## 10General information معلومات عمومی

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| **FCDO – Driving Action for Wellbeing to Avert Mortality (DAWAM) Project**  **تلاش برای رفا و کاهش مرگ و میر** | |
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| **Administration of survey** | **مدیریت سروی** |
| Name of province: | Ghor |
| Name of district: | Saghar |
| Name of health center | Okhry |
| Health Center Type: please select one ( H3, CHC,BHC,SHC) | BHC |
| Building ownership (private or governmental) | Government |
| Number of clinic personnel | 10 |
| Number of patients visited in clinic (daily basis) | 100 |
| Number of hospitalized patients (the max capacity) | N/A |
| Name of surveyor(s) | Farid Ahmad Qaderi |
| DATE of survey | 06-June-24 |

## Description of workتشریح کار

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| **Scope of intervention**  **عرصه حمایت** | | **All three component require major maintenance:** | |
| **Perimeter protection** | | The provision and improvement of Water, Sanitation, and Hygiene (WASH) facilities play a pivotal role in safeguarding human health and overall well-being. These initiatives serve multifaceted purposes, ranging from the prevention of waterborne and diarrheal diseases to the control of vector-borne illnesses. Additionally, they contribute to the enhancement of health and nutrition outcomes, mitigate the risk of epidemics, and foster dignity and safety among communities. Economically, investing in WASH facilities yields significant benefits, while also ensuring environmental protection and alignment with international sustainability and health standards.  To enhance the capacity of healthcare workers to uphold hygiene standards, ActionAid is committed to revitalizing and enhancing existing Water, Sanitation, and Hygiene (WASH) facilities in targeted Healthcare Facilities (HCFs). | |
| **Clinic map** نقشه کلینیک | | | |
| GPS of HCF: Please collect the GPS related HCF building جی پی اس نقاط کلیدی: لطفا جی پی کلنیک مربوطه را بگیرید: | | | |
| 1 | N: 33°38'33.63" | | E: 63°35'49.34" |
| Please draw a freehand sketch of the HCF facility; point out : Main building – Sanitation facilities, water source , waste disposal site ) | | | |
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## Project feasibilityامکان پذیری پروژه

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| **Parameters inspection and findings**  **بررسی پارامترها و یافته ها** | Background information: Health facility services are a fundamental right for every individual. However, communities located in the catchment area of Okhry faced difficulties due to the far distance from the center of Saghar district.  Healthcare Facility was constructed 14 years ago by the government  The healthcare facility (HCF) is staffed by two nurses (male and female), a midwife doctor, two vaccinators, a nutrition consultant, a distributor for nutrition items, a pharmacist, a cleaner, and one male guard, totaling 10 personnel.  The healthcare facility is located in the Okhry Valley, 38 kilometers away from Saghar district. This facility serves the people living in this area. The clinic can serve about 100 outpatients on a daily basis, with 40 males and 60 females.  The main challenge facing this health center is the lack of clean water inside the clinic building and sanitation services, which leads to the spread of diseases. Currently, the water of the clinic is supply from the existing stand tap which is out site of the building and did not connected with the plumbing system.  Therefore, the ActionAid office technical team had a technical survey during the observation and technical survey the main problems found in this Sub Health Center (SHC)are as follows:  -The building water supply system and the waste water system are damaged and need to fundamental repairing  -The water supply system of the clinic is from the existing stand tap which is out site of the building and did not connected with the plumbing system.  -Due to poor compaction of clinic room's floor all ceramic and tiles damaged completely need to replace  - The dry latrines need to be replaced with a toilet system that includes a flush tank.  -There is not any protected waste management system in the HCF field and they are using from a metallic stow for burning the wastes, the waste pits are not protected and the direction of the smoke is north to south that is the direction of wind blowing which is harmful to houses near to clinic and clinic staff and patients.  -the existed septic tank need to repairing (the covering slab of septic tank damaged need to replace and one partition wall well construct)  - The OPD rooms, vaccination room, Nutrition room, Hal, all baths and toilets have no floor drain and also the tile, and ceramic are completely damaged need to replace and the delivery room has no bath and toilet adjacent to it. Water source For both clinical use and drinking purposes, the water supply at the Okhry Healthcare Facility (HCF) is provided by a public gravity water supply network that also serves the Okhry community. During the survey, the tap within the Okhry HCF compound showed good water yield and quality if we connect this tap to the clinic water supply system then the lack of water inside the building will be solve. Stand Tap: The tap within the compound is currently connected using a HDPE pipe with a faucet but lacks a reinforced concrete (RCC) stand and apron, making it vulnerable to damage. In winter, the tap is left open to prevent freezing, increasing the risk of breakage and causing persistent leaks. These problems undermine the reliability and efficiency of the water supply, underscoring the need for a more robust and winter-proof solution. Water storage and distributionWater Tanks There is one high-capacity polyethylene water tanks installed on the roof of the Okhry Healthcare Facility (HCF) main building. The capacities of this tank is 1000 liters the existed tank have well-maintained pipes and fittings, free from any leakages or damages. The inlet and outlet pipes are thoroughly insulated, providing excellent resistance against freezing during the cold season.  However, to avoid any shortage the 1000-liter tank's capacity for cold water is insufficient to meet the facility's needs. Increasing the volume of cold water storage is necessary to ensure a consistent and reliable water supply for the HCF. Water reticulation outside the compoundsHand washing In total 8 hand washing sinks are installed inside the clinic need to repair and connect to the system and 6 new hand washing sink will install. Bathroom There are two bathrooms inside the building. However, they do not have bath fixtures such as a shower or floor drain. They were built locally and during bathing, clinic staff use a jerry can. Additionally, these bathrooms are not connected to a septic tank. The drain water from the bathrooms falls close to the wall, which can cause damage to the wall. Latrines There are currently four single latrines at the clinic, but no proper toilets available.   * The latrines are locally constructed and lack modern toilet facilities. * The interior surfaces of the latrines, including the walls and floors, are neither washable nor easy to clean. * There is no access to water in the latrines. * The latrines are not equipped with facilities to accommodate persons with disabilities (PWDs).  Septic Tank: The Healthcare Facility (HCF) has a stone masonry septic tank with dimensions (3.7x1.7x2.3). Although the stone masonry work has been completed, the septic tank lacks a slab and pipes. The inside of the tank is filled with soil and garbage. Waste management The following process and system for solid waste collection and disposal are in place at the Okhry Healthcare Center: Waste collection and separation: Okhry HCF doesn’t have an incinerator and pits to dispose of the waste in separate pits they burn the waste traditionally a bit far from the HCF building in the hell which is not safe and sometimes the wind and rain bring the ashes close to the clinic. They excavate the hell 50cm to 1m depth then they bury the sharp waste and organic waste together in this pit and then for new waste they do the same which is not safe and this practice is very harmful.  According to WHO’s requirements, the environment must be protected against clinical hazardous waste and also should be secure from domestic waste generated within healthcare facilities. For the safe disposal of the waste, we should have a proper waste disposal system which should have an incinerator with three pits (for sharp waste and organic waste).  Although all types of solid waste are separately stored and collected, the available bins are of low quality and insufficient to handle the daily volume of disposed waste. |
| **Technical solution in compliance with MoPH/WHO standards**  **راه حل تخنیکی مطابق ستندرد های وزارت صحت عامه وسازمان صحی جهان** | Water source  1. From the quantity point of view: the existed tap has good water yield and quality if we connect this tap to the clinic water supply system then the lack of water inside the building will be solve.   2- Quality Perspective: ActionAid is committed to ensuring that the water from the tap meets the highest standards of quality. As part of this effort, water quality testing will be conducted during the drilling process to ensure compliance with the WHO water quality standards. The results of the water analysis will be documented and included in the table below.   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Parameters | Turbidity (NTU | Color | Odor | Water Temperature | TTC (CFU/100ml | PH | TDS | Arsenic | | WHO Guideline | <5 NTU | None Detected | Not Offensive | 25C° - 30C° | 0/100ml | 6.5 to 8.5 | 1000 ppm | 10µg/l | | Lab Result |  |  |  |  |  |  |  |  |  Water storage and distributionWater tank (water availability)  |  |  | | --- | --- | | **WHO suggested minimum water quantities in health care facilities** | | | Use | Guideline quantity | | Outpatients | 5 liters/consultation | | In patients | 40–60 liters/patient/day | | Operating theatre / maternity | 100 liters/intervention | | Dry or supplementary feeding center | 0.5–5 liters/consultation | | Wet supplementary feeding center | 15 liters/consultation | | Inpatient therapeutic feeding center | 30 liters/patient/day | | Cholera treatment center | 60 liters/patient/day | | Severe acute respiratory diseases isolation center | 100 liters/patient/day | | Viral hemorrhagic fever isolation center | 300–400 liters/patient/day |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Total daily water demand of Okhry Health Care Center** | | | | | | Type of user | # of user | | Consumption norm (Liters /day) | Total daily demand | | Outpatients | 100 | | 5 | 500 Liters | | clinic personnel | 10 | | 110 | 1100 Liters | | Total daily water need | | | | 1600 Liters | | Daily available Water from tap | | Total daily water need | | Difference (L) | | 7200 Liter | | 1600 Liters | | 5600 liters | | Required water for 48 hours to avoid any shortage | |  | | 3200 Liters |   To ensure an uninterrupted water supply for at least 48 hours, it's imperative to have adequate water storage capacity. Based on our calculations, there is enough water during the day to supply water for the system to avoid any shortage we recommend the installation of a single water tank with a storage capacity of 1000 liters . The water tank is factory-made from high-density polyethylene, ensuring durability, lightness, and ease of handling. Its perfectly smooth inner surface allows for easy cleaning with traditional detergents. The tank is supplied with a top screwed lid and includes all necessary accessories and fittings and the new 1000-liter storage tank shall be connected to the toilets to cover It’s water for two hand washing sinks and four flash tanks.The water tanks is planned to be connected to the new water supply system inside the building and toilet.Water reticulation within the BHC premises:To optimize the existing distribution system and accommodate the addition of new facilities, it's imperative to connect it to the tap and extend it to the newly constructed toilets, handwashing sinks, this will ensure efficient water distribution throughout the facility. To achieve this, we will utilize PPR pipes with a diameter size of 1 inch, PN 25-bar.Moreover, to guarantee the longevity and reliability of the system, the pipes will be buried at a depth of at least 80 cm from the ground level. This strategic placement not only protects the pipes from external damage but also helps maintain consistent water flow, particularly during colder seasons when the risk of freezing is heightened.With a total length of 50meters, these PPR pipes will seamlessly integrate with the existing distribution network, facilitating uninterrupted water supply to the newly established amenities. By preventing leakages and minimizing water wastage, this comprehensive approach not only enhances the functionality of the system but also promotes sustainability and responsible resource management.Existed Stand TapsIt is planned to rehabilitate the existing stand taps as below.  1. The concrete structure shall be built as per the related drawing. 2. The pipes shall be insulated by glass wool against freezing. 3. The taps should be changed with MOGOUL type taps (0.5 size brass 100% Mogul).  Hand washing sinkThe installation of handwashing sinks within healthcare facilities is paramount for effective infection control, adherence to hygiene standards, and the enhancement of overall health outcomes. By ensuring that healthcare workers, patients, and visitors have easy access to handwashing facilities, the spread of infections can be significantly reduced, thereby supporting compliance with protocols and minimizing health risks. This initiative ultimately results in lower infection rates, heightened staff productivity, improved patient care, and an overall safer environment within the healthcare setting.Moreover, the presence of handwashing sinks fosters hygiene awareness, contributing to broader public health initiatives and promoting a culture of cleanliness and wellness. To address this critical need, ActionAid has outlined plans to install a total of 6 new ceramic handwashing sinks in key sections of the building, including the (OPD room, delivery room, in toilet’s corridor, and next to exterior toilets ) and the other 8 existing hand washing sink shall be conned to the building water supply system and sewerage also Shelf for soap, and mirror with Shelves, should be supplied and fixed on the walls.Septic Tank: ActionAid plans to rehabilitate the existing septic tank with the following measures: Clean the interior of the septic tank thoroughly.Plaster the walls to enhance durability and prevent leaks.Construct an RCC slab to cover the septic tank securely.Construct a pit for draining the liquid waste from the septic tank.Install sewerage plumbing in accordance with the related drawings.Construct partition wall inside the septic tank. Toilets and latrines  At the Okhry Health Care Facility (HCF), there are currently four dry pit latrines at the clinic premises which present several significant issues. These issues include the absence of hand-washing facilities, non-washable surfaces, and small pits that fill up quickly. To address these problems, ActionAid has devised a comprehensive plan to upgrade the existing latrines into fully equipped toilets.  For the delivery room there is not any bath & toilet so we planned to construct one single Bath & toilet adjoining to the delivery room also we upgrade the existing bath with wester water closet and head shower equipment.  The new toilets will be equipped with flush tanks and adjacent hand-washing sinks to ensure proper hygiene. Additionally, the facilities will be designed to accommodate People with Disabilities (PWDs), incorporating railings to the toilet stairs to enhance accessibility and safety.  This upgrade aims to improve sanitation, hygiene, and accessibility at the Okhry HCF, providing a more hygienic and inclusive environment for all users.  In terms of infrastructure, the water supply for these toilets will be connected to the new 1000-liter water tank, ensuring consistent access to water. Furthermore, the sewer pipes will be connected to a septic tank to manage waste effectively. All construction and plumbing work will adhere closely to the specifications outlined in the relevant drawings, ensuring the durability and functionality of the new facilities.  following actions are planned for upgrading the existing latrines and new toilets.   * Flash tanks should be installed at each toilet and latrines * The latrines should be connected to the water network * Making the internal surface of walls and floors washable by using tile and ceramic. Totally 63.5 square meters of walls and floor needs to be furnished by tile and 185.7 square meters of walls and floor needs to be furnished by ceramic. * For four latrines should install the eastern water closet with flash tanks and for three toilets should install the western water closet with flash tanks in order to install the p-traps properly to avoid bad odors. * Plumbing work such connection of water closet to main sewer and connection of cold-water pipes to pipe network should be done. * Trash bins should be mounted at each latrine and toilet.  Waste managementAccording to WHO’s requirements, the perimeter of healthcare facilities must be protected not only against clinical hazardous waste but also from domestic waste generated within these facilities. To achieve optimal hygienic conditions, ActionAid plans to construct a standard solid waste management system at the Okhry Health Care Center. The planned construction includes the following:Incinerator Construction: The incinerator will be constructed with reinforced cement concrete (RCC), and its pit will be made of brick masonry, adhering to the specified drawings.Waste Disposal Pits: New pits will be constructed for the secure disposal of organic waste (such as placental waste) and hazardous waste (such as sharp objects). These pits will feature RCC rings, and the top slabs will be constructed with RCC caps to seal the pits effectively.Incineration Area Security: The incineration area will be secured by erecting a fence with galvanized iron (GI) pipe poles and gates to prevent unauthorized access. The floor will be made of 10 cm thick plain cement concrete (PCC), with proper surface sloping to ensure effective drainage of rainwater.These measures will ensure a safe, secure, and hygienic environment for waste management at the Okhry Health Care Center. |
|  | Note: An allocation of 3% of the total cost has been designated for miscellaneous and unexpected expenses. Contractors may claim overspend only when changes in the definable feature of work are recommended and approved by the Action Aid superintendent and AAA budget holder. |

## Period of workمدت زمان کار

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| **Start Dateتاریخ شروع** |  |
| **End Dateتاریخ ختم** |  |

## Summary of BoQ

Bill of Quantity and Technical drawings are attached to this Upgrading plan.

بل تعداد و رسامی های تخنیکی به این پلان پروژه ضمیمه شده است.

## Signatoriesامضا کننده گان

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| --- | --- | --- | --- | --- | --- |
| ActionAidاکشن اید | | | DopH and HCF agents نماینده ریاست صحت عامه ومرکزصحی | | |
| Name and position  نام و وظیفه | Date  تاریخ | Signature  امضا | Name and position  نام و وظیفه | Date  تاریخ | Signature  امضا |
| Project Coordinator  کوردیناتور پروژه |  |  |  |  |  |
| WASH Specialist  متخصص واش |  |  |  |  |  |
| Program Manager  مدیر پروگرام |  |  |  |  |  |