?
   - stakeholder views: how do they diverge? Power relations?
   - the critical bottlenecks (external & internal) to effective NRM cooperation?
   - what are strengths & weaknesses of local knowledge, & given this - the biophysical research required to complement it?
• Sites will continue to have "Peer AHI review sessions" but these should be strengthened and held in the sites. The site coordinator would be responsible for organizing these and involving appropriate people.
• Site Coordinators to provide minutes in annual report (as annex) = output from this from these sessions.
• Each session should involve a process documentation (reflection/lessons) section.

• **Work plans and annual progress reports.**
  • All active participants in AHI should have annual write-ups as input into various products.
  • The report needs details as well as technical and process information on activities plus other areas such as: partnerships, team management, etc.
  • Site teams will use systematic process documentation (for capturing methods used). This will be synthesized for process information.

• **A synthesis session(s) with RRT members** can help in analysing process documentation.

• **Monitoring visits** will be made by RRT members or resource persons. Consistent persons should do this so as not to confuse site teams with mixed messages or advice. Visits would be at peer review; mentoring sessions, critical times in step processes.

• **Incentives**: AHI has agreed to pay incentives on receipt of outputs. SC to get extra monetary motivation related to performance indicators and outputs. Modalities are still being discussed with NARIs to ensure conformity with their policies.

• **Clear expectations needs continual communication** — by SC, RRT, RC to SC, team members, managers.

• **Future RRT meetings should on principle include all site coordinators.**

2) **Quality of process**
• Indicators of this would be impact on development (see impact assessment table in operationation synthesis report). We need to develop a clear idea of how to measure quality – e.g. see indicators on impact assessment framework, and use these indicators to see how they are doing.
• High-quality process documentation is needed, which will require capacity-building through practical implementation of the process documentation framework (currently being tested across sites).
• A process should take place that consolidates knowledge, e.g. as a standard practice the site teams can allocate for each sub-step or bit of work: 1-day for field design, 2 days for fieldwork, 1 day of reflection and 1 day for write-up of results (with each step documented).

3) **Quality of products**
• Requires a process to ensure quality products.
• See publications section.
• Use mentoring to assist in defining and construction.
• Research products are multiple — not only papers: methods, conceptual models, decision tools, process recommendations, technical information, transferable technologies, sets of alternatives for end-users, scientific understanding.
VI. FINAL REMARKS

As with all of AHI's work and products, this document should be viewed as a work in progress and as a tool for assisting in collaborative research and development. As such, we hope it will be digested, tested and validated/modified by site teams so that the process can be improved as we go. To improve the role of the RRT in assisting site teams, it will be important to know whether the document and underlying process is user-friendly and whether it adds value by assisting in prioritizing research and development actions or clarifying objectives under AHI. For this reason, we hope you will treat it as a product of your own creation as well, and help to improve upon it as we go. We welcome and appreciate all feedback, dialogue and constructive criticism as you read through the above pages and as we jointly test these ideas in practice.
## APPENDIX I: Generic Steps for Phases I and II of Watershed Work - Research Questions from the Moshi Workshop (Oct 2002)

### Phase I: Initiating change and entering the system

<table>
<thead>
<tr>
<th>Major Steps</th>
<th>What do you want to achieve (indicator)</th>
<th>Sub-steps</th>
<th>Key Research Questions</th>
</tr>
</thead>
</table>
| 1. Feedback meeting with site team | • Clear about our lessons and have a common understanding  
• Informs the way forward | • Presentation of conceptual frame  
• Review common understanding of experiences & lessons & strengths  
• Agree on the way forward  
• Plan of action agreed upon | • What are the key areas that need reflection and where the lessons will assist us in understanding the past and lend themselves to the future direction? |
| 2. Defining the area of influence and the social units that we intend to work with | • Identify where we will work  
• Identify who we will work with (the basic units)  
• Communities & leaders know who we are  
• Clarify expectations with leaders  
• Clarify roles & ways of working | • Secondary data collection  
• Preliminary exploration and definition of the watershed  
• Area “delineated” (e.g. the area of influence)  
• Identify relevant stakeholders  
• Introduction & consultation with leaders | • What methods do we use to inform leaders, to clarify expectations? to identify the basic units/stakeholders?  
• How do we ensure that we are trusted, are provided with good information, and get cooperation?  
• How do we combine social and biophysical aspects in our definition of the area of influence?  
• How do we clarify roles, responsibilities and ways of working with the communities?  
• How do we incorporate and address community concerns in relation to the above?  
• What are the key issues that should be addressed at the watershed/larger scales? |
| 3. Explore issues and strengths of the communities | • Communities are aware of the common key resource sharing and management challenges / issues in the area  
• Community agrees upon a number of areas that need more exploration (gaps in their knowledge) | • Team exploration of strategy to explore the issues with communities  
• Reconfirm the area of influence with communities  
• Find out what local institutions are there (at a broad level)  
• Find out the issues, coping strategies, traditions / strengths for dealing with | • How do the key issues and stakeholders interact?  
• How do we involve the key stakeholders in uncovering the complexities of the issues?  
• How do we create awareness of the communities in the issues, and at the same time build upon local knowledge? |
<table>
<thead>
<tr>
<th>Major Steps</th>
<th>What do you want to achieve (indicator)</th>
<th>Sub-steps</th>
<th>Key Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Community expectations clarified</td>
<td>issues, and have the communities prioritize them</td>
<td>• What are the local institutions and how do they interact?</td>
</tr>
<tr>
<td></td>
<td>• Clarify roles with community members &amp; ways of working</td>
<td>• Identify watershed issues</td>
<td>• What are the power relations that are emerging that we should be aware of?</td>
</tr>
<tr>
<td></td>
<td>• Researchers have a preliminary sense of the issues and the gaps in knowledge</td>
<td>• Further explore the higher priority issues – what is cause-effect, history, who is affected, where is it, etc.</td>
<td>• What is the community knowledge about the issues and what are the gaps?</td>
</tr>
<tr>
<td></td>
<td>• Researchers have a preliminary sense of issues related to community organizational capacity needs</td>
<td>• Identify gaps in knowledge that need further exploration</td>
<td>• What is the capacity and dynamics of the various community organizations and performance targets?</td>
</tr>
<tr>
<td></td>
<td>• Researchers and communities are aware of the strengths/coping strategies of the communities</td>
<td>• Reconfirm the area of influence with the communities</td>
<td>• What are the coping strategies and strengths of the communities/groups and how can these be built upon in future?</td>
</tr>
<tr>
<td>4. Further analysis of the identified issues by the team</td>
<td>• Synthesis of issues</td>
<td>• Team synthesis of the issues – what are they, where are they and who is affected</td>
<td>• How do we combine the community/group concerns and our priorities?</td>
</tr>
<tr>
<td></td>
<td>• Strategies developed for dealing with the issues</td>
<td>• In synthesis discuss issue of local institutions – which ones are more relevant in relation to the issues</td>
<td>• How do we handle different issues emerging from different communities/groups – that might be competing and/or go beyond our resources to handle?</td>
</tr>
<tr>
<td></td>
<td>• Refining the area of influence</td>
<td>• What new information is required and what is available</td>
<td>• What are the gaps in our knowledge?</td>
</tr>
<tr>
<td>5. Fill in gaps in knowledge</td>
<td>• Increased understanding of the biophysical issues and local organizational issues</td>
<td>• More detailed exploration on certain issue details including local organizational issues; e.g. collect information that will be feedback to the community at the next stage</td>
<td>• How and what information do we collect on the gaps in knowledge in a way that involves/informs the communities/groups as well?</td>
</tr>
<tr>
<td></td>
<td>• May need to find ways to create awareness in the community of certain issues (leading to step 6)</td>
<td></td>
<td>• How do we create awareness of the community of the causalities and consequences of current management or lack of?</td>
</tr>
<tr>
<td>6. Sharing and reflecting with watershed communities, and sharing the programme focus and approach</td>
<td>• Communities are aware of the watershed issues</td>
<td>• Share information on the gaps</td>
<td>• What are the most useful ways of sharing information with communities/groups?</td>
</tr>
<tr>
<td></td>
<td>• Communities are aware of previous interventions, local innovations on the key issues.</td>
<td>• Share the vision of the larger issues that go beyond the farm/community</td>
<td>• How can we ensure that information on previous interventions is widely available?</td>
</tr>
<tr>
<td></td>
<td>• Communities are aware of local</td>
<td>• Share local organizational issues</td>
<td>• How can we ensure that communities/</td>
</tr>
<tr>
<td>Major Steps</td>
<td>What do you want to achieve (indicator)</td>
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<tr>
<td></td>
<td>institutions concerned with key issues.</td>
<td>modalities of operation</td>
<td>groups are aware of local organizational capacity needs?</td>
</tr>
<tr>
<td></td>
<td>Communities aware of local organisational capacity needs.</td>
<td></td>
<td>And what ways are there to deal with these over time?</td>
</tr>
<tr>
<td></td>
<td>The focus and approach of the programme is agreed with the communities</td>
<td></td>
<td>What ways can we use to get agreement of the approach and focus of the program with the communities?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>How do we ensure that all stakeholders are involved?</td>
</tr>
</tbody>
</table>

**Phase 2: Creation of Watershed management forum and planning**

<table>
<thead>
<tr>
<th>7. Creation of a (community) watershed implementation forum</th>
<th>• Community decision on how they could be organized at watershed level</th>
<th>• Meeting with members of the community or representatives of various sections of the community to discuss how best the community could be organized and as well as issues affecting progress and causes for that.</th>
<th>• How best should everybody be represented at watershed level? (watershed forum?!)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Community reaffirms the key watershed issues</td>
<td>• Identify problems, define roles representation</td>
<td>• How do we ensure all groups are included?</td>
</tr>
<tr>
<td></td>
<td>• Define community strengths and challenges</td>
<td>• Identify institutions that will provide services</td>
<td>• Is there an organization representing everybody at watershed level?</td>
</tr>
<tr>
<td></td>
<td>• Identify institutions that could provide services</td>
<td>• Identify community capacity needed</td>
<td>• What should the watershed forum do?</td>
</tr>
<tr>
<td></td>
<td>• Identification of community capacity</td>
<td>• Sharing and reflecting with the community</td>
<td>• What issues should they focus on?</td>
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<td>• How can they best link with lower level units (villages, ward etc)?</td>
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<td>• How can we improve the existing groups to be able to perform the required functions?</td>
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<td></td>
<td>• What other capacity do other groups in the watershed require?</td>
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<td></td>
<td></td>
<td></td>
<td>• What are key challenges and strengths of the community?</td>
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<td></td>
<td></td>
<td></td>
<td>• Which institutions should the community seek linkage with?</td>
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<tr>
<th>8. Development of plans</th>
<th>• Prioritisation of possible solutions</th>
<th>• Linking identified watershed issues to</th>
<th>• What are issues within the identified</th>
</tr>
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<tbody>
<tr>
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<td>Sub-steps</td>
<td>Key Research Questions</td>
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<td>---------------------------------------------------------------------------</td>
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<tr>
<td>with communities</td>
<td>- Agreement on steps for implementation</td>
<td>possible solutions, screening of options, prioritisation, and steps for</td>
<td>- issues (problem cause–effect analysis)?</td>
</tr>
<tr>
<td></td>
<td>- Agreement on what would be monitored and evaluated and by whom</td>
<td>implementation.</td>
<td>- What are possible solutions?</td>
</tr>
<tr>
<td></td>
<td>- Definition of steps for implementation</td>
<td>- Self-organisation process for experimentation (organizational issues,</td>
<td>- Who can facilitate accessing of the solutions?</td>
</tr>
<tr>
<td></td>
<td>- Mandating of local institutions to focus on agreed issues</td>
<td>mandating, lead institutions)</td>
<td>- What steps should be followed?</td>
</tr>
<tr>
<td>9. Development of a</td>
<td>- Identification of skills required</td>
<td>- Elaboration of strategy to improve performance (planning and transformation</td>
<td>- What skills do farmers and service providers require?</td>
</tr>
<tr>
<td>strategy for local</td>
<td>- Identify possible sources of capacity</td>
<td>process, activities and indicators)</td>
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<tr>
<td>organizational capacity building</td>
<td></td>
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</tbody>
</table>

(Source: Stroud 2002, Regional Workshop for Operationalizing Phase 3: Developing Approaches for Improving Integrated Watershed Management)
APPENDIX II: Research Questions from Amalgamated Site Team Plans (Nov 2002)

The following research questions were compiled by Ann Stroud (2002) on the basis of site work team plans developed during and after Moshi workshop:

A. Defining Area of Influence (biophysical & socio-economic units; major NRM issues)
   - How do we develop and what are the criteria for watershed site selection?
   - What are the social units in the watershed (the communities perceptions), and are any of these effective vehicles for collective action in INRM.
   - What are the NRM issues that need collective action?
   - How can we harmonize the social units and NRM issues with the watershed boundaries to describe our area of influence?
   - What are the most appropriate methods to enter and initiate activities, to facilitate local ownership, trust and cooperation from the start?
   - What are the necessary institutional arrangements for sustainable NRM? Examples. [For me, this is too vague. Can you spell out?]
   - What are the conditions and mechanisms for strengthening community and partner participation?
   - What is the most economical and interactive way of finding out about the resource base, and how it is managed?
   - What are the norms of use and/or cooperation, historical trends and social dynamics related to each NRM issue?
   - What are the roles, responsibilities of the various actors and ways of working with the communities? And how do we clarify this with the community?
   - What are the key issues that need addressing at the watershed, area of influence and larger scales?
   - What are the steps/mechanisms for exiting the community?
   - Which strategies are required to manage the transformation from a farm orientation to landscape/watershed work?

B. Exploration of Watershed Issues and Strengths of Community
   - What are the main elements of effective strategies for exploring the details of the issues with the communities/stakeholders?
   - What mechanisms are most useful for differentiating relevant stakeholders? And how they and the different local organizations interact?
   - What are the priority issues, key challenges and opportunities from the communities perspective? What are their gaps in knowledge? What methods do we use to find this out?
     - What are the key issues and associated [socio-economic conditions: vague...what is it you’re getting at here]?
     - What are the external conditions that make it conducive or not to solve issues?
     - Which resources are shared, by who and how? Which resources and/or INRM issues require collective action?
     - What are the major conflict areas? Are there existing mechanisms for resolving conflicts? If not, what opportunities (local norms, skills, motives, etc.) exist for enabling effective conflict resolution mechanisms?
     - What are the by-laws? Are these being implemented, how and/or why not? What are the implications of by-laws for different social groupings (gender, class, etc.)?
   - How do researchers create awareness of the issues while building upon local knowledge? How do researchers themselves become aware of the issues?
• What local social units (groups and institutions) exist? What is their set up, duties and responsibilities? What is the capacity and dynamics of the various community organizations?

• Which local institutions are more relevant in relation to the issues? Who is most affected / affecting the issues? What are the most effective approaches for identifying relevant institutions?

• What are the key strengths, weaknesses, opportunities and threats and coping strategies of the communities / groups / organizations?
  ○ How can we build upon these opportunities and strengths in future?
  ○ What are the factors that influence cohesiveness in the community organizations?
  ○ What are the emerging power relations in the community groups?
  ○ What are the performance targets of the groups?

C. Further Analysis of Identified Issues by Researchers

• How do we combine the community / group concerns and our own in setting priorities?

• What are useful methods that involve stakeholders in research and feedback sessions, and in creating clarity in roles and expectations?

• What are viable strategies for tackling the issues involving stakeholders in all stages? How do we handle competing issues? How do we handle those that go beyond our mandate/ resources to handle?

• What are the strengths and weaknesses of the exploration findings? How could it be made more efficient? More participatory?

(Source: Stroud 2002 – Combined Site Team Plans)
APPENDIX III: Research Questions from Preliminary Exploration of the Watershed (Jan 2003)

The following research questions were identified by each of the site teams prior to the one-day watershed exploration, during the November 2002 to February 2003 Transitions Workshop (German, Opond & Amede 2003):

- **Social Units (TZ, KY, ET):**
  - **Ginchi:** Identify existing social units and institutions in the watershed.
    - For each one:
      - How are they organized?
      - What are their objectives? What motivates them to come together?
      - How are decisions made?
      - What is their membership, area covered and linkages with other groups?
      - Which of these groups are most important for you? Why?
      - What is their potential as target groups in NRM?
  - **W. Kenya:** Identify the social units within the watershed, and their potential role as vehicles for watershed management.
    - What are the social units in the village/watershed?
    - For each one:
      - What are their functions? What benefits are derived from group involvement?
      - What is their coverage (of this group, and of others of its kind within the watershed)? How inclusive is the membership?
      - Group organization: formal vs. informal; objectives; how do they work together to achieve common goals?
      - Is the group involved in any NRM activities?
      - Is the group linked with other groups or social units?
  - **Lushoto:** What are the existing social units or groupings in this area?
    - For each one:
      - What is the extent of their coverage?
      - What are their objectives or activities?
      - What are their strengths and weaknesses?
  - **Areka:** Identify the social units/institutions in the watershed that contribute to management of communal and individual resources?
    - What are the social groups in the area?
    - How/when were they formed and managed?
    - What activities do they do? Who are the members of the social group?
    - Modes of participation and obligation to the members
    - What benefits do members and community get from the organization?
    - What are the challenges and coping mechanisms within the group?
    - What is the coverage and size of the group?

- **Social Practices and Beliefs (Lushoto, TZ):**
  - **Lushoto:**
    - Are there beliefs that determine the way natural resources are managed?
- What is the extent of their coverage?
- What are their objectives?
  → What are the practices & ceremonies that take place annually or seasonally?
    - What is the extent of their coverage?
    - What are the objectives/purpose?
  → Are there any existing mechanisms for helping orphans/terminally sick/elderly/very poor/widows?
  → How does community cope with natural disasters? (floods, crop loss, hunger)

• **Biophysical Issues Requiring Watershed Approach (TZ, KY, ET):**
  **W. Kenya:** Identify the issues that require a watershed approach within the area of influence.
  - What are the resources that are collectively used or managed? Within the village? Between the village and neighboring villages?
  - What are the resource management arrangements for each of these resources? Are there any rules or norms for managing them?
  - Are these norms followed by everybody? Why or why not?
  - Are there any resource conflicts within the village or between the village and neighboring villages?
  **Ginch:** Learn about farmers' views on how on-farm and off-farm management affects others within and outside the watershed.
    - How does on-farm management affect neighboring fields?
    - How does on-farm management affect resources/farmers outside the community?
    - For each of the above, what are some possible solutions?
    - What are the resources communally managed?
    - What are the by-laws/norms that affect each one of these resources?
  **Lushoto:** Identify activities that could benefit from collective action.
    - What activities might benefit from cooperation (“gunda” or “msaragambo”)?
    - What other activities might benefit from “gunda” or “msaragambo”?
      For each one:
      - What is the mode of cooperation? (Voluntary or legally-bound?)
      - What are the guiding norms or rules for this activity (i.e. for resource use)?
      - What happens if people do not comply (sanctions)?
  **Areka:** Identify biophysical issues that calls for collective action; changes in land use over time and how the community is responding to these changes.
    - What are the problems that require collective action?
    - How serious are the problems?
    - How do these problems affect the community?
    - History of the problems - when do they occur?
    - What are the possible solutions to the problems above from the farmers’ point of view?

• **Policies Influencing NRM (Ginch & Areka - ET):**
  **Ginch:** Identify any policy issues that affect natural resource management in the watershed.
- Do any local, district or national policies influence land management?
- How?

**Areka:** Identify and understand how the existing government and local policies/bylaws affect the use of communal resources in Gununo.
- How do these policies affect NRM?
- What policies are existing in the watershed community?
- Are their local rules and norms that govern the use of natural resources?

Additionally, the **Lushoto** team covered the following questions in the existing AHI community:
- a) What organizational arrangement would be most effective for reaching more farmers?
- b) What are the categories of farmers taking up the technologies?
- c) Who are the farmers sharing technologies (types of relationships)?
- d) What issues could benefit from collective action?

The following table was developed to demonstrate the commonalities and differences of proposed research questions across AHI sites (Ibid):

**Table I. Cross-Site Comparison of Research Questions - Preliminary WS Exploration**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Kenya</th>
<th>Lushoto</th>
<th>Ginchi</th>
<th>Areka</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biophysical issues requiring watershed approach:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Resources collectively used or managed</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>- Influence of on-farm management on neighbors</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>- Influence of on-farm management on individuals</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>&amp; resources outside the community</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>- Activities that now benefit from collective action</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>- Seriousness, history &amp; impact of above problems</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>- Resource management arrangements (rules, norms)</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>- Mode of cooperation (voluntary vs. legally bound)</td>
<td>✓</td>
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<tr>
<td>- Levels of compliance with local norms</td>
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<tr>
<td>- Consequences of non-compliance</td>
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<tr>
<td>- Presence of NRM conflicts</td>
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<td>- Changes in land use over time &amp; response</td>
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<tr>
<td>- Possible solutions to identified problems</td>
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<td><strong>Social units:</strong></td>
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<tr>
<td>- Organization and management</td>
<td>✓</td>
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<tr>
<td>- Objectives, functions and/or benefits</td>
<td>✓</td>
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<tr>
<td>- Activities</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>- Membership, size, coverage &amp; inclusiveness</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>- Linkages with other groups</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Decision-making processes</td>
<td>Group involvement in NRM</td>
<td>Group history</td>
<td>Challenges faced &amp; coping mechanisms</td>
<td>Strengths &amp; weaknesses</td>
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**Other forms of social capital:**
- Influential individuals & their role in social mobilization
- Traditional beliefs influencing NRM
- Traditional practices & ceremonies influencing NRM
- Social support mechanisms for disadvantaged groups
- Coping mechanisms for natural disasters

**Policy:**
- Presence of local/district/national policies influencing NRM
- Impact of policies on use of communal resources
- Policy impacts

|                         |                         |              |                         |                         |                         | √      | √      | √      |

(Source: German, Amede & Opondo 2003, *Regional Synthesis: Phase II / Phase III Transition Workshop* – Initiating Exploration of the Watershed)

#### Thrusts with associated products and research questions

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<tr>
<th>THRUST</th>
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<th>KEY ELEMENTS OF THE THRUST</th>
<th>RESEARCH QUESTIONS</th>
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| Facilitate a process for integrated, community-based watershed management | • Effective tools for monitoring the status of diverse natural resources (genetic, species & agro-ecosystem diversity; nutrient cycling; etc.), including methods for participatory identification & use of sustainability indicators.  
• A community-based approach for reflective learning that strengthens collective and individual actions and decision-making. | Organizing learning at local level  
• Build awareness of impacts of current management including conflicts/disputes on stakeholders  
• Design M&E systems and processes of reflection for different stakeholders  
• Articulating demand: Improving dialogue with outsiders (policy makers, researchers, and other stakeholders) | • How can we assist communities in monitoring and evaluating their NRM and the impact of management (current and future)?  
• What are the most sensible indicators that can be used by researchers and by farmers?  
• What is an effective reflective learning approach that can be used by communities to improve their collective action and decision-making? |
| | • A conceptual model with discrete steps, components (social, institutional, technological) & methodological tools that illustrate the process of INRM facilitation at the watershed level.  
• An approach for participatory identification of NRM issues occurring at various scales including understanding perspectives of stakeholders, awareness building of cost- | Organizing action at watershed level (sequencing)  
• Build understanding of NRM issues, local positions and perceptions, and impacts  
• Undergo joint / iterative exploration and analysis of key issues  
• Assist in planning and priority setting  
• Find, test and implement solutions (technical and institutional) | • What are effective ways of increasing the understanding and exploring with the local communities the main NRM issues and the factors and actors involved?  
• How do we increase the understanding of the people involved in the costs-benefits of current/future management from different perspectives?  
• How do we manage participatory priority setting and planning process with different sets of stakeholders?  
• What are useful negotiation and conflict resolutions mechanisms that can build on the strengths of existing mechanisms for the various types of |
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|        | benefits from different perspectives and negotiating mechanisms. | • Conflict / dispute management and resolution strategies for common property issues  
• Community action informs individual action and visa versa  
• Cross-community links & community workshops  
• Mobilize support and investment of district stakeholders in INRM | conflicts?  
• What potential strategies and integration between market-driven and NRM solutions can we exploit to ensure that both livelihoods and environment are catered for in a sustainable way?  
• What is an effective process to identify, analyse and revise existing by-laws or create new by-laws so as to achieve better application to solve NRM issues? |
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|        | • An approach for linking INRM across scales, including scale-specific institutional arrangements and methods for all stakeholders (government, policy-makers, farmers) to plan & monitor their impact.  
• An approach for mobilizing district stakeholders to cooperate and invest in improved INRM. | Managing community-district-NGO-policy development linkages  
• Managing links with government and administration  
• Managing the process of IWM  
• Managing levels of information and decision making  
• Managing links between institutional aspects, technology and facilitation systems  
• Catalysing links and dialogue between policy makers at various levels, research and communities  
• Solicit external inputs and support required | • What are the most appropriate methods for integrating information, decision-making, and action across scales (farm-level, landscape or issue level)?  
• How are the biophysical and socio-economic dimensions integrated for IWM?  
• What information and interactions with policy makers and local government officials can increase their awareness of the NRM issues and the need to provide support to local initiatives (investment and incentives)?  
• How can local people be made more aware of the opportunities and limitations offered by current policies? And how can they be supported for advocacy?  
• What are the strengths and weaknesses of decentralization and internal governance on local livelihoods and NRM? What processes and checks-balances can be put into place to deal with the weaknesses and increase the accountability of government to the people?  
• What mechanisms and partnerships can be catalysed to increase coherent and more coordinated support to communities?  
• What are the actions required to deal with external causes of dependency? Among R&D agencies, local governments & others who promote dependency? |
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<tr>
<td>Build local organizational capacity for collective action and innovation</td>
<td>• An approach for identifying, implementing &amp; evaluating effective enforcement mechanisms (informal or formal sanctions, incentives, etc.) for agreed-upon norms. • An approach for facilitating local awareness on social and environmental impacts of existing and potential norms of behaviour, and for enhancing equity &amp; sustainability in revised norms.</td>
<td>Supporting community organizational capacity • Identify, build upon &amp; improve effectiveness of local institutions / groups through facilitation • Improve financial management • Assist groups in setting up monitoring mechanisms • Improve collective coping strategies</td>
<td>• What are the strengths and weaknesses, threats and opportunities for various types of collective action in communities? How is collective action currently working? What are the dynamics and how is it changing, e.g., what brings them together? and how do they share information? How do they make decisions? • What are the effective and appropriate methods of strengthening local organizations capacity for experimentation, demanding services, influencing policy, dealing with external and internal threats, and for achieving self-reliance? • How do we work with communities to ensure clarity of roles and responsibilities, to gain trust and respect, not to undermine local knowledge and to build upon the strengths? • What are the characteristics of a successful local organization, their performance indicators and ways to improve relationships and operations, and promote principles and values? • How do we work with inequities related to gender, wealth, power relations and other social strata? How do we deal with different interests? • How can the community groups be assisted to develop performance indicators for leaders and members and how best can they monitor these? What traditional assessment mechanisms exist and can be built upon? Are these traditional mechanisms still intact or threatened by new values, modern religion, etc?</td>
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<td>• An approach for enabling local communities to mobilize for collective INRM through the identification of collective action needs, priorities, barriers &amp; solutions (scale-specific organizational arrangements, capacity-building, rules identification &amp; enforcement, etc.).&lt;br&gt;• Methodology for participatory analysis &amp; validation (impact on INRM, need for reforms) of local by-laws.</td>
<td>Facilitating and enhancing collective action&lt;br&gt;• Enhance processes and incentives to improve collective action &amp; community mobilization related to actions needed&lt;br&gt;• Improve private benefits of collective action and find ways to deal with incentive issues&lt;br&gt;• Facilitate and enhance social capital related to improving by-laws, rules, norms and their implementation&lt;br&gt;• Address and integrate complementary and conflicting interests of stakeholders through negotiation processes</td>
<td>• In what cases does collective action seem to be more effective from the community’s point of view? When are individuals more effective than groups?&lt;br&gt;• In what cases is it more effective to start with existing groups and add to their agenda? How is this effectively done? Or alternatively to support new groups? Is it feasible to use FRGs as entry points given dearth of groups for development purposes?&lt;br&gt;• What are the by-laws and rules/norms/values between individuals and for managing common pool resources? What are the external circumstances that communities feel are impinging on their ability to implement these? And what courses of action might be supported and how to improve the situation?&lt;br&gt;• How can these be made to be more effective and implemented in such as way to encourage better NRM?&lt;br&gt;• What are the common conflicts and how are they resolved to what level of community/individual satisfaction? How can these be strengthened?</td>
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<td>• An approach for enabling multi-stakeholder platforms to emerge at higher levels, and to advocate for wide-reaching policy reforms&lt;br&gt;• An approach for empowering local communities to mobilize for external enabling conditions, including improved market linkages, responsive &amp; accountable institutions (NGO, government, etc.), and policies</td>
<td>Organizing the demand side&lt;br&gt;• Strengthen group links and networking&lt;br&gt;• Strengthen knowledge sharing modalities&lt;br&gt;• Improve advocacy and lobbying&lt;br&gt;• Find ways to minimize the dependency syndrome&lt;br&gt;• Methods to manage change (as opposed to react to it)&lt;br&gt;• Articulating demand: Improving dialogue with outsiders (policy</td>
<td>• How do we build capacity of community groups to influence the policy making process?&lt;br&gt;• What is the relationship between existing groups? What mechanisms work that can bring interest and problem solving groups together so as to increase information and experience sharing? How can existing channels and social networks be built upon/enhanced?&lt;br&gt;• How can groups be made self-reliant and self-help oriented? What are useful entering and exit strategies that clarify expectations and limit dependency?</td>
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|        | reflective of local needs & priorities. | makers, researchers, and other stakeholders | • Once the roots and ongoing causes of the culture of dependency, can performance goals be used to reorient and empower groups?  
• How can group capacity be improved and facilitated to be proactive so as take advantage of micro-credit, grants and other support/incentive mechanisms?  
• What methods, tools and information are useful in building capacity for managing financial resources & planning investments?  
• How can current coping strategies be enhanced to encourage not only short but also long term benefits?  
• How can the capacity of individuals and community groups be built so they proactively seek information, markets and other opportunities and use these to their advantage?  
• What mechanisms can be put in place to ensure that communities know their rights, know the potential implications of government policies and programs, and demand accountability of government to their interests? |