

## Assessment of SDG 6: Clean Water and Sanitation in Kampung Baru, Bandar Lampung

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### ABSTRACT

This study aims to review the achievement of drinking water and sanitation indicators in the context of the Sustainable Development Goals (SDGs) in Kampung Baru Subdistrict, Bandar Lampung City. The study reviews the achievement of drinking water and sanitation indicators within the context of SDGs, specifically the sixth goal related to clean water and sustainable sanitation. Data were collected through interviews, observations, and documentation from 53 respondents in the subdistrict. The results showed that 49.1% of households use bottled drinking water, 41.5% use protected water sources such as drilled wells or pumps, while 37% still use unprotected wells, which have the potential to cause contamination. In terms of sanitation, only 32.1% of households have access to adequate sanitation, and 83.2% of the population has the habit of washing hands with soap before and after meals. These results indicate that access to clean water and adequate sanitation remains a challenge, even though efforts to improve infrastructure have been made. The data show that not all households can optimally access these services. Therefore, more focused policies are needed to improve the quality of safely managed drinking water and to improve sanitation systems to support public health and a better standard of living, as well as further efforts from the government and the community to achieve the SDG targets by 2030.

**Keywords:** SDGs, Proper Sanitation, Drinking Water

### ABSTRAK

Penelitian ini bertujuan untuk meninjau capaian indikator air minum dan sanitasi layak dalam konteks Sustainable Development Goals (SDGs) di Kelurahan Kampung Baru, Kota Bandar Lampung. Penelitian ini

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meninjau capaian indikator air minum dan sanitasi dalam konteks SDGs, khususnya tujuan keenam terkait air bersih dan sanitasi berkelanjutan. Data dikumpulkan melalui wawancara, observasi, dan dokumentasi terhadap 53 responden di kelurahan tersebut. Hasil penelitian menunjukkan bahwa 49,1% rumah tangga menggunakan air minum dalam kemasan, 41,5% rumah menggunakan sumber air terlindungi seperti sumur bor atau pompa, sementara 37% rumah masih menggunakan sumur tidak terlindungi yang berpotensi menyebabkan kontaminasi. Pada bidang sanitasi, hanya 32,1% rumah yang memiliki akses sanitasi layak, dan 83,2% penduduk telah memiliki kebiasaan mencuci tangan dengan sabun sebelum dan sesudah makan. Hasil ini menunjukkan Akses terhadap air bersih dan sanitasi yang layak masih menjadi tantangan, meskipun upaya peningkatan infrastruktur telah dilakukan. Data menunjukkan bahwa belum semua rumah tangga dapat mengakses layanan tersebut secara optimal. Oleh karena itu, diperlukan kebijakan yang lebih fokus untuk meningkatkan kualitas air bersih yang dikelola secara aman dan memperbaiki sistem sanitasi guna mendukung kesehatan masyarakat dan standar hidup yang lebih baik serta memerlukan upaya lebih lanjut dari pemerintah dan masyarakat untuk mencapai target SDGs pada tahun 2030.

**Kata Kunci:** Air Minum, Sanitasi Layak, SDGs

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## **INTRODUCTION**

Sustainable Development Goals (SDGs), established during the 2015 UN General Assembly, are a continuation of the Millennium Development Goals (MDGs) which ended in 2015 (Bismi et al., 2021). With 17 goals designed to balance environmental, social, and economic dimensions of development by 2030, this study focuses on SDG 6: ensuring the availability and sustainable management of clean water and sanitation for all.

The 2015-2019 National Medium-Term Development Plan (RPJMN) underscores Indonesia's commitment to achieving 100% universal access to clean water and sanitation, aligning with SDG 6. In Lampung Province, efforts have targeted universal access by 2019 (Warsito et al., 2020). but significant challenges remain,

particularly in reaching low-income communities (MBR) and densely populated areas, where basic sanitation infrastructure often falls short of expectations.

In many Indonesian cities, including Bandar Lampung, residents rely heavily on refillable and bottled water due to its perceived safety compared to tap water. However, PDAM tap water, shallow wells, or drilled/pumped wells remain essential for daily needs such as cooking, bathing, and washing (Djaja et al., 2022). Limited access to clean water and inadequate sanitation infrastructure contribute to the prevalence of diseases such as diarrhea, cholera, and hepatitis A (Ariska et al., 2022).

Nationally, sanitation access remains limited, with only 40.67% of the population having adequate

facilities, according to Kimpraswil data. In Bandar Lampung, where population density reaches 5,332/km<sup>2</sup> with over 1.16 million residents, sanitation management faces similar challenges, particularly in densely populated neighborhoods like Kampung Baru Village, which hosts a significant immigrant population (Pratiwi et al., 2021).

The increasing population density in Kampung Baru Village has placed significant pressure on environmental sanitation. Despite Bandar Lampung's urban status, clean water and sanitation management remain underdeveloped in this area. This study aims to evaluate the achievements of SDG 6 indicators in Kampung Baru Village, providing insights into the current access levels to clean water and adequate sanitation while identifying gaps that hinder the realization of the 2030 sustainable development goals.

**METHOD**

This study adopts a descriptive qualitative design to assess the achievements of adequate drinking water and sanitation indicators in Kampung Baru Village. The questionnaire consisted of 20 items covering key indicators such as water source type, availability, and access to proper sanitation facilities. Observations focused on the physical condition of water and sanitation infrastructure, while document reviews included local government reports and SDG progress data.

The study employed a descriptive qualitative design to evaluate the achievements of adequate drinking water and sanitation indicators in Kampung Baru Village, Labuhan Ratu District, Bandar Lampung City. Data collection involved three main methods: interviews, observations, and document reviews.

The instruments used included a structured questionnaire with 20 items

to assess key indicators of drinking water and sanitation. Observations focused on the physical condition of water sources and sanitation facilities, while document reviews analyzed local government reports and SDG progress data. A total of 53 respondents were selected using purposive sampling to represent diverse household conditions in the village.

The research was conducted over two months, from January to February 2024. Data were analyzed using descriptive statistics for quantitative responses and thematic analysis for qualitative findings. Kampung Baru Village was chosen as the research site due to its high population density and challenges in achieving universal access to clean water and sanitation, as targeted by SDG 6.

**RESULTS AND DISCUSSION**

**1. Clean Water Area**

**A. Drinking Water Indicator**

In this study, drinking water indicators were measured on 53 respondents using questions in a questionnaire. The results obtained are as follows:

**Table 1.** Percentage of Clean Water Fields in Drinking Water Indicators

No	Indicator	Number of Residents	Presentation	Category
1.	Houses use surface water sources (rivers, lakes, reservoirs, ponds, irrigation) directly without processing	0	0,0%	Access not available
2.	The house uses water sources that come from unprotected wells and/or unprotected springs	2	3,7%	Access is not feasible
3.	The house uses tap/piped water sources	3	5,7	Feasible access is limited

4.	The house uses drinking water from a protected water source/well or drilled well/pump and the collection time is 30 minutes or less	22	41,5%	Basic decent access
5.	The house uses bottled drinking water	26	49,1%	Secure access
<b>Amount</b>		53	100%	

Fulfillment of drinking water needs must come from sources that meet health requirements. The main sources of drinking water include pipes/plumbing, drilled wells/pumps, protected springs, and rainwater reservoirs. According to SDGs Metadata Edition II, drinking water that is managed safely must come from a suitable source, can be accessed whenever needed, and meets water quality standards.

From the research results, several indicators for evaluating access to drinking water in Kampung Baru Village: 3.7% use unprotected wells which can cause contamination and disease, 41.5% of houses use protected water sources such as drilled wells/pumps or protected springs, which can be accessed in a maximum of 30 minutes, and 49.1% of houses (26 houses) use bottled drinking water (AMDK) due to perceptions of health, practicality, and decreasing surface water quality.

In Kampung Baru Subdistrict, access to adequate drinking water in 2023 will reach 49.1%, far from the target of 100% in 2030. Increasing access to drinking water requires an active role from the government and community. The main factor influencing the choice of drinking water is the perception of better quality, particularly in terms of cleanliness and safety

To achieve Sustainable Development Goals (SDGs) Goal 6,

namely universal access to safe and affordable drinking water, it is necessary to increase the quantity, quality, continuity and affordability of drinking water, as well as access to adequate sanitation for all households.

### **B. Clean Water Indicator**

Clean water is water that meets the requirements for use in daily activities and is used for drinking water treatment and sanitation. Requirements are viewed from the conditions of chemical, physical and biological content, which means they must meet the following standard requirements:

1. In general, it is classified as water that is classified as safe and healthy for human consumption.
2. Physically: the water is colorless, odorless and tasteless.
3. Chemically: The pH is neutral (not acidic or alkaline), does not contain toxins or dangerous heavy metals, other parameters such as BOD, COD, DO, TS, TSS, and conductivity comply with applicable local government regulations.

As explained in interviews by researchers with people who use government-assisted water in Kampung Baru Village, the need for this assisted water is provided by the government, but residents who need it have to pay a fee of 2500 per cubic meter. This government program has been running for approximately five years, and the community has felt happy and helped. However, there are still several problems faced, one of which is that the amount of water flowing is small and often turns off for a while.

Limited access to clean water in Kampung Baru has a significant impact not only on public health, such as skin diseases and infections, malnutrition, dehydration, and illnesses caused by heavy metals and hazardous chemicals, but also on

social and economic conditions. Addressing this issue requires collaborative efforts between the government and the community, including the enhancement of clean water infrastructure, hygiene education, and regular monitoring of water quality.

## 2. Decent Sanitation Field

### A. Environmental Sanitation Management

The government's current initiatives to improve sanitation, such as subsidized septic tanks, have shown progress but remain inadequate in densely populated areas. Based on findings in the field, the low access to proper sanitation in Lampung Province is caused by the low access to sanitation in terms of the use of septic tanks for the final disposal of feces. Disposal of feces must be managed properly to prevent or at least reduce fecal contamination in the environment. In other words, waste must be disposed of in the right place or in a healthy toilet. Viewed from a public health perspective, human waste disposal is an important issue that must be addressed immediately. Because feces or human feces are the source of many complex diseases. Diseases originating from feces can spread in various ways. The role of feces in the spread of disease is very large. Apart from directly contaminating food, drinks, vegetables, it can also damage ground water, insects and our body parts can be contaminated by feces.

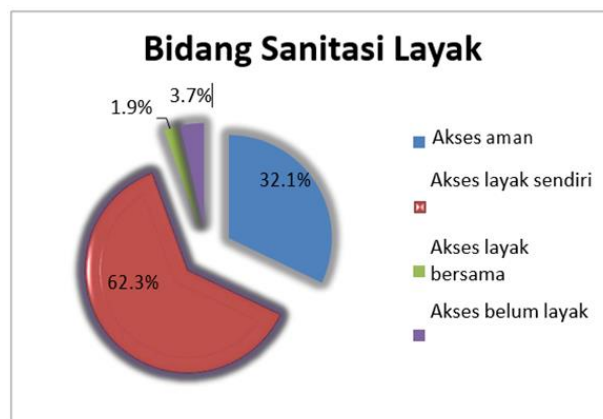


Figure 1. Proper Sanitation

Efforts to improve the health status of the Indonesian population are closely related to the importance of access to adequate sanitation in all levels of society. The government continues to strive to increase access to adequate sanitation through various programs in order to achieve the target of adequate sanitation for all by 2030, as set out in Goal 6 of the SDGs. However, achieving adequate sanitation in Indonesia cannot be separated from the role of various parties, both government and private, and of course the community.

### B. Provision of Hand Washing Facilities

Washing hands is an important behavior to prevent the risk of contracting disease. The habit of washing hands with soap, the majority, 83.2%, already have the habit of washing hands before and after eating. Apart from that, the percentage of people who wash after defecating or urinating is 71.6% who understand and know the importance of maintaining personal hygiene to avoid contracting diarrhea or other digestive diseases.

The results of data collection show that not enough houses have hand washing facilities at home. The low availability of hand washing facilities at home (only 2 households) indicates a lack of infrastructure investment and public awareness, which poses

challenges for long-term hygiene promotion. Although the COVID-19 pandemic has raised awareness of the importance of hand washing as a preventive measure against disease transmission, this habit needs to be sustained. The pandemic has taught many people about the crucial role of hand hygiene in preventing the spread of the virus, but without adequate facilities at home, this habit is difficult to maintain consistently. Therefore, it is important for both the government and the community to collaborate in improving access to and infrastructure for hand washing, so that this healthy habit can continue to be practiced in daily life.

Lack of public awareness of the importance of washing hands with clean water and soap after defecating to prevent the transmission of diseases such as stomach ache and diarrhea. This can be used as input for the government, especially the Ministry of Health, to more aggressively promote CTPS (Hand Washing with Soap). The aim is to ensure that people who have started to get used to washing their hands with soap during the COVID-19 pandemic continue to follow this without abandoning this habit.

CTPS is not only a problem for the Indonesian government, but is a global recommendation contained in the SDGs document. The SDGs target sets the goal of achieving adequate and equitable access to sanitation and hygiene for all by 2030. In Indonesia, the implementation and improvement of CTPS practices in everyday life is still needed. The habit of washing hands with water and soap is very important to improve people's health. This habit should not be abandoned even after the COVID-19 pandemic subsides (Sanguin et al., 2022).

## **CONCLUSIONS AND SUGGESTIONS**

The conclusions from this research are as follows:

1. Access to safely managed drinking water in Kampung Baru Village, Bandar Lampung City is 49.1%. Providing clean water, around 73.5% of homes are able to obtain water that meets the quality standards for clean water that is tasteless, odorless and not cloudy.
2. Access to adequate sanitation is 32.1%, which includes access to sanitation such as using your own latrine, the top of a goose neck toilet, the bottom of a septic tank, and being vacuumed every five years. As many as 83.2% are used to washing their hands before and after eating. As many as 71.6% are accustomed to washing their hands after defecating or urinating, to avoid the spread of diseases such as stomach aches, diarrhea and other digestive diseases.

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