

**2** Laindatang Water Connections

# WATER CONNECTIONS, SANITATION, AND PHBS LAINDATANG PHASE II, 2024 Building a Healthy Learning Environment Through School Sanitation









# INTRODUCTION

This report outlines the activities of the water and sanitation connection project at SDN Laindatang in Mbatakapidu village. The project involved the construction of ferrocement reservoirs, the installation of rainwater harvesting facilities, the development of clean sanitation, the delivery of PHBS education, and the promotion of nutritious eating to create a healthy learning environment.



A total of ninety school community members participated in the project, comprising 13 members of teaching staff and 77 students.

# **Project Location**

SDN Laindatang is located in East Sumba Regency, East Nusa Tenggara Province, Indonesia. The school is located approximately 25 km from Waingapu City, the capital of East Sumba Regency.



## **OBJECTIVES & KEY ACTIVITIES**

### **1.Provide Clean Water Facilities :**

Ensure the establishment of reliable and sustainable clean water facilities in the school environment, ensuring easy access for teachers and students.

### 2. Building Healthy Sanitation Facilities :

Improve sanitation conditions for the well-being of students and teachers by constructing adequate sanitation and healthy hygiene facilities.

### 3. Provide Hand Washing Facilities :

Construct accessible handwashing facilities for the entire school community, encouraging regular hand hygiene practices among students and teachers.

### 4. Improve Knowledge of Healthy Habits :

Understanding of healthy habits and personal hygiene among students and teachers using teaching materials adapted from Sumba's local culture.

### 5. Improve Students' Health Conditions :

Emphasize the importance of nutrition and personal and environmental hygiene, starting from the school environment.





# **PROJECT SITE SURVEY**

The SDN Laindatang Phase II Water Connections and Sanitation project site survey was conducted over several visits. The data collected by the team includes various potential points for constructing facilities, types of facilities, and the most effective system so that all facilities can be optimally used by the school's residents and those living around the school.

The team also ensured the living conditions of the field team so that they could live and work well with the people of Laindatang. Ensuring living conditions, access to water, sanitation, and storage of materials used in the construction of the facilities.

# **SOCIALISATION & COORDINATION**

In planning this project, we continue to observe and build up intensive communication with the school residents of SDN Laindatang, the government, and the resident so that we can decide on solutions, types of activities, and work planning based on mutual needs and agreements.

Our coordination activities started with a meeting with each partner; then we held a meeting with all partners to sign a memorandum of understanding (MOU) that included the responsibilities of each partner, including the Department of Education, Youth and Sports East Sumba Regency, Government of Mbatakapidu Village, Laindatang Primary School and the parents of the students.

We then held a meeting with the resident to share the project plan, design, and work plan and to agree on the active involvement of the resident in every process of the program implementation.









# FERROCEMENT WATER TANK AND RAINWATER HARVESTING SYSTEM

Provide three sets of clean water source installations ranging from rainwater harvesting, filtration systems, piping, and a 15,000-litre capacity ferrocement water tank in the school area, headmaster's, and teacher's room.

### **Rainwater Harvesting System**

Two sets in the school area

Two sets in the mess area

### **Rainwater Filtration System**

Two sets in the school area

Two sets in the mess area

### **Ferrocement Water Tank**

10,000 liters in the school area Five thousand liters in the mess area, including the repair of the rainwater harvesting system and the water tank in the mess area.



All these activities were carried out with the school community's participation, with material and technical support from the Foundation team, providing a clear example of practical cooperation in improving access to clean water.





Laindatang Water Connections



### Laindatang Water Connections

Future plans

### Toilet's Mess



Teacher's Mess

# TECHNICAL MAP WATER CONNECTIONS SDN LAINDATANG

Mess

Principal's



Ferrocement Reservoir



The Old



Reservoir



**Box Control** 



Rainwater Harvesting System



Septic tank

Infiltration

Handwashing

Toilet

Station

**Building** 1 2 Classrooms)

> Building 2 2 Classrooms)

**Building 3** (1 Office & 1 Classroom)

> School Toilet Renovation

<u>لعا</u>



The rainwater harvesting system implemented in this project consists of installing rainwater gutters using a 4-inch Paralon pipe connected to a water filter that leads to a reservoir.

Four buildings have completed targeted harvesting:

- 1. Gutters on the headmaster's building (16 meters)
- 2. Gutters on the teachers' quarters building (13 meters)
- 3. Gutters on the school office building (26 meters)
- 4. Gutters on the classroom building (29 meters)

The work on the rainwater harvesting system involves a team of experts in their field equipped with the appropriate work equipment to ensure the safety of the workers. Residents were also actively involved in more straightforward tasks like cutting pipes or moving equipment. Rainwater harvesting gutters were installed on only one side of each building to measure the available water storage capacity.





It took three days from pipe preparation to guttering on each of the four buildings, a total of 12 days.

### TECHNICAL DRAWINGS RAINWATER HARVESTER



# Rainwater Harvester on one side of the roof

Water collection with PVC gutters equipped with dust and dirt filtration before rainwater enters the ferrocement tanks

### **Connections between water installations**

121

100

HDPE piping connects four water tanks in the Principal's Mess and teachers' Mess and two ferrocement water tanks in the school compound. It also connects to the hand washing station.

2



Each rainwater harvester installed on the four buildings is connected to a water filter before the water enters the storage tanks.

Water filtration is a simple or applied technology consisting of two stages. In the first stage, the water channel is cut off from the gutter, and then the filtration is installed at a distance of 5 cm using a large pipe equipped with a net to prevent large debris such as leaves from entering. In the second stage, the filtration is connected vertically to a large pipe. The pipe contains a float ball.

Water passing through the first stage fills the second filtration, and the float blocks the flow when complete, directing clean water to the reservoir. This filtration retains dust and dirt from the first rainwater before the clean water enters the reservoir.



### TECHNICAL DRAWING OF RAINWATER FILTRATION



**Rainwater Harvesting Gutters** Covered with PVC to reduce roof waste



*First Filter - Mesh Screen Filter Prevents large debris such as leaves and stones from passing through* 

### Overflow pipe

Floating ball 💭

### Second filter - Flush Diverter and Slow Drip Control

Inside is a vacuum ball that rises and closes the pipe gap to prevent dirt from rising. Finer debris, such as small pebbles and dust, are filtered out by this filter.



The tap on the gutter filter should be set to a slightly open position, perhaps 2%, to allow the dirt to flow out.



### **Control Box**

The control box is used to secure all incoming and outgoing water taps.



**Drainage Infiltration Hole** When the ferrocement basin is complete, the water flows to the infiltration pit. When the infiltration pit is complete, the water fills the excavated pond and seeps back into the ground when the rain stops.

Tusen klep

## **FERROCEMENT WATER RESERVOIRS**

Ferrocement is one of the solutions for water storage in rural areas as part of the innovation of appropriate technology with more efficient materials, and the technical work system is relatively easy. While working on this technology, we can involve community participation. This makes it easier to transfer knowledge that the surrounding community can replicate for sustainability.

In this project, three ferrocement tanks have been built. The total capacity is 15,000 liters. In addition to the construction of the new tanks, the school's old tanks were also renovated, making it safer and healthier to store water for consumption by the school community.

Rainy weather poses a challenge to the construction of this water reservoir. Laindatang is often hit by rain, so the process is delayed and takes longer.











Laindatang Water Connections

### TECHNICAL DRAWING OF FERROCEMENT WATER RESERVOIR PIPING

### Check valve / Tabok valve

The inlet and outlet pipes become one. Installing a check valve prevents the water entering the tank from passing through the lower tank outlet hole.

### Lower reservoir pipe

This pipe also goes to the lower reservoir next to the class.

Air tube

To allow air to flow in and out of the reservoir without allowing dirt to enter.

**Reservoir outlet pipe** This pipe also goes to the same infiltration hole.

**Teacher's mess reservoir pipe** This pipe distributes water from the teacher's mess reservoir to this reservoir.



Ferrocement water reservoir

- 1. Principal's mess water reservoir.
- 2. Classroom water reservoir.
- 3. Office water reservoir.
- 4. Water reservoir in teacher's mess (renovation)



Inter-facility piping using 1 Dim HDPE pipe with a length of 250 m. This piping connects four reservoirs (Principal's Mes reservoir, Teacher's Mes reservoir, Office reservoir, and Class reservoir) to the source of clean water and distribution to the point of use of clean water.

This HDPE pipe will be buried in the ground at a depth of approximately 30 cm so it will not be easily torn or leaked when exposed to sharp objects, burned by fire during the burning of the savannah, or stepped on by livestock.

The pipe excavation work was carried out jointly by the Foundation's team, paid laborers, and residents. The gotong royong working system made the job easier. We divided up the points for laying the pipe, and divided up the tasks of digging and planting the pipe. The equipment was simple; the team provided it, but the residents also brought their equipment, so the pipe-laying process in the Laindatang school area went smoothly.





### Laindatang Water Connections



## **SUSTAINABILITY AND MAINTENANCE OF FACILITIES**

To ensure that communities continue to have access to safe and clean water, sustainability and maintenance of safe water facilities are critical. To ensure the sustainability and maintenance of clean water facilities, here are some steps and strategies:

### **Increase Community Participation:**

- Actions: Involve school community members in the planning, implementation, and maintenance of safe water facilities.
- Strategy: Organise regular meetings with school community members to discuss needs and changes in water facility management.

### **Plan and Schedule Routine Maintenance:**

- Actions: Develop a routine maintenance schedule for the water point.
- Strategy: Have a technical team or maintenance officer carry out regular inspections, repairs, and preventive maintenance.

### **Read the Clean Water Facility Manual Book**

- Action:

Development plan: Once a clean water facility has been built, it can be subject to development or expansion. For example, it can accept new water sources other than rainwater, such as from boreholes with additional piping, and tank trucks by improving truck access roads.

• Understand the details of each facility.

• Be aware of the do's and don'ts to maintain operation and maintenance.

• Strategy: Handle any problems with damage or replacement of facility components according to the guidelines.

• In case of damage and replacement of spare parts, there is an estimated purchase price, if it is difficult to get spare parts or damaged equipment, you can contact the

Foundation team to be assisted in the purchase process.



### LAINDATANG WATER CONNECTIONS FASE II



# PANDUAN **FASILITAS AIR BERSIH** LAINDATANG







PEMANEN AIR HUJAN **DAN FILTRASI** 

Sistem Panen Air Hujan (PAH) merupakan suatu sistem konservasi air tanah melalui penampungan dan pemanfaatan air hujan guna memenuhi kebutuhan air

INDATANG WATER CONNECTIONS

- E Box Kontrol mengamankan seluruh kran aliran air yang nasuk dan keluar

, The second sec

💥 Lubang Resapan Pembuangan ika bak ferosemen telah penuh, maka

#### PROSEDUR PEMELIHARAAN FASILITAS

#### 1. TANDON

- Jaga dan hindari hantaman benda keras seperti dilempar batu dan sundulan
- atau kerusakan pada struktur tandon. Jika terdapat keretakan atau kebocoran dapat dilakukan perbaikan dengan semen/acian luar dalam
- Bersihkan tandon minimal sekali setiap enam bulan.

#### 2. TALANG & FILTRASI

- Pemeriksaan Sistem Pemanen Air Hujan setiap dua bulan. Kegiatan meliputi :
- Periksa dan bersihkan talang serta penyaring air hujan dari kotoran seperti daun, lumpur dan sampah
- Pastikan talang dan filtrasi tidak tersumbat dan bocor agar aliran air berjalan lancar menuju tandon
- Periksa kebersihan dan kondisi filter air yang digunakan sebelum air masuk ke tandon. Pengecekan dapat dilakukan dengan membuka kran pada ujung filtrasi untuk memantau kondisi air.

#### 3. PIPA DAN KRAN

- Periksa pipa dan kran yang terhubung ke tandon, sanitasi dan westafell untuk
- Pastikan kran berfungsi dengan baik dan dapat menutup serta membuka dengan lancar



PERHATIAN !!!

stop kran saling

terhubung

Ketika stop kran no. 3

terbuka pastikan jalur

tujuannya, karena semua

#### **TANDON KANTOR**

- 1 Jalur menuju wastafel & tandon kelas Ketika menggunakan stopkran no. 1. Pastikan stopkran di tandon kelas sudah tertutup.
- Jalur yang keluar dari tandon kantor untuk penggunaan stopkran no 1, & 4. Ketika menggunakan stopkran no. 4. Stop kran no. 1, pastikan dalam keadaan tertutup
- Jalur dari tandon mes kepala sekolah & mes guru, untuk pengisian tandon kantor(2), mck (4), & tandon kelas dan wastafel (1) Pastikan stop kran yang tidak sedang di pelukan dalam keadaan tertutup.!
- jalur menuju mck & wastafel mck sekolah





Four hygienic toilets have been built to an improved standard. Each toilet has a septic tank with a capacity of 100 people. These sanitation facilities take care of proper waste management so that they do not spread hazardous materials, are easy to clean, and prevent the spread of disease vectors to people and the surrounding environment.

### Four healthy toilets around the school

- school office area

### **Septic tank for 100 people**

Size adapted to the number of users (school population)

## **PROPER SANITATION FACILITIES AROUND THE SCHOOL**

• Two healthy toilets in the teachers' mess area (toilets with lightweight steel wall and roof materials) • Renovation of two hygienic toilets in the classroom and

## **BUILDING HEALTHY TOILETS**

The seven Healthy Toilet Concepts for Healthy Sanitation that we use are based on the guidelines set out by the Ministry of Health and include the following:

### **Distance From a Clean Water Source:**

To prevent water contamination, toilets are built far enough away from clean water sources such as wells or rivers.

### **Depth of The Pit:**

Pit toilets are deep enough to allow waste to decompose properly and not contaminate the surrounding environment. For healthy sanitation in Laindatang, the length and depth of the septic tank is  $3 \times 1$  metre with three filtered chambers to produce an effluent that is safe for the environment.

### Ventilation:

Ensure proper ventilation to prevent the build-up of harmful gases and to keep the air inside the toilet fresh.

### **Type of Toilet:**

Choosing an appropriate type of toilet, a squat toilet, meets health and hygiene standards. It is also the most common latrine used by residents in East Sumba Regency.

### **Construction Materials:**

Construction materials are durable, easy to clean and meet health standards. The material used for the walls and roof is mild steel combined with split bamboo for the artefacts. Cement is still used for the floors and foundations.

### Waste Disposal Site:

Provide a safe sources.

### Maintenance and Hygiene:

The surrounding community is expected to keep the latrine and the surrounding environment clean.

Guidelines: Permenkes-no-3-year-2014 on Community-based Total Sanitation (STBM) Permenkes No. 70 Year 2016 on Environmental Health Standards and Requirements for Public Facilities



Laindatang Water Connections

Provide a safe waste disposal site away from clean water

### In the process of sanitation development in Laindatang, community participation is the main thing that is emphasised, from determining the location and the work plan to the implementation of the development, which is decided together through deliberation.

It is expected that community knowledge about healthy sanitation structures and standards will be increased through community participation. In addition, community participation can increase the sense of ownership and responsibility to maintain the facilities built for sustainable use, especially for the school community of SDN Laindatang.















The two healthy toilet cubicles in the teachers' mess area were built with a light steel frame, spandex walls and roof, cement floor, split bamboo as the outer wall and handwashing facilities.

The renovation of the two toilet cubicles in the school area was to continue the materials that had been used previously, namely brick walls and wooden door frames. The roof uses a spandex roof. This healthy toilet has a wastewater catchment area and a place to wash hands.







# REFILL

The initiative to provide handwashing facilities in the school area and jerry can refilling stations with a closed system for the infiltration of waste from the handwashing facilities reflects the commitment to creating a clean, healthy and sustainable school environment.

The school creates an environment that supports hygiene principles, sustainable clean water and safe waste management.

**Eight-point handwashing stations** 8-point handwashing stations in each classroom and toilet

from school

**Sewerage Construction** Drainage from each handwashing station with a closed system.



### **Three-point jerrycan refill station**

3-point jerrycan refill station for students bringing water home





**Hand wash station piping** The blue pipe is the inlet pipe and the yellow pipe is the outlet pipe which goes to the infiltration pit.

> **Drain Infiltration Pit** All drainage pipes go through this infiltration hole with 50-100cm of excavation.

TECHNICAL DRAWING OF THE HAND WASHING STATION





Car

<u>Car</u>

70cm high for children in years 4-6 If required for younger children, raise backfill, remove cement concrete

Control Box

Controls the distribution of interconnecting water from the reservoir to the hand and foot wash stations.

 一 二 一



6 Washbasins are scattered around the classroom, and all toilets, including teachers and school toilets, make it easy for students to wash their hands after going to the toilet. This helps prevent the spread of disease and maintains personal hygiene and the school environment.





The three-point jerrycan filling station is designed to ensure that students, teachers and school staff have easy and quick access to clean water at all times.



A covered drain minimises the risk of spreading bacteria and disease through wastewater. The system also helps maintain the environment's aesthetics by eliminating stagnant water and unpleasant odours.

### DOCUMENTATION OF BUILDING HAND WASHING FACILITIES



### **BENEFITS OF RAINWATER HARVESTING, SANITATION AND** HAND WASHING FACILITIES AT SDN LAINDATANG

### **Improved access to clean water :**

- Rainwater harvesting: SDN Laindatang can use rainwater for daily needs, including drinking water, washing, and other sanitation. This helps to ensure a steady supply of clean water to the school.
- Hand washing facilities: The availability of handwashing facilities with clean water and soap improves student hygiene and health, preventing the spread of infectious diseases among students and school staff.

### **Environmental education and awareness :**

- Rainwater harvesting: Teaching students the importance of water conservation and how to use rainwater efficiently develops environmental awareness from an early age.
- Sanitation and Handwashing: Students learn to take care of their health and reduce the risk of disease by being trained in good sanitation practices and the importance of regular Handwashing with soap.

### **Improves student attendance and concentration :**

- Better health: With improved sanitation and access to safe, clean water, students are healthier and able to attend school regularly. This improves their attendance and concentration on learning.
- Handwashing facilities:\*\* Students who are used to washing their hands with soap before eating and after using the toilet are less likely to develop illnesses that can affect their attendance and concentration.

### **Reduced potential for disease :**

• Good sanitation facilities and spotless and safe toilets can significantly reduce the risk of accidents and diseases caused by poor sanitation.



Laindatang Water Connections



A series of Healthy Habits education campaigns were carried out around Laindatang School with all students and residents in various activities. With the involvement of all partners and residents, Healthy Habits are more accessible to achieve together. Below is a list of activities:





### **Campaign Media Design**

In the Healthy School Campaign on Healthy Habits, posters were made as a tool. These include posters on nutrition, hand washing and healthy lifestyles.



### Installation of campaign media

The installation of healthy school campaign media consisting of 4 posters will be placed on the wall of each classroom and at the handwashing facility's site, in a location that is easily visible and readable by the children.

Laindatang Water Connections

• Preparation of teaching modules and classroom resources for the facilitator team, complete with student assignment sheets according to the topic.

• Collaborating with other educational facilitators from different disciplines to share knowledge about clean and healthy lifestyles with students and residents around the school.

### **Health class**

There are several inseparable sub-activities in the Health Class series. These include:

• Facilitator classroom teaching and learning activities on clean and healthy lifestyles.

 Complement the learning activities with simple games that can be played individually or in groups to make the learning atmosphere more enjoyable.







Kawan Wahyu is a digital artist who turned the Healthy Habits campaign illustration into an A2 poster to be used as information for the school community. This poster has been divided into four images, which are as follows.

- 1. Hand washing guide
- 2. Balanced nutrition
- 3. Daily healthy behaviour
- 4. Healthy and unhealthy food and drinks

This poster emphasises localism by portraying two children of Sumba ethnicity, with images of food ingredients found in Sumba, highlighting daily characteristics in Sumba, hoping that school children will more readily accept this image in Sumba.

These posters will be printed and distributed in schools visited by the Kawan Baik Indonesia team and the Fair Future Foundation. They will also be displayed in community activity centres such as the RT hall or the district office.





Well-designed and printed posters are displayed in a variety of locations; for example, hand-washing posters are displayed in the hand-washing area and bathroom. A balanced diet and healthy lifestyle posters are shown in the classroom.

These posters have also been distributed to other schools visited by the Kawan Baik Indonesia Foundation and to the community around Laindatang School.

The posters are not only printed as campaign media. They are also printed in a larger size to be used as classroom teaching aids for Healthy Habits materials. With exciting and contextual images, it is hoped that it will be easier for students to understand the material presented by the facilitator.





In order to facilitate the teaching and learning activities of the Healthy Habits material for facilitators, teaching modules have been developed with general material:

- 1. Rambu, Umbu, let's wash our hands!
- 2. Fill your plate with nutritious food.
- 3.A varied and balanced diet
- 4. Physical activity
- 5. Getting enough rest

This module is enriched with illustrations by Wahyu in attractive colours, making it easy for teachers or facilitators to use and understand.

In addition to the material, this teaching module is equipped with several pages of tasks for students and games that classroom facilitators can use to deliver Healthy Habits material.

Classroom teachers can also use this module when conducting teaching and learning activities without the Foundation team, as the material in this module refers to teaching materials issued by the Ministry of Education and the Ministry of Health.







Untuk melakukan aktivitas sehari-hari, tubuh membutuhkan asupan gizi yang lengkap. Makan makanan beragam dengan porsi yang seimbang sangat penting bagi kita agar bisa memenuhi asupan gizi yang lengkap. Piramida gizi seimbang menggambarkan anjuran konsumsi kelompok bahan pangan dari yang dianjurkan untuk dikonsumsi dalam jumlah yang paling banyak (lapisan paling bawah) hingga yang paling sedikit (lapisan paling atas) 1. Lapisan pertama: bahan pangan sumber karbohidrat (3-4 porsi per hari)







### PERHATIKAN LANGKAH CUCI TANGAN YA!

2 Laindatang Water Connections

## MAKANAN BERAGAM DAN SEIMBANG

2. Lapisan kedua: sayur (3–4 porsi per hari) dan buah (2–3 porsi per hari) sebagai sumber vitamin dan mineral

3. Lapisan ketiga: bahan pangan sumber protein (2-4 porsi per hari) 4. Lapisan keempat: gula (4 sendok makan), garam (1 sendok teh), minyak (5 sendok makan), atau kue manis dan asin secukupnya.

the state		0000	Δ
	GAMBAR PIRING MAKANMU		
	Isi piring kosong disamping ini dengan gambar makanmu hari ini!		Ľ
1	Nama : Kelas :		
19/8/4		U 🔪	Ŀ



implementation of Healthy Habits activities, we In the collaborate with local partners, including:



### **Education facilitators**

A total of six education facilitators were involved in this activity. They conducted mentoring teaching and learning activities in the classroom in four meetings. The Kawan Baik team and the facilitators also conducted training. They shared perceptions about Healthy Habits material, strengthened teaching methods and games in the classroom, and provided material on childfriendly facilitation.

### **Medical Personnel**



In health checks, we partner with doctors and medical personnel who have contributed a lot to social health activities in East Sumba, namely:

1. MEIRLIN RAMBU KAITA RIWA, commonly called Dr. Narni 2. IVONSIANI NATALIA MBAKURAWANG, commonly called kak Ivon, as medical personnel and pharmacists.

### **Educators of SD Laindatang**

All educators of SD Laindatang are fully involved in the classroom during teaching and learning activities about Healthy Habits as a companion for students because this program material is also part of the regular school material so that teachers and facilitators can complement each other. Some teachers also help the community and the team in the kitchen to cook a balanced menu for students.





**Residents around the school** The team prepared a nutritionally balanced meal with the local community, from preparing ingredients, cooking, and washing equipment to cleaning the kitchen as before.

environment.

A COMPLETE collaboration to implement PHBS in the school

## Learning about Healthy Habits in the classroom using different methods

Teaching and learning activities in the classroom about PHBS materials will be carried out using different teaching methods. With this variety of methods, teaching and learning activities in the classroom are expected to be more enjoyable. These methods include:

### **Active learning**

- Involving students in the learning process by having them actively participate in discussions, role plays, quizzes or group activities.
- By involving students directly, they will be more engaged and more likely to understand and apply the concept of PHBS in their daily lives.

### **Practical demonstration**

Conducting practical demonstrations of how to perform healthy actions, such as washing hands properly or brushing teeth, by seeing and doing it themselves will help students better understand and internalise Healthy Habits.

### **Group discussion**

### Use of multimedia

### **Good practices for PHBS activities**

Practice hand washing Active movement through happy, healthy gymnastics

• Encourage students to discuss relevant Healthy Habits issues in small groups.

• Group discussions allow students to exchange opinions, share experiences, and solve problems together, thus improving their understanding of the material.

• Use media such as videos, pictures, infographics or digital presentations to convey information about PHBS in an exciting and easy-to-understand way.

• Multimedia can help visualise concepts and make learning more enjoyable.





Integrating games into teaching and learning can create a more dynamic, fun and effective learning environment. It helps teach academic concepts and develop skills and attitudes essential for students' future lives.

This time, the teaching and learning activities of the Healthy Habits material are equipped with various games, considering that this material is easy and familiar but needs a method that primary school students understand more easily. Some of the games played in class and out of class this time are :

- The game of matching pictures of vegetables and fruits
- Protein grouping game
- Guess the flavour game
- Traffic light game
- Happy, healthy gymnastics together
- Drinking water table game
- Fill the plate
- Bedtime fill-in



Some of the benefits of games in this teaching and learning process are:

### **Motivation and engagement:**

- Games can increase students' motivation to learn by making them more interested and engaged.
- Games competitive aspect and fun make students more willing to participate and achieve learning goals.

### **Development of social skills:**

- Games often involve teamwork and social interaction, which helps students develop communication, cooperation and conflict-resolution skills.
- Students learn the importance of teamwork and how to work effectively in groups.

### **Contextualized learning:**

- Games can present learning situations in a more accurate and relevant context, helping students to relate knowledge to real-life situations.
- This allows students to understand how their learning concepts are applied in practical situations.





### Learning through experience:

- games.

### **Improved memory and comprehension:**

### **Alternative assessment:**

• Games allow students to learn through hands-on experience, which can be more effective than passive learning, such as listening to lectures.

• Students can explore and understand concepts in depth through simulations and experiments presented in

• Activities involving games are memorable because they provide a richer and more varied learning experience. • Interactive games allow concepts to be repeated and reinforced in an engaging and non-boring way.

• Games can informally and continuously assess student understanding, giving teachers a complete picture of student progress.

• It also allows students to demonstrate their knowledge and skills differently from traditional assessment.

# HEALTHY EATING PROGRAMME:

When implementing the Healthy Habits material in the Balanced Diet section, we carry out several interrelated activities, including



Water filtration station for safe drinking water Providing water filters in schools to ensure that students drink enough and good quality water.



### **Balanced, nutritious lunches for students**

Four weeks of lunch for students and teachers with a nutritionally balanced menu.



### **General Health Check**

This series of health checks will be carried out before and after the program, and it is hoped that we will be able to track changes in the health of the students at SD Laindatang.



# Water filtration station for safe drinking water

Clean drinking water is essential for our health and well-being. Here are some reasons why good quality drinking water is so important:

- 1. Health and hygiene
- 2. Optimal body function
- 3. Digestion and metabolism
- 4. Body temperature regulation
- 5. Skin health
- 6. Cognitive function
- 7. Energy and vitality
- 8. Long-term health
- 9. Preventing dehydration

To ensure good quality drinking water, it is important to check water sources, use appropriate water filtration and treatment technologies, and ensure hygienic water storage.

In this program, we provide drinking water filters in each classroom so that all students can consume good-quality water.





Develop a nutritionally balanced menu that includes a variety of foods from all major food groups:

- 1. Carbohydrates
- 2. Animal or vegetable protein
- 3. Vitamins, minerals and fiber from fruit and vegetables
- 4. and supplemented with milk
- 5.Water

Avoiding processed foods and foods high in sugar and saturated fats is also essential in maintaining a balanced diet.

When preparing the menu for the Laindatang students, priority is given to ingredients that are readily available in the neighborhood or are commonly cooked by local people, such as yam leaves, moringa, papaya flowers and pumpkin leaves.

Teachers and community members are actively involved in implementing the activities so they can learn from the Balanced Nutrition materials with the team.







### Nutritious, varied and balanced lunch menu

No	Carbohydrat es	Vitamins, minerals and fiber	Protein	Fruit	Mil
1	Rice and corn	Vegetable soup (carrots, potatoes, beans)	Fried Chicken	Banana	200 ml
2	Rice and corn	Sayur lodeh (pumpkin and pumpkin tops)	Fried Egg	Рарауа	200 ml
3	Rice	Moringa vegetable + sweet corn	Fried Fish	Watermel on	200 ml
4	Rice	Stir-fried papaya flowers and sweet potato	Beef lapis seasoning	Jeruk Bali	200 ml

### Notes:

1. Supplement with 1 glass of water

2.each child's portion follows the guidelines below (not too much rice must be balanced with vegetables, fruit and side dishes)



In the student health check activities here, basic health checks are carried out, including measuring:

- 1.body weight
- 2.body height
- 3.body temperature
- 4. blood pressure

To 76 students from grades 1-6 SD with a composition of 42 female students and 34 male students. 34 students.



No	Age	Total
1	7 years old	12 Students
2	8 years old	13 Students
3	9 years old	8 Students
4	10 years old	9 Students
5	11 years old	9 Students
6	12 years old	16 Students
7	13 years old	7 Students
8	14 years old	1 Students
9	15 years old	0 Students
10	16 years old 1 Students	

### Students at SD Laindatang have the following age classes

In this student health check, we try to calculate BMI or body mass index, an important measure that gets data about whether students fall into the everyday, overweight, or obese BMI class. According to the National Institutes of Health (NIH), the Body Mass Index is an indicator that helps to track body fat, and this fat is highly correlated with the risk of death and disease. We calculate BMI based on student height and weight.

The results of the BMI calculation were obtained:

- Underweight = 33 students (43.42%)
- Standard weight = 37 students (48.68%)
- Overweight = 2 students (2.63%)
- No data = 4 students (5.26%)

It is expected that the teaching and learning activities on PHBS and several activities related to the fulfillment of balanced nutrition with Laindatang Elementary School students can reduce the BMI rate in the Underweight group.





# FORMULA EDUCATION WITH RESIDENTS OF LAINDATANG







In addition to students, various knowledge activities were also carried out in the classroom with school residents, and mothers and fathers were no less enthusiastic than school students to listen to the facilitator's presentation of PHBS material. Good practices are also carried out together; we hope these good habits can continue at home as the smallest environment to start healthy and clean living behavior. We will start planting to feed our family when the water is available. There will be no need to go to the market and no excuses for not eating healthy because everything can be harvested from your garden. <image>

The school teacher who lives in the mess has started a community garden. The activity starts with tilling the soil by hoeing to loosen the soil and remove weeds that disturb the plants.



# TUJUAN PEMBANGUNAN BERKELANJUTAN SUSTAINABLE DEVELOPMENT GOALS



### ELIMINATING POVERTY

Construction of clean water facilities to improve the quality of life, addressing the unaffordability caused by poverty.



### GOOD HEALTH AND WELL-BEING

Healthy lifestyles can be achieved sustainably through improved access to safe water and healthy sanitation.



### LAINDATANG WATER CONNECTIONS

# 6 AKSES AIR BERSIH DAN SANITASI

### ACCESS TO SAFE WATER AND SANITATION

We are providing access to clean water and safe water storage combined with healthy sanitation.



### PARTNERSHIPS TO ACHIEVE GOALS

Engaging the resident of Laindatang village to build their healthy sanitation facilities, by and for the community, the goal is achieved and sustained together.

### OUR TEAM



2





Kawan Annisa Secretary and HR



Kawan Niluh Finance Manager



Kawan Wahyu Illustrator and Graphic Design



### Kawan Santi Treasurer and Admin

# THANK YOU

Titung

