



Trip Report

Project: Sustainable Management of Watersheds: The River Njoro, Kenya (SUMAWA)

Travelers Scott N. Miller

Location (s): Kenya

Dates of Travel: July 5 – July 26, 2004

Purpose of Trip: Project review, field research, initiate partnerships

1. Summary of Travel Itinerary

July 5 - 6: Travel from Washington, DC to Nairobi (arrive July 6)

July 6 – 10: **Separate Research Travel Program in South Africa (Not GL-CRSP activities)**

July 11 – 25: SUMAWA activities in Nairobi, Njoro, Nakuru

July 25 – 26: Travel from Nairobi to Washington, DC (arrive July 26)

2. Summary of Primary Activities and outcomes

July 6: Stay at Barbie Allen, SUMAWA financial consultant, house in Nairobi. Intention was to meet with Ms. Allen and review basic financial information and function of the system we have in place for transferring monies between the US and Kenya institutions. However, Ms. Allen was feeling poorly, and the meeting was cancelled.

July 11: Return to Nairobi from South Africa Trip, stay in Nairobi. Meet with Tracy Baldyga, University of Wyoming graduate student and SUMAWA project participant (leveraged external funds) at Ms. Allen's house. Review program and research expectations for the upcoming field season. Review project notes, field note and data collection activities.

July 12: Travel from Nairobi to Egerton University, location of SUMAWA project office. Numerous *ad hoc* meetings with various members of the SUMAWA research and program management team, including Drs. Shivoga, Akula, Maina Gichaba, Zakayo Akula, Sian Mooney, Mary Ndivo.

- Met with Akula to review project finances and assess how the implementation of accounting practices brought from the US are being translated into SUMAWA project. Akula was very enthusiastic with respect to the outcomes from his earlier trip to the US for project administration training and had initiated the process of improving the SUMAWA methods. The project administration and finance is well coordinated and Akula is doing a good job. He expressed concern over his job position description not being finalized and formally recognized by the SUMAWA team, and an action plan for addressing this concern was created. The original terms of reference drafted and agreed upon by Susan Johnson (GL-CRSP), Dr. Shivoga, Akula and myself were examined and additions made with respect to his actual activities. These new terms of reference were examined by the SUMAWA team PIs at the Lake Bogoria retreat (July 18-20; see later section in this report) and adopted.

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- Met with Mary Ndivo, project secretary to ensure that meetings with all co-PIs were scheduled and appointments were made with Drs Abdulrazak (deputy vice chancellor for research and extension), Maritim (vice chancellor), and Tuitoek (DVC Administration and Finance).
- The housing arrangements for SUMAWA team members were not adequate or as expected, and a meeting was held with the housing manager at Egerton and several co-PIs. This matter was not satisfactorily concluded and all members of the team were forced to stay at the Egerton hotel for visiting scientists. This situation needs to be resolved in the future, and Akula has been assigned the duty of arranging for suitable long-term housing for visiting scientists and students.

July 13:

- Meeting with Host Country PI, Dr. William Shivoga. Shivoga and I discussed project weaknesses and management alignment and conceptualized a new method for assigning research and management responsibilities and structure. It was recognized that structural barriers to communication have been hindering research progress, and it was decided to build in more interdisciplinary activities in the next year's work plan and budget to foster greater cooperation and encourage collaboration and discussion. A review and assessment was made of project progress relative to the 2003/2004 work plan. It was recognized that the research plan was not being followed closely enough and that greater and more rapid progress is necessary. Research components and individual researchers were assessed with respect to their performance.
- Meeting with co-PI and watershed hydrology component leader Charles Maina Gichaba. Research progress in the watershed component was assessed, and found to be lagging in expected outcomes. Dr. Gichaba cited several constraints that were limiting the component's success, including (1) inappropriate personnel relative to expected research activities, (2) inadequate physical infrastructure to support field research, (3) lack of well defined work plans and research activity guidance. A series of recommendations were written up and presented to the co-PIs at the Lake Bogorai retreat, including better definition of research activities and budgeting in the work plan submitted to GL-CRSP, more defined linkages between field activities and compensation for researchers, increased formalized supervision of students, and reinstatement of regular (monthly) meetings of the co-PIs.
- Meeting with co-PI and socioeconomic component leader Dr. Desterio Ouma and Njeria Muhia, a principle scientists in the component. Reviewed economic research efforts and successes to date. Identified strengths and weaknesses in the component. Principle observations were: (1) lack of continuity in research staff, (2) need for computer resources, including hardware (printer) and software (additional analysis packages and virus protection). Recommendations were drawn up for presentation to the co-PI team meeting at Lake Bogoria, including identification of additional researchers and increased budget allocation to support data analysis.
- Meeting with Francis Lelo, co-PI and stakeholder component leader. Reviewed progress to date. Concern over the lack of progress on PRAs and development of the PRA manual was communicated to Dr. Lelo, who conceded that there have been delays but expressed confidence in the ability of the team to fulfill



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responsibilities. Team appears to have a weakness in coordination with other components and a lack of personnel.

July 14-16: Travel to Nairobi, Presentation to Egerton University, Field visitations

- Meeting with Ms. Thel, PhD graduate student at University of Wyoming to review summer research plans.
- Upon arrival at Egerton University, Ms. Thel and I made a joint presentation on the SUMAWA data management challenges and solutions. This presentation was formally announced at the University and a large number of attendees came from the general University community. Title of the presentation: Integrating and Managing Data for a Multidisciplinary Research Project
- Travel within the Njoro watershed for exposure to sections of the watershed with which Ms. Thel and I were not familiar. Identification of potential placement points for field equipment.
- Exposure visit and meeting with Bernard Kuloba, Kenya Wildlife Service. This meeting was originally to include Drs. Shivoga and Mucai (co-PI and ecology component leader), but they were unavoidably detained due to a car breakdown. Ms. Thel and I met with Mr. Kuloba, a research scientist with Lake Nakuru National Park and a MS student at Egerton University who is working on the SUMAWA project. Mr. Kuloba expressed the support of KWS and indicated a strong interest in pursuing his MS thesis on the ecological consequence of land cover change within the watershed as related to the National Park with particular interest on animal and plant diversity and ecological health.

July 18-21: Project planning retreat at Lake Bogoria

- The majority of research scientists, including all co-PIs and representatives from Moi, Fisheries, and KWS attended a 3-day planning retreat held at the Lake Bogoria Lodge. The objectives of this meeting were to (1) finalize work plans and detailed research activity plans (RAPs) for 2004/2005 research year, (2) Identify new approaches to research and technologies, (3) Anticipate research briefs and publications targeted over the next year. In advance of this meeting the co-PIs held a retreat at Lake Naivasha in which they outlined the scope of work desired by the Kenyan team in light of research outcomes from the previous year. These proposed activities served as the basis for discussions
- Each research component submitted a series of detailed RAPs that are to form the basis for the 2004/2005 work plan. These RAPs (see Appendix I) are a framework that links objectives, activities, personnel, and budget.
- This approach, where the work plan and budget is generated from a collaborative, multidisciplinary approach holds great promise for the SUMAWA team. However, inadequate advance preparation made it impossible to complete the creation and selection of research activities for the work plan in the short session accorded to this activity. Dr. Shivoga, Dr. Gichaba, Ms. Thel and I remained at Bogoria for an extra day to synthesize results, but we did not



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succeed in our primary goal of achieving consensus and finalizing the scope of work for the next research year. Key observations necessary for the team to assemble an adequate work plan on time include:

- Advance discussions at the PI and co-PI level to determine the general thrust areas and key research topics (prioritization)
- Advance meetings of each research component to further refine the scope of work within each subdiscipline. In this process, linkages between components should be identified, leading to
- Advance meetings within small groups who would potentially work on RAPs. These small groups should prepare, at a minimum, an outline for each RAP and provide a brief summary to the co-PIs
- As Lead PI, I did not properly plan for the scope of the effort necessary to pull these various teams together to produce a viable plan. This is an important observation since the degree of effort put into this exercise both in advance and during the retreat was high, indicating that this was not a successful approach. Note: as a capacity building exercise this method had great merit, as researchers who would not normally be included in this process were fully engaged.
- The Kenyan PI and co-PIs likewise did not adequately plan and prepare their teams for creating the RAPs in order to meet the July 25 deadline.
- There is a critical need for training and capacity building in planning and proposal writing within the Kenya team, and SUMAWA should provide a framework for building capacity in two ways: (1) on-the-job training and leadership, and (2) formal training either through attendance at workshops and seminars or by bringing in an expert to provide local training.

July 22-24: Research planning, Partnering discussions, Field visits

- Efforts at creating a work plan and budget continued.
- Field visits to proposed instrumentation sites for in-stream and small watershed studies. Field equipment that was to be installed during July and August was detained in customs, preventing their placement in the watershed. However, advance work was done to identify potential sites for both field experiments and equipment installation. Several potential small watershed sites were identified, and future ground work is necessary to finalize the sites and ensure stakeholder engagement.
- Partnership meetings:
 - Friends of Mau Watersheds. Met with Richard Muir, Director, and Jacson Mwanduka, chief executive. Traveled to Muir's house up the Rift and had tea, etc. on the lawn. Muir talked in generalities regarding scope of forest problem in Kenya and introduced the mission of FOMAWA as focusing on large-scale agroforestry and forest plantations. Traveled with Mwanduka and L. Thel to Muir's



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and also to a demonstration site where a modified shamba system is being carried out. This is a large land owner just off the Njoro watershed divide: agriculture field is converted to forest plantation and locals are allowed to grow crops during first few years contingent on their caring for seedlings. Very good idea and IS BEING CARRIED OUT. Minimal chance for translating this to SUMAWA since the watershed is dominated by smallholders who are not capable of the start up costs and long-term planning associated with these activities. I suggested that we create a linkage with FOMAWA and build in an economic assessment and perform site visits and exposure meetings with Mwanduka. He was agreeable. Muir suggested that we financially support FOMAWA and provide them with operating funds and a motorcycle. The possible integration of research and FOMAWA activities is an exciting possibility; out financial investment is not.

- Meeting with forest officers. Albert Njoroge, Forester, Longoman (ph 0721 76 84 20) and John Birgen, District Forest Officer (ph. 0721 820 747). Discussed SUMAWA and exchanged information on watershed and loss of forested areas. Showed them the results of T. Baldyga's work on land coverf classification and both were surprised by the scale of the problem. They identified a major problem as being external people coming in to the watershed to illegally forest. Maasai come in for firewood and grazing, and although they are issued leases, their activities are mostly uncontrolled. Grazers pay a royalty but the officers feel overgrazing is a serious issue in the upper part of the watershed. They have active outreach to encourage tree planting by smallholders. They identified 1988 as the breakdown year for forest conservation, when the shamba system was banned and plantings shifted to 50% exocitc, which failed in high numbers.
- Meeting with Francis Lisenga, Ogiek outreach coordinator. Lisenga expressed strong support for SUMAWA. Had a breakfast meeting at Egerton and traveled twice to Ogiek areas to investigate potential research study sites. Good possibilities for field scale experiments and introduction of agro forestry and soil conservation practices were identified.



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APPENDIX I - Research Activity Plan – Scope of Work Proposal
(template)

Activity Title & Description:

<brief 1-2 sentence description>

Research Component:

Activity Leader:

Responsible Person:

Personnel:

Purpose:

Why you want to do this activity?

How does it contribute to the overall scope of work and goals for the year?

How does it tie in with and link to other research activities and outputs within this component? How does it tie in with and link to other research activities and outputs in other components?

Specific Objectives:

What specific research questions will be answered by this activity?

What kinds of answers, information will be produced?

Methods and Approach:

- *Conceptual approach*
- *Data collection method(s) and tool(s)*
- *Data analysis method(s) and tool(s)*
- *Sampling logic, method, size*

Materials and Resources:

- *What resources do you need to accomplish this task?*
- *Budget needs*

Work Plan & Timeline:

- *Quick breakdown of Research Activity into main sub-tasks with assignment of team member to each sub-task*
- *Timeframe for sub-tasks to be started and completed*

Outputs:

What will be the format of the “answers” produced by this activity?