

ZONGO water project

PHASE 2 community empowerment

[OBDL] open boundary design lab

Emily Williamson, Project Leader and Founder

Katherine Lai, Fellow

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THANK YOU

Dear Family, Friends, and Colleagues,

Thank you so much for your donation to this year's ZONGO Water Project, phase 2: community empowerment! Your contribution helped evaluate last year's rainwater collection efforts, implement 15 new rainwater collection systems, execute a week long soap-making workshop in which residents learned how to start their own soap business, and work with children to write and illustrate, [Gizo Gizo!](#), a folktale about water and caring for the environment.

Katherine and I were thrilled by the residents' responses to these efforts and hope that these foundational, low cost and high impact projects will lead towards the development of a community-sustained economic, social, and environmentally responsible urban infrastructure. Thanks again and we'll keep you informed as we continue to synthesize this year's work and make plans for the next phase.

Please let me know if you have any questions, comments, and if you're interested in being more involved in the future (either on the ground in Ghana or from the States).

Thanks again for your support.

Best,
Emily



a view of cape coast from fort william

take off!

“9 hours, 51 minutes with the wind at our back” ...

It sounded like we'd touch down in Accra a half hour early this time. In many ways preparing for this project felt like old hat – I knew the basic supplies I would need, where to stay, and who to contact. As we pushed off the runway for my 5th trip to Ghana though, I still felt uncertainty, apprehension, and the pressure to “succeed”. My itinerary would change day by day depending upon the community's needs and I would be required to adapt design concepts sensitively and quickly.

To step back a bit, let me give you a quick background of the project I am about to embark upon. It's called the *Zongo Water Project* and it's about using water as a way to improve the quality of life for the Zongo community, a small Islamic community in Cape Coast, an urban coastal settlement in the Central Region of Ghana. Even though this

migrant community has lived and traded in the city for over a century, the residents still don't have access to the city's public infrastructure.

While the problems of flood and drought, sanitation, hygiene, and erosion are germane to the entirety of Ghana's Central region, these issues are of particular concern for the visibly impoverished Zongo community. Rather than developing a master plan to be executed by the government, this community-based approach creates a new water infrastructure through the processes of engagement, education, empowerment, and sustainability.

Perhaps less similar to other water infrastructure projects you might be familiar with, the Zongo Water Project is a community-based effort that keeps larger economic, environmental, and social systems in mind while working at the local level. By community-based, I mean entering the community with an open mind – with the flexibility to adapt ideas and create new ones by listening to the residents' needs.

The approach also aims to empower the community to make change themselves. This involves consistent long-term engagement, trust, and education so the community proudly takes ownership of the project.





- RAINWATER collection systems installed last year



I've come to realize though that the real design work here is in creating a flexible process that deepens and expands the capacity of the community. While some of this process is tangible such as the rainwater collection systems, much is also intangible such as the thickening of social networks. It is about preparing the ground for change: keeping in mind the short and long term, the large and small scales, and changing needs of the community.

This year, my main community partner is the Ghana Heritage Conservation Trust (GHCT), a not-for-profit organization that has become a leader in local and regional Cape Coast community development,



planning, preservation, and natural resource conservation initiatives. Since the organization serves as neutral, shared ground in both its mission and physical location among different ethnic, religious, and social groups in the city, GHCT will be able to provide an accessible and comfortable environment for all.

Now 2 hours and fifteen minutes from our destination with 6,539km behind us, I am eager to get on the ground running. Though I won't leave Accra (the capital of Ghana) for Cape Coast until tomorrow afternoon, I will coordinate meeting times and locations over the phone, visit the National Public Archives and Records Office in Accra

in hopes of finding historic maps of Cape Coast, and begin overall planning strategies with Katherine Lai, an architecture student at the University of Virginia and the project's first fellow.

“It is about preparing the ground for change: keeping in mind the short and long term, the large and small scales, and the changing needs of the community.”

Over the course of the next month, we will both continue efforts begun last year during phase one and introduce new methods in community mapping, oral histories, and interviews to more effectively understand the needs of the residents. There are five specific goals of the project that include the following:

goals

- + To facilitate communication among local stakeholders including the Municipal Government, Oguaa Traditional Council, Ghana Water Company, University of Cape Coast, and Residents of Cape Coast by hosting educational workshops, performances, and community forums.
- + To continue last year's initiative of providing rainwater collection systems to households in which we supply the materials + education about the system and in return the community provides the labor and long-term stewardship.
- + To develop and execute, with the community, a small pilot project that will test out a specific concept relative to water quality, sanitation, hygiene, or erosion that will also have a sustainable social and economic benefit.
- + To monitor and evaluate the progress and results of the project through quantitative and qualitative analysis.
- + To craft a series of workshops with the children with the goal of increasing their understanding about the current water situation in Cape Coast and developing a creative way to voice their opinions.

I continued to imagine what these goals might look like as I sat impatiently watching the minutes tick by on Delta's outdated digital screen.

Finally, a couple ginger ales later, we had a smooth landing in Accra and I stepped out into the familiar thick humid and smoky air.

I felt right at home again and was ready to dive in!





PHASE 2:

COMMUNITY EMPOWERMENT



**“Women Empowerment, yes!
This is a very laudable idea.
The women need this.”**

Today was all about re-introducing ourselves to Cape Coast and Zongo Community. I had talked with Hammad on the phone the night before and we had arranged to meet in the morning. According to him, this meant “9am African time and 10am US time.”

We had always joked about “African time v. US time” last summer and it felt good to know that this conversation was a familiar one. We met in the usual Madrasa Alley and were greeted by children chanting verses of the Quran. After a warm welcome from Hammad’s mother, we sat in our usual plastic chairs under the shade of the porch and began by catching up with Hammad. His wife, Binta and their baby, Emily, unfortunately could not be here this morning, but we would see them later on.

We talked about his family – his brother was to be married next weekend and many of his family members were already in town visiting. We also talked about the community - Hammad explained how happy the community is about the rainwater collection systems, that they use them “24/7” in the rainy and dry seasons, and that they

are happy we have returned to continue the work this year.

After going over this year’s goals in more detail, we spent more time talking about the pilot project and our idea to work with the residents, and in particular the women, to build skills towards developing a product having to do with water conservation, hygiene, sanitation, or landscape systems that would bring social and economic benefit to the community. At first, I was concerned about how Hammad might react to involving the women more directly in the project, but he was thrilled. He said, “Women Empowerment, yes! This is a very laudable idea. The women need this.”

We continued talking about pilot project possibilities, scheduling, and looking over last year's booklet, The Zongo Water Project Phase 1 over ice-cold chocolate Milo until it was time to meet with the Chief Imam. As a greeting gift, we picked up more Milo, sugar, bread, and 4 cans of evaporated milk and weaved our way through the Zongo's narrow streets to his house.

The meeting was quite short, but also very effective. He gave us his blessing to continue the work and

when we told him about the pilot project ideas, he too was very taken with the idea of including women.

Katherine and I spent the rest of the afternoon eating Binta's Fish Stew and Fufu (boiled cassava and plantain pounded into a dough) and spending time with their new baby Emily.

Later that evening, we stopped briefly by Hammad's shop to reunite with his friends, and just as last year, we were given multiple, conflicting lectures about the

mosquitoes as the sun began to set. While one of his friends insisted that the mosquitos "welcome you" and "just want to sing to you", Hammad warned us that they are vicious "Hezbollah" and to watch out. Heeding his warning, we made our way back to the guesthouse and prepared for tomorrow's water workshop with the children.



welcomed with a local dish...

FISH STEW AND FUFU



chief imam, central region

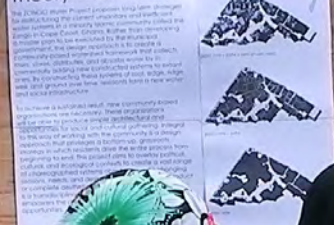
.....community participation.....



Introduction



Theory + Context



ZONGO water project 2012



thrown into the deep end!

Instead of just a single workshop with the children as we did last year, we thought it would be more beneficial to hold a series of sessions that could build off- one another. A number of ideas had come to mind – creating a folktale, murals, or sewn canopies whose underlying theme would be local water issues.

Since Hammad had let us know yesterday that we could work with the children the following day, we were thrown in the deep end and had little time to prepare for our first session. Rather than coming up with an entirely new method of working, we decided to build off last year's folktale workshop and begin with the re-telling of the story about the Cockroach and Ant that needed to conserve water.

We read the story out loud, talked about the moral of the story, where water comes from, what the local water issues are, and how one might think about fixing some of these problems. While the younger

students drew pictures of where their own water comes from, we encouraged the older students to think about how they might compose their own folktale that contained lessons about water.

In future sessions, we planned to collaboratively create an original folktale with particular characters, problems, and lessons. The end aim of the three sessions will be to provide the children with a copy of the story they create.

Today's session was a good beginning and the children were thrilled to have their picture taken while proudly displaying their artwork.





chief zongo; cape coast

We spent much of the afternoon preparing this week's schedule – going over our exact itinerary, clarifying the responsibilities of the water conservation committee and figuring out when we would meet with each set of stakeholders – from the municipal government and Oguaa Traditional Council to the Ghana Heritage Conservation Trust.

Though originally, we had planned to conduct evaluation interviews for much of the afternoon, Hammad had wanted to hold off until we were able to talk with the Chief Zongo. We arrived at the Chief Zongo's home just after 3-o'clock prayers and were ushered to plastic chairs on the porch of his modern estate at the outskirts of the city proper. He welcomed us warmly just as he had done last year and exclaimed how happy he was to know that the project would continue.

I handed the chief the booklet from phase 1 and explained this year's goals in more detail. In particular, I emphasized that we did not come here to implement projects for the community, but instead to implement projects with the community; that this needed to be a

collaborative effort and the ultimate purpose was for the community to make change themselves. He paused briefly, threw up his hands and said,

“This is what our religion is about...it is about helping one another to improve our lives. Thank you! A million miles begins with one step!”

He also added while pointing to the book, “This is a testament that the community is benefitting from this project.” We continued to talk in more detail about the particulars of this year's work including the training workshop with the women and also about the history of the community – how some Muslim traders came from the East along the White Volta

trade route and others came from the West along the Black Volta trade route - all converging in Cape Coast. “I was tired when you came,” the chief Zongo explained, “but now that we have had this discussion I am interested and awake. Let's talk more about this later.”

We left the chief's house and made our way to Hammad's light bulb shop within walking distance to our guesthouse. Again, it began to get dark. This time, Hammad's mosquito lecture was about the female Anopheles mosquito – apparently, these are the only ones that bite and spread malaria.

evaluations

This morning we awoke to water pounding on the aluminum roofing of our guesthouse. Whenever it rains here in Cape Coast, activities grind to a halt so Katherine and I had to assume most of our meetings would be cancelled today. In any case, we set out optimistically into the light rain in hopes that the Oguaa Traditional Council would still meet at their usual time. Luckily, the skies cleared by the time we reached town and we waited with the secretary until two representative council members were free. Though this meeting was not required since we are working specifically with the Zongo Community members, it is still the tradition to greet the Chiefs of the region when coming to stay in Cape Coast. The exchange was short, yet very meaningful as they gave us a note to us that we would deliver to a longtime friend in the United States and we gave them two bottles of Schnapps (one is used to pour libations and the other is for the council to share among themselves). Upon receiving the Schnapps, the Omanhene (The King) exclaimed,

“Oh, so you know our tradition! We have a new tradition now, you drink ½ the bottle!”

He grinned and gratefully accepted the two bottles.



Conveniently, our next meeting with the Program Director of Ghana Heritage Conservation Trust was just upstairs. We had met with him yesterday as well, but the purpose of today's conversation was to share our own goals with the Director of

the entire Foundation, to discuss GHCT's goals as a non-profit, and to read through GHCT's 5-Year Strategic Plan together. The meeting with the Director went very well and it was a relief to hear that the goals of the organization aligned closely with the Zongo Water Project. In particular, the Director stressed the importance of sustainability and that the projects ought to continue once those who initiate them leave. Thus, they had hired a Program Director to help manage projects such as ours.

By now the rain had completely stopped and we met up with Muhammad, a young man who often helps Hammad. Today, he would be taking us around to five out of the ten houses we provided rain water collection systems to last year. We would then evaluate the success of the system based upon our own observations and interviews with each of the residents.



For the most part, the rainwater collection systems were in excellent condition. There was only one case in which a structural member holding up a gutter had splayed outwards causing the gutter to pull slightly away from the house. In this case, the owner explained that it had happened with the last rain and they were calling a carpenter to come and fix it. For all of the houses interviewed this day, all of them said they used the system every day it rains (whether during the dry or rainy season).

They use it for cooking, washing, and drinking and share the water with other members of the community. One of the women explained that community members come to her house from all over when it rains to fill up their containers.

When I asked about if/how the residents clean the water, the majority explained that they don't collect the water during the first set of rains in order to clean the roof. When it rains the second time, they collect the water, let it settle,

sieve it, and then either boil it or add Aquatabs (water purification tablets). One house, however, did not boil their water or add Aquatabs.

While it is clear that there is more work to be done to ensure that all of the houses know how to drink water collected from their roofs safely, the overall impression was a positive one. It was thrilling to see how appreciative the community members were and that those who benefitted from

the system maintained it and shared their water resources with their neighbors. Perhaps one of the most touching stories though, was from a woman whose house had leaked last year. I had remembered seeing the walls and floor of her room soaked in water. You could look up and see the holes in the corrugated metal roofing and the exposed wood roofing structure. Her house had been one of the homes selected for the rainwater collection system. This time around, when I looked

inside the same room, she had taken the initiative to add a finished ceiling, finished flooring, and the leaking had stopped. Furthermore, she elaborated that the Municipal Assembly saw the rainwater collection system on her house and decided to contribute roofing sheets to the other side of her house.

Hammad also explained later that a neighboring house that also received the rainwater collection system decided to change the entire pitch of their house to more effectively

collect water. It was exciting to see the community beginning to really see the benefits of the system and making change themselves!



By the time we arrived at Madrasa Alley in the Zongo after a morning meeting at GHCT, we were almost a ½ hour late “US time” and a ½ hour early “African time”. When we greeted Muhammad and Yusuf who would take us around to the five remaining houses who had received rainwater collection systems last year, Muhammad grinned and told us that since we were late we would now have to wait until 12 o’clock US time – another 4.5 hours. Going by the time change itself – this was an angle I hadn’t thought about! Luckily, he was joking and we began our rounds shortly afterwards.

It was at the first house we visited that Katherine would be given her new Arabic name. In recognizing me, the woman smiled, held both my hands and said, “Habiba! Thank you, thank you, thank you!” She then looked over at Katherine and before I could even finish introducing her as my assistant, she exclaimed, “Fati! Fatima!”. From now on, Katherine would be called Fati or Katherine the Pure in the Zongo.

After leaving this first house, Muhammad turned to me and said,

“You know this place well. From now on, you are the captain and we are the crew. Lead us!” This analogy carried us through the afternoon from one house to another. When I had successfully navigated us to the last house, he announced, “You did well! You have won the captain of the year!” I let him know that I couldn’t have done it without such an amazing crew – Katherine taking photographs and Muhammad translating every question and answer for those residents that didn’t speak English.

The content of the interviews were similar to yesterday - in every case the roofing, gutters, and containers had been well-cared for and showed little wear. At one house, a gutter had fallen off from a storm that occurred a week ago, but the woman explained that a carpenter was on his way to fix it.

Though no one seemed to have problems with the system, one woman explained that when she mixed well water and water collected from the roof that it felt itchy; I let her know that we would look into this to see if we could figure out why that might be the case. Other than that, the

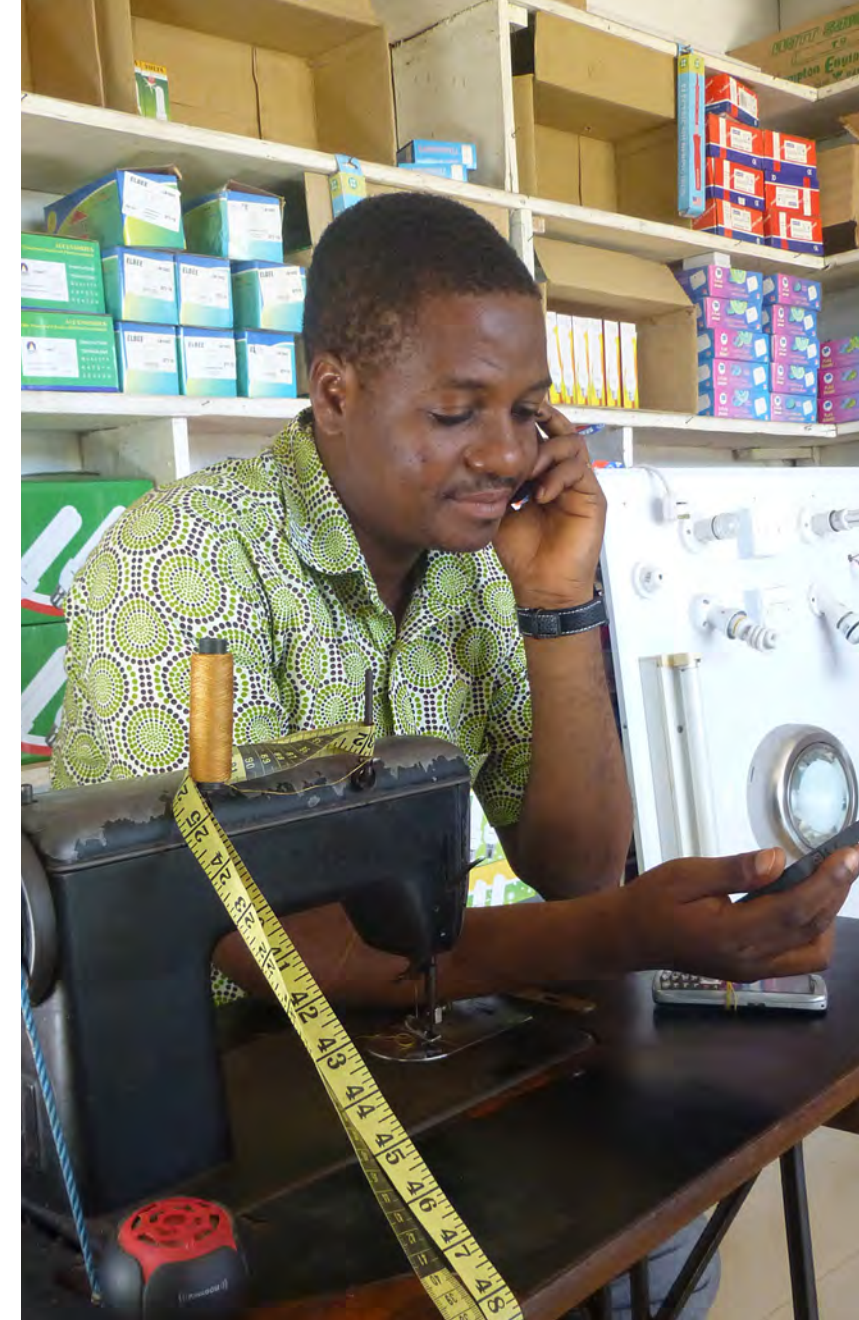
overall consensus was that the owners knew how to filter the water, maintain the system, and most importantly, shared it with all of the other members of the community. In fact, when we asked again and again, how many people used the system, the most common answer was,

“Many, many. They all use it. The entire community is using it. Thank you!”

Late in the afternoon, we met Hammad at his lightbulb shop bent over his sewing machine attaching a breast pocket to an ornate shirt. He smiled and said, “I am a man of many trades. Today I am a tailor.”

We touched base with him regarding the afternoon’s interviews and together, we made a list of the remaining activities we needed to organize for the week. He pulled out his pen and paper, began taking notes and even began letting us know by when we needed to complete specific tasks. Hammad has really begun taking initiative of the project and it has been exciting to take more and more of a backseat as he takes ownership of the rainwater collection system installation process.

Clearly, Hammad was also in a playful mood this evening. At first, he had been telling us that we needed to buy him a jet, but somehow the conversation turned into us needing the jet to get back to the guesthouse before dark. Since clearly the jet was not an option, Hammad came up with another, “I know something that can carry you home,” he said, “The little boy mosquitos that like to hang out at my shop. They will take you, I know it!”





made in china

To prepare for the upcoming workshop, Katherine and I decided to see what locally-made products were being sold in the market downtown. Perhaps this would give us some additional ideas for other types of training sessions we could hold with the residents of the Zongo. Unfortunately, as

we weaved our way through the stalls, "Made in China" was most often plastered across the pre-packaged labels. The only locally made items we could find were fruits, vegetables, fish (smoked and fresh), cow hide (a Ghanaian delicacy) and other meats, soaps, and batiks. The rest, even the rice,

was mostly imported. By the end of our excursion, we had narrowed down our training options to raised planting beds for cultivating fruits and vegetables, soap-making, and water filtration. Perhaps at tomorrow's workshop, the residents would be able to provide us with some other alternatives.



a workshop

By the time we arrived at the Zongo this morning, the two tents had already been raised, the minerals (soda) had been placed in a refrigerator, and the two pieces of plywood we had requested for our exhibition were ready and waiting. We sat with Hammad and went over the details of the program – when people would arrive, who we should thank, and who would be serving as the chairman and MC (translator).

After Hammad left to go to the mosque, Katherine and I (with the help of many of the children) hung the exhibition composed of four main sections: introduction, theory and context, last's year's implementation, and this year's goals.



By 1:30, the mosque had been let out and members of the community began to slowly trickle in. Though the turn-out was lower than expected, we still had over 38 people attend the workshop and about 70% of them were women. When I asked Hammad why it was so difficult to get good attendance at these types of community forums especially when it was announced in all of the local mosques, he explained that there are too many programs occurring simultaneously, many of them being weddings and funerals that take priority over a workshop such as this. In addition, tomorrow is The Ramadan Conference and this year it would be hosted by the Central Region here in Cape Coast. Thus, many members of the community were preparing for this important meeting.

Even with the lower turn-out, the workshop went very well. The community was extremely appreciative of last year's efforts. The same woman who had given us our Arabic names (Habiba and Fati) expressed her profound gratitude for last year on behalf of the ten beneficiaries who received

rainwater collection systems last year. Additionally, the chairman commended us for what we had done and what we planned to do and thanked the Water Conservation Committee for their volunteer efforts. Finally, he thanked Allah for Ghana's political stability and peace that enabled these types of projects to move forward.

In terms of questions and comments at the end of the session, many of both the men and women reiterated the importance of continuing the rainwater collection systems as it helped with leaking roofs and provided water for not only individual houses, but also the entire community.

Many residents also brought up the importance of education and asked if the project would be able to set up scholarships for the talented youth in the community. In response, I agreed that education was of fundamental importance.





Since the mission of The Zongo Water Project is centered around water however, I explained that the youth educational component at this point in time would be workshop-based and provide children with knowledge about local issues and solutions concerning water systems, hygiene, and the environment. The community agreed that this type of education is necessary, foundational and complimentary of other subject matter they would be learning.

As for the pilot project whose aim is to have an economic and social benefit, the overwhelming majority was eager to learn how to make their own soap. Even though these training sessions had initially been aimed towards the women, the chairman raised his hand and asked if he could participate.

I had been hoping that other ideas would be brought forward during the workshop, but since the majority overwhelmingly supported the soap-making, we would continue to research this particular vocational skill to see if a training session would be feasible in the next few weeks.

Hammad was clearly pleased at the completion of today's workshop. He said,

“As for this one, the community is very happy about the training and they will all want to participate, even the chairman wants to know how to do this!”

these phones, they make us lie!

Another productive day in Cape Coast! This morning Katherine and I met the Program Director at Ghana Heritage Trust to review their Five year Strategic Planning Document. After flipping through the document the evening before, we came with a series of questions. What projects have been tackled so far this year? How many of the projects are directly related to the maintenance of Kakum National Park versus community projects in the Central Region? Are there any projects that address water issues directly and if so, how? How does GHCT ensure the sustainability of the community-based projects? Where does the funding come from?

Our conversation did not expand too far beyond the scope of the document itself until we began talking about the pollution issues of the Kakum River. The mining areas directly north of the river are polluting its waters and communities downstream. To address this issue, GHCT has organized educational workshops for the affected residents to help them understand the environmental and human consequences of the

contamination. Since Kakum's watershed encompasses many communities (large and small, urban and rural), we talked extensively about how such a regional approach to environmental community planning could help the communities understand how one settlement affects another. Zooming into The Zongo Water Project, we ended our conversation by figuring out how we might work together to sustain not only the rainwater collection systems, but also the soap-making training.

The program director suggested that each participant in the training should invest 1 Ghana Cedi each week towards the business and that within a month or so, the residents would be able to purchase the needed materials and get a soap-making business up and running. We agreed that a long-term, community-sustained business strategy ought to be part of the training and thought we should talk to the community further to see what seemed feasible and favorable to them.

After a few hours in the Cape Coast Archives and in the shade

of Hammad's shop, we discussed the remaining items to be purchased for the rainwater collection systems, planned a follow-up meeting with the Chief Zongo, and reviewed the minutes from yesterday's Zongo Water Committee concerning the houses to be chosen to receive the rainwater collection systems and the members to attend the soap-making training.

The committee had picked 11 out of 15 recipients for each and would decide on the rest this evening after examining the roofing condition of the houses and speaking with more residents about the training and to what extent they would benefit. Hammad looked at his watch and shook his head, "Salia was supposed to be here an hour ago to put the stickers (logos) on the rainwater collection containers. These phones make us lie!" He explained what he meant by telling us about one time when he had called up his friend who said that he was in Accra but that in the background, Hammad could hear the loudspeaker coming from a junction just down the road.



"Are you sure you're in Accra?" Hammad had asked the friend, "It sounds like you're in Pedu junction." The friend had later admitted that he was actually at the junction Hammad had mentioned, but had been on his way to Accra.

Salia and a friend finally arrived with stickers in hand and together we eagerly applied them to the large collection containers.



soap-making

Katherine and I arrived at Ghana Heritage Conservation Trust bright and early this morning in hopes that the trainer and trainees would follow suit. Unfortunately, this was wishful thinking and we spent the first 20 minutes setting out the chairs and tables ourselves without hearing from Mr. Haywood.

I finally called him just before 8am and he said, "I'm coming, I'm coming. I'm at the market getting the oil." Great, I thought

remembering Hammad's comments about the phone yesterday. For all I knew, he could be in Accra right now. Finally, around 8:15 he arrived with all his materials and about seven trainees were settled in their chairs ready to begin. By 8:30 we had a total of 12 trainees including a couple of interested staff members from Ghana Heritage Conservation Trust. At first, I couldn't tell how interested the trainees would actually be in the soap-making process. To what extent were the

residents interested in making the soap themselves and selling it? Were they just intrigued by the process or did their ambitions extend into a profit-making business?

After we had completed mixing the caustic powder and water, it became clear that the trainees were far more excited than I had initially thought. The trainees asked Mr. Haywood one question after the next and he took his time



thoughtfully answering every one. The nature of these questions, suggested an interest in soap-making that extended beyond the training sessions: Where do you get the materials and how much do they cost? How much do you need to make until you start generating a profit? What colors and perfumes may be added to the soap? What will our trademark be? In response to this last question, I showed them the logo of the Zongo Water Project and asked if they would be interested in using this for their stamp.

They nodded vigorously and one of the women said,

“Yes! This is Zongo soap!”



The trainees continued to take avid notes throughout the morning and we promised to also provide a small instruction book that illustrated the process at the end of the sessions. When the morning came to a close,

a couple of the women trainees approached me and thanked us heartily for the workshop. “We really appreciate what you are doing for us. It is going to be so good to know how to make the soap. Allah is sending you blessings!”





بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
وَالْعَدْلِيَّةِ رَبِّكَ فَانْحَرِيكَ
فَدَعَا وَالْمَغْفِرِينَ سُبْحَانَكَ
تَا يَدْرُؤُكُمْ فَوَلِّسْهُمْ بِمَعِي
إِنَّ الْإِنْسَانَ لِرَبِّهِ لَكَنُودٌ
وَأَنزِلْنَا عَلَى قَوْمِكَ الْقُرْآنَ
لِتُحْيِيَ الْبَشَرِ لَشَدِيدِ أَقْلِهِ
بِأَنَّهُمْ إِذَا رَفَعُوا إِلَى السَّمَاءِ
يُخْضِلُونَ مَاءً فِي الصُّورِ إِنَّ
رَبَّهُمْ بِهِمْ لَبَصِيرَةٌ

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
تَتَرَكَّى وَدَكَرَ
صَلَّى بَلْ تُؤْخِرُونَ
الدُّنْيَا وَالْآخِرَةَ خَيْرٌ
إِنَّ قَلْبًا لَقَبِي الضَّحْفِ
بِصُحُفٍ إِبْرَاهِيمَ وَمُوسَى

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.....education.....

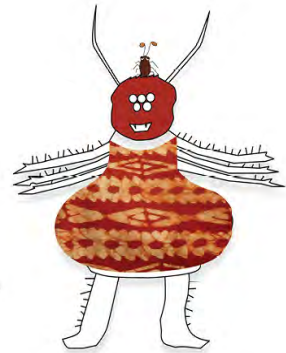
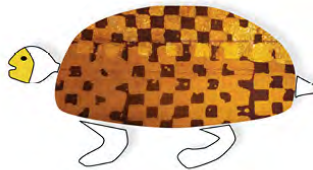
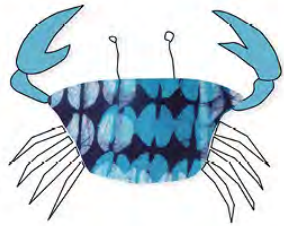
crab, tortoise, and spider

We began the morning with little more than a basic framework for the folktale we hoped to generate with the children. First, we reminded them about the story we had read last week and what some of the problems had been that the cockroach and ant had faced and how they solved those problems. Then, we asked them about other water-related problems the Zongo community faces. What do these problems look like, smell like and sound like or even taste like? After brainstorming problems paired with solutions, we talked about the setting and it was clear that the local lagoon was the favorite—we decided to call it The Zongo Lagoon. Afterwards, we talked about the main characters. Should they be animals or people? How many main characters should we have?

If we use animals, what personality traits are associated with which local animals? Which animals would cause the problem and which ones would find the solution? The spider was immediately a popular choice among the children. He was known for being smart, yet extremely devious and even lazy. The second animal they chose was the crab who they agreed was hard-working and also the symbol of Cape Coast. They also wanted to include the tortoise as he was slow, but very wise.

Though it took some time to encourage the quieter children to speak up, we ended up with a rich narrative about a spider, crab and tortoise that lived by the Zongo lagoon. The spider was a miner and polluted the lagoon's waters without caring about the other animals. The

crab (a fisherman) and the tortoise (a medicine man) had to develop a plan to trick the spider and help solve the community's problems. Before ending the lesson, we had each child draw the main characters without looking at each other's sheets of paper. This way, we could use multiple renditions of each animal throughout the story. Next weekend, using a storyboard as a tool, we will continue to finalize the folktale and add illustrations to each page. To be continued!



powder and bar soap

The last few days have been full of soap-making training and distributing the rainwater collection system materials to all of the community members. Each morning we woke up earlier than usual (around 5:45) and headed to town to prepare for our soap-making sessions with the instructor Mr. Haywood and our ten trainees from the Zongo community.

The participants ended up being about half women and half men – more than half of which were youths under the age of 18. Involving the teens in this activity was especially important as there had not been much opportunity previous to the training for them

to get involved in the Zongo Water Project.

The first day of training, we spent time mixing the caustic soda (sodium hydroxide) with water – a process that can actually be dangerous if one does not follow the right precautions. After making this mixture, we let it sit for about three days in a covered container.

Meanwhile, the instructor answered numerous questions including those outside the realm of soap-making such as why he had decided to convert from Islam to Christianity. The Zongo community members were intrigued and we had long, friendly debates in the shade

of GHCT's garden about the differences and similarities among the world's religions.



Finally, by Friday the caustic solution was ready and we were able to add it to a mixture of coconut oil, perfume, and color. In many cases, additional chemicals are also added at this point, but we had specifically asked to leave this out so our product would be eco-friendly. After every trainee took turns stirring this mixture for a total of about 20 minutes, we let it sit for another three hours. While a few trainees left while the soap hardened, the rest of us stayed to watch the process and eat Burger Nuts (a popular Ghanaian snack of peanuts coated with a hard candy shell).

Since I had never made either powdered or bar soap before, I have to admit I was uneasy during this entire soap-making process.



At times, it was impossible to tell whether everything was going according to plan or not. What would the product look like and would the Zongo community be proud of what they produced? At the end of the day though and having tried to intervene unsuccessfully at points, Katherine and I finally put all of our faith into the soap-maker.

Once the soap had finally hardened, the trainees sieved the soap into another big bowl and then laid it out in the sun to dry. Since it needed more time, one of the trainees volunteered to bring it back to her own house and lay it out in the sun until the next day of training.

Since the completion of the soap-training, the woman on the left has already made and sold her own bar soap. And, the woman on the right has been collecting soap-making materials to start a soap-making business with her husband.





blessings

The last day of training (yesterday), we packaged up the now dried powdered soap and began making the slightly more challenging bar soap. The process for the bar soap was almost exactly the same as the powdered soap in the beginning except that the ratio between the caustic solution and coconut oil was 1:2 instead of 1:1. When we had finished mixing the oil and caustic, we poured the mixture into a larger wooden mould and once again let it sit until it was almost hard – about three hours. Once again, we made conversation while waited for the soap to harden.

Just as it was about time to pull the soap from the mould, it began to rain – just lightly, but enough to make me nervous. When I asked the other trainees whether we should bring the operation inside though, they looked at me and laughed. “This type of rain we call blessings,” one of them said. “It just refreshes us and then goes away.” She was right – the rain stopped soon afterwards with no harm to the soap.



The next two hours, we cut the soap, pounded it into a rectangle, stamped it, and beveled its edges. The trainees were thrilled by the final product and formed a long assembly line in which each person helped put the finishing touches on the soap.

At the same time, they excitedly began to chatter about how to develop a business plan. How could they work together to raise enough funding to start production? Where would they sell the soap and for how much? After we finished cutting down most of the soap and packaging the powder soap, a few passersby saw that we were making soap and asked if they could by some.

The trainee contingent looked at one another gleefully and responded that it wasn't for sale yet and they still needed to come up with a fair price. This exchange only fueled their entrepreneurial attitudes further and the "all business" conversations lasted until we had packed up all of the materials and soap products into a taxi to take back to the Zongo.





the distribution

The afternoons of the last three days were focused on the distribution of the rainwater collection systems. It turned out that collecting all of the materials from disparate parts of Cape Coast and delivering them to the congested area of Kotokaraba market was more difficult than I ever could have imagined.

To further complicate the situation, the store that had promised us 120 roofing sheets had only been able to provide us with 56 and so we had to return the following day to complete the distribution to all of the houses. The Zongo Water Committee was extremely generous with their time in taking us to each of the houses and talking extensively with the

recipients about how to install the system and when we would return for a final inspection. By the end of the three long days, all of the materials had been delivered and the recipients seemed poised to begin construction!





Perhaps the most memorable moment of these three days though was when Hammad turned to me at the end of the distribution and said, "Emily, something has just made me very, very happy. I will tell you later." That evening he told me that even though most of the community understood the project and were very grateful for all we have done, that there were a few that had kept giving him a difficult time whenever he talked with them.

What Hammad let me know this evening though, was that in seeing the materials and our efforts today, had changed their minds. They were now in full support of the project, praised us for our efforts and even said that they would attend the closing ceremony.



inspections + preparations

Much of the day today was spent planning for tomorrow's final closing ceremony that has been generously sponsored by the MIT Public Service Center. Thank you MIT!

We arranged the tent, chair, and mineral delivery as well as the payment for the PA system and the drummers in the morning and prepared final invitations, programs, trainee certificates, and speech back at the guesthouse that night.

In addition, that afternoon, we began the final rainwater collection system inspection during which we went around to the first ten houses to ensure that each had begun installation. While most houses at least had replaced the roofing sheets and some had added the gutters, there were still two houses that hadn't started work at all.

He invited The Zongo Water Committee gave them a good talking to on the spot and I will be shocked if the entire system isn't installed by tomorrow morning!

In all cases Katherine and I were heartily thanked by the members of the community and the women were especially grateful. They would take our hands, firmly our palms into theirs, and repeat thank you in Hausa, "Nagodiye, nagodiye, nagodiye" over and over again.

There were also a couple of cases in which the residents would invite us into their home and show us exactly what roofing they were going to replace and where the gutters would go. For every house, it was clear the residents had thought through exactly which roofing sheets they would replace, where the gutters would go, and how to get the flow of water as close to their kitchen as possible.

At one of the last houses in the evening, Katherine and I stumbled upon this strange creature – at first I thought it was a rooster and then a goose, but it seems to be somewhere stuck between – geesters I came to call them!



At the end of the day, Hammad turned to me and Katherine and said, "I am very excited for the program. Very excited. I think this one is going to be different than the last.

**"People will come in their numbers.
You just wait and see!"**

I had thought the turn out to the last program was pretty good myself (about 38 people), but we would wait to see what tomorrow would bring...





empowerment



closing ceremony

Though Katherine and I had spent almost the entire month together, we split up for one of the first times this morning to make sure we could get everything ready for the final ceremony. While she finished preparing a comprehensive soap-making pamphlet to be given to each of the trainees with their certificates, I worked with Hammad on finalizing the ceremony details and setting up the tent.

By 1:30 we had reunited and a ½ hour later residents began to filter in. Since the ceremony was supposed to begin just after 1:30 prayer, I was concerned at first by the large number of empty seats. By 2:45 though, all of the seats had been taken and Chief Wangara the Chief Zongo Representative, the Zongo Water Committee, and all but one of the soap trainees were present. There were over 55 residents present and we were ready to begin.

This ceremony followed a similar structure to the opening ceremony a few weeks before, but this time we had the bonus of a Zongo drumming group. In-between the prayers and

speeches, they would play and sing while residents would stand up and invite others to dance. Since one tradition in Islam is to place coins or small bills at the forehead of whoever is dancing, Katherine and I found ourselves with coins stuck to our sweaty foreheads more than once that afternoon.

From the dancing to the speeches, it was truly a very touching program. One of the highlights was when a woman stood up to thank us for what we had done on behalf of the entire community. She explained that too often the Zongo people retreat from doing and don't want to participate in activities outside of the house. But, she explained, this is exactly what they needed to do – to get out and participate because good things come to those that are willing to listen and learn; it is time they gathered together as a community to improve themselves.

The chief Wangara also added how important timeliness is on an occasion such as this and that part of being a community and coming together is being on time. When a program starts at 2pm, that it

means to come before 2pm! Other speeches echoed the importance of Zongo cohesion + empowerment and most often used the soap-making training sessions as an example.





ZONGO



SOAP



The program ended with awarding certificates to the trainees and an exhibition of the soap they produced. Everyone at the program received their own samples of both bar and powder soap. "This soap", one of the Zongo Water Committee members said, "is for us to test out at home to make sure it works well. We should all be buying Zongo Soap!"





At the end of the program, I asked Hammad how he thought the program went. "Oh wow." He said.

"Very well. I am very pleased. They all came in their numbers!"

reflections from a youth in the zongo

The narrative that follows was written by an older teen in the Zongo Community about current water-related issues. Though I had always planned for a community member to participate in the journal writing at some point, the boy who wrote this essay approached me of his own accord telling me he wanted to write about local issues of water. Below (and without any steering from me) is his essay on water that begins with a couple short narratives and ends with his own interpretation of the Zongo Water Project...

1.) It's Wednesday, the third day of June and Maryam had already woken up at about 3am to begin with her chores. She has to get to the nearest bore hole to fetch water as early as possible in order to avoid being trapped in the long queue. This has been Maryam's routine for the past two weeks, since the water shortage had started in the city. Maryam had just begun washing a big pot that she made "waake" (rice and beans) in, when she heard a thundering sound. She looked up

into the sky as if she was studying it and continued with her work. Then, she felt a drop of water on her back, then another. Before she realized, it was raining. She quickly went inside to get her buckets and basins to collect water. She was overjoyed seeing the sight of the rain filling her buckets and basin. "Ah! Almighty God! Water is definitely one of your natural elements that we as humans cannot do away with!" She said and heaved a sigh of relief.

2.) This year the rains had been delayed and the Kakum River has gradually dwindled in quantity. Since the water company needed to shed water across the Cape Coast Metropolis and there wasn't enough, people in the city had to rely heavily on boreholes, wells, and a few taps. The situation also made people turn a blind eye on the safety of the water they drank since the water was scarce. One potential outcome of this is an outbreak of diseases.

The poor water collection and storage facilities in Ghana is a situation which needs to be taken seriously if the water crisis is to be brought under control in the near

future. Steps must be taken by the government to address this situation.

3.) The Zongo community and specifically the "Kotokaraba" Zongo has been worried about this water problem for years now and have long lost hope in their leaders for any turn around of the situation for the better. Emily Williamson has studied the Zongo Community for some years now and realized the need to initiate a Water Project in the community.

Emily, together with some members of the community, formed a Committee on water and are working very hard to restore the hope that has been lost in the community for years. Workshops were organized by the committee in order to engage the members of the community.

The purpose was to discuss relevant issues, difficulties they might be having, and to educate the community on plans to improve lives and hopefully accelerate development on water projects in the community. The committee

brilliantly communicated with members of the Zongo community and introduced the water collection and storage systems in the community that has so far benefited 25 houses.

Like a light in darkness, Emily is gradually restoring hope in the community and improving the standard of living of people in the community. She is doing a great deal of work and I think whichever institution or people are supporting her should continue to do so and perhaps increase the support so that everyone's dream in the Zongo community will become a reality one day.

Water is life and conserving our water bodies is our utmost responsibility. The earlier we put an end to our irrational behaviors and start a new page of collectively restoring, protecting, and conserving it, the better for us and the generations that are yet to be born.

Ruwa ZONGO



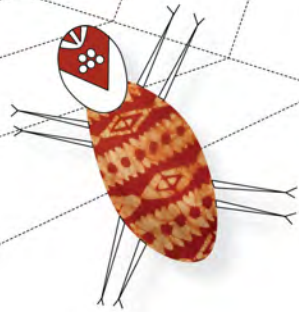


breaking news

On our last day we gave each child his/her own copy of the book. We hope to also publish the book in the States and give all of the proceeds back to the school! Last night, I asked one of the older children what the younger kids thought about the book.

He grinned and said, "This is the breaking news in the Zongo! All of the children will let everyone know about this. Even this afternoon, I went back and lots of adults and kids were all huddled around a single book reading it. This will truly change things."

Though my final thoughts will come at a later date, I just want to emphasize the importance of these smaller scale engagements such as those with the children. Even though the NGO world is so focused on making immediate visible change that can be replicated in mass quantities, it is these highly personalized, creative acts that have made the most difference in empowering the Zongo Community. And, I believe it is these acts that will translate to the large, visible change later on.



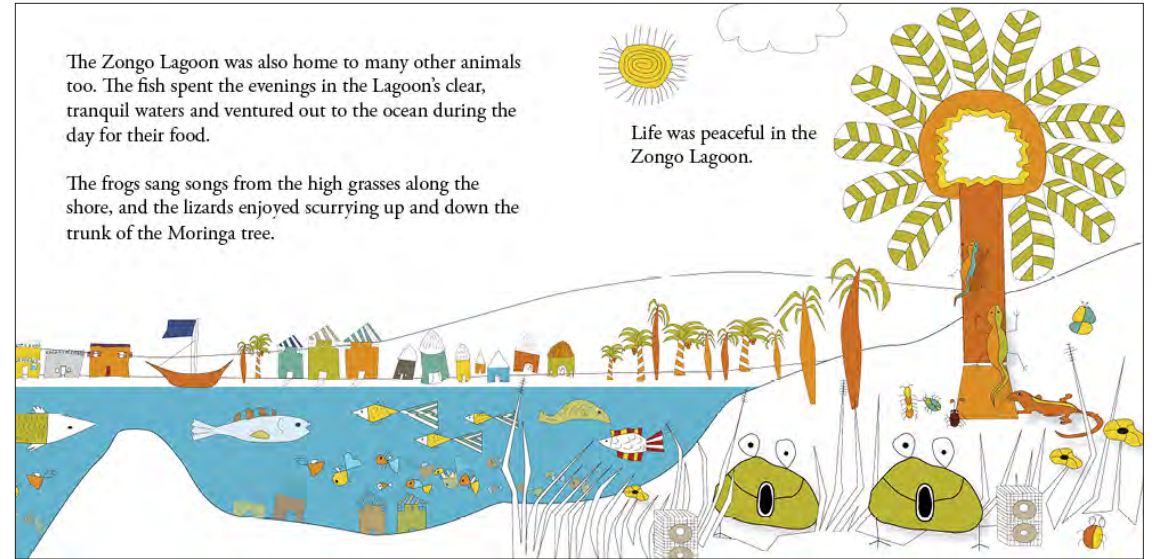
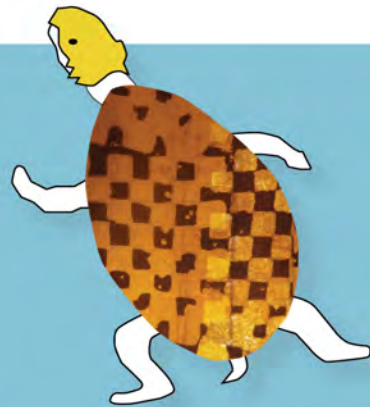
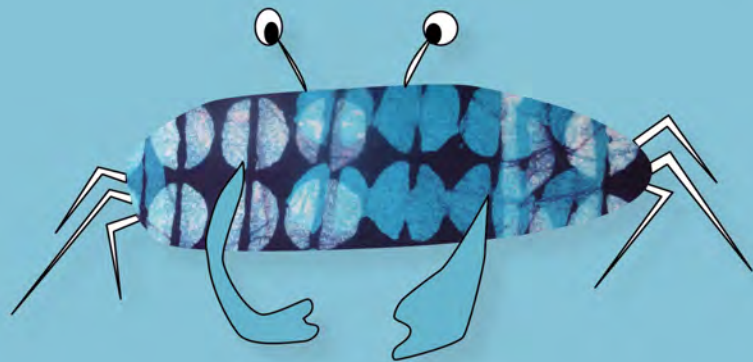
GIZO GIZO!



a tale from the Zongo Lagoon

written and illustrated by the Students of
the Hassaniya Quranic School in
Cape Coast, Ghana

composed by Emily Williamson

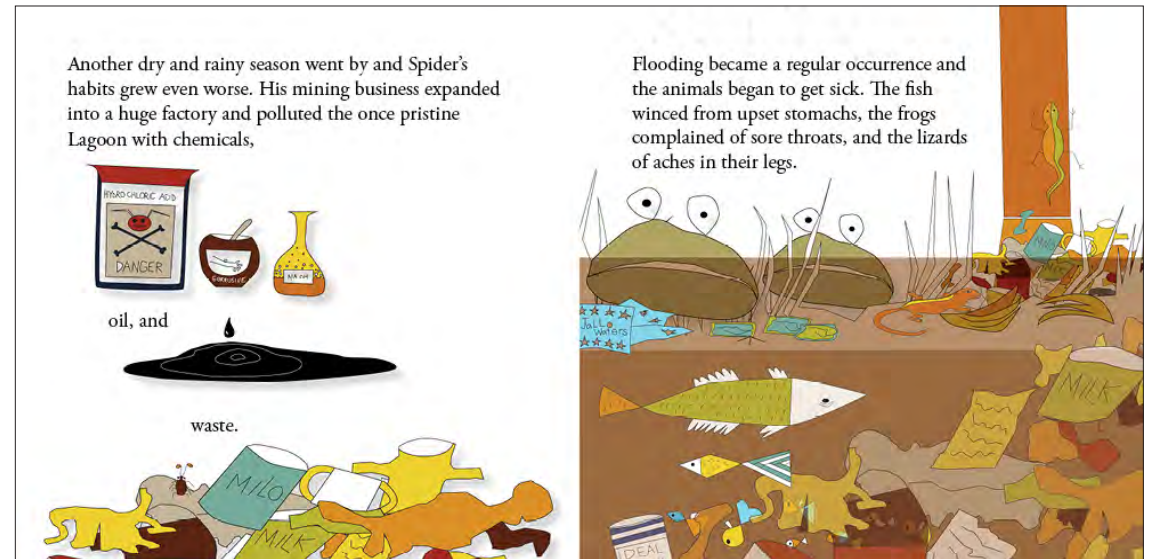


The Zongo Lagoon was also home to many other animals too. The fish spent the evenings in the Lagoon's clear, tranquil waters and ventured out to the ocean during the day for their food.



Life was peaceful in the Zongo Lagoon.

The frogs sang songs from the high grasses along the shore, and the lizards enjoyed scurrying up and down the trunk of the Moringa tree.



Another dry and rainy season went by and Spider's habits grew even worse. His mining business expanded into a huge factory and polluted the once pristine Lagoon with chemicals,

Flooding became a regular occurrence and the animals began to get sick. The fish winced from upset stomachs, the frogs complained of sore throats, and the lizards of aches in their legs.



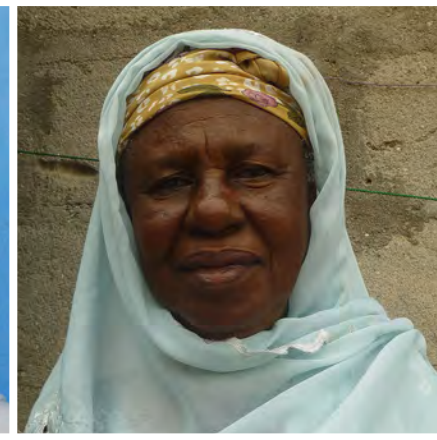
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15 RAINWATER collection systems added...

+ a total daily water supply for 250 people

+ a total of 1,500 gallons of water saved per day





ruwa zongo