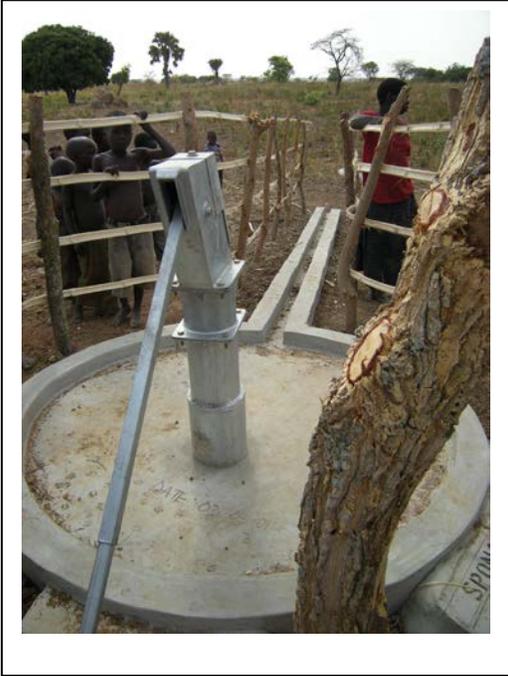
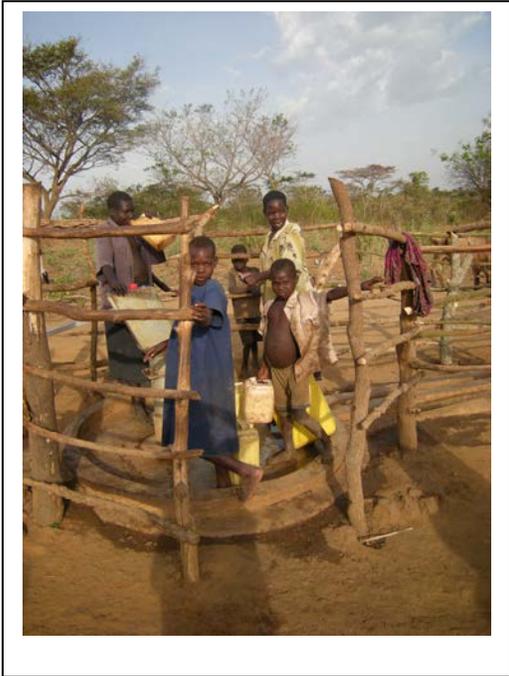


**Aromo Sub-County Water & Sanitation Project**  
**2011 - 2013**

*Annual Progress Report*  
*May 2012*



Canadian International  
Development Agency

Agence canadienne de  
développement international

# 1. Project Background

## **(i) Aromo Sub-County, Lira District, Northern Uganda**

Divine Waters Uganda (DWU), in partnership with the Ryan's Well Foundation (RWF) and the Canadian International Development Agency (CIDA), are working together to provide access to safe water, sanitation and related community mobilization, skills training, hygiene education and sanitation promotion for Aromo Sub-County of Lira District, Uganda. In 2009, Aromo Sub-County was identified through the local district water council as the geographical focus area for Divine Waters. As such, Ryan's Well has worked with Divine Waters to develop a multi-year project implementation and monitoring plans.

Project activities began in Aromo Sub-County on March 21, 2011. To date, four quarterly progress reports have been submitted by Divine Waters to Ryan's Well along with regular weekly updates and discussions. The quarterly reports include information on activities completed or in progress, stories from residents of the area, challenges faced and measures taken to mitigate impacts and photos of project sites, training events and residents of communities in Aromo.

Aromo Sub-County is located in the extreme north of Lira District. It covers an approximate area of 186km<sup>2</sup> and is divided into 7 parishes and 119 villages. According to a 2002 census, it is home to approximately 27,000 people with 15,000 females and 12,000 males.

## **(ii) Partnership of Divine Waters and Ryan's Well**

Divine Waters Uganda (DWU) is led by Director Deleo Moses Ocen, based in the town of Lira, Uganda. DWU contributes their expertise on local and national water policy, sanitation and development best practices, technical expertise for drilling and construction, proven community development methods, cultural knowledge and local insights towards the success of this project. Ryan's Well Foundation (RWF), a Canadian-based NGO, first partnered with Divine Waters in 2005 based on their experience and expertise in development of water, sanitation and hygiene in this region. The Divine Waters team is comprised of 14 people including the field crew of drillers and technical experts, community training staff, financial officers, monitoring and mobilization staff and administration.

At RWF, CIDA program activities are led by Julie Truelove, Program Manager. Detailed reporting, best practices in the water and sanitation sector, strategic planning, information sharing and capacity building of local partners are the main focus areas and contributions of RWF. The roles of gender integration and environmental impact are shared between RWF, who bring information on best practices, and Divine Waters, who incorporate this information into the implementation plan in Uganda.

Financial information is tracked by both organizations with DWU reporting quarterly on the expenses in the field and RWF adding in-Canada expenses including program management, public engagement and overhead for RWF. All financial and progress reports are drafted with input from both RWF and Divine Waters, with RWF finalizing reports in required format and context. RWF relies on Divine Waters' technical expertise and local knowledge while reporting and strategic planning are strengths that the RWF provides for Divine Waters. These complementary skills enable a progressive partnership with each organization and lead staff adding value to the programme.

## 2. Activities and Accomplishments

### (i) Provision of Access to Safe Water & Sanitation

**(a) Outputs to Date:** This two year project is making strong progress. As of April 2012, the following has been accomplished:

- Identification and construction of 13 shallow wells (of 15 planned) all of which are operational and serving over 7,650 people.
- Identification and construction of 6 deep wells (of 13 planned) all of which are operational and serving almost 7,750 people.
- Selection and training of 19 Water Source and Sanitation Committees (of 28 planned) for the 19 well sites completed to date.
- Identification and construction of 25 latrine stances all of which are operational and serving over 1,869 students and teachers throughout 5 schools. Many of these schools have started health clubs that clean and monitor latrine usage and maintenance. They also encourage students to practice better hygiene.
- Construction of 5 rainwater collection jars with 2,500 litre capacity utilizing the roofs of school latrines as a catchment area for rainwater. The rainwater harvesting systems serve as a hand washing station and provide washing water for the girls washing rooms which encourage improved hygiene practices. During the dry season, the jars are filled with water from the school water sources.
- Trained 30 community health facilitators that spread hygiene awareness within their communities.
- Water quality testing of all wells sites and follow up monitoring on any reported concerns by residents.
- Consultative meetings with parents of 2012 class candidates for analysing problems of poor school performance.\*
- Mobilization of schools for promotion of girl retention at schools and improvement of academic performance in Aromo Sub-County through educative film shows.\*
- Identification of 10 female mentors for 10 girls in primary seven (senior class in elementary level) as a pilot project.\*

\*Initiatives were not anticipated in the original workplan but were determined to be priorities within the school programming in Aromo. These activities are undertaken by Divine Waters with no funding required.

*Refer to Annex 1 for full details of Shallow Wells, Deep Wells and Latrines*

#### **(b) Site Selection:**

Sites are identified in collaboration with local communities, district level governments and Divine Waters. Villages, in collaboration with local leaders, will assess needs and decide on a preferred location for a well which is then submitted to the Parish Development office. The Parish committees will then build an annual plan that is submitted to the Sub-County. This process is in hopes of better coordinating DWU/RWF efforts with other organizations and the long-term plans of local governments. This process enables district offices to better plan water access and coverage by reducing overlap between organizations or over concentration of well construction in certain areas.

Within the District plan, DWU will assess water and sanitation needs and determine specific sites that are feasible for wells and latrines. DWU works through this collaborative process with the Parish Development Committees and the District while also having the ability to prioritize sites and, at times, substitute sites that have a greater potential for success given the level of community mobilization or the results of hydro-geological surveys. An initial site list is submitted to RWF and any amendments are reviewed with RWF and DWU as needed. Although delays can occur through this collaborative process with the District offices it is necessary to ensure RWF/DWU comply with local policies and plans while water points are being built in the places with the greatest need and likely to result in successes. DWU enjoys a relatively strong relationship with the local Ugandan government which enables them to have input and a strong voice in local planning. It is therefore important DWU collaborate with the District government in site planning despite the challenges of time and negotiations that it can present.

**(c) India Mark II Handpump:**

The India Mark II is the handpump installed at each well. India Mark II is the standard handpump in most areas of Uganda and is locally referred to as the “Uganda Pump” And is recommended by the Directorates of Water Development for community water wells. While some studies suggest that the India Mark II can be difficult to repair, Ryan’s Well and DWU believe the India Mark II remains a better solution than other options for hand-pumps. Spare parts for the India Mark II are readily available in northern Uganda. This is also important to note because of a new initiative by the local government attempting to establish a repair network for community pumps. Through SMS messaging, communities can report repair needs and arrange repairs with mechanics. Moving away from the standard pump chosen of the local government ministries could hurt access of communities to the new repair network currently being established by the government and create greater financial challenges for purchase of less available parts for other types of handpumps not considered standard and readily available.



*Joseph, DWU Field Crew, checks an India Mark II pump installed at Omac Abiko Village in 2010 during a previous project in Aromo Sub-County.*

**(d) Latrine Design**

Based on past experience with latrine construction, the challenges of sustainability of latrines along with a desire to enhance sanitation and hygiene especially for girls, latrine design was changed and improved. Two out of the five latrines blocks constructed are drainable. This means that the pit was lined with masonry and a detachable panel provides an opening to the pit for a sewage truck to pump out the pit. While this was not a common service in the past, feedback and demand for services over the last few years has supported development of pumping services in Lira District. These are the first two latrines built with this design by Divine Waters in Aromo Sub-County. It is anticipated that the pit would need to be drained approximately once each year but this will be monitored by the school. The school is also aware of the cost of pumping and is planning for the expense.

A 2500 litre water jar was also constructed with each latrine. The jar is connected to a rainwater harvesting system utilizing the roof of the latrine block as a catchment area. During the dry season, the jars were being filled from nearby boreholes. This design provides for handwashing and bathing in the washing room. The washing room is one stance of the latrine block that is reserved for bathing. This provides privacy and a source of water for washing during the school day. At Akore Primary School, at least 300 girls bath every day which shows an increased awareness of the importance of proper hygiene and appreciation of the facilities made available..



*Sam and Nelson of DWU Field Crew finish the latrine and rainwater harvesting jar at Agak Primary School.*



*Akite Hellen, girls empowerment teacher at Akore Primary School, stands by the new girls latrine with washing room and rainwater harvesting for handwashing and bathing.*

## **(ii) Community Mobilization and Skills Training**

Throughout the communities where shallow and deep wells were constructed, Water Source and Sanitation Users Committees (WSSC) were formed and trained. The 9 member WSSC committee establishes bylaws, fee structures, and committee roles including Chairperson, Vice Chairperson, Caretaker, Treasurer, Secretary and at times a Communications/Mobilization member along with several Members. The WSSC hold a pivotal role in maintaining the well and ensuring its sustainability. Divine Waters facilitates the training and advocacy of the WSSC then a vote is held by the community themselves, without DWU present. This ensures that the community takes the lead in managing the committee and water source.

Ryan's Well and DWU emphasize the importance of WSSC training to support long term sustainability as the community assumes ownership. In total, DWU has trained representatives from all 19 completed water points and although the training is geared towards those on the water committees, 1029 community members also participated in the training. Of those participants, 58% were women (*Refer to Table 1*). It is encouraging that community members who are not directly involved with water committees are engaged and eager to learn. The participation of women in the community is both encouraging and vital to the success of the water sources. This shows a willingness to learn and participate and engagement of the community. DWU reports that many women are eager to receive training and are active participants in conveying WASH messages in their community. The objectives of this training were as follows:

- To create awareness at the community level of how diseases are transmitted and what can be done to block transmission.

- To prepare the community to keep safe water safe including the water source, containers for fetching water, storage of water and drinking containers.
- To demonstrate to the community how basic practice of handwashing with soap can reduce diarrheal disease and the impacts on children under 5 years.
- To build community capacity for sustainability and maintenance of their water source.

Topics covered within the training included water source maintenance, source bylaws, management of user contributions, simple book keeping, safe faecal disposal, urinal shelters, safe water chain, hand washing with soap, and making use of tippy taps.

Overall, the WSSCs determined a plan of action through resolutions agreed regarding:

- Monthly contributions per household and opening of an account for funds for future maintenance of the water sources.
- Resolved to replace vegetation destroyed during well drilling, planting of grasses like paspalam around the well pad and planting of “living fences” around the wells with trees species that have minimal root spread to avoid any damage to the cement well pad and will become the fence to avoid cutting more trees for replacing the fences.
- WSSC’s will form by-laws for protection of each water source.
- WSSC will hold a standing list of all users of each water source.
- Agree to replace any WSSC member who is not performing as expected.
- Draw a duty roster for their WSSC to be posted weekly on a big tree near the water source.

**Table 1 – Water Source and Sanitation Committee (WSSC) Training Attendance**

| No | Village          | Parish       | Attendance by Non-WSSC Members |            | Attendance by WSSC Members |            |
|----|------------------|--------------|--------------------------------|------------|----------------------------|------------|
|    |                  |              | Male                           | Female     | Male                       | Female     |
| 1  | Atwero           | Walela       | 15                             | 24         | 3                          | 7          |
| 2  | Bar Ongin        | Walela       | 20                             | 27         | 5                          | 5          |
| 3  | Adag Anii        | Bar Pii      | 29                             | 33         | 3                          | 7          |
| 4  | Adag Woo         | Apua         | 28                             | 34         | 4                          | 6          |
| 5  | Dago Opele       | Otara        | 24                             | 36         | 3                          | 7          |
| 6  | Ayitunga         | Apuce        | 19                             | 37         | 3                          | 7          |
| 7  | Abinek           | Acutkumu     | 21                             | 39         | 4                          | 6          |
| 8  | Te Olam          | Apua         | 18                             | 25         | 3                          | 7          |
| 9  | Acoli Dumu       | Bar Pii      | 27                             | 41         | 5                          | 5          |
| 10 | Angole B         | Otara        | 25                             | 32         | 3                          | 7          |
| 11 | Wipunu           | Walela       | 20                             | 29         | 5                          | 4          |
| 12 | Acan Godi        | Bar Pii      | 25                             | 31         | 5                          | 4          |
| 13 | Dam Odoca        | Bar Pii      | 22                             | 29         | 5                          | 4          |
| 14 | (Malyam) Wigweng | Bar Pii      | 29                             | 32         | 5                          | 4          |
| 15 | Akaidebe         | Apua         | 16                             | 25         | 5                          | 4          |
| 16 | Ayang            | Otara        | 15                             | 27         | 5                          | 4          |
| 17 | Lela Dam A & B   | Otara        | 25                             | 32         | 5                          | 4          |
| 18 | Arwot Olaro      | Otara        | 28                             | 34         | 5                          | 4          |
| 19 | Apuce            | Apuce        | 24                             | 32         | 5                          | 4          |
|    |                  | <b>TOTAL</b> | <b>430</b>                     | <b>599</b> | <b>81</b>                  | <b>100</b> |

### (iii) Hygiene Education and Sanitation Promotion

#### (a) Training of Trainers (TOTs)

The second and third rounds of hygiene Training of Trainers (TOTs) occurred in December 2011 and March 2012. Over the multiple days of training in Lira Town, four facilitators trained 16 men and 4 women. The facilitators consisted of 2 DWU staff members and 2 staff from the local government (Aromo Sub-county Health Assistant and the Assistant Community Development Officer (ACDO)). The candidates selected for TOT training were chosen because in most cases they already serving on Village Health Teams (VHT) from each of the parishes. Rather than attempting to mobilize a new group of people, DWU determined that training the VHT's, who were already engaged and evenly distributed among communities, as hygiene trainers was the most effective solution. In total 30 VHT's were trained as TOT's. The objectives of TOT training was to teach importance of water in society and in development, help trainees learn good WASH practices, equip trainees with proper messages to share within communities and encourage a spirit of voluntarism.

The topics covered in the training were:

- 1) Uses of water and common water practices
- 2) Water faeces and diarrhoea
- 3) Making and keeping water clean
- 4) Safe disposal of feces
- 5) Children and infant feces disposal
- 6) Washing hands with soap
- 7) How to make a tippy tap for hand washing
- 8) Water and Sanitation (WASH) related diseases
- 9) Community mobilization
- 10) The role of TOTs
- 11) Planning for change



*Mapping of diarrheal disease transmission during TOT training (Dec. 2011)*



*Building tippy taps for handwashing during TOT training. (Dec.2011)*

#### (b) Additional TOT Refresher Training:

DWU began TOT refresher training for those who were trained (*Refer to Table 2*) in the first TOT training sessions but required a more in-depth, and advanced training. The goal of this training was to encouraged community trainers to be committed to a spirit of volunteerism and listening to their lessons learned. This was also a way to monitor community trainer progress by asking them to report on their

activities carried out since original training. The refresher also gave the community trainers an opportunity to discuss challenges and local best practices with other trainers that may be experiencing similar issues. With DWU present, the local trainers were able to ask questions they may have received from communities but were not sure of appropriate answers. Finally, the facilitators updated the trainees' knowledge of local WASH issues and were able to emphasize certain areas that required specific attention.

In November 2011, Village Health Teams (VHTs) sent 8 representatives from local parishes for a refresher course at DWU headquarters. They received refresher training in water and sanitation (WASH) practices. They will return to their communities to lead further training in WASH methods. The facilitators were three DWU staff and a government official in charge of community health in the sub-county. DWU attempts to involve government officials to build strong relationships with local governments and help to gain an in-depth understand of government health policies.

Overall community leaders reported that open defecation still continues despite awareness campaigns in local communities and latrine coverage at about 50%. Leaders reported that many individuals will use latrines and open defecation with no condemnation from communities. There is also a lack of recognition that poor sanitation (e.g. Open defecation) leads to poor water supply and illness. This lack of knowledge from the community members re-enforces the need for increased awareness campaigns and WASH education.

There are however positive signs of change. Mr. Ojok Jasper, the community trainer for Otara Parish, trained three villages that had no hand washing stations. He then returned to find 35 hand washing stations installed. Before the training, out of the 198 households approximately 27 had rubbish pits, since the training, 128 of them were noted. This type of experience was noted from the other trainers and overall sanitation improvements continue.

**Table 2 – Hygiene TOT Refresher Training Attendance**

| No. | Participant Name  | Gender |
|-----|-------------------|--------|
| 1   | Ojok Jasper       | Male   |
| 2   | Okello James      | Male   |
| 3   | Alele Filbert     | Male   |
| 4   | Okello Ambrose    | Male   |
| 5   | Agonga Charles    | Male   |
| 6   | Lilly Angena      | Female |
| 7   | Omara Jimmy Aaron | Male   |
| 8   | Ongom Francis     | Male   |
| 9   | Obong Jimmy       | Male   |
| 10  | Odyek Alex        | Male   |
| 11  | Opio Jasper       | Male   |
| 12  | Aleny Jimmy       | Male   |
| 13  | Amule Santa       | Female |
| 14  | Etam Bosco        | Male   |
| 15  | Acwa Walter       | Male   |
| 16  | Akullo Flowrence  | Female |
| 17  | Ogoa JB           | Male   |

|    |               |        |
|----|---------------|--------|
| 18 | Owot Moses    | Male   |
| 19 | Otyang Jimmy  | Male   |
| 20 | Morro Edward  | Male   |
| 21 | Ayo Morish    | Male   |
| 22 | Betty Obua    | Female |
| 23 | Lucy Abala    | Female |
| 24 | Ocol Thomas   | Male   |
| 25 | Opio Tom      | Male   |
| 26 | Odong Gilbert | Male   |
| 27 | Omara Joel    | Male   |
| 28 | Alunga Denish | Male   |

### **(c) Regional Health & Hygiene Workshop**

A regional Health & Hygiene Workshop for NGO partners in Uganda and Kenya will take place in November 2012. Ryan's Well, with the support of Divine Waters, is partnering with The African Manzi Centre (AFMAC) to deliver the workshop. The African Manzi Centre, based in Ndola, Zambia, has been mentored by the Centre for Affordable Water and Sanitation Technology (CAWST) based in Calgary, Alberta. They facilitate capacity building workshops, including health and hygiene, in collaboration with the resources and expertise of CAWST. By establishing this partnership, Ryan's Well and Divine Waters can effectively bring together NGO partners from Uganda and Kenya along with Community Health Officers and Community Development Officers from sub-county government in Lira District and Aromo. The workshop will include 5-6 days of workshop seminars on topics including WASH, Safe Water and How to be a Community Health Promoter. Cross-cutting themes include environment and gender. *(Refer to Annex 2 for the draft Memorandum of Understanding in development with AFMAC.)*

### **(iv) Enhancing Participation and Progress of Women**

Based on feedback from Semi-Annual Progress Report 1 and further from the Workplan Update in January 2012, Ryan's Well and Divine Waters have endeavoured to review and improve initiatives related to female participation in training, involvement in the water committees and empowering girls to stay in school. During a monitoring trip in March 2012, the CIDA Gender Policy was reviewed with Divine Waters in a meeting with staff and the RWF Program Manager. This provided an opportunity to assess our gender targets and indicators and, along with information collected during visits to communities and schools, work through an informal gender analysis. As a result of this meeting, Divine Waters held a follow up meeting with staff to determine their plan of action. At this follow up meeting, it was determined that the targets for females on the water committees would be increased to 80% or 7 of 9 members of each committee, from the current target of 5 women. Time and time again, the most successful water committees are those that are managed by women.

During the monitoring trip, it was also observed and recorded that, although the number of women on each committee was at times lower than the original target of 5 out of 9 members, the women often held key executive positions of Treasurer, Caretaker, Secretary and at times Chairperson. These are positions held in high regard and with responsibilities for tracking fee collection and reserve funds and daily maintenance of the well as Caretakers. It was reported by females in the community that when women

are in these roles on the water committee, they feel comfortable and able to approach them with concerns or challenges about the well and their ability to pay monthly fees.

Two more new initiatives focus on keeping girls in school and mentorship between female community members and young girls. DWU noted that girls attending school in Aromo had poor test scores and also had a high rate of drop-out at the primary level. DWU has responded by promoting girls education through a film entitled *“Let the girls stay at School”*. Three schools have provided positive feedback and DWU intends to continue showing this film in other schools of the region. The intent is to raise awareness among students and parents about providing equal opportunity for girls and boys.

A second initiative is an innovative mentorship program between 10 young girls and 10 women from the community. This initiative is in the planning stages but would see head teachers match women from the community with young girls to discuss physical, social and spiritual challenges faced by girls as they grow older. DWU hopes to foster this program in hopes it spills over into other schools. Divine Waters is also establishing a “model school” and “model community” to showcase positive results for other schools and communities that may be struggling. These model sites will, among other issues of maintenance and mobilization, highlight issues of gender empowerment.

## **(v) Monitoring, Evaluation and Reporting**

Monitoring and evaluation visits by representatives of Ryan’s Well have taken place in October 2011 and March 2012. In October, an independent monitor from within Uganda met with Divine Waters and visited the project sites to date. This independent feedback was valuable to both Ryan’s Well and Divine Waters as we seek to ensure best practices, results against indicators and further address environment and gender issues.

In March 2012, Ryan’s Well Program Manager, Julie Truelove, travelled to Uganda to meet with Divine Waters and visit all project sites to date. In preparing for the trip, a questionnaire was developed to be used at each project site. This ensured that consistent data was collected at all sites including information on the water source committee members, gender roles, household fee collection, problems or challenges with the wells and latrines along with anecdotal information from residents and schools. Meeting with Divine Waters in person enabled us to review reporting requirements with staff, discuss ways of improving on results including environment and gender indicators and cover various topics related to successes and challenges of the project. It provided Ryan’s Well with an improved understanding of some elements of the project including gender issues, establishment of water source committees and the collaboration with local government and UWASNET (Uganda Water and Sanitation Network).

During this trip, Julie met with staff members of the Divine Waters team specifically about reporting requirements. A powerpoint presentation was done in this meeting to review reporting with finance and field staff of Divine Waters along with Executive Director, Deleo Moses Ocen. In this meeting, we covered the quarterly financial reports, the performance measurement framework along with risks and mitigation measures. In addition, the meeting provided an additional opportunity to discuss challenges related to gender and environment initiatives being integrated into the project. Divine Waters quarterly reports have been very good and Ryan’s Well relays that information through the CIDA reporting. We will establish a review process between Ryan’s Well and Divine Waters to ensure that all reports are reflective of all key issues.

### 3.0 Community Testimonials

**(i) Social Impact** - Feedback received on social impacts ranges from empowering women, to less fighting within the community to healthier home environments and marriages. Mrs. Better Obua, one of the two female trainees at the WSSC training said that she was very thankful for the training that DWU organized, and more specifically for calling them, the women, to be part of it.

*“Cleanliness in homes depends a lot on the women. I have learned a lot about water which is a source of infection if not properly kept. All that I have learned shall be taken back to those who did not come”.*

Another woman, Lucy Albala, was very thankful for the five days of training. *“These were days of adding to us knowledge and reminding us of some of the important things we never considered were that serious. According to this training, water is life. My request is that the number of women be increased in such future training because women have more opportunities to teach others than men. For example, I will go back home, and the first thing I will do is to go to our water source, and from there I will begin straight away to teach and not wait for dates appointed for training only.”*

During the March 2012 visit by Ryan’s Well, many community members reported that the community now works together to ensure sustainability of their well. Where there used to be arguments at the old water sources, everyone now has safe water access and tend to be more cooperative when it comes to maintaining the well. At schools where new latrines with the washing rooms were constructed, girls are “so happy” and feel more comfortable to be at school knowing they have a private and secure place to bathe especially during menstruation.

**(ii) Economic Impact** - Many households that had been spending money and time to transport water from far villages have now been relieved of this burden. The extra time is now being invested in agriculture for food security, school fees and other family needs. The communities with new wells are now coping better with the increasing cost of living in Uganda. The number of households that needed to spend significant sums of money at hospitals and on medicines due to illnesses related to poor hygiene and sanitation will now reduce.

Wells can also initiate the creation of small business ideas from those who are in deep need of finances. Abwango Samuel, a 17 year old boy, of Adag Anii said that he was producing bricks as a source of income to pay for his school fees. However, the water source he had been using to produce the bricks was a seasonal source and during the dry season, the community didn’t allow him to use the water because it was the only source. With the new well, Samuel is able to use the runoff water from the well for free and not risk taking more than the community wishes. Runoff water is perfect for his purposes and will enable him to continue to sell bricks to attend school.

**(iii) Health Impact** - Apio Florence, 36 years of Adag-Woo village explained that the water they used to drink contained a lot of long brown worms. The distance to the safe water source was 3 kilometres away and in another village. Their local source was not only brown but milky in color. The water from the former source was very dirty and families were too ashamed to give it to guests for fear of being shamed. If she wanted to drink at night, she would have to shine a flash light inside the water pot to check for long worms. She is happy because she is no longer scared to drink from the water source. The new well has only been in place a few months but she already notices a difference in her family.

Mr. Oti Robert of Angole B village: *"In 2009, I became sick and was unable to do anything and I used to feel a lot of pain in my stomach and skin rash all over my body, some long germs came out of my skin. I was taken to the hospital and they treated me but the doctor told me that I will lose my sight."* Because of the dirty water he cannot see clearly and most likely had open infections and stomach illnesses. He later said, *"I believe that by drinking clean water, I will live longer"*.

**(iv) Educational Impact** – Improved water sources give young girls a chance to attend school and receive a long term, consistent education. Ayo Bonny, a 16 year old girl told DWU: *"From when I was four years, my mother was always attending to me. I couldn't go to school because, just like me, my sister was sicklier than I was. Therefore, I was always left to take care of my younger sister and also look after the animals. This interrupted my studies and the doctor advised my mom to start boiling our drinking water because our source was contaminated."* The new well in her village will allow her and her sister to attend school and begin breaking the cycle of poverty.

At schools where new latrines with the washing rooms were constructed, girls are "so happy" and feel more comfortable to be at school knowing they have a private and secure place to bathe especially during menstruation.

## 4.0 Challenges and Mitigation Measures

**(i) Lessons Learned** - Most villages are still water-stressed with the ratio of borehole to population served being quite high. This presents significant challenges in management and maintenance that must be monitoring on an ongoing basis. The lifespan of a well can be shortened if the usage levels are too high. It is important to continue the work in this area to ensure better water and sanitation coverage.

DWU expressed to Ryan's Well the need to adjust the pace of projects. Often donors operate on a different time-table than implementing agencies. As Northern Uganda shifts from a country requiring emergency relief to a country in development, the timetable for success will become more drawn-out. Many initiatives, like more stringent sustainability initiatives, require a shift in cultural norms that vary from community to community. There must be time for trial and error and time to adapt educational material as need be.

More time is needed to achieve mobilization, community involvement, participation and ownership. The Uganda government expects implementers to engage software components of the project ahead of facility constructions. Preparation and mobilisation for this requires time that may necessarily not fit in the donor time table.

### **(ii) Gender: Challenges and Mitigation**

- DWU have continued to promote gender mainstreaming in water, hygiene and sanitation activities. Both men and women were sensitized on gender concerns in the management of water and sanitation facilities.
- Role of women in decision making on WSSC's is still low, where approx less than 50% of women are on the committee. It is however noticed that 15 treasurers at the 19 water points are women (i.e.

79%). These women are voted by their own community because of trust. Women are believed to be more trusted when it come to stewardship than men.

- Participation of women is seen in most water points and most of the women do know who are on their WSSC. This is an indication that most women are frequently attending meetings or are involved by the WSSC. It is however not clear about influencing factors on the role of women.
- Family resources are controlled by men; this is the case at Wipunu where one woman had never paid for her water fees because her husband had not given her the 1000 shillings to pay for their household use.
- DWU carried out advocacy and diversity for 50% representation at WSSC and it proved that some women turned down their election making water sources having 40% representation in the WSSC. Reasons are that women often feel they cannot lead and many are illiterate. Instead they will say that the literate men represent them on the committee.
- The composition of water source and sanitation committee is still a challenge. This is because men still believe that water is a women's responsibility so they have to take full control yet women who are not married, and widows, fear taking leadership responsibility.

New strategies are being developed to better educate committee members of the importance of female participation in WSSC committees. DWU is also adapting their strategies to further promote women's empowerment and change targets for participation of women on the committee. Although communities are still be empowered to select their own committee members, DWU is attempting to increase the number of female members through enhanced advocacy and promotion of female participation. It is encouraging that DWU is eager to see a higher level of female participation and are equally eager to challenge local communities to meet this goal. Water committees that are already established, who have 40% female participation, have pledged to increase this to 50% by July 2012. DWU will find out why and how women participation and power in decision making can be encouraged. DWU will also find out about influencing factors on the role of women through the 70% advocacy.

DWU has found that women in executive or decision-making roles on the water committees such as Treasurer, Caretaker or Chairperson encouraged greater oversight. DWU told Ryan's Well that it is common for men who are committee chairs to visit well once a week to ensure it is operational whereas women, because the well is where they collect water, visit the well each day. The women of the community often have the most insight into the status of a well. DWU has shown increased resolve in promoting participation of women and has made it clear to RWF it continues to be a priority.

### **(iii) Environment: Challenges & Mitigation**

- Construction of wells led to creation of new paths, roads or widening of the existing paths and roads for accessibility. DWU sensitized the land owners where a well is constructed to have restricted paths. This is so that access to the wells does not encroach on agricultural land. There is understanding to this and the community are in agreement.
- Coupled with fencing at the well site, vegetation and soils are damaged during construction and access to the well. DWU have responded by sensitizing each community to use **"Omara Omara"**

the local name for a species of shrub. This shrub grows short with managed trimming and provides a good live fence. These shrubs have no thorns and the seeds can be easily planted. It is also a fast growing shrub. The shrubs roots do not affect the well pads and there will be very little needed for community to fence their wells once the shrubs are in place. Drilling mud pits are levelled and refurbished.

- All water points are well located with recommended distance from contaminating sources like former water sources or latrines and settlements.
- A Memorandum of Understanding is signed Divine Waters and the owner of the land where the well is to be located. This is negotiated with the community, the land owner, Divine Waters and support from local community development officers. This MOU outlines that the well is owned by the community, not the landowner and that the landowner agrees to specified pathways across their land for the community to access the well. Landowners do not have to agree and, in one instance for example, a well site was moved to another location when the landowner did not agree to the terms. While it delayed construction, relocating the site was an amicable arrangement to all involved.

Discussions are under ways for the source committees to plant at least 20 tree seedlings at each source to replace trees that have been cut.

To encourage environmental protection, communities have been encouraged to plant grass around the water point, bananas trees, and gardens to help the community and encourage the repair of damaged vegetation during well drilling. DWU promotion of “living fences” by planting of shrubs, rather than cutting down trees to create a fence, is a positive step forward. Current fences are often removed for firewood or other construction requiring that the water committees have to again cut trees and build a new fence to keep livestock and animals from spoiling the well. Living fences in the form of shrubs is a more sustainable method. This innovative idea has only been implemented on a small scale and there is a need to promote and support this type of idea. About 80% of the water source committees have committed to this new form of fencing.

#### **(iv) Governance: Challenges & Mitigation**

- Roles and responsibilities of WSSC are clear with evidence from over 90% of the sources while 10% remain with challenges of understanding responsibilities.
- All water sources/ community have their own bylaws about the well.
- Structure for fee collection are set at all water sources and there are evidence of continues collections for wells constructed last year and beyond in Aromo Sub county.
- Community engagement in WSSC for the future maintenance of the well is clear, many users do know when it is expected of them to meet and discuss issues related to the well.
- For all six deep wells sources, communities have paid in full their 200,000 cash contribution and have maintain positive attitude to their contributions.

- Sources that have 40% gender representation have pledged to step up their composition to match 50% representation by July 2012.
- All water points have signed land agreement which make it clear that the community owns the water facility not the family that donates the land for the well site.
- DWU continued to sensitize communities on management of their water and sanitation facilities as a result 19 WSSC were formed and trained. The numbers trained under WSSC is about 171 and out of that were 77 female which is about 45%.

The District government is now requiring communities to pay a cash fee to the Ministry of Water and Environment of Lira District for monitoring. The fee is to cover the costs of a new monitoring program being established. Through SMS messages, communities will be able to contact repair-persons and organize their own repairs. The fee is one time 200,000 UGX (\$80 CAD) payment for a deep well. While a one-time fee of 100,000 UGX (\$40 CAD) is mentioned for shallow wells, this has yet to be regulation. The community of Abinek, for example, was having a difficult time raising the funds for this fee. After much discussion with the District representatives, Divine Waters and community leaders, it was determined that the handpump chain could not be connected until the fee was paid. This was a very difficult situation. Divine Waters and Ryan's Well visited Abinek in March 2012 to further support and engage the community. They produced a record book indicating that 132,000 UGX had been collected to date. DWU has since reported that after our discussion and visit, the residents of Abinek were able to collect the rest of the funds needed and the well is now operational. DWU had resisted this step in the past, with the support of Ryan's Well, until the District monitoring could be evidenced. However, there are no longer alternative measures within the current policy and all communities within this project are in compliance.

#### **(v) Economics: Challenges & Mitigation**

Rising prices of all commodities is a significant challenge, both for this project and for local residents paying monthly fees. Fuel costs are unstable and cost of construction materials and handpumps have risen significantly since the budget was proposed. DWU and RWF continue to monitor the budget closely and all measures to reduce fuel costs are taken to consideration. Field crews stay in each community for several days at a time to help the work progress but also to reduce the transport required back and forth to sites. At the community of Bar Ongin, the female Vice Caretaker was encouraging women in the community to work on their gardens for the coming rainy season so that they may sell more produce and earn several months of water source fees ahead of time. While there is pride among the community members for doing this, the economy is very challenging with the cost of living, school fees and providing basic necessities for families.

#### **(vi) Equity and Accessibility: Challenges & Mitigation**

- DWU continues play the role of filling gaps amongst WASH less privileged, the underserved poor and voiceless. Most of the wells are constructed in the underserved areas in the remote villages.
- The pumps are low enough that all members in the community can pump water with fewer difficulties.
- The constructed school latrines provided one room for people living with disability.
- DWU will continue to advocate for equitable distribution of water, hygiene and sanitation services.

### **(vii) Sustainability: Challenges & Mitigation**

- There is proof of fees collected and funds accessible for future maintenance and repairs of the current wells. The security of the fund lies in the choice of the committees especially Treasurer, which are women in most communities.
- The committees know where to contact the pump mechanics when repairs are required or for periodic maintenance.
- All wells are well fenced and protected from animals and other sources of contamination.
- Prior engagement of community of deep wells to pay for advance 200,000 UGX, challenging though it was, created engagement and participation at the initiations of the project. Both the community and DWU appreciate community ownership without which would breed dependency.
- Selection and training of Water Source and Sanitation Users Committees (WSSC) for the nineteen wells sites is to ensure sustainability. All the WSSC that were formed a year ago and beyond are still the ones holding offices.
- Men in some of the villages prevent women from working as volunteers with such things as the TOT's, Village Health Teams or the local water committee. They sometimes see these roles as a waste of time and this, therefore, affects progress of the activities in the community.
- Low turnout for meetings, especially during rainy season when women and men work in their gardens for cash crops, is a challenge.

Some community members believe that TOT's are being paid by DWU and are in-turn asking for some pay after they receive WASH training. This was a common practice during emergency relief operations in the region. Breaking away from this practice now with the transition to development is a challenge. This puts pressure on the TOT's to mobilize the community while quelling rumours of pay. It would be beneficial to allow TOT's to engage in an income generating activity that enables them to concentrate on training and promotion within their local parishes without suffering economic consequences. Divine Waters is exploring this matter further for future projects.

## 5.0 Public Engagement in Canada

### (i) October 2011 – April 2012

In Canada, public engagement is focusing on youth empowerment, as well as education about the global water crisis and illustrating how the water and sanitation activities in Aromo Sub-County are addressing the issues in this region. To date, Ryan's Well has communicated this project with:

- Three e-blasts and one e-newsletter: feature story & photos, reaching 3,000+ people
- Fall 2011 Newsletter: mailed to 1,700 people
- Social media (reaching 10,000+ people):
  1. 20 posts on Facebook with direct mention; 5 posts with indirect references
  2. 4 posts on Twitter with direct mentions; 22 posts with indirect references/ links to posts with direct reference
- Mentions in 6 different blog posts reaching over 1,000 readers

### (ii) April 2012 – December 2012

#### Development of interactive web features for additional youth engagement

- In the planning stages of developing web content (videos, etc) on **Water, Sanitation and Hygiene Education (WASH)** incorporating the stories, images and videos collected during the Aromo Sub-county monitoring trip in March 2012. All content will be available online and educate people, primarily youth, of the impact of WASH in these communities. Content will be educational and include technical elements around such topics as:
  - Water – Impacts, how to choose a well site, approaches for water projects
  - Sanitation – Impacts, different types of latrines
  - Hygiene – Impacts, how to we teach about hygiene
- Costs will include development, production and download on [www.ryanswell .ca](http://www.ryanswell.ca).

#### Motivation Workshop for RWF Canadian Youth Ambassadors

The original proposal outlined a *motivation workshop* for Ryan's Well Youth Ambassadors (15 participants for 1 day including materials and communications).

- The Ambassador program is no longer in effect, and we believe there is an opportunity to reach a much larger youth audience from different geographic regions across Canada with an alternate plan, which includes:
  - Further development of the website youth engagement features as outlined above, with enriched content.
  - The videos will be enriched to include downloadable Q&As on the Aromo Sub-county project activities, and other interactive elements.
  - Outline and proposal from vendor coming in May.

### (iii) Educational Outreach Activities

CIDA's generous contribution to the Aromo Sub-County Water and Sanitation Project is highlighted by the Ryan's Well Foundation Education Coordinator, Elisabeth Rubli, at all educational opportunities. Such activities include:

- School visits and classroom presentations (approx. 30 each year)
- Skype presentations (approx. 25-30 each year)
- Educational conferences and workshops at Canadian universities (approx. 10 each year)

- National Student Leadership Conference (1 each year)
- Provincial teacher conferences (1-2 each year)

A summary of the CIDA project is included in all presentations/lessons/workshops with students and educators so they understand the support we are receiving and how much it will help. There is always great interest and appreciation for the work being done in partnership with CIDA, Ryan's Well and Divine Waters. Students and teachers are well aware of the need for clean water but they also see the importance of building of latrines, hygiene training and skills development that is provided within the project. The goal of educational activities is to raise awareness of these important issues, how they contribute to better health and a better life and the impact of this partnership.

Below are the numbers of educational opportunities that we have taken advantage of to speak about the Aromo Sub-County project with CIDA, Divine Waters and Ryan's Well this past year:

- School visits: 14
- Skype presentations: 30
- NGO Fairs: 1
- Conferences: 10