OCHA Coordination Saves Lives

Project Proposal

Organization	FAO (Food & Agriculture Organization of the United Nations)			
Project Title	Improving water supply availability to drought affected communities in Ceel Waaq district through identification of sustainable groundwater resources.			
CHF Code	CHF-DMA-0489-601			
Primary Cluster	Water, Sanitation and Hygiene	Secondary Cluster		
CHF Allocation	Standard Allocation 1 (March 2014)	Project Duration	12 months	
Project Budget	100,000.00			
CAP Details	CAP Code: SOM-14/WS/64322	CAP Budget: 1,000,000.00		
	CAP Project Ranking: A - HIGH	CAP Gender Marker:		

Project Beneficiaries

	Men	Women	Total
Beneficiary Summary	10,000	10,000	20,000
	Boys	**Girls**	**Total**
	0	0	0
	Total		**20,000**
Total beneficiaries include the following:			
Aid Agencies	100	0	100

Implementing Partners

Organization focal point contact details

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BACKGROUND INFORMATION

1. Project rationale. Humanitarian context: Give a specific description of the humanitarian situation in the target region based on newest data available (indicate source) (Maximum of 1500 characters)

According to the latest FSNAU post Deyr 2013 assessment results, the humanitarian situation in Somalia has improved with less people in the emergency and crisis phase. However there are still 3.8 million people in need of life-saving and resilience building humanitarian aid including provision of emergency water, sanitation and hygiene. According to a recent study by SWALIM, FSNAU and UNICEF, 71% of the Somali population have no access to an improved source of water and 77% have no access to improved sanitation facilities. Hence, provision of water to IDPs and drought prone population is a key priority. One area is Ceel Waaq district in Gedo region of Southern Somalia where recent droughts have affected people prompting high costs for water provision through voucher system or water trucking utilizing an already stretched water resource aquifer in the area. Most of the boreholes supplying Ceel Waaq district are hardly productive or have gone dry, with salinity levels exceed recommended WHO standards. Further, the recently issued climate outlook for the Horn of Africa points towards high probability of normal to below rains are anticipated in the whole country. This leaves Ceel Waaq communities at more risk if new sustainable water sources are not properly identified well in advance. Such sources require detailed information on the geological formations and ground water conditions in the aquifer to enable successful borehole drilling.

2. Needs assessment. Describe the capacities in place, then identify the gaps (previous and new). Explain the specific needs of your target group(s) in detail. State how the needs assessment was conducted (who consulted whom, how and when?). List any baseline data

Groundwater is the most reliable water source in southern Somalia. However, little is understood about the resource, particularly on where good quality groundwater supplies can be tapped. According to recent WASH cluster review, about 30% of boreholes drilled in Elwak and neighbouring Bardere districts are not functioning. Generally, the boreholes are of poor water quality, low - medium yield or drilling failed due to lack of comprehensive hydrogeological information. A rapid assessment carried out by WASH cluster in Elwak and Berdera districts in February 2014 found out that 54.8% of the residents did not have any access to water sources. In most of the villages, water catchment berkads are the major sources of water and dry out soon after the rains forcing people to travel long distances (between 1 and 50 Km) is search of water. Another important finding was that most of the water sources did not provide safe drinking water, with 71.1% of the respondents conceding that the water they consumed exposed them to health problems. This leaves Ceel Waaq district with only few functioning boreholes. The community remains one of the most vulnerable in southern Somalia. Information on groundwater in the area is incomplete making it difficult for drillers to locate new boreholes. There is high need to assist borehole drillers with the correct information to support Ceel Waaq community in identifying sustainable groundwater.

3. Activities. List and describe the activities that your organization is currently implementing to address these needs

The project will be implemented by FAO under the Somalia Water and Land Information Management - SWALIM Project. SWALIM continues to deliver timely and relevant water and land information to inform emergency response, early warning and preparedness. SWALIM supports the humanitarian community on preparedness through provision of analysis and trends on flood and drought prone areas, which are used to develop contingency and response plans, and in-depth analysis and projections of underlying climatic and ecological factors that trigger emergencies in Somalia. Major activities include assessment of rural and urban water supply, data collected from 2,300 strategic water sources, the hydrogeological survey and assessment of selected areas in Somaliland and Puntlnad and recently SWALIM has supported the water authorities in Somaliland and Puntland in mapping strategic boreholes. FAO has equipped field offices with trained staff in water and land information management that work closely with water authorities. In addition SWALIM project is working closely with the WASH cluster and UNICEF in addressing information and capacity building needs of water authorities. SWALIM is an active member of the technical working group looking at sustainable solutions to water stress in Gedo Region. This requires good geophysical and hydro-geological information. Risk and mitigation measures will follow the overall FAO Somalia risk management framework which will be adjusted during implementation.

LOGICAL FRAMEWORK

Objective 1	Water availability increased through guided borehole drilling using up to date hydrogeological information
Outcome 1	Potential groundwater zones identified with good accuracy to support drilling of sustainable boreholes in Ceel Waaq district
Activity 1.1	Collecting and collating scattered geological, geophysical, hydrological and hydro-geological information from previous studies, reports and surveys carried out in the study area and analyzing (including limited satellite image analysis) to provide basic understanding of groundwater resource situation in the district.
Activity 1.2	Geophysical and hydro-geological field data collection, analysis, interpretation and presentation of results to the WASH cluster and partners.
Activity 1.3	Compiling detailed ground water resources database and technical report and accompanying information products including geophysical investigation logs, layers resistivity, groundwater potential maps and recommended drilling information.

Indicators for outcome 1

	Cluster	Indicator description	Target
Indicator 1.1	Water, Sanitation and Hygiene	Number of people with sustained access to safe water	20000
Indicator 1.2	Water, Sanitation and Hygiene	Groundwater resources database created	1
Indicator 1.3	Water, Sanitation and Hygiene	Updated hydro-geological map at 1:100,000 scale	1

Outcome 2	
Activity 2.1	
Activity 2.2	
Activity 2.3	

Indicators for outcome 2

	Cluster	Indicator description	Target
Indicator 2.1			0
Indicator 2.2			0
Indicator 2.3			0

Outcome 3	
Activity 3.1	
Activity 3.2	
Activity 3.3	

Indicators for outcome 3

	Cluster	Indicator description	Target
Indicator 3.1			0
Indicator 3.2			0
Indicator 3.3			0

WORK PLAN

Implementation: Describe for each activity how you plan to implement it and who is carrying out what

The project will be implemented by the Somalia Water and Land Information Management Project (SWALIM) of the Food and Agriculture Organization. Activity 1: SWALIM will collect and collate all existing hydro-geology information and data for Ceel Waaq district and undertake a preliminary analysis (including limited satellite image analysis) to provide basic understanding of groundwater resource situation in the district. Activity 2 In consultation with the WASH cluster and partners, investigation sites will be selected across Ceel Waaq district and a consultant contracted to undertake geophysical and hydro-geological investigation of the selected sites. The results of the field investigations will be discussed with the WASH cluster and partners for further input and comments following which the consultant will compile the final field investigation results. Activity 3: SWALIM will compile a detailed ground water resources database and technical report and accompanying information products including geophysical investigation logs, layers resistivity, groundwater potential maps and recommended drilling information. FAO SWALIM will collaborate closely with the WASH cluster and provide updates on the progress made in the implementation of the activities. Bi weekly progress reports from the consultant will be shared with WASH cluster lead. The final results will be presented to the WASH cluster.

Project workplan for activities defined in the Logical framework

Activity Description	Month 1-2	Month 3-4	Month 5-6	Month 7-8	Month 9-10	Month 11-12
Activity 1.1 Collecting and collating scattered geological, geophysical, hydrological and hydro-geological information from previous studies, reports and surveys carried out in the study area and analyzing (including limited satellite image analysis) to provide basic understanding of groundwater resource situation in the district.	X					
Activity 1.2 Geophysical and hydro-geological field data collection, analysis, interpretation and presentation of results to the WASH cluster and partners.		X	X	X		
Activity 1.3 Compiling detailed ground water resources database and technical report and accompanying information products including geophysical investigation logs, layers resistivity, groundwater potential maps and recommended drilling information.				X	X	X
Activity 2.1						
Activity 2.2						
Activity 2.3						
Activity 3.1						
Activity 3.2						
Activity 3.3						

M & E DETAILS

			Month (s) when planned M & E will be done											
Activity Description	**M & E Tools to use**	**Means of verification**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Activity 1.1 Collecting and collating scattered geological, geophysical, hydrological and hydro-geological information from previous studies, reports and surveys carried out in the study area and analyzing (including limited satellite image analysis) to provide basic understanding of groundwater resource situation in the district.	- Other	Database, maps and reports		X										
Activity 1.2 Geophysical and hydro-geological field data collection, analysis, interpretation and presentation of results to the WASH cluster and partners.	- GPS data - Other - Photo with or without GPS data - Sattelite image - Survey - Verification	Geophysics logs and analysis, hydrogeology maps, field survey report							X	X				
Activity 1.3 Compiling detailed ground water resources database and technical report and accompanying information products including geophysical investigation logs, layers resistivity, groundwater potential maps and recommended drilling information.	- Other	GIS database, study report											X	X
Activity 2.1														
Activity 2.2														
Activity 2.3														
Activity 3.1														

Activity 3.2																	
Activity 3.3																	

OTHER INFORMATION

Coordination with other Organizations in project area

Organization	Activity
1. GEDO Technical Working Group	The project will be relevant for the Gedo Technical working group, and guide partners including COOPI, ICRC to know the right locations to drill in this area

Gender theme support: Yes

Outline how the project supports the gender theme:

Women and men will be involved throughout project implementation and equal representation will be ensured. Field data collection in Somalia is difficult and requires extensive and long travel distances with teams in many cases spent the nights away from their families. Given the Somali culture, participation of women in this activity is not foreseen. The SWALIM remote sensing unit that will support the project through analysis of satellite imagery and production of hydro-geological maps is completely managed and run by four professional women. The project will ensure all data collected in the field is dis-aggregated according to gender. Women and children are mostly affected by lack of water, and the results of this study will improve their lives by increasing water availablity and reducing the time spent searching for water. On the other hand, this study will result in improved water for livestock production and other economic activities where men are involved.

Select (tick) activities that supports the gender theme

☑	**Activity 1.1:** Collecting and collating scattered geological, geophysical, hydrological and hydro-geological information from previous studies, reports and surveys carried out in the study area and analyzing (including limited satellite image analysis) to provide basic understanding of groundwater resource situation in the district.
☑	**Activity 1.2:** Geophysical and hydro-geological field data collection, analysis, interpretation and presentation of results to the WASH cluster and partners.
☑	**Activity 1.3:** Compiling detailed ground water resources database and technical report and accompanying information products including geophysical investigation logs, layers resistivity, groundwater potential maps and recommended drilling information.
☐	**Activity 2.1:**
☐	**Activity 2.2:**
☐	**Activity 2.3:**
☐	**Activity 3.1:**
☐	**Activity 3.2:**
☐	**Activity 3.3:**

BUDGET

A:1 Staff and Personnel Costs

1.1 International Staff

Code	Budget Line Description	Units	Unit Cost	Duration	TimeUnit	Amount(USD)	Organization	CHF	% of CHF Total
1.1.1	International Hydrogeologist Expert	1	625	12	Months	7,500.00	0.00	7,500.00	
1.1.2									
1.1.3									
1.1.4									
1.1.5									
1.1.6									
1.1.7									
1.1.8									
1.1.9									
1.1.10									
Subtotal						7,500.00	0.00	7,500.00	8.0

Budget Narrative: 1.1.1 The role of the International Hydrogeologist Expert will acquire the lead role in ensuring compilation of detailed ground water resources database and writting of the technical report and accompanying information products including geophysical investigation logs, layers resistivity, groundwater potential maps and recommended drilling information. This is a cost shared position and only a portion of the remuneration has been included which is equivalent to 625$/month. The cost is only salary and does not include social security, medical and life insurance and hazard pay. The rest of the cost comes from other projects under FAO Somalia

1.2 Local Staff

Code	Budget Line Description	Units	Unit Cost	Duration	TimeUnit	Amount(USD)	Organization	CHF	% of CHF Total
1.2.1	National Consultant-Hydrologist	1	2500	2	Months	5,000.00	0.00	5,000.00	
1.2.2	National Consultant-GIS Officer	1	2500	2	Months	5,000.00	0.00	5,000.00	
1.2.3	National Consultant Remote Sensing Officer	1	2500	2	Months	5,000.00	0.00	5,000.00	
1.2.4	Operation, finance and administrative officer	1	291.667	12	Months	3,500.00	0.00	3,500.00	
1.2.5									
1.2.6									
1.2.7									

1.2.8									
1.2.9									
1.2.10									
Sub Total						18,500.00	0.00	18,500.00	19.8

Budget Narrative: 1.2.1: Hydrologist will be engaged for 2 months. The incumbent will provide technical services in relation to collection methodology and analysis of groundwater resources and hydro-geological field data and interpretation. This costs include salary only. 1.2.2: GIS Officer will also be engaged for 2 months. The incumbent will develop GIS datasets from the hydrogeological data and water points and ensure they comply with SWALIM standards for projections, attribute completeness, field definitions, metadata and map layouts. This costs include salary only. 1.2.3: Remote Sensing Officer will also be engaged for 2 months. The incumbent will assist in aerial photography images interpretation as input for the development of the of the water points sources data. This costs include salary only. 1.2.4 Operation, finance and administrative officer will provide field logistics, procurement and finance support to this project. The post is cost shared.The costs include salary only.The budgeted costs are not duplicated with Enabling project and the proportion charged relates directly to the functions performed for this project.

B:2 Supplies, Commodities, Materials

Code	Budget Line Description	Units	Unit Cost	Duration	TimeUnit	Amount(USD)	Organization	CHF	% of CHF Total
2.1.1	Consumables Office Supplies	1	1600	1	Lumpsum	1,600.00	0.00	1,600.00	
2.1.2									
2.1.3									
2.1.4									
2.1.5									
2.1.6									
2.1.7									
2.1.8									
2.1.9									
2.1.10									
Sub Total						1,600.00	0.00	1,600.00	1.7

Budget Narrative: Consumables represents cost of printing paper general stationery office use. The costs is estimated based on the projected usage and the prevailing market prices.Please refer to attached BOQ

C:3 Equipment

Code	Budget Line Description	Units	Unit Cost	Duration	TimeUnit	Amount(USD)	Organization	CHF	% of CHF Total
3.1.1									
3.1.2									
3.1.3									
3.1.4									
3.1.5									
3.1.6									
3.1.7									
3.1.8									
3.1.9									
3.1.10									
Sub Total						0.00	0.00	0.00	0.0

Budget Narrative:

D:4 Contractual Services

Code	Budget Line Description	Units	Unit Cost	Duration	TimeUnit	Amount(USD)	Organization	CHF	% of CHF Total
4.1.1	Hydrogelogical survey contract (including inventotry and water quality testing)	1	40000	1	Lumpsum	40,000.00	0.00	40,000.00	
4.1.2	Rent of Vehicles for field work (100 days of field data collection)	1	120	100	Days	12,000.00	0.00	12,000.00	
4.1.3									
4.1.4									
4.1.5									
4.1.6									
4.1.7									

	4.1.8									
	4.1.9									
	4.1.10									
	Sub Total					52,000.00	0.00	52,000.00	55.6	

Budget Narrative: 4.1.1 Hydrogelogical survey contract (including inventory and water quality testing). FAO will competitively contract local organization with expertise in collecting and collating scattered geological, geophysical, hydrological and hydro-geological information (under FAO-SWALIM supervision) in Ceel Waaq district in Gedo region. In addition, a water testing company will be engaged via competitive FAO procurement process to test the quality of the water samples collected. 4.1.2 This cost for car hire during field surveys for data collection (hydro-geological and geophysical). A total of 120 field data collection days have been budgeted with one car per day. The daily rate of car is USD 120. The vehicle will be utilised in providing easier access to the villages and data collection points.

E:5 Travel

Code	Budget Line Description	Units	Unit Cost	Duration	TimeUnit	Amount(USD)	Organization	CHF	% of CHF Total
5.1.1	DSA SWALIM staff	4	100	20	days	8,000.00	0.00	8,000.00	
5.1.2	Air ticket for consultant to the field	2	1000	1	Trips	2,000.00	0.00	2,000.00	
5.1.3									
5.1.4									
5.1.5									
5.1.6									
5.1.7									
5.1.8									
5.1.9									
5.1.10									
	Sub Total					10,000.00	0.00	10,000.00	10.7

Budget Narrative: 5.1.1 Per Diem for staff participating in the data collection supervision is calculated as 4 staff for a total duration of 20 days. The per diem is standard UN rate of USD 100 per day including incidentals. 5.1.2 Air ticket for consultant will cater for flight costs via UNHAS where EC flight is unavailable. The round trip UNHAS standard costs to Somalia is USD 1000 and 2 trips have been budgeted.

F:6 Transfers and Grants to Counterparts

Code	Budget Line Description	Units	Unit Cost	Duration	TimeUnit	Amount(USD)	Organization	CHF	% of CHF Total
6.1.1									
6.1.2									
6.1.3									
6.1.4									
6.1.5									
6.1.6									
6.1.7									
6.1.8									
6.1.9									
6.6.10									
	Sub Total					0.00	0.00	0.00	0.0

Budget Narrative:

G:7 General Operating and Other Direct Costs

Code	Budget Line Description	Units	Unit Cost	Duration	TimeUnit	Amount(USD)	Organization	CHF	% of CHF Total
7.1.1	Office Rent	1	1000	3	Lumpsum	3,000.00	0.00	3,000.00	
7.1.2	Other Services: (Communications, utilities, etc)	1	857.94	1	Lumpsum	857.94	0.00	857.94	
7.1.3									
7.1.4									
7.1.5									
7.1.6									
7.1.7									
7.1.8									
7.1.9									

	7.1.10									
	Sub Total					3,857.94	0.00	3,857.94	4.1	

Budget Narrative: 7.1.1The office rent is SWALIM's contribution to the FAO Somalia's offices rent. The cost is based on the apportionment of space occupied by SWALIM staff. This is budgeted at USD 1,000 per month for 3 months. 7.1.2 This will cover cost for services such as telephone, electricity and internet cost, water, guards, garbage collection, cleaning services and other services related to the use of the offices in Nairobi. The costs have been estimated based on past consumption and this has been apportioned to the CHF project based on the number of staff to be engaged in the project. The costs are not duplicated with ENABLING SWALIM project and the proportion charged relates directly to this project. Other services are telephone costs, office water, security etc

		TOTAL					93,457.94	0.00	93,457.94	

H.8 Indirect Programme Support Costs

Code	Budget Line Description				Amount(USD)	Organization	CHF	% of CHF Total
8.1.1	Indirect Programme Support Costs				6,542.06	0.00	6,542.06	7.0000
	GRAND TOTAL				100,000.00	0.00	100,000.00	100.0

Other sources of funds

Description		**Amount**	**%**
Organization		0.00	0.00
Community		0.00	0.00
CHF		100,000.00	100.00
Other Donors	**a)**	0.00	
	b)	0.00	
TOTAL		**100,000.00**	

LOCATIONS

Region	District	Location	Standard Cluster Activities	Activity	Beneficiary Description	Number	Latitude	Longitude	P.Code
Gedo	Ceel Waaq	Ceel Waaq		Investigating possible ground water aquifers in Ceel Waaq district	People	20000	2.78767	40.998291	NA-3708-F11-002
TOTAL						**20,000**			

DOCUMENTS

Document Description
1. FAO SWALIM Funding Strategy
2. FAO Risk Management Framework
3. JRC 2 Comments
4. TOR for Hydrogeology Survey Contracts
5. BoQ Rent
6. BoQ Other Services
7. BoQ Supplies