



Document 522
POST-ASSESSMENT REPORT

CHAPTER: [Oregon State University](#)
COUNTRY: [Kenya](#)
COMMUNITY: [Lela](#)
PROJECT: [Lela Water Project](#)

PREPARED BY
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EWB - Oregon State University

Lela, Kenya

Lela Water Project: Initial Community Health and Needs Assessment

Post-Assessment Report Part 1 - Administrative Information

1.0 Contact Information

	Name	Email	Phone	Chapter
Project Leads	Aparna Shrivastava			Oregon State University (OSU)
President	Scott Crook			OSU
Mentor #1	Payal Razdan			OSU
Mentor #2	Jennifer McClure			OSU
Faculty advisor (if applicable)	Kevin Boston			OSU
Health and Safety Officer	Adam August			OSU
Assistant Health and Safety Officer	Payal Razdan			OSU
NGO/Community Contact	Charles Olang'o	n/a		n/a
Education lead	n/a	n/a	n/a	n/a

2.0 Travel History

Dates of Travel	Assessment or Implementation	Description of Trip
12/14/2009 – 12/29/2009	Assessment #1	Initial Community Health and Needs Assessment.

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3.0 Travel Team

Name	Email	Phone	Chapter	Student or Professional
Courtney Holley			OSU	Student
Adam August			OSU	Student
Payal Razdan			OSU	Professional

4.0 Safety

4.1 No health or safety incidents to report.

5.0 Budget

5.1 Cost

Expense	Total Cost
Airfare	\$4645.90
On Ground	\$727.17
Materials	\$0.00
Other	\$0.00
Total	\$5373.07

6.0 Project Location

Longitude: -1.123123

Latitude: 34.398536

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Post Assessment Report Part 2 - Technical Information

1.0 INTRODUCTION

The purpose of this document is to outline what was accomplished during the first assessment of EWB-OSU's adopted project in Lela, Kenya. The objectives of this trip were to collect health quality data, to strengthen our relationship with the community, and to further assess the needs of the people and the feasibility of the project.

2.0 PROGRAM BACKGROUND

Lela is a rural community in southwest Kenya located in Migori district of Nyanza province. The village is about 50 km from Lake Victoria and 14 km from Tanzania. The community of Lela desires a reliable water system that will provide water for 400 households. Currently there are no clean water sources within the village, and the contaminated sources that are available dry up completely for weeks or months at a time. Residents may spend a large portion of their day searching for enough water to meet their family's needs. Collecting and carrying the water long distances is a strenuous task for the women and children. The lack of a reliable clean water source is restricting the educational and economic advancement of the people of Lela.

Efforts made by the community:

1. Dug shallow wells (or ditches) to a depth of 20 feet. The wells provide some water throughout the year but dry up completely during drought. The wells have very low yields, approximately 1000 liters per day, and are contaminated with E. coli.
2. Constructed a water dam to provide water for cattle. This water also dries up during drought.
3. Organized the Lela Women's Group to oversee and manage the Water Project and other community programs. Charles Olang'o is one of only two men in the group and acts as the group coordinator.
4. Arranged a meeting between the Lela Women's Group, the local water ministry, and the EWB-OSU travelers.

EWB-OSU's involvement in this water project will improve the health and economy of the community by providing a safe sustainable source of clean water. Currently we are looking into working with the water ministry to drill a borehole which could potentially be used in the future as the supply to a water distribution system.

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3.0 TRIP DESCRIPTION

The EWB-OSU travel team arrived in Nairobi, Kenya on December 18th, 2009. At the Kenyatta International Airport we saw Paul Olang'o holding a sign for EWB-OSU. Paul is the son of Charles Olang'o (our community contact). Paul escorted us to a taxi cab and headed with us into town towards our hotel to meet up with Payal. The next morning Paul escorted us to the bus station and helped us find a bus traveling to Migori. This was a very busy time for traveling and finding a spot on a bus would have been near impossible without him. We traveled across Rift Valley to Kisii, and then down to Bondo. The bus trip took about eight hours. Once in Bondo we got some food, a taxi, and headed for Lela. We were greeted by villagers when we arrived; the Lela Women's Water group came down to Charles' homestead to welcome us. During the next week we conducted our assessment.

Day 1: Started meeting with community leaders and developing a relationship with Charles Olang'o and the Women's Water Group while learning about Lela.

Day 2: Water Source Testing / Individual Health Assessments / Surveying

Day 3: We met with the local water ministry to discuss the water project with the leaders of the Lela Women's Group. Afterwards we priced construction materials in Bondo and sent out an update email. We then held a meeting with the Lela Women's Water Group to update the rest of the women on our discussions with the water ministry and to answer questions.

Day 4: Individual Health Assessments / Surveying

Day 5: We meet with a community and church leader at his house outside of Lela to discuss the culture of Kenya, the issues he believed to be the biggest hindrance to the progression of Lela, and EWB-OSU's plans for the future of the project.

Day 6: Christmas Day! Unfortunately we were unable to do much celebrating as there was still more work to do. We continued our health assessment to the east section of the community. We stopped by the churches in the area to say hello, introduce ourselves, and talk about the project. We also conducted our community health assessment survey with the Lela Women's Group and community leader.

Day 7: Our final community meeting with the Lela Women's Water Group and many other villagers. Community leaders spoke to the community on the aspects of the project we had discussed throughout the week. The members of the travel team all gave their fairwells, and an instrumental group played music while everyone danced.

Day 8: We said our goodbyes and headed to Bondo with Paul in the morning to catch a bus back to Nairobi.

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4.0 COMMUNITY INFORMATION

4.1 Description of Community

Lela is a community of about 400 households, ranging in size from one to 30 people, scattered throughout a land area of 35 square kilometers. Using data collected in our household surveys we obtained an average number of nine people per household. This calculates out to an estimated population of 3600 and an estimated population density of 103 per square kilometer.

Dholuo is Lela's mother tongue and is spoken within the community. Swahili is also spoken and understood but not used as much as Dholuo. The village is predominantly catholic and protestant, with five small churches scattered throughout. Most residents are small scale farmers of maize, tobacco, beans, sugarcane and vegetables. Some cattle and poultry are raised for subsistence. The average income is estimated at one US dollar per month.

Lela does not have electricity except for one small solar panel on Charles Olang's rooftop that powers two lights, a television, and a radio. Charles also has a small solar powered cell phone charger. Most households consist of two to six mud huts with either thatched or steel roofs and two or three granaries. The huts range in shape and size from 10ft x 10ft to 30ft x 20ft.

Transportation to and from the community is done by taxi, motorbike, or bicycle. Bondo town is about a 10 minute drive from the community. In Bondo there is access to construction materials, a supermarket, and a Barclays Bank. A taxi ride from Bondo to Lela costs 1000 ksh or about \$14. The dirt road into Lela is narrow and very bumpy in areas. Transporting some materials into Lela, such as a large plastic tank for water storage, could prove challenging.

4.2 Community/NGO Resources and Constraints

Community members have helped EWB-OSU's efforts by fundraising, providing accommodation and food to volunteers, translating to Dholuo, providing free manual labor, collecting local building materials, providing security and transportation services. We were able to connect with the local water ministry to discuss a geotechnical survey and borehole implementation. We were unable to meet with proposed contacts such as Rotary in Kenya. More time and effort should be made on future trips to contact local NGOs and put them in contact with the Lela Women's Group for on-site support. However, connections between EWB-OSU, Lela Women's Group and the water ministry should be sufficient to succeed in the borehole aspect of our commitment to Lela.

4.3 Community Relations

Travelers made strong connections with the Olang'o family and the Lela Women's Group. We were able to visit over 30 households during our health assessment. We spoke with the community members about EWB-OSU's role and possible projects in conjunction with resident's

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needs. We concluded our visit with a very positive community meeting including the women of the Lela Women's Group where residents gave their personal testimonials and our travelers were able to express EWB-OSU's commitment to the water project.

We are continuing our weekly calls to Lela to update the community on our progress.

4.4 Community Priorities

- Secure a local source of clean water for year-round use
- Build personal/community composting latrines
- Malaria treatment and prevention
- Opportunities for economic development
- Reforestation
- Primary school improvements
- Food security

5.0 DATA COLLECTION AND ANALYSIS

5.1 Summary of Data

See Attached.

5.2 Mapping

See Attached.

5.3 Monitoring and Evaluation Data

6.0 PHOTO DOCUMENTATION

See Attached.

7.0 PROJECT FEASIBILITY

After the initial assessment, the travelers are confident in the proposed project feasibility. There is a strong relationship between the Lela Women's Group and local water ministry, who will be in charge of overseeing a geotechnical survey and the borehole construction. EWB-OSU's charge is to ensure funding for the project is appropriately allocated with onsite assistance from Lela community members. With adequate funding and assistance from Lela community members,

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there is high likelihood of success in providing clean water to the citizens of Lela with the borehole drilled by the water ministry's contractor.

Several other projects in the village are also within EWB-OSU's grasp. Building personal/community latrines, local reforestation, cooking stoves and malaria prevention have been proposed and will be the group's focus in conjunction with the water project. The travel team obtained prices from local businesses for construction materials such as concrete and hardware.

The main concern for project feasibility is funding for airfare for travelers. EWB-OSU must also work to make connections with local NGOs to have an onsite resource for community support and future project sustainability.

8.0 LESSONS LEARNED

- It might be wise to travel during the summer to save money and to avoid the holidays.
- Future trips should reserve seats on a bus in Nairobi at least a week prior to traveling.
- Having a guide through the city and the bus station is crucial during the holiday season.
- The Terminal Hotel is a good place to stay when on a budget in Nairobi.
- Team size needs to be a major concern for future trips. It seemed as if the host family was providing more for the travelers than they would for their selves. Available housing was limited, future teams may need to consider bringing tents or finding other accommodations.
- Paul Olango's help is invaluable.
- The Women's Water Group of the Lela Women's Group has officers in place and a community bank account.
- The local water ministry is very happy to have us helping Lela and has given us quotes for a land survey and a base estimate for a bore hole. We will be comparing these values with estimates from similar projects in the area.

9.0 MENTOR ASSESSMENT

After interacting with the community and community leaders it is clear that there is a strong desire for support from EWB to bring water for the people of Lela. There is a strong network of women who clearly understand the value of having EWB provide support both technically and financially. Initially, I was concerned because community members referred to both the students

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and the mentor as "donors". I felt that the community felt the need to simply "convince" us to give them money to set in motion the procedures and actions necessary to bring a clean water system in. However, after clarifying with community leaders and our translator we feel that they did understand what EWB was and that mentor and students were simply part of a bigger picture and that the students were there to learn from the community, to use what they have learned in school to help the people of Lela and then finally that we were not donors but were a large group of individuals who had to raise the money in order to complete this water project.

It may be beneficial for EWB to hire a translator in addition to the work that Paul Olang'o was doing. I feel that we missed many of the nuances of what was being said because we were not receiving the direct translation but only abbreviated translation. Also, it can be incredibly difficult to obtain full and honest information from women when a man is translating. In my clinic work in the United States women are less likely to provide their full range of issues and concerns when the translator is a male and even less likely when the translator is from a different cultural background. However, we just didn't have access to a female interpreter and I think that would have been a great advantage.

There are many needs in this community. It was clear as I walked from household to household that water was not the only issue. I assumed the people of Lela would be suffering from a variety of health issues as well. It would be both a productive and educational experience for the students of EWB to engage other nonprofit groups in this project. Doctors Without Borders is one possibility. There is a physician in Nairobi who graduated from Johns Hopkins who might be another reasonable option in terms of providing health education and a better overall picture of the health of the people of Lela. I would also advise the next group to make some time to visit the clinic to see what their connection is to Lela and to see the conditions of the clinic. The clinic plays a vital role especially in regards to the water project. Many of the issues that the people of Lela are suffering are from water. There are some nutritional issues as well, cleft lips, spinal deformations, and many skin health issues that must be addresses.

Another possible connection that EWB might want to consider making is with the Permaculture Association. There are many permaculture groups in Oregon that do work that would be of great use to Lela and the water project. However there are also international permaculture groups, including several in Africa, that work on water and waste management. I recommend contact one of the groups near Lela and building that relationship.

One other concern I had was the role churches are going to play in this project. I am Hindu and I assume the OSU EWB team is made up of many denominations, religions or people who do not believe in religion. It should be made clear that EWB is a nondenominational group. Where I grew up there were plenty of churches and I would go with my friends, but I can see a non-Christian individual getting uncomfortable listening to some of the sermons. Also, it is vital that EWB either interact with all or none of the churches. Since many of the community leaders are church leaders and since community members do have strong ties to one of (4?) churches in Lela, I recommend that all the churches be included equally. However, it must be made clear that

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EWB cannot provide any of the churches with funds for church projects. EWB can act as a resource and connect church programs with the churches of Lela and I know several pastors who might be interested in such work.

Finally, I did get the sense that we, as a group, were being "protected" on various levels. We were given well balanced meals every day, carefully boiled water, and were escorted at all times, unless we chose to walk off on our own. I did feel the sense that the community was concerned that this group would do what others have done which is come in, do half the work and then leave without finishing. However, there were strong voices from community leaders who were supporting the work that EWB was doing. It was incredibly important that EWB show its presence and this was an incredibly important piece in giving the people of Lela an opportunity to trust EWB. Had EWB not made a presence it may have caused trust issues. The networking that took place between community members, leaders and the local water ministry was incredibly important in building a foundation for future work.