

Desludging assessment –Bhamo IDPs camps – Kachin

January – February 2015

1. Activity Background

Since the beginning of desludging activities in Bhamo camps, SI has been mostly contracting a private contractor (recommended by Township Development Committee (TDC)) to organize this sensitive work. Since the beginning of SI activities in the camps in 2012, around 100 latrines have been desludged.

Two technical solutions have been implemented up to now, depending on the septic tanks accessibility.

- a) Septic tank is accessible for the desludging truck
Workers are pumping out the sludge up to their truck, handling opening and re-sealing of the covers, disinfecting the septic tank areas with lime if any sludge has been spilled. Then sludge is being disposed in a dumping site without treatment;
- b) Septic tank is not accessible for the desludging truck
Manual desludging is in this case needed. It means workers are digging a hole near the septic tanks and are emptying the septic tank inside the hole. Lime is added to participate to the sludge deactivation. Holes are covered by wood, rice bags and bamboo mat. However, along the time the sludge infiltrates in the ground and the hole become empty creating a new gap in the ground.

3 main concerns have therefore been raised:

- 1) The manual desludging could lead to soil and eventually ground water contamination; it could weaken the soil and the pit's direct environment; represent a risk few month after desludging as the pits are not properly protected and it is not anyway a sustainable solution as space in camps is limited. → Not a sustainable solution and increased risks for IDPs;
- 2) Workers have no protection clothes and are handling the sludge without respecting any safety procedures → increased risk for the workers;
- 3) The final disposal of sludge is a major issue as the sludge is dumped outside of the city, in an unprotected area, without any kind of treatment → No respect of the Do No Harm approach and clear environmental impact;

SI therefore decided to focus for now on the 2 first concerns that can be tackled by an improvement of the actual desludging techniques. However the 3rd concern is not left apart and SI is aiming at conducting an in-depth study on potential treatment option and capacity building of existing stakeholders such as TDC.

2. Methodology

To define a strategy to improve desludging at camp level as well as the safety of workers and IDPs, SI:

- Conducted meetings at camps level to identify potential desludging workers. It appears that few of the IDPs are interested in this kind of work, as sludge management is considered as a “taboo” activity;
- Assessed TDC capacities, willingness to improve the actual practices;
- Presented potential targeted desludging strategy and steps to all stakeholders;
- Assessed the financial feasibility of proposed technical solutions;
- Defined the next steps according to the solution choice (need of materials, trainings, etc.)

3. Main findings

a) Meeting at camp level

Two meetings were held with IDPs identified by the camp, with the support of the Camp Leader and SI WWG members for the communication on the activity: 1 in Robert Church camp, with 15 persons, 1 in AD 2000 Camp, with 5 persons. A power point presentation was presented to explain what is desludging and the way SI intends to undertake this activity, with a particular emphasis on hygiene and worker protection (clothes, cleaning etc.).

In both camps, the pre identified workers were not interested in the way SI was thinking to implement the desludging. They mainly objected the fact that they will have to manage the sludge, whatever the protocol and protection provided to the worker.

In Robert Church camp, some of the IDPs were still interested to be part of this activity, but the price demanded was the main issue. They did not manage to agree on a daily rate, and wanted to be paid by septic tank. Only few of them were finally interested, with a negotiated rate of 150 000 MMK / 4 doors latrines septic tank for a team of 8 people. However, not even 8 people showed interest for this activity.

In AD 2000, none of the people were interested after the presentation and the discussion that followed. IDPs clearly do not want to be associated with direct sludge management and daily worker rate is not the main issue.

b) Meeting with Township Development committee (TDC)

SI organized 2 meetings, one in December 2014 and the other one in February 2015 with TDC Bhamo in order to assess their way of working and capacities regarding desludging activities.

It has to be noted that TDC itself has only limited capacity for desludging activity: they have 1 vacuum truck (800 gal), with a small pump only adapted to pump the liquid part of the septic tank. For the solid part, they sub contract to a private team, equipped with a pump and a normal truck with fiberglass tank (800 gal). TDC does not have a dedicated team for desludging, as they exclusively go through their private partner. TDC has a request form, to be filled and sent to them for any desludging need.

However TDC seemed interested to improve its practices and knowledge about the activity. However the improvement areas will remain limited to:

- For the septic tanks accessible by truck, they agree to be in charge of the complete process, meaning that they will desludge directly the liquid part with their truck, and manage with their private partner for the solid part. However, they cannot commit themselves to ensure the good practices of their partner.

For the septic tank not accessible by truck, TDC does not want to be involved at all as it will require manual usage (carrying the drums, etc...).

So TDC is the focal point of contact for Bhamo town in terms of desludging. They seemed interested in building up their knowledge and capacities around desludging activity. However, they mostly sub-contract for their interventions. They have restricted capacity (HR and logistical). SI asked them to give

us quotations prices for desludging, for both accessible and non-accessible septic tanks, but they only sent us their private partner contact to get the desired quotations:

Price is 50 000 MMK / 800 GAL (only when the latrine is accessible by truck).

c) Meeting with private contractor

Following the discussion with TDC official representative (Head person for Bhamo), SI had a meeting with the private contractor ensuring desludging at Bhamo level.

The private contractor constituted a team of 5 persons including himself, among which 4 are working for TDC in the waste collection or desludging teams.

They organized their own team with their own materials when the TDC pump for desludging broke down. They have now 1 truck with 800 gal fiberglass tank, 1 pump 3" and equipment for worker protection and lime.

TDC ensures the desludging through a separate private contract when the customer wants to desludge liquid and solid. As it is very expensive, most of the people from Bhamo city cannot afford and desludge only the liquid part of their septic tank, through TDC regular contract at the rate of 50,000 MMK per truck. Up to now, the contractor has never desludged the solid part. However, when required, TDC desludges also solid part through this private way, and the private contractor negotiates directly with the customer for the price (no fixed price per gallon). The same strategy applies for public infrastructure (example last year with the Bhamo hospital: TDC transferred the desludging request to this private contractor for him to manage entirely). In that case, they do not give back any money of the contract to TDC as they are using exclusively their own materials and are desludging at night.

The disposal site is located in a kind of valley, not fenced, and next to a cemetery where nobody seems to go. It is "managed" by TDC who identified the site but no treatment is being done. The private contractor can use TDC dumping site.

In term of operations:

- Desludging in Momauk Township is problematic as the disposal site is far from Bhamo Town (10 miles from Momauk to Bhamo + 4 Miles from Bhamo to dumping site). Previously they were digging holes in the camps, but now that we do not allow this process anymore, it will be difficult for the private contractor team. They are trying to get a solution at Momauk level (either finding another desludging site or to increase the price).
- Safety equipment is available for the workers. Part of it has been provided by METTA. However, some of the private's workers prefer not to wear them as they are not use and do not feel comfortable;
- Workers clean the area and spread lime for disinfection after every desludging;
- They desludge only at night time, in order to keep low profile and to avoid having too many people around the desludging area;
- Attention has to be put on the site protection (temporary safety barriers + someone to stay and control the area of desludging in the camp when they go to the disposal site for dumping) to avoid any accident, particularly as children are curious of the process despite the strong smell.

The price is 200 MMK / GAL.

Desludging photos in Bhamo, Robert Camp, 12/02/2015 / Private contractor



800 GAL tank on the private contractor truck



- Desludging:**
- 1. Manual pull out of the solid sludge***
1st layer
 - 2. Motor pumping the liquid part***



Tank bottom desludging...

Cleaning + lime layer



d) Conclusions

Desludging in Kachin is definitively a taboo activity. Few people are willing to work on this activity, even for a significant amount of money.

The solution involving IDPs from the camps and working directly for SI seems complicated as few persons are willing to work. Moreover, the strategy of direct implementation has implications for SI in terms of infrastructure, as we will need to identify storage and cleaning space, for materials and workers, which would probably create tensions with the IDPs, camp leader and Church committee (no space available, storage of sludge in the camps etc.). In addition, SI will still need to coordinate with TDC for the use of the disposal site, as sludge cannot be transferred without authorization.

In Bhamo, TDC does not want to be more involved than what they currently do. TDC broken pump on the vacuum truck has not been replaced for months now. Their partnership with the private contractor is satisfying everybody, particularly as TDC HR and logistical capacities are limited. They showed motivation to access trainings and materials, but not intervene in the process directly, as they do not want to be associated to desludging activities.

Only the private contractor team has the capacities to fully manage desludging: he has the team and the material, and shows good knowledge on the activity. He can work in all conditions (solid sludge or not, accessible tank by truck or not accessible...). The practices have been improving with NGOs recommendations.

However, he is the only actor in this domain in Bhamo, and the prices he is practicing are quite high while desludging needs are growing in the camps with the construction of semi-permanent latrines.

Recommendations:

- Short-term: continue to work with the private contractor team as SI cannot stop the desludging activities which are needed on a regular basis. He is the only one to have the capacities to manage for now;
- Middle-term: Advocate at State level for TDC capacities reinforcement: HR / materials / trainings on safe practices etc. This could be supported by INGOs/LNGOs or the WaSH cluster through an official process in order to implicate more the TDC for the desludging in Bhamo area, and make it responsible for its complete management;
- Long-term: Look at a solution for the disposal site, in terms of sludge treatment and management at Bhamo level.

Finally, this document is a first compilation of the situation, information gathered and discussions held regarding Bhamo camps. In SI other areas of interventions the situation is different and would require a similar assessment work to be undertaken:

- ✓ In Lwegel: desludging is mainly handled by Chinese private contractor(s) who are taking the sludge to China side for organic fertilizer. TDC Lwegel is not handling at all desludging activities for the town and the camps. Prices secured by Chinese are high: around 1,000 MMK for GAL.
- ✓ In Laiza: TDC Laiza is the one handling desludging for the town and the surrounding camp. In the camps access to semi-permanent latrines' septic tanks is not a major issue and therefore the TDC truck can directly pump the sludge to the truck. Desludging cost is surprisingly cheaper than in GCA (considering that the general cost of leaving is higher in Laiza), in average 120,000 MMK for 8'/4'/4' septic tank and 180,000 MMK for 12'/6'/6' tanks. The major issue in Laiza is the dumping site. Lately, TDC has been assessing a new dumping site, close to the entrance of Je Yang camp (on top of a hill) and they are building a 6-storey concrete room (kind of septic tanks), expected to be completed by mid-April 2015. It seems that the sludge might be used as natural fertilizer. Consequently, no desludging in camps has been possible since September 2014 (huge issue in Je Yang where at least 60 latrines are reported to be full and condemned). Currently, they're looking at a very short-term solution to just bury the sludge on the ground.