EUROPEAN COMMISSION
DIRECTION GENERALE POUR L'AIDE HUMANITAIRE & LA PROTECTION CIVILE
Regional Support Office for East and Southern Africa (Nairobi)

RAPPORT DE MISSION

Subject: **Ethiopia WASH RSO Mission (*resilience part of the mission*)**
Auteur: **Jerome BURLOT (WASH Adviser/RSO Nairobi)**
Date: **Du 03 au 14 August 2015**

Main partners and visited sites list:

Dire Dawa:

- Oxfam GB: Abdulaye Mohamed (Field Coordinator) and his team
- Save the Children: Ketema Wogari (WASH advisor) and field WASH and health/nutrition team
- HCS[1]: Hilina Mikrie (Operational Director of operation/program based in Dire Dawa) and his WASH team
- CARITAS Germany: Wolfgang Fritz (Project desk office for Africa/Middle East)

Appendices list:

- 1: ECHO Resilience policy
- 2: Ethiopian National framework for WASH project implementation
- 3: Operation and Maintenance WASH manual
- 4: Minutes of TWG from WASH sector
- 5: WASH project Siti zone baseline survey report provided
- 6: DRR approach project reference document
- 7: WASH committee organization and water point management project general guidelines

[1] Hararghe Catholic Secretariat

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1. EXCECUTIF SUMMARY

The mission combined nutrition, food security (*monitor by Yohannes Country PO*) and wash and last 4 days. Of course that's very tricky to understand in so short time all the issues, challenges and stakes, general problematic of the context encountered by the partners. Whether many issues have been highlighted at various levels from the project design, assessment to the implementation and monitoring, the outline of the resilience approach remains particularly relevant in such context. Nevertheless, it really time to build effective implementation capacity and apply with more consistence and added values the principles of the resilience approach at partner's level.

A certain number of constraints encountered by the partners have to be taken into account when monitoring the project implementation:

- ✓ The difficulties to deal with the local authorities in general at state and regional level and as result the amount of time waste before signature of the MoU by relevant authority and as consequence need from the partners to deal (together with the emergency) a huge volume of activities in short time which led to many gaps in project implementation
- ✓ The difficulties to implement resilience project in the middle of an acute emergency situation
- ✓ The difficulties to recruit competent people in the surrounding and the level of education of community members (*even if this aspects can be considered in most of the context of the RSO NBO region at least*)
- ✓ The level of needs
- ✓ The challenge of keeping the balance between building good relationship with local authorities and respecting humanitarian imperatives
- ✓ The inter-ethnic relationship complexity

The main problems highlighted during the visit are:

- ✓ Translation of strategic document into detailed action and contextualization of standard guidelines/standard
  - Need to better contextualize the activities at level of design and implementation.
- ✓ The bottom up dynamic to learn from the project, the communities and the context in order to be more relevant in problem identification and then definition of solution
  - Need of better project preparation, diagnosis, survey, inquiries
- ✓ Need to improve the monitoring tools and plan to ensure appropriate dynamic of improvement (as it is a new approach), production of lesson learnt…
- ✓ Planning of the activities and adaptation of the planning to the constraints faced. The problem came as well from the way the partners prioritize the activities in such situation (delay, emergency…) which show until some point a gap in understanding how to apply resilience principles in order to reach or contribute to reach the objectives pursued by the resilience. Improve the capacity to deal with emergency without stopping completely the resilience part of the project.

The detailed or those problem and proposition for improvement have been in respective sections of the report. The main critical issues have to be addressed without delay and partners have to get aware about the stakes of it if we want to be able to build in a close future a relevant implementation framework for resilience project adaptation, implementation and replication.

Within such context it is clear that the resilience approaches is ***pretty relevant*** and that the needs are clearly there. The problem is more in the capacity of the partners to understand the concept and to translate it into detailed action plan strategic documents. The project tools and activities have to be developed to be adapted to the approach and to the context (to each context of intervention). The capacity to learn from the project and the population and to improve relevancy and then sustainability of the action led has to be clearly enhanced by the partners.

As the approach is relatively new for some of the partners within the context, it is clear and normal that it is has to be improved. Thus, the implementation of a dynamic of improvement should be taken into account, formalized and capitalized. The importance of internal monitoring with clear output should be understood and then implemented in accordance by the partners.

2. BACKGROUND

2.1. Project implementation context

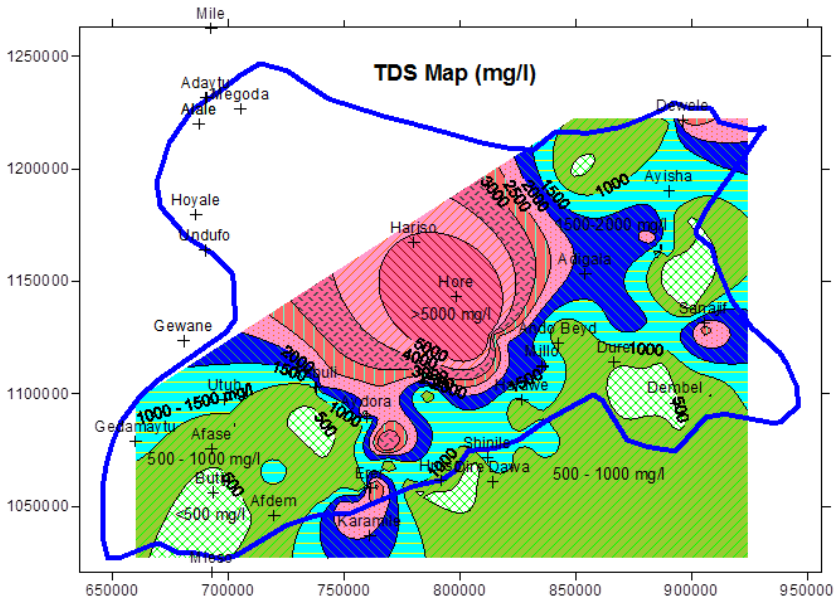
A lot of time have been spent in transport during this visit especially the third day where we spent 8h in car, for about 3h on the site. The time of transportation is a constraint to take into account in project monitoring.

The consortium of partners leading the project struggled about 6 months to sign the agreement with the local authority to be able to start up the project and then when it began, the partners had to face the consequence of a protracted acute drought. The Ethiopian context and notably the Somalia regional state are pretty pushing to direct the humanitarian relief and partners have to spend a lot of energy to ensure that the project independency is effective. The regional Water bureau also request changes in the project targets at last minutes, imposing to partners to review their plan. It is clear and understandable until a certain level that this situation affect the project deliveries and quality of action. Although, it cannot explains all the issues noticed on the resilience part of the project which need to be improved as fast as possible.

In the same state of mind, the emergency being quite chronicle in the area, even if the intensity of crisis is hardly predictable, we expect from our partners to be prepared and organized for it in order to don't abandon the resilience aspect of the project. We rather expect to create link between actions and to plan the appropriate "contingency" capacity to deal with both aspects of the projects in parallel.

2.2. Note on water resources context

Whether that it seems that the Siti zone gets high potential of fresh groundwater, with potential yield between 72 and 180m3/h under 200m depth, the distribution of this potential is very unfair. In addition some identifies area (Erer woredas or Hore and Hariso kebeles) get very salty water with TDS[2] value over 1500 mg/L and even over 4000 sometimes (the limit being 1500). The areas with the highest



[2] Total Dissolved Solid

potential of fresh groundwater resources are the North of the main Siti zone recharge area and Southern area of Siti zone.

Four areas with the highest potential have been identified by the Geo engineering service (hydrogeological consultant) that produced the HCS water point and assessment report, it is concern:

- Dembel-Biyo Bahe-Gebi Plain (Kulen valley)
- Harawe Valley
- Gad-Metto-Aydora
- Butij –Alijir-Utub Plain

Those areas could be exploited as contingency resources in case of high drought as the resources should not be affected unless the drought last several years. People and especially Nomads struggling for water at time of acute drought could be directed and informed in advanced about those locations. Equipment with buffer capacity could be implemented. Instead to run after people in such wide environment and findings people in needs but limited to relief them as limited by existing water resources, the place with high potential of groundwater could be developed to supply them at time of acute drought. It should more efficient, as the pastoralist will get water and it will mitigate in the meantime stress on permanent resident population water resources (with risk of depletion) and then risk of conflict for water access as well. Traditionally, pastoralists are used to move with the goal top find water resources.

We have note that the sub surface dam (with drainage pipe and hand pump on the safe side of the river) in appropriate location is very relevant equipment to improve water availability during the drought by increasing the buffer storing capacity of the underground river bed. The visit happen during very acute drought and even at this time the well was still providing fresh water. In addition in this area the aquifer is likely saline, and then such equipment is even more relevant. The problem is that those types of equipment should be built and maintained properly. The proficiency of the contactor is very important in ensuring appropriate anchorage of the dam wall, appropriate dimensioning and soil to lay down/anchorage the dam. As well, given the unpredictable strength of flash flood it is very important to clear the upstream of the dam to avoid timber or tree carry away by previous flood to damages the dam when push by new flood. Apparently, it is not done whereas normally the rainy season should occur. This equipment have been hand over to government and the community already some time ago, but this aspect is interesting to note to learnt from it (*investigate why people are not doing it, problem of ownership, not aware???)* in order to contribute to improve in the future the sustainability of equipment management/maintenance.

The mots tricky areas in terms of water access haven't been visited during the mission.

3. MAIN FINDINGS AND ISSUES DISCUSSED

3.1. In general / Basic macro analyze

One the main problem seems to be apart planning, the need to translate strategic document and guideline into action plan. In addition, a monitoring plan should be developed in order to be able not only to record the findings, data, information collected during the implementation of the project but also to exploit it in order to be able to produce lesson learnt and then be able to ensure a dynamic of improvement. Those lesson learnt and this improvement of knowledge about the area will enable to better adapted the project to the targeted population and then be able to contribute to build or improve the resilience of those communities in a bottom up logic. The dynamic of learning from the population and the project implementation haven't been enough demonstrated during the visit.

No monitoring report or lesson learnt note have been produced so far by the partners through the TWG[3], or at least not provided whereas it has been requested. It took very long time to get few strategic and operational documents from the partners, when it should has been fast and easy, if the document were properly collected and filed. It seems that the data based management should be seriously enhanced. Although, we can take into account that regular coordination meeting are held at Addis and field level.

Extract from the project baseline report: During focus group discussion in Durdur kebele the groups said "how can we boil the scarce and precious water and expose to evaporation?" This is the type of information that should come out from resilience project, but this is the only such information provided from the baseline and data base. This information could for instance help to better address the problem of water uses at HH level through hygiene promotion…

The Trans-sectorial approach seems to be very weak. It is very tricky to understand the dynamic of interaction between sectors involved despite of the project aimed to deliver a multi sectorial response to a problem (*e.g.: lack of harmonization in terms of community contribution…, no public health record in the WASH sector baseline/ data base*).

Furthermore, it seems that only two TWG have been implemented so far, the first one being last December 2014, with project which should have started in June 2014). Reading the minutes of it, it seems that TWG are more led as a coordination meeting tackling *what to do*, rather than real TWG aiming to find out *how we do*. It is very hard to understand why the time waste to wait for the MoU endorsement by the local authority haven't been used to improve knowledge, analyze to define the respond and data base about the problems and the context…

It is clear that without this agreement sign, partners could not start implementation but at least they were allow to implementation and develop investigation and based on the results of the investigation (technical, socio-economic, cultural, environmental…) develop relevant strategy, guideline, action and monitoring plan…

[3] Technical Working Group

3.2. Visit 1 with STC in Garman and Bila Kebele:

3.2.1. Site 1, Visit of rangeland in Garman Kebele:

2 very poor design of segregated latrine (no sign but they plan it that way) were standing close to the rangeland. The explanation from the partners to understand the logic was a bit confused. They were planning to use it as:

- ✓ Demonstration facilities
- ✓ To promote used of latrine
- ✓ To be used by the labor used to work on the rangeland rehabilitation

The problems in the response are:

- ✓ One of the latrine the one for men has never been used, and the one of women barely
- ✓ The design and achievement is of very poor quality and do not ensure privacy at all

In conclusion, the level of relevancy of such approach can clearly put in question. How you promote latrine access with such poor design, out of standard in terms of privacy, and even not used at rangeland location. However, if the level of implementation harms the approach, the initial idea could be interested to develop.

3.2.2. Site 2: Visit of village with 650HH in Bila Kebele:

The project was consisting of the rehabilitation of the water supply system with capacity building and awareness activities. The water supply system was built 6 years ago and was not working since 2 years. This is a serious concern; the lifespan of the system should have been much longer.

The initial problems of the water supply system were mainly:

- ✓ Leaks on the GI rising pipe
- ✓ Electrical breakdown of the pump
- ✓ Distribution on the pressure line

The response has been:

- ✓ Replacement of the rising pipe and pump
- ✓ Implementation of a 10m3 fiber glass tank at school
- ✓ Connexion of the 50m3 storage tank (made by government) with 860m of GI pipe 3''
- ✓ One training of three days about O&M and assistance for opening of a bank account

The problems in the response:

- ✓ The replacement of the rising pipe could have consider to implement HDPE pipe less sensitive to corrosion than GI pipe (leaks appear after only 3-4 years after using the system), especially given the features of the groundwater.

- ✓ The replacement of the pump is ok, but no investigation has been made to understand why the problem occurs and then they cannot contribute to improve the lifespan of the pump as well. Although, the pump lifespan should be around 10 years and can even be over.
- ✓ The training was a one shot training with some practice but not on side.

One of the main problems was the fact that no backup generator has been plan despite of the ECHO WASH policy. Which means, in case of any breakdown for the generator, the people will not get any more access to the network. This is pretty serious problem hard to understand, as providing backup for the pump station in such dry area should be evident if you want to improve the reliability and the sustainability of the water supplies.

In addition, during the visit it has been asked to the partners if the people contribute to the operating cost of the water supply system, but they did not have *any* clue about, as well as fuel consumption, etc….The also did not know whether the pump operator get incentive (yes he got). Although, they are supposed to build capacity of the communities (*within the framework of the ECHO resilience policy and HoA technical guideline, as well as national WASH implementation framework, and the project water committee organization and water point management guideline*) and assist the communities to understand the cost of the operating and minor maintenance to define an appropriate water price with them and ensure sustainability of the management.

The community mentioned that they are financially contributing, they set up a price by jerricane, starting at 50 cents/20L, but they found out that they could afford the operating cost with it and then they increase the price up to 1ETB / 20L (about 0,05USD). They have opened the bank account of the WASH committee 2 months ago, and at the day of the visit they mentioned that they still have 1600ETB. If we assume that 70% of the population is contributing, they should collect (based on a daily consumption of 20L/pp) every month 68 250 ETB. The operating cost are not known but let say that with a pessimistic assumption at 15L of fuel per day for 6 hours pumping (means: 450L/month, about 9 750 ETB /month) and the salary of one operator (2000 ETB), it seems to means that the level of contribution is pretty low.

The community by themselves produces a list of the most vulnerable persons to ensure free access for them.

The partners mentioned at this point that they do not want to interfere within the local community dynamic. Which has sense until some point, but then they should change the ToR of the project (it is quite of an easy position to hold).

We have to note for this village, that it is not very representative of the place suffering from drought in terms of access to water resources, as in the middle of the village flow a permanent stream, which were used when the water supply system were not working.

Whether we can acknowledge that a clear and demonstrated substantial quick impact on the access to clean water resources (no chlorination was planned), the problems highlight up there seems to be evidence that they are not contributing as they should to improve the sustainability of the service. The impact of the sanitation and hygiene promotion activities is barely noticeable, and in the meantime not monitored. Saying that and following the framework of the resilience programming, the consortium's partners should drastically improve their level of diagnosis, assessment and survey to better contribute to build/improve the resilience and coping mechanism of the targeted population.

The pump operator did not have any log book to follow up water production, fuel consumption, or service of generator, breakdown historic, … The log book is recommended means to be implemented to contribute to improve management and then sustainability of the water supply system according the *water committee and water point management guideline* of the project (in appendice) and the *National WASH implementation framework* (in appendice).

Extract from the WASH committee organization and water point management project general guidelines:

"A water and sanitation project cannot be sustainable unless there is a capable body to manage and sustain the service of a water point after completion."

The sanitation and hygiene promotion part consist only on an ad hoc training and then trained are in charge to disseminate messages within the community, but there is no activity report and very inconsistent monitoring of the action led by the community. It seems that so far no refreshing has been implemented. Despite the fact that the important of consistent training is widely acknowledged notably by the National WASH implementation framework as the guidelines of the project and the ECHO WASH policy, it seems that the partners did not made any assessment of the existing capacity, the capacity to be acquired and the way to measure progress (there is no entry and exit test). They did not assess the progress made.

In the meantime, we can take into account that numerous training have already be implemented in the area with risk of routine and then the government request to be more direct and practical in targeting training contents. Nevertheless and following this principle, the existing capacity and output from former training should be even more assessed in order to be more relevant and practical in defining training needs and targeting training contents.

Normally in the initial plan of the partners, they should deliver a first training mainly based on community mobilization and contribution, community awareness, project information, WASH committee, cost recovery… focusing on software.
The second training should focus on operating and maintenance of the equipment, and then continuous training/refreshing should be applied. Actually, so far due to the time to sign the MoU with local authority only the second training has been delivered. Partners plan to implement continuous refreshing and training before the end of project, with which frequency, means??

Furthermore, the training that have been delivered about O&M of the equipment gather 59 attendees, which is a bit too much for an efficient training and ensure appropriate framework when it comes to practical exercise. No document has been provided about the way to design, develop training materials, implement, and monitor / test training.

Despite of the National WASH implementation framework (2011), which among others mentioned the following principles and strategy for capacity building in rural area:

Results Based Planning *– first defining WaSH output targets and CMP/WMP approach to be achieved in context of the Core Plan and Action Plan, then, using a participatory needs assessment, determining what additional capacity is required and how increases in capacity will be measured.*

Incremental Training – *training is generally provided in a series of short courses over a period of time – allowing trainees to learn step-by-step as the task requires. In this context, initial training is followed up with continuous professional development including on-the-job action-based training.*

Action planning *– articulating specific post-workshop tasks that participants commit themselves to undertake with clear objectives, targets, indicators, and timelines…*

The partners in charge of the project interviewed on the field did not have any feedback to give about what is done by the community, how and what is the project impact so far as well as the lesson learnt, as planed within the resilience strategy (ECHO resilience policy as well as national WASH implementation framework).

3.2.3. Site 3 visited, Sideta, Sub Kebele Tubi:

There were two dug wells located on the side of a non-permanent river and equipped with hand pump and serving the surrounding scatter communities (about 500HH). The furthest HH is located about 4km from the water point. The community had a birka which we could not see, and consider as broken (?). The next water resource is located at about 12km.

Water access problem was coming from one hand pump broken and one well dry out.

The response was:

- ✓ Repair the pump (why the pump is broke??)
- ✓ Dig deeper the well, from 13m depth to 15,8m (the aquifer is semi confined)

Member of the WASH Committee had benefit from the previously mentioned training 4 months ago.

In terms of activities, they are collecting the financial contribution, fix at 15 ETB/month/HH, which is a bit weird. There is no operating cost and so far after 4 months they have 1300 ETB in bank. The main point of contribution is to plan reparation of the hand pump. They mentioned that they are also disseminating message within the communities but the message base on hygiene and sanitation were barely understood by the members of the committee meet and in charge of this activity.

The digging deeper of the well can be considered as an a real input in terms of building resilience by identification of opportunities to reduce future risk, and contribute to improve sustainability of the access to water.

On the ground it seems that the partner STC is not involved in water quality testing/monitoring (***TO BE FOLLOW UP AND CONFIRMED OR NOT*****).**

3.3. Visit 2 with OGB in Arawa Kebele:

OGB works with an implementing partners focusing mainly on the software component when OGB staff focus on the hardware one.

3.3.1.Site 1: Shebeleon village, 1200 HH (7200 pp)

There are two BH (120m 40 years old and 73m built in 2011) built by government. The distribution is done in gravity from elevated tank (one of 15m3 and one of 10m3). The pump rates are 5L/s (18m3/h) and 4,5L/s for the most recent BH (16,2M3/h). They use to fill 3 times per day the 25m3 storage tank, meaning about 75m3, a bit more than 10L/pp/day, but they could pump much more. In the village is 5 public water point and private connexion. The generator fuel consumption (according the pump operator) is 10L for 4hrs which is coherent. Currently, the community is using only one BH but increase the pump time. They are using both resources communal electricity and pump station generator, but the communal at first. One of the BH is connected to the communal generator and the others to the pump station generator.

The two pumps were not working at time of the assessment in February. In the oldest the old pump was corrugated and in the new one the pump had work 3 years and then breakdown for electrical problem. Actually, the electrical problem occurred when the population tried to connect directly the pump to the new communal electricity network (communal generator).

When the water supply system was not working people used to go at the closest river located 2-3km from the village. During the dry season they could find water digging in the rover bed at 5m depth.

During the stage without pump, few outbreak of diarrheal disease have been recorded.

The people contribute since 5 years (cost recovery system implemented by HCS) to the operating cost of the equipment, so far they save about 22 000 ETB[4] (a bit more than 1000USD). The price of a 20L jerricane is 50 cents. The WASH Committee with the current structure have been implemented 5 years ago and re activate 2 months ago (as they stay about 1 year without water supply system) by OGB. According the community, the most vulnerable have free access to the water; it was en evidence for them which a good sign that solidarity mechanism is effective in the community. The fact is all this community organization and contribution is not an input from the current project.

Problem noticed during the visit:

- ⇒ The OGB staff did not have any idea about the level of organization of the community, if they pay or not water and how much, what is the average fuel consumption, price of communal electricity.
- ⇒ No backup generator in the meantime, the communal electricity supplies could be considered as a backup. The fact is that the partners did not think about need of backup in anyway.
- ⇒ OGB did not have any clue about the operating cost of the system and did not provide in technical assistance to improve budgeting and management of the two electrical resources they have
- ⇒ No hydrogeological data available, no pump test or water quality test have been performed so far on the resources. The water table level is not monitor whereas apparently the pumping program has

[4] Ethiopian bir

change from the original one. That's why it would be relevant to ensure that current pump rate and schedule are adapted to the resource and sustainable.

⇒ The pump operator had no log book to follow up: fuel consumption, water production, service…

⇒ The hardware is finished since almost 2 months and no training have been delivered so far to the people in charge of the O&M or even the management of the equipment.

⇒ The water table level is not monitored and no pump test

In terms of sanitation, 47% of the people of the village used to have kind of latrine. They got slab from HCS 5 years ago. The problem is they would need some follow up and technical advice to ensure stability of the slab and pit (*select appropriate ground to backfill around the latrine to improve the drainage*). Actually, many latrine collapsed because of water intrusion despite of they rise up the level of the slab, but the soil (clay) is crackling after first rain. Furthermore, one serious problem of public health is coming from the fact that people wait for the pit to be totally full to decommission. Then, they just drop some ground on the top but it is too late and then the ground is mix up with faces plus the backfill sink into the former pit. This is the type of problem that should have been identified during the assessment and address by the hygiene promotion capacity built. In this way, you can have a targeted hygiene promotion answering real problem faced by the people, which help to give legitimacy to the activity.

Instead of the local WASH committee member have been trained to disseminate very standard messages about the latrine used (but the problem was more technical, this is something that should have been identify within the framework of a resilience project and also according the WASH implementation framework), the hand washing and solid waste. It seems that the safe water chain topics have not been taken into account. The training has been delivered by HAVIACO the implementing partners of OGB. The strategy and the message are not adapted and not contextualized.

The fact is the WASH Committee seems to be active in a way, they normally meet once per month and more if there is problem.

The problems of backfilling the refuse pit for solid waste have also been noticed during the visit.

The same statement can be making about the involvement of OGB in this village. Very quick and relevant impact of the project on the access to water, but the level of knowledge and support of the community demonstrate by the partners is not in accordance with the expectation from the resilience concept. For instance the impact of the project on the sustainability is very limited, as well as the software component.

3.3.2. Site 2, sub Kebele of Gad, Dube village, 600HH (3600pp):

The water access used to be ensured by two shallow dug well (20M deep) which dry out over the time, then they were mainly using an existing Birka in bad condition (leaks) and when the Birak is empty to go a river site 10km far away. The government (not very clear if it is really them) drilled a BH but they ran out of fund to equipped it and implement water point.

The people even with the Birka used to pay for water, 1 ETB for 40L. The people are very sensitive to the water question. They care a lot about their equipment and by themselves developed a strategy to manage

the different type of resources they have according the water uses and the time of the year. This is the type of information that should be very relevant to record and capitalize, as it is a way to learn and build project in a bottom up manner. Initiatives of the community are the best base to implement project as it has usually good potential of replication after adaptation. Furthermore, it comes from their own understating and it is adapted to their capacity, it is then seriously contributing to improve the sustainability of the action led.

As response OGB planned to:

- ⇒ Equipped the borehole with direct solar pumping and after the visit they mentioned that they will add a backup generator
- ⇒ Build a water point with 10 taps plus a watering place for the livestock
- ⇒ An elevated storage tank of 10m3 has also been built

Actually, only the pump station and solar pump installation is remaining. The time of purchase is apparently pretty long for such equipment in Ethiopia (?).

No software components have been implemented so far in this village.

Same statement as previously mentioned can be made about the learning about communities' process, respect for the principle and objectives of the resilience approach, and sustainability of the action led. The project focus mainly on hardware and it looks more like a standard WASH emergency project rather than a multisectorial resilience project.

The purpose to extend the project duration funding is especially to give more time to:

- ❖ assess the situation,
- ❖ develop a relevant risk and vulnerability analyze
- ❖ identify risk to anticipate crisis and opportunities to reduce risk,
- ❖ identify and improve local capacity,
- ❖ identify underlie cause of problem to better address it,
- ❖ learn about population and from population,
- ❖ better adapt the project to the context, and improve the sustainability of the action led.

Focus on community contribution:

As in most of the case the strategy applied in terms of community contribution is that 70% of the labor work will be paid by the partners and the rest will be contribution from the community. For instance, if they have to dig a trench of 1000m, 300m will be dug free by the community. The labors get an incentive of 90ETB/day which seems to be quite high as an incentive in the context. All partners normally implement this type of strategy. However, notably for the food security component the contribution of the community for such earth work is only about 5%.

3.3.3. Site 3: Livelihood and food security activities

One comments, in this location they benefit from a permanent stream flowing down from the mountain. The point is that they continue to develop the network of irrigation channel to irrigate more land but they have any clue about the quantity of water available, and as well the quality of the water. This should be corrected to don't generate disappointment and wasting of money, plus OGB .

3.3.4. Site 4, Lastere Sub Kebele, about 450HH scatter around the water point (project not funded by ECHO):

In 2013, the EC IFS fund drilled a shallow BH which has been equipped with hand pump (repair two times and keep as backup). People used to go at about 10km to fetch water prior to the hand pump. However, the water point was very crowdie and conflict occurs among people especially during the dry season as the users of the water point increased when the flow available decrease.

Then, a private contractor originally from the place drilled a new deep BH (*89M deep, Flow: 5L/s*) on his own but the BH could not be exploited because of a problem with the development of the drilling.

Two years within the framework of an OCHA funded project OGB developed properly the BH and installed solar panel and pump with a backup generator. 16 panel of 195W have been installed to supply the 3kW pump of the BH. The water point now supplies all the communities living in a range of 5km around the water point. OGB improve the system with building two water points each equipped with 5 taps and connected to an elevated concrete storage tank.

Problem noticed during the visit:

- ⇒ Few cells of 3 solar panel were broken, and the lowest part of the array was clean when the upper part not (*see pics in front*).
- ⇒ The outlet of the BH had big leaks
- ⇒ The water meter was not working
- ⇒ Sign of high concentration of iron and mangan in the water resources (*see the red colored on the BH top on the left pics below*)

The people contribute to the operating cost and the price of water is about 25 cents for 20L. The price is lower than in others location as the solar system implies much less running cost than the fuel energy supplies. There is a price for animal as well, for instance a camel is 50cents. So far they succeed to safe 1600 ETB in 2 years. It seems to be very low; the dynamic of contribution and budget management should be investigated to better understand this aspect.

Same statement as previously mentioned can be made about the learning about communities' process, the respect for the principle and objectives of the resilience approach …, and the sustainability of the action led.

3.4. Visit 3 with HCS in Bike Kebele:

The visit with HCS was mainly focus on food security and livelihood. Actually even for a neophyte like me in food security it was very interesting, the needs obvious and the commitment of the targeted population clear…

The day was quite sad in a way that we could noticed many dead cow on the road and even at the first spot we stop we observed a cow falling down with child from the communities trying to put her up and water her pushing her in the shade.

3.4.1. Site 1, Biokulu sub Kebele: Livelihood and food security

At the first spot visited, a hot spring was used to water what is called a nursery garden. The spring was directed to the garden by small channel just after what was called a cooling pond. Close to the garden were one hand pump not working, we did not know if the problem was coming from the well which dry out or the pump breakdown. Seems to be the pumps as next to the well, the community digs a small very shallow well (2-3m), where they go down to bring the water up to the animals at the surface with bucket.

The communities used this and a dirty pond as water resources. There is a clear need for water access improvement and it should be clearly include in the future plan (***TO FOLLOW UP***).

3.4.2. Site 2, Muzu town: Livelihood and food security and quick visit of one BH

During this visit, we attend an ongoing training about food security and the way to implement cooperative. The local cooperative specialist from the state/regional institution is in charge of the training which was delivered by a lecturer from University. People were very enthusiastic with the training which raised a lot their expectation. The problem is that apparently the lecturer was using flip chart to animate the training and fix input but the level of literacy of the attendees was not in accordance with the method used. They all had notebook and pen on their table provided by the partners but almost all of them haven't been touched by the attendees.

The method of training does not seem to be the most appropriate for this type of attendees whom barely heard about cooperative in the past.

The town is supplied in water by one BH (180m deep, 3L/s) connected to elevated storage tank and public taps. The pump is apparently working at 3L/s and 210m as head. Few hand pumps are also available in the town. During the time the pump was not working the situation in terms of access was that bad that some people start to immigrate, the alternative resources are or very limited or very far. Even, with the BH functioning, still the water access is quite stressed.

The HCS staff gave confused information and even wrong information about the type of pump (when by just checking the size of the generator you could notice that the information's provided about the pumps are not correct…). The stop as very short as we had to leave the place because of the time (last place visited).

Although few problems apart the lack of knowledge about the work implemented on the site, have been noticed:

- ⇒ It seems that the pipe and fitting do not match the pressure of the pump, which could affect drastically the sustainability of the equipment. This should be confirmed or not as the information was confused and the time to get appropriate ones too short.
- ⇒ The generator is 31kVA when the pump is 7kW, so the pump could easily work with 20kVA generator and even less if a frequency controller would be installed. Which much less fuel consumption.
- ⇒ Once again there is no backup planned in such tricky water access environment
- ⇒ The pump broken last only 4 years again, but no diagnostic has been done in order to ensure longer lifespan for the new one (we cannot change pump that should last at least 10 years every 4 years, there something wrong: way to use the generator, electrical protection component, …; that should have been investigated).

Once again even the WASH component visited was very small, same statement can be made about the action as others partners. The fact is that at least HCS in the recent past produced a very relevant water point mapping with large section on water resources assessment.

3.5. Emergency operation:

Mainly consist on water trucking which should not mobilize all the resources of the partners as a contractor is used. Furthermore, the emergency intervention had started recently. STC plan as well to implement latrine for idp's but in which situation?? I am a bit wander about the relevancy of such approach. Apparently, last year some partners used to deliver water by truck on a distance which could reach 170km.

OGB start water truckin in 3 Kebele and plan to increase the water trucking to reach 6 Kebeles in total. So far OGB has already spent 250 000 USD/month for the water trucking of the 3 Kebele. Given the amount spent for water trucking (no sustainability), the resilience approach become even more relevant in such context.

STC supplies 4 hotspots in one Kebele by water trucking, repair 4 hand pumps, build latrine for Idp's, distribute 2500 aquatabs. They start 7 days before the mission. They brought 100 000 GPB (own fund?).

Problem is the pump of the BH used for water trucking is now broken.

HCS started 9 of supplies 5 Kebele and about 1600HH in water trucking and implement 10m3 storage tanks. They got OFDA fund and expect additional fund from CARITAS Germany.

4. RECOMMENDATIONS AND ISSUE TO FOLLOW UP:

4.1. General:

The concept of resilience is applies mainly in place of chronicle crisis. One of the point and one of the main differences between the concept of resilience and the standard humanitarian WAH project is the project duration. Within the resilience concept the point to have more time is too ensure more preparation of the project, better understanding and identification of problem and capacity, more time to establish suitable

social link with representative of targeted population, more time to ensure contribution and ownership, design the project and notably the soft part, etc… all this in order to be more efficient in ensuring their needs with as objective to give the maximum of sustainable autonomous and capacity to the communities to cope with crisis such as drought…and to reduce as much as possible dependency from the relief.

The underlie cause and factor of aggravation of a crisis have multiple origin. Then, that's why resilience aims as well to implement multi sectorial project. Then, for instance one of the principles of resilience project is as much as possible to implement a bottom up approach, meaning to have time to learn from the people, better adapt the project to the targeted people understanding, capacity and needs…in order to ensure ownership and sustainability of the action led. Normally, in such kind of approach, there is no hardware implemented before the software and before a certain time to design and implement an adapted community approach (every community is unique).
The duration of the project should give enough time to more practical and targeted for the software component, to ensure more relevancies for the target population, and then more legitimacy, which should contribute to improve impact and sustainability.

The problem is that looking at the ECHO WASH policy for resilience, technical guidance for HoA, and most of the reference document; what have been done and how it has been done by our partners, the project look much more like a standard humanitarian project rather than a resilience approach based project.

The initial survey should be consistent and enable crossing of information. The initial survey is a crucial step of the project in order to ensure relevancy, efficiency, legitimacy and sustainability in reaching the objectives of the project and the resilience concept.

Harmonization in terms of incentive should be ensured for all the sectors involved in the project.

Need of data base management guideline or at least terms of reference to improve data acquisition and exploitation.

4.2. Strategic thinking and planning:

Resilience should give a substantial part to preparedness and risk reduction. Then, the partners should be a reference in terms of preparedness. Following this statement, the partners should be able to anticipate crisis and plan the project and the capacity to be allocated in accordance. At the level of project implementation, the partners should try to alleviate as much as possible negative impact of the emergency intervention on the ongoing resilience project. At time of designing project, once again crisis being chronicle, the partners elaborate pessimistic and optimistic assumption and plan the capacity and the outcome of the project according with both assumptions. This type of strategic thinking will enable to improve the overall project impact (emergency and resilience) and to ease eventual modification of the initial funded request as assumptions should be mentioned in the initial single form. In addition, the eventual treatment of a modification request will be much easier at every level and much for fast.

The partners should improve their efficiency and practical thinking in translating strategic documents and guideline into concrete action plan. As well operation and maintenance should not be an unique and standard manual translate and disseminate right and left, rather the existing manual should just be a base to adapt it to the different context where the project is implementing, mentioning the specificity of each place

and equipment: type of pump, fuel consumption, the type of log book to use, name of people in charge, pipe and fitting materials to repair leaks for instance, the program of pumping, etc… The best example of the level of details is the detailed contingency plan made at level of each locality (this document has been presented to us during the visit by OGB; it has been done within the framework of a national campaign for preparedness and risk reduction).

Extract from ECHO technical guidance for HoA HIP 2015:

Resilience[5]: ECHO's objective is to respond to the acute humanitarian needs of the most vulnerable and exposed people while taking opportunities to increase their **resilience** – to reduce on-going and future humanitarian needs and to assist a durable recovery. Where feasible, cost effective, and without compromising humanitarian principles, ECHO support will contribute to longer term strategies to build the capacities of the most vulnerable and ***address underlying reasons for their vulnerability*** – to all shocks and stresses.

All ECHO partners are expected to ***identify opportunities to reduce future risks*** to vulnerable people and to strengthen livelihoods and ***capacities***. ECHO encourages its partners to ***develop their contextual risk and vulnerability analysis*** and to adapt their approach to the type of needs and opportunities identified (see template). This requires partners ***to strengthen their engagement with government services, development actors and with different sectors.*** In that regard, ECHO partners should indicate how they will increase ownership and capacity of local actors whenever possible: community mobilisation, CSOs, technical dialogue, coordination and ***gradual transfer of responsibilities*** to countries' administration or relevant line ministries.

The capacity to shift from a resilience mode to an emergency mode with the crisis modifier is very relevant in such project. Nevertheless, the partners knowing the area were emergency are in anyway chronicle should be able to adapt his capacity to shift to an emergency mode without totally abandon the resilience objectives of the project.
Given that one of the main advantages of the resilience financial mechanism in ECHO is the time of duration of the funding, which should enable better project assessment, diagnosis, survey to improve the relevancy and the sustainability of the action led.

Within this framework and to avoid such waste of time due to the complexity to deal with government bodies, we could imagine to put in the Technical guidance or in the ECHO resilience policy that no hardware activities (unless justify by emergency) should be implemented by the partners prior to a 4-6 months duration used to improve diagnosis, survey, inquiries, or relationship with the various communities and start to implement software activities. This approach is used in the EU water facility program as studies highlighted the fact that since the hardware is implemented to level of interest from the communities for the software component decrease.

4.3. Water supply:

[5] *Resilience opportunities differ according to context. However, these opportunities should be considered in all locations. HIPs, designed after consultation with partners, should explain broad resilience parameters and expectations of partners. ECHO partners are required to fill in the "Resilience Marker" in the e-Single Form. Four guiding questions are presented. For each of these questions, for example "does the proposal include an adequate analysis of shocks, stresses, and vulnerabilities," the technical annex should indicate expectations (i.e. what may be considered as adequate according to the situation).*

- Instead of only replace broken equipment such as pump or generator, the partners should investigate the reason of those breakdowns and a diagnosis should be issued to enable to improve the lifespan of the equipment and the training of the operator (as many problem come from misused of the resources). We cannot replace pump every 4 years.
- The partners should assist the communities to calculate at the operating cost of the hydraulic equipment as well as minor maintenance, define an appropriate price of water, and manage their budget. A log book should be systematically implemented, and the partners should build the local capacity to ensure appropriate management of fuel stock in order to avoid rupture in supply and then stop to water supply (*fuel is also frequently the most risky items in terms of diversion*).
- The cost effectiveness of the energy consumption must be taken into account systematically when working on motorized system especially the ones using fuel. More the system is cost efficient, more they are sustainable as more it is affordable for the users. For instance, generator should not be oversized compare to the pump needs unless the strategy is to keep a contingency capacity and flexibility, but this has to be coherent…
- Every time a BH is open, the partners should check the position of the pump, do a pump test which could help to update the water resources assessment matrix and improve the way to manage water resources by improving the level of knowledge of the dynamic and evolving in time for the aquifer exploited. Log profile of the BH where the partners intervene should be recorded and file as memory of the project. Water table level should be monitored as well, not necessarily in each BH, but at least in each different type of aquifer. Given the importance of water resources management in such environment, the partner's staff should improve their knowledge about the different type of aquifer in their area and their potential of exploitation for human and animals used.
- Systematically backup generator or even pump in certain circumstances must be implemented where motorized pump is used.
- Water quality test must be systematically performed before sealing BH after intervention.
- ***Emergency intervention:*** Appropriate identification of high potential sustainable water resources and more accurately BH should be used to ensure the most cost effective water trucking by reducing distance. In addition, the partners should be able to technically demonstrate that there is no negative impact on the level of exploitation and the sustainability of the resources and equipment used for water trucking. For instance in some location we could find a BH equipped with hand pump as the population using it is limited as well as the financial resources to afford the operating cost, but with very high yield potential much over the needs of the permanent people using it. Then, this resources and equipment could be temporally equipped with motorized pump to supply the water trucking of others location and the local community as well (as the hand pump will have to be removed). Those types of resources should be identified within the framework of a contingency plan…
- The local WASH Co and especially operator should be involved at every steps of the work implementation

4.4. Sanitation and hygiene promotion:

- The project focus mainly on water access which is ok, but then the sanitation and hygiene promotion part should be minimized in the budget and decides case by case according the problem identify and not as part of a standard comprehensive package. This is a strategy that could be accepted for an emergency project as the time to identify accurately and get a deep knowledge about the problem, or the capacity and the community dynamic, is limited. This is where we could expect the resilience approach to be more adapted, contextualized and then efficient with more sustainability of the action led and the improvement made.
    - The framework of resilience funded project should enable the partner to be more targeted and adapted to the context
- The sanitation should be based on subsidies and technical assistance. The level of subsidies should be defined according the capacity of the population assessed. The sanitation component cannot be based only on hygiene promotion. Sanitation should be implemented when public health risk or problems related to it have been identified. The design of latrine should be based on the principle of easy replication (*promoting local construction materials and method, they know how to build their house so they should know how to build a latrine, then the slab for a question of quality and stability could be imported, as it is sustainable*) by the population. The solidarity mechanism must be as much as possible preserved (as it is one of the strength of resilience for those communities), notably when it comes to support the most vulnerable. Workshop could be organized to learn about the design (by practice), the most skill people of the community could be identified and provide technical support to the others… the partners could subsidies the construction by providing slab or others means…
- The partners should prior to the project activities implementation learn from the communities about their problem and capacity in order to be more efficient in supporting to answer the needs, as mentioned in the resilience reference document, the project should be built or designed bottom up. This should help to design all software activities, such as: training and capacity building, hygiene promotion method and tools, management of hydraulic equipment and cost recovery, community contribution …

  As much as possible, targeted population should be in charge or promote in the project activities implementation and the partners should supervised, adjust and provide technical assistance when needed. Then, problem like decommissioning and collapsing of latrine (*highlight in one village during the visit*) of others concrete problem should be included in the topics addressed by hygiene promotion.

4.5. Capacity building:

Extract from the National framework for WASH implementation, 2011:

Experience has shown that a water management committee can best handle the financial management of a rural water scheme provided that, their capacity are built through proper training.

- Appropriate training should not gather more than 30 people, entry and exit level of knowledge and skill should be assessed. The training should be mainly practical and refreshing or continuous

training/monitoring should be implemented on site, in the environment of the trainee in a kind of coaching or mentoring approach. The strongest elements in the various field address by the training, should be identified during the training and be used and promote as focal point for continuous training and/or technical referent in one particular field according the different type and level of capacity outcome from the people enhanced by the training. This will enable to bring the capacity as close as possible to the needs and contribute to a more sustainable training impact.

- The standard manual for O&M of water supply system should be used as based and contextualized to every location the project is implemented: every location should have his own manual develop in participatory manner with partner's staff and stakeholder of the village to make practical. The main technical information about the equipment should be mentioned: type of generator, pump, and features of the borehole… The O&M plan should be based on the type of equipment, pump, generator, borehole, storing capacity they have…all instruction to operate the system should be based on the equipment they have: schedule of generator working hours to ensure appropriate supply according, yield of borehole, flow of the pump, storing capacity…service of generator, regulation of the network if necessary, drainage of water point…
- Improvement of the spare part availability or assistance to the WASH Co to get in touch with potential providers should be part of the capacity building
- The training for hygiene promotion should integrate a large session on practices and simulation like role play, etc…
- Partners should have a focal point or at least a referent proficient senior person for resilience to be able to consult and to enhance monitoring. Such position should be difficult to fund in many locations but a mobile capacity could be envisaged at least to also better learn and then advocate for such approach as it is new. Then, It could be interesting to internally in ECHO consider eventual contribution to fund a regional focal point position by the appropriate partners with clear delivery and output in order to ensure better: *training and capacity building of the partners, technical assistance (in case of emergency for instance and need to review project planning), monitoring with production of lesson learnt and analyze, proposition for improvement (as it should be dynamic) might be a good opportunity to contribute to build the necessary capacity and advocate for…*

5. CONCLUSION

This is clear that the partners' actions have quick and important impact on the life of people. In addition, some relevant output have been identified but mainly coming from former funding project, like the water resources mapping or the detailed contingency plan at micro level...

Given the tricky context of water access in the Somali region, the population is pretty aware about the importance of water, and seems to be very committed to ensure/secure and improve their access to safe water.

After the mission we make the general statement that the staffs in charge to implement the project strongly need to better understand the objectives, mechanism and purpose of the resilience concept. Most of the partners staffs meet on the field are barely able to explain what the difference between a standard humanitarian WASH project and a resilience project. The best evidence of it, is the way they prioritize what

they have to do and focus mainly, if not only, on the hardware component and implement the project in a upside down manner. Normally in such kind of project, there is no hardware since deep contextual analyze and data collection haven't been done and the software component is always the first to be implemented (*see resilience ECHO policy and National WASH implementation framework or the guideline of EU Water Facility program*).

Given the emergency situation and the waste of time to sign the MoU with local authority, the partners end up with very high volume of activities and then in such situation they really need to understand what the point of resilience if they want to be relevant and prioritization of the activities.

There is a clear lack of method, planning and management at this level. In addition, it is crucial that people in charge to implement the project (*not only the management staff*) at each level understand the concept of resilience, the objectives chased and the added value which should come from it… The partners have to ensure this by appropriate briefing/training about the resilience approach and the way to reach its objectives and to ensure sustainability of the action led.

Within such context it is clear that the resilience approach is ***pretty relevant*** and that the needs are clearly there. The problem is more in the capacity of the partners to understand the concept and to translate it into detailed action plan strategic documents. The project tools and activities have to be developed to be adapted to the approach and to the context (to each context of intervention). The capacity to learn from the project and the population and to improve relevancy and then sustainability of the action led has to be clearly enhanced by the partners.

As the approach is relatively new for some of the partners within the context, it is clear and normal that it is has to be improved. Thus, the implementation of a dynamic of improvement should be taken into account, formalized and capitalized. The importance of internal monitoring with clear output should be understood and then implemented in accordance by the partners.