



## **GLOBAL GRANT**

### **Water, Sanitation and Education**

**(Grant No. GG1642128)**

## **Babile worda Water Infrastructures Construction and Rehabilitation Project Proposal**

### **ETHIOPIA**

**2016 – 2017**

**Host Club / District:** Rotary Club of Addis Ababa East (No.52043), Addis, Ethiopia (D-9212)

**International Club / District:** Rotary Club of Space Center (No. 2010), Houston, Texas, USA (D-5890)

**Cooperating Organization:** Innovative Humanitarian Solutions

**Number of Beneficiaries:** This project will target over 3,500 households representing over 50,000 men, women, and children.



**What kills more people than breast cancer, AIDS, or diabetes? Lack of proper sanitation and dirty water. It currently accounts for 10% of the global disease burden.**

**Sanitation is a powerful tool, more effective than surgery or drugs.**



**Location of Project:** Ethiopia, East of Addis Ababa, between Harar & Jijiga

### Babile woreda Water Infrastructures Construction and Rehabilitation Project

WASH project is located east of Addis Ababa, Ethiopia, between Harar (where NGO's on-going children's project is located) and Jijiga



## Project Summary:

The Somali Region is the eastern most of the nine regions of Ethiopia. The capital of the Somali Regional State is Jigjiga. Other major towns and cities include Degehabur, Kebri Dahar, Shilavo, Geladin, Kelafo, Werder and Shinile. The Somali Region borders the Ethiopian regions of Oromia, Afar and Dire Dawa to the west, Djibouti to the north, Somalia to the north, east and south, and Kenya to the south-west. Based on the 2007 Census conducted by the Central Statistical Agency of Ethiopia (CSA) the Somali Region has a total population of 4,445,219. The Region has an estimated area of 279,252 square kilometers. This region has an estimated density of 15.9 people per square kilometer and is the second largest region next to Oromia. The water sector is one of the least developed sectors in the Somali region. Even though it has 4 potential river basins and reserved ground water potential, very little of it is so far exploited for use. The water supply coverage of the region is still 32%. Currently there are 8 refugee camps and one transit center, hosting 212,967 refugees from Somalia, located in the Somali Region. Generally the climate of the Region can be characterized as arid and semi-arid with an average rainfall ranging from 200-700 mm/year. There are two rainy seasons, known locally as the Gu (April to June) and the Deyr (October to November). The rainy seasons are alternated by two dry seasons locally known as Jilaal (December to March) and Haggaa (from July to September).

The regular fluctuations of weather patterns make the rainy season more erratic and unpredictable. In the dry season most of the ponds and Birkhads become dry and a large number of people and their livestock are forced to move and concentrate in nearby fields in search of water whereby water wells are over exploited and the surrounding area degraded due to the movement of livestock and population. The negative impacts are felt by pastoralist women and children in particular as the burden of fetching water often lies with them. The regional government together with nongovernmental organizations (NGOS) aims to solve a number of problems in water supply and sanitation by implementing new projects, and conducting regular monitoring and evaluation of the existing projects.

Somali Babile woreda is located 700 90' North Latitude and 430 00' East Longitude. It shares boundary with other woredas of the Somali region and Fadis Woreda of Oromia regional state. The total size of the Woreda is about 1,325 km<sup>2</sup>. It is divided into 17 kebeles and 42 sub-kebeles. The average temperature is 26.5 Celsius with uneven rainfall distribution. Babile is known for its hot springs, mineral water and elephant sanctuary. Often, the inhabitants come into conflicts with the neighboring Oromo communities over the control of the sanctuary. Dendema is the capital of the woreda. The total population of the woreda is about 92,702 of whom 50,059 are males and 42,643 are females with average household size of 7.5 persons. This woreda is inhabited by the Karanle Hawiye clan of the Somali people but some of the inhabitants are bilingual, speaking both Somali and Oromiffa languages. The people are dominantly agro-pastoral with 70% of the total population living on this mode of life. Of the remaining population, 15% are agricultural, 10% are pastoral, and 5% petty traders. Maize and sorghum are staple crops and livestock includes cattle, goats, sheep, and camels. Although women constitute a sizable proportion of the population, their roles in the public spheres are limited because they are

relegated to reproductive labor. This, in turn, makes their contribution to the socioeconomic development of the woreda rather invisible.

A productive safety net program (PSNP) is operational in the woreda, whereby constructions of canals, check dams and rehabilitation of Birkas have been carried out so far. (Ministry of Agriculture 2014).

### **Water, Sanitation and Hygiene:**

A safe and adequate water supply is the top priority of the target area. This was excessively discussed during the assessment. Health problems related to the absence of water, the time spent to fetch water, the workload on women, the absence of water for cattle, and so on were points of the discussion. All participants agreed on the severity of the water problems in the targeted Kebeles. They reached a consensus that the problem of water is the highest priority for them.

The people in the target area are seriously suffering from the absence of safe water. As a result, water borne diseases are among the major causes of illness in the Woreda. According to the Woreda health office data, the top ten diseases recorded in 2007 E.C. all related to food and water contamination and accounts for 28.80% of diseases. Diseases related to personal hygiene accounts 20.68%. The community members also mentioned diarrhea diseases, giardia, intestinal parasites and amoeba as water related diseases.

Children at school also share the same problem. Because of the warm climate of the area the daily water demand is very high. A large number of students drop out of school every year with cases related to scarcity of water.



Water sector depression in Dendema has persisted at the Kebeles level in the Woredas and rather limited for the local sub Kebeles communities. Less than a fourth (23%) of household's report using a borehole and birka (pictured below on left) as their main source of water in the dry season by traveling eight to ten hours every day. Moreover, the needs assessment discovered there were few or no functioning, maintained sanitation facilities in most areas visited and in all areas poor hygiene practices were prevalent.



As the assessment shows nearly every one of the people in the assessed villages have little or no access to latrines. The communities are willing to participate in building latrines by contributing manpower. Household rubbish is thrown out of the compound. Sometimes it is disposed of by burning. No household garbage pit was seen during the assessment. The majority of primary schools do not have latrines and those schools having latrines are not gender-segregated. Furthermore the assessment indicates no sanitation and/or hygiene clubs exist in the schools in the Woreda.



Borehole (short brown structure) and water tanks  
To serve as reservoirs for the water.

## Project Outline:

- Construction of birkas, shallow wells, and water ponds
- Repair and updating of boreholes (six are available in Dendema Woreda but three are not functional and all need some repair and updating)
- Repair birkas and provide water purification chemicals
- Construct a roof top rain water harvesting system for schools and health centers
- Distribution of water purification chemicals for beneficiary Kebeles.
- Provision of training for water and sanitation committees in the targeted beneficiary Kebeles
- Construction and maintenance of institutional latrines in the entire woreda
- Capacity building to woreda level bureau in the WASH sector
- Community trainings on proper operation and maintenance of the water schemes
- Hygiene promotion in school and other institutions
- Distribution of hygiene kits for beneficiary Kebeles
- Distribution of water storage containers
- Construction of latrines for communities in collaboration with the community
- Promoting Vector control lessons focusing on flies and mosquitoes

**Table 1:** Kebeles to targeted for the construction and rehabilitation of water accesses points

S/n	Name of the Kebele	Population	Household	Water Accesses Points		
				Borehole	Hand dug well	Birka
1	Ali-Ethiopia	6895	455			1
2	Erayso	5552	366			1
3	Dawrota	5704	376			1
4	Dendema	8812	582	1		
5	Beko	7852	518	1		
6	Kora	5500	350		1	
7	Elbanay	7671	506		2	
8	Anod	5702	376		1	



**Table 2: Goals / Verification**

Goals	Objectively verifiable indicators	Sources of verification	Risks & hypotheses
<p>Contribute to improved drinking water supply in Somali Nationalities and Regional State and contribution to the achievement of the Ethiopia's National Development and Transformation strategy (GTP 2) in water sector.</p>			
<p><b>Specific goal:</b> Rural households (3529) in the communities of selected kebeles of Babile woreda have sufficient high quality water available in close proximity</p>	<p>I.1. Human and livestock population have access to safe drinking water during dry season. I.2 Beneficiary households maintain livelihood activities during dry season</p>	<p>S.O.V.1. Beneficiary lists validated by kebele and woreda administrations S.O.V.2. 15 fully functional water infrastructures. S.O.V.3. Reports from woreda Water Bureau.</p>	
<p><b>Outcome 1.</b> Increased access to safe potable water through the construction of 3 new Birkas and the rehabilitation of 6 damaged water infrastructures (2 boreholes and 4 hand dug wells) (Approximately 2326 households).</p> <p><b>Outcome 2.</b> Reduced incidence of water borne diseases through increasing access to water treatment chemicals and community awareness on hygiene and sanitation</p> <p><b>Outcome 3.</b> Water committees to manage water points are organized and their capacity is increased. 60% of the members are women. And school WASH clubs are active in promoting good water use behaviors and its relation to health and hygiene.</p>	<p>OVI.2.1. 8 water harvesting infrastructures (Birka hand-dug wells and boreholes) rehabilitated and fully operational. OVI.2.2. 8 kebele water committees trained on water management and infrastructure maintenance. OVI.2.3. 900 households have access to water purifiers for at least 6 months</p>	<p>S.O.V. 2.1. Beneficiary lists validated by kebele and woreda administrations S.O.V. 2.2. 8 water harvesting infrastructures fully operational Distribution input vouchers S.O.V. 2.3. AQUATAB distribution records S.O.V.2.4. Water committee lists S.O.V.2.5. Photo reports S.O.V.2.6. Location map S.O.V.2.7. Infrastructure assessment report</p>	<ul style="list-style-type: none"> <li>• The security situation in the implementation areas remain stable</li> <li>• The local authorities participate actively in activity preparation and M&amp;E</li> <li>• The selected communities participate actively in all agreed activities.</li> <li>• There are capable local contractors to carry out infrastructure rehabilitation.</li> <li>• Construction material are available locally</li> </ul>

**Table 3. Activity Budget**

Item1	<b>Construction and rehabilitation of water infrastructures</b>	Quantity	Costs/ unit	Total
1.1	Consultant (feasibility study; preparing the specification of the construction material and technical illustrations; preparing the construction plan; assessing the water supply system) and continuous follow up of the construction progress.	1	N/A	N/A
1.2	Construction of Birkas (underground reservoir)	3	350,000.00	1,050,000.00
1.3	Rehabilitation of Hand dug wells (includes purchase of hand pump, 6mx6m fence, concrete work)	4	130,000.00	520,000.00
1.4	Rehabilitation of Boreholes (include purchase of electric pump and electric power resource generator, Installation of the water pipes and construction of water access point and animal trough etc. ...)	2	Lump sum	1,300,000.00
1.5	Purchase of Water treatment Chemicals		Lump sum	200,000.00
2	<b>Training and building capacity</b>			
2.1	<b>Water management</b>			
2.2	Trainers fee: 1 trainer from Jigjiga - 1600 birr/day x 6 days x 2 times; training material preparation: 10,000.00 bir	2	9,800.00	19,600.00
2.3	Accommodation and meals for trainees: 300 birr/trainee/day x 3 days x 60p (including government officers and community mobilizers); 2 times a year	2	54,000.00	108,000.00
2.4	Training School-WASH Clubs to promote good water use behavior includes (school for meals, training materials, T-Shirts & Huts, Toolkits.)		Lump sum	27,000.00
2.5	For coordinating the school WASH clubs' activities through IHS staff, will occur costs for board & lodging (3 trips for 5 persons, 5days per trip, for meals and for accommodation = 3 trips x 5 people x 3 days x 400birr/person	3 Trips	6,000.00	18,000.00
3	<b>Project Management and Project Administration, Transportation, External Evaluation, Project monitoring trips</b>			

3.1	Office supplies and equipment for the office at the project office in the field (for the project-related recruited employees, the following items will be purchased: Office furniture 1 Laptop, 1 Desk-top computer, 1 printer, 1 scanner and 1 UPS electric power stabilizer.	No	Lump sum	77,000.00
3.2	Project Vehicle rent and fuel for the project office in the field (For Six Month)	6 months	2,500.00	450,000.00
3.3	Office Rent for field office	10	7,500.00	75,000.00
3.4	Program meetings/regional coordination/conferences/seminars for staff at Jijiga level (To report the progress to the regional government and to attend the regular Humanitarian coordination meeting	No of Meetings	Lump sum	40,000.00
3.5	Monitoring & Evaluation, During the implementation phase IHS plans to conduct systematic monitoring along with the representatives of the local authority, and Rotary club representatives. (cost for board & lodging per each M&E trip and per person is 500birr. Three persons will travel on each trip and stay three days at the project site. During the whole project period there will be 9 monitoring trips => 500birr x 3 days x 3 persons x 9 trips = 40,500 Birr).	9	4,500.00	40,500.00
3.6	Visibility and public relations: The donor logo (Rotary) along with IHS logos will be put using a metal board by the water points. Information on project donor, number of beneficiaries, types of interventions to be carried will be publicized to the community of the project area.		Lump sum	
4	<b>For personnel</b>			
4.1	Water Engineer (100%)	1	10	150,000.00
4.2	Water work officer (100%)	1	10	100,000.00
4.3	Community Mobilizers (100%)	2	10	100,000.00
4.4	Liaison Officer at Jijiga level (100%)	1	10	80,000.00
4.5	Field office Security Guards (50%)	3	10	120,000.00
4.6	Filed Office Cashier (100%)	1	10	50,000.00
4.7	Bank Transfer fee		Lump sum	4,000.00
<b>TOTAL</b>				<b>4,529,100 ETB / ~ 206,000 USD</b>



A4: Distribution of Water Treatment Chemicals										
A5: Training School-WASH Clubs										
A6: Promote WASH events with School WASH Clubs										
A7: Conduct monitoring and evaluation										
A8: Write reports										
Evaluation of the project by government offices										
Finance Audit										
Preparation of terminal report by IHS Ethiopia										
Project Monitoring by Rotary										

### Project Administrative issues:

#### Exit Strategy

IHS Ethiopia will use the following tools as an exit strategy for the project implementation

**Participatory Targeting of Beneficiaries:** Beneficiary communities and individuals will be targeted by an approach involving a participatory beneficiary selection procedure which engages emergency-affected communities and clan elder councils to prioritize their needs.

**Knowledge transfer:** Through the WASH intervention, IHS Ethiopia will build knowledge and technical capacity within the target population through specially designed, sustainable technology and knowledge transfer. Specifically, WMCs (water management committees) will continue to efficiently and ably manage the Birkas. Laborers from the beneficiary communities will apply their experience of participating in the rehabilitation activities to the future maintenance needs. All interventions will be implemented in close coordination with clan leaders and Kebele administrations to provide continued community-based planning and activities.

#### Sustainability

**Structurally:** The Woreda water office has expressed a commitment to maintaining the water delivery system after the end of the project. The various capacity building activities for the water management committee and the Woreda water office staff will contribute to the sustainability of the project significantly. Because of the existing long term network between the community and government (and also the ownership), the effective implementation of the project will be sustainable. **Financially:** The financial and in kind contribution of the community at the initial stage lays a good basis for the sustainability. In addition to it, the community members will support the project over the long term by paying a fair fee for water provision to maintain the village water points.

**Ecologically:** The local partner will seek to change attitudes of community members toward natural resources and common goods by establishing ownership identities, monitoring systems and sanctioning rules that fit

within current cultural systems. Taking these measures to change attitudes and behaviors of the communities will strengthen the chance of sustainable success into the future.

From significant practical experience, IHS Ethiopia has found that for any intervention to be accepted by a community, the traditional leadership structure of the elder councils (Gurti) have to be involved in a participatory role and recognized as a crucial element to the successful introduction and sustainability of a program. IHS will approach the elder councils that represent each site to discuss what community contribution can be expected toward the continued management and future maintenance of the facilities. The elder council members will convene a general community meeting at each site and facilitate the selection of beneficiary households at each activity.

### **Critical Assumptions/Risks and Mitigation Strategy**

The continued success of this project lies heavily on the assumptions that the Woreda water office and the community indeed does have capacity and willingness, to maintain the rehabilitated and newly constructed water infrastructures. The risk reduction method for this assumption includes, this project is truly a grassroots initiative. Community members together with the government officials have participated in the feasibility studies and project planning process. Thus this high degree of the project ownership and the woreda water office's active involvement throughout the entire project will play an important role to risk reduction..

Droughts are recurrent and can disrupt activities by preventing community participation since people emigrate. To mitigate such risks, activity schedule will take into account seasonal factors. In the case of major natural disaster, partner NGOs & Local government will address the situation.

### **Security Risk Management**

IHS Ethiopia has its own security protocol to ensure the safety and security of the beneficiaries as well as the IHS staff, project materials, office equipment, supplies, and vehicles. The security situation in the implementation areas remain stable and conducive to a successful project. At field level the field supervisor is responsible in assessing the security situation as well as applying safety and security rules of IHS Ethiopia

### **Concluding Remarks:**

The Rotary Clubs of Addis Ababa East and Space Center are currently preparing a formal Global Grant application. We invite you to consider consider partnering with us on this exciting project. We have confidence we can *SERVE HUMANITY* with this project.

