



EVALUATION AND IMPACT BRIEF

# Clean Water Project Phase III (CWP 3 Project)

## Background



Safe drinking water and proper sanitation facilities are essential for health and wellness in communities. In particular, these can affect young children's nutrition and ability to stay healthy and focused in school, as diseases caused by unsafe or unhygienic practices decrease their chances of successful school completion and healthy growth.<sup>1</sup>

However, access to safe water and sanitation remains a challenge in the Philippines, especially in rural areas where poverty rates are high and inequalities are aggravated by this cycle of and link between the lack of access to safe drinking water and sanitation, and poor health and low productivity. Nearly 5 million people rely on unsafe and unsustainable water sources, while around 9 million lack access to improved sanitation.<sup>2</sup> Although there has been a consistent improvement in the country's access to adequate and equitable water supply, sanitation, and hygiene in the past five years, only half or 47.6% of the population had access to safely managed drinking water, with a majority or 61.80% living in urban areas and 34.54% in rural areas.<sup>3</sup>

The country, in response, continues to work towards attaining the Sustainable Development Goals (SDGs) Target 6.1, which seeks to achieve universal and equitable access to safe and affordable drinking water for all by 2030. World Vision supports this global initiative and believes that

without clean water, dignified sanitation and healthy hygiene behaviors, sustainable development is essentially impossible. Thus, World Vision has selected water, sanitation and hygiene (WASH) as one of the priority areas for investment. The overall goal of World Vision's WASH programming is to improve child well-being health, nutrition, and education outcomes through universal access to safely managed drinking water, sanitation and hygiene.<sup>4</sup>

From 2018 to 2020, World Vision Development Foundation (WVDF) implemented the Clean Water Project in partnership with Procter & Gamble (P&G), aimed at contributing to the reduction of waterborne diseases and scaling up access to drinking water in 14 barangays across 5 municipalities, namely: **Bunawan** (Poblacion, Nueva Era, Mambalili, San Marcos), **Loreto** (Poblacion, Nueva Garcia, Katipunan), **Trento** (Poblacion, Kapatungan), **La Paz** (Sabang Adgawan, Poblacion) and **Talacogon** (Sabang Gibong, Maharlika, La Flora) in the province of Agusan del Sur, Mindanao.

The Clean Water Project Phase III (CWP 3) collaborated with the rural health units in the identified areas to reduce the spread of water borne diseases and provide access to safe drinking water through WASH<sup>5</sup> advocacy, capacity building of health care providers on better hygiene practices, educating target families on using water purifiers and household treatment, and provision of water packets.

<sup>1</sup> UNICEF Philippines. (2017, July 17). *Two billion people lack safe drinking water, more than twice lack safe sanitation* [Press release]. <https://www.unicef.org/philippines/press-releases/two-billion-people-lack-safe-drinking-water-more-twice-lack-safe-sanitation>

<sup>2</sup> *Philippine Water Crisis Report*. (2018)

<sup>3</sup> World Health Organization (WHO) and UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP). (2020)

<sup>4</sup> World Vision International. (2017). Integrated Water Sanitation and Hygiene Project Model.

<sup>5</sup> Drinking water, sanitation and hygiene services



## Project overview

### COVERED AREAS IN AGUSAN DEL SUR

The project has prioritized assisting these communities primarily due to the persistent challenges they face in accessing clean water. The covered areas are located within peatland or marshland where people rely on rainwater harvesting during the rainy season and shallow open dug wells during the dry season. Lakes and rivers are the main source of drinking water among the households living in these communities. However, these water sources are now polluted because of contamination from chemicals washed out during mining activities and sediments caused by illegal logging and flooding from nearby areas. In summary, these areas were selected based on three major criteria:

1. Insufficient existing potable water system or no potential potable water sources in the community,
2. Prone to flooding, and
3. High prevalence of waterborne diseases.





## PROJECT INTENDED OUTCOMES

The CWP 3 initiative is aligned with the strategic objectives of the government and World Vision's country strategy and child well-being aspiration, which are as follows:

- For children living in these communities to enjoy good health through programs that address the concerns on access to safe water sources
- For households and their family members living in these communities to be involved in programs that aim to reduce the high incidence of waterborne diseases
- For local government units to provide alternative and sustainable sources of drinking water to these communities amidst the challenges and unavailability of water sources in the affected areas

## SNAPSHOT OF PROJECT ACCOMPLISHMENTS



### 5.4 million P&G purifier water packets distributed

to 5,475 families, with 183,000 packets distributed to community health facilities and schools



### 230 student leaders mobilized

to conduct demonstrations to 2,000 school children on proper water treatment using P&G packets



### 4,700 individuals reached

through several orientation on Solid Waste Management and Environmental Sanitation



### 16 floating material recycling facilities installed

in the 4 riverside communities for 1,600 families to have access to an established proper waste disposal facility instead of throwing their trash into the river



### WASH training and advocacy conducted

to 560 community leaders, including day care workers, elementary school teachers and local health providers such as barangay health workers, barangay nutrition scholars, midwives and barangay sanitation workers



## Evaluation objectives

To provide evidence of contributions in addressing waterborne diseases through access to safe water among households and children in affected areas, an evaluation study documenting key interventions made from 2018 to 2020 was conducted. In particular, the evaluation had the following specific objectives:

- To assess the effectiveness of the interventions in curbing waterborne diseases and improving access to safe water supply sources among project beneficiaries
- To distinguish the impact of the project and behavioral changes among affected households and communities
- To identify lessons learned and recommendations to improve approaches in implementing WASH-related programs

## Methods

The study employed both quantitative and qualitative methods in assessing the impacts of the project. A baseline and evaluation survey<sup>6</sup> was conducted to measure and evaluate key indicators of the project (i.e., relevance, effectiveness, impact and sustainability) in the affected communities. Questions regarding water supply-related information – such as the sources of, access to, and quality of household water supply; the incidence of waterborne diseases; and WASH-related programs and activities in the covered areas – were captured. Cross-validation of the survey results was also done using key informant interviews<sup>7</sup> and review of relevant documents<sup>8</sup> from project stakeholders.

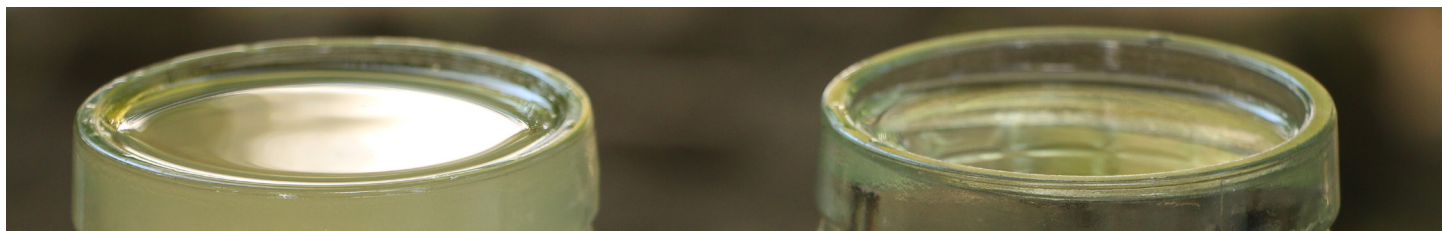


<sup>6</sup> The respondent sample size was 380 with a 95% confidence level and 5% margin of error

<sup>7</sup> Includes representatives from local government units (LGUs), community health workers and school authorities

<sup>8</sup> Collected secondary data related to water sources and waterborne diseases from relevant agencies and organizations in affected communities

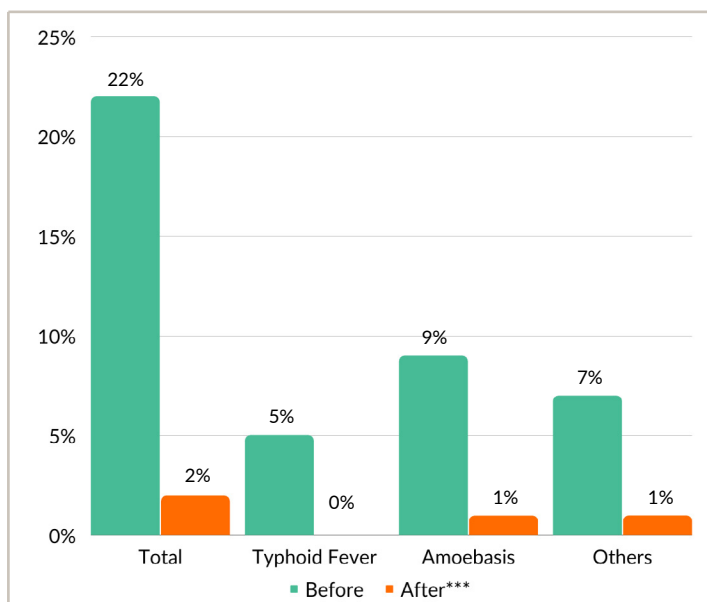
## Key evaluation findings



### ON REDUCTION OF WATERBORNE DISEASES

- Fig. 1** shows the results of the survey where almost a quarter of the covered area's population experienced a significant reduction of incidences of waterborne diseases, from 22% before project implementation to 2% after project implementation.<sup>9</sup>

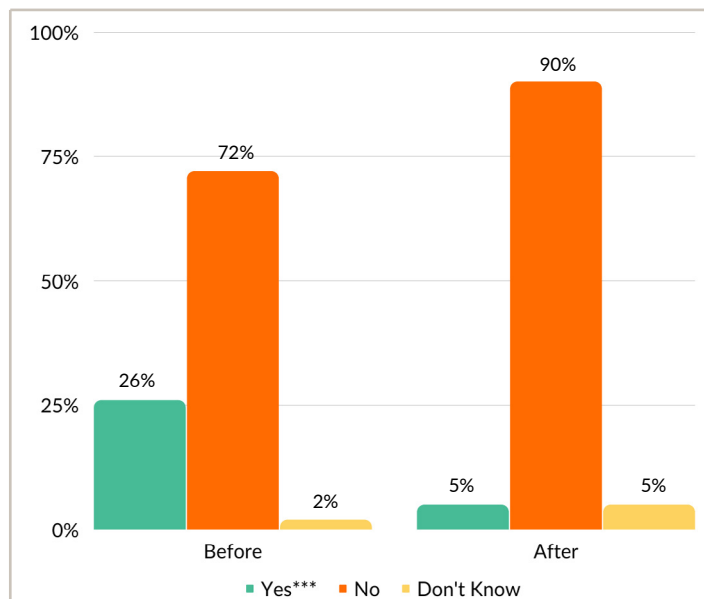
**Fig. 1. Households Reporting Incidence of Waterborne Diseases, CWP3 Evaluation 2020**



\*\*\* Statistically significant at <0.0001

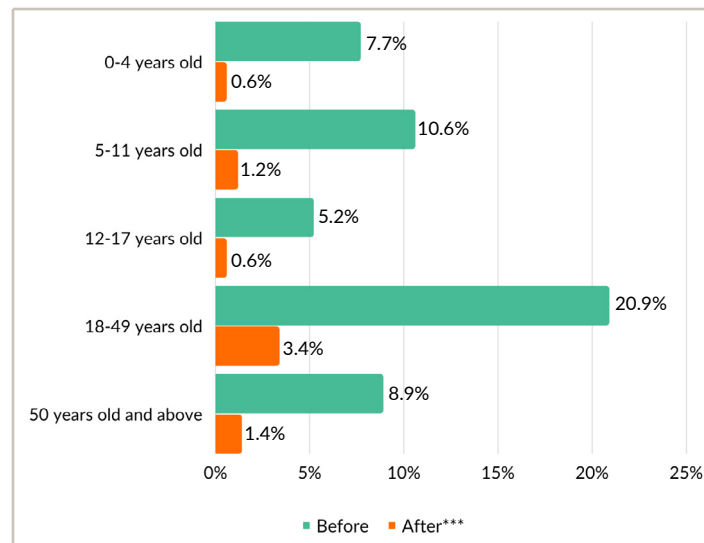
- Fig. 2** shows that the proportion of households reporting the incidence of diarrhea was significantly reduced from 26% before project implementation to 5% after project implementation. In **Fig. 3**, nearly half of the incidents of diarrhea occurred in those below 18 years old, showing that children are among the most vulnerable when access to safe water is not present in the communities. Nonetheless, a considerable decrease is noted among all age groups, including children under 5 years old.<sup>10</sup>

**Fig. 2. Proportion of Households Reporting Incidence of Diarrhea, CWP 3 Evaluation 2020**



\*\*\* Statistically significant at <0.0001

**Fig 3. Proportion of Households Reporting Incidence of Diarrhea, by Age Group, CWP 3 Evaluation 2020**



\*\*\* Statistically significant at <0.0001

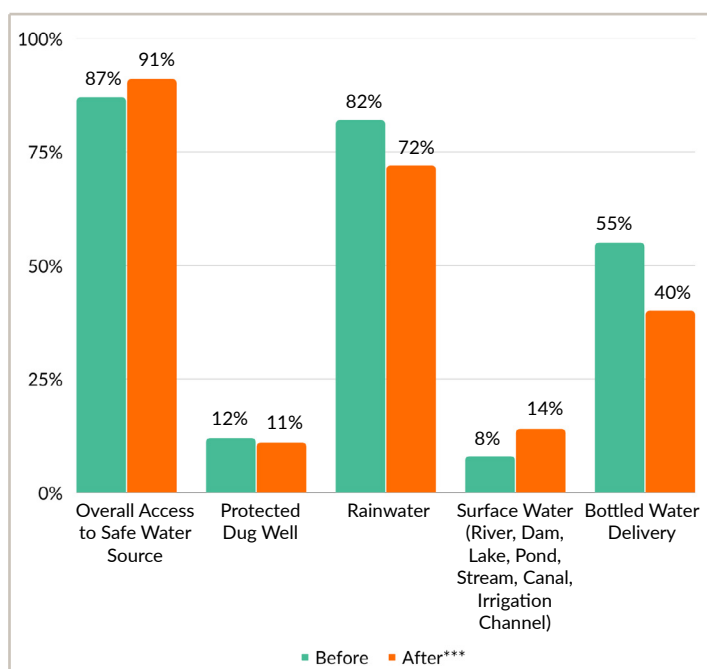
<sup>9</sup> With a p-value less than  $\alpha=0.001$ , the difference is statistically highly significant ( $t(1000) = 4.45$ ).

<sup>10</sup> The prevalence of diarrhea in children under 5 years old falls within the <15% threshold, where the current prevalence is .57% compared to 8% before project implementation.

## ON ACCESS TO SAFE DRINKING WATER SOURCE

- The evaluation shows that the project helped increase the access of households, especially children, to safe drinking water. As seen in **Fig. 4**, the participating households' access to a safe water source, particularly the quality, improved from 87% to 91%.
- Before project implementation, the quality of the water gathered from the sources was poor (67%) – either slightly cloudy/dirty (50%)<sup>11</sup> or very cloudy/dirty (12%).<sup>12</sup> After implementation, a 21% improvement in water quality was reported, with 88%<sup>13</sup> of households revealing that the water has become clear and has been declared by the health authorities as safe for drinking, compared to 38% before any intervention.

**Fig. 4. Source of Drinking Water and Access to Safe Water Source**

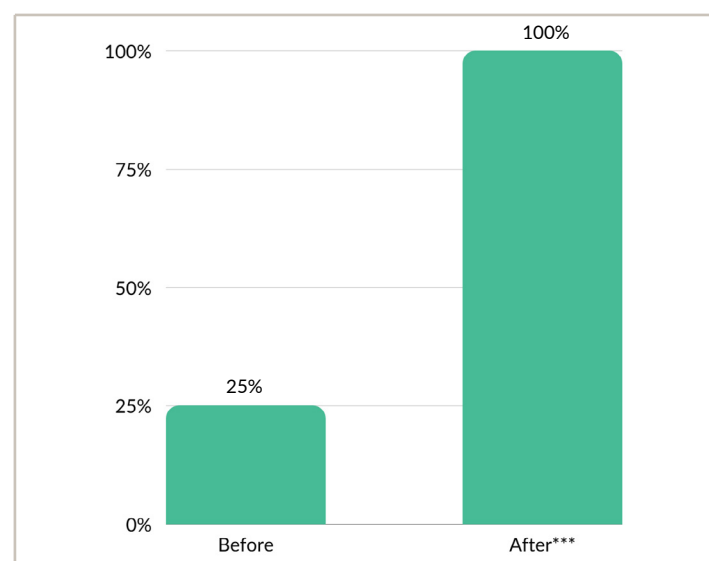


\*\*\* Statistically significant at <0.0001

## ON IMPROVED SANITATION AND BASIC HYGIENE PRACTICES

- Fig. 5** illustrates the significant difference between hygiene practices among children – such as brushing their teeth, washing their clothes and hands, and taking a bath – before and after project implementation.

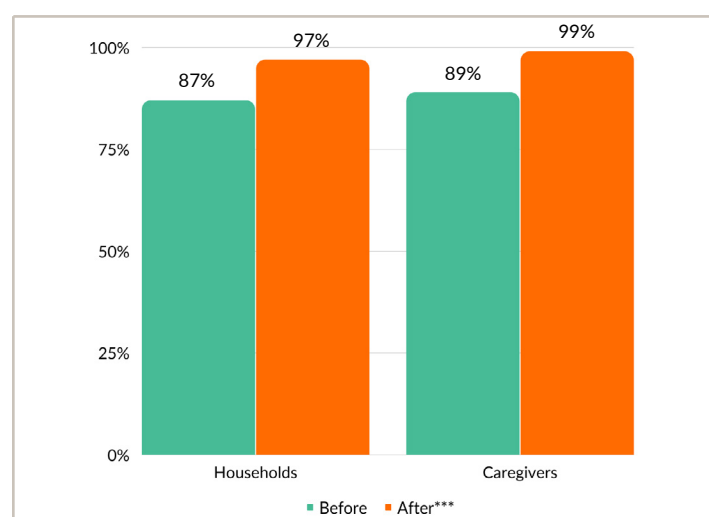
**Fig. 5. Hygiene Practices Among Children (Brushing of Teeth, Washing of Clothes and Hands, and Taking a Bath)**



\*\*\* Statistically significant at <0.0001

- At the household level, a significant improvement was also noted on hygiene practices. **Fig. 6** shows that the proportion of households who washed their hands with running water and soap before preparing food increased from 87% to 97%. A similar increase of 89% to 99% is seen for caregivers who washed their hands with running water and soap after defecating, with a corresponding decrease of 11% to 1% in those who washed their hands with running water only.

**Fig. 6. Proportion of Households and Caregivers who Washed their Hands with Running Water and Soap**



\*\*\* Statistically significant at <0.0001

<sup>11</sup> 174 respondents

<sup>12</sup> 43 respondents

<sup>13</sup> 308 respondents





## ON SOLID WASTE MANAGEMENT AND ENVIRONMENTAL SANITATION

- Under the Clean Water Project, advocacy, orientation and support on solid waste management and proper waste disposal were done with households and Local Government Units (LGUs). These resulted in a 28% to 35% improvement in garbage collection by the LGUs in the communities. Furthermore, inappropriate waste disposal practices, such as burning or dumping in the river, decreased from 74% to 21% as shown in **Table 1**.

**Table 1. Different Ways of Disposing Waste Before and After Project Implementation**

Ways of Disposing Waste	Before	After	Change
Local council or municipality collects garbage	28%	35%	(+) 7%
Private company or community members/groups collect garbage	8%	1%	(-) 1%
Burn or bury garbage	55%	15%	(-) 40%
Informal dumping in landfill/river identified by community or government	16%	6%	(-) 11%
No organized system	3%	1%	(-) 2%
Others	2%	0%	(-) 2%







## Beneficiary story

Krisha and her family live in Brgy. Sabang Gibong, one of the community beneficiaries of the project. It is one of the 14 *barangays* of Talacugon, Agusan Del Sur, with 5,475 families whose houses are located in the marshland with no water table underneath as a source of safe drinking water. People here rely their water sources such as lakes, rivers, creeks and open dug wells during the dry season.

### THE STRUGGLE FOR SAFE WATER

Krisha, 11 years old, is one of the children in the community experiencing poor access to safe drinking water and clean water for cooking and hygiene needs for a long time now. She can still recall the time she got diarrhea because most of the time, her family fetches their water directly from the river. "We don't have safe water. Another incident with unsafe water was when my mother and I got sick with amoebiasis. During that time, I was afraid that we wouldn't survive. Thanks to our neighbors who brought us to the nearest health center, we were given the right medication."

### ACCESSING SAFE WATER IS A LUXURY

For Krisha and the rest of the families in their village, getting safe drinking water is already a luxury. "My father said the only way we can get potable water is to spend almost an



*Krisha, 11 years old, with her family outside their home. She showed how they treat water using P&G packets.*

entire day and at least Php1,500 for pump boat fuel just to access it in the town proper, and that's not including the extra amount to buy a week's supply of purified drinking water," Krisha narrated. That was until World Vision introduced its Clean Water Project in the marshland areas of Agusan Del Sur.

"The program of World Vision in our community is really the answer to our long plea to access safe water. Although our main source is still in the center of the lake, I am assured that we are drinking treated safe water. I am not worried anymore," Krisha happily shared. ■

## Recommendations



Identified below are the initiatives and recommendations that, when continued, can help increase and sustain quick wins of the project, and ultimately the children's well-being in the area even after World Vision's engagement has ended.

### **A. ENGAGE CHILDREN IN TRAINING AND ADVOCACY ACTIVITIES**

Child leaders have been mobilized to conduct training and orientation sessions and advocacy activities. These children are recognized as one of the stakeholders in the project and they play an important role in improving sanitation and hygiene practices because of their influence on other children in the communities. The schools provided a common venue for children to be actively involved in the community and understand the importance of proper hygiene and sanitation.

### **B. INCREASE AWARENESS AND KNOWLEDGE OF SANITATION AND BASIC HYGIENE**

Initiatives on proper handwashing, water treatment, proper personal hygiene and sanitation practices, and proper waste disposal were implemented, which heightened the awareness or knowledge of caregivers and children on these practices.

### **C. ESTABLISH PARTNERSHIPS WITH LOCAL GOVERNMENT UNITS AND SCHOOLS OR GROUPS DIRECTLY PROVIDING SUPPORT TO THE COMMUNITIES**

The Clean Water Project Phase III was implemented in collaboration with the rural health units (RHUs) in five municipalities of Agusan Sur. RHU personnel, such as community sanitation workers and rural sanitation inspectors, and the LGUs were engaged in the advocacy and capacity building on better hygiene practices. They also helped educate the target families on proper water treatment. Collaboration with the RHUs and LGUs and the integration of the project activities in the Local Health Board Plan would strengthen partnerships and commitment of duty bearers.

Sharing of documentation on the progress of World Vision's implementation of CWP 3 interventions with key officials at the provincial or regional level is important. Increasing the knowledge of the provincial government leaders on the issues faced by the communities and the importance of clean water affects the level of commitment and prioritization of projects in the Agusan Marsh communities.

### **D. INTEGRATION OF SPIRITUAL NURTURING IN AWARENESS-RAISING CAMPAIGNS**

Through the integration of biblical principles in all activities of the Clean Water Project, participants were enlightened on the importance of sanitation, cleanliness, good habits and personal hygiene. Biblical reflections/devotions conducted during every project activity – such as reflecting on the sermon of John Wesley (1778) emphasizing that cleanliness is next to Godliness – helped develop their faith in God.



### **MANILA OFFICE**

389 Quezon Ave., cor. West 6th St.  
West Triangle, Quezon City 1104  
+632 8374 7618 to 28

### **CEBU OFFICE**

2F Arcada 5 Building, Highway Tipolo  
Mandaue City, Cebu 6000  
+6332 505 4444

### **DAVAO OFFICE**

376 Sampaguita St., Juna Subdivision  
Matina, Davao City 8000  
+6382 327 4564

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