

**EVALUATION OF SAVE THE CHILDREN JAPAN
WASH INTERVENTIONS IN HLAING BONE AREA**



Social
insight

 **MMRD**
**Research
Services**
Myanmar Marketing Research & Development Co., Ltd

**Evaluation of Save the Children Japan UNICEF-funded WASH interventions
implemented in Nargis affected communities of Hlaing Bone Area,
Mawlamyinegyun/ Labutta Township**

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List of Acronyms

4-Clean	Clean Hand, Latrine, Food and Water
3-Proof	Fly-proof, Odour-proof, and Cover-proof
AMW	Auxiliary Midwife
CHW	Community Health Worker
IEC	Information, Education and Communication
MMRD	Myanmar Marketing Research & Development Co., Ltd
RWHT	Rain Water Harvesting Tank
UNICEF	United Nations Children's Fund
WASH	Water, Sanitation and Hygiene

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Executive summary

The project “Improved Access to Safe Water, Sanitation and Healthy Hygiene Practices” in collaboration between Save the Children Japan and UNICEF had a planned implementation period of 6 months, from October 2010 to April 2011, by Save the Children Japan. It aimed to enable improved access to safe water, sanitation and healthy hygiene practices in Nargis affected communities in Hlaing Bone area, Mawlamyinegyun/ Labutta Townships, Ayeyarwady Region. The project overall goal was to enhance community resilience to current and future hazards related to access to water, sanitation and public health and poor living conditions. This expected outcome would be achieved by increasing the water storage capacity at community level - construction of new ponds, renovating the existing ponds as well as providing rain water harvesting tanks at the school level, and by promoting the use of sanitary latrines and hand washing facilities both in the community and in schools.

Myanmar Marketing Research & Development Co., Ltd (MMRD) was awarded by Save the Children Japan as an external evaluation consultant to assess whether the expected project outputs have met the initial objectives of the overall program. The evaluation employed both qualitative and quantitative research approaches. A total of 153 household level semi-structured interviews, 7 Observations, 7 Key Informant Interviews (KII) and 2 Focus Group Discussions (FGD) in 7 project villages were carried out.

The findings demonstrated that the intervention was timely implemented and met the needs of the targeted beneficiaries. It was found that the targeted communities now have adequate water storage items, provided by Save the Children Japan, and year-round water accessibility. However, the amount of water that had been stored was still low at the time of study. Rain water was largely expected to enhance the increase of water storage.

97% of respondents stated that drinking water is available throughout the year, meeting the objective of the project – communities have accessibility of water through the provision of storage items.

The distribution of buckets reached to a large number of households based on the evidence that 99% of respondents stated they currently has buckets for water storage. In addition, the high rate of households (93%) that owned glazed earthen pot indicated that sufficient water storage items are now present in the community.

The data show that a significant improvement in drinking water purification method has taken place in targeted communities based on the fact that 95% of respondents stated they now use filtration method (ceramic, sand), which is an appropriate purification method. But, the two inappropriate purification practices of using cloth filtering (90%) and storing water one night before drinking (81%) were also found to be used simultaneously with the

filtration method. Any future project should aim at encouraging behaviour change of these practices.

Regarding latrine, a number of latrines have been constructed at schools. They come with attached hand washing facilities after defecation. Posters put on the walls of latrines were reported to contribute to increased awareness of personal hygiene in the targeted primary schools.

There has been an overwhelming satisfaction with constructed latrines in the study villages. Although some villagers were reported to practice open defecation in the pre-project period, the use of fly-proof latrines has now become the most common practice (97%) in the community.

Due to the provision of latrines for households in the survey villages, the majority of households do not share latrine with other households, as stated by 87% of the respondents.

Good hygiene practices have been witnessed in the study villages as well. Asked how often villagers clean around their houses, 52% of respondents reported that they do clean 1-3 times per week. There are also households who clean around their houses daily (12%). Thus, the local communities are now more aware of the importance of keeping their environment and houses clean.

Although respondents expressed they gained knowledge from Information, Education and Communication (IEC campaign) including personal hygiene and environmental cleanliness, many people were still found to be disposing garbage in their own yard and river/stream. Inappropriate practices of disposing garbage are still a concern accordingly.

The distribution of IEC materials positively contributed to the increase of knowledge with 99 percent of respondents stating that households increased their knowledge on water, sanitation and hygiene. However, as stated before, there is still a gap between increase in knowledge and change of practices.

100% percent of respondents said washing hands after defecation is important, and 95% of respondents stated that washing hands is important before eating meaning that villagers have a high level of knowledge on hygiene practices.

1. Background

Save the Children has been established in Myanmar for 15 years and supports child rights programming across a range of interventions to reach Myanmar's most vulnerable populations focusing in particular on children.

The project "Improved Access to Safe Water, Sanitation and Healthy Hygiene Practices" in collaboration between Save the Children Japan and UNICEF had a planned implementation period of 6 months, from October 2010 to April 2011. It aimed to enable improved access to safe water, sanitation and healthy hygiene practices in Nargis affected communities in Hlaing Bone area, Mawlamyinegyun and Labutta Townships.

The results from an assessment conducted by WASH thematic group led by UNICEF revealed that needs were significant in this area. The assessment outcomes coincided with the early water shortage assessment carried out in December 2009. The project overall goal was to enhance community resilience to current and future hazards related to access to water, sanitation and public health and poor living conditions. This expected outcome would be achieved by increasing the water storage capacity at community level - construction of new ponds, renovating the existing ponds as well as providing rain water harvesting tanks at the school, and by promoting the use of sanitary latrines and hand washing facilities both in the community and in schools. A total of 14 villages were identified as first priority located in the 7 different village tracts in Hlaing Bone area, Mawlamyinegyun/Labutta Townships. This project implementation would directly benefit a total population of 6,900 (including 2,700 children) who lacked access to safe water, sanitation and hygienic practices. This number is the total population of the target villages.

In addition, vulnerable families living in the villages would also get an average income of 10 days by involvement in the cash for work for construction and renovation of water sources. With technical assistance transferred during the project period, capacity development of the WASH committees could also be achieved by proper mobilization and specific training related to water and sanitation. Continuing Township level coordination with local authorities, agencies and local NGOs in sharing information at the township level would ensure optimal use of resources. The impact of behaviour change generally takes longer to determine, however, this project would become a good foundation for future by providing locally appropriate healthy hygienic practices and acknowledging the benefits of healthy environment.

2. Objectives

As the project was coming to an end, Save the Children Japan wished to evaluate the impact of its intervention and to ensure that it has met the outputs of the project as stated in the proposal's logical framework and thus contributed to bring about the overall goal.

Result 1 was "At least 3,000 water insecure people have year-round access to an adequate quantity and quality of water". MMRD, as an external consultant, evaluated whether all target beneficiaries had adequate access to water thanks to Save the Children Japan's intervention.

In this respect, MMRD assessed the following verifiable indicators:

- Number of people who benefited from constructed/renovated ponds;
- Average amount of time reduction on collecting water reported by beneficiaries;
- 60% of household drinking water samples tested is free from faecal coli form contamination.

Result 2 was "At least 10 primary schools have improved access to safe water, better sanitation facilities and safe hygiene knowledge". MMRD evaluated whether such improvements have taken place in targeted primary schools thanks to Save the Children Japan's intervention.

In this respect, MMRD assessed the following verifiable indicators:

- Number of students benefited from improved water and sanitation facilities;
- 80% of drinking water samples tested at the schools are free from faecal coli form contamination;
- Number of rain water collection tanks and sanitation facilities constructed in the school compound;
- Number of latrines constructed in the school compound.

Result 3 was "Increase sanitation coverage by 10% through mobilizing households for the construction of 1,600 latrines". MMRD evaluated whether such increase and mobilization have taken place thanks to Save the Children Japan's intervention.

In this respect, MMRD assessed the following verifiable indicator:

- Number of sanitary latrines constructed by the families with the supported materials.

Result 4 was “At least 1,000 families use improved water treatment method and gain healthy hygiene knowledge through the provision of ceramic water filters and hygiene promotion activities. 6,900 people (total population in 14 villages) receive hygiene promotion inputs from CHWs, including IEC materials”. MMRD evaluated whether such changes have taken place thanks to Save the Children Japan’s intervention.

In this respect, MMRD assessed the following verifiable indicators:

- Number of WASH committees formed to manage the water and sanitation related facilities
- Number of families who received ceramic filters and water containers expressing specific benefits
- Number of under 3 year old child mothers who received hygiene training exercising safe child defecation practices
- Number of WASH committees trained for the operation and maintenance training
- Number of children exhibiting safe water treatment method and personal hygiene practices
- % of households who practices proper hand washing at three critical occasions (before meals, before cooking and after latrine)

3. Methodology

MMRD applied both quantitative and qualitative research methodology to triangulate findings and increase the depth and comprehensiveness of the analysis, conclusions and recommendations.

Regarding quantitative data, a semi-structured questionnaire was designed by the research agency to collect all relevant data to meet the objectives as stated in the precedent sections.

Out of the 14 villages in 7 village tracts with a total population of 1,500 households with 6,500 people including 2,700 children where Save the Children Japan carried out the project, MMRD designed as follows;

For the quantitative interview, 7 large villages were selected from the 7 project village tracts. In each surveyed village, 10% of households were randomly selected using Proportionate to population size in order to represent the village tracts of selected villages, meaning that a total of 153 beneficiary households were interviewed for the evaluation.

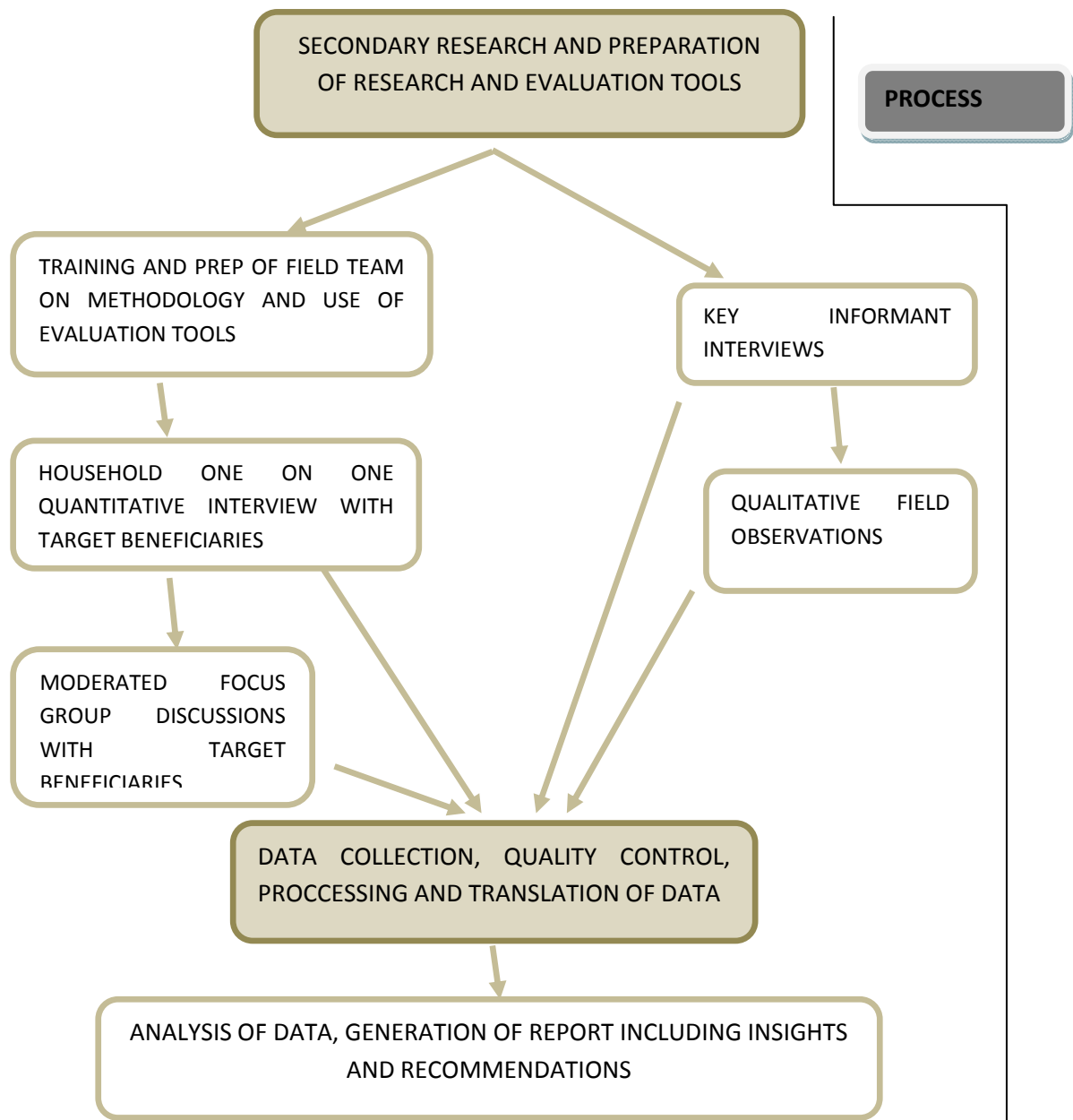
Regarding qualitative data, Key Informant Interviews (KIIs) were carried out with members of communities' WASH committees and/or village chiefs (1 in each surveyed village). One such interview was also done with a SC field staff who took part in the project. Observation was also done in each surveyed village to assess water sources, water filters and other relevant items. Finally, 2 Focus Group Discussions (FGDs) were held with an equal number of female and male participants to ensure gender balance.

Table 1 presents the methodology and sample allocation in 7 villages for the evaluation.

Table 1. Methodology and Sample Allocation

Name of surveyed village	HH	Total Pop	Sample HH	Obs	KII	FGD	KII
Bay Htone	91	419	18	1	1	1	Hlaing Bone Save the Children office
Chin Su	133	525	12	1	1		
Kanaso Chaung	287	1149	50	1	1		
Phyar Lake	215	881	20	1	1	1	
Shaw Chaung	145	636	34	1	1		
Tat Kwin	86	348	14	1	1		
Thu HtayChaung	45	147	5	1	1		
Total	1002	4105	153	7	7	2	1

Chart 1. Process Flow of Evaluation



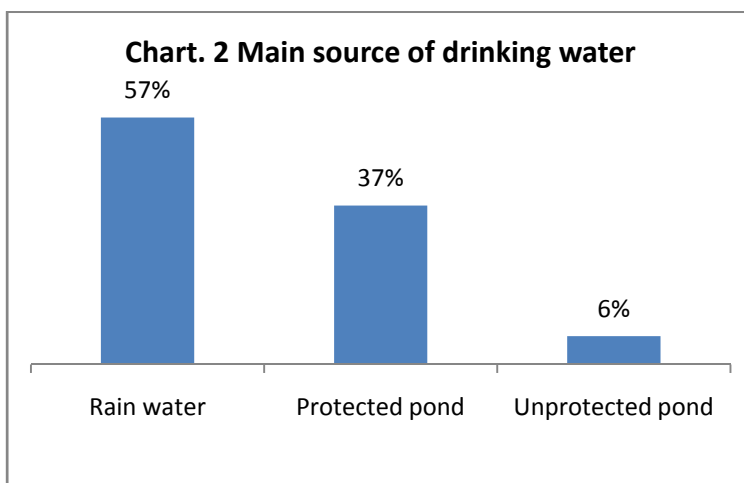
4. Findings

A. Quantitative Analysis of Performance Indicators and Evaluation Measures

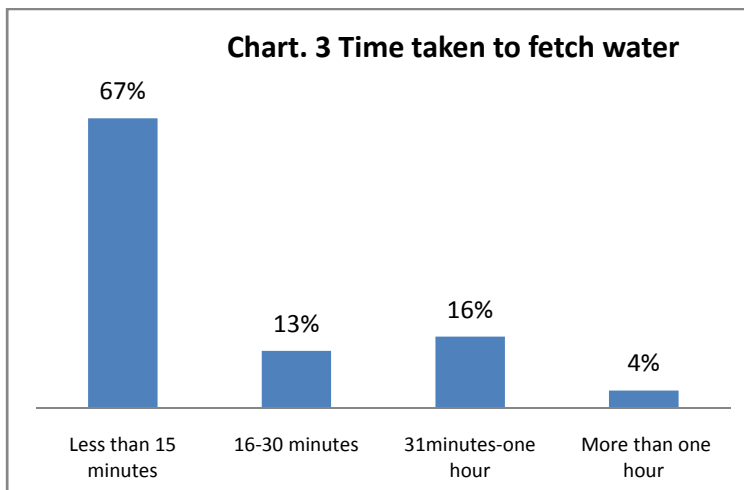
The data below presented whether the project outcomes as described in the logical framework matched with the actual findings.

i. Year-round access to an adequate quantity and quality of water

The study found out that there is adequate quantity and quality of water accessible year-round, and no water shortage is expected during next dry season.

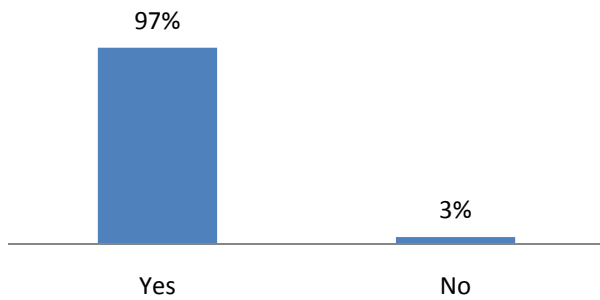


The main water source used by households is rain water (57%) stored in household items, followed by protected pond (37%). This is a very satisfactory situation.



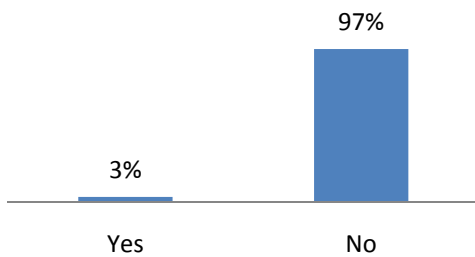
Respondents stated that the duration for fetching water is 30 minutes or less (80%), which is in line with SPHERE Standard. Time taken in fetching water is not a problem in the community.

Chart. 4 Availability of drinking water from water source throughout the year



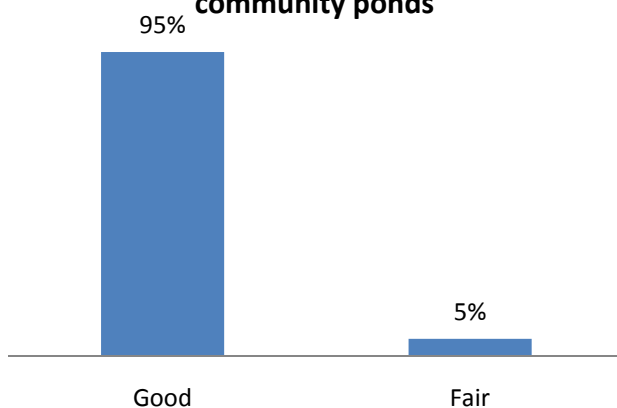
When investigating whether drinking water is available throughout the year, 97% of respondents stated yes, meeting the objective of the project. In the time of facing water shortage in the past, respondents reported that they went to nearby villages to fetch drinking water.

Chart. 5 Whether community faced water shortages during the last dry season

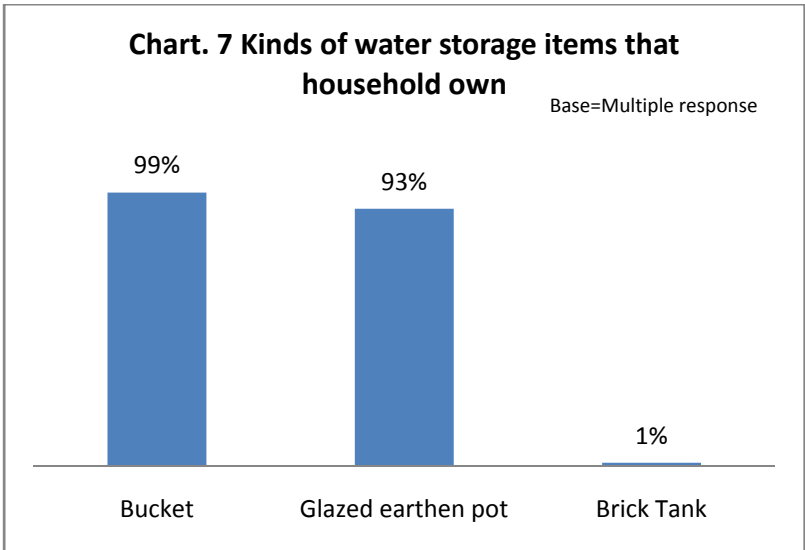


97% of respondents reported that no water shortage was encountered during the last dry season.

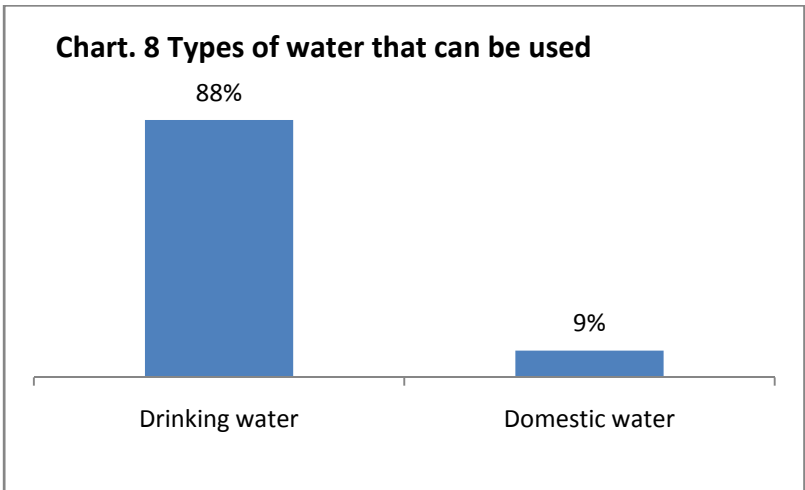
Chart. 6 Quality of new or renovated community ponds



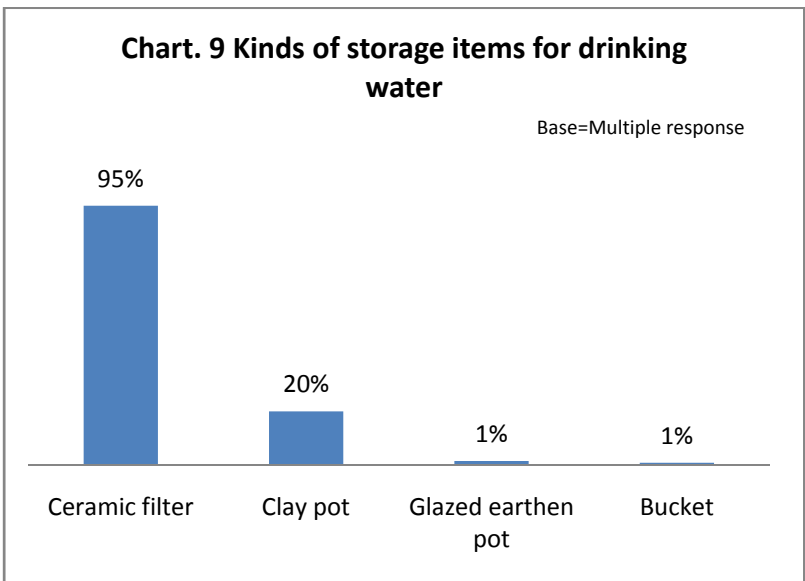
It was found out that the quality of both new and renovated community ponds constructed by Save the Children Japan was good as reported by the respondents (95%).



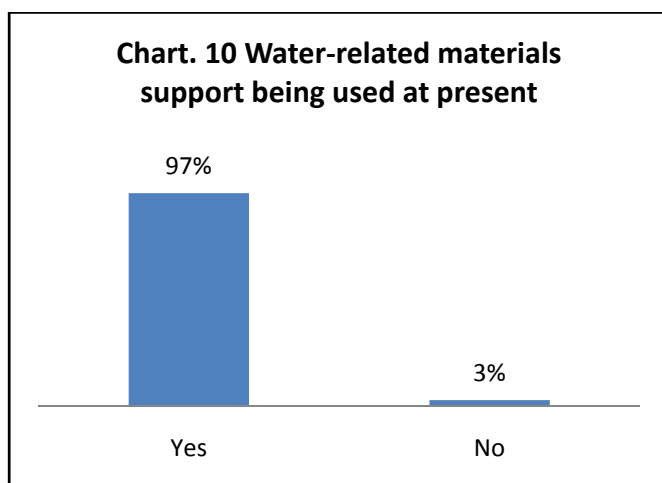
The distribution of buckets reached to a large number of households based on the evidence that 99% of respondents stated they have buckets for water storage. In addition, glazed earthen pot owned by households (93%) indicated that there has been sufficient water storage in the community.



Due to the fact that the present condition of drinking water implemented by Save the Children Japan is reasonably good and usable (88%), it can be assumed that the project villages have adequate and good quality of drinking water and 9% can be used as domestic water thanks to Save the Children Japan intervention.



The most common item used for drinking water storage is ceramic water filter (95%) showing that ceramic water filters distributed by Save the Children Japan were used by households.



The study found that households properly used materials provided by Save the Children Japan. WASH committees also checked if the materials have been used or not and encouraged households to maintain ceramic water filters and buckets for long term use. 97% of respondents said they are currently using water-related materials provided by Save the Children Japan.

ii. Improved access to safe water, better sanitation facilities and safe hygiene knowledge for primary schools

Table 2. Number of schools in the survey villages

No.	Village Tract	Village Name	Primary School	Affiliated Primary School	Middle School	Male students	Female students
1.	KyunChaung	Bay Htone	1	0	0	43	28
2.	Pet Paye	Chin Su	1	0	0	53	36
3.	MyitKyiBoe	KanasoChaung	1	0	1	160	185
4.	Phyar Lake	Phyar Lake	0	0	1	140	110
5.	Shaw Chaung	Shaw Chaung	1	0	0	210	192
6.	Tat Kwin	Tat Kwin	1	0	0	26	32
7.	Yae Twin Kone	Thu Htay Chaung	0	1	0	13	12
Total			5	1	2	645	595

Table 3. Support of water-related inputs/materials at school for water storage

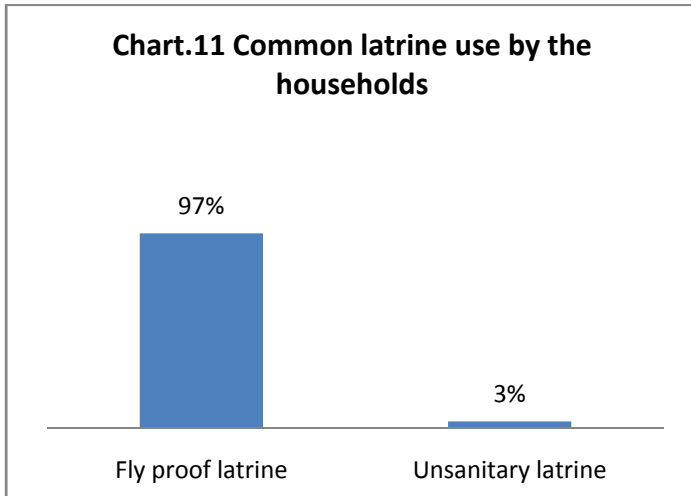
No.	Village Tract	Village Name	Plastic bucket	Ceramic water filter	RWCT	Brick Tank (for latrine)	PVC pipe (To extend water)	Hand Pump
1.	KyunChaung	Bay Htone	5	4	1	0	0	0
2.	Pet Paye	Chin Su	8	11	0	0	0	0
3.	MyitKyiBoe	KanasoChaung	8	8	0	1	25	0
4.	Phyar Lake	Phyar Lake	4	10	1	0	0	0
5.	Shaw Chaung	Shaw Chaung	4	10	0	0	0	0
6.	Tat Kwin	Tat Kwin	4	10	0	0	0	1
7.	Yae Twin Kone	Thu HtayChaung	4	5	0	0	0	1
	Total		37	58	2	1	25	2

Table 4. Institutional latrines support for schools

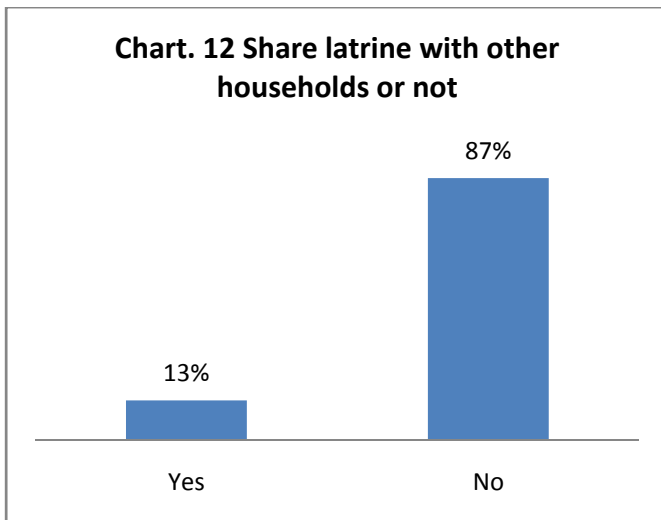
No.	Village Tract	Village Name	Type of Latrine	Hand Pump	Place
1	KyunChaung	Bay Htone	0	1	Primary school
2	Pet Paye	Chin Su	2 Units	0	Primary school
3	MyitKyiBoe	KanasoChaung	2 Units	0	Primary school
4	Phyar Lake	Phyar Lake	2 Units	0	Primary School
5	Shaw Chaung	Shaw Chaung	0	0	-
6	Tat Kwin	Tat Kwin	2 Units	0	Primary school
7	Yae Twin Kone	Thu HtayChaung	2 Units	0	Affiliated primary school
	Total		10 units	1	

There has been an improvement in the quantity of latrines constructed at schools that come attached with hand-washing facilities after defecation. Posters put on the walls of latrines were reported to contribute to the increased awareness of personal hygiene in the respective primary schools. The provision of ceramic water filters also contributed to the accessibility of safe drinking water in the schools.

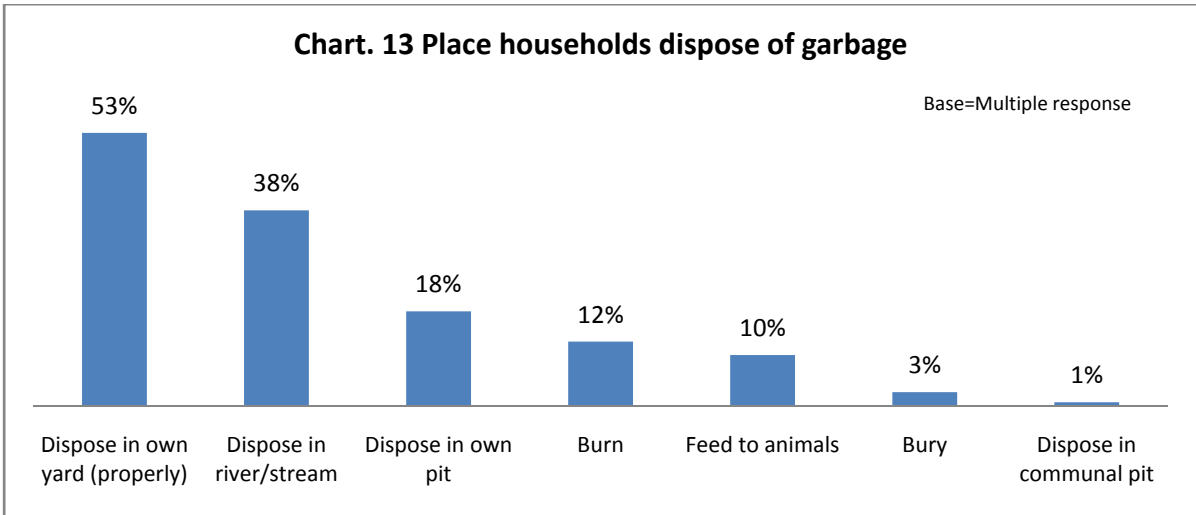
iii. Increase sanitation coverage through mobilization of households for the construction of latrines



There has been an overwhelming satisfaction on the use of latrine in the study villages. Although some villagers were reported to practice open defecation in the past, the use of fly-proof latrine is now the most common (97%) in the community.

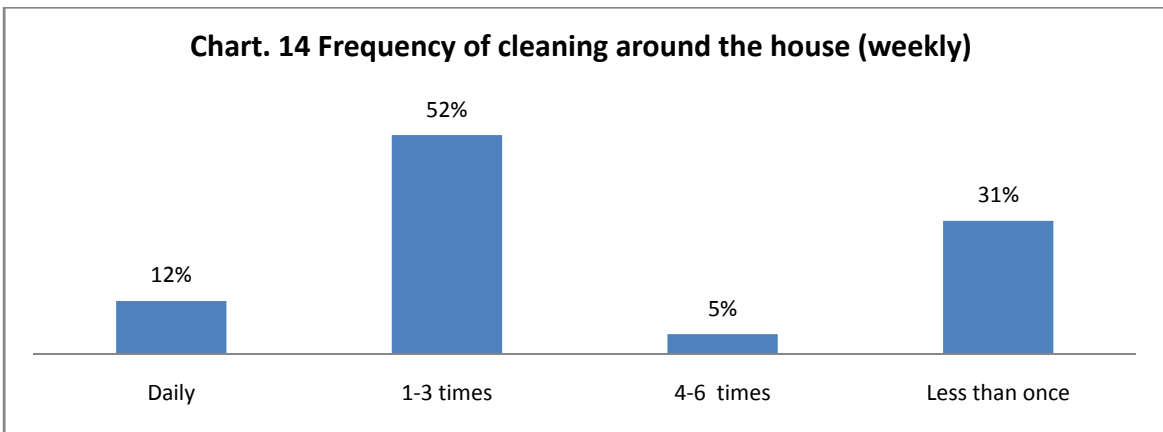


Due to the provision of latrine for households in the survey villages, the majority of households do not share latrine with other households as stated by 87% of the respondents.

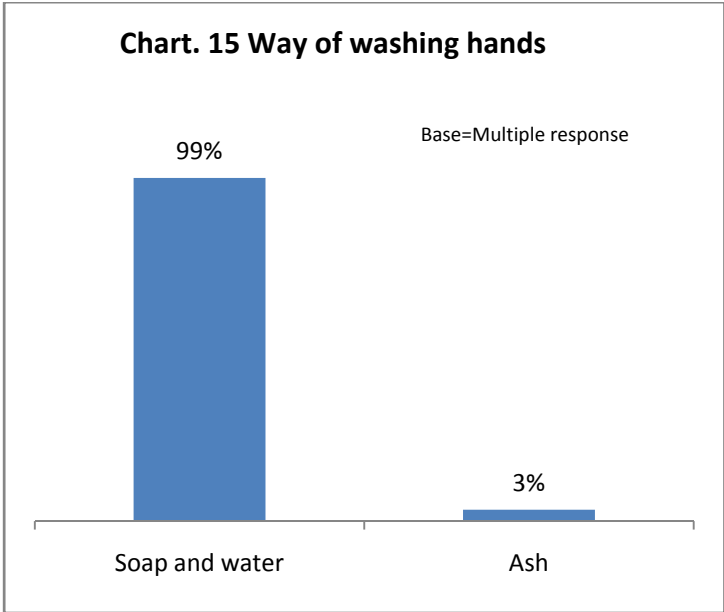


Burning (12%), Bury (3%) and Disposal in communal pit (1%) are proper practices in disposing garbage. So, although respondents expressed they gained knowledge from IEC campaign including personal hygiene and environmental cleanliness, many are still disposing garbage in their own yard and river/stream meaning that good practices of disposing garbage is still of great concern.

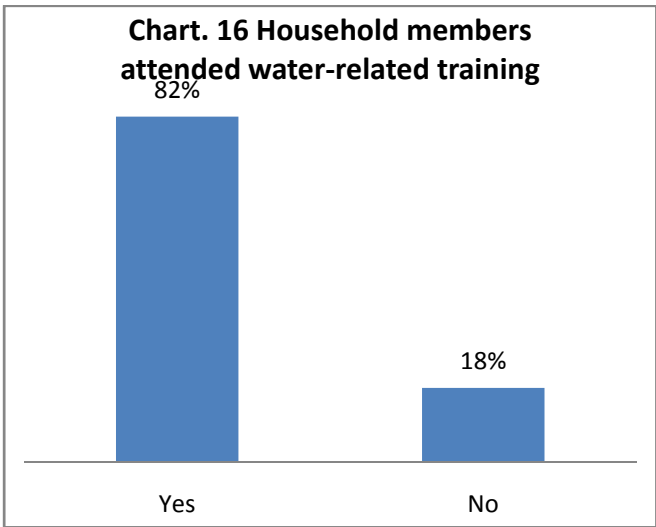
iv. Improved water treatment method and hygiene knowledge through the provision of ceramic water filters and hygiene promotion activities



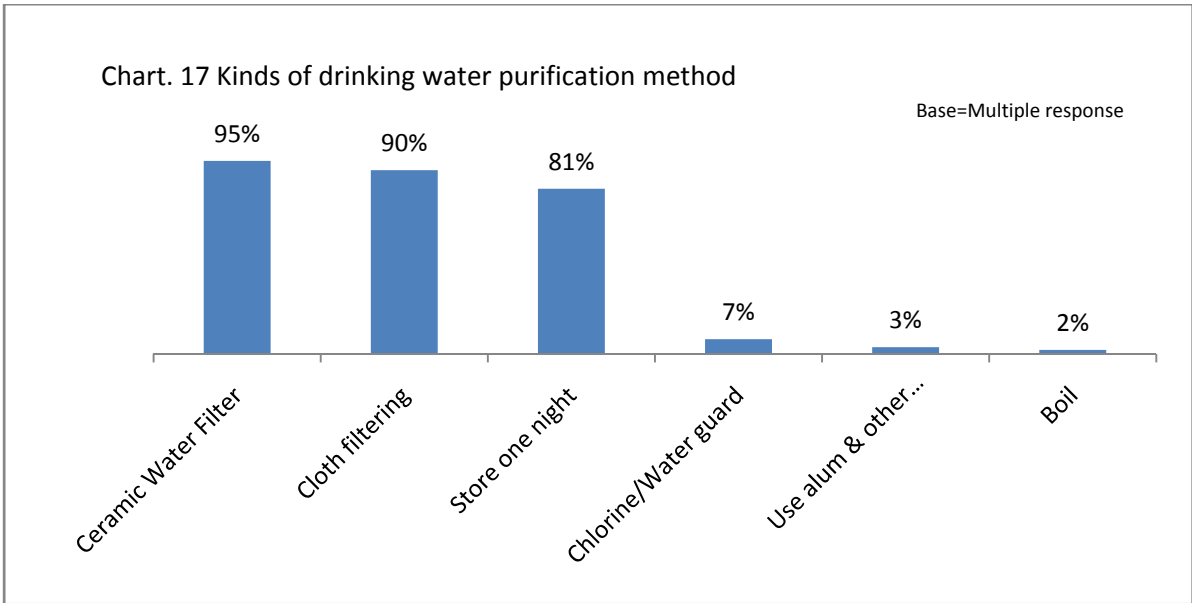
Good hygiene practices have been witnessed in the study villages. Asked how often villagers clean around their houses, 52% of respondents reported that they do clean 1-3 times a week. There are also households who clean around their houses daily (12%). The local community is now more aware of the importance of keeping clean their environment and houses compared to the pre-project situation.



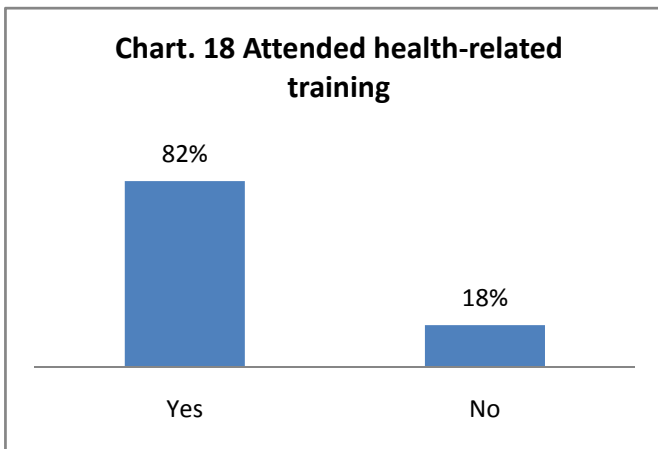
It is an encouraging sign that the use of water and soap when washing hands is widespread among the villagers. Respondents stating they use either water only or soap and water are 99%. The practice of using soap also indicated that the distribution of soaps reached out to a large number of households.



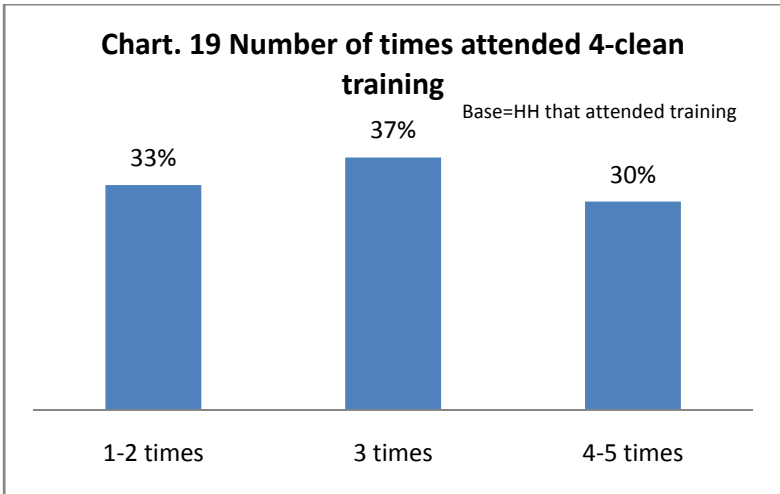
There has been an enthusiasm of attending water-related training among the households (82%). The reason some households did not attend the training was reported to be related to their workload as well as lack of interest.



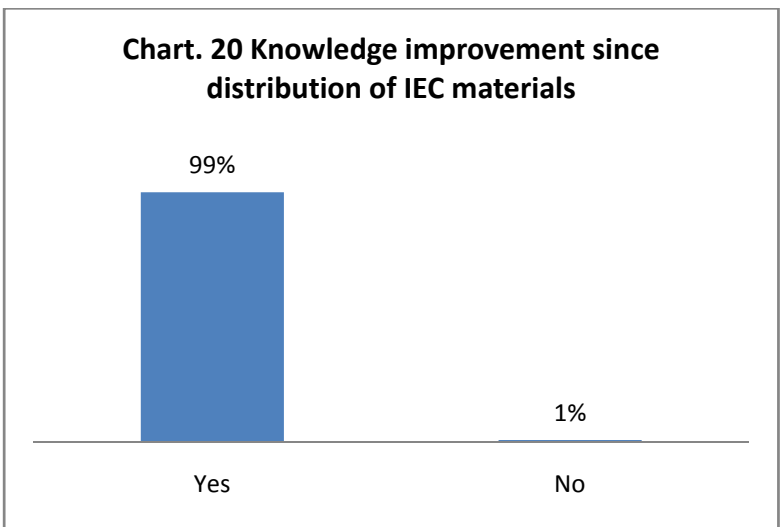
The data show that a significant improvement in water purification method for drinking water has taken place in communities based on the fact that 95% of respondents stated they use Ceramic Water filter. But, the continuing practice of using cloth filtering (90%) and store one night before drinking (81%) is not a good sign, and should be targeted in future project.



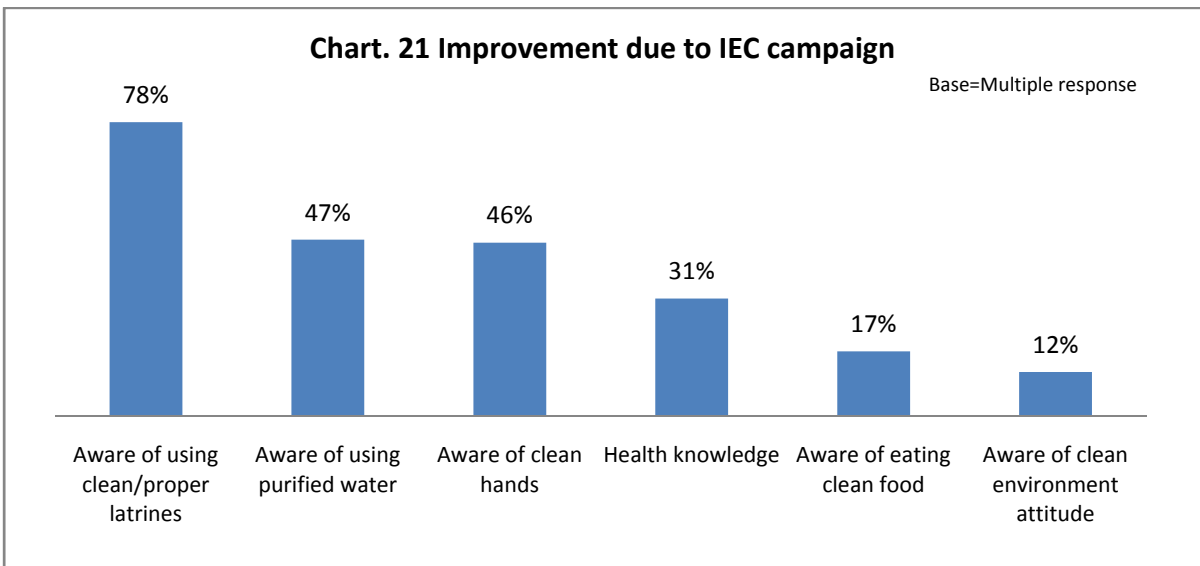
82% of respondents reported that they attended health-related training showing that there has been a good participation in the project from the side of the local community.



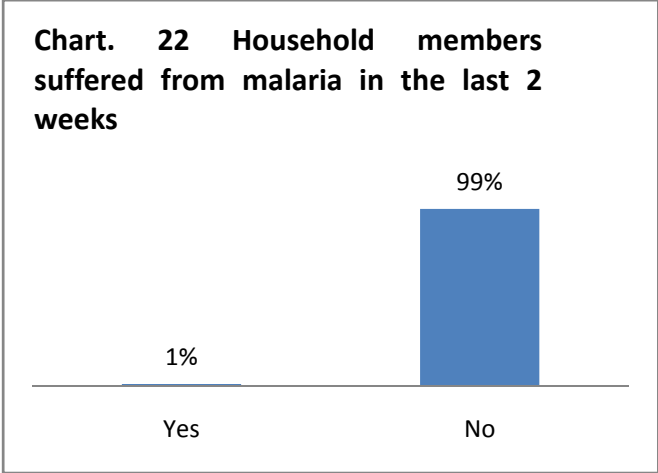
The data shows that villagers were interested in attending 4-clean training held by Save the Children Japan. 33% of participating respondents stated they attended 1-2 times, 37% for 3 times and 30% for 4-5 times.



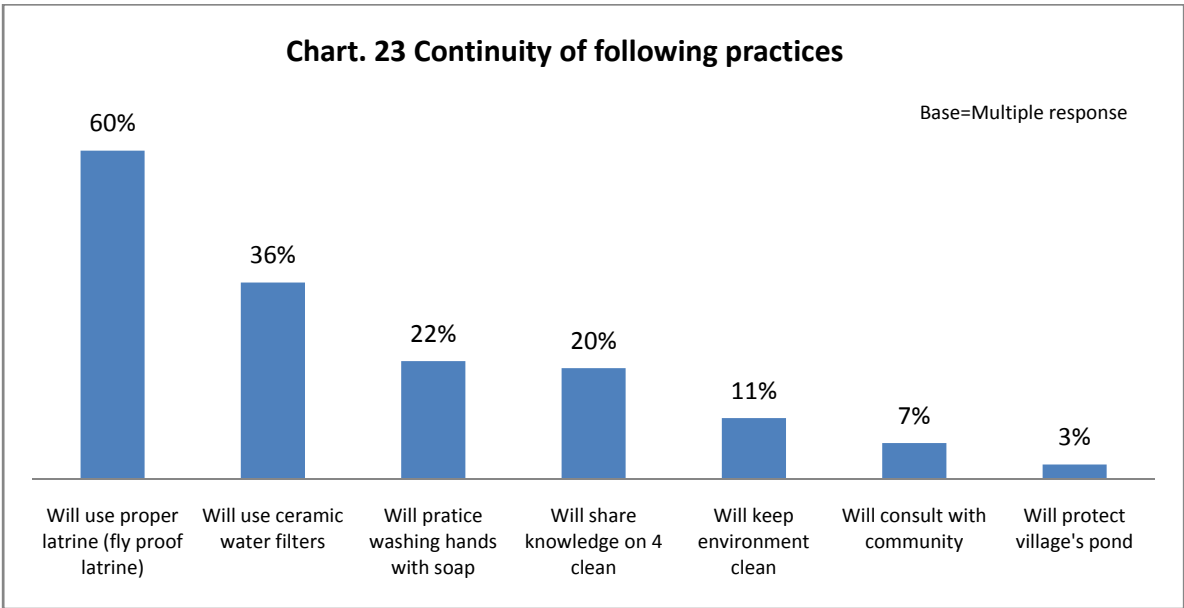
The distribution of IEC materials positively contributed to the increase of knowledge with 99 % of respondents stating that households increased their knowledge on water, sanitation and hygiene after IEC materials were provided to them.



Due to IEC campaign held in the villages, 78% of respondents reported that they are now aware of using clean and proper latrines, awareness of using purified water (47%) and awareness of keeping hands clean (46%) which are attributed to hygiene promotion activities done by Save the Children Japan.



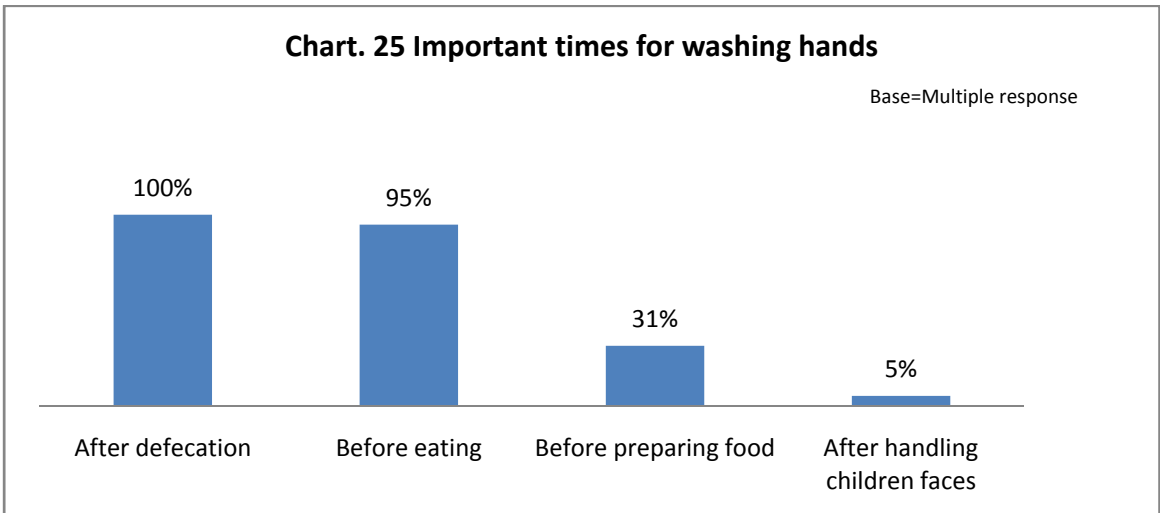
99% of respondents stated that no malaria was faced in the last two weeks, partly because of the community keeping around their houses and environment clean.



There has been an overwhelming statement on the maintenance of materials provided and the continuation of practices. 60% of households stated that they will use proper latrine, ceramic water filters (36%) and 22% said they will share knowledge on 4-clean and keep environment clean.



It was reported by households that they always wash hands after defecation (75%) indicating that hygiene promotion activities had a positive impact on the behavior.



A full percentage of respondents said washing hands after defecation is an important time, and 95% of respondents stated that washing hands is important before eating meaning that villagers have a good knowledge on hygiene practices.

B. Findings from Observation, FGDs, Field Reports and KII

i. Water

In the summer, creek water becomes salty, thus, pond water is mainly used for both drinking and domestic use. A round trip for fetching water from the nearest household takes 15 minutes and 40 minutes for the furthest household.

The main water source used by households is rain water (57%), followed by protected pond (37%) which is a satisfactory performance. Save the Children Japan also conducted the testing of water quality twice in the project villages to ensure safe drinking water were accessible to the villagers.

When selecting villages for the provision of water, the villages which suffered from water shortage were given priority. Then, the active villages which could donate land to construct ponds were selected for the project. Moreover, the villages which are disciplined and could follow the instructions were also given priority. It is encouraging in project implementation that lands were enthusiastically and voluntarily donated for the construction of new ponds.

Save the Children Japan has provided ceramic water filters and buckets to every household. Previously, the pond water was not tested its quality which was later tested by Save the Children Japan to see if the water quality was safe enough for drinking. Villagers were informed of the bad condition of drinking water according to the test conducted by Save the Children Japan. In the meantime, Save the Children Japan asked the villagers to take care of the ponds and fence the ponds to prevent animals from entering into the pond. In this regards, WASH committees have been the most active in relaying messages and maintenance of water ponds.

The WASH committees were formed comprising of at least 11 members who were given responsibility to supervise the maintenance of the ponds and monitoring on the use of water including buckets and ceramic water filters that were distributed to every household in the targeted villages.

Previously, the villagers did not know the concept of good quality water so they all thought that there would be no germs if water was filtered through a piece of cloth. Now, as Save the Children Japan made a test on the water quality and gave information about un-drinkable and drinkable water, all villagers now show their willingness to use water filters.

Protected ponds were described to be good. Out of 7 villages, water from RWHT is available throughout the year in 5 villages. Shallow tube well is also available throughout the year in 3 villages. One RWHT was provided in each village. Present conditions of ceramic water filter supported by Save the Children Japan were reported to be in good use, and the percentage

of beneficiaries who use ceramic water filter is 100% according to KII data meaning that supported materials were actually used. Present conditions of buckets supported by Save the Children Japan were also described to be good and used by beneficiaries in good manner. Prospect of water shortage was high in only one village, The Hyay Chaung. Since only water for domestic use is available in this village which is unique among the study villages, people in this village usually have to search for drinking water in other villages every year.

WASH committees were present in the project villages, consisting of 11 to 23 members. The composition of the committee also took into account of women member inclusion. Their activity include distributing ceramic water filter and bucket, construction of latrine, transmitting hygiene and water knowledge to villagers, cleaning of ponds constructed, checking if water clean or not, latrine used systematically or not, giving awareness on hygiene and water knowledge, and other village-related matters.

ii. Latrines

When providing latrine, the demo latrine along with 15,000 Kyats for latrine construction was given to the poorest and disciplined household.

18 potties were also distributed to mothers of child under 3 years old. Due to the latrine assistance provided by Save the Children Japan, the habit of using fly-proof latrine has become more and more a common practice.

Education on using latrine was held by Save the Children Japan. Save the Children Japan constructed demonstration household latrines in all villages, by which they learned how to construct the latrine, and hence they constructed their own latrines. Institutional latrines constructed in schools are satisfactorily clean – comfortable use. Some demonstration latrines constructed in schools have been unable to be used due to schools being closed at the time of the evaluation. It was also found that some households who received latrine equipment from Save the Children Japan found it difficult to construct latrines on their own. Posters on latrines were found and in other distinctive places as part of awareness campaign on the proper use of latrine.

Save the Children Japan constructed demonstration household latrines and 2-unit institutional latrines in school compounds. Latrine pans and pipes for fly proof latrine were provided. Few people said using water in latrine not accustomed yet. Save the Children Japan provided latrine training 2-7 times in which topics focused on the proper use of latrine, construction technique, way of maintaining the latrines. Fly proof latrines were found to contribute to good health, and respondents suggested the continuation of provision to a larger population. Knowledge gained from latrine-related trainings held in

villages had positive impact on a good use of latrine properly including washing hands after going to latrine.

iii. Hygiene

Previously in the village, there were dysentery cases due to drinking of fresh water without storing overnight because they did not have extra pots and buckets for water storage. At present, they can drink the filtered pond water so there is no case of dysentery anymore.

For the environmental cleanliness, garbage is dumped at the bank of the creek to be washed away when the high tide comes. In summer, garbage is mostly burnt down according to KII data. Save the Children Japan held discussion and talks on water, latrine, and good hygiene practices for eight times.

There has been a good practice of washing hands with soap nearby latrine and kitchen area. The use of soap is widespread among the villagers as well. Children also appeared to be clean in the community. It was said that children have better practices than elders. No health centre is present in villages except in PyaLeik village.

Two types of soap were provided to households – body wash and for laundry use (10 in quantity for each one). Soaps and washing technique were given to the primary schools which had a practical impact on children. Diarrhoea used to happen in some villages which were described to be related to the use of un-sanitary latrine, bad odour, and unclean water (particularly faced by 18-age people and under). This has been overcome now due to Save the Children Japan provision as respondents cited. No serious disease is now present in the study village.

The disposal of garbage in yard, burn, and stream/river was found to be still prevalent in the community. One reason is that there was a heavy rain in the villages causing water level to be risen high to the houses level during the study, making hard for households to use communal pit or burn garbage in this rainy season. Thus, it must be noted that the majority of households burn garbage and use communal pit in the summer time.

IEC materials provided included pamphlets and posters visibly seen around the houses and in the village. Improvements of IEC reported by the community included gaining knowledge on latrine use improved, systematic use of latrine, became better awareness to wash hands after defecation, children got improved in hygiene and drinking clean water, using water instead of papers and sticks after using latrine, posters put inside latrine helpful for reminding of proper use. In addition, Save the Children Japan gave IEC training – health and personal hygiene, 6 steps of washing hands, staying clean, children to stay clean, eating clean food, and became to have the practice of taking bath regularly. There has been a high

percentage of satisfaction on health-related materials provided by Save the Children Japan as well.

Respondents stated that Save the Children Japan does not have to provide anymore because sufficient materials have been received. And what is now required in the village is to maintain and practice what has been provided.

5. Conclusion and Recommendations

a. Conclusion

The overall assessment of the project demonstrated that the targeted beneficiaries have year-round access to safe drinking water with sufficient water storage items that were provided, and sanitation facilities have been improved, thus meeting the objectives of the project. The project was implemented in a timely manner, and no major delay was encountered. The assistance provided by UNICEF-funded WASH project had a positive impact on the target villages at individual level and the communities as a whole.

As the project conceived, the target communities have benefited for the construction of water ponds and latrines in the households and at schools. Particularly children have better and safe accessibility for drinking water through the distribution of ceramic water filters at the primary schools. There has also been a strong feeling from the side of WASH committees formed in respective villages which were provided technical assistance and capacity development through the provision of trainings, to take the continuing role of maintaining latrines, water-related materials and giving awareness of good hygiene practices even after the project termination.

The provision of water-related inputs such as RWHTs and ceramic water filters particularly enhanced the resilience of the communities for the storage of rain water in coming seasons since rain water is the main water source in the communities. The practice of filtration method for water treatment was also considered as significant and positive impact of the project that ensured the quality of water consumed for drinking.

b. Recommendations

Since the distribution of materials such as water storage items and latrine construction have been sufficiently provided, it is recommended that the continuation of awareness campaign particularly in regard to the disposal of garbage should be considered while material distribution should be minimized for any future project. This is also in line with the suggestion from the local community pointing out their desire to receive continuous knowledge-oriented training.

In addition, the conduct of follow-up monitoring after the project termination can ensure the proper maintenance of water ponds. WASH committees can be reminded in this regard.

6. Appendix

a. KII Transcript

Age : 54 years

Position : P.O

Town : Hlaing Bone area

Though the project was started in October 2010, actually the programme could begin on November 23, 2010. The project's target was set to be finished in April 2011 but the task was finalized on May 31, 2011. The level of the office collects data by the coordination of the Head Centre and then permission was taken from the township authorities.

Village selection had to be made due to other organizations have already provided assistance on latrine and ponds to some villages. In the level of the organization, first the advocacy meeting was done for the explanation on the programme. Then, the village WASH committee was formed. Training was given to active villagers. In the village level, a group of parents of child and a group of villagers were formed in separate groups of male and female and they were given training on latrine and use of water. Then, to construct latrines, the village map was drawn with the help of villagers.

When selecting villages, the villages which suffer from water shortage were given priority. Then, the active villages which could donate land were selected for the project. Moreover, the villages which are disciplined and could follow the instructions were also selected.

Activities and supplies with regard to WASH were provided to 14 targeted villages. Those included 2 new ponds, 4 renovated ponds, 10 RWCTs (5000 gallons), and one ceramic water filter to every household, and one plastic bucket to each household. Then, 350 sets of fully facilitated latrines were proportionately provided among 14 villages. Latrine construction materials were also provided to each household and the surplus were also given to the households which have many members. When providing the fully facilitated latrines, poor households which follow the disciplines and live hygienically, are given priority as recommended by the village. The demonstration latrine was built in each of 14 villages. 12 latrines were also built at schools in 14 villages in terms of having no latrines and many students in school. Furthermore, each household was provided 6 bars of body soap and 9 bars of washing soap.

As the programme was overloaded with tasks for the given time frame, the tasks could not be finished in April but in May.

The provided assistances are really useful to the village community. The quality is good so there has a little damage. In some households which have older people and children, a few ceramic water filters were broken. When the request is made for the broken pots, new materials are again provided. Due to health talks included in the given training, the villagers follow the instructions and they are satisfied with the training and assisted materials. Therefore, the positive results have come out within the 6-month period. It is founded that with regard to water, latrine and health issue, out of 14 villages about 5 are in the best, 4 are in the minimum and the rest 5 are in the low grade.

Due to the time limitation of 6 months, it is difficult to finish tasks in time. It is because of late receiving the construction materials due to the flood tide and the ebb-tide.

The lesson gained from the 6-month-project is that monitoring is always followed up to meet the target date. Especially in the case of hygiene promotion, it is very hard to get the practical approach.

It will be more appropriate for the better awareness if the project allows one year period. Then, it will be better if the transportation is smooth.

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b. FGD Transcripts

Water Sanitation and Hygiene (WASH) Evaluation

FGD (PyarLeik)

Township	: Mawlamyinegyun
Town	: Hlaing Bone
Village Tract	: PyarLeik
Village	: PyarLeik
Participants	: 8 persons: 4 males and 4 females
Leader of the discussion:	U Hsan Min Soe
Recorder (1)	: Daw May Thin Soe
Recorder (2)	: Daw Thae Phy Tun
Date	: June 2, 2011
Duration of time	: 08:00am – 09:00am

Availability of water

In rainy season, the village mainly uses rain water for drinking and creek water for domestic use. In summer, the village principally uses pond water for drinking. The village has 8 ponds in which 3 ponds are used for drinking, another 3 ponds are for domestic use and the rest 2 ponds are out of use. Among 3 drinking ponds, one is at the edge of the village; another one is at the entrance, the rest one is in the middle. The pond at the edge of the village can be used for the whole year but the rest 2 cannot be used for drinking due to their taste.

From the nearest house, it take 15 minutes for a round-trip of fetching water from the pond at the edge village while it takes one hour from the farthest house. While fetching water, one side of the village cannot go there by land but by boat. As the villagers have no large pots or buckets, they have to carry water by small buckets and pots. A round-trip of fetching water can fill up one half of earthen jar or the full load of a jar. Persons who own 2 to 3 jars have to fetch water many times. So, it is known that fetching water is a kind of major task for a household. Then, as some households own no boats, they have to wait till others have done.

Generally, the village has no water shortage. In summer time, even nearby villages usually fetch water from the village pond. In this year, due to frequent rains villagers estimated that there will be no water shortage in coming year. Save the Children Japan has provided one ceramic water filter and 2-gallon buckets to each household. It also provided one 5000-gallon RWCT to the village school.

The assistances provided by Save the Children Japan are practically useful. Previously, the pond water was filtered by a piece of cloth for drinking so they did not know whether the water was clean from germs or not. Now, it is known that the villagers can drink good quality water by filtering through ceramic water filters. When providing ceramic water filters, a brush and a manual were inserted in the filter. So, it is known that they use water filters systematically and make regular washing.

The villagers came to know that the drinking pond should be fenced to keep away from cattle and boiled water should be drunk in the water shortage period. Then, they suggested that it will be more convenient if a water purified machine is provided for distributing water to nearby villages during the water shortage period.

Disposal of excrement

Previously, every house in the village had no separate latrine. So, when using latrine, except water only sticks and paper were used. Latrines were usually built on the bank of the creek and excrement was disposed into the creek. So, the creek water was not clean and it was very difficult to use such water.

It is known that Save the Children Japan has provided one demo latrine, 37 fully facilitated latrines, 200 sets of latrine supported materials and 52 child potties (excrement cups) to the village. When constructing the demo latrine, the pit is 6 feet deep with the outside rim is 4 feet wide and the inside rim is 3 feet wide. The villagers were asked to construct their own latrines in the same structure of the demonstrative latrine. The demonstrative latrines with construction cost of K.15,000/- were given only to selected households which follow the disciplines.

37 fully facilitated latrines were also built for households who could not afford the cost. To build a latrine, it needs 4 poles, 70 pieces of stitched nipa palm leaf, 2 bamboo mats, 3 bundles of bamboo, some timber planks and woods for the flooring and the frame. Households which receive latrine facilities have to build their latrines by their own.

Now, as each household has a fly-proof latrine, the village environment and creek water becomes clean. Then, the disease of dysentery becomes less and less. It is known that the villagers can systematically construct fly-proof latrines and have habit of washing hands after using latrine because Save the Children Japan has given posters and trainings on how to use latrine. Households which were provided latrine facilities to build their own latrines want to have concrete coiled pits for the long existence. It is because there is no need to move the pit to other place although the latrine body is damaged. They want this type of stable pit because it is difficult to find place for a new pit.

Personal hygiene and environmental cleanliness

It is heard that previously many children were suffered from dengue fever and a mid-wife in the village gave treatment to them. The midwife had a tester for the disease. If a child was ill with the dengue fever, the child was sent to town for further treatment. It is known that the midwife had to make cleanliness in the house compound to keep away from the disease. She also gave instructions how to drain off water and to sleep in mosquito net.

For the environmental cleanliness, garbage is dumped at the bank of the creek to wash out away when the high tide comes. In summer, garbage is burnt down.

In this year, there is no distinctive disease of dengue fever and other illness. The villagers wash their hands with soap according to 6 steps of hand-washing after using latrine or

before handling vegetables or before eating food. Mothers with children mainly wash their hands after cleaning the excrement of their children. After giving training for personal hygiene, 7 bars of washing soap and 6 bars of body soap were provided to each household.

The assistances provided for the personal hygiene are useful but not sufficient. Soap is used while taking bath and washing face as well as after using latrine. They all can follow the practice according to the instructions because a poster is already posted in each latrine and on distinctive places.

For the environmental cleanliness, one garbage pit was built in the compound of the village school and villagers were asked to clean up the ditches. The villagers know that they must clean garbage, weeds and bushes for the cleanliness of the village.

It came to know that it will be more appropriate if Save the Children Japan provides a garbage pit. If the garbage pit is built, they will dispose the garbage into it. They know that mosquito and infected flies cause diseases. If they are provided medicated mosquito nets, the individual hygiene will be better. All villagers are satisfied very much with the current assistances.

Trainings concerning personal hygiene, water and latrine were conducted in Kazaung village was attended by 5 persons, 5 males of 9 to 18 years old, 5 females and 2 teachers. The team of Save the Children Japan has given 8 times of discussion to the villagers. Then, 4 mothers of child under 3 years old were also given training and the trained persons had to relay the message to others. In the training, lessons were taught how to use potty when a child disposes excrement.

After the training given by the team of Save the Children Japan, the habit of using latrine becomes better and better. Now, the villagers do not use stick or paper or dispose excrement in the field and they can use the fly-proof latrine in proper way.

For the personal care, they have learnt how to clean from head to foot. They also practice the habit of washing hands in terms of 6 steps of washing hands and they usually cut nails once a week. As a result, the villagers become more aware of health knowledge due to trainings and discussions.

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Water, Sanitation and Hygiene (WASH) Evaluation

FGD (Bay Htone)

Township	: Mawlamyinegyun
Town	: Hlaing Bone
Village Tract	: Kyun Chaung
Village	: Bay Htone
Participants	: 8 persons: 4 males and 4 females
Leader of discussion	: U Hsan Min Oo
Recorder (1)	: Daw May Thin Soe
Recorder (2)	: Daw Thae Phyu Tun
Date	: May 27, 2011
Started time	: 17:00 pm
Finished time	: 17:55 pm

Availability of Water

The village has 4 old earthen ponds and a new earthen pond which was constructed by Save the Children Japan. The new pond which is 100 feet by 100 feet is not yet fit enough for drinking. In rainy season, rain water is mainly used for drinking and creek water is for domestic use. In summer, creek water becomes salty so pond water is mainly used for both drinking and domestic use.

A round trip for fetching water from the nearest household takes 15 minutes and 40 minutes for the furthest household. As most of households have no big jars, they have to fetch water for 2 times. The pond water cannot be instantly used for drinking so it has to be stored overnight. Households which do not have jars or buckets for water storage have to drink the water by just filtering with a piece of cloth.

In the year of water shortage, water is fetched from The Kyonmangay River. A round trip for fetching water from the river takes 4 hours. To do so, a motor-driven boat is collectively rent to fetch water. Persons who cannot rent a boat have to carry water from nearby ponds. There is no water shortage in this summer, so in coming year there will be no more water shortage because SC has already provided a new earthen pond. Beside this new pond, Save the Children Japan also provided one 5000-RWCT to the village school. Then, Save the Children Japan dug a tube-well to use for the school latrines.

Then, Save the Children Japan has provided ceramic water filters and buckets to each household. Previously, the pond water was not tested its quality. But, Save the Children Japan tested the water quality whether the water is good enough for drinking or not and asked the village to take care of the pond and to make fence to the pond.

The water committee was organized in which 13 members are included and the members are asked to supervise the maintenance of the pond. Then, training on how to use water was also given to selective trainees who, in turn, have to retrain other villagers.

The assistances provided by Save the Children Japan are relevant to the village needs. As the village water committee continuously monitors on using water, the programme is effective. Previously, in the village diseases of diarrhea occurred due to drinking of fresh water without storing overnight because they did not have extra pots and buckets for water storage. At present, they can drink the filtered pond water so there is no case of dysentery.

Previously, the villagers did not know the concept of good quality water so they all thought that there would be no germs if water was filtered through a piece of cloth. Now, as Save the Children Japan made a test on the water quality and gave information about un-drinkable and drinkable water so, all villagers accept to use ceramic water filter. Then, they also accept to keep the domestic water clean. Thus, the whole village will be healthy and the social standards will prosper in longer existence if the villagers follow the instructions given by Save the Children Japan.

Disposal of excrement

Previously, most of households had no habit of using latrine but disposing excrement in bushes. Households which used latrines did not use water but just stick and paper. Because of that, it was very disappointed in the time of paddy harvest and cutting nipa palms. Moreover, it was difficult to use latrine because each house did not have a latrine. Those latrines were also on-ground types. Mothers of child also disposed their child's excrement to any convenient places.

Save the Children Japan has provided one demonstration latrine, 30 latrines, 112 sets of latrine supported materials and 18 potties (child excrement bowls) to the village. When

providing latrine, the demo latrine along with 15,000 Kyats cost of construction was given to the poorest and disciplined household. 30 full-facilitated latrines were given to the selected and poor households which could not afford money to build. However, 112 sets of latrine facilities were provided to the rest each household. 18 potties (child excrement bowls) were also distributed to mothers of child under 3 years old. Now, the villagers can construct a systematic fly-proof latrine because Save the Children Japan has already guided them since the first demo latrine was constructed. The demo latrine has a 6-foot deep pit with 3-foot wide each in the outer and the inner pit. The body of the latrine is 4 feet by 4 feet with 6 feet high in the front and 5 feet in the rear. According to the above specifications, the rest latrines have to be constructed.

Due to the latrine assistance provided by Save the Children Japan, the habit of using fly-proof latrine becomes developed. Now, there is no odour in the village. After the arrival of the WASH team of Save the Children Japan, the villagers became healthy and the medical expenses can be reduced.

The villagers tell that the current latrine facilities are not sufficient for the whole village. Households which have to construct latrines with their own money cannot build latrines for long existence. Those latrines can be lasted for only 3 years. They informed that when constructing a latrine, on the first attempt it is good enough to build, however, on one is desired to do in the second time if the latrine becomes damaged. So they suggested that the long term durable latrine facilities should be provided from the beginning of building a latrine.

Personal hygiene and environmental cleanliness

Before Save the Children Japan came to the village, the villagers were not aware of caring purposes for personal hygiene. For the matter of environmental cleanliness, they usually disposed garbage into the creek. Diseases such as cases of dengue fever, dysentery, common illness, and a few malaria cases occurred then. If such cases of diseases occurred, patients were treated with folk-medicine. Then, if the cases were serious, patients went under medical treatment at Kyonmange hospital.

For the matter of personal hygiene, while Save the Children Japan was providing ceramic water filters and latrine facilities, educational talks were given to the villagers. After the talks and trainings, 9 bars of washing soap and 6 bars of body soap were distributed to each household. Then, a garbage pit with the size of 3 feet by 2 feet by 4 feet was constructed in the school compound. When the training was given, 5 members of the water committee, 5 males between 9 to 18 years old, 5 females, 2 teachers and 5 mothers of child under 3 years old were selected to attend. Trained peer mothers and peer children were asked to retrain others in the village. It is known that educational CDs with songs of the personal hygiene

were also provided and the song competitions were conducted in the village. Then, mothers of child were also given instructions how to use the child potty (excrement bowl).

Now, the children and the elder people in the village become aware of personal hygiene. They have the habit of washing their hands after using latrine, cutting nails, and then taking bath two times a day. As a poster is posted in each latrine, they are now used to the habit of washing hands. When washing hands, they follow 6 steps of instructions. Then, even children can clean themselves without the help of elders. Moreover, the educational songs taught by Save the Children Japan are very helpful. On the aspect of environmental cleanliness, now the garbage is burnt and the rest wastes are piled for fertilizers at the foot of tree. Then, ditches are cleaned up and bushes are weeded out. On the other hand, the village lanes are embarked and houses are fenced.

The villages tell that for the matter of the environmental cleanliness, burning out garbage can be done easily in the summer but it is difficult in the rainy season due to flooding in the house compound. So, they suggest that each garbage pit should be provided for 10 houses. Then, they advise that a 10-member committee should be organized as a village development committee to monitor the systematic disposal of garbage.

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c. Result of water testing

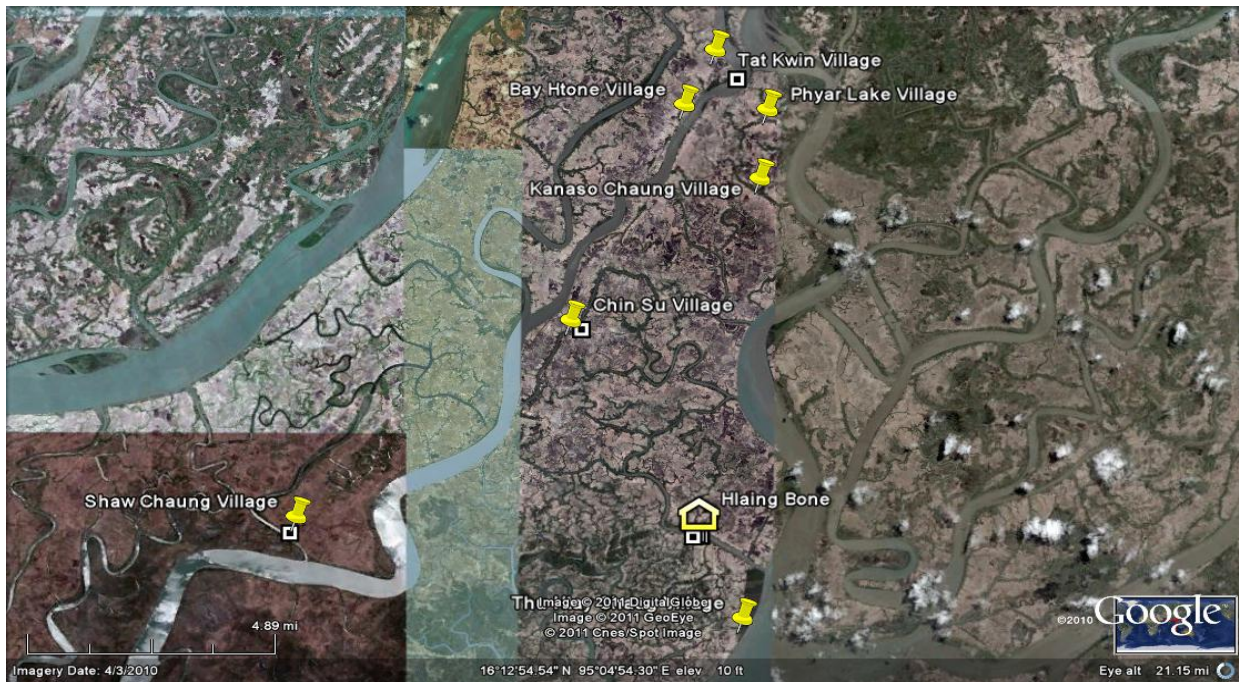
Indicator of Water Testing for Primary Source						
Area	Villages	Main water source	Water testing result			
			A	B	C	D
Hlaing Bone	7	21	1	8	6	6
Result of water quality tested (in percentage)			4	38	29	29

Number 21 in the above table refers to a total sample of water sources taken from 7 villages. The result shows that the quality of main water sources used by villagers is low with only 4 % indicated as good to drink (A) followed by 38 % which is fair for drinking (B). A much higher percentage with 29 % indicated the water inappropriateness to drink (C) and 29 % of the main water source is dangerous to drink which can affect health severely if used for drinking (D). Overall a high percentage of bacteria were present in the drinking water well.

Indicator of Water Testing for Household Source						
Area	Villages	Household drinking water source	Water testing Result			
			A	B	C	D
Hlaing Bone	7	35	1	10	15	9
Result of water quality tested (in percentage)			3	28	43	26

Number 35 refers to a total sample of household water sources taken from 7 villages. The result shows that 31% of water is appropriate to drink whereas 69% of water used in household, taken from drinking pot in the households, is not appropriate to drink.

d. Maps



Map showing the locations of the 7 study villages in Hlaing Bone area.

e. Pictures





Ceramic water filters in the primary school distributed by SCJ.



A hand pump to wash hands and to use for latrine constructed in front of a 2-unit latrine.



2- unit latrine which have hand washing facilities.



Rain Water Collecting Tank constructed within the compound of school.



MMRD evaluation team holding Focus Group Discussion with villagers.