Final Project Evaluation

Strengthening the Resilience of 20 Rural Communities Effected by Flood in 2015 In District Layyah

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Islamabad

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Acronyms and Abbreviations

BCC	Behaviour Change Communication
CEO	Chief Executive Officer
CHAST	Community Hygiene And Sanitation Transformation
СНС	Children's Hygiene Club
СО	Community Organization
DEA	District Education Authority
DHA	District Health Authority
DRR	Disaster Risk Reduction
DDMA	District Disaster Management Authority
FGD	Focus Group Discussion
HHs	Households
ICT	Information Communication Technology
IDI	In-Depth Interview
КАР	Knowledge-Attitudes-Perceptions
NGO	Non-Government Organization
0&M	Operations and Management Development Assistance Committee of the Economic Cooperation
OECD-DAC	and Development
PDMA	Punjab Disaster Management Authority
PHED	Public Health Engineering Department
PHSAT	Participatory Hygiene And Sanitation Transformation
РКАР	Post KAP Survey
PWDs	Person with Disabilities
SDGs	Sustainable Development Goals
SDMC	School/Development Management Committee
SM	Social Mobilizer
SMC	School Management Committee
UC	Union Council
VDC	Village Development Committee
WASH	Water Sanitation and Hygiene

Acknowledgements

This end of project evaluation report provides the opportunity to assess the benefits of Suisse Solidarity funded project titled "Strengthening resilience of 20 rural communities in Layyah district affected by floods 2015", to learn from its successes and to improve interventions for subsequent phases.

I would like to acknowledge the support of many people, whom I want to thank most sincerely. First and the foremost is the Solidar management team, to whom I am thankful for the trust they have reposed in me by awarding this assignment. I am truly grateful for the creative opportunity to review the application of this project in the form of a WASH project evaluation.

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I would also like to acknowledge my most valuable resource, i.e., my field enumerators and five social mobilizers of the Solidar project, who facilitated in randomly selected communities and beneficiaries in remote areas of Layyah. Without their invaluable time and insights, it would have been impossible to successfully complete this assignment.

Shahzad Bukhari Development Sector Specialist August 2018

Executive Summary

This report presents the findings of the end-of-project evaluation for the 2-year (May 2016-April 2018) Swiss Solidarity funded and Solidar Suisse implemented project with objective of "Strengthening the Resistance of Flood Affected 20 Communities in district Layyah". The project was implemented in 20 communities/revenue villages in Union Councils Jakhar and Lohanch, situated between the Indus and Chenab Rivers (see map). Both Union Councils are vulnerable to annual monsoon flooding, which destroys food and cash crops, homes and livelihoods, and increases the incidence of water-borne diseases and makes safe hygiene practices extremely difficult.

The purpose of the project was to strengthen the resilience of flood-affected communities by improving the access to safe, sufficient and reliable drinking water sources, low cost sanitation facilities and to improve their capacities to respond to flooding in the future. The project utilised a holistic Community Based Disaster Risk Reduction approach, with safe-water infrastructure provided deep boreholes and hand-pumps; constructed flood resilient low cost sanitation facilities, knowledge and behaviour change aspects focussed on safe drinking water and improved personal, domestic and environmental hygiene and cleanliness.

The purpose of the evaluation was to assess project outcomes at all levels (from planning, design, implementation to M&E), encompassing targeted households and schools in the project area. The evaluation also assessed the impact of the project on targeted primary and secondary beneficiaries and the sustainability of approaches adopted by the project for the communities.

The evaluation began with a review of key project documents; including project proposal, LFA, progress reports, pre- and post KAP surveys, budget and work plans. The evaluation team collected qualitative and quantitative data through 150 household surveys and 11 in-depth interviews with associated institutions, to assess achievements and goal(s), compiled lessons learned, and identified areas with strong sustainability components. 12 FGDs and two transact walks (one each in Jakhar and Lohanch union councils) were conducted with the schools and community beneficiaries (i.e. households) to critically review the facilities and post-project changes in both UCs.

At least three factors contributed to the successful achievement of the project outcomes: (1) the project's relevance to the chronic WASH needs of community members; (2) good project management and financial management; and (3) the revitalisation and effective functioning of community organisations. In terms of OECD-DAC criteria¹, the findings are as follows:

- The evaluation shows that the project was extremely relevant to the WASH-specific needs of the people living in the 20 villages. For most people, the dire water and sanitation problems had existed since the catastrophic floods of 2010 which further exacerbated by subsequent floods in 2013 and 2015. The project was directly linked with SDG Goal 06 (Clear Water and Sanitation) and indirectly supported Goals 03 (Good Health and Wellbeing), 04 (Quality Education) and 05 (Gender Equality). Participatory methods in the project design meant that it was closely aligned with local needs and local capacities.
- The evaluation found that the project was well-managed. It was completed in time and below the estimated budget without any compromise on quality. Financial efficiency made a number of additional interventions (i.e. electric water coolers, BCC materials, water storage tanks, additional features for hand pumps) possible. Financial disbursements were directly controlled from Solidar country office in Islamabad, which ensured strong internal control, transparency and accountability.
- Members of 1,325 households now have access to safe, clean and sufficient drinking water from easily accessible boreholes, as well as improved sanitation facilities in homes and schools, and they know how to efficiently use safe and clean drinking water. All 25 schools with a total enrolment of 4,125 students (KG to Matric) now have access to hand pumps and hygienic latrines and First Aid kits. Latrine usage in homes and schools has increased greatly, resulting in improved cleanliness, reduced open defecation and personal hygiene as mentioned by several community members through FGD. Women are equally participating in Village Development Committees (VDCs) and in the community' decision making process. Equal numbers of women and men have been trained in H&H, DRR, and First Aid.
- VDC members know how to contact RESCUE 1122 who informed them about the essentials of DRR, First Aid, Search and Rescue. The post-KAP survey showed that positive results were achieved for all interventions; especially behaviour change related to hand washing at critical time with soap, abandoning open defecation, indoor-, and environmental cleanliness around the living spaces changed positively and capacity of

⁺ The five DAC evaluation criteria are based on the conception that evaluation is an assessment "to determine the relevance and fulfilment of objectives, developmental efficiency, effectiveness, impact and sustainability" of efforts supported by aid agencies (OECD, 1992, p. 132)

community members enhanced through linkages established with existing gov. early warning systems; relevant information shared related to disaster preparedness; the usage of first aid and DRR kits trained theoretical and practical. It was also noted by the community members that 22 households have already built their own latrines without any financial support, which is not only a significant awareness and behaviour change in the community but an indicator of the success and acceptance of the project and its interventions.

Relevant Government Departments have signed MoUs with the project. The MoUs commit the departments to continuing to work with the communities after the project is completed. The formation and capacity-building of village-level committees has the potential for long-term sustainability. All 25 SMCs are functioning well and they understand their roles and responsibilities. All SMC members are able to apply first aid and know to reinforce the health and hygiene messages. 25 O&M committees are functioning well because the hand pumps are maintained, linkages with PHED are established for support and the introduction of saving trends is a good example for sustainability. Communities now have a model of low cost latrines which can easily be replicated using locally available materials and capacities. The evaluation team was informed (by the project team, VDC members and PHED officer) that water testing was a regular feature during the installation of the hand pumps/Tube wells in the community. The VDCs were also linked with the PHED and informed about the water testing procedure which will continue free of charge after the project ends.

The project was implemented with full sprit but there is always room for improvement e.g. planning for initial phase can be reduced for such projects, the concepts of inclusiveness can be looked more closely, role of CHC in the school can be more enhanced, the kits can be gender sensitized with members personal needs, the local entrepreneurship for latrine construction and hand pump can be introduced, etc.

I. Introduction and Background

Solidar Switzerland is an international humanitarian not-for-profit NGO headquartered in Zurich. It focuses on Humanitarian Aid International Corporation, Social Affairs, Labour and Trade Unions and Education. Solidar Switzerland has been active in Pakistan since 2010, working for flood affected people in Punjab and Khyber Pakhtunkhwa provinces. Solidar Switzerland pays particular attention to child protection and child labour, DRR, WASH, Shelter and school safety.

Scope of the Project

The objective of the project was to assist the communities in WASH sector and prepare them for future flood disasters in their areas. The efforts were directly linked with SDG² Goal 06 (Clear Water and Sanitation) and indirectly supporting Goals 03 (Good Health and Wellbeing), 04 (Quality Education) and 05 (Gender Equality). The project endeavoured to achieve this by increasing number of functioning water points (Constructed 265 deep bore holes hand pumps in communities and 24 hand pumps in 25 Schools) in two Union councils of District Layyah; organizing and capacity building of communities and children at school level; increasing the hygiene and sanitation knowledge base of targeted beneficiaries; and increasing the hygiene and sanitation knowledge base, training of target groups around community based disaster risk management and promoting coordination, monitoring, reporting and networking between stakeholders.

Scope of the Evaluation

The purpose of the evaluation was to assess the outcomes of the project at all levels, encompassing targeted households and schools in the project area. The evaluation also assessed the impact of the project on targeted primary and secondary beneficiaries and the sustainability of approaches adopted by the project for the communities.

The evaluation process aimed to:

- evaluate all aspects of the project design, implementation, management, reporting by assessing the achievement of the project and goals and focusing on the effectiveness, relevance, efficiency, sustainability, and impact of the project outcomes.
- document key lessons learned during the project implementation and identify promising good practices for knowledge sharing purpose.
- identify key areas for continued advocacy, sustainability/replication of the project and other future interventions related to project activities.

II. Project Context

1. Layyah District Profile

Layyah is situated in southern Punjab (see Map). According to the 2017 District Census, the population of district Layyah is 1, 373,000 with a male / female ratio of 107/100. 85% of the district's population live in its western zone that is adjacent to the Indus River and is prone to floods especially in monsoon season. In this area extensive irrigated agriculture is practiced with tube wells and canals. The eastern part of the district is mostly deserted and is inhabited by 15% of the population of the District.

Flooding is common in South Punjab and Layyah. District Layyah, located between the Indus and the Chenab rivers, declared as one of the worst affected Districts in 2010 and subsequent floods. In a 2015 assessment, the World Resources Institute ranked Pakistan as the fifth most affected country by river flooding. Residents in the highly flood-prone Layyah district have seen their homes repeatedly inundated. In 2015, around 226,000 people were affected and crops on more than 101,000 acres were destroyed (NDMA). However, the flood-resilient homes, which were mostly rebuilt in late 2010 (i.e. after the floods of that year), survived, as they did during heavy flooding in the three consecutive years from 2011 to 2013.

The Government and national and international aid organizations do provide support during the floods but a sustainable effort is required to equip communities to mitigate and respond to disasters on their own, to the extent that is possible. Thus the Solidar project aimed to build local capacities to respond during disasters and in reconstruction efforts.

² Sustainable Development Goal (SDG)

2. Project Milestones & Targets

The 2-year project was implemented as per plan and preparation including baseline, community meetings and orientations. As a standard project implementation practice, the Solidar project started its activities with a comprehensive baseline and a KAP survey. The assessments took a little longer than the usual time but it helped the management to draw findings and helped the team to start operations. However, the management started its project operation well before the finalization of the KAP survey report to lay down the project base to avoid any delay. The project had two key beneficiaries i.e. community clusters (265 clusters for hand pump and latrine installation) of Union Councils Jakhar and Lohanch and 25 schools (mix of boys, girls and co-education).

3. Status of Project Activities for Communities

All the project's immediate outcomes were accomplished or superseded. Project has completed the installation of 265 communal Hand pumps (for approx. 1,325 houses), construction of 225 latrines, health and hygiene sessions for community members (approx. 5,300 members), two rounds of follow-up sessions (for 10,600 members) on O&M of Hand pump (for 1,325 members), and sessions for latrine O&M (for 450 members). It revealed during community meeting and In-Depth Interview (IDIs) with VDCs and management, that gender considerations were taken into account for all events, activities and interventions: women's participation was mandatory in all consultation and decision making processes, as was inclusivity (of minorities, senior, male and female youth members) in all capacity building activities and exposure activities. However, in composition of hygiene kit the especial needs of adult girls (for menstrual period) and women were not taken care off.

4. Formation and Support to Village Development Committees3

The 20 existing VDCs (from Solidar's previous project) were re-activated and shortlisted for project interventions. Each VDC had 20 members (10 men and 10 women, totalling 400 members).

5. Activities for Community Schools

A total of 25 schools were selected (from a list of 37 schools provided by the District Education Department) in consultation with the District Education Authority, Layyah. The selection criteria included: schools' vulnerability to flooding; lack of sanitation facilities, lack of safe drinking water and the number of students in a school (as per govt. of Punjab's criteria) together constituted some of the vulnerability criteria.

6. Project Planning

The project planning was done at the Solidar Head Office in Islamabad (with subsequent orientation meeting with field staff) to ensure quality and timely delivery of the project. In Pakistan the last few years have not favoured INGOs and rural development organizations due to security concerns. It has been very difficult to implement any activity at the grassroots level without an NOC and approval from the Ministry of interior and, concerned government line department). However, due to Solidar's reputation from its previous project they found no difficulty in continuing this project with any NOC neither they asked for such permissions, and as a result project was implemented as planned.

7. Stakeholder Participation

Project managers always face challenges in delivering the project efficiently particularly when they need to engage government and to create efficient delivery systems. Solidar's previous project and quality interventions in the District meant the organisation had good relations with the concerned Government Departments. As a result, the project was able to leverage support⁴ from Rescue 1122, District Disaster Management Authority (DDMA), Public Health Engineering Department (PHED), District Education Department (DEAs) and other CSOs in District Layyah.

8. Project Human Resources

The Project had a well-structured organogram with an appropriate number of skilled social mobilisers and technical expertise: these were critical for effective rollout of the program in communities and schools. The community needs were also identified in the last phase of the previous Solidar project which resulted in the early start and identification of existing VDCs, other community groups and potential areas of intervention.

9. Financial Resources

The project was completed below the estimated budget without any compromise on quality. It not only completed all the deliverables according to the agreed quality and time, but was able to provide additional augmenting interventions (i.e. Electric water coolers, BCC material, water storage tanks, additional features on hand pumps were provided in consultation with project and senior management). The financial disbursements

 $^{^{3}\,}$ Project Activities is attached as Annex 01

 $^{^{\}rm 4}\,$ The type of support promised by these departments is explained below

were directly controlled from the country office and back-upped by the HQ which contributed to maintaining stringent internal control, transparency and accountability. Some small delays in payments to vendors occurred as a result of there not being a Standard Chartered Bank branch in Layyah.

III. Evaluation Profile & Methodology

The evaluation process was designed keeping in mind the requirement given in the ToRs and the critical review of the project documents provided by the Solidar office in Islamabad. A participatory approach was adopted to collect the relevant data for subsequent quantitative and qualitative analysis. Both the quantitative and qualitative primary data was collected through the household survey, Focus Group Discussions and Key Informant Interviews. Supportive literature reviews and site visits (observations) were also carried out to collect the secondary data. Later a detailed data evaluation exercise was conducted to measure the actual project outcome at various stages of implementation and its overall impact. The following table shows the main sources of primary and secondary data:

1. Sources of data

The primary and secondary data was collected from the following sources:

Primary	Secondary ⁵
 Structured questionnaires were used to assess situation of water supply, sanitation, sustainability of the facilities provided. 	 Project Documents (i.e. monitoring reports, evaluation reports, relevant to water and sanitation)
 Semi structured interviews were conducted with beneficiaries during focused group discussions. 	 Pre-Post KAP Survey Data and Reports
 In depth interviews were also conducted with community representatives, water management committee members and relevant project staff. 	Activity Completion ReportsFinancial Documents

2. Quantitative Data Collection

Survey Instrument and Sampling: The field survey questionnaire was developed based on the requirements stated in the ToR, the findings of the pre/post KAP surveys, discussions and consultation held with project team consisting of the project coordinator, M&E resource person and project manager in Layyah. The evaluation methodology was fine-tuned during the inception phase. The following sample size was finalized for the field survey:

- Sample Size 150 (rounded to 10% of 1,325)
- 2 UCs (Jakhar & Lohanch 50% of total respondents from each UC)
- Sex Disaggregation (34% adult Male, 34% adult Female, 16% Male youth, 16% Female⁶ youth approx.)

<u>Data Collection</u>: A team of seven trained enumerators (5 Male and 2 female including two supervisors) was earmarked for this assignment. A complete orientation session was conducted with the team of enumerators to explain the objectives of the assignment and the methods to be used for data collection. The team was introduced to the household questionnaires with terminologies to minimize risks to reliability of the data. Project staffs consisting of 5 community mobilizers, project coordinator and manager were also accompanied the enumerator to facilitate in randomly selected communities, beneficiaries and partners of their project in Layyah.

3. Qualitative Data Collection

Focus Group Discussions (FGDs⁷): Detailed discussions were held with stakeholders including the SOLIDAR staff, social mobilizers, technical staff, community members (male and female), selected students from government schools (boys and girls, mixed), members of VDCs, SMCs and Head Teachers.

 $^{^{5}}$ The full list of documents reviewed for the evaluation is attached as Annex 02

 $^{^{\}rm 6}$ Individuals age 22-28 are considered to be youth.

 $^{^7\,}$ List of FGDs participants is attached as Annex 03.

Discussions with Key Informants (IDIs⁸): Interviews with selected officials, representatives and resource persons were held to gain in-depth knowledge of the issues and levels of support and coordination provided by each stakeholder (including PHED, Health, Education and Disaster Management) in their respective subject areas.

4. Observation⁹

To assess the quality and usability of each physical facility the lead consultant travelled across the project area and observed the achievements of the project, particularly the quality of work done, physical condition, distribution and performance of water facilities. For this 17 water points, 17 latrine facilities, five schools (2 boys, 2 girls and 1 mix) were visited.

5. Data Analysis & Findings

Data was recorded in Excel and an analysis was conducted in SPSS for cross tabulation and frequency test. The information gathered through FGDs, IDIs and observations were compared, triangulated and analysed during the preparation of the report. The process of developing the findings through data analysis was guided by the Solidar Wash Project TOR, the LFA indicators and Pre/Post KAP findings.

IV. Evaluation Framework

The findings of the evaluation after due analysis¹⁰ are divided into following categories: Effectiveness, Relevance, Efficiency, Sustainability, Impact, Equality and Knowledge Sharing.

1. Effectiveness

a) Community Level



The overall project implement in line with project outcomes. Project improved sanitation facilities and reached 1,325 HHs to improve their access to safe, clean and sufficient drinking water and 225 HHs to provide then flood resilient low cost sanitation facilities. One of the key outcomes of the project was to improve resilience of communities and schools, which was done systematically by providing structures, capacities to manage disasters and sustained inputs and linkages after the project timeline. The consultants' findings revealed that the project has not only achieved its target to provide the infrastructure but has also played a pivotal role in changing the mind-set of the people towards

drinking safe and clean water and using improved sanitation facilities. 43% of the respondents (post-KAP) reported that the depth of the well has been increased to more than 100 ft. (30.48 m) which is in itself an assurance of access to safe water. 75% reported that they have ensured they drink tested water and also that they know where to get the water tested (i.e. PHED). The communities through the VDCs have established a relationship with PHED for the provision of water testing and treatment related support. The project has seen a significant improvement in behaviour regarding water testing and treatment. A majority of community members (91% in Jakhar and 87% in Lohanch) are aware of water purification procedures and the hazards and disease associated with unsafe water. Post KAP results show that the use of boiled water for drinking purposes has increased from 0% to 97% and the same was also confirmed by 72-84% of respondents during the survey.

 $^{^{\}rm 8}$ List of persons interviewed is attached as Annex 04

 $^{^{9}}$ The list facilities visited and observation checklist is attached as Annex 05

¹⁰ In line with OECD/DAC evaluation criteria with gender equality as cross cutting theme

Boiling Drinking Water (Q29)

Response	Union Council	Female	Male	TOTAL
Yes	Jakhar	45%	27%	72%
	Lohanch	45%	39%	84%
No	Jakhar	4%	22%	26%
	Lohanch	4%	11%	14%
Total	Jakhar	49%	49%	97%
	Lohanch	49%	50%	99%



Similarly, the use of latrines has improved immensely. 95% of respondents now have a latrine at home. 91% of respondents in Jakhar and 58% in Lohanch have latrines at home, which have significantly improved the defecation practices of the community members and especially the privacy of women and children. A considerable number of women respondents mentioned during the FGDs that they now pour water after using the latrine, which has improved personal hygiene practices from 0% to 60% (Post KAP survey).

Using Latrine at Home (Q40)

Response	Union Council	Female	Male	TOTAL
Yes	Jakhar	43%	47%	91%
	Lohanch	26%	32%	58%
No	Jakhar	7%	3%	9%
	Lohanch	22%	18%	42%
Total	Jakhar	50%	50%	100%
	Lohanch	49%	50%	100%



The community members' personal health and hygiene practice has improved. This outcome was the result of various hygiene sessions conducted with 5,300 members by the project SMs. The project also provided hygiene kits (comprising of a nail cutter, anti-lice shampoo, comb, tooth brush, toothpaste and soap) to the community members, as well as information about using the items and the importance of personal health. Two rounds of follow up sessions were also conducted to ensure the H&H practices were being followed e.g. in the Post KAP survey nearly 90% of the schools and community members reported that they buy soap for hand washing even when their little sore from the supply kit has been used.

Approximately 10,600 community members attended the health and hygiene sessions. It was revealed during the FGDs that personal health had been given priority but was sometimes compromised by the male members who didn't brush their teeth regularly, or take a shower often enough. The women community members were more concerned about family and child health, which is positive evidence of the project intervention. It was also noted by the community members that 22 households have built their own latrines without any external financial support, which is not only a significant awareness and behaviour change in the community but an indicator of the success of the project and its interventions

b) School Level

Twenty-five (25) schools were selected for the interventions. The provision of functional latrines (numbers varied from school to school, from a low of 2 to a high of 6), a hand pump and DRM kit were the key input of the project. A hand pump was not provided to one school because the one already had a functioning hand pump which was appropriate and satisfactory to meet the school requirements. However, the project ensured the quality of existing hand pump by conducting water quality tests from PHED.



The project also provided electric water coolers in 21 schools, where cold drinking water was not available. The necessary support including water storage tank and electric motor was also provided for an un-interrupted supply of cold drinking water. Recognizing the hot weather in Layyah and the needs of the children, the project also provided portable water coolers (with 2 steel glasses) in 125 classrooms of 25 schools.

Behaviour: The BCC component was well received in every school among boys and girls. During Pre-KAP survey there was hardly any respondent child who was aware of water and sanitation related issues. However, in the Post-KAP survey, almost every child was vocal about such issues, which shows the

great impact of the project activities. The students were quite aware of and followed the steps of hand washing and they are aware that unsafe water and unhygienic practices can affect their health negatively.

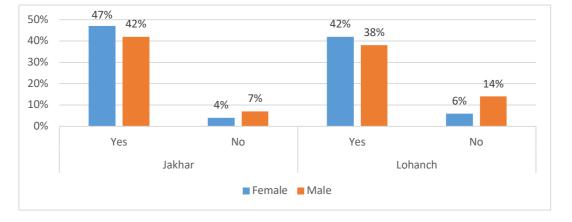


A total of 57 latrines were constructed in 25 schools (as per their requirements) along with required accessories i.e. water supply and water tanks. Though children were well aware of the use of latrine but some of the school latrine were missing water pot (*lotas*) which may be taken added in the maintenance checklist in future interventions.

2. Relevance

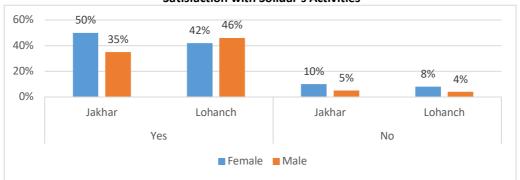
a) Community Level

In general, the evaluation team concluded that the project interventions in District Layyah were quite relevant to local needs as the areas has been several times been affected by floods, as water has destroyed many livelihood opportunities and damaged agriculture land and infrastructure of the people. On the other side the project has created positive changes related to hand washing at critical time with soap, abandoning open defecation, indoor-, and environmental cleanliness as described earlier. According to the community groups interviewed, the project team had conducted a comprehensive needs analysis and baseline survey along with a subsequent Pre and Post-KAP assessment surveys. The community needs and priorities were analysed and later addressed during the project intervention and some new intervention (like: installation of water cooler; strong involvement and participation of women) were also added during the course of the project which were addressed in consultation meetings.



Community Involvement at Project Planning Stage

The graph above shows that the project involved women and man in the planning phase right from the beginning. Their ideas, expectations and their wishes were respected and the project emphasised that women and men had their equal share in decision making process. The project activities were the key output of the planning phase where concerned community members were consulted about their priorities. Their satisfaction with the project activities is quite evident as shown in the graph below (89% in Jakhar and 80% in Lohanch).



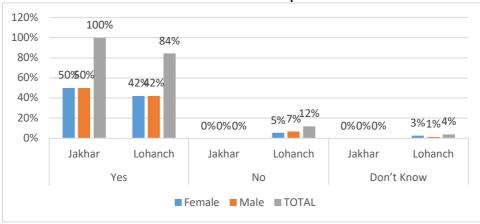
Satisfaction with Solidar's Activities



The project installed hand pumps which reaches water from 80-100 feet. Before the project started often the people were forced to use water from 30 to 50 feet [9.14 to 15.24 m]. This water was often in many cases not appropriate for drinking. The project team decided to install hand pumps to reach water source of at least 80-100 feet (30.48 m) deep which was declared safe according to the community members and PHED.

In the past before the project installed the hand pumps/deep tub wells 98% (Post-KAP) of community members have already started the water treatment practices i.e. water

boiling or using tablets/pills to treat drinking water. The graph clearly illustrates that access to safe, clean and sufficient water increased almost 100% in Jakhar and 84% in Lohanch. In the Post-KAP survey, 92% responded that the water is safe and sufficient now, whereas the pre-KAP survey showed that 0% had found the water to be safe and clean. Because of the good water quality the community members mentioned that there is no need to treat the water as they have done it in the past.

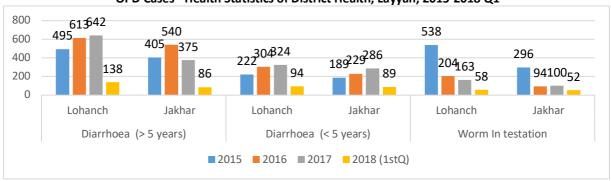


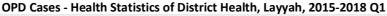
Access to Safe Water Improved

To ensure sustainability, the project also taught the community members how to operate and maintain the facilities provided. The project conducted O&M trainings for all 20 VDCs and community members. From each family cluster (5 caretakers per cluster or at least one person from each family) participated in the O&M training. In total the project reached 1,325 persons. Additionally the VDC members were linked to the vendors who installed the equipment. Through these linkages any repair or replacement of equipment will contribute to a higher level of and better access to maintain the hardware components in the future.

Health and Hygiene:

The project conducted and extensive hygiene training program both in communities and schools focusing on personal, domestic and environmental hygiene. PHAST (Participatory Hygiene and Sanitation Training) approach was used in communities where main focus had been to capacitate VDCs and increase awareness of the communities in the catchment areas. In school CHAST (Children Hygiene and Sanitation Transformation) approach was used in which SMCs, CHCs, support staff of schools and students were engaged. Main focus had been on SMC and CHCs capacity building on good hygiene practices whereas awareness session were also conducted covering the entire enrolment of 25 selected schools. It was revealed during the meeting with health officials in DHA (District Health Authority) Layyah and data showed that the health status of children over five living in the project area shows a significant improvement (reduced diarrhoea and worms) as a result of the project interventions. This is a clear contribution of the project intervention.

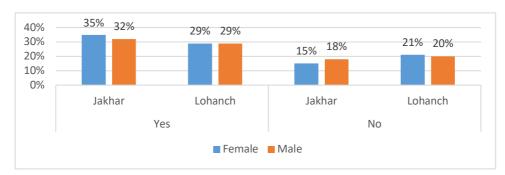




Source (District Health Department, Layyah)

Organization and Participation:

Keeping in mind the vulnerability of the targeted area population in general and women in particular, the project re-formed the existing VDCs in the communities which had been formed earlier by Solidar. VDCs have both male and female members. Persons with disabilities were invited to join the VDCs but no PWD were found in VDC membership. Project staff and community members mentioned that VDCs had been very instrumental in identifying the vulnerable households, in organising field level training and awareness sessions, resolving field level minor issues/disputes, convincing the owner of land for allowing to construct communal hand pumps, organising broad based community meetings, prioritising the hygiene and sanitation issues, identifying masons, be part of early warning system and volunteer themselves took part to disseminate information to respective communities in case of any alert.

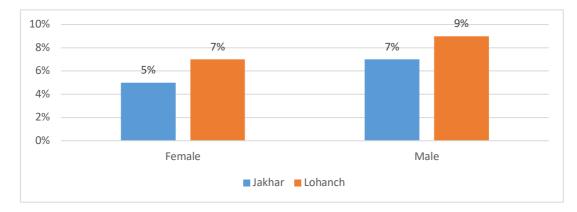


VDC Membership by Gender

Inclusiveness

The survey found that there was a significant number (28%) of persons with disabilities (PWDs) in both UCs. For example, some cases of polio were identified but no latrines were made for them. Similarly, the needs of the elderly community members were not taken into account e.g. in villages there is a number of senior citizens with joints issues and they don't feel comfortable using regular Asian style latrine. There was no specific consideration made to realize the needs of PWDs and senior citizen and respond accordingly.

Presence of Disabled Person in the Family (Q7)



b) School Level

Behaviour Change:

The BCC component of health and hygiene was excellent in almost all of the schools. During FGDs with the student it was revealed that they knew the concept and categories of hygiene e.g. they knew the importance of handwashing, associated risk of dirty hands, component of personal hygiene, how to keep environment clean, what are the disadvantages of keeping trash and garbage at home, etc. The interview with children hygiene club members revealed that they knew their TOR and associated responsibilities.

School Management Committees

The SMCs indicated that they were satisfied with Solidar's interventions and acknowledged that they have greatly benefitted from them. The SMC members, DHA officials and teachers said that Solidar staff effectively responded to their needs in terms of providing provision for potable water, sanitation and hygiene, and disease prevention.

Children's Forums

The Children's Hygiene Clubs (CHCs) found the interventions to be innovative and beneficial e.g. the project created a forum at school level for their capacity building aspects. In these forums children were orientated and they talked about health and hygiene issues, how to get address DRR aspects in their community and space was created to discuss and exchange individual aspects. These forums were further used to train them on aspects of early warning system, evacuation procedure, helping others during emergency situations, etc.

Children are aware about the roles and responsibilities of the clubs but clubs are underutilized e.g. the role of CHCs was found limited, Children's awareness about DRR and rescue need to be enhanced further as they still have limited knowledge about the physical evacuation points. Gender sensitive aspects were discussed with th4e children however it was observed that more sensitisation is to protect especially girls from harassment and sexually abuse during emergencies.

IEC Material:

Each school is provided with IEC materials for personal, domestic,

environmental hygiene. The panaflex posters were suitably placed right outside the latrines. Although the BCC material was an excellent intervention to transform healthy practices but a proper method, schedule or strategy for dissemination would be required e.g similar can be distributed through handbills or flyers so that they can take this information with them, a schedule sessions on IEC material can be arranged either in the assembly or class level, a quiz program can be arranged at class or school level to encourage student to read and memorize the information.



First Aid Kits:



The first aid kits were provided to the teachers and SMCs, along with training on the usage of emergency kits (25 Kits for 4,125 students). The VDC members and teachers were quite aware of the kits but had no idea about the re-filling in future. The head teachers are aware that this kits need to be maintained and refilled. However the annual school budget has its limitation as the school budget is also used for other priorities (wash article, stationary etc.) The teachers mentioned that it is good for the school to have these items for small injuries and as soon as the school identifies the need to refill it the task will be placed on the planning agenda.

3. Efficiency

a) Planning Phase

The project planning was done at coordination office level in Islamabad to ensure quality. The lessons learned and informal need analysis conducted during the previous project was made part of project proposal. All members of the community were engaged in the consultation process to identify the needs at the community level. The district education department, head teachers, teachers and children were involved in designing the school level interventions. The disability component was somehow overlooked in the planning phase. There was no specific intervention linked to the hardware for PWDs except one soft component i.e. capacity building of PWDs on the role of disabled persons in emergency situation.

b) Grassroots Connectivity

Reporting and coordination with the religious and community leaders was done via the project manager and field staff, who reported to coordination office in Islamabad. This evaluation has determined that the role of VDCs and SMCs was a strong pillar of the project and a bridge between the community and the project. The project not only enhanced the capacity of the VDCs and SMCs but also increased their exposure and linkages with the respective organizations and departments for sustainability.

c) Stakeholder Participation

Beside the security concerns in the country and strong/stringent policies on INGO activities by the previous government, Solidar project was able to leverage linkages through agreements and MoUs, with relevant stakeholders including Rescue 1122, DDMA, PHED, District Education Authority, and other CSOs in district Layyah. These linkages and MoUs were not only for the project time line but subsidies and support have been promised/committed after the project.

d) Project Human Resource

The skills of the social mobilisers and technical knowhow of the team engineers were critical for effective rollout of the program in communities and schools. The project utilized the existing human resources (i.e. staff from the previous project) for the mobilization of the new project but unfortunately, the mobilization and hygiene staff members had to be replaced, as they avail other opportunities. This may cause the loss of institutional memory of the project and might have the relationship with community and implementation of activities. The two-year project had three project managers in different period of time, although the project coordinator has the main responsibility for the implementation but change management has its own affect.

e) Financial Resources

With the help of approved budget, project managed to complete the scheduled activities within the available financial resources. The smart financial management and procurement department manged to provide some additional support (i.e. additional elbow to hand pumps, electric water coolers, portable water coolers to schools, etc.) from the available funds. The financial planning, control and management was done at coordination office (in Islamabad). The approvals and funding of infrastructure was provided by the office, which created a delay and ultimately weak trust between the field staff, district vendors and service providers but on the other hands it resulted a strong internal control to make sure quality and value of money

4. Sustainability

The district Public Health Departments (PHED) and District Education Authority (DEA) were interviewed in Layyah and they acknowledged the strong role of Solidar in raising the level of access to safe, clean and sufficient water and flood resilient low cost sanitation services both in communities and schools. All the respondents mentioned

that Solidar is a key partner that responded to the Government's development expectations and community needs. They also recognized the relevance of Solidar's activities and in particular appreciated the funding of water and sanitation facilities in rural communities and schools.

MoUs were signed with Rescue 1122, District Disaster Management Authority, the Public Health Engineering Department, and District Education Authority to solicit their support during the project. The Project Manager confirmed that all the VDCs, SMCs, and DRR teams have been introduced with respective departments at the end of the project (April 2018) for future support.

PHED appreciated the efforts of Solidar to involve them in the project implementation activities, especially for water quality testing and using the Government-subsidised rate for testing to encourage the community to have the water tested regularly. Majority of the people interviewed were of the view that Solidar had responded quickly and positively to their demands. The officer in PHED ensured their support to the communities after the completion of the project. He also promised a free of cost water testing (which was Rs. 1,300) after the closure of the project, if the community members approach individually through the community organization i.e. VDCs or SMCs.

The district health authorities were closely involved in the project activities. The Solidar Project Manager regularly shared the progress and event information with the higher authorities, where needed. The linkage developed by Solidar have sensitised the PHED, the DDMA and created a high level of understanding among the government authorities which will remain intact even after the project has been closed. An additional positive effect is that the GoP will provide a free health services to the communities.

Rescue 1122 has taken on responsibility for further support the VDCs in both union councils. The representatives mentioned during an IDI that, "now these are our people", (registered with 1122) we will not only continue to build their capacities but will maintain their First Aid and Disaster Kits from special grants and funds of the Department.

The Rescue 1122 entered selected VDCs in the 2017 Punjab Disaster Response Competition, where the team Layyah took the 2nd Prize.

5. Impact

The data show a remarkable improvement in year-round access to safe, clean and sufficient water: 92% of project families have moved from no access to clean drinking water to full access because 265 water points have been constructed and are functioning all year-round for 24 hours a day. The permanent and easy access to water has changed the behaviour of people as they clear their closes frequently, brush their teeth and take bath regularly; the personnel as well was the environmental hygiene conditions have improved as people are more sensitised to manage the cleanliness of their home and their garbage. 97% of families' reported that they boil water every day for drinking purpose, up from zero percent in the pre-KAP survey.

A variety of indicators reflect the community members' satisfaction, comfort and improved hygiene due to easy access to latrine and availability of safe drinking water provided by this project, which was not possible before. Some of these are provided below.



"The best thing about the hand-pump is to take a bath any time, before we had to wait for the sun rise"

Earlier, I always hesitated to take bath after meeting my wife in the night. Now, having hand-pump just outside the house provided me comfort of taking bath at my convenience. (Mentioned by a male member during group discussion in Jakhar)



"Now we can eat as much as we want"

Prior to this project, we had no latrine at home and we had to control our diet and type of food to minimize the visit to field for defecation. Now, we are at least out of this bondage. (Mentioned by a woman during a group discussion in Lohanch)

Category	Community Level	School Level		
Infrastructure	 at the doorstep. The facility is most suitable for females, elders, and children of the communities. The community infrastructure (latrine, hand pumps, safe drinking water) has increased. The water points for clean and safe drinking water are available at the doorstep. The VDCs are available as a forum to discuss community issues frequently, accessible to both male and female members. First aid kits and DRR instruments are available for use during flood situations. 			
Behaviours	 Awareness increased regarding use of safe and clean drinking water and associated benefits, disadvantages of using unsafe contaminated water and associated diseases. Information and behaviour regarding personal, domestic and environmental hygiene has improved e.g. the female members mentioned that they wash their hands after using the toilets after feeding animals, and they take care that their kids wash their hands before eating. Within the community women and especially man are more and more taking care about their personnel hygiene. As water is available and easy accessible the male community are taking shower, cleaning their hands at critical point to avoid /or minimise health risk and they understand and know the importance of cleaning teeth more frequently and regularly. The consultant got the impression that the children have learned all steps of hand washing and practice this daily. Through knowledge transfer a high sense of ownership has been created within the communities to maintain the installed facilities. 			

	• Water purifying practices have improved between the project core beneficiaries and surrounded communities.			
Capacity Development				
Bonding and Organization	 Community formation, organization, and togetherness has increased Community has been organized around the VDCs and SMCs for social issues, and disaster situation. The CHCs have been rated as one of the key interventions to improve the leadership of the club members, and act as forums for other children to discuss and raise their issues. The same forum can be utilised to address and mitigate harassment and discrimination issues in the schools. 			
Linkages	 Linkages with PHED, Health & education department, schools, vendors, resource persons for WASH related services have been established and will be functioning even beyond the project time frame. Community have been introduced with Rescue 1122 and VDCs have been registered for future support and trainings. 			
Environment	 95% community members adopted garbage management practices i.e. throwing the garbage at a central place and burning it once it is piled. 			
Health	 49% of the female use ORS to avoid diarrhoea. The storage of safe water with cape/lid and a neat container is also increased to 100 % (as per post-KAP results) There is a reduction in children related diseases according to data from DHA and discussions with health officers 			
DRR	 Rely on early warning system has increased to 96%. 30% respondents started pre-flood arrangement (i.e. storing of ration) during monsoon season. School children have been informed about the early warning system, evacuation procedure, etc. 			

a) Impact on Overall Environment (Indirect)

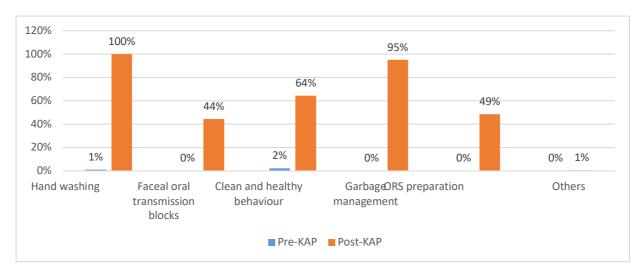
The project has benefitted all the segments of the community including male, female, boys, girls and school children are aware and practise personal, domestic and environmental hygiene. As mentioned some community members have built latrines from their own resources, project did not provided hand pump and training to all but water boiling practices is improved in surrounded villages too thru children and relatives, etc.

6. Equality of Access

a) Community Level

The women in rural areas are more exposed to the water than any other members of the community. From fetching to storing, cleaning to washing and treating to drinking, women are involved in all stages of water management. According to the post KAP survey, women's personal, domestic, and environmental habits improved significantly; washing hands before cooking rose (from 1% - 97%), general washing habits increased (0% to 39%), before feeding infants (58% of total respondents). Using soap for hand washing also increased from 3% to 99%. Having safe drinking water, having a tap in the courtyard, having a latrine in the house with sufficient water not only improved women's confidence and self-esteem, it also reduced their labour and most importantly it improved their health and that of their infants and children.

Akbar, who has polio, must always ask one of his family members for help if he needs to visit the latrine. He cannot walk and cannot manage the defecation by himself. He always needs someone to hold and help him. Using the Asian latrine for defecation is one of the most difficult parts of his life. Unfortunately, Akbar was not provided any support by the project.



Behaviour Change in Female Members

- b) School Level
 - Both boys and girls have improved their health and hygiene practices.
 - The CHCs empowered children to take leading role in different school activities.
 - Both males and females are SMC members, and participate in the school management process.
 - Improved sanitation habits developed in the children.
 - The 10 step hand washing has improved among children of targeted schools.
 - No ramps or special staircase with handle available at any facility for disabled children 11.
 - No support instruments, equipment (chair, wheel chair, clutches, etc.) as an alternate to commode in the toilet.

7. Knowledge Creation and Lessons Learned

a) Program & Interventions

Highlights	Issues
 The project completed all the milestones by the end of the project, and some extra augmenting facilities, services and goods were provided (both to community and schools) The low retention standard of the project staff was a challenge but did not affect the project activities greatly. The community, schools and partner organizations own the project. 	 Very limited interaction with special needs persons in decision making, especially while providing latrine facility both at school and community levels. The flush system was compromised (not flush tank was installed at any constructed latrine), to keep the cost low, which may cause environmental hygiene issue in the future. No Gender consideration in DRR and First Aid

¹¹ Because of the financial situation the project could not finance ramps, special staircases for PWD

•	Community ownership and sustainability is visible	•	Kits, (sanitation, jackets, tubes for rescue, etc.) No pumps were provided to blow the tubes for
•	The BCC component was well practiced (improved hygiene standards personnel,	•	rescue and search operation There was no ramp or western toilet seat in the
	domestic and environmental level) by the		schools or near the latrine for PWDs (in case
	children in the community and schools.		there is any).

b) Administration and Resources	Administration and Resources		
Highlights	Issues		
 No financial mishandling was found in the project. Despite the low retention of staff, the project met the deadline with desirable results. 	 Short project duration and low salaries did not allow experienced staff to stay till the end of the project. Although project provided major portion of the latrine construction cost but a low cost solution for elevated supper structure was not provided (e.g. community can also be trained in using local resources i.e. bamboo, bushes, straws, wood, mud, etc. for the construction of their latrines at their own) 		

c) Effectiveness

Community Level	School Level	
 It is important to continuously monitor the performance of VDCs; to ensure their smooth linkage with communities, preparedness towards disaster and established linkages with public departments. Some of the Head Teachers had a feeling that they were side-lined during the project and were not given a lead role in implementation and monitoring. 	lack of cleaning staff in the school. If the numbers of latrines are increased in school they maintenance staff should also be discussed with SMCs or DEA.	

d) Inclusivity for persons with special needs

Community Level	School Level
• There was no support for children with special needs e.g. there were no ramps in the schools for children with disabilities, or injuries in the school.	organization of First Aid kits.

e) Sustainability

- /	Sustainability				
	Community Level	Schools Level			
• • •	The activities can be handed over/transferred to VDCs for continuity and monitoring. VDCs have maintained saving accounts for the maintenance of hand pumps. HHs showed willingness to maintain their own latrines from their own resources. The Rescue 1122 has registered all the VDCs. The Post KAP survey showed excellent results with respect to ownership, capacity building and behaviour change towards use of clean water and latrine and these results confirmed during final evaluation.	 The SMCs will remain active with their mandate and additional responsibility of monitoring school facilities, water pumps, and ongoing capacity building of teachers and students on health and hygiene. They will also maintain the kits (DRR and First Aid) provided by the SOLIDAR Project. The maintenance of latrine and hand pumps will be managed by the District Education Authority, Layyah from school maintenance funds. 			

f) Future Community Priorities

In response to a survey question, the consultants identified the following areas as priorities for future interventions. Some of the intervention can directly address under WASH project but some (roads, sewerage, etc.) can be solved through linkages with the concerned departments and a local influence over politicians for

earmarking funds based on priorities and needs of communities.

Jakhar	Lohanch
1. Hand pump in the homes	1. Cemented Homes
2. Latrines in homes	2. Roads improvement
3. Sewerage system	3. Sewerage system
4. Girls school	4. Girls school

V. Recommendations

The following are the recommendations made by the evaluation team for future project interventions.

Sr.	Area	Community	School	
1	Project Design and Planning	 project. Interventions for PWDs should I program. 	hould be incorporated into the next potential be integrated at the early stage of the	
2	Staff and their Capacities	 The staff remuneration should be competitive in the market. This may result in retaining the competent and experience project staff. 		
3	Infrastructure & Facilities	by introducing flush systems.	The latrine design (both in community and school) may further be improved	
4	Linkage Building with Stakeholders	 The VDCs and community members may also be trained in using simple water testing meters (used by PHED) to simplify water-testing. An experience sharing event may be conducted between various VDCs where the members could share their best practices and knowledge. 	 A serious dialogue between the SMCs and DEA (CEO, DEA) is suggested regarding project interventions and their maintenance and ownerships. The SMCs may meet with other SMCs for knowledge and experience sharing and best practices. 	
5	Capacity Building	 Advance training for hand pumps and water tanks repair and maintenance should be imparted to selected community members. 	 More comprehensive training may be conducted for the children on DRR and evacuation system with frequent drills. The capacity of the members of the student clubs may be enhanced so that they become more effective in handling children's issues and disaster management especially at the time of evacuation. The role of CHCs can be improved especially about evacuation points, dealing with emergencies, etc. Better plans can be developed for the use of BCC posters. Orientation timing can be scheduled, frequent quizzes can be arranged. It is important to continuously monitor the role of SMC e.g. how often they meet, what is agenda items, what is the improvement in relationship with different departments i.e. DHA, DEA, DDMA, Rescue 1122, how often they meet CHC to monitor their activities and guide them, etc. 	
6	Equality and Inclusiveness	 Special needs for special persons may be taken into 	• Portable toilet seats may be provided for emergency situations and for the	

7	Emergency Kits	 consideration while addressing sanitation issues, i.e. latrine design. Interventions for PWDs should be included the early stage of the program. Women's personal needs and priorities should be considered and categorized in DRR and First Aid Kits. The air blowing pumps may be provided for blowing tubes to initiate rescue and search operation (Tractor/Truck tubes need a heavy compressor or pump to blow) use of disabled students. The women SMC members need more training and more encouragement to participate. The male SMC members should be made aware that women's participation is useful and necessary. The women's kits should include accessories and medicines related to female sanitation issues. Follow-up training on maintenance and kits organization should be arranged. The DHA or concerned officers can be linked with this intervention for the re- filling, maintenance and up-to-date medicines and respective trainings. 	
8	Knowledge Sharing Communication	 The linkage building and trust between partners and stakeholders may be exhibited through introducing quarterly newsletters, reports, and periodicals. The information can also be shared with community members occasionally so that they may know which department and individual are on board for their help and support. The project may inform community and stakeholders regularly about their activities so that other NGOs and partners may not take the credit. 	
9	Sustainability	 The project encouraged the community to contribute 20% of the cost as an in-kind contribution in the shape of unskilled labour. was the lead indicator of sustainability, which may be enhanced to self-help interventions. Training the local community in the proper use of local resources (bamboo, bushes, mud, etc.) will enhance ownership in the community and will help in ensuring sustainability of future interventions. 	