



**Final Evaluation Report** 

Sustainable WASH Assistance to the 2010 Flood Affected Communities in Naushahro Feroze, Sindh September 2017

# Acknowledgement

The evaluation team would like to thank all who participated in and supported the undertaking of this evaluation. This includes staff of Norwegian Church Aid (NCA) and Research and Development Foundation (RDF), key stakeholders, government officials and the communities.

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# List of Acronyms

CHS	Core Humanitarian Standards			
CLTS	Community-Led Total Sanitation			
DRR	Disaster Risk Reduction			
FCM	Feedback and Complaint Mechanism			
FGD	Focus Group Discussion			
HH	Household			
HIES	Household Integrated Economic Survey			
KII	Key Informant Interviews			
MICS	Multiple Indicator Cluster Survey			
NCA	Norwegian Church Aid			
0&M	Operations and Maintenance			
ODF	Open Defecation Free			
PATS	Pakistan Approach to Total Sanitation			
PHED	Public Health Engineering Department			
PKR	Pakistani Rupee			
PWD	Person With Disability			
RDF	Research and Development Foundation			
SMCs	School Management Committees			
SDG	Sustainable Development Goal			
SwS	Swiss Solidarities			
TMA	Taluka Municipal Administration			
ToR	Terms of Reference			
UC	Union Council			
VDC	Village Development Committee			
WASH	Water, Sanitation and Hygiene			
WSS	Water Supply Scheme			

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#### **Executive Summary**

**Background to the Project and Evaluation:** The monsoon floods in 2010 created one of the worst humanitarian disasters in the history of Pakistan. More than 20 million people in 84 districts of the country were affected. Norwegian Church Aid (NCA) planned to restore living conditions of 15,000 flood affected families (105,000 individuals) through WASH interventions. The project adopted integrated approach i.e. the project was inclusive of cross-cutting interventions on protection, Disaster Risk Reduction (DRR) and Gender Mainstreaming. The project was implemented in rural areas of district Naushehro Feroze, Sindh province. These interventions were implemented together with the local implementing partner Research and Development Foundation (RDF).

This evaluation is commissioned by NCA and has been carried out by GLOW consultants to independently evaluate Swiss Solidarities (SwS)' and HEKS funded project "Sustainable WASH Assistance to the 2010 Flood Affected Communities in Naushahro Feroze, Sindh Province, Pakistan".

*Methodology:* Under the agreed methodology, the evaluation team reviewed the project documents, conducted Household (HH) survey, administered Focus Group Discussions (FGD) and Key Informant Interviews (KIIs).

Following are the key findings against each evaluation criteria:

**Relevance:** The evaluators believe that the project design was relevant and according to the needs of the communities. The project was aligned with the local community needs. At the project design stage, not only secondary data was used but the needs were also confirmed through the baseline study conducted by RDF upon initiation of the project. From the baseline data, it is evident that prior to the project the main source of drinking was shallow hand pumps and open wells. Generally, there were no latrines as open defecation was common; however, a few HHs had pit latrines constructed with mud. The targeted area is also prone to natural disasters such as floods. Overall, the project was designed as per communities need. The interventions were not only aligned with the ground realities but had good association with the project objectives.

**Efficiency:** The procurement for all major items was carried out using formal bidding processes. This process of open tendering attracted more bidders which helped in obtaining best quality products at lowest available price.

The WASH assistance as appropriate was provided on communal basis to optimise the utilization of the available resources.

Overall, the project is delivered within the agreed timeframe and budget. There was no major shift in the project targets except for a few small adjustments. It is also important to note that some of the unspent funds were diverted towards procurement and distribution of mosquito nets.

**Effectiveness:** The project adopted an effective approach which helped ensure that all the targets set are met within the available budget and timeframe. There was direct engagement of the community in the project interventions besides engagement through Village Development Committees (VDC). This helped improve the community ownership of the project interventions. This ownership is reflected through high percentage of WASH

infrastructure functionality. Similarly, the interventions were as per community needs and had improved utilization. The material and skills required for the interventions were generally available in the local markets. In addition, RDF have linked up some of the committees with other NGOs working in the area e.g. with Plan International and SAFWCO. These organizations have taken up WASH activities in the district including one of the UC where RDF was working previously to cater for the unmet needs. There is improvement in the living conditions of the communities as open defecation has been reduced and access to drinking water has improved coupled with improved hygiene practices. Overall, this resulted in reduction of water borne and sanitation related diseases e.g. diarrhoea.

**Crosscutting Themes:** Under this project, when necessary and possible, separate women committees were formed to ensure women engagement in the project. The women actively participated in the site selection for WASH interventions. The feedback confirms that the sites selected for the water supply and sanitation facilities' were appropriate as per privacy requirements of women. The field level teams of RDF had appropriate number of women members.

For facilitation of Persons with Disabilities (PWDs), the project provided commode chairs as per identified needs in selected households.

The project helped the communities develop disaster management plans and raised their awareness regarding early warning, evacuation routes and evacuation points etc. The WASH infrastructure provided under the project also had DRR inclusive design.

The latrines constructed were connected to septic tanks and constructed away from the water points. However, still there were around 20% of the latrines which were constructed within 10 m of hand pump. This situation arises due to the availability of limited space within the HH boundary ensuring that besides environmental consideration the latrine location is also culturally appropriate. Besides drinking, the communities use the hand pumps for bathing, and washing dishes and clothes. The communities also use water from the hand pumps for their livestock. Therefore, if there is any leakage from the septic tank e.g. due to bad quality of workmanship or due to use of faulty material then the hand pump water in closer vicinity can be affected.

Furthermore, those who used the feedback / complaint mechanism were mostly (81%) satisfied with it

Following are the key lesson learnt and good practices of the project:

- **Beneficiary Targeting for Commode Chair:** The feedback from the HHs suggests that some of them have received commode chair but they are not using the chairs as they do not have any Person with Disability (PwD) who require this support. This implies that commode chairs should be only provided to those HHs who are really in need of it.
- **Mosquito Nets:** This appears to be a good value addition and a very good utilization of the leftover funding.
- **Community Participation:** The project had very good engagement of the communities.
- **Separate Women Committees:** This was an excellent idea as most of the times women are left out as they have social constraints of working together with male

community members. This project had provided them the opportunity to form a separate women exclusive committee, if necessary.

- **Cultural and Social Constraints for Women:** Though it appears that there was good women participation in the project. However, still some women in particular were left out as mainly their husbands didn't allow them to participate in the project.
- **Replication of Latrines:** It appears that communities are using the latrines provided, however, they are unable to replicate.
- **Communal Latrines:** The communal latrines under this project are successfully functioning.
- **Restricted Access:** Some of the HHs had restricted access to use water from the water points mainly due to local enmities or conflict amongst the HHs.
- **Community Feedback** / **Complaint Mechanism:** Even though the community feedback and complaint mechanism had good coverage, there is a significant number of around 26% the HHs that are not aware of this mechanism.
- **Water Point to Septic Tank Distance:** There were around 20% of the latrines which were constructed within 10 m of hand pumps.
- **Learning from the Previous Projects:** It was encouraging to see latrine design was modified based on the learning from the previous project.
- **Coordination with Local Authorities:** The project was implemented in coordination with the government departments e.g. PHED, Social Welfare and Education etc resulting in ownership of the project interventions by the government.

*Recommendation:* Evaluation team would like to make the following recommendation:

- **1. Revised Beneficiary Targeting Approach** *(High Priority)* It is recommended that commode chairs should be only provided to those HHs who are really in need of it e.g. HHs with very aged person and/ or a HH with such a disability who can benefit from the commode chair e.g. partially paralyzed.
- **2. Engaging the Husbands** *(High Priority)* It is recommended to develop a targeted strategy to work specifically with Husbands to sensitize them so that they can allow their wives to participate in the project activities.
- **3. Replication of Latrines (***High Priority***)** In order to make it financially feasible for the communities, it is recommended to devise a strategy to encourage communities to construct communal latrines i.e. sharing the cost of latrine with neighbouring HHs.
- **4. Information Dissemination to the Communities:** *(High Priority)* It is recommended to widely disseminate information related to nearest locality where latrine construction material and masons are available. Similarly, it is recommended to disseminate DRR related information to general community to increase their awareness.
- **5. Unrestricted Access to all HHs** *(High Priority)* It is recommended to note down any enmity or related issues at the community consultation phase for intervention planning and plan the intervention accordingly e.g. identification of a neutral place for hand pump or latrine construction accessible to all HHs.
- **6. Beneficiary Feedback** / **Complaint Mechanism** (*High Priority*) It is recommended to further strengthen the dissemination of information regarding Beneficiary Feedback / Complaint Mechanism during the project.
- 7. Water Point to Septic Tank Distance (*High Priority*) It is recommended to ensure implementation of latrine or hand pump installation criteria so that safe distance between latrine/septic tank and hand pump is maintained.

#### 1. Background Information

GLOW consultants were commissioned by NCA to conduct this third party evaluation of its Swiss Solidarities (SwS) and HEKS funded project, "Sustainable WASH assistance to the 2010 flood affected communities" implemented in Naushahro Feroze district, Sindh.

#### **1.1 Overview of the project**

The monsoon floods in 2010 created one of the worst humanitarian disasters in the history of Pakistan. More than 20 million people in 84 districts of the country were affected. The massive humanitarian needs after heavy floods posed considerable challenges for the Pakistani government, national and international humanitarian organizations, to plan animmediate and robust response to emergency needs of the flood affected communities. In spite of the challenges, NCA planned to restore decent living conditions of 15,000 flood affected families (105,000 individuals) through WASH interventions integrated with cross-cutting issues like protection, Disaster Risk Reduction (DRR) and Gender Mainstreaming. The project was implemented in rural areas of district Naushahro Feroze, Sindh province. These interventions were implemented together with the local implementing partner organization i.e. RDF.

Table 1: Main Project	Fable 1: Main Project Activities					
Water	Hand pumps repair, New hand pumps installation, Provision of lead line hand pumps, Construction of village level water supply schemes, Water quality monitoring, Provision of HH level water filters, Capacity building / trainings of communities, Advocacy with government departments					
Sanitation	Construction of flush latrines with hand washing and bathing facility for women, Provision of washing pads for women, Improvement of drainage systems					
Hygiene Promotion	Hygiene promotion sessions and campaigns, IEC material distribution, School hygiene promotion activities, Hygiene kits distribution, Mosquito nets distribution					
DRR, Protection and WASH Mainstreaming etc	First aid and early warning trainings of communities, WASH / DRR village development plans, Distribution of commode chairs, Formation / activation of village development committees					
Core Humanitarian Standards (CHS)	Beneficiary complaints and feedback mechanism,					

# **1.2 Project Area**



Figure 1: Geographical Map of District Naushahro Feroze

#### 2. Evaluation Objective and Methodology

This section contains details about the methodology adopted to evaluate the subject project. The final evaluation primarily evaluated the project based on relevance, efficiency, effectiveness and crosscutting themes. This final evaluation used both qualitative and quantitative tools in order to obtain the information required to evaluate the project progress. The evaluators collected information from general community, representatives of community, implementing partner and other stakeholders.

#### 2.1 Methodology

The evaluation methodologies were broadly guided by the Terms of Reference and refined by the evaluation team in consultation with NCA at the inception stage. The key features of the methodology are outlined below:

#### 2.1.1 Review of Relevant Documents / Secondary Data

The evaluator reviewed the relevant documents related to this project e.g. project proposal, baseline study, progress and final reports etc. GLOW evaluation team carried out desk study of the available data and reports, and developed tools accordingly.

#### 2.1.2 Field Visits

The sampling universe of this integrated project constituted all the targeted villages of RDF. Sampled villages were selected with a multi-stage approach. In stage one all the six project implementation Union Councils of District Noushero Feroz were selected. In stage two, the total number of HHs questionnaires was distributed proportionately based on the beneficiaries' number per UC. The number of targeted HH questionnaire per UC lead to the selection of required number of villages per UC i.e. to achieve around 20 HH questionnaires per selected village. The final number of villages per UC visited by the evaluation team is provided below:

#### Table 2: Sampled Villages

S. No. Union Council		Number of Villages Visited in the Evaluation Exercise		
1	Lalia	6		
2	Noor Pur	7		
3	Dalipota	2		
4	Bhorti	4		
5	Phull	4		
6	Mithiani	5		
Total		28		

#### 2.1.3 Key Informant Interviews

Meetings and interviews with below project stakeholders were conducted:

- NCA / RDF staff
- WASH Committee / Village Development Committee
- Teachers / SMC members,
- Government Officials including PHED, BHU staff
- Other stakeholders as appropriate



Senior Evaluator Visiting the Project Schools

# 2.1.4 Focus Group Discussions

During the visit, 35 Focus Group Discussions were conducted in the sampled villages i.e. 25 with the communities and 10 with school children. The FGDs were equally participated by men and women.



Separate Men and Women FGDs in Progress

# 3. Findings

Findings are grouped under each evaluation criteria in this section.

# 3.1 Relevance

The evaluators reviewed the project design in light of the needs on the ground. The evaluators believe that the project design was aligned with the local community needs as at the project design stage not only secondary data was used but the needs were also confirmed prior to initiating implementation through a baseline study conducted by RDF at the start of the project. According to the baseline report 90.6% HHs did not have access to clean drinking water. Similarly, the baseline reported that a large number i.e. 77% of the community members were practicing open defecation.

The baseline further suggested that a significant number i.e. 51% shared that they don't have any idea regarding causes of diarrhoea. Around 49% said that they wash hands before eating and only 32% said that they wash hand with soap. The FGD participants confirmed that open defecation in their areas was common. Similarly, they shared diarrhoea and other diseases were rampant in their communities prior to the project interventions. This suggests that the communities were in a poor state related to WASH.

According to the FGDs participants, prior to the project their main source of drinking was shallow hand pumps and open wells. According to Multiple Indicator Cluster Survey (MICS) 2014 the main source of drinking water in Naushahro Feroze district i.e. 99.6% population rely on tube wells, hand pumps and dug wells. The same survey suggests that approximately 15.3% schools are not having drinking water facilities. Generally, there were no latrines as open defecation was common; however, a few HHs had pit latrines constructed with mud. MICS 2014 data shows that, approximately, 40.8% schools are not having latrine facilities.

Beside WASH related challenges, the selected communities were also prone to natural disasters. In the final evaluation, the communities listed floods and heavy rains as the major hazards that they face in their area. Some of the communities also mentioned water logging or the seasonal fluctuation in the water table as a hazard which affects their drinking water sources and crops. The communities further shared that they face these disasters annually or every second year with varying magnitude.

To cater this situation, NCA supported RDF to implement a WASH project in the area.



Figure 2: Integrated Water, Sanitation and Hygiene Activities

The following were the project goals:

#### **Table 3: Project Objectives**

#### **Overall Objective**

The living conditions, health and disaster preparedness of the most vulnerable families in flood affected areas are improved.

#### Specific Objective 1

15,000 flood affected families in the district Naushahro Feroze, Sindh have dignified access to safe and adequate WASH facilities

#### Specific Objective 2

The target population has an improved understanding of disaster and risk management to better cope with disasters reduction approaches and is better able to cope with future disasters.

#### Specific Objective 3

The most vulnerable population (women, girls, minorities, elderly and people with disabilities) in the target areas have access to WASH services without any intimidation, cultural barriers or abuse

The project objectives to improve the living conditions of the targeted communities' pre project situation as discussed earlier in this section. The project objectives were specific and had considered the need to mainstream DRR, protection and gender aspects. At the activity level, the project had good integration of water, sanitation and hygiene activities. The water component included provision of drinking water through construction of water supply schemes (WSS) and through provision of new or rehabilitation of existing hand pump infrastructure. Similarly, water filters were given in areas where good quality of water was entirely not available or due to seasonal variation in the water table the water had quality issues. Under sanitation, construction of latrines and improvement in drainage infrastructure was carried out. Similarly, hygiene promotion activities (messages were delivered in local language) backed up by provision of hygiene kits ensured the communities have improved hygiene conditions. All the WASH components had integration of DRR component e.g. construction of latrines and hand pumps on higher grounds and raised platforms. Such initiatives were very relevant as the project area is prone to flooding. Overall, the project had adopted convergence approach where all the three sub sectors of WASH i.e. water, sanitation and hygiene worked together along with the integration of DRR, gender and protection to ultimately improve the status of the targeted households. The beneficiary selection was primarily done based on the water and sanitation needs and the other related support e.g. provision of mosquito nets and commode chair, as appropriate. Overall, the project activities were as per communities need and were also aligned with the project objectives.



Figure 3: Engagement of Community in the Project Delivery

The project engaged both men and women community members in project activities. The beneficiary households were selected considering the WASH needs of the households particularly of women. As appropriate, the women had separate committees in the targeted villages to ensure all WASH activities are relevant to the specific needs of women.

# Table 4: Availability of WASH related Material and Technical Skills

	Yes	No	Comments	
Availability of Raw Material Locally – Water (%)	90	10	Availability at union	
Availability of Technicians Locally – Water (%)	92	8	council or Taluka Level	
Availability of Raw Material Locally – Sanitation (%)	53	47	Availability at union council or Taluka Level	
Availability of Trained Masons / Technical Persons Locally – Sanitation (%)	68	32		

The communities appeared to be more familiar with the type of assistance provided under water. The communities considered that equipment, raw material and technical skills required related to water assistance is comparatively easily available locally i.e. within their taluka. However, the communities seemed to be less familiar with the technicalities involved with the type of latrine provided i.e. pour flush connected to septic tank. Even though majority of the communities felt that the required skills and material is locally available, however, still a significant number (as shown in above table) were unsure and thought that the material and technical skills couldn't be sourced locally. It is important to note that prior to the project interventions communities were largely either practicing open defecation or they were using pit latrines. Therefore, pour flush latrines were only introduced to them through the project. This means they had little familiarity with some of the latrine components like septic tanks and commode previously. The communities considered this to be a technology which might only be available in large cities. It is recommended by the evaluation team to aware the communities regarding the nearest place to find the latrine construction raw material especially commode. Similarly, it will be important to train the local masons on the pour flush design and also aware the communities where they can find skilled masons. In addition, as NCA (through its partners) works on latrine construction demand creation at the community level, they can also encourage local sanitary mart owners (supply side) to make latrine construction material available.

The project also has taken on board the government departments e.g. Public Health Engineering Department (PHED), Education Department and Social Welfare Department. The government was not only kept updated about the project progress through sharing of project updates but more importantly the departments were involved in monitoring e.g. PHED concerned engineer visited the WSS provided by RDF in the area. Similarly, a complete list of interventions was shared with PHED and Education Department. Moreover, the village committees were introduced and linked with social welfare department.



Figure 4: If WASH Assistance was Needed?

This rehabilitation project in response to 2010 floods has the following relationship with NCA priorities and also with the government or sector priorities.



Figure 5: Project Relevance with Other Strategic Documents

The project is contributing towards decreasing the open defecation and increasing the awareness. Therefore, the project had some alignment with Pakistan Approach to Total Sanitation (PATS).

#### **3.2 Efficiency**

The project financial and efficiency aspects are explained in this section.

#### 3.2.1 Procurement

The procurement for all major items was carried using formal bidding processes. RDF has set procurement procedures where request for procurement is initiated by the technical team whilst the bidding and rest of the procurement process is led by the procurement team. The procurement under this project included open tendering process to attract more bidders so that best quality and price is obtained. During the project there was no contract termination of any of the contractors, however, there were instances where if material on any site was not of good quality then the material was returned e.g. in one instance, bricks provided were of poor quality and were replaced by the contractor.

#### 3.2.2 Service Delivery

The monthly average income per household in the targeted communities is calculated to be approximately PKR 14,400. Therefore, suggesting that the targeted communities are amongst the poorest communities. According to Household Integrated Economic Survey (HIES) 2015-16, out of the 5 income quintiles the lowest quintile in the rural area has monthly HH income ceiling of PKR 19,625. Unfortunately, Sindh Province has the highest level of poverty prevalence in the rural areas i.e. 38.4% rural population falls in 1<sup>st</sup> (lowest) income quintile. The community on average suggested that the cost of the latrine set (1 latrine + 1 bathroom + 1 hand wash facility) was around PKR 47,000. This amount is very much in line with the estimates of NCA & RDF amounting to PKR. 43,000 to 44,000.

Based on this context it was important to provide assistance in a way that utilizes the available resources efficiently so that the benefits could reach out to majority of the HHs. Therefore, the project adopted a communal approach in delivery of its major project components like delivery of water and sanitation infrastructure.





The above graph shows that in most cases around 3 to 4 HHs were sharing the latrines provided under this project and the usage of the latrines was generally as per SPHERE guideline i.e. 20 or less individuals using one latrine. But in few instances, the number of latrine users were much higher e.g. up to 30 or 40 individuals using the same latrine. It is also important to note that though latrine users were as per SPHERE guidelines but as individuals from different HHs were sharing the same latrine, therefore, in some instances the users were not entirely satisfied with this arrangement. The following graph explains HHs satisfaction regarding sufficiency of the latrines. The key reasons for dissatisfaction were the availability of less number of latrines, unavailability of separate latrine for individual HH and latrines not segregated based on gender.



**Figure 7: Sufficiency of Available Latrines** 

Therefore, in some instances the communities responded that the provided assistance is not sufficient for all the HHs e.g. 21% of the HHs who have received communal latrines suggested that the numbers of latrines are insufficient as per their need.

Similarly, the communities were engaged in the project not only to improve the ownership of the service delivery but at the same time through volunteer labour contribution some of the construction or installation cost was reduced. The labour work was mainly related to the unskilled labour.

#### 3.2.3 Operations & Maintenance (O & M) Costs



Figure 8: Who carries out O&M?

Approximately, 96% of the respondents shared that O&M is carried out by the village development committees (VDC). In some areas, they contribute funds monthly or quarterly and in other areas they contribute when it is required. This system helps ensure each benefitting HH contribute to the maintenance of the scheme which also means that a single HH is not overburden to bear the overall cost of maintenance. This results in efficient utilization of the community resources and ensures that the WASH infrastructure provided remains functional. Due to this communal approach, over 91% of the respondents shared that the O&M cost is affordable for them. However, a very small proportion who said it is still not affordable for them to share O&M cost they further elaborated that their friends and relatives pay on their behalf.

# 3.2.4 Overall Project Timeframe and Budget

Overall, the project is delivered within the agreed timeframe and budget. There was no major shift in the project targets except for a few small adjustments e.g. rehabilitation of PHED water supply schemes (planned 6 in total) and construction of HH level rain water conservation units (planned 25 in total) were later replaced with other WASH activities. It is also important to note that some of the project unspent funds were diverted towards procurement and distribution of mosquito nets.

#### 3.3 Effectiveness

To better understand the effectiveness of the project, this section is further split into sub sections as detailed below.

# 3.3.1 Village Development Committee

Around 93% of the HH survey participants were aware of the village committee. The unawareness of some of the HHs (approximately 7%) may suggest that in these villages the VDCs may not have worked well during the project. Out of those who were aware of the VDCs, 89% said that the village committee formation was participatory as the committee was formed by taking in puts from the larger community.

The FGD participants (non-committee member) shared that RDF team (including one male and one female member) came to the village. The RDF team then invited all the community members to one location and shared the importance and benefits of forming a village committee. The non-committee members of the FGDs further shared that once we all agreed to form a committee, then we elected committee members including the president, general secretary and finance manager in a participatory and transparent manner. We are happy and satisfied with the committee formation process adopted.

The communities in FGDs further shared that the committees generally meet on monthly, quarterly or as required basis. Around 60% of the respondents considered the village committee to be still functioning. Based on the communities feedback the top three activities of the committee are to collect funds for maintenance of WASH infrastructure, interact with NGOs and solve village problems. The FGD participants also highlighted the importance of exposure visits which some of the VDCs received. This helped them understand how others are successfully running VDCs in their areas and how their area is benefitting from collective action. The FGD participants further shared that the committees not only help them with WASH services but they also help with issues related to electricity and vaccination. The committees appear to be very active related to advising communities on how to manage their livestock in a better way. The 40% participants who said the VDCs are not active shared issues like not conducting meetings and fund collection by the VDCs. The community further said after the project the VDCs have lost their interest.



**Figure 9: Satisfaction with VDC Performance** 

The above graph suggests that the general communities' satisfaction level related to VDC performance has been dropped once the project was completed. This is a common phenomenon which suggests that as the NGO pulls out and there is no more follow up from the NGO staff and no more interventions to implement the committee members soon lose interest in continuing their activities. Interestingly, RDF shared that they have linked up those committees with the Social Welfare department, who have supported them (only a few of the VDCs) in supplying commode chairs in their respective communities and also helped some VDCs in installing hand pumps in their communities. RDF further shared that they have linked up some of the committees with other NGOs working in the area e.g. with Plan International and SAFWCO. These organizations have taken up WASH activities in the district including one of the UC where RDF was working previously to cater for the unmet needs.

The project also involved the communities in the delivery of the project e.g. involved them in identification of sites for water facility and latrine, as a paid and voluntary labour.

The process as explained above ensured that the community has a complete buy in of the WASH interventions.

# 3.3.2 WASH Infrastructure Functionality

The community highly regarded the provision of water related support i.e. installation or repair of hand pumps and provision of water supply schemes. The community shared that they not only drink water from the hand pumps but also provide water to the livestock. They also use hand pump water for bathing, and washing clothes and dishes. Based on the feedback from the communities it seems that hand pumps were provided at culturally appropriate location not far away from the households (easily accessible). In areas where safe water was not available then the RDF supported the communities with provision of lead line hand pumps. The project initially envisioned to provide 95 lead line hand pumps, however, later in the implementation stage considering the need on the ground the number was revised upwards to 113 lead line hand pumps. Similarly, the communities didn't complain nor evaluator observed if they have to queue for long time to collect water.

According to NCA's Naushahro Feroze WASH Final report, around 2500 latrines were provided in the villages. RDF staff through WASH committees consulted the communities regarding selection of the latrine location mainly to consider privacy, dignity and protection needs of women and girls. The women particularly mentioned that after the construction of latrines they use them and it is a great support in terms of having privacy. Also it had reduced the open defecation practice in the targeted communities. The community acknowledged the importance of latrine but suggested that RDF needs to construct it for them as they are poor. The type of latrine construction is pour flush with brick and mortar superstructure, therefore, it is hard to adopt by the extremely poor HHs because it is expensive. As the communal latrines concept seems to be working in these communities, it would be good to promote the idea of constructing communal latrine from community's own funds as a way to reduce cost to the individual HH. Similarly, the communities needs to be made aware that though the initial construction cost of a pour flush with brick and mortar constructed latrine is higher than the mud constructed latrine. However, the former is more likely to withstand heavy rains, will require comparatively less maintenance and will have longer useful life. Similarly, pour flush latrine with lined septic tank provides better environmental protection against contamination the nearby water sources. Therefore, in the long term perspective the type of latrine is not only economically but has better environmental characteristics.



**Figure 10: WASH Infrastructure Functionality** 

The above WASH infrastructure functionality graph confirms the effectiveness of the implementation approach adopted by RDF. Some of the school children and SMCs did share that water point is in functional condition; however, they face problems sometimes to run electric motor for pumping water due to electricity load shedding. The RDF management also shared that to make their approach more effective they have adopted learning from their Dadu district WASH project which was also supported by NCA. One of the learning they shared was the adaptation to the latrine design, which previously had ventilation space on one of the wall, however, now there are two openings provided on opposite side for ventilation. This has reduced the concerns of the communities who felt that latrines have poor air quality. Similarly, taps provided with the hand washing points would get damaged in Dadu project mainly due to type of the material and as the children would misuse them. In Naushahro Feroze project better material has been used and there is targeted mobilization and awareness raising so that children do not break taps.

# **3.3.3 Changes in the Living Conditions**

Around 10% of the respondents shared that in the last two weeks someone in their HHs was affected from diarrhoea.



Figure 11: Pre and Post Project Diarrhea Prevalence (past 2 weeks)

The above graph shows that at the baseline stage 22% reported that someone in their HH was affected from diarrhea. However, this percentage dropped to 10% at the project evaluation stage. Therefore, suggesting there is around 12% reduction in the diarrheal cases in the targeted communities.



Figure 12: Pre and Post Project Open Defecation Situation

The open defecation in the area has been reduced exponentially i.e. improving the overall living environment of the targeted communities. However, one important reason quoted for the open defecation by the community after the project is the insufficiency of the latrines.



Figure 13: Have you found use of mosquito nets beneficial?

Around 81% said that mosquito nets they have received are in use and they feel these are beneficial as the nets provide safety against mosquito bites. Some of the FGD participants shared that though they didn't receive mosquito nets under this project, however, they have purchased them as they feel it is a safeguard against malaria.

The communities also confirmed this through FGDs that they have noticed reduction in the open defecation, improvement in hygiene practices such as washing hands with soap and overall cleanliness in their villages. This has contributed towards reduction in diseases and improvement in health conditions. The school children said after the project interventions they keep themselves clean and in hygienic conditions i.e. cut nails, wear clean clothes, com hair and wash hands after latrine use. The students also shared that they pass on the hygiene messages to the new comers. The SMCs said though students only spend part of the day time in school, however, due to RDF intervention the

environment of the entire village has been improved e.g. better quality of drinking water is available also latrines are constructed in the communities. Therefore, they have noticed improvement in the students' health and the absentees has been reduced. They further elaborated that before the project the children remained absent because of illness like diarrhoea (even if it was just a symptom or very miner) etc because they did not had latrines facilities in case of need but now in such cases they have proper latrine facilities within the school boundary so they do not remain absent. Similarly children were going for defecation out of school either in the open fields or to their homes and were remained absent from the classroom for long time or even some children would not come back to school on that day. This would negatively affected their performance but now as they mostly remain present in the classroom and can focus on learning so ultimately their performance and grades have improved.

# **3.4 Crosscutting Themes**

This section includes details on approaches adopted for integrating DRR, gender and protection aspects in the WASH project.

#### 3.4.1 Gender and Protection

The project had a presence of appropriate number of women staff in the field teams.

The community's feedback confirmed that women had presence in the village committees. There were either mix committees where men and women both were represented or in majority of the cases considering the cultural sensitivities separate women village committees were established.





The above data suggests that women were largely engaged in the project in terms of identification of sites for provision of water or latrine assistance. However, in instances when they were not engaged the reasons for their non-participation identified were mainly the cultural barriers more specifically permissions from their husbands. This suggests that NCA through their implementing partners should device a strategy to target the husbands / men earlier in a project to ensure they permit their wives to participate in the project. A majority of the respondents who said women were not engaged in the project delivery were of the view that it is only men role to engage in the project activities.

Over 85% of the HH survey respondents shared that women are primarily responsible for collection of water. Similarly, 94% said women are primarily responsible for cleaning the latrines.



Figure 15: Water and Latrine Locations Cultural Appropriateness for Women

The above graph suggests that the water and sanitation facilities provided under the project were appropriately situated considering the cultural and privacy needs of women. Almost all the latrines were within the boundary wall of cluster of houses. The SMCs shared that as most of the schools have both girls and boys children, therefore, there are gender specific separate latrines for girls and boys.

The minorities living in the project area were included in the project, if fulfilling the eligibility criteria to become beneficiaries. However, there were very less minority villages in the project. Around 7% of the respondents shared that they have been discriminated i.e. restricted to use water from the water points but that is mainly due to local enmities or conflict amongst the HHs. Though, it is not clear from the available information whether these enmities existed at the project implementation time period or these issues aroused after the project. It is recommended to carefully note down any such issues at the community consultation phase for intervention planning and plan the intervention accordingly e.g. identification of a neutral place accessible to all HHs. To avoid causing conflict and to strengthen peace capacities within the affected communities, HEKS and NCA follow the "do no harm" approach. NCA trains its local partner on this approach to ensure "do no harm" approach is adhered to in the field.



Figure 16: Primary Latrine Users in a HH

The data suggests that in 86% of the cases the entire HH is benefitting whereas in some households individuals are primary beneficiaries. The feedback in the FGDs suggests that as these were communal latrines, therefore, in a small percentage of HHs they have dedicated these latrines to men, women or children only. The reason was related to privacy issues where men and women from different HHs didn't want to share same latrines.



Figure 17: Presence of PWDs in the HHs

The HHs data suggests that 7% of the HHs had one or more persons with disabilities. The prime disability related to paralysation i.e. partially or completely paralyzed. Other disabilities included blindness, deafness and other special needs.



Figure 18: Commode Chair Utilization

The project tried to facilitate the PWDs by providing commode chairs. The community feedback suggests that around 71% these commode chairs were in use and were appreciated by the beneficiaries. However, there were other HHs without any disable family member who received commode chairs. For better use of equipment for special needs, the evaluation team strongly recommends a thorough beneficiary targeting to ensure such equipment is distributed among those HH with a PWD as a family member.





Figure 19: Is there a DRM Plan for the Village?

Though the project was primarily focused on WASH but it has also helped communities develop disaster risk management plans. Those who were aware of the DRR plan for the village also shared that the plan includes information on evacuation routes and points details in case of a disaster. Similarly, it includes details of hazard vulnerability and early warning system. The information dissemination for DRR has to be better implemented as most of the beneficiaries interviewed were unaware of it.



Figure 20: Are Latrines and Water Points Provided on Higher Grounds or on Raised Platforms?

Similarly, the hand pumps and latrines under the project were provided on raised platforms considering the flood hazard i.e. Disaster Risk Reduction (DRR) component included. The latrines were as applicable constructed higher than the ground level to ensure these are available for use during monsoon season and in case of minor flooding. However, approximately 6% believed that in case of monsoon rains or minor flooding they may lose their access to the water points. Half of those who think they will lose access to their water point in case of minor floods or monsoon rains also

shared that they can access alternative water source easily, however, the other half believed it will be difficult for them to access any other water point in the close vicinity.

#### 3.4.3 Environment

For better environmental protection / management the type of latrines used was of pour flush type connected with septic tank. This ensured safe disposal of human excreta.



Figure 21: Water Point Distance from Latrines

However, it appears that in more than half of the instances the distance between latrine and hand pump or dug well was less than 30 m (based on observations only, no tape measurements taken!). It is important to note that in some areas there is limitation of availability of suitable space especially when trying to finalize latrine site which is environmentally safe and socially / culturally acceptable. Similarly, in reality the safe distance between latrine and water point varies mainly depending on the type of soil and depth of water table. The latrines constructed under this project were having lined septic tanks. This will ensure that there is no leakage to the ground water. This will help prevent contaminating the ground water. However, for better environmental management this situation needs to be further improved in the future interventions as in some of the area the communities are using shallow hand pumps to draw water for drinking and other usages e.g. bathing, and washing dishes and clothes. The communities also use water from the hand pumps for their livestock. Therefore, if there is any leakage from the septic tank e.g. due to bad quality of workmanship or due to use of faulty material then the hand pump water in closer vicinity can be affected.

#### 3.4.4 Beneficiary Feedback Mechanism



Around 74% of the respondents were aware of beneficiary feedback / complaint mechanism. The FGD participants also shared that a contact number was provided to them in case they want to provide any feedback or register any complaint.



Figure 23: Have You or Anyone from Your HH Used the Community Feedback / Complaint Mechanism?

Most of the beneficiaries said that the complaint box and number was provided but we did not make any complaints as we had no issue to report. Those who did complaint, did so on grounds of nonselection as a beneficiary. Those who have used the complaint or feedback mechanism shared that they mainly did it via phone calls and also verbally provided feedback to the staff in the field. On rare occasions people said they use text messages or written a formal complaint letter. Those who used the feedback / complaint mechanism were mostly (81%) satisfied with it. Those who were not satisfied also quoted reason like they complaint but still didn't receive the required intervention e.g. hand pump or they called the provided number but no one picked up the phone.



Project Supported Hand Pump and Latrine Set

# 4. Conclusions

Based on the above discussions the following conclusions are made against each evaluation criteria:

# 4.1 Relevance

The evaluators believe that the project design was relevant and according to the needs of the communities. The project was aligned with the local community needs as at the project design stage not only secondary data was used but the needs were also confirmed prior to initiating implementation through the baseline study conducted by RDF at the start of the project. From the data it is evident that prior to the project the main source of drinking was shallow hand pumps and open wells. Generally, there were no latrines as open defecation was common; however, a few HHs had pit latrines constructed with mud. The targeted area is also prone to natural disaster such as floods.

#### 4.2 Efficiency

The procurement for all major items was carried out using formal bidding processes. This process of open tendering attracted more bidders which helped in obtaining best quality products at lowest available price.

The WASH assistance as appropriate was provided on communal basis to optimise the utilization of the available resources.

Overall, the project is delivered within the agreed timeframe and budget. There was no major shift in the project targets except for a few small adjustments. It is also important to note that some of the unspent funds were diverted towards procurement and distribution of mosquito nets.

#### 4.3 Effectiveness

The project adopted an effective approach which helped ensure that all the targets set are met within the available budget and timeframe. There was direct engagement of the community in the project intervention besides engagement through Village Development Committees (VDC). This helped improve the community ownership of the project interventions. This ownership is reflected through high percentage of WASH infrastructure functionality. There is improvement in the living conditions of the communities as open defecation has been reduced and access to drinking water has improved coupled with appropriate hygiene practices. Overall, this resulted in reduction of water borne and sanitation related diseases e.g. diarrhoea.

# 4.4 Crosscutting Themes

Under this project, when necessary and possible, separate women committees were formed to ensure women's engagement in the project. The women actively participated in the site selection for WASH interventions. The feedback confirms that the sites selected for the water supply and sanitation facilities were appropriate as per privacy requirements of women. The field level teams of RDF had appropriate number of women members; however, senior project management and technical persons were men.

For facilitation of Persons with Disabilities (PWD), the project provided commode chairs as per identified needs in selected households.

The project helped the communities develop disaster management plans and raised their awareness regarding early warning, evacuation routes and evacuation points etc. The WASH infrastructure provided under the project also had DRR inclusive design.

The latrines constructed were connected to septic tanks and constructed away from the water points. However, still there were around 20% of the latrines which were constructed within 10 meters of the hand pump.

# 5. Lessons Learnt and Good Practices

Following are the key lessons learnt and good practices of the project:

- **Beneficiary Targeting for Commode Chair:** The feedback from the HHs suggests that some of them have received commode chair but they are not using the chairs as they do not need them. This implies that commode chairs should be only provided to those HHs who are really in need of it.
- **Mosquito Nets:** This appears to be a good value addition and a very good utilization of the leftover funding.
- **Community Participation:** The project had very good engagement of the communities.
- **Separate Women Committees:** This was an excellent idea as most of the times women are left out as they have social constraints of working together with male community members. This project had provided them the opportunity to form a separate women exclusive committee, if necessary.
- **Cultural and Social Constraints for Women:** Though it appears that there was good women participation in the project. However, still some women in particular were left out as mainly their husbands didn't allow them to participate in the project.
- **Restricted Access:** Some of the HHs had restricted access to use water from the water points mainly due to local enmities or conflict amongst the HHs.
- **Replication of Latrines:** It appears that communities are using the latrines provided; however, they are unable to replicate.
- **Communal Latrines:** The communal latrines under this project are successfully functioning.

- **Community Feedback / Complaint Mechanism:** Even though the community feedback and complaint mechanism had good coverage there is a significant number of around 26% HHs that are not aware of this mechanism.
- **Water Point to Septic Tank Distance:** There were around 20% of the latrines which were constructed within 10 m of hand pumps.
- **Learning from the Previous Projects:** It was encouraging to see latrine design was modified based on the learning from the previous project.
- **Coordination with Local Authorities:** The project was implemented in coordination with the government departments e.g. PHED, Social Welfare and Education etc resulting in ownership of the project interventions by the government.

#### 6. Recommendations

Below are the key recommendations for future projects:

- **1. Revised Beneficiary Targeting Approach (***High Priority***)** It is recommended that commode chairs should be only provided to those HHs who are really in need of it e.g. HHs with very aged person and/ or a HH with such a disability who can benefit from the commode chair e.g. partially paralyzed.
- **2. Engaging the Husbands** *(High Priority)* It is recommended to develop a targeted strategy to work specifically with Husbands to sensitize them so that they can allow their wives to participate in the project activities.
- **3. Replication of Latrines** *(High Priority)* In order to make it financially feasible for the communities, it is recommended to devise a strategy to encourage communities to construct communal latrines i.e. sharing the cost of latrine with neighbouring HHs.
- **4. Information Dissemination to the Communities:** *(High Priority)* It is recommended to widely disseminate information related to nearest locality where latrine construction material and masons are available. Similarly, it is recommended to disseminate DRR related information to general community to increase their awareness.
- **5. Unrestricted Access to all HHs (***High Priority***)** It is recommended to note down any enmity or related issues at the community consultation phase for intervention planning and plan the intervention accordingly e.g. identification of a neutral place for hand pump or latrine construction accessible to all HHs.
- **6. Beneficiary Feedback** / **Complaint Mechanism** (*High Priority*) It is recommended to further strengthen the dissemination of information regarding Beneficiary Feedback / Complaint Mechanism during the project.
- **7. Water Point to Septic Tank Distance** *(High Priority)* It is recommended to ensure implementation of latrine or hand pump installation criteria so that safe distance between latrine/septic tank and hand pump is maintained.

# 7. Annexes



# **Assessment Tools**