

Report of the Japan Water Forum Fund 2017

June 2018

Japan Water Forum



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While Japan Water Forum (JWF) assessed and awarded funding to activities based on a proposal of each relevant grass-roots organization, the said field activities were conducted under the responsibilities of respective organizations.

Therefore, all activity reports covered by this Report of the Japan Water Forum (JWF) Fund 2017 (this Report) are based on their own reports. The main feature of the JWF Fund is vesting recipients of the Fund full executive power to conduct their proposed project, so that any possible expenses incurred if JWF directly engages in them can be saved while autonomous outcomes from the practitioners can be expected.

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1. What is the Japan Water Forum Fund?

Outline

Japan Water Forum (JWF) Fund was established in 2005 to support organizations aiming at solving water-related issues at a grass-roots level. It is formed and operated by utilizing membership fees of JWF and donations through JWF's "Charity for Water".

The JWF Fund has three basic principles; 1) the maximum amount of fund is 1,000 US dollars per a project, 2) projects shall be carried out by local organizations working at a grass-roots level, and 3) projects shall be carried out with acceptable and appropriate technology and method by the locals in cooperation with stakeholders.

During the past 13 years, 163 projects were implemented and more than 196,000 people were benefited in the regions of Asia-Pacific, Africa, Central America and South America.

Total number of supported projects and beneficiaries by JWF Fund 2005-2017

- ◆ Number of implemented projects: 163
 - ◆ Total amount of funds: 161,531 US dollars
 - ◆ Total number of beneficiaries: 196,778 people
 - ◆ Number of water-supply facilities: 475units
 - ◆ Number of sanitation facilities: 397 units
 - ◆ Number of awareness building sessions: 404
- (As of 22 May 2018)

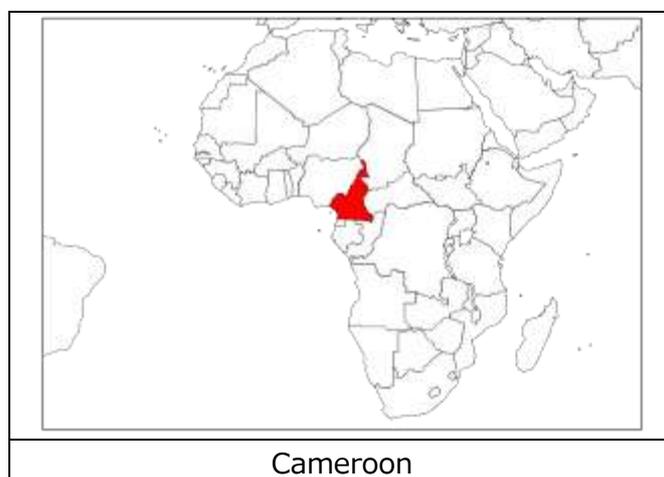
2. Projects of the JWF Fund 2017

In 2017, JWF received 211 applications from 31 countries. After careful consideration, 7 projects have been adopted from Ethiopia (1), Cameroon (1), Kenya (2), India (1), Bangladesh (1) and Philippines (1).

1) Water For Life Project Nkum Ekie (Cameroon)

Reported by Ms. Hananeel Niba

- Organization: Community Awareness and Development Association Cameroon (CADAC) (#172)
- Project title: Water For Life Project Nkum Ekie
- Country/Area: Cameroon/Centre Region
- Project period: October 2017 to March 2018
- Number of beneficiaries: direct beneficiaries 179 people (38 Women, 20 men and 121 children) and indirect beneficiaries 2,000 people
- Cost: 1,594.54 USD (JWF Fund: 1,000 USD, Contributions by the beneficiaries: 100 USD, CADAC and others: 494.54 USD)



Background

According to the surveys carried out by National Institute of Statistics on Households between 2014 and 2016, the water-related diseases still remain rampant in the targeted area, though the water-related diseases in other areas in the country have improved. People living in the Nkum Ekie village take water from a distant river from their village, and they use that water to wash dirty cloths, dishes, other materials and body. A lot of mosquitoes breed around the water source, which makes children and women at risk of malaria. Even the community health center does not have clean water supply facility.

Outputs

- ◆ **Coordination Meeting was held:** A coordination Meeting was taken place in Nkum Ekie. The meeting was made up of 17 persons, among were the village notables, the founder of the Health Center, a representative from the neighbouring primary school, the President of the divisional youth council and

village elders. The aim of the meeting was to discuss on the project to be implemented and define various responsibilities. At the end of this meeting, a local committee will be in charge of the project follow-up, population mobilization, collection of inhabitant's participation (financial and material) and operation and maintenance of the constructed well.

- ◆ **Workshop on water, sanitation and health was held:** A workshop on dirty water risks to health and means to avoid water-related diseases was held at the Hospital Center in Nkum-Ekie. It was made up of 107 participants and lasted more than 3 hours. During the workshop, the participants learned from experts on socio-economic risks of dirty water consumption and techniques to get good quality water from dirty or contaminated sources. In addition to that, this workshop also emphasized and shared some tips to manage and maintain well drains.
- ◆ **One well was constructed:** To ensure safe water sources for the beneficiaries, 1 well of 25 m in depth was constructed in cooperation with technicians being invited from a nearby town. Everything started smoothly, but some unexpected situations arose. Some natural gas was released at the depth of 19 m, and the water was found 25meters deep. For these reasons, the digging phase took longer than expected.
As soon as the well was built, however, CADAC realized that the water in the well was dirty. Therefore they cleaned the well immediately.
- ◆ **Water quality test was carried out:** The water quality test had been carried out before the well was cleaned. As a result of the test, the water contained bacteria and was not potable. After the well was cleaned, water from the well is safe now.

Because of these activities, the people in the Nkum-Ekie village could access to clean drinking water so that reduction of diseases caused by contaminated water can be expected.

Voices from the beneficiaries:

- ◆ Mr. Pierre Longin, 30 years old, Founder of the Health Center
Water for Life project is a salutary and humanitarian response to the crises of underprivileged populations. It has brought additional values to CADAC and the medical center's objectives, which are to relieve suffering and bring life to others.
I just want to express my gratitude to JWF for supporting this community, thank you.
- ◆ Mrs. Mbarga Aboui Marcelle, 38 years old, Women Leader
Actually this problem of dirty water had really been a pre-occupation in the

community since most patients were often diagnosed with typhoid and dysentery due to dirty water they consumed. Fortunately, illnesses as such are becoming to be rare in the community, thanks to the awareness workshop and the provision of the well.

- ◆ Mr. Ekomo François, 33 years old, President of Youth Council
For the past years, we have had water problems in this community because we had just a stream from which the population fetched water. Sometimes they took their bath in this stream and this often left the water dirty and not good for drinking. Now, with the well we will benefit from the implementation of this project, parents and children will have safe access to good quality water. However with the deepness of the well, it will be good if you could provide us with a water pump when handing it to us.

Success story of the project:

Commitment and dedication were the keys to smooth implementation of the activities. This was evident in the CADAC's team whose main goal was to attain expected results and provide potable water to the Nkum Ekie Community. This is why we had to put a local committee in place that should facilitate the implementation of the project activities and ensure the project follow-up within the community. As a result, youths were gathered for the preparation of the seminar hall to conduct ten seminars, women of the community provided food for technicians on a daily basis, and sands and gravels were provided for the building of the well. Sure enough, we have received the extra finances from the Bread for Life International, which helped us to complete the project even after its actual term.

Biggest challenges in implementing the project:

We had several challenges in the course of implementing this project. This shows our weaknesses in development and management of the project. The first challenge was the fact that the assistance we expected from IRAD and the Municipality was not effective. Also, in making the budget for the project, we underestimated the funds needed to cover transportation fees incurred, and we weren't aware that the water table existing at deeper length. In fact, during the digging process the technicians were confronted with the presence of gas within the hole, so they took much longer time than expected to finalize the phases of digging and building the well. Together with this, the cost of digging per meter was twice the amount expressed in the budget which was submitted to the Japan Water Forum. Also, well-building expenses were not included in the budget.

Before the project



Water source which residents use



Steep path to the water source

During the project



Coordination Meeting



Workshop on water, sanitation and health

After the project



Well digging



Constructed well with the beneficiaries

The result of water quality test



CPC
CENTRE PASTEUR
DU CAMEROUN

SERVICE D'HYGIENE ET ENVIRONNEMENT
SECTION MICROBIOLOGIE
Contrôle des eaux et des produits alimentaires

Annexe 1 DDC 400/002 10 - Support d'un rapport d'analyse des eaux



TUNSAE
TUNISIENNE UNIVERSELLE
D'ANALYSE ET DE CONTRÔLE

RAPPORT D'ESSAI N°261E

Date d'édition : 12 Mars 2018

Nom du demandeur : CADAC CAMEROUN

ANALYSE BACTERIOLOGIQUE DES EAUX

Origine de l'eau : EAU DE PUTS			
Date et heure de prélèvement : 05/03/2018 à 13H30min		Lieu de prélèvement : NGOUMOU (NKUM - EKYE)	
Conditionnement : Flacon de prélèvement stérile par le laborant		Professeur : MBAZDA EANG SOPHIE	
Date et heure de réception : 05/03/2018 à 14H00min		Date de production : /	
Température de l'échantillon de transport à la réception : 6,8°C		Date d'expiration : /	
Date d'analyse : 05/03/2018		Numéro de Lot : /	

Paramètres analysés	Méthodes utilisées	Résultats en unités formétriques de colonies (UFC)	Critères Microbiologiques Ogawa - norme de 11/11/07 (2007) n°74 de 4 Mars 2007, communiqué
Germe aérobies à 36°C	NF EN ISO 4222	> 3 000/ ml	< 200/ml
Germe aérobies à 22°C	NF EN ISO 4222	> 5 000/ ml	< 100/ml
Coliformes totaux	NF EN ISO 9308-1	> 1 000/100 ml	0/100 ml
Escherichia coli	NF EN ISO 9308-1	> 1 000/100 ml	0/100 ml
Entérocoques intestinaux*	NF EN ISO 7899-2	> 1 000/100 ml	0/100 ml
Pseudomonas aeruginosa*	NF EN ISO 16266	> 1 000/100 ml	0/100 ml
Amphibactes sulfite réducteurs*	NF EN 26461-2	> 1 000/50 ml	0/50 ml
Tuberculose sp*	NF EN ISO 18270	Absence	Absence
Filices charbonnées	CNR charbonnées	Absence	Absence

Conclusion : Eau de qualité non satisfaisante selon les critères microbiologiques de paramètres analysés.

* : rapport au consommateur que l'échantillon envoyé à l'analyse.
 Ce rapport doit être reproduit en intégralité.
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 Les résultats ou comptes de justification ou de certification de ce rapport d'essai seront fournis conformément aux lois en vigueur.

LE CHEF DE SERVICE
P. O. Mbazda
Dr. Jean Eyangah
Directeur Scientifique
du Centre Pasteur de Cameroun

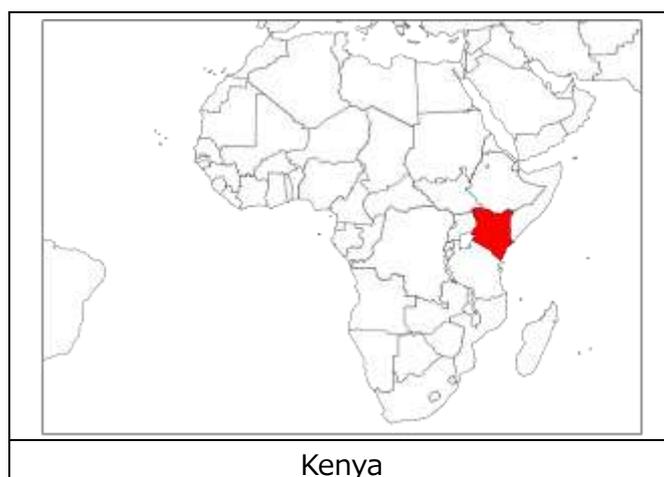
Service d'Hygiène et Environnement (Section Microbiologie)
 S.P. 2274 Niamey 100 - +227 90 00 00 48 / 22 23 34 00 / fax : 22 23 25 04 - tun@pasteur.org / tun@pasteur.pasteur.org

After the water quality test, the well was cleaned and water from the well is potable.

2) Equipping the Eshiru primary school with 1 block of 3 re-usable pit-latrines and 4 hand-washing facilities, and educate 1,200 pupils in the school on skills in hand-washing and the importance of pit-latrines (Kenya)

Reported by Ms. Deborah Patesena

- Organization: Renewed Hope Group (RHG) (#054)
- Project title: Equipping Eshiru primary school with 1 block of 3 re-usable pit-latrines and 4 hand-washing facilities, and 1,200 pupils in the school with skills in hand-washing and importance of pit-latrines
- Country/Area: Kenya/Kakamega County
- Project period: October 2017 to February 2018
- Number of beneficiaries: 1,220 people (800 girls, 400 boys and 20 teachers)
- Cost: 1,339 USD (JWF Fund: 1,000 USD, Contributions by the beneficiaries: 199 USD, RHG: 140 USD)



Background

The Eshiru public primary school, which has 1,200 poor pupils, has only 2 pit latrines fully filled up every half a year. Pupils have to stand in a queue to use existing pit-latrines during breaks or lunch time. As a result, most of them delay returning to classes and often defecate open in bushes around the school to catch up with time. Pupils do not have enough knowledge about importance of using pit-latrines and hand-washing. In addition to that, the school lacks hand washing facilities. At-least 4 out of every 10 children in the school are infected with water-borne diseases every year, therefore, a local public health authority regularly closes down the school temporarily.

Outputs

- ◆ **Project Implementation Committee was established:** Project Implementation Committee (PIC) was established consisting of 3 staffs of RHG, 2 local renowned and experienced masons with cooperation with volunteers from the ministry of water and sanitation and 2 hand-labors with vast experiences for construction of pit-latrines.
- ◆ **3 VIP pit latrines and 1 urinal unit were constructed:** 2 VIP pit latrines for girls and 1 VIP pit latrine and 1 urinal unit were constructed in the Eshiru public primary school. Wide pits and boy's urinal unit extension were adopted so that the cesspools can be emptied upon being filled up. The constructed facilities can serve as a benchmark of sanitary facility that can be replicated in other learning institutions in communities of the Kakamega County.
- ◆ **4 hand washing facilities were installed :** To wash their hands after using constructed pit latrines, 4 hand washing facilities were installed near the sanitation facilities. There is a small 1,000 liter rainwater harvesting system installed in the school. From a natural spring well nearby that is about 1Km away from the school, the pupils need to get water to fill the tanks of the hand-washing facilities.
- ◆ **2 training workshops on water and sanitation were held:** PIC hired 2 qualified and experienced water and sanitation trainers from the government's department of water and sanitation for training workshops on water and sanitation. 2 training workshops were held on usage and importance of pit-latrines and hand washing (why, when and how to wash hands) for 1,200 pupils and 20 teachers at the Eshiru primary for 2 days. Participants keenly listened when trainers explained the issues. Through the train-the-trainer program, they will transfer acquired knowledge and skills to wider range of the community
- ◆ **Operation and maintenance framework was established:** Governing board of the school that consists of executives such as chairperson, secretary and head-teacher will be responsible for sustaining the output of the project. Pupils must pay small yearly fees to be kept by the school's governing board for renovation and emptying of the pit-latrines when necessary, as well as for WASH workshops. Pupils in organized rotation and school's subordinate staff will clean the constructed pit-latrines every day.

Because of these activities, teachers and pupils could use clean sanitation facilities, so that the school environment can be improved.

Voices from the beneficiaries:

- ◆ Ms. Angela Simiyu, 13 years old, pupil of the school
I really enjoy using the newly constructed VIP latrines in our school. I will no longer visit bushes around our school for call of nature.
- ◆ Mr. Tom Khaoya, 12 years old, pupil of the school
The training in the project has been of a great importance to us as a school as we have got knowledge on use of pit-latrines and hand-washing and how it prevent waterborne diseases among us; and this coupled with new constructed 3 VIP pit-latrine block boosts hygiene and eliminates further cases of outdoor defecation in bushes around and inside our school.
- ◆ Mrs. Janet Wasike, 34 years old, teacher of the school
Teaching at the Eshiru primary school has now become enjoyable and without interferences since cases of waterborne diseases among pupils is slowing down, foul smell as a result of outdoor defecation has drastically reduced and pupils can now return to classrooms on time after breaks since there is no more congestion on queues to use pit-latrines

Success story of the project:

The key to make the project successful in the activities was strong partnership and collaboration with local government department of water and sanitation. They provided professionals and experts with adequate skills and experience in areas covered in the project. They drew design of pit-latrines to be constructed, assisted budget formulation, identified suitable site for pit-latrines, assisted in hiring project staff, assisted identification and solicitation of quality construction materials for pit-latrines, assisted supervision and management of project activities, assisted monitoring project activities, voluntarily provided all technical know-hows and expertise in time of need, when constructing VIP latrines. They regularly visited the Eshiru primary school before and during the implementation of project activities.

Biggest challenge in implementing the project:

The biggest challenge in implementing activities of the project was transport. Most roads in the community are in poor and impassible conditions. It hindered movement of the project team and materials; the situation is worse in the community during rainy days. Logs of trees fell and blocked their movements, and flooded streams and rivers caused huge hindrances to their mobility. The community is sloppy- as it was strenuous to climb uphill and trails becoming muddy during rainy season and making it difficult for people to walk on foot. The organization overcame the challenge by transporting materials when it did not rain within 1 or 2 days. Additionally, the RHG's members, project team and community residents carried the project materials together and occasionally contributed to employ drivers of trolley, motorbike and bicycle to offer transport services when necessary.

Before the project



Waste-filled latrine is closed



Students waiting for the latrine

During the project



Construction of the VIP pit latrine



Training workshop on water and sanitation

After the project



Constructed VIP pit latrine

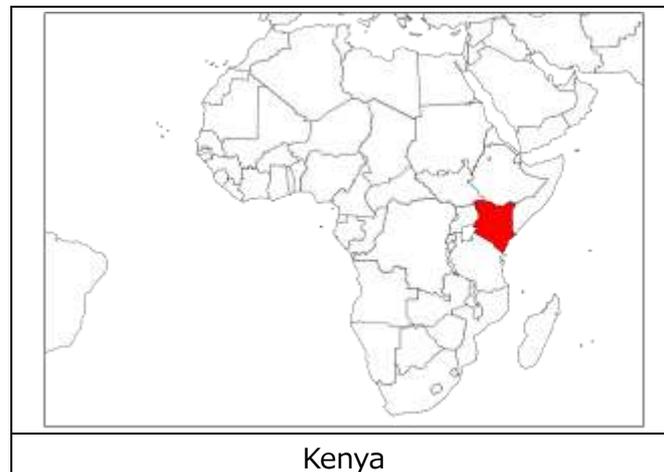


Handwashing facilities with students

3) Promoting access to safe water in the Luyekhe community through construction of 1open spring well with clean water (Kenya)

Reported by Mrs. Ruth Naliaka

- Organization: Ufanisi Women Group (UWG) (#031)
- Project title: Promoting access to safe water in the Luyekhe community through construction of 1open spring well with clean water
- Country/Area: Kenya/Bungoma County
- Project period: October 2017 to February 2018
- Number of beneficiaries: 750 people (150 women, 150 men and 450 children)
- Cost: 1,389 USD (JWF Fund: 1,000 USD, Contributions by the beneficiaries: 258 USD, Ufanisi Women Group: 131 USD)



Background

About 150 households live in the Luyekhe community and they use water from a heavily contaminated open spring. This water source is not protected well and people defecate open, therefore human excrete and other wastes flow into the spring. People consume the water without treatment. This leads to water-borne disease such as diarrhea and deaths. Almost half of the people in the community visit local clinics. A public health authority occasionally closes down community's school due to outbreak of the diseases.

Outputs

- ◆ **Project Implementation Committee was established:** Project Implementation Committee (PIC) was established by UWG which is comprised of 3 water management professions collaborated with reputable water company (Bungoma well company) to hire 2 qualified spring well technicians with wide

skills and proven experience in construction of standard spring wells from Bungoma well company and 2 local unskilled hand-labor men from the Luyekhe community.

- ◆ **1 spring well was protected**: PIC partnered with hired and skilled spring well technicians to purchase quality construction materials necessary to complete construction of the Luyekhe open spring well, which was based on the design drawn by a Bungoma well company's expert. The constructed spring well comprises of: internal terrace to collect water from sources, spring box to store and reduce speed of water, an apron to provide space for inspection and renovation of the spring well, screens to remove solid elements from water, brick wing wall to raise water level, non-rusting outlets to direct clean water from the spring well to containers, rabbles to prevent soil erosion, and an external terrace to direct untapped water to safe disposal.
- ◆ **3 training workshops on water and operation and maintenance were held**: PIC hired qualified and experienced water and sanitation trainers from Bungoma Well Company and held 3 training workshops to encourage collective participation, practical activities and discussions for 150 family heads (30 males and 120 females) from 150 households, including on-site trainings for repair, maintenance and protection of spring wells; water treatment (boiling, chlorination, use of water guards, chlorination and solar pasteurization); and importance of pit latrines.
- ◆ **Operation and maintenance framework was established** : PIC organized a meeting with 150 representatives from beneficiary-households and community leaders to discuss project sustainability. In the meeting, 10 members were impartially elected and the Project Exit Committee (PEC) was established. PEC takes ownership of repair; maintenance and management of constructed spring well and is therefore responsible for project's management and sustainability. 150 households will pay small monthly fees that shall be kept by PEC for repair and maintenance of the constructed spring well and fence, as well as for conducting need-driven community workshops.
- ◆ **Water quality test was carried out**: Water from the spring well was analyzed by the Lake Victoria North Water Services Board. As a result of the test, it met the safe drinking water standard, however; a few total coliform bacteria were found. UWG informed this result to the beneficiaries and advised that the water should be boiled to disinfect all present bacteria before drinking it.

Because of these activities, the people in the Luyekhe community could access to water, therefore reduction of diseases caused by contaminated water can be expected.

Voices from the beneficiaries:

- ◆ Mrs. Anna Molaba, 34 years old, volunteer community health officer
Outbreak of waterborne diseases is now a thing of the past after protection of the Luyekhe spring well, meaning that the community is now healthier and richer because their cumulative expenditures on medication is going down.
- ◆ Mrs. Sarah Mumbua, 25 years old, small scale farmer
Now available water at one's disposal has improved our self-image as a community, saved our time for working on our farms and put us in good books with the public health personnel and our neighbours.
- ◆ Mr. Geoffrey Asombi, 28 years old, community leader
The project provided safe and clean water to over 1050 residents in the Luyekhe community, who previously drank polluted and contaminated water often resulted in debilitating and deadly waterborne diseases among them. The hospital beds in our health centres were previously occupied with patients hit by waterborne illness. We spent a lot of money and time seeking for medication to water related diseases in this community, and now Japan Water Forum's Fund via Ufanisi Women Group's Luyekhe spring well project has provided lasting solution to the problem.

Success story of the project:

The key to make the project successful in the activities was securing, hiring and working with spring well technician, experts and trainers from Bungoma well company that has skills, expertise and experiences in construction of spring wells and training local communities regarding repair, maintenance and protection of spring wells, including water treatment and importance of pit latrines. These spring well technicians and trainers from Bungoma well company provided all skilled and technical labor/ manpower needed in preparation before and during implementation of the project activities; and assisted the project team by supervising, monitoring and management of the implementation, all of which contributed to the project's success. The trainers and experts trained 150 family heads on the site of constructed spring well regarding repair, maintenance and protection of spring wells, water treatment and importance of pit latrines.

Biggest challenge in implementing the project:

Political interference: The Luyekhe community is located in the Nalondo South ward, which is one of the political units in the Bungoma County where a political leader referred to as County Representative, being grass-root political representation, and Members of County Assembly (MCA) for the Bungoma County together with other leaders in other wards are devolved by Kenyan legislative systems under the new constitutional dispensation. The Nalondo South ward together with other 3 wards

form a Kabuchai constituency. Politicians serving the community i.e. Members of County Assembly (MCA) and Member of Parliament (MP) tried to interfere with implementation of the project by insisting that they should be included in its leadership for purposes of self-gratification, popularity and generally corruption; or else the project would not take place. However, the project team engaged with the District Officer (D.O) who barred them from taking any leadership position of the project, thus thereby eliminated their interference that would have otherwise resulted in failure of the project.

Before the project



Residents collecting water from contaminated water source

During the project



Construction of facility to protect the spring well

After the project



Meeting on operation and maintenance



Constructed facility to protect the spring well

The result of water quality test



LAKE VICTORIA NORTH WATER SERVICES BOARD
Maji safi maisha Bora

Water Analysis Report

Client: Ufanisi Women Group
P.o. Box 1606-50200,
Bungoma,
Sample Number: 10235
Sample Description: Recently constructed community well, Luyekhe spring well
Sampled by: Ufanisi Women Group
Date/ Time Sampled: December 7, 2017 at 10.00 AM
Date/ Time Sample Received: December 7, 2017 at 1.00 PM

Analysis	Result	Unit	Standard
Total Coliform Bacteria	5	per 100 ml	0 per 100 ml
Fecal Coliform Bacteria	ND	Per 100 ml	0 per 100 ml
pH	7.2	pH Units	6.5 to 8.5
Hardness	7.3	gpg	no standard
Total Dissolved Solids	260	mg/l	<500 mg/l
Iron	0.1	mg/l	<0.3 mg/l
Nitrate	4.19	mg/l	<45 mg/l
Lead	5	µg/l	<15µg/l

Comment

Sample meets safe drinking water standards. However, due to presence of total coliform bacteria, the water should be disinfected to remove bacteria.

Submitted by: James Tsuma, Laboratory director.

4) Repair of wells, bore wells, awareness on hygiene and training program in repair of bore wells to unemployed youth (India)

Reported by Mrs. M. Divya

- Organization: Rural Action In Social Emancipation (RAISE) (#047)
- Project title: Repair of wells, bore wells, awareness on hygiene and training program in repair of bore wells to unemployed youth
- Country/Area: India/Andhra Pradesh State
- Project period: October 2017 to March 2018
- Number of beneficiaries: 230 people (80 women, 100 men and 50 children)
- Cost: 1,030USD (JWF Fund: 1,000 USD, Contribution by RAISE: 30 USD)



Background

Most of the people in targeted village belong to lower class and they are illiterate. The village has shallow wells and bore wells which were constructed a few decades ago. The shallow wells have become dirty due to ignorance of proper usage, which led to various water-borne diseases such as dysentery, diarrhea, amoebiasis, and hepatitis. In addition to that, water in the wells mingled with mud due to aging of the boreholes.

Outputs

- ◆ **Repairing and cleaning of 5 wells were conducted:** Repair and cleaning of 3 bore wells and 2 wells have been done; including removal of mud accumulated in the bore wells, installation of new chains, wheels and pipes, constructing of small wall around the wells, and painting of the well. The beneficiaries provided their physical support in this activity.
- ◆ **2 awareness camps on sanitation and hygiene were held:** 2 awareness camps have been conducted regarding the sanitation and hygiene. 90 persons participated in the camps. In this meeting, they were also instructed on how to

use the water in safe and keep the environment around the bore wells and wells clean.

- ◆ **A training on operation and maintenance was held:** To youth of the village, a training on operation and maintenance was held. An expert trainer was sent by Panchaity as RAISE requested them to fill the needs of training person who can teach how to repair them.
- ◆ **Water quality test:** A water quality test was carried out to make sure the water from the wells is safe for drinking. As a result of the test, water from the wells is potable.

Because of these activities, the people in the village could access to safe drinking water so that reduction of diseases caused by contaminated water can be expected.

Voices from the beneficiaries:

The beneficiaries are very happy with the project which helped in promoting health of the rural people. It brings confidence in them that it is a sustainable support because youth have been trained. They are very thankful to JWF

Success story of the project:

The beneficiaries were the key to make the project successful. They gave their complete support and cooperation in running the project smoothly. While the project work was going on and bore wells were under repair, the beneficiaries very patiently went far places for fetching water without causing any problems to the project. It showed us that they are interested in having good quality and quantity of water.

Biggest challenge in implementing the project:

In the Nellore district, the summer season has almost started. The training of youth in repair of wells had to be done during 11:00 am to 3:00 pm. The trainer and the youth had to stand in the hot sun during the practical explanation and learning sessions. It became difficult for RAISE to provide shelter as there was no space for it and keeping the shelter would make the area dark and unable to conduct the work. But the beneficiaries supported us by providing liquids like butter milk so that the training program went on smoothly.

Before the project



Water in bore well mingled with mud



Inside of the shallow well

During the project



Awareness camps on sanitation and hygiene



Training on operation and maintenance to youth



Cleaning of the well

After the project



Repaired bore well



Repaired shallow well

The results of the water quality test
Bore wells

GOVERNMENT OF ANDHRA PRADESH Rural Water Supply & Sanitation Department WATER QUALITY MONITORING LABORATORY OPP BSNL OFFICE, NELLORE - 2			
Report of Physical and Chemical Examination of Drinking Water			
Sample Received from:	RURAL ACTION IN SOCIAL EMPOWERMENT		
Collection Date:	23.02.2018		
Mandal:	VENKATACHALAM, NELLORE		
Village:	JOSPH PET		
Source:	BORE WELL WATER		
As per IS 10588 - 2002	Results	Minimum	Maximum
1. Colour		0	20
2. Turbidity (NTU)	0.1	0	10
3. Odour			Unobjectionable
4. pH Range	7.4		6.5 - 8.5
5. Electrical Conductivity (Microhm/cm / CM2)	177		1000
The Following Result is in Milligrammes per Litre	Maximum Permissible Limit (MPL)		
6. Total Dissolved Solids (TDS)	162	500	2000
7. Alkalinity: (i) Phenolphthalein (P)			
(ii) Methyl Orange (M)	288		400
8. Total Hardness: (as CaCO ₃)	210	200	600
9. Calcium (as CaCO ₃)	104	75	200
10. Nitrate (as N)	11.4	0	45
11. Sulphate (as SO ₄)	46.9	200	400
12. Chloride (as Cl)	26.1	200	1000
13. Fluoride	0.98	1.0	1.5
14. Iron (as Fe)	0.24	0.3	0.3
15. Magnesium (as Mg)	37	30	100
Date of Report:	23.02.2018		
Remarks:	SUITABLE FOR DRINKING		

GOVERNMENT OF ANDHRA PRADESH Rural Water supply & Sanitation Department WATER QUALITY MONITORING LABORATORY Opp BSNL Office Nellore-524001			
REPORT OF BACTERIOLOGICAL EXAMINATION OF DRINKING WATER			
Sample from:	RURAL ACTION IN SOCIAL EMPOWERMENT		
Village:	JOSPH PET		
Mandal:	VENKATACHALAM		
District:	NELLORE		
Source:	BORE WELL WATER		
Date of Collection:	23-02-2018		
Date of Report:	22-02-2018		
RESULTS OF EXAMINATION			
MPN of coliform Bacteria per 100 ml	3		
MPN of E-Coli	0		
REMARKS	The above source of Received water sample Bacteriologically safe for drinking		
J. Water Analyst, Microbiologist & W.S. Division Officer NELLORE			

Left: Chemical test

Right: Bacteriological test

Shallow wells

GOVERNMENT OF ANDHRA PRADESH Rural Water Supply & Sanitation Department WATER QUALITY MONITORING LABORATORY OPP BSNL OFFICE, NELLORE - 2			
Report of Physical and Chemical Examination of Drinking Water			
Sample Received from:	RURAL ACTION IN SOCIAL EMPOWERMENT		
Collection Date:	23.02.2018		
Mandal:	VENKATACHALAM, NELLORE		
Village:	JOSPH PET		
Source:	OPEN WELL WATER		
As per IS 10588 - 2002	Results	Minimum	Maximum
1. Colour		0	20
2. Turbidity (NTU)	0.8	0	10
3. Odour			Unobjectionable
4. pH Range	7.2		6.5 - 8.5
5. Electrical Conductivity (Microhm/cm / CM2)	306		2500
The Following Result is in Milligrammes per Litre	Maximum Permissible Limit (MPL)		
6. Total Dissolved Solids (TDS)	446	500	2000
7. Alkalinity: (i) Phenolphthalein (P)			
(ii) Methyl Orange (M)	388		400
8. Total Hardness: (as CaCO ₃)	276	200	600
9. Calcium (as CaCO ₃)	104	75	200
10. Nitrate (as N)	11.4	0	45
11. Sulphate (as SO ₄)	46.9	200	400
12. Chloride (as Cl)	26.1	200	1000
13. Fluoride	0.98	1.0	1.5
14. Iron (as Fe)	0.12	0.3	0.3
15. Magnesium (as Mg)	36	30	100
Date of Report:	23.02.2018		
Remarks:	SUITABLE FOR DRINKING		

GOVERNMENT OF ANDHRA PRADESH Rural Water supply & Sanitation Department WATER QUALITY MONITORING LABORATORY Opp BSNL Office Nellore-524001			
REPORT OF BACTERIOLOGICAL EXAMINATION OF DRINKING WATER			
Sample from:	RURAL ACTION IN SOCIAL EMPOWERMENT		
Village:	JOSPH PET		
Mandal:	VENKATACHALAM		
District:	NELLORE		
Source:	OPEN WELL WATER		
Date of Collection:	23-02-2018		
Date of Report:	22-02-2018		
RESULTS OF EXAMINATION			
MPN of coliform Bacteria per 100 ml	3		
MPN of E-Coli	0		
REMARKS	The above source of Received water sample Bacteriologically safe for drinking		
J. Water Analyst, Microbiologist & W.S. Division Officer NELLORE			

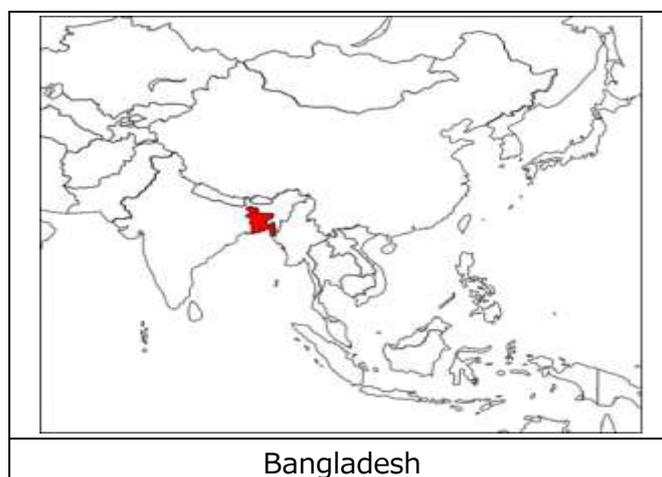
Left: Chemical test

Right: Bacteriological test 22 / 31

5) Ensure child education through construction of hygienic latrine & water supply (Bangladesh)

Reported by Mr. Nilmadhab Biswas

- Organization: BASCO Foundation (#157)
- Project title: Ensure child education through construct a hygienic latrine & water supply
- Country/Area: Bangladesh/Magura district
- Project period: October 2017 to March 2018
- Number of beneficiaries: 80 people (24 girls, 16 boys and 40 women)
- Cost:1,365 USD (JWF Fund: 1,000 USD, Contributions by the beneficiaries: 125 USD and BASCO Foundation: 240 USD)



Background

In the Roygram village, there is no public or private primary school. There is only one primary school with 40 children which is operated by local communities. As this school cannot get any support from the government, it does not have any facility for water and sanitation. Therefore, the students defecated in open field and drank dirty water. Especially girls were unwilling to defecate open, therefore they do not want to go to school. It makes many girls drop out of school and their parents were reluctant to encourage their daughters to go to school.

Outputs

- ◆ **1 pit latrine and 1 hand tube well were installed:** To ensure safe water and sanitation, 1 pit latrine and 1 hand tube well were installed in the target school. After being filled up with feces, the school management committee (SMC) and the water and sanitation committee will clean-up the excreta in the pit latrine in

cooperation with teachers and guardians.

- ◆ **Water and sanitation committee was established:** A Water and sanitation committee was established comprising of 7 members of SMC, teachers, students and guardians. The role and objectives of the Committee is to guide proper uses of the latrine and tube-well.
- ◆ **Workshop on usage of facilities and health education were held:** To develop knowledge on water and sanitation, workshops were held for the students and guardians. 40 students learnt usage of the latrine, waterborne disease and personal hygienic and safe drinking water.
- ◆ **Water Quality test:** A water quality test was carried out to ensure the water from the well is safe for drinking. As the result of the test, no arsenic was found and the water is potable.

Because of these activities, the students and guardians could gain the water supply and use sanitation facilities and school environment was improved.

Voices from the beneficiaries:

- ◆ Mrs. Rimi Khatun, 8 years old, student of the school
My name is Rimi Khatun and I am in class two in this school. Before constructing latrine and tube-well, we have faced many problems. At school time, we drank dirty water and defecated in open field or jungle. But now we have no tension because Japan Water Forum and BASCO Foundation constructed a hygienic latrine and a tube-well. So we are very happy. We will come to the school and live free from water born disease. So we thank JWF, BASCO Foundation and pray to GOD.
- ◆ Mrs. Ruma Begum, 34 years old, guardian of a student
I am very much pleased for the installation of hygienic latrine and Tube-Well for the benefit of their children. As their children will safe from water born disease. Also their female children will be able to defecate at isolated place without tension. It is a good reward for us. I am giving thanks to JWF and BASCO-Foundation for their kind support. I am praying for them.
- ◆ Mrs. Joshna Begum, 32 years old, guardian of a student
Firstly, I am giving thanks to BASCO-Foundation and JWF for their kind visual fruitful option on safe drinking water and hygienic latrine for the school students of the Raygram village. It will help the students to live free from waterborne diseases. Also the other people will be able to drink safe water. It was a dream to us to get those options.

Success story of the project:

When implementing the project work, the local community, SMC, Guardians of the students and students had been willfully assisted and supported to the project

activities that have been our key inspiration of the project.

Biggest challenge in implementing the project:

In fact, before starting the project work, we had motivated the local community, SMC and school teachers and students for a positive benefit on health and hygienic and reduction of waterborne disease by this project. Therefore, we did not face major challenges during the project implementation. But we think ensuring safe sanitation and safe water practices by the students hundred percent properly remains to be our great challenge.

Before the project



No water and sanitation facilities in the school



Pupils going to bushes to defecation

During the project



Digging tube well



Constructing pit latrine



Workshop for students



Workshop for guardians

After the project



Students enjoy water from the tube well



Constructed pit latrine

The result of water quality test

Government of the People's Republic of Bangladesh
Office of the Sub- Assistant Engineer,
Department of Public Health Engineering
Magura Sadar, Magura.

"Urmayotter Gancharin
Shiekh Hasinar Mulmantra"

Memo. No. 91 Dated, 10/03/2018.

From : The Sub- Assistant Engineer,
Department of Public Health Engineering
Magura Sadar Upazila, Magura.

To : Executive Director,
BASCO Foundation,
Magura.

Sub : Water Test Report.

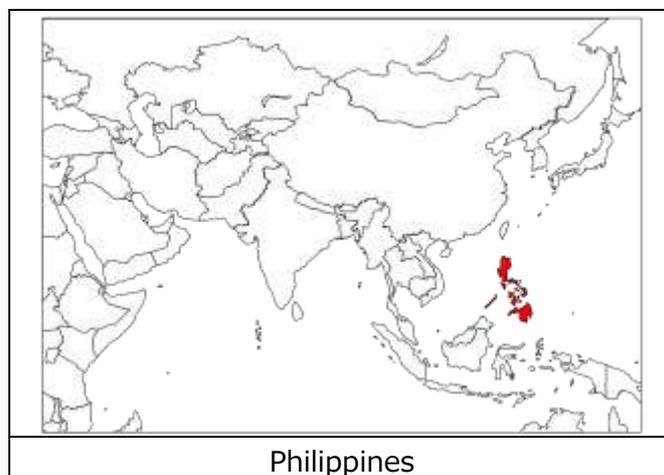
With due respect it is to certify that sample water collect form Tube-well and water test by field kit (Hack Kit) wich is constructed in Roygram Non-Government Primary School under Jagdal Union, Magura Sadar Upazila, District, Magura, Bangladesh financed by Japan Water Forum (JWF), Japan and implement by BASCO Foundation, Bangladesh. There have seen no Arsenic and water is suitable for drinking.


 10-03-2018
 (Md. Zinnarul Islam),
 Sub- Assistant Engineer,
 Department of Public Health Engineering
 Magura Sadar, Magura.

6) Rainwater Harvesting Project (Philippines)

Reported by Mr. Jovannie Yangyang

- Organization: Asset-Based Community Development with Equity Foundation (ABCDE Foundation) (#108)
- Project title: Rainwater Harvesting Project
- Country/Area: Philippines/Zamboanga del Norte
- Project period: October 2017 to March 2018
- Number of beneficiaries: 240 people (109 boys , 123 girls and 8 teachers)
- Cost: 1,121 USD (JWF Fund: 1,000 USD, Contribution by ABCDE Foundation: 121 USD)



Background

The project site is mountainous and water sources such as springs and creeks are far from the site. People have to down hills to fetch water and it takes around 1.5 hours. It is difficult for women to fetch water from the distant water sources and wash clothes every day. Severe lack of water has affected health, hygiene and the economic condition of local people.

Outputs

- ◆ **Courtesy call was conducted**: ABCDE Foundation conducted courtesy call to barrio leaders and teachers in the local elementary school. The courtesy calls enable the beneficiaries to understand how a rainwater harvest tanks made of iron and concrete is done and how it functions.
- ◆ **2 rainwater harvest tanks were installed**: To ensure sustaining water sources, 2 rainwater harvesting tanks adopted using ferro-cement technology were installed in the community center and the elementary school. During the construction, engineers supervised carefully the works such as

proper water content of the mix, marking the proper spacing of the wire reinforcement, curing of the structure and fixing the mold outside of the tank.

- ◆ **Barrio Water Association was established:** To maintain constructed rainwater harvesting tanks, Barrio Water Association (BWA) with 7 members comprising local community volunteers was established. ABCDE Foundation conducted a workshop attended by 7 officers of the BWA in order to explain how the harvesters will be managed. The rainwater harvesting tanks will be cleaned once a half year, and the pipes for storing rainwater will be cleaned once a month by the community people assigned by the BWA.
- ◆ **Trainings on water management and vegetable gardening were held :** To 120 beneficiaries, training on water management and vegetable gardening utilizing excess water from the tanks were held.

Because of these activities, the community people could use sustainable water source, and their living environments can be improved.

Voices from the beneficiaries:

- ◆ Mr. Nonie Sumarap, 31 years old
The rainwater harvester is indeed a blessing for me, my family and our community since we are able to get access to water for our personal needs.
- ◆ Mrs. Dionesia Anigan, 42 years old
I am a gardener and I love to raise vegetables for home consumption and for sale with my neighbors. My problem before is that I used to fetch water from a long distance. With the water harvester, that problem is solved now
- ◆ Mrs. Maredel Segayo, 26 years old
I recently gave birth to a son and badly need water for personal hygiene and in order to cook food for my baby. The rainwater harvester is indeed a big help for me.

Success story of the project:

The key element for the success of this project is the cooperation and participation of local leaders and community residents. They feel the need for water and realize that rain can provide them with this only that they need a giant harvester to gather and store the water. Another key success factor is the availability of technical expertise from the ABCDE Foundation because constructing the harvesters is a technically difficult procedure and need an expert.

Biggest challenge in implementing the project:

The road condition going to the area is difficult, very hilly and muddy. We have difficulty hauling the hardware materials.

Before the project



Small river as a water source



ABCDE Foundation conducted pre-survey

During the project



Construction of the rainwater harvesting tank



Fitting gutters for rainwater collection

After the project



Child fetching water from the tank



Vegetable garden

7) Improving access to water and enhance communities awareness on sanitation in Gursum district, Quramatana kebele (Ethiopia) (unsubmitted)

Reported by Mr. Mr. Demissew Abi

- Organization: Nurture Education and Development (NED) (#133)
- Project title: Improving access to water and enhance communities awareness on sanitation in Gursum district, Quramatana kebele
- Country/Area: Ethiopia/Somali region
- Project period: October 2017 to February 2018
- Number of beneficiaries: 1,040 people (420 Women, 350 men and 270 children)
- Cost: 2,199 USD (JWF Fund: 1,000 USD; Contributions by the beneficiaries, NED and the district water office: 1,199 USD)



Background

In the targeted area, there is high scarcity of water supply system and sanitation facility, therefore, water and sanitation is in a severe condition. Women and girls have to spend more than 2 hours to fetch water from a distant small river with riding donkey. However, people wash their clothes and bodies and defecate open around the water sources. In addition to that, animals also use that water sources. As a result, people are exposed to water-borne disease such as cholera, diarrhea, and typhoid.

Before the project



People heading the small river riding donkey



Animals using the water source

It was reported that this project has not been completed due to domestic conflict of ethnic groups and instability of the government of Ethiopia. Since then, no report has been submitted by NED as of May 31, 2018 and the details remain to be clarified.

【News regarding the internal situation of Ethiopia】

- Ethnic clashes in Ethiopia leaves hundreds dead
<https://www.enca.com/africa/ethnic-clashes-in-ethiopia-leaves-hundreds-dead>
eNews Channel Africa, 25 September 2017
- Ethiopia under state of emergency after prime minister resigns
<https://www.pbs.org/newshour/world/ethiopia-under-state-of-emergency-after-prime-minister-resigns>
PBS NEWS HOUR, 16 Feb 2018

End of the Report