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Research Article

“Project TUBIG PARA SA LAHAT (Water for All)”: A Community Based Action Research

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ABSTRACT

This paper aims to present the community extension project of local higher education in Olongapo City, Philippines. The project entitled “Project Tubig Para sa Lahat (Water for All).” is a collaborative effort of the Gordon College – Community Extension Service Unit (GC –CESU) and different Non-Government Organizations (NGOs). The project's main objective is to provide a clean water storage for every household in a far-flung community in Olongapo City. This project is an initial step towards the United Nations Sustainable Development Goals (UN SDGs) mandate, in particular SDG 6. After a series of meetings, a strategic planning, and months of preparation, the project commenced. However, there were some challenges in the logistics due to the distance and terrain of the place. Nevertheless, the project was successful and turned over to the community as a sign of community engagement to all parties involved. The whole community has full access to the water tank project, and many households benefitted from the said project.

Keywords: *Action Research, Community – based project, Community Extension, Non-Government Organizations (NGOs), Sustainable Development Goals, Water*

Introduction

Water is an essential part of our human lives. Surviving the harsh environment will be challenging and impossible without the help of water. Humans, plants, and animals cannot survive without this valuable entity. The whole environment or the ecosystem needs water as a sustainable resource. Life strives even in the water itself, which makes it more vital.

For humans like us, water is essential for life (Westall & Brack, 2018). Water is also a part

of our body since about 60% is water. Therefore, it would not be accessible if our bodies deprived us of it. In reality, water makes up 70% of our world. However, only a portion of this is potable and usable for human consumption. Cosgrove and Loucks (2015) mentioned that there are many regions where freshwater resources are inadequate to meet domestic, economic development and environmental needs. This water insecurity may lead to distress among individuals (Stevenson et al., 2016).

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The United Nations' Sustainable Development Goals (SDG), mainly goal 6, entails the availability and sustainability of water and sanitation management for all. Some of our population still needs help accessing safe and potable water for drinking and household use. Moreover, these communities suffer from water shortages and crises. This notion applies to human settlements from the far-flung areas and the periphery of the central business districts of a particular city. Community involvement is associated with support for alternative water sources (Dean et al., 2016).

Sanitation is also equally important to point out here as well. One study mentioned that a country in Southeast Asia listed low hand-washing habits as one of their challenges (Purnama & Susanna, 2020). Moreover, the lack of access to sanitation services has been a significant challenge in the international community for decades (Pereira & Marques, 2021). In addition, most sanitation interventions focus on expanding sewer infrastructure and paying little attention to the poor (Schrecongost et al., 2020). However, there are also global constraints in sanitation (Zhou et al., 2018). Nevertheless, sustainable sanitation has excellent potential to catalyze action and contribute to sustainable development goals (Andersson et al., 2016).

In terms of hygiene, this particular issue also significantly affected the lives of every people in the world. For instance, in an African country, a study showed that only 19% of the rural schools had a program for personal hygiene training at the school (Jordanova et al., 2015). Regarding food hygiene, respondents from an African country adhere to basic hygiene practices, and 90% are aware of food and personal hygiene (Dun-Dery & Addo, 2016). In addition, despite high poverty incidence and constant water shortages in the area, several water-intensive hygiene practices are consistently carried out (Rusca et al., 2017). Here in Asia, a study stated that proper personal hygiene practices of children are important for maintaining and promoting child health in urban slums (Otsuka et al., 2019). Another study also shared good hygiene practices among schoolchildren, but some demonstrated hand-

washing procedures incorrectly (Meher & Nimonkar, 2018).

Now, in the local scene, in the Philippines, a study focused on adequate and socio-culturally appropriate sanitation and hygiene intervention (Pfadenhauer & Rehfuess, 2015). Another one tackled the different barriers to proper hygiene management in selected locations in the country (Ellis et al., 2016). The paper also evaluated the country's water, sanitation, and hygiene (WASH) intervention. It yielded some interesting results (Vally et al., 2019). Furthermore, indigenous practices for water, sanitation, and hygiene have already improved regarding knowledge, attitudes and practices from the barangay level (Hasan et al., 2021). Lastly, the reduction of water-borne diseases like diarrhea also has something to do with the government's water, sanitation, and hygiene program (Capuno et al., 2016).

In the local context, clean and potable water sources are still challenging for some locations in the country. More specifically, the far-flung areas in the metro still have some barriers to obtaining clean water for everyday use in their households. Based on the different perspectives regarding water, sanitation, and hygiene issues, this notion prompted the proponents to create this research. The project site was Sitio Mampung, a remote and indigenous community in Barangay Old Cabalan, Olongapo City, Philippines. Their current water source is spring water from the mountains exposed to different elements of nature. In order to have a safe and potable water source, a contained water storage solution will help eliminate water exposure to hazardous elements of the environment.

This project will enormously benefit the community involved. Also, it will also facilitate using clean and potable water and the proper hand-washing program endorsed by Non-government Organizations (NGOs).

Methods

This paper represents the community extension project of Gordon College located in Olongapo City, Philippines, in partnership with a non-government organization, RP Energy, JCI Olongapo, and SEAPINE Corporation. Specifically, the project aims to address the problem

of safe and potable water storage in a peripheral community located in the mountainous area of Olongapo City, Philippines. The project is known as "Project *Tubig Para sa Lahat* (Water for All)."

The chosen community is predominantly occupied by Indigenous People (Aeta), with more or less 200 families categorized in low-income status. At the same time, their means of living are purely agricultural. The Department of Environment and Natural Resources (DENR) considered the land timberland with areas for possible proclamation as an ancestral domain.

The RP Energy and Sea Pine Corporation funded the project in partnership with Gordon College Community Extension Service Unit (GC-CESU). The GC-CESU provided human resources for project management and execution. At the same time, coordinated all the activities, control logistics and construction, and supervise the construction activity.

The project hired community members on a contractual basis (day rate) to haul materials and construct the storage tank base or foundation and the pipework associated with the project. On the other hand, the RP Energy CSR team will plan, organize, and coordinate the handover and inauguration ceremony with Sea Pine Construction Corporation as a key stakeholder. The local community leaders were also be

responsible for providing the land on which the storage tank facility will be. Moreover, the community leaders will be accountable for obtaining all the necessary permission and permits (related to the project's construction) if applicable. Furthermore, the proposed tank supplier will transport and erect the water tank once the foundation is complete.

The RP Energy in-house engineers were responsible for the foundation and rebar concept drawings. They all volunteered and provided oversight supervision during the actual execution of the project. Then, RP Energy created the Deed of Donation and ensured that no sponsors and donors were liable for this project. Finally, the JCI Olongapo provided a follow-up campaign on proper hygiene and education among the households that will benefit the project.

Results and Discussion

The Community Extension Services Unit of Gordon College, together with RP Energy and other NGOs, conducted a series of meetings, consultations, and, finally, strategic planning with the local government units and the tribal council in order to prepare for the said project. The planning took some time to commence due to overlapping schedules or the unavailability of critical persons; however, it still took place and became a successful workshop for all.



Figure 1. Strategic Planning and Signing of Agreements for the Project

As seen in Figure 1, Gordon College -Community Extension Services Unit, in collaboration with RP Energy, Tribal Council, Local Government Unit (LGU) and other Non-Government Organizations, initiated some agreement signing and strategic planning for the project to

commence finally. These steps are essential in order to coordinate the different parties on the division of labor and work. The Gordon College - Community Extension Service Unit is the main facilitator for this project and the rest of the NGOs collaborated for the water tank

construction and the materials as well as the labor. The strategic planning workshop was a successful one. The team that participated in

the workshop laid out the plan to accomplish the project every step of the way.



Attn: Mr. C. H. Kang
 Project Manager
 Sea Pine Construction Corp.
 Unit 3, Ground Floor Lots 6, 7 and 8
 Greenwood Park
 Subic Bay Freeport Zone

Date: 01 June 2018
 Our Ref: RPE-SPC-LT-EH-0041
 Your Ref:

Enquiries: Mr. Avin H. Maharaj

PROJECT: [RPE] Redondo Peninsula Energy – Temporary Works & Site Maintenance

Subject: Corporate Social Responsibility (CSR) Project – Participation of Sea Pine Inc.

Reference(s):

No.	Date	Letter No.	Transmittal No.

Dear Mr. Kang,

The Owner's discussion with the Contractor's Subic Branch Manager, Mr. Seungyeup Moon regarding partnering to execute a very strategic and beneficial CSR project refers. The Owners CSR contributions in our host communities are based on the following pillars:

- Education,
- The environment and,
- Livelihood and Enterprise Development.

The Owner's CSR projects range from community livelihood and enterprise development like the establishment of seaweed farms, providing teacher training, to promoting sports and youth development.

A high impact project identified for the 2018 year and to be executed within the next 3 months is the "Water Sanitation Hygiene" (WASH) project for Sitio Mampung, Barangay Old Cabalan, Olongapo. See attached additional information regarding this specific CSR project.

The project is estimated to cost around PHP500,000.00 to complete, the Owner will cover 50% of this cost, and we hope that the Contractor, being a socially responsible and caring organization, can provide a matching grant of PHP250,000.00. The project is aimed at benefiting over 200 families and impacting over 1000 lives.

As one of RPE project key stakeholders, we look forward to partnering with you in this worthy CSR project. The Owner's representative will arrange for an onsite ocular before finalizing the scope and execution plan for this CSR project. Thanking you in advance.

Figure 2. Letters of Communication

Figure 2 depicts the communication letters of RP Energy, one of the project's sponsors, regarding their organization's request for participation in a Corporate Social Responsibility (CSR) Project. The other letter is the letter of

response and approval of the said CSR project participation. It was a great delight for all parties that the project went smoothly and as planned.



Figure 3. The Actual Water Tank Setup

Figure 3 portrays the actual tank setup in the community. The tank contains 10,000 liters of water. This volume is enough to sustain a clean water source for the 200 families located in the area. The workers assembled the tank on site. The location is on the highest point of the

community for a strong flow of water. This idea is to harness the natural power of nature, which is gravity. This idea will replace machines as water pumps run on gasoline or electricity, which will incur some costs.



Figure 4. The Inauguration of the Water Tank

It can be gleaned in figure 4 the actual inaugural ceremony for the turnover of the water tank to the community with the presence of the selected community leaders, the representatives from Gordon College Community Extension Service Unit and some representatives

from the local government unit of the barangay. Present in the said event is the local tribe representative, the representative from the NGOs, and the Gordon College – Community Extension Service Unit.



Figure 5. Smile of Success

The smile of success! Gordon College Community Extension Service Unit, headed by the College Administrator, the Vice President for Research Development and Community Extension Service and the Coordinator of the

Community Extension Service Unit, tested the water tank for the first time before the actual utilization for the community. Figure 5 displays the successful turnover ceremony of the water tank project.

Conclusion

The said project is just the start of a progressive campaign to provide a clean and potable water source for the community to use daily. The project was successful and entirely usable by the community offering fresh, clean water for the nearby households. This project is just the first step in attaining the primary goals of WASH. The community must have a source of clean water in order to practice proper sanitation and personal hygiene in their households.

The project entails supplying and installing a water storage solution that will ensure a reliable water source for the families of the indigenous community. It also encompasses a WASH Campaign to ensure proper hygiene among households, especially children. Lastly, this project is a long-term support to the community through other complementary interventions in terms of education and livelihood programs.

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