



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 (*refugee's part of the mission*)
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Date: Du 03 au 14 August 2015

Main partners and visited sites list:

Gambella and Kule, Tierkidi, Jewi, Pugnido, Pagak camps:

- UNHCR : Cletmetine Awu Nkweta (Representative); Angele Djohossou (Head of Field Office); Nasir Khan (Head of Operation-Field office); Josaphat Kambale (WASH Officer), Isaac Mohamed (Head of Sub Office Pugnido) and others staff
- ADRA: Yoshiro SAITO (Program Manager) and his staff
- UNICEF: Robert Kizito (WASH Specialist committed to UNHCR), Nasser Mohamed (WASH officer)
- NRC: Wondwosen Assefa (WASH Project Coordinator) and his staff, including the M&E coordinator
- DRC: Chiara Vascaro (Regional Infrastructure Coordinator), Daniel Mwangi (WASH Manager)
- DCA-NCA: Lisa De La Rubia (Field Coordinator), Peter Noel Cawley (WASH Manager)
- Oxfam GB: Mark Chitelesij (Public Health Engineer Team Leader), Marilou Divina (Public Health promoter) and their staff
- WVI: Abiyot Gurasho (WASH Manager) and his staff
- LWF: Eshetu XXX (WASH Coordinator) Mamushet XXX (WASH Manager) and their staff
- IRC: Assad Abdella (WASH Coordinator), Kebenecha Hawas (WASH Manager) and others staff
- ARRA (Gvt): Ato Teferi (Gambella Manager) and all his staff by camp
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Appendices list:

- ❖ 1: Ethiopian Water resources and development of Ethiopia, presentation by Ministry of water and energy
- ❖ 2: Kule-Tierkidi water supply system bill of quantities revised by UNICEF
- ❖ 3: 3W matrix
- ❖ 4: Proposed camp map and lay out for the new camp Pugnido 2
- ❖ 5: UNHCR health and nutrition monthly bulletin, July 2015
- ❖ 6: New arrival in Gambella post 13th December 2013

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1. EXECUTIF SUMMARY

The WASH mission in Gambella region from the 10th to the 14th august 2015 was accompanied by the country TA in charge Jacob Asens. Within the HIP 2015, 14,5 M euros has been invested from ECHO in the refugees response. During the visit, the following camp sites have been visited:

- ✓ Pagak transit reception center
- ✓ Kule and Tierkidi camps
- ✓ Jewi camp
- ✓ Pugnido 1 camp

It has been very tricky during the visit to get relevant, clear and accurate information from the various partners meet on the field, especially technical information but also strategic ones. The discussion with partners were most of the time confused as too many partners are involved in the same field (6 partners involved in latrine construction in Kule camp, and 6 involved in hygiene promotion in Jewi) in the same camp and as too many type of design and approach have been implementing. Furthermore, the communication level among the partners and especially among the UN agencies did not help to get clear and coherent information about the strategies developed the challenges and the gaps identified.

All those statements highlight the issue of coordination. The coordination is quite complex in the refugee's case management in Gambella for few reasons noticed during the visit:

- ✓ The Ethiopian government agenda on refugees and the fact that they sometime make arrangement directly with partners without coordination with UNHCR. Furthermore the Ethiopian entity in charge of the refugees ARRA behaves as camp manager without real proficiency in it.
- ✓ The UNHCR coherency between the field office and the country office enhanced by problem of communication. The country and field office are not always on the same page, with various level information and understanding of the situation and different level of involvement with very little communication especially (according the UNHCR partners meet on the field) from the country office to the field
- ✓ The lobbying of some big NGO at country or even HQ level to get commitment and funds which does not respect the assessment of the partners on the ground done by field staff of UNHCR
- ✓ The effective concurrence for fund and leadership among the INGO but also among the UN agencies
- ✓ The lack of leadership on the field which is mainly due to a lack of will to empower the field person in charge of coordination by bypassing the position from different perspective...

During the visit, we noticed that in terms of sanitary condition the situation of Pagak transit/reception center is especially at concern. The partner newly in charge of WASH (ADRA) in this camp is very weak (no water during our visit and for two days because of generator breakdown and no backup, no chlorination ...) and the level of service is pretty low (about 800 pp per taps, 172 persons per latrine stance, many pool of mud within the camp...).

The main problem noticed during the visit:

- ✓ Lack of proficiency in hydraulic design and regulation among all the partners (*investment in water supply system being about 7 M USD only for Tierkidi, Kule and Jewi*)
- ✓ Some of the activities are far from cost efficiency (*water supply system design, latrine construction, incentive...*). In Kule and Tierkidi camps the water trucking cost about 280 000 USD /month (partly cover by ECHO fund) and the permanent water supply system completion has been again delayed (initially should has been finished last May) during our visit mainly due to lack of anticipation and communication (UNICEF).
- ✓ Lack of anticipation of the needs (*e.g.: decommissioning ...*) and strategic thinking (*e.g.: what to do when the HH latrine pit is filled*). In general, partners are always reacting instead of to act. Some of the partners presented irrelevant and inefficient strategy/approach for instance for HH share latrine (NRC).

- ✓ In general we can say that the trend of the partners is to make their life easy in designing and implementing the relief instead of make the life of refugees easy, with some impact on the cost efficiency. Apart for very few partners there is no strategy to reduce progressively the dependency from the relief.
- ✓ Lack of sustainability, most of the partners do not have any clue about what to do when the HH share latrine pit is filled, at some point the pit are getting filled up faster than new latrine are built.
- ✓ Lack of community approach and lack of building and designing activities based on the capacity of the refugees
- ✓ Serious need to harmonize the approach and design. In some camps, we have partners trying to foster people to dig the pit of their HH latrine (as done in the entire region) without incentive and another partners giving incentive for everything to the beneficiaries. One of the partners is trying to implement a design based on the capacity of replication of the users and one others partners in the same camps building not replicable or removable facilities
- ✓ Most of the partners are still in an emergency mindset when they should work on fine tuning, stabilization and sustainability.
- ✓ The supervision and monitoring of their activities by the partners is very weak and need to be substantially enhanced and formalized (no chlorine in the water and an operator whom does not at all what he is doing in Pugnido when there an ongoing AWD outbreak on the other side of the border). The discussion with M&E officer from some of the partners showed very little relevancy and the adding value of the output from this capacity.
- ✓ Problems are also suspected in the unit price (*seems to be much too high*) of the HDPE pipe for the UNICEF design of water supply system of Tierkidi and Kule. Investigation has been requested within the recommendations of the present report.

Recommendations and propositions have been issued in the report to address all those problems and improve the general situation. In addition, agree with country office, meeting with regional WASH staff of the some of the partners have been set up in Nairobi, to address some of the issues highlighted in the report.

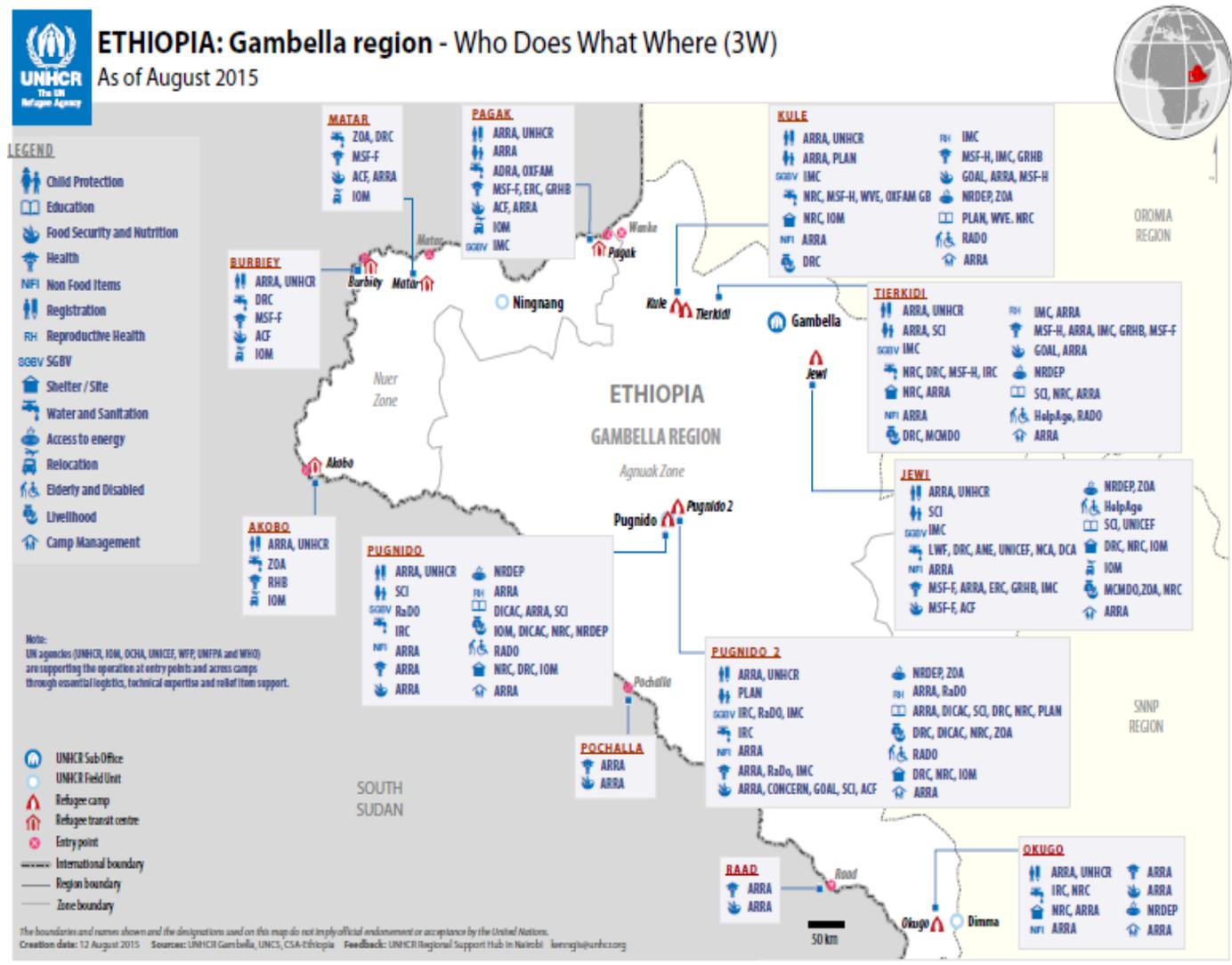
Following the visit, assessment of partners' capacity and level of performance and relevancy, we can state so far that among all the partners meet:

- ⇒ *The weakest partners meet:* NRC, ADRA, WVI, UNICEF (for water supply system)
- ⇒ *The strongest partners meet:* DCA-NCA, IRC, OGB (*but problem coming from their way to get involved, see capacity of the partners*)

Regarding the UNHCR, the person in charge of the WASH coordination on the field is relevant and committed (*but not proficient in hydraulic and first experience with UNHCR*) but need strongly to be empowered to ensure coherency and harmonization as well as one channel for coordination. He will need support notably when it comes to advocate with the government and partners as it seems that now anyone can do whatever they want dealing directly with ARRA.

Unless technical strategies approved, coordination improved and duplication avoided maybe ECHO should reconsider if continue to engage supporting inefficient/ineffective responses, as it would an endless funding needs.

2. CAPACITY OF THE PARTNERS AND LEVEL OF PERFORMANCE ESTIMATION



2.1. Partner by Partner assessment :

10 partners have been meet during the mission:

ADRA Japan (funded by UNHCR, UNHRC get fund from JICA): ADRA is nowadays in charge only of ALL the WASH in the Pagak reception center and some hygiene promotion in Kule camp. At time of the visit they just took over the management of WASH in Pagak. The level of performance shows was pretty low. Whether some of their staffs have some knowledge about civil work, in terms of hydraulic they are not at all proficient so far. At time of the visit, we observed that the people had no water during 2 days because of the lack of backup.

The level of service was very low especially quality wise (see section main findings/main issue discussed about Pagak entry point/ reception center), as well as in terms of organization and set up. The level of analyze of the situation, identification of problem and solution was low and confused. They as most of the partners do not put in question what they do. They are not reactive when a problem has to be solved and do not have any clue

about assessing contingency capacity and action plan development. This aspect can be considered as particularly tricky in a reception center where the influx of people can be very important and sudden.

Overall performance level: pretty Low

Potential partnership with ECHO: To don't be considered so far

World Vision: They are mainly present in Kule camp in terms of WASH. They are working on the construction of the permanent water supply system, latrine construction, hygiene promotion and WASH in school/health center (institutional WASH). Regarding the water supply system, they are in charge of the main storage tank construction (700m³), the distribution network and the public taps construction. In terms of civil work again it seems to be correct, but in terms of hydraulic and regulation of the distribution they are confused and do not know about the way to protect a pipeline from hydraulic hammer. They have a good capacity in terms of quantity of staff but they miss proficiency in hydraulic and water technology in general. They mainly work with contractors.

They are supposed also to contribute to the capacity building in WASH but once again they have no vision about capacity of the users, type of organization to implement, requirement for instance to manage a water supply system, etc... They built also HH latrine with poor design (in terms of sustainability and maintenance) and provide incentive to the latrine users to dig the pit and so on..."to make their life easy". The quality of achievement is in general quite poor but the quality of the facilities is very variable from one to another.

They are confused when it comes to the management of the latrine access. For instance, how many latrine pit are going to be filled in the next month, they don't know. In the meantime, the latrine visited were far to be filled yet. They work in hygiene promotion in a very holistic and standard manner, not very creative and dynamic, no specific targeting, no adapted strategy, no IEC materials at water point they built or latrine...

Overall performance: Low

Water: almost acceptable in terms of construction/implementation but low for the rest

Sanitation: Low

Hygiene promotion: quite low

Potential for ECHO funding: not to be selected unless there is a gap with of partners

NRC: Partners late on the ground during the emergency phase. They are one of the main actor in terms of latrine construction in Jewi, Tierikidi and Kule camp and have a little involvement also in Pugnido (290 stances to be built with UNHCR funding). Their latrine are in terms of achievement more or less acceptable, but not hygienic (no cap, no net protection on the vents pipe, problem with flooring in Jewi, see section main findings) with very big variation of quality from one facilities to another which can be considered as a lack in terms of monitoring.

They are not well organized: no action or strategic plan to decommission/desludge latrine and ensure appropriate rate of user per stance with poor knowledge and understanding of what they do. They are quite weak in monitoring and especially in terms of ensuring sustainability of the facilities/services (see section on main findings). They are also involved with very little relevancy in hygiene promotion, same statement as for ADRA: holistic, standard package with no real adaptation to the context, not creative, not dynamic.

Whether the hygiene promoters seem to be dynamic and motivate, they barely understand the message they disseminate (level of training??). The approach is mainly based on hygiene promoter going around disseminating basic messages in a very repetitive manner. The level of staff meet in general is also weak in terms of WASH proficiency but also in terms of management of activities. They don't really follow recommendation from the WASH coordination group and keep trying to implement their own strategy (which shows a lot of failure, see section on main findings) in which they give incentive for almost everything to the beneficiaries (against the current trend in the region applied by most of the partners). They are globally weak in terms of community approach and hard to understand the need to build strategy based on the users and their own capacity.

Only in Jewi, they finally follow the same strategy as others in terms of latrine design, maintenance and community participation. They focus too much on volume of work rather than quality. They are also one of the main actors in terms of shelter, that's one of the reasons they are that much involve in latrine construction, as in Gambella region stakeholders try to implement latrine-shelter construction approach, meaning the actors in charge of shelter should also be in charge of building the latrine. This type of approach could be relevant in certain context, but it do not show very good added value in Gambella, as NRC for instance are performing almost at acceptable level in terms of shelter when they pretty weak in WASH.

Overall performance: pretty low

Sanitation: pretty low

Hygiene promotion: quite low

Potential for ECHO funding: not to be selected, only for shelter

OGB: Partners late on the ground during the emergency phase. They are mainly dealing with water supply and in the entire Kule camp. There, they are in charge of water trucking for the entire camp and building of the main pressure line from borehole location to the camps main storage tank for both Kule and Tierkidi. In addition, they operate the SWAT system at the river site to supply all the water truck for Kule and Tierkidi with a poor level of organization and dangerous practice in terms of chlorine manipulation. In Tierkidi, they also do HH latrine construction with low level of achievement but relevant approach. They are also in charge for the same camp of hygiene promotion in few zones of the camp, and once again they seem to be relevant in the approach, in practice there is big room for improvement.

To end with Tierkidi, OGB involvement in WASH, they did some institutional latrine in school and demonstrate a quite acceptable level of performance on this regards. In addition, they did the design of Jewi water supply system. The design is somehow acceptable but within the documentation I found it seems that some parts of

design have been forgotten: protection of pipeline and pump station from hydraulic hammer, distribution network dimensioning and tracing...to be followed.

Level of the staff is more or less acceptable in terms of hygiene promotion, only one guy has been meeting for the rest of their activity and he did not demonstrate relevant proficiency with little level of information about what they do. Problem of duplication and confusion in partners planned, see section findings for Jewi camp.

Overall performance: almost acceptable, especially in terms of approach but lower in terms of achievement quality.

Water: almost acceptable (but they do only water trucking and did a design so far)

Sanitation: good for the approach, low for the quality of achievement (pb of monitoring also)

Hygiene promotion: acceptable, especially the solid waste management activity has to be enhanced and improved

Potential for ECHO funding: yes but mainly in sanitation and hygiene promotion, could be consider for water as well according the level and gap of partner

DRC: They are working mainly in Tierkidi and Jewi camp. They do water trucking together with a local NGO called DICAC in the entire camp of Tierkidi (fetching water at OGB SWAT¹ system), and are well performing on this. They are also in charge of HH latrine construction in some zones of the Tierkidi camp (together with shelter). In Jewi camp they are in charge of HH latrine construction again in some of the some and in the same zone they are doing also hygiene promotion. In Jewi, they are also in charge of building the distribution network for water supply of some part of the camp (the rest will be done by LWF, when at the beginning only DRC was planned), this with ECHO fund.

The quality level of achievement of the HH latrine in Tierkidi is more or less acceptable, but the sustainability should be reviewed. The quality level of achievement in Jewi is lower in terms of HH share latrine construction with relatively poor design, but at least their latrine are cost efficient compares with some others, and more replicable than usually seen. The hygiene promotion and community approach and implementation are also relatively poor as most of the partners. They seem to have at least a good and relevant manager on the field with acceptable proficiency in WASH.

Overall performance: between low and almost acceptable

Water: acceptable so far

Sanitation: between low and almost acceptable

Hygiene promotion: low

Potential for ECHO funding: mainly to be considered for water supply (but to be followed) and at some level HH latrine construction, hygiene promotion if they rise their capacity up.

¹ Emergency small unit for water treatment

IRC: They are mainly involved in water supply: building the distribution network of Tierkidi camp, upgrading and extending the one of Punido 1 and plan to build the one of Punido 2. In Punido 1, IRC is in charge of all the WASH (only few latrine constructions have been given to NRC for which reason??) including latrine construction and hygiene promotion. Whether some problem with chlorination (at a moment where there is a risk of AWD outbreak just next to the border in South Sudan) and then monitoring have been highlighted during the visit of Punido 1, they demonstrate along the visit the best knowledge among the partners about the equipment they implemented.

They have also some lack of proficiency in terms of hydraulic but show proper knowledge in terms of water resources and borehole management and in anyway higher than others partners meet. They provide some relevant technical documentation about the equipment they implement.

Design of the new Punido 2 water supply system should be follow up, especially the hydraulic part, but they show that they have some good tools and acceptable guidelines for water supply system construction and management. The quality level of slab produce to build latrine in Punido 1 should be improved systematically (stability and aggregats). The hygiene promotion component is the weaker part as in most of the case.

Overall performance: acceptable so far, with few points to be correct it in emergency, notably monitoring of water quality and contingency plan.

Water: acceptable in general

Sanitation: almost acceptable

Hygiene promotion: low

Potential for ECHO funding: yes, especially for water supply, but could be considered for latrine construction and maybe hygiene promotion if they improve their approach and capacity.

LWF: They are only involve in WASH in Jewi (as they came with a substantial budget they got from the ACT network, they invest it in the water supply sub sector about 5M ETHB and they might have an additional 2,5M ETB available for WASH). In Jewi, they operate the mass water treatment plant system to supply water trucks; they also operate another small SWAT in zone D of the camp as it was difficult to access it with truck.

They struggle a lot at the beginning but it seems that now it is more or less acceptable at this level. They also fund a hydrogeological survey to identify ground water resources and following this assessment of groundwater potential for water supply, they drilled two boreholes, but the yield was not sufficient to be considered. They will be in charge to build together with DRC the distribution network, taps stand and main storage capacity in Jewi camp, to follow their level of performance at this time. Their volume of work is pretty small and they are new WASH actors in the area.

Overall performance: acceptable but very limited in terms of volume (only involve in Jewi and in water supply).

Potential for ECHO funding: will depend on their level of performance in building distribution network and storage capacity in Jewi: Only for water supply in anyway.

DCA/NCA: DCA-NCA is mainly involved in sanitation and hygiene promotion in Jewi camp, in which they were the first actors for sanitation and hygiene promotion. So far, they decommissioned their trench/emergency latrine and they are now building as others partners HH share latrine. The quality level of achievement is almost acceptable but they are fine tuning what they did and at least they are cost efficient (cheaper latrine among the partners). They are in stage to upgrade their design and are building proper quality of dom slab (which in the context is the most relevant type of slab). They have been very honest in terms of challenge and gap they face (problem for decommissioning latrine that are close to be filled; construction of new facilities...).

They tried very relevant community approach and demonstrate that they put what they do in question and they set up a very positive and appreciable dynamic of improvement. They organize the community to clean themselves the HH share latrine and provide them with product and equipment, strategy that is now follow by others stakeholders of the camp. They are trying to work on latrine design based on capacity of the communities and local construction materials; they start a process of doing this with consultation and input from some sample of the future users (beneficiaries). They seem to have relevant staff but limited in terms of quantity. Could be interesting to see how far they can scale up their capacity. Their approach in terms of hygiene promotion and especially the implementation part of it should be enhanced but they are trying to implement something dynamic and adapted to the people.

Overall performance: very acceptable in both sub sectors, most relevant partners in terms of community approach, also good potential for emergency and permanent HH² latrine construction.

Potential for ECHO funding: yes, especially in terms of sanitation and hygiene promotion.

UNHCR: Our main partners for the refugees. In charge of the coordination of the WASH sector in Gambella, given the numerous complain and effective problem noticed about it during the visit, the main target for critic. Although, the person in charge is for sure, one of the most relevant person in the WASH sector in the context. Even if Jewi camp shows a positive evolving in terms of strategy of community approach harmonization giving more chance to ensure the sustainability of the actions, there is still huge room for improvement.

Many strategic/guideline documents have been produced by UNHCR in the WASH sector with more or less relevancy, but the problem is if those document exists they are barely know on the field by the WASH actors: Tierkidi and Kule camp are the best example. The monitoring tools are correct but focus mainly on the follow up of the indicator rather than on the quality performance of the partners. Furthermore, we did not see production of some lesson learnt within the framework of dynamic of improvement.

The level of information from partners is also low, with retention of the information sometime and concurrence between agencies, plus the confusion sometime between Addis and field level. The problem is still, if there some strategic thinking, there is no vision and low understanding about what has to be done and

² Householder latrine

how. For instance, the only existing strategic document cover the period 2014 until mid-2015, and no plan to review/update has been mentioned during the visit.

The problem is what we implement today and the way we do it, will condition the future and sustainability of the service provided which is too much based in humanitarian relief for the time being. The level of dependency to the relief is pretty high and nothing starts to progressively change that.

In the meantime, considering the level of performance of UNHCR we have to take into account few points:

- The local government is skill to play a game with the humanitarian actors and contribute to generate confusion and concurrence (by for instance dealing directly with some partners and allocate them some volume of works without consideration for the coordination role of UNHCR, ...) among the actors which do not help to ensure synergy (cost efficiency but it is not their interest; so they are keen with the current level of dependency and are not promoting community contribution), open transmission of the information, harmonization of the strategy
- The fund limitation and maybe the attraction of the country imply harsh concurrence among the partners which are paradoxally too much (it is one of the main problem noticed too much partners working in same field in the same camp and with different approach, total non-sense...). As well, link with this since a partners come with his own fund they raise by a way or another, even if there is no need, he will be involved in the activities.
- Lobbying of some of the biggest humanitarian actors at donors HQ level and with the central or local government to get involved in the response even if not needed
- One of the main problems is also coming from the internal incoherence or confusion within the UNHCR Ethiopian office itself with people who should be involved in partners selection involved at some point and different statement, analyze and recommendation from the field and from Addis level, which is not acceptable.
- Plus the eternal problem of turn over with always new people thinking that it is better to change everything
- The WASH officer in charge of coordination is a first mission in UNHCR and he is coming from standing partners (DRC), and he needs strong support from his management line. He is also not proficient in hydraulic, just ok in plumber work and proficient in construction of hydraulic equipment

Overall level of performance: Low in general but with some improvement

Potential for ECHO funding: partners difficult to avoid totally, but given the problem reported upthere funding for them should decrease. Given the level of confusion and internal lobbying in UNHCR I would recommend as much as possible to found directly the main partners to don't be affected by it, but giving as well the recommendation to the partners to coordinate closely with them on the field and to ensure respect to widely endorsed operational strategies.

UNICEF: Within the framework of the visit UNICEF was mainly involved in supporting UNHCR WASH team in terms of coordination, they fund some of the partners and they have been in charge for the design of the water supply system of Tierkidi and Kule. The WASH officer from UNICEF met on the ground demonstrates low

proficiency in water supply system design and implementation (e.g.: he even did not know that pipeline could be protected and what is a hydraulic hammer, the same who contribute to the ToR and the endorsement of the design. Apparently, he is not also disclosing information regarding financial gap within the funding of the water supply system of Tierkidi and Kule. This situation affects directly the need of water trucking funding by ECHO.

Actually, we were told at the last moment that the water supply system cannot be completed in time because of the fund missing to connect borehole to the main collecting chamber/pump station. The first deadline for completion was in May, then June, then September and during the visit we find without it was naturally mentioned by UNICEF WASH officer that this lack of funding will postpone again the completion of the system and then that the need of water trucking will be longer than plan.

The water trucking for the two camps cost about 280 000 USD/month. Apparently in the design endorsed and paid by UNICEF, the consultant did wrong cost estimation (from about 2,6M ETB to 5,1M, so almost double) and then it is not possible to find any calculation or assumption in terms of pipeline protection despite the heavy pump used... In the meantime a survey regarding refugees income capacity has been done but finally the report was not used because consider as too bad (payment made??) and then nothing has been done afterward.

Overall performance: pretty low

Potential for ECHO funding: not recommended

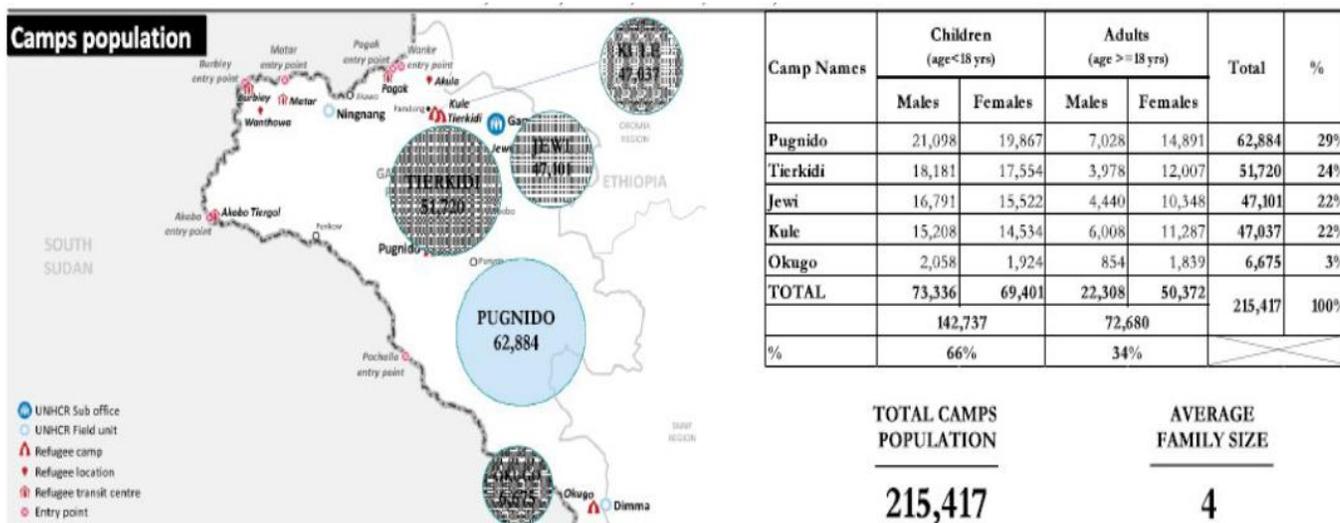
2.2. Overview of partner's capacity and level of performance estimation:

Partners	Volume of current activities	Water supply	Sanitation	Hygiene promotion	Community approach and sustainability	Cost efficiency	Potential to be ECHO partners
DCA-NCA	++	NA	+++	++	++++	+++	yes
IRC	+++	+++	++	+	++	++	yes
DRC	+++	+++	++	+	++	++	yes
LWF	+	++	NA	NA	NA	NA	maybe
OGB	++	+++	++	+++	+++	++	yes
ADRA	+	0	+	0	0	+	no
NRC	+++	NA	+	+	0	+	no
WV	++	++	+	+	0	+	no
UNICEF	+	+	NA	NA	NA	0	no
UNHCR	++++	++	++	+	++	+	Yes but with limited fund

Based on performance and capacity noticed highlight by the visit, as main partners (to be updated according the turn over):

- ⇒ IRC and OGB and at different level DRC are recommended as main partners for water supply. *Nevertheless, given the way that OGB is pushing and lobbying to be involved (which has generate confusion in the partners plan) in the camp out of normal coordination mechanism, we don't recommend them for funding so far.*
- ⇒ DCA-NCA and OGB and at different level DRC are recommended as main partners in sanitation and hygiene promotion/community approach
- ⇒ If need a partners to deliver a comprehensive WASH package: IRC, OGB and DRC are recommended in such ranking

3. MAIN FINDINGS AND ISSUES DISCUSSED



3.1 General and miscellaneous

3.1.1. Operational and strategic documentation:

The document so called Final SOP provide some standard to follow in terms of partnership and coordination, as well as incentive and so on...but it gives responsibility to the NGO/INGO but not to the population as well (*in terms of contributing to the management of the services and facilities implemented*); should be able to tackle also effective community contribution and how to progressively increase this contribution, meaning decreasing in the meantime dependency to the relief and then vulnerability.

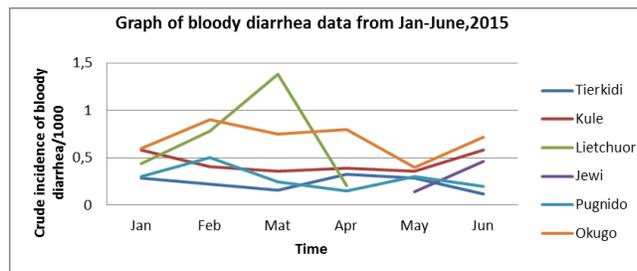
There is an unfinished draft for community approach for sustainable HH latrine construction 2015-2017 strategy, there is a good start but then it stops?? And another quite similar document specific for jewi?? However no mention of how people will deal with pit filled at mid/long term; no mention of potential removable structure..., no cost analyze. There is some kind of sanitation guideline, but as previously mentioned there is no orientation in terms of sustainability: desludging, decommissioning, removable structure on a new pit or building complete new equipment; no section as well on cost effectiveness and sustainability of the maintenance by the users.

The WASH strategy is here but should be updated in august as plan by the document.

3.1.2. Public health:

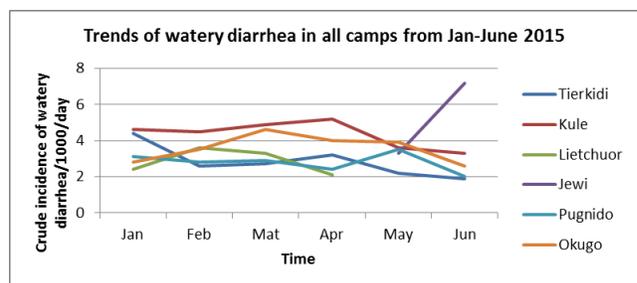
According the UNHCR situation update most of the camps have high incidence of diarrheal disease. Although, the data provided are global and not desegregated camp by camp.

The Kule camp encountered a **hepatitis E outbreak**. The last confirmed case recorded was at the beginning of June. There is no relevant causal analyze to understand the dynamic of this outbreak localized only in Kule. We can assume that the reaction of the partners have been efficient to mitigate the risk of spreading of such disease difficult to handle. More than **two month had pass since the last case**, which should means that the disease has been handled.



During the visit in Pugnido, we have been informed from UNHCR staff that there is an outbreak of AWD on the other side of the border with South Sudan. One of the most important measures to be taken in such situation is to secure the chlorination and rise up the contact time and concentration. Unfortunately, during our visit of the site we found all water point connected with one of the storage tank without chlorine. Contingency plan was there but the monitoring of its implementation can be put in question.

Based on the epidemiological data provided, it is tricky to make a correlation between the improvement of services deliveries in the camps and the evolving of the epidemiological trends. However, looking at the curves we can say that there is trend of decreasing of the watery diarrhea and after a decreasing, an increasing since June of the bloody diarrhea incidence. The seasonality of those trends evolving could not be analyzed as not enough data in time available.



3.1.3. Water supply:

- ⇒ The water quality monitoring, basically free residual chlorine testing is only performed at water point level and not as mentioned in the WASH ECHO policy (ensuring access to safe water at HH level and not only at water point; the final objective of delivering water is to ensure FRC at householder level to ensure that all the water chain is secure in terms of bacteriological contamination) at HH level on a representative sample of the population.
- ⇒ No shades on the bladders in most of the case, but no issue with the water temperature have been noticed.
- ⇒ Many partners involved contribute to inefficient and ineffective response
- ⇒ For Jewi and Kule-Tierkidi permanent water supply system the budget needs is estimate at about **7 M USD**. Within the partners meet, there is clear gap in terms of hydraulic proficiency, with as result:
 - Design that could be more cost efficient

- Certain crucial aspect of the design not been addressed which undermined the sustainability of the equipment's.
- Difficulty to adapt to the problem face on the ground, and then waste of time
- Lack of vision and understanding of the operation and maintenance of the system and then to establish such structure in time and estimate the cost of O&M and then the price of water and potential contribution from the users in time.

3.1.4. Sanitation and hygiene promotion:

- ⇒ All the latrine are not hygienic in a way that all of them did not get any cap on the drop hole or net protection on the vents pipe.
- ⇒ The bathing units are not systematic and they are of poor design with most of the time no appropriate drainage (complex to implement because of the presence of black cotton soil).
- ⇒ Many of the partners imagine that they will ensure sustainability of the latrine access by resort to desludging, but in the meantime it does not seems really plan and realistic:
 - They have no clue about the capacity of desludging and disposal in the area
 - They have no clue about what could be the priced
 - As the latrine are not lined, they in any case could not operate a full desludging to avoid collapsing of the pit and then the need of desludging will be more frequent.
 - They have no idea about the quantity of latrine pit that could be accessible for the truck
- ⇒ There is huge different of hygiene promoter among the camps which is hard to understand. In most of the case, the hygiene promotion component is very weak with lack of dynamism, creativity, adaptation, targeting... It is mainly implemented in very standard and repetitive manner.

3.1.5. Coherence, approach and coordination:

- ⇒ In some of the camp, Jewi being the best example, there is a huge variation of level of service deliveries which has led to migration inside the camp. At the end, the place where the service delivery was fine, it became too crowdie and then also obsolete. We can assume that the lack of planning and the involvement of too much partners with different level of progress and quality of achievement, etc... can partly explain this problematic situation
- ⇒ We can state in most of the mindset of the partners is hard to shift from emergency one to stabilization with enhancement of fine tuning and sustainability aspects. The latrine aspect being the best evidence of it. The capacity of the partners to plan in advanced is very limited, as if they have an idea of the latrine that will have to be decommissioned and rebuilt or desludge, they have no action plan with budget estimation to ensure to keep an appropriate rate of users per latrine stance. Actually, the partners have no clear strategy to reduce need of humanitarian relief in time in terms of latrine access. Then, they mainly react instead of acting more than 1, 5 years after the emergency in some camps and over 6 months after the emergency for Jewi camp.
- ⇒ The number of partners involve per camp in WASH enhanced by the lack of harmonization in terms of approach and design affect clearly the quality of the deliveries and output from the partners' intervention.
- ⇒ The lack of communication affect also the ECHO funding notably in water trucking as the time to complete the permanent water supply system which will enable to phase out an very costly water

trucking operation change all the time without clear information in time in order to prepare alternative solution.

- ⇒ In general, we can say in most of the case it seems that partners are designing and implementing activities more in a way to make their live easy than the live of the refugees. In most of the relief the needs and way to answer it, is mainly coming from the partners with very little for most of the partners consultation of the refugees population despite of they are the first concern. Instead of to build from them, most of the time the partners build from their own perception of the problem and the solution.

3.1.6. Challenge and strength of the partners:

- ⇒ Most part of the camps population is women and child. For instance, in Pugnido 1more than 50% of the population are child under 8 years old. This is an aspect to take into account in the way to deliver the relief.
- ⇒ We can state as well, that whether the quality of achievement and the strategic thinking of the partners is weak, they have been very efficient and committed to response to a huge influx of population (more than 4000 pp /day at the rush time in Jewi). In the meantime, the positive evolving of the relief delivery in the new Jewi camp, show that there is some dynamic of improvement which should be speed up.

3.1.7. Visibility:

- ⇒ The ECHO visibility is quite weak at facilities level and in general not as highlight as the ones of UN agencies and big INGO. The visibility is mainly present at the entrance of the camp and sometime at the entrance of the various zones.

3.2 WASH situation specific by camp:

3.2.1 Tierkidi and Kule camp

3.2.1.1. Overview of the WASH situation

	Water supply	Sanitation	Hygiene promotion
TIERKIDI camp	Population (source: UNHCR July 2015) 51 809 pp		
Partners	DRC, DICAC, IRC	NRC, DRC, MSF-H	NRC
Indicator	Quantity of daily water per pp and nb of pp per taps	Nb of users /stance	Nb of hygiene promoter / pp
Standard	15L/day/pp and 250 pp/taps	50 users /stance	1 promoter for 500 pp
Current level (07/2015)	17L/pp/day with 247 pp /tap	26 pp/ stance (19% cover with HH latrine and 81% cover with family share latrine The target is 50% of people using HH latrine)	1 promoter for 910 pp
KULE camp	Population (source: UNHCR July 2015): 47 041 pp		
Partners	OGB, WVI	NRC, OGB, DICAC, ADRA, MSF-H	NRC, OGB, WVI
Indicator	Quantity of daily water per pp	Nb of users /stance	Nb of hygiene

	and nb of pp per taps		promoter / pp
Standard	15L/day/pp and 250 pp/taps	50 users /stance	1 promoter for 500 pp
Current level (07/2015)	16,2L/pp/day with 149 pp /tap	11 pp/ stance (39% cover with HH latrine and 53% cover with family share latrine AND 8% with communal latrine; The target is 50% of people using HH latrine)	1 promoter for 490 pp
Comments on indicator			
	The problem of such indicators is that it is not demonstrating clearly if the access is ensured. Actually, according the flow at the taps the standard for number of people per tap can be not adapted. Then, the waiting time should also be considered in the indicators matrix.	The indicators are following up at camp macro level, but they do reflect the distribution of those rates within the different zones of the camp. Normally the standard in terms of rate of user for the latrine in the second phase of the emergency should come after 3 to 6 months to 20 pp/latrine. The breakeven in terms of ensuring better rate as soon as possible come to 2 years compare with management of communal latrine with rate equal of above 40pp/stance (source: UNICEF). The follow up of the rate of user is well done by UNHCR.	

3.2.1.2. Overview of the WASH intervention

Kule and Tierkidi camps (open may and February 2014)	
Activities	Main findings
WATER SUPPLY	
Water Trucking	<p>The water trucking itself seems to work properly.</p> <p>Although issue in terms of chlorine manipulation and storing have been noticed during the visit at the water production point supplying the water trucking for Kule and Tierkidi. The barrel of highly concentrate chlorine in used to chlorinate the truck at the water production point was kept it in front of the sun (see pics on the left) and then when you open it very high concentrate gas can be inhale.</p> <p>Furthermore, the person in charge of the chlorination was manipulating the chlorine without using his available protection equipment. The organization of truck filling at the production point should also be better organized (see pics in front).</p>



<p>Permanent water supply system</p>	<p>With the permanent water supply system design gathering Kule and Tierkidi a lot of confusion in the fundraising came from apparently a wrong estimation of the cost of the system and from a lack in communication from the stakeholders (so seems to be UNICEF). The completion is delayed for the third time which increase in time the needs of water trucking and implies high additional budget needed (water trucking for those camps are about 130 000USD/month for Kule and 150 000USD/month for Tierkidi, with gives us a huge total of 280 000USD/month). Not very cost efficient management, plus we could observe during the visit child playing with water freely. The chlorination aspect has been planned. Whether globally the design seems to be acceptable (apart issue mention above), few problem have been noticed while checking the design documentation:</p> <p>1/ It seems that given the price of the pipe (almost 3 times for expensive than in Kenya for instance) in Ethiopia, the dimensioning of the distribution network could have been based on an average daily flow rather than on the peak flow (all the taps open in the meantime) by using the existing storage capacity used for the current supply by water trucking as a buffer capacity at least to balance the 3hrs of peak time. The technical and financial compromise could be to design the main distribution line on the peak flow to give flexibility to the system to increase the supply, but to design all the rest of the distribution network on the average flow using existing storage capacity at water stand.</p> <p>2/ Another problem are that apparently the protection of pipeline/pump station against hydraulic hammer has not been taken into account (only on gravity lines for OGB) despite of some of the pipeline will deal with quite big hydraulic load (meaning hydraulic hammer with high intensity...). This situation will affect the sustainability of the equipment. Actually, the consequence could undermine seriously the functionality of the equipment by a very quick increasing of the leaks in the network (huge loss in efficiency and higher operating cost to get the same quantity of water).</p>
<p>SANITATION</p> <p>Latrine</p>	<p>There is almost as much design of HH share latrine in the camp as there is partners meaning for the two camp 7 partners building different type of the latrine with different approach and very big variation quality wise. Although in the RSO NBO region most of the partners acknowledge it, in those camps two partners are giving incentive to the beneficiaries to dig the pit and build HH latrine when others partners are struggling to foster community contribution and based their design on the capacity of replication of the beneficiaries using local materials and easy construction technic. So, strategies are in concurrence which is totally unacceptable. Moreover, the partners giving incentive (like NRC and WV) propose a design which is not replicable for the people meaning they will need always assistance to decommission /rebuilt or desludge latrine pit.</p>



Incomplete booster station



OGB latrine in Kule camp

	<p>The same partners at time where he will get 40% of the pit full (during the visit many pit have been observed already filled with immediate need of decommissioning/desludging) in the following month and based is strategy on desludging, did not know the coming financial gap to keep the rate of user in the standard and as well the price of desludging (which at some point should be covered by the people...) or accessibility with truck. In consequence, some latrine block will have to be closed (to avoid to wait for the pit to be totally full), meaning that or people will try to use other facilities for this needs and then speed up the filling rate of the functional block, or they will go back to open defecation.</p> <p>These strategic and management problems related to this topics can jeopardize the public health. NRC use the problem of hard rock to promote incentive to dig the pit but this is not working, as they brought machineries to dig where there is hard rock and then it is understandable in those case that NRC pay the contractor (and not the future users) for the pit to be dug, but it does not mean that where people can dig they have to get incentive, this undermine further community contribution and increase level of dependency to the relief (if another big crisis happen in the world with high reduction of available fund as consequence all the system will collapse as people won't be paid so they won't work).</p> <p>Normally, the partners are providing tools and product to the users to clean the latrine by themselves. However, still for the communal latrine people are paid to clean the latrine which is acceptable. In Kule for instance, 47 latrine cleaner are employed and get 700ETB /month as recommended by the stakeholders.</p>
Drainage	<p>Whether the identification of the main flood prone area seems to have been done, very few actions have been taken on main drainage. Secondary drainage and drainage around the shelter in progress of construction haven't been taken into account (it is basically technical assistance for the refUgees). However, usually it seems that the drainage of the latrine for instance is generally correct in both camps.</p>
Solid waste management	<p>No much have been done as well in terms of solid waste management. Information about the situation of this sub sector can be barely found in the situation update and camp profile. Apparently the plan is build refuse pit.</p> <p>In Kule, OGB organize the collect of the solid waste within the camp and dispose it. People should bring their waste up to collection point and from this collection point the waste are taken away by donkey cart whom are paid. The disposal site haven't been visited but the person in charge from OGB explain us that they are not that much incinerate the waste at disposal site as most of people do it within the public place (access road...) of the camp, regardless of the risk of fire in the camp. This has to be addressed by Hygiene promotion.</p>
HYGIENE PROMOTION	<p>The hygiene promotion is one of the weakest sub sectors. It seems that partners focus on having a certain number of hygiene promoters whom got some briefing and equipped sometime with drawing box (not observed). The approach of NRC is based on people going around disseminating basic message, in a repetitive manner. OGB developed in the same camp a more elaborate approach based:</p> <ul style="list-style-type: none"> • Every Wednesday they do cleaning campaign

	<ul style="list-style-type: none"> • Every Thursday is jerricane cleaning campaign • Friday they focus on hand washing • Monday and Tuesday door by door visit plus focvus group and open discussion <p>The main problems still observed in terms of hygiene practice is the <i>misused of shower as latrine and latrine as shower, disposal of the waste</i>, as well as the <i>cleanness of the jerricane</i>.</p> <p>No IEC materials are present at water point or other strategic position. OGB did a quite good painting with the main messages of hygiene promotion on the wall of the latrine block of the school.</p>	
<p>COMMUNITY APPROACH and cost effectiveness</p>	<p>The strategy of HH share latrine aimed to rise up the ownership of the facilities to foster the cleaning by the users. The strategy of community contribution contributes to this objective and as well to decrease the level of dependency by promoting the capacity of future users to replicate it, plus it is more cost efficient (Given the global level of needs versus fund availability).</p> <p>The problem is NRC within this framework proposed to put lock on each doors (as they are building block of 4 latrines stances that have to be shared by the neighborhood), but about 80% of the latrine door visited did not have any more lock, so it seems that the soft component of this strategy (getting people organized) failed.</p> <p>Regarding the permanent water supply system, the plan is the operating and maintenance should be manage by an INGO during sometime until they create a utility center (private actor) to manage the system and organize the payment of water. They just have an idea but they did not go further in the analyze and reflexion, which is not acceptable as the O&M should be consider at some point in the design to ensure sustainability. The partners did not have any clue of:</p> <ul style="list-style-type: none"> ✓ what could be the structure to manage the system (number and type of staff, salary, ...), ✓ what are the main operating costs of the system, when it is easy to estimate given that most of the budget should cover fuel, generator service and staff, minor maintenance ✓ and then what could be the price of the water for the people. <p>Apparently, a survey has been made by consultant appointed by UNHCR/UNICEF to assess capacity to contribute of the population but the report has been considered as not relevant and then from this nothing has been done.</p>	

3.2.2. Pagak camp

3.2.1.1. Overview of the WASH situation

	Water supply	Sanitation	Hygiene promotion
PAGAK reception center (re-open Dec. 21013)	Population (source: UNHCR July 2015): 3 939 pp (they include only register people, so indicator monitoring is not appropriate as based on this figure); Population at time of the visit (source partners and UNICEF, august 2015): about 8000 pp, 4000pp roughly are waiting for registration		
Comments on the center situation	Pagak is a reception center where people are supposed to stay about 1 week , when most of them are there for more than 3 months . This should be taken into account the level of service delivery to avoid too much degradation of the sanitary environment and then public health. No epidemiological data could be provided for Pagak population.		
Partners	ADRA took over very recently from UNICEF and its partner the Regional Water Bureau	ADRA	ADRA
Indicator	Quantity of daily water per pp and nb of pp per taps	Nb of users /stance	Nb of hygiene promoter / pp
Standard	15L/day/pp and 250 pp/taps	50 users /stance	1 promoter for 500 pp
Current level (07/2015)	3,5L/pp/day with about 800 pp /tap	172 pp/ stance (39% cover with HH latrine and 53% cover with family share latrine and 8% with communal latrine; The target is 50% of people using HH latrine)	1 promoter for 715 pp

3.2.1.2. Overview of the WASH intervention

Pagak camp	
Activities	Main findings
WATER SUPPLY	
Permanent water supply system	<p>A borehole at 40-60m is in used to supply the camp population in water by pumping 3hrs per day in a 10m3 elevated storage tank made of fiber glass. The camp is equipped with 2 water point each with 5 taps, so 10 taps in total plus 5 hands pump use as well by local population (no figures could be provided about the resident population). So, it means taps plus hand pump that in the best assumption we can expect about 530pp /taps, which is out of all standard.</p> <p>Furthermore, during the visit the camp had no water as the generator was broken and no backup was planned. People were waiting at water point in front of the sun without any information from the partner's staff about the unavailability of water. They stay two days without water, not acceptable even if it is transit camp. UNHCR, UNICEF and ADRA are the main responsible for such unacceptable situation. The lack of backup and the risk of water supply disruption should already have been highlighted.</p> <p>The population of the camp do not have appropriate water container, most of the one seen were dirty and broken.</p> <p>There is no chlorination of the water set up. UNICEF who was in charge before ADRA, said that they used to do it but it stop during the transition stage with ADRA, again not acceptable (moreover, people are used to drink chlorinated water and then you stop it</p>

	<p>is worth than never chlorinated). The water supply situation is very bad. The partners in charge very weak, they did not know the flow of the pump they use and the quantity of water they mentioned that they fill three times per day the 10m³ storage tank meaning that they provide 30 000L/day, means 3,75 L/pp/day without taking into account the hand pump.</p> <p>The partners have no idea about the potential of water resources in case of an influx of people, whereas one existing BH with appropriate yield if feasible could be temporarily equipped with motorized pump (contingency).</p> <p>There is no log book to follow up: fuel consumption, water production, generator service,...</p> <p>The strategy of the partners is to maintain very limited level of service in the transit camp to avoid fixing of people, which can be understandable but there is some limit otherwise we create a source of outbreak, especially when the people stay much more than plan in the camp.</p>
SANITATION	
Latrine	<p>The lifespan of the communal latrine pit is 4 months, then they need to build new block. The latrine had no cap on the drop hole (see pics in front) and no protection net on the vents pipe. They have only one pipe for ventilation for 5 stances which seems to be not enough to ensure efficient aeration.</p> <p>As it is a transitory reception camp, the latrines are only communal ones. In the camp on the 58 stances existing 8 blocks meaning 40 stances are almost full and 40 new stances are planned to be built to keep the rate. Although, the rate should be improved. One of the issues faced by the partners in latrine construction is the water table that can reach 1,5m from the ground surface in certain place. People are paid to build the latrine.</p>
	
Drainage	<p>The situation in terms of drainage is very tricky as the camp is flat and just near few streams often overflowing during the rainy season. Within the camp there is a lot of mud pool within the camp, as well drainage of the hand washing facilities should be ensured. The drainage must be improved, relocation of the site should be also considered.</p>
Solid waste management	<p>People are paid to collect the solid waste within the camp and it is transport by wheelbarrow and disposes few hundred meters from the camp but not buries or incinerate. Must also be improved.</p>
HYGIENE PROMOTION	<p>Very weak, no real strategy or approach, just hygiene promoter going around in the camp disseminating repetitive message with no IEC materials, no awareness materials present at strategic point. 52 community workers are employed on the site.</p>
COMMUNITY APPROACH and cost efficiency	<p>Regardless to the orientation from UNHCR and ARRA (gvt), the community workers are much more paid than in others site. The incentive is about 100 ETB/day/pp, meaning between 3000 ETB /month /pp when an institutor is paid 700 ETB/month. All the approach should be built as there is almost nothing for the time being.</p> <p>The cost of latrine stance (communal latrine same price as HH share latrine) is about 293 USD, 1464 USD/block of 5 stances for ADRA.</p>

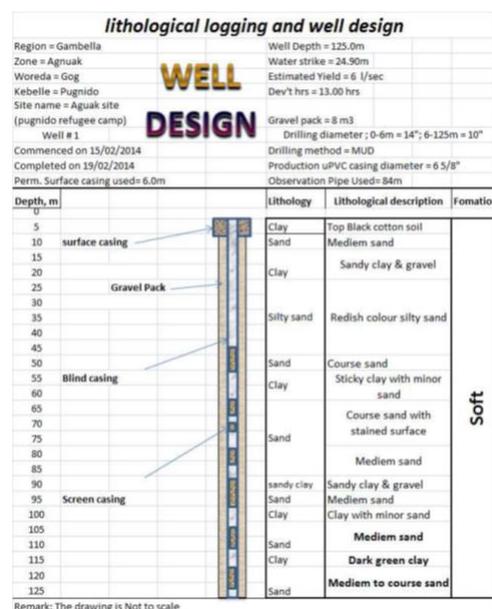
3.2.3. Jewi camp

3.2.1.1. Overview of the WASH situation

	Water supply	Sanitation	Hygiene promotion
JEWI camp	Population (source UNHCR, July 21015): 47 101 pp, camp open in March 2015		
Partners	LWF, DRC, ANE (local NGO), OGB (design)	DRC, NRC, and DCA-NCA	NCA-DCA, DRC, NRC, ERCS (red cross)
Indicator	Quantity of daily water per pp and nb of pp per taps	Nb of users /stance	Nb of hygiene promoter / pp
Standard	15L/day/pp and 250 pp/taps	64 users /stance	1 promoter for 500 pp
Current level (07/2015)	7,5L/pp/day with about 352 pp /tap	172 pp/ stance	1 promoter for 479 pp

3.2.1.2. Overview of the WASH intervention

Jewi camp	
Activities	Main findings
WATER SUPPLY	
Water Trucking	The water trucking is organized using 6 trucks, for a cost of 60 000 USD/month (the level of service is much lower than in Kule and Tierkidi). The water treatment plant located on Baro river is struggling with the very high variation of turbidity (up to 1500NTU after heavy rain, which means very important concentration of aluminum sulphate). The water trucking and treatment plant seems to work properly.
Permanent water supply system	<p>The design has been performed by OGB with higher quality than the one provided by the contractor of UNICEF. Whether they integrate protection of the main distribution line by selecting the most appropriate trace, they also planned pressure release valve which are ok to cope with high pressure (until some limit of course) but do not protect the pipeline against depression generate as well by hydraulic hammer. They could also consider slow closing valve.</p> <p>Apparently, the problem in terms of protection against hydraulic hammer remains for the pump and has to be addressed. As explain in the main findings table for Kule and Tierkidi, the design of the distribution network could have been more cost efficient as well by using the existing storage capacity at water point level to enable design of the network based on average flow and not the peak flow which means much bigger pipe and then cost. Given local price of pipe, compromises could have been found in regards to this type of approach.</p> <p>The main problem for this permanent water supply system is the water resources. Actually, a hydrogeological survey has been</p>



	<p>funded by LWF to identify appropriate location for borehole, 8 areas has been identify with more or less potential. 2 boreholes have been drilled by LWF but the results were not satisfactory with a yield of 5,4m³/hrs (1,5L/s) per borehole when about 1500 m³/day is required.</p> <p>The main problem geology wise is the presence of a metamorphic complex base and in the alluvial part a lot of fine particles. The point is there is some potential but it is tricky to precisely identify the location as the complexity of the geology. The fact is now the partners planned to implement a permanent water treatment plant, but this solution is not sustainable (see Damien Blanc report from February 2014 which highlight the bad experience with such system and UNHCR in Ethiopia), tricky to manage because of the very high variation of turbidity in the river, need regular supply in chemicals, ...</p> <p>Another element is to continue to investigate as we can use as well shallow aquifer, the main objective being to cope with the turbidity problem and for that use the natural capacity of filtration of the ground for instance on the side of river/stream were alluvial deposit could have accumulated and constitute a convenient storage capacity (even if it is going to be very sensitive to rainfall; contingency with a SWAT system could be kept on the site).</p> <p>So far, nothing as start in terms of construction of the water supply system whereas even with the problem of resources they could build the storage tank and distribution network which would ease a lot the water trucking and decrease the cost as well.</p> <p>Then, the partners made a relevant proposal:</p> <ol style="list-style-type: none"> 1. start asap with construction of distribution network and storage capacity in the camp 2. Implement a temporally connexion between storage tank and water treatment plant to phase out the water trucking asap 3. In parallel investigate more the water resources, to be able according the findings to by-pass the water treatment plant connexion using the same pipes to reduce the cost 	
<p>SANITATION</p>		
<p>Latrine</p>	<p>The approach seems to be harmonized (good lesson learnt by former experience), but the yet the design is very different from an actors to another. Some of the design are not hygienic at all (NRC) with wood platform not cover by plastic sheeting and many opening, still no cap on the drop hole and no net protection on the vents pipe...Only DCA-NCA is trying to develop a design of HH latrine replicable for the people, following a bit the strategy of Arborloo latrine with a pit dimensioned for 3-4 years. A removable or replicable (based on available free construction materials: grass, mud...) super structure and only the digging of a new pit for the users. The needs to base the design on the capacity of replication/removing of the facilities once the pit is filled (no accessibility for most the latrine for an eventual desludging truck) is not yet hitting the mind of others partners for their ongoing facilities construction. The one with the less potential remaining the one of NRC.</p> <p>Furthermore, NRC is building both HH latrine and shelter, but the shelter is in mud when the latrine is in iron sheet and concrete. The latrine build by DRC are also of poor design.</p>	

	<p>The latrine of DRC and NRC have also a design problem as the slab are installed in a bucket configuration, meaning the only way to dispose water standing (case of run off intrusion...) in the latrine is to put it in the pit with has low seeping capacity instead of to have for instance a <i>dom sla</i>. <i>The dom slab well implemented</i> will enable run off water on the side of the slab, water cannot stand as in the others design mentioned.</p> <p>The seeping capacity (many location with black cotton soil) is also a big problem encountered by the partners as it reduce the lifespan of the pit and also make the drainage of bathing unit tricky (some people even stop to use the bathing unit for that reason).</p> <p>The need of desludging/decommissioning and building of new facilities have to be clearly planned in advanced. For instance, the zone A and B, 50 pits has to be decommissioned soon which will affect the rate of user.</p>
Drainage	<p>Drains are built on the side of the main access road. Many pool of mud can be noticed in the camp and secondary and tertiary (around shelter) are not taken into account so far. The UNHCR WASH officer mentioned that they are not in charge of drainage as it is the job of the site planner whom mentions that he is only in charge to build the main drains??</p>
Solid waste management	<p>Refuse pit was planning to be built but still not effective. The solid waste management has to be substantially enhanced if for the time being there is no that much problem, it will comes in time if the situation is not seriously addressed.</p>
HYGIENE PROMOTION	<p>Once again the hygiene promotion approach and tools have not been adapted to the context; we can be understood given that the camp is recent. Although, there is need to develop an approach and some tools adapted to the context and to the public health issues that should be addressed by hygiene promoter. The approach is mainly based on the presence of a certain number of hygiene promoters more or less relevant in their activity and disseminating message by going around the camp and interacting in a random manner with people. This could work for the first months of emergency but approach and tools have to be harmonized through the development in common of a clear dynamic and adapted approach.</p> <p>Product and tools are provided to the latrine users to ensure the cleaning. For NCR the price of the first kit is about 100USD and last 1 month for the consumable, the second kit is about half the price, but given the quality of the tools they will have to be replaced after short time as well. DCA-NCA is trying to develop tools that could be produce locally with available materials like grass and wood.</p> <p>The situation of bathing unit has to be enhanced asap, the main problem being the seeping capacity of the ground.</p>
COMMUNITY APPROACH and cost effectiveness	<p>The cost of a HH share latrine for NRC (with design based on iron sheet, wooden platform and concrete base) is about 375USD/stance (same cost for communal latrine in Pagak camp made by ADRA) when for DCA-NCA the cost a HH share latrine (with design based on plastic sheeting, wooden platform cover by plastic sheeting and wooden platform) is about 125USD/stance. A compromise should be found between the two designs to promote local capacity of replication and sustainability of facilities built. To compare DICAC for roughly the same type of latrine design as NRC (source: <i>DICAC BoQ for Akula camp</i>), the cost of stance is 50USD. In Jewi, the cost of the stance</p>

	<p>for HH share latrine is about 125USD.</p> <p>The approach should focus on the way to ensure sustainability based on the capacity of the beneficiaries and the resource of the local environment.</p> <p><i>Whether the community approach seems to be harmonized in Jewi, still the design and the maintenance strategy have to be improved and harmonized.</i></p>
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3.2.4. Pugnido 1 camp

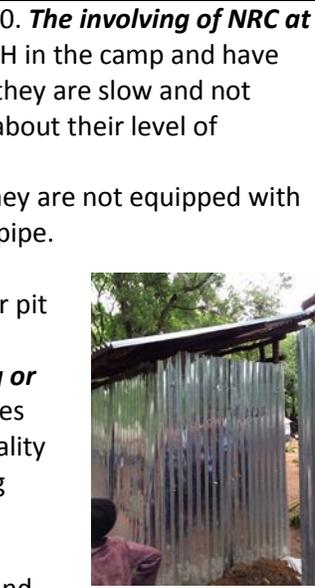
3.2.1.1. Overview of the WASH situation

	Water supply	Sanitation	Hygiene promotion
PUGNIDO 1 camp	Population (source UNHCR, July 21015): 63 137 pp , camp open since about 20 years, but it has to cope with two big influx of refugees in December 2013 and November 2014.		
Partners	IRC	IRC and NRC	IRC
Indicator	Quantity of daily water per pp and nb of pp per taps	Nb of users /stance	Nb of hygiene promoter / pp
Standard	15L/day/pp and 250 pp/taps	64 users /stance	1 promoter for 500 pp
Current level (07/2015)	16L/pp/day with about 97 pp /tap	37 pp/ stance (mainly HH share latrine and HH latrine with 78 communal latrine, still in used)	1 promoter for 645 pp

3.2.1.2. Overview of the WASH intervention

Pugnido 1 camp	
Activities	Main findings
WATER SUPPLY	
Water Trucking	After upgrading and extension of the existing water supply system by IRC, the water trucking have been phased out.
Permanent water supply system	<p>IRC encountered a lot of problem when trying to rehabilitate and extend the existing system as no technical documentation was available. The WSS³ has been built almost 20 years ago. They also encountered problem with the size of the main distribution line and some extension and connection because of the size of the pipeline that hasn't been design for the current need. In consequence, some of the water point are hardly supplied, mainly the furthest ones. Former water point capacities have been removed when it could has been used to ease the regulation of the system (see section recommendation).</p> <p>The water supply system was a pressure network with storage capacity at most of the water point. By building 9m high elevated tank (see pics in front), IRC enable the distribution to be done by gravity, which constitute a good improvement in the</p>

³ Water Supply System

	<p>functionality and sustainability of the equipment. Most of the pump station, generators and borehole are properly managed and most of the technical documentation is available.</p> <p>Although, there is a problem with the monitoring, notably as one the water point at no chlorine residual and the guy in charge of performing the chlorination did not know the protocol and the dosage. The records are not comprehensive. This aspect has to be addressed urgently, especially given the risk of AWD coming from an ongoing outbreak on the other side of the border with South Sudan.</p> <p>Another problem come from the type of taps installed (Talbot tap). Those types of taps are less and less used as they generate a lot of leaks after short timeNRC latrine.</p>	
<p>SANITATION</p>		
<p>Latrine</p>	<p>NRC is in charge to build 290 new stances when IRC about 1200. The involving of NRC at this stage is hardly understandable. There not involve in WASH in the camp and have very little volume of activity in general over there. Moreover, they are slow and not relevant in terms of design and approach. UN HCR complains about their level of achievement but they are the one funding them???</p> <p>As usual, most of the latrines are not hygienic in a way that they are not equipped with neither cap on the drop hole, nor net protection on the vents pipe.</p> <p>The approach implemented is acceptable, people digging their pit and then they got slab. However, the type of super structure meaning for the shelter of the latrine should enable removing or replication with local means. Still, iron sheet are used. The ones built by NRC are the less replicable for the people, plus the quality of achievement undermined the privacy aspect (many opening coming from wrong installation).</p> <p>The NRC strategy for share HH latrine as in Kule camp is not working as most of the latrine do not have any more locked (and were not clean) as it was planned by NRC to ensure ownership. The NRC local project manager was confused in trying to give the price of a latrine stance.</p> <p>Another problem for both IRC and NRC is the quality of the slab. Actually, it is tricky to find appropriate construction materials in the area and then it can affect the stability of the slab. A quality control system should be put in place, and the type of slab produced should be dom slab equipped with a cap.</p> <p>The main practice for shower for the camp population is to go to the close river/stream.</p>	
<p>Drainage</p>	<p>Some drainage has been implemented but it is still not enough and this aspect should be clearly enhanced. The problem comes from the type of soil which has very low seeping capacity and from the flat aspect of the land. Flood prone areas have been identified, but action plan has to be developed.</p>	<p>NRC HH share latrine</p>

Solid waste management	The disposal sites haven't been visited, but the camp were relatively clean during the visit. The organization of solid waste collection should foster more contribution from the communities.
HYGIENE PROMOTION	Same comments as the ones made for others camp. No awareness materials at water point or others strategic location. The hygiene promotion is as usual clearly based on standard door by door visit and hygiene promoter going around to disseminate very repetitive standard messages, with lack of relevant and adapted tools as well as lack of proficiency of the staff in charge who understand more or less what they are doing. Mass campaign and focus group have been also organized to prevent Hepatitis E outbreak spreading. Most of the jerricanes observed at water point were very dirty, full of algae and broken. Last distribution of jerricane was in 2011.
COMMUNITY APPROACH and cost effectiveness	Whether, there is an attempt of community approach implemented by IRC it has to be clearly improved and enhanced . NRC has also to harmonize its own approach with IRC. In few months, about 450 refugees got "training" about hygiene promotion, given the numbers of people mentioned we can doubt about the efficiency of the training, which usually come with continuous refreshing.

4. RECOMMENDATIONS AND ISSUES TO FOLLOW UP

4.1. General:

- ✓ If some strategy/guidelines are specific to a camp, ensure that still the coherence is effective with the general approach
- ✓ Improve the community approach and develop adapted participatory method. Better identify and consider local potential and capacity in designing and implementing the system, as well as for the O&M aspects.
- ✓ Capitalized technical documentation and develop a check list to ensure that all needed technical documentation or lesson learnt and so on are recorded and exploit. The documentation comprehensiveness should be also ensured as much as possible. The documentation should be archived in a way to ease the search.
- ✓ Improve the accountability aspect toward the refugees and toward the humanitarian actors
- ✓ A contingency or at least a check list of monitoring should be committed to rainy season preparedness: *identification and correction of drainage problem, risky pit in terms of water intrusion, risk of collapsing, etc...*
- ✓ Unless technical strategies approved, coordination improved and duplication avoided maybe ECHO should reconsider if continue to engage supporting inefficient/ineffective responses.

4.2. Coordination:

- ✓ The general level of coordination has to be enhanced. In addition, the coordination has to be improved as well as it seems that now everyone does what it wants or just discusses with ARRA for Approval.
- ✓ Improve or complete strategic operational document and guidelines. Ensure effective dissemination and endorsement by the stakeholder including of course the government body. The respect of the strategy and guidelines endorsed in the implementation should regularly be monitored and disrespect of it should be strongly addressed in time.
- ✓ Improve the level of communication among stakeholders; to ensure one channel to communicate, to avoid confusion.
- ✓ The WASH officer in charge of coordination should be empowered to ensure respect to operational strategy and technical guidelines.
- ✓ The coordination constraints like level of overlapping of various staff involvement, lobbying of various partners above the field coordination level to get involve, information retention, etc... should be identified and corrected without delay.
- ✓ Strategic and guideline operational document should be officially endorsed by the entire stakeholder by the institution/organization and not by a person. Strategic document should be translated into action plan.
- ✓ The number of partners should be taken down to an appropriate number in order to ensure service delivery capacity but to ease the coordination and harmonization of approach and strategy (why to bring new partners to camps/operations when others already funded to do so).

4.3. Water supply:

- ✓ Regarding the cost estimation of Kule and Tierkidi water supply system by UNICEF consultant and revised by UNICEF staff, it seems that the unit price are much higher that it should (after price assessment made by our Country office upon RSO request). UNICEF should be informed and investigation should be launched
- ✓ Ensure in the staff of the partners capacity and proficiency in hydraulic to deal with design, construction and management of water supply system. Socio-economic survey should also be implemented.
- ✓ In case problem with temperature is noticed, shade should be implemented on the bladders/storing capacity at water point.
- ✓ Assess need of hydraulic hammer protection for the pressure pipeline and pump station and main gravity network and implement appropriate technical solution to ensure sustainability of the functionality of the network. For instance, hydraulic vessel properly designed could be implemented at pump station, slow closing valve (20 rounds) at main distribution pipeline, air valve 3 effects on gravity system
- ✓ Improve potential of regulation of the gravity distribution network by implementation of regulation valve (butterfly type at main connection of before each water point) in order to ensure fair and balanced supplies among water point
- ✓ Produce a manual to ensure appropriate operating and safe startup of the water supply system
- ✓ Ensure regular water quality monitoring on a sample of representative people from the users

- ✓ Develop an appropriate and detailed plan/strategy for O&M of the water supply system in camp: define the structure of management (O&M), responsibilities and cost (especially for operating and minor maintenance) for operating, minor and heavy maintenance. The strategy should take into account and promote as much as possible self-reliance/capacity of the users at least for operating and minor maintenance aspects. The plan should be as cost effective as possible to make it more affordable for the users. The capacity of users' organization should be built in time according a clear strategy and an efficient method, to maximize their contribution and decrease the dependency.
 - **Note:** In Ethiopia as far as I understood, usually the public institution in charge of water supply is in charge of all O&M of the hydraulic equipment in urban setting and only of heavy maintenance in rural setting, the rest being at the charge of the communities. The fact is that in Ethiopia there is no legal framework for the management of hydraulic equipment in refugee camp. The refugees camp could be assimilate as a rural setting. However, a private actor if relevant could be appointed by the association of users (water committee) to exploit the system and collect the contribution of users. Affordable price and special care for the most vulnerable people should be ensured.
 - A INGO could start the O&M of the equipment building in the meantime by practice and technical assistance the capacity of the representative of the users to operate the system. It could be done in a kind of mentoring approach, time to make effective the final structure of management and integrate those capacities acquired through such approach within the final organization of the O&M.
- ✓ In Kule-Tierkidi and Jewi, water meter should be implemented at pump station and one the main distribution pipeline at least.
- ✓ Jerricane equipped with led should be distributed according the needs (which seems to be pretty high in most the camp: Pagak, Kule, Tierkidi, Pugnido... At time of distribution beneficiaries should ensure that the led and the jerricane are tie up.
- ✓ Jewi camp:
 - Start as soon as possible construction of the main storage tank and distribution network in Jewi camp to ease water trucking
 - Implement a temporally connection between water treatment plant and main storage capacity to phase out the water trucking and in parallel continue to investigate ground water resources potential even at shallow level
 - Water treatment plant should be the last resort at the sustainability of it is unlikely
- ✓ Given the below table, the unit price of pipe for the UNICEF design and cost estimation of Kule-Tierkidi water supply system should be investigated:

Items <i>Price in ETB (1 euro = 23 ETB)/linear meter</i>	Unit price including transport to site, cleaner and lubricant, couple or welding ⁴ / UNICEF Design	Unit price / check at Addis Ababa level by ECHO staff
HDPE pipe DN 250 NP 16	2500	708
HDPE pipe DN 200 NP 16	2000	458

⁴ The bigger diameter already installed are connected by welding and not by couple (mirror welding device for such diameter cost between 2000 and 3000 euros)

HDPE pipe DN 300 NP 16	-	1129
HDPE pipe DN 160 NP 16	-	-
HDPE pipe DN 100 NP 10	1500	136
HDPE pipe DN 63-65 NP 10	1345	44

The bigger pipe *for instance* are connected by welding (the mirror welding for those type of diameter should cost maximum 4000 euros, which less than 1% of the cost of the pipe) so need of coupler fittings, even if we assume 20% of installation fees, 10% of cleaner/lubrificant, 30% of transport and 20% of benefit for the contractor, the maximum price for DN250PN16 should be not be over 1500ETB/lm. **The unit cost of pipe in UNICEF design cost estimation revised by UNICEF should be investigated and justified.** In the meantime, according the findings for instance whether the bigger portion of the cost coming from transport, way to reduce this expense should be investigated.

4.4. Sanitation:

4.4.1. HH Latrine and bathing unit:

- ✓ In the monitoring sheet develop, instead of to ask if the latrine is full and then it is too late to anticipate, they should have a kind of stick of wood with length and then this idea is to use to gauge the level of faces (not very nice but very useful), and that should be the record in the monitoring sheet. The level of the stick of wood should be ensure that the latrine can still be in used 1 month more before decommission or desludging. It will enable to have a buffer time capacity to react.
- ✓ The backfill on the side of the latrine facilities should be compacted and made of clay
- ✓ As mentioned in the technical guidance under which is the current funding, the latrine must constitute a barrier on route of disease transmission, then they should be systematically equipped with a cap on the drop hole (ideally fixed and handle by feet) and net protection on the vents pipe.
- ✓ Given the problem of temperature reported by some of the partners in the latrine pit, the aeration of the pit should be improved (a tee could be add on the outlet of the pipe, as well as black paint or others relevant means...)
- ✓ Improve the access to bathing unit with appropriate drainage
- ✓ Seeping test should be performed in different location of the camp to try to identify is there is a layer of ground that gets better seeping capacity and then exploit it in the way to design soak away pit. Quid about the drainage for the waste water
- ✓ Improve the harmonization of approach/strategy in terms of design, way to implement and to maintain and community approach. Harmonize as well the tools of monitoring of latrine functionality. The document developed by OGB seems to be the most relevant to be used.
- ✓ Improve the financial needs forecast to ensure in time appropriate access to latrine facilities
- ✓ Develop in parallel and in participatory manner a cost analyze of the different type of design to make it as affordable and cost efficient as possible
- ✓ The existing beginning of guideline should be completed in a participatory manner.
- ✓ The strategy should be built to reduce after time as much as possible dependency from the relief. For instance the strategy should :

- Focus on replicable (using available local materials like wood and grass or mud) or removable (design the equipment in order to be able to re-use most the construction materials with easy dismantling...) structure...
 - Ensure as much as possible pit dug by users
 - Easy removable and reusable latrine slab
 - Foster use of *dom slab* which seems to be the most relevant type of slab in the context to ease the manipulation and reduce risk on the stability related to inappropriate way of production and quality control, and bad construction materials quality (aggregate)
- 
- Dom slab production site*
- ✓ The principle to follow given the problem of sustainability and access in case of strategy based on desludging, should be to base the latrine design and way to build on the capacity of the people and the most available and cheap construction materials (unless some technical problem like hardness of the ground or available space are identified). Way to build latrine should be defined with representative of the population.
 - ✓ By principle as well and following the ECHO WASH policy, the construction materials of the shelter of the latrine should be the same as the one the shelter (living habitat) and the community contribution to do it as well

4.3.2. Solid waste management:

- ✓ The strategy for sustainable solid waste management should follow few principle:
 - Several garbage collecting points could be established by zone in the camps. It could be a pit, or just a spot marked by appropriate fencing. The collecting point should ensure easy loaded of the means of transportation up to the disposal.
 - No people get incentive to bring garbage from their home to the various collecting point implemented in the camp. The means to collect and carry it should be provide at HH level to ensure ownership and avoid stealing
 - Incentive can be considered when it comes to transport garbage to the final disposal site. Means should be provided to the people in charge (wheelbarrow, donkey cart, ...)
 - A minimum of waste processing should be effective at disposal to ensure some stabilization of the garbage by incineration (according the type of garbage) and storing by burying the ashes.

4.2.3. Drainage:

- ✓ Through maybe the hygiene promoter capacity, the population of the camp should be briefed about drainage of their shelter with technical advice and organized to support each other's
- ✓ At least the main pool of mud and all the WASH facilities (mainly bathing unit and water point as for the latrine is done in general) should be drained
- ✓ Implementation of raw drains (to be maintained before every rainy season), gravel pack, upgrading of the site... could enable to improve to drainage at localized pool of mud.

4.5. Hygiene promotion:

- ✓ Develop harmonized approach, method and tools to ensure coherence of implementation of the activities and avoid generating confusion among the target population. The strategy and tools have to be adapted to the context and tested as mentioned in the technical guidance of the HIP under which is the current funding. The capacity of the hygiene promoter have to be built in time and not only by one shot or ad hoc training which is implement as briefing. What we call training has to ensure respect to the definition of training, as most of the time what is called is basically a briefing.
 - The capacity buildings of the hygiene promoter have to be continuous, with regular refreshing, identification of the stronger element whom could be used as focal point or referent for the others. This type of approach will enable following the strategy to promote local capacity, peer to peer capacity building and decentralized the capacity of training and technical assistance as close to the needs.
- ✓ The hygiene promotion approach should be better target and have practical and concrete output instead of standard holistic approach. For instance it should start from problem identify in terms of public health risks, misused of the services and wasting of resources. Following the visit few issues has been identified and the hygiene promotion capacity should at least:
 - Addressed the problem of wasting water
 - Addressed the problem of firing waste in the public place
 - Addressed the problem of misused of latrine and bathing unit
 - Get people organized to deal with community and HH daily task to maintain a safe environment
 - Implement notice board at strategic location like water point to ensure appropriate information of the camp population and to be used for awareness posters thematic campaign
- ✓ A hand washing system using feet to poor water could be implemented instead of the system of nails push in to the jerricane barely removable.

4.5. Community approach

- ✓ Ensure coherent and fair incentive rate and resort among the camp and among the sector.
- ✓ Ensure that every sectors are respecting the main principles of the community approach to give more chance to the approach to be understood and acknowledge by the target populations
- ✓ To give more chance to the community approach to be successful ensures information of the populations as early as possible and progressive change notably in terms of community contribution.
- ✓ In the meantime, build a strategy (“vision”) to reduce at short, mid and long term the dependency from the humanitarian relief, especially in responding to daily needs of people.
 - Improve inventory of existing resources, skill within the refugees population of every camp
 - Improve level of organization of the communities
 - Ensure effective and practical involving of the refugees and the design and implementation of the relief
 - Promote existing skill among the refugee population and capacity of replication for building and maintenance of WASH facilities/services. In this regards, promote available and cheap construction materials, especially for latrine, bathing unit and solid waste management...
 - Select design and way of implementation based on the capacity of people as much as feasible