

添付 4

岡山大学プレゼン資料

International Collaborative
Learning Project 2025

Learning Together for the Future of our shared Earth



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Bahkan kucing pun bertanya-tanya ke mana sampah dibuang.



Even cats wonder where the trash goes.



Our Journey

- We joined this project in 2024.
- in Feb 2025, 13 students came here.
- Together, we worked hard and learned many new things.

Our Motto



"Keep Smiling"

Please enjoy our stories and
keep a smile on your face!

**Preparation:
Learning in Maniwa City**



**Maniwa is beautiful and green.
it is a different world from our busy lives.**



**Turning trash
into "treasure"
(resource).**



"Where does our trash go?"



"How does trash become treasure?"

Recycling boxes at the store.



Using food waste to grow vegetables.



Clear trash bins at my university.



How my life change

- I can see inside, so I want to sort my trash.



Government



Company



Citizen

What we learned in Makassar

17 February 2025

23 February 2025





From learning to doing.



Trash is not just trash; it is a treasure.

**First we learn,
then we care.**



Children can change the world.



Trash Sorting Games 🏃♂️♂️♻️



It was fun!

Trash at Okayama University



If it is clean, we don't want to make it dirty.

Thinking together
for the future.



Our journey continues



OKAYAMA
UNIVERSITY

Why international exchange matters



Japanese students



They learned about themselves by seeing that their “normal” is “not normal”.

From “My World”



to “Our Earth”



Learning by doing



Thinking with our hands and hearts

Before: "Why we can't"



After: "How we can"

Picking up trash was hard work.



Now, it is a fun game!

LEARNING TOGETHER BRINGS US TOGETHER.



Together with you, we will build a circular society through education.



OUR UNIVERSITIES ARE WORKING CLOSER THAN EVER.

添付 5

ハサヌディン大学プレゼン資料



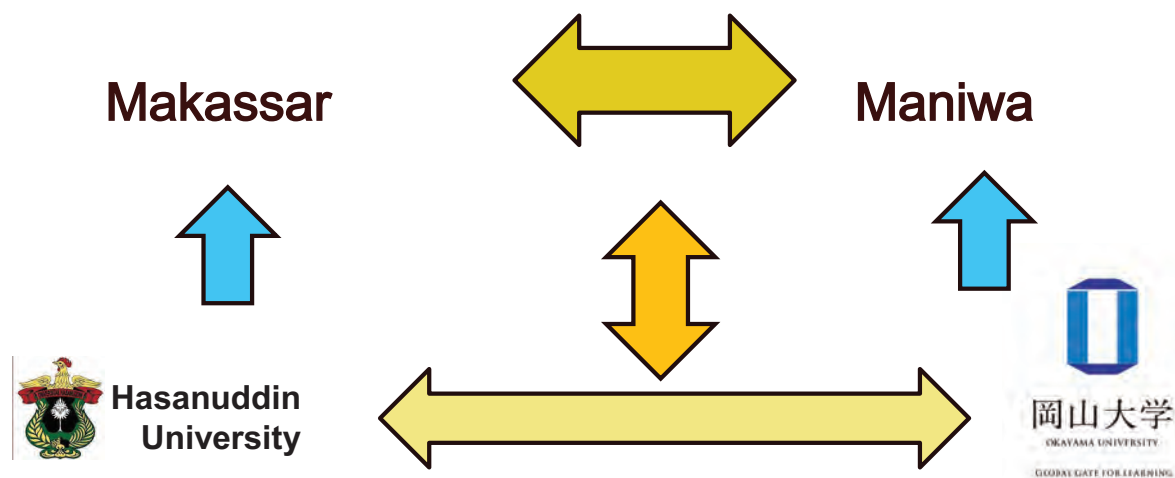
City to City Collaboration Maniwa Japan and Makassar Indonesia



International Collaboration Hasanuddin Univ & Okayama Univ



City to City Collaboration





What's the point of your
EDUCATION,
if you still throw **GARBAGE** on
the **STREETS**, only for an
UNEDUCATED PERSON to
clean up after you?



Apa lah arti **gelar** dan
pendidikanmu
Jika kamu masih saja
membuang sampah di
jalan dan justru orang2
tidak berpendidikan yang
harus membersihkan
sampahmu

(No Pic)

Laki-Laki

1 Sota (22) 2 night 3 days

2 Naoki (22) 2 night 3 days

3 Yuki (22) M 2 night 3 days

4 Shota (22) 2 night 3 days

4 Laki-Laki

5 Risa (19) F (All week) OR 2 night 3 days

6 Natsume (20) F 2 night 3 days

7 Haruna (22) F 1 Night 2 Days

8 Satsuki (23) F 1 Night 2 Days

9 Kotone (19) 2 night 3 days

10 Ayuko (22) F 2 night 3 days

6 Perempuan



岡山大学
OKAYAMA UNIVERSITY

OPEN VOLUNTEER HOMESTAY

Kami mencari keluarga yang bersedia menjadi homestay sukarela bagi mahasiswa Jepang dari Okayama University dalam rangka program akademik dan pertukaran budaya di Universitas Hasanuddin (UNHAS).

DAFTAR NAMA
10 MAHASISWA
UNIVERSITAS
OKAYAMA

DURASI TINGGAL

3 HARI/2 MALAM

20 - 22 FEBRUARI 2026

4 LAKI-LAKI
6 PEREMPUAN

WIDYA KAMMA

082393132814

Number of H

Student, female

1	Makino Kotoko & Nakayama Junna
2	Nishima Natsume
3	Akimoto Chiho & Yamamoto Natsuki
4	Nishimoto Chifuyu & Ooi Natsumi
5	Sueda Ayuko & Waki Momoka

Student, male

6	Ikeda Haruto
7	Senoo Kotaro & Takahashi Tsukasa

Supervisor

8	Hara Yuichi
9	Ardh Khalifatulloh Fiel
10	Mimura Yukari

Others

11	Murase Ryohei
12	Senshi Ichigo
13	Hina Seiya









Organic Waste



Organic Fertilizer



Urban Farming



BIO DIGESTER

HASANUDDIN UNIVERSITY

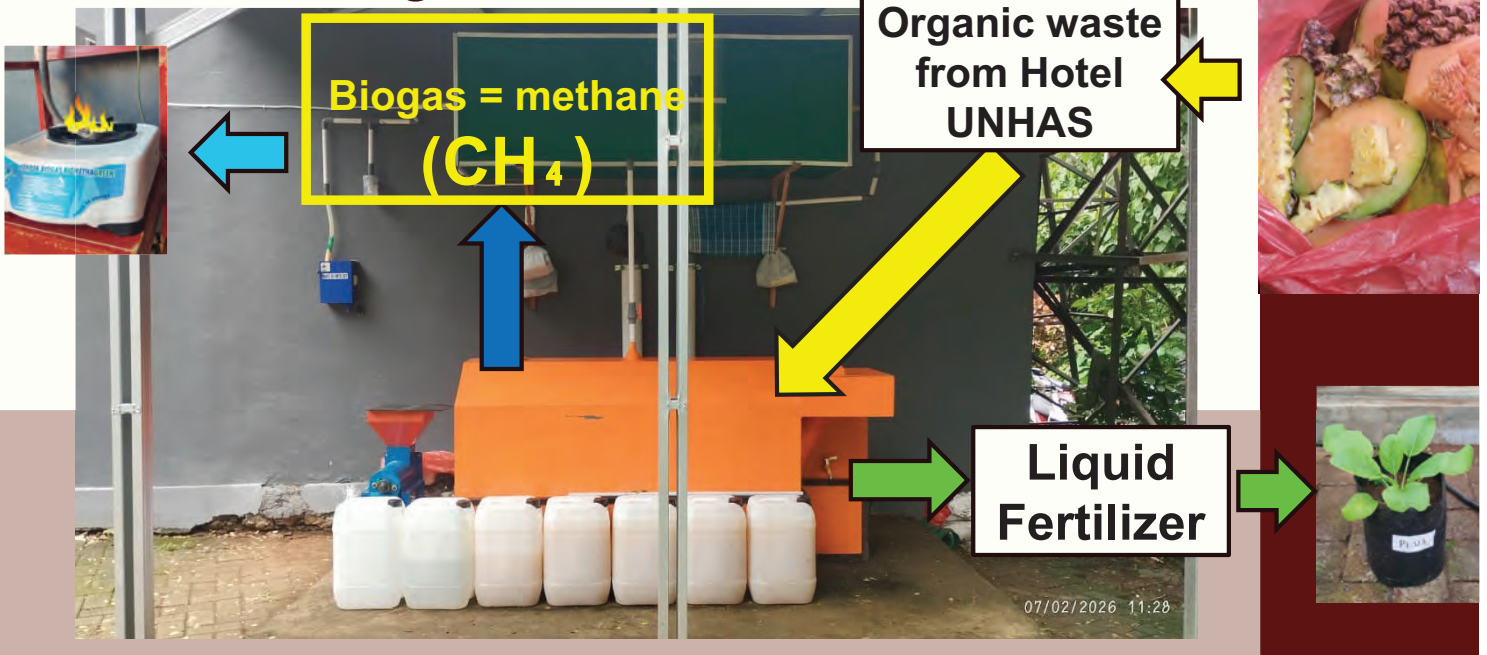
Supervisor :
Prof. Dr. Ir. D. Agnes Rampisela M.Sc.
Muh. Abbas S.P., M.P.
Widya Astuti Kamma S.P.

Researcher:
Imam Rezky
Raihan ArifArrahman





What is Biodigester ?



Why is a biodigester important?

Annual Municipal Solid Waste Generation Data for Makassar City

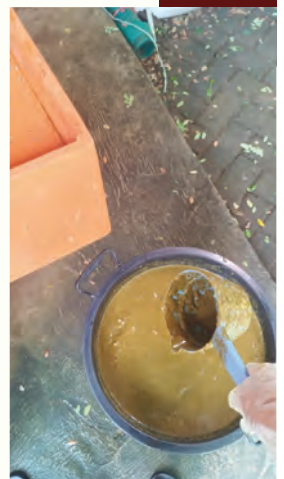
Source: DinasLingkunganHidup Kota Makassar 2024
Portal Satu Data Makassar



No	District	Annual Waste Generation (Tons/Year)
1	Kepulauan Sangkarrang	3.943,84
2	Tamalanrea	28.058,63
3	Rappocini	39.648,37
4	Manggala	42.528,14
5	Biringkanaya	56.949,81
6	Tamalate	49.727,54
7	Panakkukang	37.942,01
8	Ujung Tanah	9.650,28
9	Tallo	38.896,50
10	Bontoala	14.518,12
11	Wajo	7.723,95
12	Ujung Pandang	6.537,41
13	Makassar	21.543,29
14	Mamajang	15.262,11
15	Mariso	15.451,85

The total annual waste generation amounts to 388,381.85 tons per year.

Biodigester Activator Materials



The biodigester activator material in the form of cow dung was collected from the Cattle Farm, Faculty of Animal Science, Hasanuddin University.

20 kg/day of cow manure

Mixed with water at a ratio of 1:1

Sourcing Methanogenic Bacteria From Other Sources

Bacteria



Hasanuddin University Lake



Rice Field in Gowa Regency

Organic waste

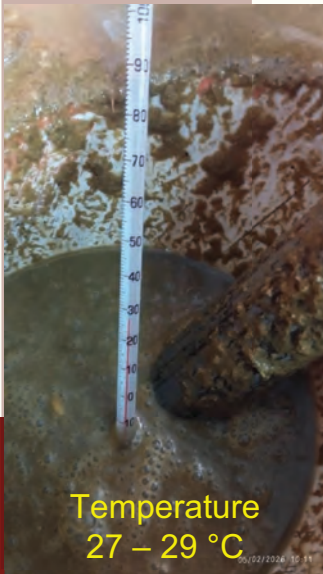


Organic waste was collected from the kitchen of the **UNHASH Hotel**.

5 Kg/day of Organic waste
5 L of 40 °C Water



TEMPERATURE & pH MEASUREMENT



Day/Date	Temperature (°C)	pH
Wednesday, 21 January 2026	27	6
Thursday, 22 January 2026	27	6
Friday, 23 January 2026	29	6
Saturday, 24 January 2026	29	7
Sunday, 25 January 2026	29	7
Monday, 26 January 2026	29	7
Tuesday, 27 January 2026	29	7
Wednesday, 28 January 2026	29	7
Thursday, 29 January 2026	29	7
Friday, 30 January 2026	28	7
Saturday, 31 January 2026	28	7
Sunday, 1 February 2026	28	7
Monday, 2 February 2026	28	7
Tuesday, 3 February 2026	28	7
Wednesday, 4 February 2026	28	7
Thursday, 5 February 2026	27	7
Friday, 6 February 2026	27	7
Saturday, 7 February 2026	27	7
Sunday, 8 February 2026	27	7
Monday, 9 February 2026	28	7
Tuesday, 10 February 2026	29	7

Biodigester Products



Bio - slurry



Biogas

Research on the use of liquid organic fertilizer from biodigester output



THANK YOU

HASANUDDIN UNIVERSITY BIODIGESTER TEAM