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**REPORT** 

ON

**IMPROVING ACCESS TO CLEAN WATER** 

AT

SUHUM PRESBYTERAIN SECONDARY TECHNICAL SCHOOL



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IN THE

SUHUM MUNICIPAL ASSEMBLY, EASTERN REGION- GHANA

SPONSORS: JESUS HOUSE BALTIMORE (JHB) HOPE FOUNDATION, MARYLAND -USA

LOCAL PARTNERS: ICGC POTTERS TEMPLE OLD ESTATE- KOFORIDUA /GHANA

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March, 2023

# IMPROVING ACCESS TO CLEAN WATER AT SUHUM PRESBYTERIAN SENIOR HIGH-BOYS DORMITORY

The love exhibited by JHB Hope Foundation a Global Outreach Ministry, by sinking a mechanized borehole for the students of Suhum Presbyterian Senior High School can never be forgotten.

Water is live, water forms 70% of the Earth, likewise the quantity in the human body. By this fact when individual lacks water it generates uneasiness and this situation worsens as the day go by. Nonetheless, an intervention like this project is an essential to livelihood of the beneficiaries and they show gratitude to JHB Hope Foundation. Such was the attitude of students in Suhum Presbyterian Senior High School during the commissioning of the borehole project.

The students were filled with so much joy at the swift pace with which the intervention was provided, though they were looking up to the Ministry of Education to address this issue to no avail.

The Headmaster of Suhum Presbyterian Senior High School stated that he always felt embarrassed whenever he enters the school compound and sees the students queuing for water. "Indeed this facility has come as a great relive to him. He thanked God first and JHB Hope Foundation for this amazing support to the school.



**Entrance of Suhum Presec** 

Main Classroom Block

#### Background

Suhum Presbyterian Senior High School is located in the middle of Suhum Municipality and was established in 1963. Currently the School has a Student population of 2,800. From this enrolment those in the boarding house comprise of 89% (2,500) and the Day students 11 %.( 300). The school have a Teaching staff of 125 and Non-Teaching staff of 45 people. The performance of the School is encouraging and it is classified as grade "C" School.

#### Statement of the Problem:

The School does not boast of having the entire infrastructure and the essential facilities needed, nevertheless their topmost concern was inadequate water for the School. The situation affects the study hours of the students which impact on the academic performance. These water constraints

also exposed students to water borne diseases and other social vices since they go beyond the school boundary for water. The scheduled times for studies were used to search or queue for water and the challenge becomes unbearable in the harmattan season.

#### **Existing Facility**

The school have three mechanised boreholes which serve the entire school population but the outputs of the boreholes were not sufficient to meet the demands from the new constructed Boys' Dormitory. Again the existing borehole breaks down intermittently or malfunctions. Students queue for water or go beyond the school compound to search for water instead of attending studies.

These have placed undue pressure on the School management and the Students with respect to their performance. By these challenge, it has motivated the school authorities to search beyond the jurisdiction of Ministry of Education for support from benevolent groups on behalf of the School.

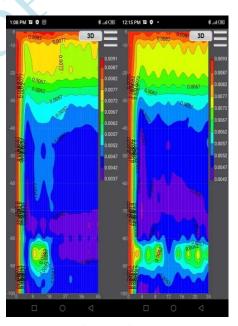
The Senior Housemaster of the School who happens to be responsible of the water facilities for the school approached ICGC Potters Temple for support.

The gospel says "for their good deeds will follow them", this was how the Housemaster got to know the works of JHB Hope Foundation / ICGC Potters Temple, through the Presiding member of Suhum Municipal Assembly and also the radio & Television channels after the commissioning of Abisim Dawa borehole. The Senior House Master with the authority from the Headmaster contacted our team to discuss the situation pertaining in the School to us. Formal meetings were schedule to further discuss the issues and the way forward to meet their demand.

In order to obtain the baseline information, a short video was submitted to show the situation on the ground. The information received, was presented to the Presiding Pastor of JHB hope Foundation for their perusal. Amazingly, the request was considered to the glory of God.

### Geological Analysis (Siting):

Geological analysis was of adequate underground proposed that the borehole uncompleted Assembly and was that, they will need when it is completed. survey did not support the was no evidence of submitted by Equizone was changed and order test The results analysed underground water. From colours indicate prospects 80 meters deep.



Seological survey

carried out to ascertain availability water. The school Authorities should be closer to an dining hall complex. The reason water at the Dining hall complex However, the analysis of the location required, because there adequate water at that section as Engineering Services. The location run in front of the boys dormitory. identified aquifers with possible the image: the light and deep blue of water at a depth of 30 meters to

## Implementation (borehole) drilling

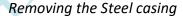
Inferring from the available data the drilling was sited at the established point. Starting from the ground level to a depth of 3 meters the soil formation or the overbearing was aligned with a steel pipe of 0.2 meters diameter to prevent the wall from failing.



a. Positioning the drill barge infront of Boys Dormitory b. inserting steel pipe to shore surface overbearing

The drilling proceeded to 3.5 meter deep, at this juncture the formation again changed from the loose to sedimentary rock and continued up to a depth of 10 meters.







inserting the screen pipes

The drilling continued to a depth of 35 meters where the particle sizes of the soil changed signaling an open aquifer at the various levels. The drilling progressed to a depth of 70 meters which we observed wet soil intermittently. From the depth of 75 meters the soil became wetter but the drilling continued till the final 100 meter was reached.

Construction of the well begun by inserting casing and screen pipes were installed while removing the metal steel pipes. The space in direct contact with the screen and casing pipes were filled with 0.1cm chippings, this was done to stabilize the pipes and also help to strain the water into the pipe

duct. After the pipes were fixed the well was allowed to rest so that water recovers in the well, and subsequently flush the recovered water to clean the filth in the well.

## Fixing Pump/ Electrical and Plumbing Works

With the depth of 100 meters a Dongyin pump of 2 Horse power (HP) complete and automatic sensor, circuit breaker, electrical cable and plumbing cables were installed. The pump was connected to electricity main power supply and tested for its efficiency. For a period of 6 hours continuous pumping the results produced 8.4 m³ to 15 m³/ day at pumping rate of 1.29 m³ to 4.00 m³ /hour. By the established results it was judged that the pump was efficient and the borehole has been successful.



With the pump installed and tested, the chamber to house the pump and accessories was constructed, this will conceal the pump settings and also keep away pedestrians/students from tempering. When the chamber was done, we proceeded to fix the plaque with inscription of the sponsor and implementers on the chamber to serve as a memorial.



Construction of the Pump chamber



Construction of the Chamber

## Construction of Poly Tank Platform; / Repair of Existing Pump

The existing storage container or poly tank was directly on sandcrete blocks, this pose a great danger to the poly tank when it is full. In this regard the platform on which the poly tank stands was constructed, so that the platform will be able to withstand the force from the tank on the platform. Two pipe outlets were created to reduce the queue during the rush hours when students go for water. One of the existing borehole pumps which were not performing well was replaced with timer, automatic switch as well as servicing the pump. After this exercise the pump functioned effectively to the admiration of the Teachers and the students.



Construction of the Storage Platform

The students were happy that their expectation has been meant that now they will have much time to study. They expressed their sincere gratitude to God for the borehole and also JHB Hope Foundation for this mighty support.





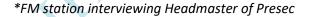
Presec Girls & Boys Prefect

Students on their way to support the Ceremony

## **Handing over**

On 4<sup>th</sup> April, 2023 the borehole was handed over to the school, since the school was vacating on 12<sup>th</sup> April 2023 for the Easter break. In attendance were the school Authorities, section of the students, PTA chairperson, Pro of education deputising for Director of Education in the Suhum Municipality. Also a delegation from ICGC Potters Temple Koforidua and the press from Ahotor FM 93.9 and Cee TV based in Accra were in attendance.







\*Girls Prefect expressing gratitude on behalf of the Students

Commissioning of the borehole was held in front of the Boys Dormitory where the facility was built. At 8:45 am the programme started with a prayer from the Chaplain of Suhum Presec. The handing over was brief because the students were slated to write their exams and prepare for the Easter break.

The Headmaster of Suhum Presec addressed the gathering and explained the reason for the occasion.



He stated that he was grateful and thanks JHB Hope Foundation for this relieve. They didn't anticipate this problem of water will be solve with in the shortest time, they are grateful. They owe JHB Hope Foundation a great Honour of gratitude.

## Message of Love from the Sponsor:

We briefed the gathering about the activities of JHB Hope Foundation, they seek to share a message

of love,

hope and love of God by around the and Jesus Christ for such they are them. you all", Saviour".



compassion and hope to the less privileged. Their vision is to restore impact the world positively with the giving a helping hand to all people world who are in urgent need of care attention. They believe in emulating feeding and clothing the needy, as giving back what society has given JHB Hope Foundation says: "We love "accepts Christ Jesus as your personal"

Pastor indicated that, water is life,

this water will satisfy the social and physical needs but the ultimate water which is eternal life is from the Lord Jesus. Therefore they should accept Jesus Christ as their saviour.



Commissioning by the PTA executive



Unveiling of plaque

Although the school is a religious institution, nevertheless they should not relent on their fellowship with the Almighty God. He thank God first and JHB HOPE Foundation Maryland for this amazing support and commissioned the borehole to the Headmaster and his team for their management.

Long Live JHB Hope Foundation (Jesus House Baltimore) Maryland USA.

Long Live ICGC- Potters Temple Koforidua

Long Live the Head and students of Suhum Presbyterian Senior High School

## **Thank You**





To the glory of God, Grace has found the Students of Suhum Presec





Surveying the Location of the well in between the back of boy's dormitory and New Assembly Hall.





Entrance of the Boys Dormitory

Drilling of well



Fixing of Pump and electrical connection



Construction of the chamber to house pump and dressing and fixing of plaque







Construction of Poly tank platform



Chaplin praying for the handing over



Speech by School Boys & Girls Prefects



**Commissioning by PTA Executive and Headmaster** 



**Speech by Headmaster** 



Headmaster and Girls Prefect tasting the water after handing over



Senior Housemaster Giving the Vote of Thanks