

## **Provision of clean drinking water for the most vulnerable and marginalized population**

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Water is a basic need of life. It must be pure, Portable, wholesome and safe for human consumption. The water should meet the drinking water quality standard and parameter recommended by World Health Organization and or Pakistan Drinking Water Quality Standard with regard to its physical, chemical, bacteriological, and biological quality of water. According to standards safe drinking water must have 0 coliform per 100 ml, Arsenic less than 50 ppb and having required minerals and salt. It is the core responsibility of water services provider to provide and maintain safe drinking water. According to National drinking water Policy All people have access to safe and sufficient quantity and quality of drinking water.

Public water points are sufficiently close to households to enable use of the minimum water requirement. The quantities of water needed for domestic use is context based, and may vary according to the climate, the sanitation, facilities available, people's habits, their religious and cultural practices, the food they cook, the clothes they wear, and so on. Water consumption generally increases the nearer the water source is to the dwelling.

According to sphere standard 2011 minimum need of water for a person per day is 15 litres as 2.5-3 litres per day for survival needs- water intake (drinking and food), 2-6 litres per day for basic hygiene practices and 3-6 litres per day for cooking needs. Similarly maximum 250 individual per water tap based on flow of 7.5 lpm per tap, 500 individual per hand pump based on 16.5 lpm per hand pump, average distance from any shelter to water source should not be far than 500 meters. But all these depend on climate, individual physiology, social and cultural norms and food type as well. In extreme situations, there may not be sufficient water available to meet basic needs and in these cases supplying a survival level of safe drinking water is of critical importance. In most cases, the main health problems are caused by poor hygiene due to insufficient water and by the consumption of contaminated water.

In District DI Khan water quality has been a question mark. Water sources at different stratum are exposed to Arsenic contamination as river Indus is suspected the main cause for contamination. According to assessment conducted by Aman, the data shows that the situation is more alarming in post flood scenario. The Union Councils: Choudhwan and Daraban of Tehsil Kulachi, District DI khan are composed on **61050 populations, 97 villages and 7718 households**. Aman conducted a rapid assessment of all the 85 villages and hamlets to find out the most vulnerable population where the flood has been washed away the water sources and population has no access to safe drinking water. **97 villages comprised on 19775 population(4578 women,4766 men,3538 girls (5-18 years) , 3678 boys (5-18 years), 1578 <5 years girls and 1637 <5 years boys )** do not have access to safe drinking water according to meet the sphere standard water supply needed for survival and other human needs. Water supply schemes like hand pumps, dug well, etc have been damages and the water has been exposed to contamination.

The impact of such an alarming situation was observed in shape of Water born and water related diseases as they were common due to insufficient supply and miss management of supply. The most vulnerable population **women, children and elderly** are suffering much due to hard terrain, difficult access due to purdha system, mobility, poverty and lack of awareness. The target area is at high risk and the vulnerable population is in intense need of proper water supply to fight against mortality and morbidity in the area.

### **Aman Proposal:**

Aman organization proposes 68 numbers of Community Hand Pumps as per 250 populations to ensure proper water supply to 19775 population and health hygiene sessions will be conducted in the area to create awareness and bring a sustainable development through Behavior Change Communication.

## **Project Objectives**

- To ensure 100 % access to safe drinking water of target population
- To reduce the water related / born diseases in target communities
- To develop permanent monitoring mechanism at community level

## **Proposed activities:**

1. **Advocacy for institutional strengthening:** water and sanitation services provider will educated and liaison will be developed to bridge up the community and service providers for sustainable development and resolving the issue.
2. **Setting of social mobilization team and training:** Social mobilization team will be trained properly to conduct broad based community meetings and corner meetings to create mass awareness
3. **Awareness rising for improved hygiene and water behavior:** To raise mass awareness on the importance and use of safe drinking water, a series of activities would be carried out. Details of the activities are given bellow.
  - 3.1. **Sessions on safe drinking water:** the target population would be aware on the safe handling techniques for water and domestic water treatment. Messages would be disseminated with the help of Information Education and Communication, IEC, material. The IEC material would be designed and printed in National and local language.
  - 3.2. **Training on water quality monitoring:** At district level the capacity of water providing agency would be enhanced on water quality monitoring. Water quality surveillance system would be established and government official would be trained on safe drinking water.
  - 3.3. Community based training on domestic water treatment and handling: the target community/ committee members would be trained on water quality and safe handling of water.
4. **Water quality testing:** water quality tests like Bacteriological, chemical and physical quality of water would be tested. Each water source would be tested and the result would be shared with Govt. and Donor. Water sample would be also tested at proposed site before installation of hand pumps.
  - 4.1. Chlorination /disinfection: The contaminated sources would be disinfected with Chlorine. Quantity of residual chlorine would be maintained according water quality standard. The hands pump/ water source found for Arsenic contamination would be reinstalled in safe place and the water of the source would be treated with Arsenic filter.
5. Installation of hand pumps: After water testing hand pumps would be installed in safe place where contamination level for bacteriological , physical and chemical specially e- coli , Total Dissolved Solid TDS and Arsenic is negligible.

## **Implementation Strategy:**

Aman has devised a strategy to achieve objectives of the proposed activities. According to strategy efforts would be made to establish alliance with Govt line department and agencies. An MoU will be signed with District Govt and govt. staff would be trained. After alliance building social mobilization team, comprises of six members, would be established and trained on water quality monitoring, hygiene promotion and water related issues. After training the SMTs would select target area and identify community activists. The community activists would be trained on water quality monitoring mechanism.

They would provide support in need identification and prioritization, mobilization, management of water facilities etc.

After need identification the target beneficiaries would be identified and they would be provided with safe drinking water with the help of hand pumps.

**Community involvement:** Aman believes in participatory approach and peoples empowerment, and according to Aman strategy community will be evolved in the process to take the ownership and create a sense of responsibility.

**Need identification:** People will be benefited from the scheme on need basis and they will be guided and trained to identify and prioritize their needs and manage accordingly.

**Role of stakeholders:** All of the stakeholders will be oriented through advocacy seminars, BBCMs and training sessions. The stakeholders will be given responsibilities to create a sense of empowerment and responsibility.

**Identification of project beneficiaries:** project beneficiaries are already identified during the need assessment : 19775 population(4578 women,4766 men,3538 girls (5-18 years) , 3678 boys (5-18 years), 1578 <5 years girls and 1637 <5 years boys )

**Project Beneficiaries:**

Bellow given table shows the direct beneficiaries of selected union councils Daraban and Choudhwan, Tehsil Kulachi, District DI Khan with age breakups according to Aman assessment. Moreover people of the nearby UCs / villages, visiting people and employees of government departments and other organizations may be indirect beneficiaries of the proposed project.

Union Council	Girls <5 Years	boys < 5 Years	Girls 5-18 Years	Boys 5-18 Years	Women	Men	Total
Daraban	980	1017	2198	2285	2844	2961	12285
Choudhwan	598	620	1340	1393	1734	1805	7490
<b>Total</b>	<b>1578</b>	<b>1637</b>	<b>3538</b>	<b>3678</b>	<b>4578</b>	<b>4766</b>	<b>19775</b>