



Document 521
PRE-ASSESSMENT REPORT

CHAPTER: Oregon State University

COUNTRY: Kenya

COMMUNITY: Lela

PROJECT: Needs and Technical Assessment
for Water Project

TRAVEL DATES: September 1st-15th

PREPARED BY
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Mikkel Leslie

June 13, 2009

Document 521 - Pre-Assessment Report
Oregon State University
Lela, Kenya
Needs and Technical Assessment for Water Project

Pre-Assessment Report Part 1 – Administrative Information

1.0 Contact Information

	Name	Email	Phone	Chapter
Project Leads	Aparna Shrivastava	Aparna@ewb-osu.org		Oregon State University (OSU)
President	Scott Crook	crooks@onid.orst.edu		OSU
Mentor #1	Gordon Dillon	gdillon@ci.camamas.wa.us		OSU
Mentor #2	Andrew Dryden	Andrew.dryden@gmail.com		OSU
Faculty Advisor (if applicable)	Kevin Boston	Kevin.Boston@oregonstate.edu		OSU
Health Point Person #1	Aparna Shrivastava	Aparna@ewb-osu.org		OSU
Health Point Person #2	Dr. Anna Harding	Anna.Harding@oregonstate.edu		OSU
NGO/Community Contact	Charles Omuono	not applicable		not applicable
Education Lead	not applicable			

2.0 Travel History

Dates of Travel	Assessment or Implementation	Description of Trip
not applicable		

3.0 Travel Team

Name	E-mail	Phone	Chapter	Student or Professional
Adam August	augusta@onid.orst.edu		OSU	Student
Aparna Shrivastava	Aparna@ewb-osu.org		OSU	Student
Kendra Seniow	seniowk@gmail.com	---	OSU	Student
Gordon Dillon	gdillon@ci.camamas.wa.us		OSU	Professional

4.0 Safety

Document 521 - Pre-Assessment Report
Oregon State University
Lela, Kenya
Needs and Technical Assessment for Water Project

4.1 State Department Warning

There is a state department warning for risks of travel to Kenya. The warning does not affect the portion of Kenya where the team will travel. The issued warning is for the Northeast region of Kenya near the Somali border. The travel team will be far from this area because our flight is to Nairobi (central South Kenya) and the community is in the Southwest corner of Kenya, only 5 kilometers away from Tanzania.

4.2 Point to point travel detail

Our main in-country travel coordinator is Mark Gikenyi. He lives in the US, but is from the Migori district (where our community is located). He will be traveling to Kenya to visit family this summer and will travel to Lela in July to finalize our in-country travel logistics. He has personal contacts that he will put us in touch with in each of the major cities we go through.

Nairobi Airport to Hotel: Taxi

Hotel to Bus stop: Taxi or Mark's family friend

Nairobi to Migori: Direct Bus that Mark's family friend advises us to take

Migori to Lela: Charles (community contact) will come pick travel team up and arrange travel between Lela and Migori

Same modes of transports and contacts will be used for return travel.

4.3 Safety Plan

Team members will never travel alone, it will be required to be paired with another member of the travel team at all times. Mark Gikenyi will also provide us with the numbers to his contacts in Kenya that we can use in case of emergency or crises. Team members will maintain a sense of awareness of their surroundings at all times and will use good judgment in the food they eat, the water they drink, and the places they go.

4.4 Emergency Plan and Exit Strategy

Emergency decisions will be made by designated team member: Aparna Shrivastava

Evacuation will be by vehicle to the nearest city. Transportation to the US consulate in Nairobi will be the highest priority.

4.5 Contacts

4.5.1 On-the-ground phone number and email for travel team

Charles Omuono: +254, no e-mail

Mary: +254, no e-mail

Also, as mentioned above, our main in-country travel coordinator is Mark Gikenyi. He lives in the US, but is from the Migori district

Document 521 - Pre-Assessment Report
Oregon State University
Lela, Kenya
Needs and Technical Assessment for Water Project

(where our community is located). He has personal contacts that he will put us in touch with in each of the major cities we go through.

4.5.2 Nearest US Consulate Contact Information

The U.S. Embassy is located on United Nations Avenue, Gigiri, Nairobi, Kenya

Telephone (254) (20) 363-6000;

Fax (254) (20) 363-6410.

Hours: Monday-Thursday 7:15 am-4:30 pm , Friday 7:15 am-12:15 pm

In the event of an after-hours emergency, the Embassy duty officer may be contacted at (254) (20) 363-6170.

Mailing Address

United Nations Avenue Nairobi

P. O. Box 606 Village Market

00621 Nairobi, Kenya

4.5.3 Nearest Hospital Contact Information

Ojele Memorial Hospital

P.O. Box 355, Suna, Migori, Kenya

+254 592 0346

5.0 Budget

5.1 Cost

Expense	Total Cost
Airfare	3 * 1500
On Ground	3*100
Materials	0
Other	200
Total	5000

5.2 Hours

Document 521 - Pre-Assessment Report
Oregon State University
Lela, Kenya
Needs and Technical Assessment for Water Project

Names	# of Weeks	Hours/Week	Trip Hours	Total Hours
Project Lead Aparna Shrivastava	13	5	TBD	50
Mentor Gordon Dillon	13	1/2	TBD	7.5
Other Team Members (7)	10	1	TBD	70

5.3 Donors and Funding

Donor Name	Type (company, foundation, private, in-kind)	Account Kept at EWB-USA?	Amount
EWB-OSU	Monetary		2500
Private Donors	Monetary		750*
Krispy Kreme Sale	Monetary		500
Total Amount Raised:			3750*

*This number will increase since we are still soliciting within our personal networks for donations.

6.0 Project Location (approximate)

Longitude: 1° 08' 11.88" S

Latitude: 34° 23' 24.27" E

7.0 Project Impact

Persons directly affected: 400

Persons indirectly affected: 100 (estimate)

8.0 Mentor Resume

See Attached PDF

Pre-Assessment Report Part 2 – Technical Information

1.0 INTRODUCTION

The purpose of this document is to detail the objectives and desired outcomes of the first assessment of EWB-OSU's adopted program in Lela, Kenya. The trip will be the first step towards helping the community to acquire a sustainable water source for domestic use.

2.0 PROGRAM BACKGROUND

The Lela community is located in the Migori district of southwestern Kenya, 50 km from Lake Victoria. The community desires a reliable water system that will directly provide water to 400 community members and 100 other locals in the region. There is also some interest in a reforestation project as many trees have been cut down for firewood. Residents currently spend a large portion of their day searching for enough water to meet their daily needs. This restricts their educational and economic advancement.

Efforts made by the community;

1. Digging of two shallow wells to a depth of 20 feet. Some water available except in the dry season. The wells have very low yields, approximately 1000 liters per day.
2. Efforts to drill a borehole failed due to lack of funds
3. To provide water for cattle, the community constructed a water dam.
4. A borehole and reservoir exist in the Bondo village about 3 kilometers away. Collecting and carrying water is a strenuous and time consuming task for the women and children.
5. Efforts to purchase water pipes to connect to the system did not materialize.

EWB-OSU's involvement in this water project will improve the health and economy of the community by providing a safe sustainable source of water.

3.0 OBJECTIVES OF SITE ASSESSMENT TRIP

The assessment trip has two major objectives. The first is to perform a general assessment of the community needs and establish goals for the partnership. The assessment will include surveys of the water, sanitation, and hygiene conditions affecting the community. Interviews with community representatives and members will establish the primary concerns of the community. Statistics will be gathered regarding water transportation and health risks caused by drinking contaminated water.

The second goal is to gather necessary information to develop a technical solution to the community's needs: potential water sources, community geography and local project

Document 521 - Pre-Assessment Report
Oregon State University
Lela, Kenya
Needs and Technical Assessment for Water Project

resources such as construction materials and/or services. In particular this will include developing a community map of present and potential water sources. Soil and water samples will be taken to explore the possibility of groundwater utilization. Local universities and government agencies will be referenced to gather information on the region's hydrogeology.

4.0 COMMUNITY INFORMATION

4.1 Description of Community

Lela is a community of about 400 residents and 100 locals in the surrounding area. Residents speak Swahili and Dholuo and are predominantly Catholic and Protestant. Most are small-scale farmers of maize, tobacco, beans, sugarcane and vegetables. Some cattle and poultry are raised for subsistence. Average income is estimated at one US dollar per month. It is uncertain whether electricity is available.

4.2 Community/NGO Resources and Constraints

Community members have agreed to aid EWB-OSU's efforts by fundraising, providing accommodation and food to volunteers, providing free manual labor, collecting local building materials, providing security and transportation services. There is also some support from EWB-Kenya in terms of logistical support, liaison with government and contractors, and project management. However, considering the memorandum of understanding that was sent from EWB-Kenya and other EWB chapters' negative experience with EWB-Kenya we are weary of using the resources they have offered. We plan to establish a strong relationship with community leaders to avoid potential conflicts with EWB-Kenya.

The community decisions rely on member contribution. A democratically elected committee makes executive decisions with unanimous member approval. Women make up 80% of the committee officials.

4.3 Community Relations

We have established contact with the community via cellphone. We have had multiple discussions with them, each lasting about half an hour. We have primarily talked with Charles Omuono (a resident of Lela) and his two sons. Initial contact was made in Swahili, but large portions of the conversations have been in English.

We are currently working with Mark Gikenyi, who is from Kisii (in the Migori district). Mark has been in the US for the past few years and has met with us several times, assisting once with Swahili in a phone conversation with Charles. Mark will be in Kenya for most of the summer and has agreed to help us make

Document 521 - Pre-Assessment Report
Oregon State University
Lela, Kenya
Needs and Technical Assessment for Water Project

travel arrangements and will also make a visit to the Lela community. Mark is putting us in contact with a resident of Nairobi who will assist our travel upon our arrival. Mark will also put us in contact with people in Kisii who can assist us if needed. We will be sending pictures of ourselves to Lela through Mark, and he has agreed to take pictures of the area and send them to us before we travel.

The community has agreed to provide us (4 travelers) with room and board. We will stay at a community volunteer's residence and will be fed and supplied with clean (boiled) water by the community.

4.4 Community Priorities

The community primarily desires a clean water source which is close at hand and sustainable during the dry season. They have suggested a deep well as the primary solution, but there may also be other potential water sources nearby that can be taken advantage of.

The community also realizes that they are using their fuel-wood at an unsustainable rate. In order to counteract this they wish to implement a tree planting program with any excess water if possible. This would also act as a habitat revival for some species in the surrounding area.

5.0 DATA COLLECTION AND ANALYSIS

5.1 Site Mapping

Oregon State University will provide us with several GPS/GIS units which we will use to map the community. GIS layers may include roads, buildings, water sources and quality, contamination sites (sewage), possible project sites, and other parameters deemed noteworthy by the team.

5.2 Technical Data Collection

We will collect primary types of data: 1) human health and sanitation, 2) water-use, and 3) water quality. Human health and sanitation and water-use will be determined using a survey designed specifically for the trip. The survey contains questions on both overall health and respiratory health, and is intended to show us what conditions may be caused by poorly managed water. Water from sources as well as from domiciles will be tested, with permission, using a water testing kit supplied by the EWB West Coast region. Water quality data will be integrated into the GIS system.

5.3 Monitoring and Evaluation Data

Upon completion of our implementations, water quality will again be tested. Both water quality and health will be assessed at a later date and compared with the

Document 521 - Pre-Assessment Report
Oregon State University
Lela, Kenya
Needs and Technical Assessment for Water Project

data collected during this first assessment trip. Using survey data we will ascertain what effect our aid is having on the community.

6.0 SCHEDULE OF TASKS

Our tentative departure date is September 1, 2009. There are 4 travelers who will work in groups of two; therefore there will be two work groups. An initial schedule is given below:

Day	Group 1	Group 2
1	Fly from Portland to Nairobi, check into hotel	Fly from Portland to Nairobi, check into hotel
2	Bus from Nairobi to Migori, arrive in Lela	Bus from Nairobi to Migori, arrive in Lela
3	Introduce ourselves, tour community	Introduce ourselves, tour community
4	Health surveys	Test water quality
5	Health surveys	Test water quality
6	Health surveys	Test water quality
7	Participate in community meeting	Participate in community meeting
8	Health surveys	GIS Mapping
9	Health surveys	GIS Mapping
10	Health surveys	GIS Mapping
11	Finish additional work, meet with community leaders	Finish additional work, meet with community leaders
12	Socialize with community	Socialize with community
13	Bus from Migori to Nairobi, prepare to leave	Bus from Migori to Nairobi, prepare to leave
14	Fly from Nairobi to Portland	Fly from Nairobi to Portland

Document 521 - Pre-Assessment Report
Oregon State University
Lela, Kenya
Needs and Technical Assessment for Water Project

7.0 PROJECT FEASIBILITY

Upon completion of the assessment trip, the larger team at OSU will reflect upon the course of action we will take in pursuing the project further. Questions to be answered will include the following:

- Is the community friendly, are they willing to work with us?
- Does the community agree amongst themselves on the problem and solution?
- Would returning be a risk to any of our safety?
- Will the proposed solution increase the peoples' quality of life?
- Will the community be able to own and sustain the proposed solution?
- Is there an ample supply of water within reach of the community?
- Does the water quality need improvement? If so, can we improve it enough?
- Can we get the materials needed to the community?
- Can we raise enough money before our next trip to fully pay for the project?

8.0 MENTOR ASSESSMENT

The Kenya project team has been meeting weekly since the submission of the Application to acquire the project was submitted to EWB national. During the ensuing time the team has begun research on Kenya and the Lela community. The completion of the TAC and IRB documents has focused the team on areas that need to be researched to prepare for the assessment trip. The TAC document is being completed by Adam August and Courtney Holley with the assistance of Kelsea Schwing, Justin Hovland, and Aparna Shrivastava. Justin Hovland and Mikkel Leslie are completing the IRB document with the assistance of Courtney Holley and Susana Murrie. Susana Murrie and Meg Henning are creating the basic health survey that will be used during the assessment trip.

Kevin and Brian Gatimu, and Mark Gikenyi, native Kenyans studying at OSU, are actively training the team with cultural issues and language skills as well as with what to expect when in country. These individuals have been instrumental in establishing good communications with the community.

Project information that has been generated has been forwarded to me by Aparna Shrivastava. My contact with the Kenya team has been minimal to date, primarily with document review. During the course of the summer break I will be meeting with the team

Document 521 - Pre-Assessment Report
Oregon State University
Lela, Kenya
Needs and Technical Assessment for Water Project

numerous times to review training and suggest further courses of study to ensure that the assessment trip goals are met.

During the summer break there will be training in the use of GPS units, GIS software and basic surveying techniques for the purpose of mapping the community. There will also be instruction on basic groundwater hydrology, borehole interpretation and relevant safety training to include first aid. Andrew Dryden, the other mentor for this project, will also brief the team in performing projects in third world areas, and the role that they will be taking during the assessment trip.