



**Access to
Safe Drinking Water
in Kotli - AJK**



Installation of Deep-wells for the vulnerable communities of District Kotli - AJK

PROJECT FINAL REPORT

Rural Aid Pakistan



One of the most pressing and fundamental health challenges the area faces is the non-availability of clean & safe drinking water.

“Hepatitis is three to four times more lethal viral infection in Pakistan where around 300 to 325 people are dying daily due to complications of hepatitis B and C,” – media reports (<https://www.dawn.com/news/1637326>)

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Step wise pictures of deep well-

ACRONYMS

AJK	Azad Jammu and Kashmir	KAP	Knowledge, attitudes, and practices
BCC	Behavior change communication	M&E	Monitoring and evaluation
CB	Capacity building	SDG	Sustainable Development Goal
CBO	Community-based organization	MOU	Memorandum of understanding
CBSD	Community-Based Sales and Distribution	NGO	Non-governmental organization
CDC	Center for Disease Control and Prevention	O&M	Operation and maintenance
CDWA	Clean Drinking Water for All	PHED	Public Health Engineering Departments
CDWI	Clean Drinking Water Initiative	PMP	Performance Management Plan
CH	Community hygiene	UK	United Kingdom
CRM	Complaint Response Mechanism	WASH	Water, Sanitation and Hygiene
CLTS	Community Led Total Sanitation		
CSO	Civil society organization		
DHS	Demographic Health Survey		
DRR	Disaster Risk Reduction		
HIF	Hygiene Improvement Framework		
GOP	Government of Pakistan		



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Executive Summary

In September 2021, Rural Aid Pakistan in partnership with Penny Appeal UK launched the project “Installation of deep wells for the vulnerable communities of District Kotli, Azad Jamun & Kashmir (AJK)” to ensure that water stricken communities have adequate access to clean water and knowledge of best hygienic practices.

The deep well project was designed with the goal of providing significant benefits to 5397 community members belonging to the most vulnerable population, who are currently facing severe challenges in accessing clean water. Its primary focus was to enhance the effectiveness and long-term sustainability of clean drinking water programs by implementing complementary activities such as hygiene promotion, community mobilization initiatives, and capacity-building efforts.

The primary objective of the deep well project was to enhance the overall health and hygiene conditions of the most vulnerable population. However, it was carefully designed to encompass additional secondary objectives. These included the improvement of livelihoods through initiatives such as homestead kitchen gardening, fruit tree plantation, and livestock rearing. Additionally, a key aspect of the project aimed to alleviate the burdensome task of daily water collection, which adversely affected both children and adults, by reducing the time and effort required for this essential activity.

The Deep-Well project started in September 2021 and concluded in April 2022 with total budget PKR 26.5 million and activities implemented under Deep-Well project supported the three key areas that included;

1) Accessibility: to ensure safe drinking water provision at the community level

2) Health and Hygiene promotion: The objective was to establish community-level health and hygiene promotion initiatives through informative sessions, aiming to encourage the adoption of safer WASH practices. These practices included essential behaviors such as hand washing with soap, appropriate latrine usage, avoidance of open defecation, proper bathing techniques, utilization of clean cloth and kitchen utensils, and the proper storage of safe drinking water and other domestic purposes. To effectively promote hygiene and behavior change, communication exercises were conducted through community-based WASH committees and engaged youth volunteers. These committees and volunteers played a vital role in disseminating information, raising awareness, and encouraging positive behavioral shifts related to hygiene practices.

3) Inclusion, Community Ownership and Capacity Building: The project promoted community ownership and facilitated the organization of targeted communities through WASH committees at the village level, utilizing participatory approaches.

These committees were well-oriented and trained to fulfill crucial roles in monitoring, operating, and maintaining the deep wells. Additionally, they played a pivotal role in driving behavioral change, promoting safer WASH practices within the village, advocating for sustainable solutions, and ensuring long-term viability.

The Deep-Well project was implemented through participatory approach by involving the targeted communities including men, women, youth, school going young children and PWDs in planning, site selection and installation of deep wells, implementation of awareness raising activities, procurement and monitoring of the whole project cycle. The hygiene promotion sessions included messages regarding personal hygiene, domestic hygiene, clean environment, hygienic food, clean drinking water and waste water management. Besides the hygiene sessions for adults, interactive and innovative hygiene sessions for school children organized at local schools including art & speech competitions, quiz competitions sensitization and awareness activities.

The project successfully provided technical assistance to local communities, enabling them to safely operate and maintain deep wells. It also focused on promoting safer personal and household water hygiene practices, while also educating the community about environmental hygiene. Rural Aid played a key role in training community members on the operation, maintenance, and protection of water deep-wells within their respective communities.

The project's achievements are as follows:

1. Improved Access to Safe Drinking Water: A total of 5,397 vulnerable individuals, including men, women, children and 74 persons with disabilities (PWDs) benefited from the project. The implemented measures ensured easy and sustainable access to safe drinking water in accordance with SPHERE standards.

2. Enhanced Knowledge and Sensitization: A total of 1,452 community members, including 447 men, 477 women, and 528 young children, were sensitized and educated on the importance of clean drinking water, safer health & WASH practices, and proper WASH (Water, Sanitation, and Hygiene) habits.

3. Establishment and training of Community Level WASH Committees: A total of 41 community level WASH committees were formed and trained, comprising 543 members, including 340 men and 203 women. These committees received comprehensive training on the operational and maintenance aspects of deep wells, emphasizing the importance of sustainability.

These accomplishments highlight the significant impact and success of the Deep Well Project in improving access to safe drinking water, promoting hygiene practices, and fostering community engagement and ownership.

Section I—INTRODUCTION



I.I About the Report

This report presents the findings of the Installation of 41 deep-wells project, a collaborative endeavor between Penny Appeal UK and Rural Aid Pakistan. The project, which commenced in 2021, aimed to address the water scarcity-related challenges faced by vulnerable communities in District Kotli - AJK. The primary goals of the project were to provide access to safe drinking water and improve the health and hygiene conditions of the targeted communities, benefiting a total of 5,397 community members. The project focused primarily on addressing severe water shortages in remote rural areas with limited access to clean water.

Objectives: The project had a clear and focused objective “vulnerable people have easy and sustainable access to safe drinking water according to SPHERE standards and enhancing the health and hygiene practices”.

This was achieved by facilitating their access to safe drinking water and promoting awareness about crucial hygiene practices to mitigate the risk of waterborne diseases, such as diarrhea, hepatitis A, and hepatitis E. Furthermore, the project aimed to strengthen and sustain the ongoing Safe Drinking Water initiative in District Kotli by implementing a range of complementary activities. These activities encompassed hygiene and sanitation promotion interactive sessions with communities and school going children, community mobilization efforts, and capacity-building initiatives and sanitation promotion sessions, community mobilization efforts, & capacity building initiatives.

Report Structure: This report provides a comprehensive overview of the project's activities, their outcomes, impacts, and the valuable lessons learned during the implementation phase by Rural Aid Pakistan. The report is structured into the following:

- 1. Project Background:** This section provides an overview of the project, including its purpose, partners involved, and the targeted communities in District Kotli of AJK.
- 2. Project Objectives:** This section outlines the specific objectives of the project, emphasizing the improvement of health and hygiene practices, and the enhancement of safe drinking water access.
- 3. Implementation Activities:** Here, the report describes the various activities implemented as part of the project, including the installation of deep wells, hygiene and sanitation promotion sessions, community mobilization efforts, and capacity-building activities.
- 4. Results and Impacts:** This section presents the outcomes and impacts of the project, highlighting the improvements in safe drinking water access, health, and hygiene practices among the targeted communities.
- 5. Lessons Learned:** The report concludes with an analysis of the lessons learned throughout the project's implementation, providing valuable insights for future endeavours in similar contexts.

By examining the activities, results, and lessons learned, this report aims to provide a comprehensive overview of the successful implementation of the Installation of Deep Wells Project, shedding light on the positive impact it has had on the lives of the vulnerable communities in District Kotli - AJK. The report consisting on the following sections:

Section I: Introduction, Section II: Context Analysis, Section III: Theory of Change, Section IV: Implementation Arrangements and Section V: Lesson Learnt.

Activities implemented under the Deep Well Project supported three areas of sanitation improvement to prevent wastewater-borne diseases: 1) access to safe water, 2) hygiene promotion; giving, and 3) community organization.



This report provides an overview of the project, which aimed to ensure community access to clean water in vulnerable and water-scarce areas.

The project involved the installation of deep wells, community mobilization efforts, technical training, and hygiene promotion activities. This report highlights the project's key initiatives, partnerships with stakeholders, and its broader objective of improving health and livelihoods in target communities.

1. Installation of Deep Wells: The project identified vulnerable communities with limited access to water and installed deep wells at these locations. This intervention aimed to provide a sustainable source of clean water to the communities in need.

2. Community Mobilization and Technical Training: To ensure the successful operation and management of deep wells, the project engaged in community mobilization efforts and provided technical training. This approach empowered the community members to take ownership of the wells and equipped them with the necessary skills to operate and maintain the infrastructure.

3. Hygiene Promotion: The project prioritized hygiene promotion to foster good hygiene practices within the communities. This included advocating for proper hand washing techniques, safe waste disposal, and appropriate storage of water for drinking and food preparation. Behavior change communication interventions were

implemented, with a particular focus on community volunteers, women volunteers, and individuals with influence over family hygiene practices.

4. Community Involvement and Ownership: The project emphasized community participation by involving the targeted communities in the design and implementation cycles. This approach aimed to enhance community ownership and foster a sense of responsibility in monitoring various project activities.

I.II Partnerships and Collaboration

The Deep Well Safe Water project forged partnerships with various stakeholders, including local civil society organizations, public health & engineering departments, district administrations, Government of AJK and other relevant entities. These collaborations ensured a coordinated and holistic approach to addressing water related challenges in the target communities.

Mr. Ch. M. Akmal Sargala Minister for Forestry, Wildlife and Fisheries Government of Azad Jammu & Kashmir inaugurated the project.

I.III Broader Objective and Impact

The overarching objective of the Deep Well Safe Water project was to improve the health and livelihoods of the target communities by reducing their vulnerability



to water borne diseases such as diarrhoea & hepatitis. Additionally, the project aimed to enhance water availability for animal care and homestead kitchen gardening & plantation of fruit trees, thereby contributing to improved livelihoods.

This objective was achieved through a combination of critical impact factors, including improved access to hardware (deep wells), behaviour change through hygiene promotion sessions, and social mobilization efforts. The project's multifaceted approach addressed both the immediate and underlying causes of water-related issues.

By implementing deep well installations, promoting hygiene practices, and fostering community involvement, the Deep Well Safe Water project successfully advanced its

objective of providing safe drinking water and improving health and livelihoods in vulnerable communities. The project's collaborative partnerships and comprehensive approach have contributed to sustainable outcomes and positive impacts in the target areas.

I.IV Snapshot of Project's impacts on other sectors in context of SDGs

The Sustainable Development Goals (SDGs) recognize the critical role of water in various aspects of people's lives, including health, environment, livelihoods, education, and economic development. The absence of safe drinking water has particularly profound implications for individuals living in poverty, marginalized communities & vulnerable populations. Globally, the lack of access to safe water and sanitation represents a significant threat to the health and well-being of communities, with children and persons with disabilities being particularly vulnerable.

However, the consequences of inadequate access to WASH extend beyond health outcomes. In regions with hilly or mountainous terrain, the arduous journeys required to collect water expose women and girls to the risk of violence, harassment and psychological stress. Moreover, women's valuable time is consumed by fetching water and caring for sick children, preventing them from engaging in livelihood activities, parenting, or other essential household responsibilities. Insufficient WASH facilities also have a detrimental impact on educational access and achievements.



Frequent illnesses and the time spent fetching water disrupt the regularity and continuity of schooling. Both girls and boys dedicate additional time to water collection.

Access to safe water within close proximity to homes, along with improved domestic hygiene and sanitation, are indispensable for the health, safety, and well-being of vulnerable women and children. The project has made significant contributions across various domains, including health, nutrition, livelihoods, education, and the protection of children and women, among other areas.

Health & Nutrition

The deep well safe water project significantly improved health of the local population by reducing the incidence of waterborne diseases and respiratory infections amongst the children and women.

The improved access to safe draining water and hygiene also helping children to be better nourished, preventing chronic diarrhea, which leads to enteropathy and under nutrition.

Livelihoods

The deep wells project reflected to improve water security and reduce hunger. The deep-well water systems provide water for productive uses in growing vegetables & fruit trees on homestead farms and animal drinking.



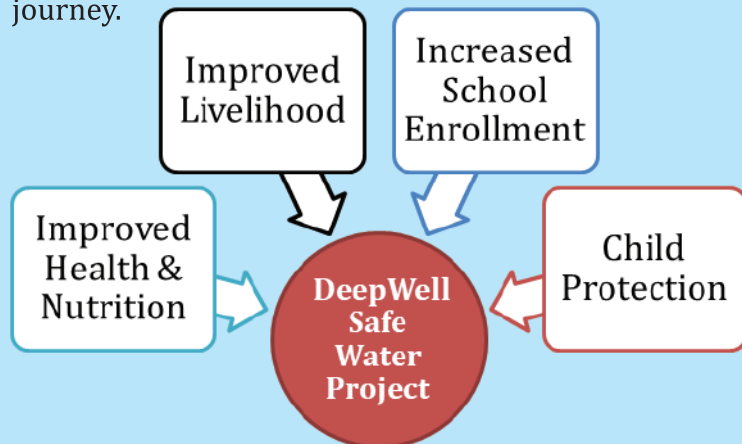


Increase School Enrollment Education

The Deep Wells Safe Water Project has significantly contributed to improving educational outcomes particularly in terms of safeguarding children, especially girls, from harm. The provision of safe water at their doorstep has resulted in a reduction in the time and labor previously spent on fetching water from distant areas on a daily basis. Consequently, children, particularly girls, now have more time available for studying and engaging in recreational activities. Moreover, the project has positively impacted school attendance rates due to a decrease in child illnesses, thereby enhancing the overall learning environment.

Child protection & participation

The deep wells safe water project promoted and respected the rights and dignity of women, boys and girls, especially the vulnerable segments. The availability of safe drinking water at nearby locations reduced the risk of abuse and exploitation of both boys and girls, as well as minimized the risks of physical and sexual violence during long journey.



Section II—CONTEXT ANALYSIS



Access to safe drinking water is a fundamental right for all individuals, just like clean air. However, the majority of Pakistan's population lacks access to safe drinking water, particularly in regions such as Southern Punjab, Sindh, Baluchistan, and AJK. Even in relatively developed areas, the availability of safe drinking water is limited. This issue is of utmost concern due to the fact that 50 percent of diseases in Pakistan stem from contaminated drinking water. Furthermore, knowledge about water purification methods is scarce, particularly in rural areas.

District Kotli, located in Azad Jammu Kashmir, is one of the many districts in Pakistan. It boasts a considerable population, estimated at 0.774 million, with the rural population accounting for 88 percent (0.684 million) of the total. According to the district health department, only 0.1 million individuals in the urban population have access to piped water, which is revealed to be unsafe according to recent media and health reports.

In rural areas, only 20 percent of the population somehow relies on deep wells or government water schemes, leaving 80 percent without access to water. The majority of the rural population in District Kotli depends on open springs or distant water channels, facing challenges in obtaining clean drinking water. The scarcity of water in mountainous areas of District Kotli severely impacts the lives of its residents. Extracting water from underground sources is a significant burden for the vulnerable communities in the district.

The mountainous areas of District Kotli suffer from severe water scarcity, forcing people to consume water contaminated with waterborne diseases, posing significant health risks. The main sources of drinking water in Kotli town are River Jhelum, groundwater wells, and springs. The town has seven tube wells distributed across different parts, pumping water to reservoirs for distribution to the urban population.

The aim of the project was to alleviate the hardships faced by the most vulnerable communities in District Kotli, known as one of the hottest and water-deprived places in AJK. Additionally, Kotli is grappling with a severe drinking water shortage due to the lack of water sources, widespread groundwater contamination, and inadequate response from government departments. These challenges are exacerbated by rapid population growth, inadequate urban and rural planning, and the impacts of climate change, making Pakistan the 8th most vulnerable country to climate change shocks.

The project successfully provided low-cost, localized, and sustainable deep wells to benefit 5,397 individuals in District Kotli. The selection of these sites was based on secondary data from the Public Health and Engineering Department, SDMA, and Rural Aid's assessments. Further extensive evaluations were conducted during the project to identify the most suitable and deserving locations in Kotli.

Project is in line with the objectives of “Thirst Program” by Penny Appeal and directly compliments the **SDGs 3, 6 and 13**. Rural Aid Pakistan being one of the leading development organizations of Pakistan undertakes multiple interventions in vulnerable areas of the country such as district Kotli. In order to reduce the water deficiency of the biggest district of AJK, Rural Aid partnered with Penny Appeal, UK to provide safe drinking water to the communities living in most water deprived areas of the district. A total number of 41 deep wells were installed to benefit the target communities.

Rural Aid's community-led approach ensured that the benefits of the deep wells reached the most deserving population. To achieve this, a comprehensive needs assessment and beneficiary selection process were implemented. Rural Aid actively engaged key stakeholders, including the community, government entities, and like-minded organizations, to ensure that the project effectively addressed gaps in the water, sanitation, and hygiene (WASH) sector.

Emphasizing efficient resource utilization and value for money, Rural Aid followed rigorous procurement and hiring policies to access the best possible solutions while optimizing funds. Additionally, the organization prioritized accountability, transparency, and harm prevention by implementing a robust complaint handling mechanism and safeguarding policy. Environmental considerations were also taken into account to prevent adverse impacts on the local population's well-being.

The project not only provided much-needed access to water for marginalized communities at their doorstep but also contributed to improving the health and hygiene conditions in the area. The availability of water facilitated the promotion of safe sanitation practices, as the shortage of water had previously led people to resort to open defecation.

Through this project, Rural Aid successfully reduced water borne diseases, lowered livestock mortality rates, and alleviated the burden on women who previously had to travel long distances to collect water. In line with its community-based approach, Rural Aid placed significant emphasis on the sustainability of interventions. Therefore, considerable efforts were invested in establishing, training, and equipping community based WASH committees. A total of 41 WASH committees were formed to serve as these committees, responsible for routine troubleshooting and maintenance of the deep wells.

Project has received lot of appreciation from the government and local stakeholders during the regular meetings that were conducted in the project's coordination committee. These committee meetings were a regular feature of the project and helped not only in sharing the lessons and progress of the project but also take on board the valuable ideas and opinions of experts. Based on the learning from the project, Rural Aid plans to carry out further similar projects in Kotli and do its best to provide safe drinking water to the water-stricken communities.

Section III: THEORY OF CHANGE



The Deep well water project model designed was a set of evidence-based practices in the three principal domains of WASH sector; Safe water provision, hygiene & sanitation and building community ownership.

The project intervention logic built upon the proven and effective approaches for impactful, scalable & sustainable results across verity of context. It therefore, provides a framework for inclusive WASH development programming in the target areas for future intervention. Moreover, it also provides guidance upon the standard operating procedures around water quality and post implementation monitoring, as well as greater prioritization of soft component necessary to assure key health outcomes, such as sustainable behavior change in hygiene and sanitation practice.

III.I Project Intervention Logic

Rural Aid's Deep-Well Safe Water Project plays a crucial role in improving the health of the target communities while also serving as a catalyst for development in areas such as livelihood, education, and protection. The project was implemented in collaboration with local community groups, ensuring the availability of safe, functional, and sustainably managed water at both household and community levels.

To ensure long-term sustainability, community actors were empowered with the skills and knowledge to manage, maintain, and repair the deep-well facilities.

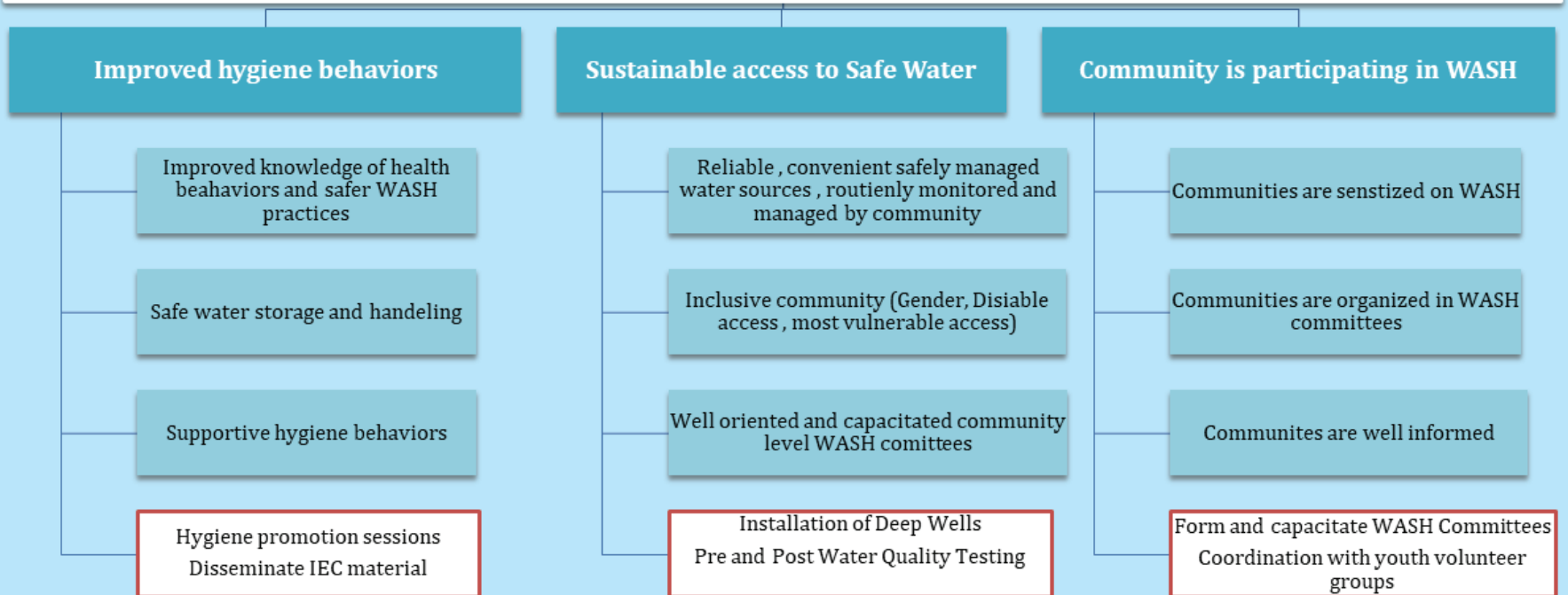
Alongside hardware construction and maintenance, Rural Aid actively engaged community volunteers, religious leaders, and influential members to promote behavioral changes related to water, sanitation, and hygiene (WASH).

The selection of beneficiaries for the Deep-Well Safe Water Project was conducted through an interactive process with the Public Health and Engineering Department (PHED), followed by a comprehensive baseline study.

The project's logic was designed to benefit all members of the household and the selected community, with a specific focus on women and children, particularly girls.

The strategic objective of this approach was to ensure that everyone within the intervention zone had access to sustainable and safe water before the project's completion. Rural Aid made intentional efforts to ensure that the WASH facilities provided were accessible, appropriate, safe, and sustainable for the most vulnerable individuals in the target community, including people with disabilities and those marginalized socio-economically, often women and girls. on the socio-economic margins, often women and girls.

III.II IMPACT : Improved Health and Wellbeing of the Community



III.III Table of Key Project Activities

Improved Accessibility	Need Assessment for the identification and selection of the villages: Rural Aid conducted a need assessment and identified villages for installation of deep wells as per criteria. The methodology of the need assessment included key informant interviews, questions from villagers on pre-designed format, focused group discussions (FGD's) and transit walk. Rural Aid developed a detailed need assessment report based on the findings and ground realities.
	Water Quality Assurance: Pre and Post water quality tests conducted for all the water sources to ensure the availability of clean drinking water and stop the spread of waterborne diseases. The quality test included biological appearance, turbidity, hardness, pH, and TDS of water.
	Procurement of the contractors
	Installation of the deep wells
Hygiene Promotion	Development of a behavior change strategy and a behavior change communication (BCC) plan for the project
	Development of hygiene promotion IEC materials
	Implementation of hygiene promotion campaigns through community volunteers and interactive sessions at community & school level
Inclusion, Community Ownership & Capacity Building	Involvement of socially excluded groups i.e. men, women, youth, children and PWDs
	Formation of community level WASH committees
	Training of WASH committees on operations, water source protection, water testing, maintenance and sustainability
	Training of community volunteers on household level water treatment, hygiene promotion and sanitation. The hygiene promotion sessions included messages regarding personal hygiene, domestic hygiene, clean environment, hygienic food, clean drinking water and waste water management. Besides the hygiene sessions for adults, interactive and innovative hygiene sessions for school children organized at local schools including art & speech competitions, quiz competitions, sensitization and awareness activities.
	Kitchen Gardening: Rural Aid educated and trained the partner communities on kitchen gardening including sowing practices, information about seasonal vegetables, plantation, manures, organic method, seeds, plants and other inputs.
Complaint Response Mechanism: Complaint response mechanism established at the village level to make the Rural Aid accountable to the beneficiaries. The CRM ensured protection and confidentiality of the complainant and also ensured that all the parties treated impartially.	

Table of Key Project Activities

Addressed Cross cutting themes

All the cross-cutting themes – protection, cultural sensitivity, gender, DRR and environment protection ensured in project implementation.

Gender:

The deep wells installed at the locations easily accessible for women and children without fear of harassment or are safe from the wild animals during the day time and in the evening. Also, addressed other vulnerabilities, e.g. old age and PWD during project design and implementation.

DRR measures:

The Washing pad of the deep wells constructed at least 10” above Natural Surface Level (NSL). It will make deep well resilient to 1’ flood water.

Environmental Protection:

The deep wells water is safe for drinking. The excess and waste water drained to kitchen garden and soakage pit respectively. Proper filled of bore with concrete to avoid external contamination, this prevents internal source from contamination.

Participatory Monitoring:

Participatory monitoring ensured during all the phases of project and the participatory monitoring is ensured at all stages of the project from the planning to execution and phase out.

Do No Harm:

The project has not affected local culture, religion, traditions and any other relevant factor. Do-No-Harm approach is reflected in all components of the project.

Section IV— PROJECT COMPONENTS AND SUCCESS



IV.I Accessibility to Safe drinking Water

To enhance access to safe drinking water, Rural Aid implemented a strategic intervention strategy involving the installation of deep-well boreholes to tap into groundwater sources. District Kotli, situated in high-altitude mountain ranges, faces significant challenges in terms of water resources due to hydrological conditions in the area. Decreased rainfall and changing weather patterns over the past two decades have led to a decline in underground water recharge, resulting in a lowered water table. In light of these underground hydrological factors, Rural Aid proposed the utilization of deep groundwater as an alternative water source for the people in Kotli district. Deep wells play a crucial role in increasing water supply in these mountainous regions, enabling communities in need to access water more easily.

The process of installing the 41 deep wells began with a comprehensive site identification process. Rural Aid conducted initial meetings with stakeholders, including community members, local elected bodies, and representatives from various departments such as Public Health and Engineering, Social Welfare, and District Management. These consultations aimed to identify the most vulnerable areas within the district of Kotli. Additionally, area profiling was conducted to gain a better understanding of the specific needs and circumstances of the target communities. Subsequently, Rural Aid initiated a baseline assessment and beneficiary identification process to identify and prioritize the most vulnerable beneficiaries for the project.

The selection of potential sites for deep well installation was further determined through geophysical analysis. Factors such as discharge potential, depth of productive aquifers, water quality, location characteristics, and the convenience and accessibility of the water site were taken into consideration when determining the optimal points for the installation of deep wells.

The installation of the deep wells executed by the hiring of well-equipped vendors where the local communities have taken the full charge on the monitoring of the entire process.

A certified lab to ensure the quality of water through performing pre and post water quality tests included in course of action.

The overall course of action has the following steps;

- Identify the sites for installation of deep wells
- Start the construction work of engaging the
- Perform pre and post water tests
- Installation of Water Storage Tanks on the concrete slab
- Installation of electric powered water pump
- Build the drainage line
- Open the well for use by the community

The installation of deep well at the convenient location of the communities has impacted positively the target communities.

**IV.I
THE
RETURN OF
HAPPINESS**



When the sun is setting down and its dim rays spread a sense of joy and silence all across the village Keri Narakot. Then the sounds of happy chatter & pleasant laughter of some adolescent girls in the courtyard of a small house at the foothills of the village add more glory and magnificence in the environment. Their life is simple and sweet, and they like it that way.

Their father, Abdul Qayyum, says life didn't always feel like this. Few years ago, in an accident my leg was amputated, I was not able to bring water because it was far away, on a hilltop, so every evening my wife, and daughters spent time fetching water.

Persons with disabilities, especially those living in mountainous areas, encounter cumbersome challenges in access to water. Abdul Qayyum is one if he lives in Keri Narakot village of district Kotli AJK belonging to a marginal income segment. He has a five-daughter age ranging from four years to fourteen.

While living in a water scarce village, fetching water from far-flung and unprotected springs is a hard-hitting problem that makes life miserable, but this suffering turned into a state of torment when in 2013, my leg amputated as a consequence of a mine blast.

“Water is life, but to get this life my daughters have lost their childhood” Said Qayyum , while saying this, his eyes became wet.



Says Qayyum, “Before that disability, I used to fetch water myself, because the spring was fairly far from our house, and the hilly track leading to the spring was not so favorable for a lonely woman and girls. But my inability came in my way - my wife and daughters reserved this responsibility, even our 3 years youngest daughter joined her sisters in daily water exercise.”

Qayyum says, most of her daughters' time would have been spent on water fetching - at least 2 hours in the morning and more or less in the evening, but this huge effort would not helped us bring adequate water for entire household chores e.g. washing, bathing and animals etc. Earlier, I also had some livestock, which I trimmed because of water dearth.

Says Qayyum, "Before that disability, I used to fetch water myself, because the spring was fairly far from our house, and the hilly track leading to the spring was not so favorable for a lonely woman and girls. But my inability came in my way - my wife and daughters reserved this responsibility, even our 3 years youngest daughter joined her sisters in daily water exercise."

Qayyum says, most of her daughters' time would have been spent on water fetching - at least 2 hours in the morning and more or less in the evening, but this huge effort would not helped us bring adequate water for entire household chores e.g. washing, bathing and animals etc. Earlier, I also had some livestock, which I trimmed because of water dearth.

The water gave them back their time to play and study.

"Qayyum's daughters have sufficient time to play in the evening and go to school regularly, without absenteeism and delays, " Qayyum says.

Having more time has returned back evening play and pleasant laughter's of her daughter.



Once the community had water access, they elected Qayyum the leader of the community water management committee. With the knowledge he gained in the hygiene sessions, he has built an accessible latrine for himself at his home and introduced healthy hygiene habits to his family. He has redeemed some goats and a milking cow because of close access to safe water. His wife has cultivated a small land and grown vegetables to meet their kitchen needs.

IV.I.II

A DROP FOR
LIVELIHOOD



Located amidst the mid-altitude hills of the Himalayas ranges, besides a dirt track in a remote village of Kotli district and you will find Amjad Mehmood, irrigating his vegetables by a newly built water point -- It is Amjad who has changed the destiny of his family by turning water in to productivity.

With his dynamic spirit and warm heart, it is no wonder that Amjad has emerged as an entrepreneur who is becoming self-sufficient and changing the economic situation of his family. This man is thriving in the rural area of District Kotli, – and it started when the Rural Aid and Penny Appeal just added water to his land.

Amjad Mehmood resides in Sania Ghai village of Charoi in Kotli district Azad Kashmir. He has three children including two daughters aged between 1.5 and 5 years. He was an unskilled laborer who worked on demand in the local market. His earnings remained confined within 10,000 to 12,000 thousand rupees per month.

Six months ago, Rural Aid and Penney Appeal installed deep-water well on Anwar's land through the community engagement and participation and the well now provides reliable water service to 27 families in the village, which means Amjad and his village community employ less time walking for water, children of his village can dedicate more time to their education -- this means households don't have to worry about the health consequences of consuming unsafe water and can thrive.

Before the intervention of Rural Aid Pakistan and Penny Appeal a year's back, the entire village was facing a shortage of safe drinking water; the villagers were barely able to meet household water demand.

Women and children walked long distances everyday to fetch contaminated water from open sources. Amjad was no exception, even his 4 years old son was also engaged in water fetching. Amjad and his family had to walk for an hour to fetch drinking water – at least 2-3 rounds per day cost him physically and economically.

Amjad would cultivate a chunk of land near his house, but dependency on rains and shortage of readily available water would not ever encourage him to cultivate.

Through the village WASH committee' consultation, Amjad volunteered to provide a piece of land for installing a deep well. After a detailed survey, Rural Aid Field Engineers approved the site for installation of a deep well.

After the well was built, the local community WASH committee – a group of people in charge of monitoring and maintaining the deep well. It was no surprise that the community chose Amjad to lead this committee.

Says Amjad "Before this safe water facility was built in our village, people used to get diarrhoea, malaria and other diseases all the time - today everyone in my village has safe water and no one has diarrhea, typhoid is on the decline. It's all because of the blessing of safe water."

Amjad says, " Now I devote more time to my work, I planted fruit trees and cultivated the various vegetables on my small land, which gives me good return, and I have also raised 4 goats through which I can collect sufficient milk for my family use. My children are getting healthier and dedicating more time to their schooling."

This deep well is an important source of livelihood and healthy living for my family, my community and myself. The entire village community is overjoyed to have this blessing at our village.

Amjad's influence has spread beyond the community WASH Committee' role - he has also become an ambassador of hygiene promotion.

Having good knowledge of personal hygiene, Amjad is demonstrating how families and his surrounding community can adopt safer health and hygiene practices. **This all is because of the safe drinking water at my doorstep.**



IV.II Hygiene Promotion

Rural Aid conducted a comprehensive formative study to gain insights into the local water, sanitation, and hygiene practices of the target communities. The key findings from this analysis guided the development of a behaviours change communication and hygiene promotion plan. To effectively implement this plan, Rural Aid trained a dedicated group of community volunteers and organized multiple meetings and hygiene promotion sessions in the 41 communities where the deep wells were installed within the district of Kotli. These sessions were conducted both at the community level and within households, and other individuals were trained to engage in interpersonal communication initiatives.

The hygiene promotion component, led by Rural Aid teams with the active involvement of community volunteers, targeted families and households with a particular focus on school-going children, especially those under the age of five. To reach this important audience, Rural Aid relied on community volunteers, religious leaders, and members of the community WASH committees.

The WASH committees are playing the vital role at village level for information dissemination, awareness raising, advocacy and promotion of safer WASH practices.

Various channels were utilized for hygiene promotion at the community level. For instance, religious leaders were mobilized to deliver hygiene promotion messages during Friday sermons, reaching a wide audience comprising fathers and children. Women volunteers conducted hygiene sessions inside households, engaging with mothers and adolescent girls to promote hygienic practices. Members of the WASH committee organized separate sessions within their respective communities to demonstrate proper hygiene behaviours.

The paramedical staff at local Basic Health Units (BHUs) also played an active role in mobilizing communities and emphasizing the importance of hygiene practices. Additionally, local community-based organizations (CBOs) and other civil society groups supported hygiene promotion efforts at the local level, incorporating hygiene awareness messages into their existing social welfare and awareness activities, thereby amplifying the reach of the hygiene promotion campaign.

Women members of the WASH committees showed exceptional dedication and support for the hygiene promotion campaign, as highlighted by Seema Bibi, one of the committee members.

**IV.II.I
SQUAD OF
HYGIENE
PROMOTORS**



Seema seems middle-aged but her intentions are youthful, she is a force for hygiene promotion at her community, in Kotli. She along with her five daughters has become a squad of hygiene promoters who are passionate to promote health and hygiene awareness in the village. Once a week, the squad holds a hygiene session in their community, everyone at her village in district Kotli knows that hygiene ensures health.

"Water is important because it helps keep our bodies healthy," shares Seema. "Better hygiene practices also help prevent the spread of diseases. If we are sick, we can't go to school," said her daughter Abida.

Before the safe water facilities were installed at her village, Seema along her community women would have to walk two miles everyday to fetch water. Because the village is situated on a hamlet a mile from open water source, the mother along with her daughters would usually walk twice and even thrice when they needed extra water on some special events or occasions, but that would lead to absence from school or time away from class.

"Now her daughters and other girls of her village don't miss classes because of devoting more time for water fetching," says Seema.

Seema Bibi, 50 years old widow, a mother of nine children (5 daughter) lives in Munil Kallar Gibran village of Kotli district. Hailing from a lower economic background she does not have any other means of earning except buffalo and subsistence agriculture to make a living by getting milk from it and selling it at the local market. Her monthly income from selling milk is eight to ten thousand Pak Rupees. She owns a small rain-fed agriculture land in front of her home where she grows wheat crops for her family use.

Village Munil Kallar Gibran falls under severe water scarce zones of the district Kotli , communities in these villages everyday confront tremendous challenges of water shortage. Fetching water from the hilly terrain further elevates security and life risks that have been observed in the past.

Water shortage not only made these people suffer, but Seema and other women of her village were also not familiar with basic health awareness, due to which water-borne diseases were quite prevalent in the entire village, especially among children.

A few kilometers away from the village was a basic health center, which was always overcrowded by the diarrheal patient inflow.

Availability of water and hygiene awareness has changed the destiny of our community." Says Seema.

Seema got an opportunity to participate in this great cause when her villagers through a group consultation elected Seema as their leader and nominated her as their ambassador for embracing this change. Her passion for this big change was so high; she happily donated land for the installation of deep well.

"The village community came to me because I've always been passionate about hygiene and health promotion," Seema said.

Seema's passion about hygiene promotion spread beyond herself – she partnered her five daughters in her campaign and conducted various sessions with other women on how to maintain better hygiene.

Whenever I used to go to the hospital, I used to feel a lot of pain especially seeing the children suffering from diarrhea.

I feel very satisfied that now women of my village have started adopting good health and hygiene habits. It is very important for women to be part of hygiene promotional activities because women have more responsibility for households' hygiene.



IV.III Inclusion, Community Ownership and Capacity Building

To ensure the long-term sustainability of the project, Rural Aid actively engaged the target community, fostering a sense of ownership. This participatory approach involved the community in the planning, implementation, and management of the deep-well project.

Rural Aid's approach prioritized the involvement of socially excluded groups, such as women, youth, and people with disabilities, promoting community ownership and good governance of the deep wells installed at the community level. Through social mobilization and community engagement efforts, active community members were identified and enrolled in WASH committees, which play a crucial role in ensuring the sustainability of community water systems.

The community level WASH committees have various responsibilities, including overseeing the day-to-day operations of the deep wells, establishing procedures for community members to access water, and planning for future operations and maintenance. These WASH committees also received tool kits and training on operations & maintenance of deep wells and to conduct hygiene promotion activities within the community, aiming to bring about behaviours change and improve hygiene and sanitation practices at both the community and household levels.

Additionally, the WASH committee members are connected with service providers and contractors to address any maintenance or repair needs that may arise in the future.

To promote gender equality and women's inclusion, the WASH committees actively encourage the participation of women and young girls activists and support their leadership roles within the committees. This emphasis on women's involvement aims to challenge traditional gender attitudes and roles.

Capacity building training has been a crucial component of the project, involving multiple stakeholders such as social welfare officials, representatives of the Public Health and Engineering Department, district management, youth and women's groups, religious leaders, and local authorities. These stakeholders have been oriented to define their responsibilities throughout the project's lifespan and beyond, ensuring the continued operation and management of the deep wells.

The community level WASH committees also mobilize the local communities by promoting safer WASH practices and addressing water quality issues, while emphasizing the importance of environmental cleanliness.

Section V: LESSON LEARNET



1. Employing a participatory approach and ensuring the inclusion of all community groups proves invaluable in fostering active community participation, cultivating a sense of ownership, fostering resilient communities, promoting safer WASH practices, and ensuring the long-term sustainability of the project.

2. The successful implementation of the project can be attributed to the engagement of local communities in the planning and execution stages. Notably, the formation of various community groups, particularly the WASH committees, has resulted in the acquisition of invaluable knowledge and experience in promoting safer WASH practices and building the capacity needed to sustain water systems. Equipped with this knowledge and experience, these community-based WASH committees have emerged as effective advocates for creating awareness and driving behavior change regarding water, sanitation, and hygiene.

3. A significant milestone in engaging communities and fostering ownership of the deep-well operations and maintenance was achieved through raising community and household awareness about the importance of safe drinking water and good hygiene practices. In response, the target communities demonstrated their commitment by donating resources, such as land for the installation of deep wells, and consistently bearing operational and maintenance expenses.

4. Despite the positive outcomes of the project, concerns surrounding the quality of drinking water in the district persist. Alarming results from the Public Health and Engineering Department's survey of water supply schemes revealed that approximately 80 percent of the water sources in rural areas were contaminated with bacteria. Shockingly, access to safe drinking water is limited to less than 20 percent of the population in Kotli district.

5. Household-level water treatment practices remain dismally low, with less than 5 percent of the target areas implementing such measures. Surprisingly, over 95 percent of respondents in the baseline survey admitted to not boiling water before consumption and neglecting to perform any water quality tests. This prevailing misconception underscores the urgent need for widespread public awareness campaigns.

6. It is imperative to provide communities with comprehensive knowledge on domestic hygiene, sanitation practices, and water treatment techniques in order to mitigate the risks of waterborne diseases and respiratory infections. Equipping communities with such knowledge & skills will play a pivotal role in safeguarding public health and well-being.

Step wise Pictures of Deep wells



Figure 1: Step 1 (Layout)



Figure 2: Step 2 (Boring)



Figure 3: Step 3 (Louring)



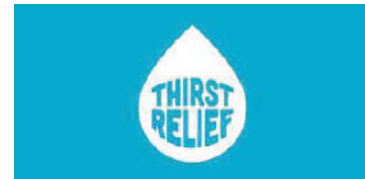
Figure 4: Step 4 (Construction)



Figure 5: Step 5 (Construction completion)



Figure 6: Step 6 (Beneficiary fetching water)



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