

Social representation of waste management in Mayotte: a cooperation between residents and scientists

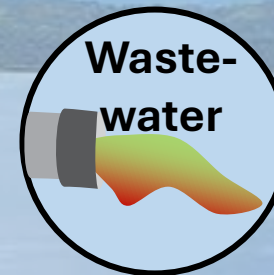
Guillaume Marchessaux, Vincent Marco Just, Mathieu Leborgne, Emilie Strady, Oumayma Chkili, and Cristèle Chevalier



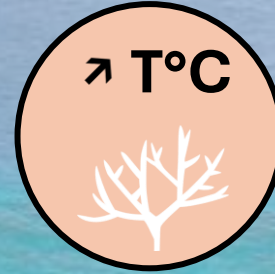
One of the most beautiful lagoon in the world



Anthropogenic pressures



Global change pressures



Chido hurricane
in 2024

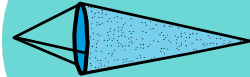
PLASMA: an interdisciplinary project

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Mayotte



Citizen science between **schools** and **scientists** on the pollution in the shantytown



Quantify the plastic pollution in rivers and in the lagoon

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**Lycée des
Lumières**

**Collège
Passamainty**

Participatory study: students-scientists



Students from middle school and high school performed the interviews with scientists in the shantytown



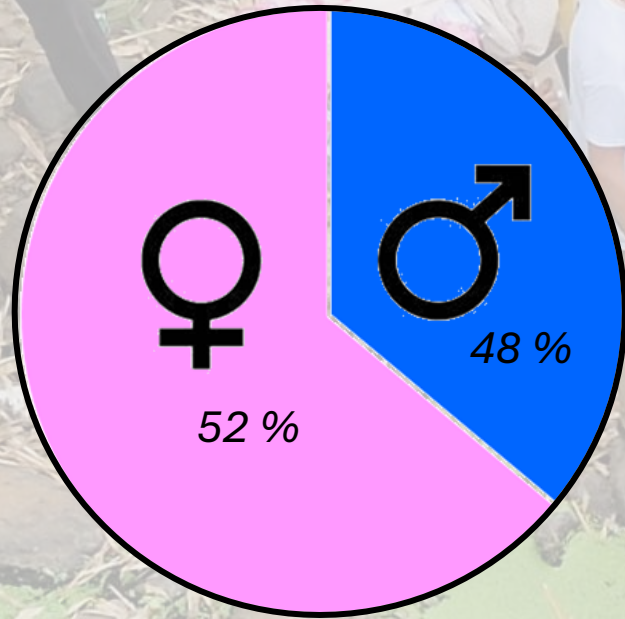
37 questions on the people perceptions on Mayotte environment and pollution



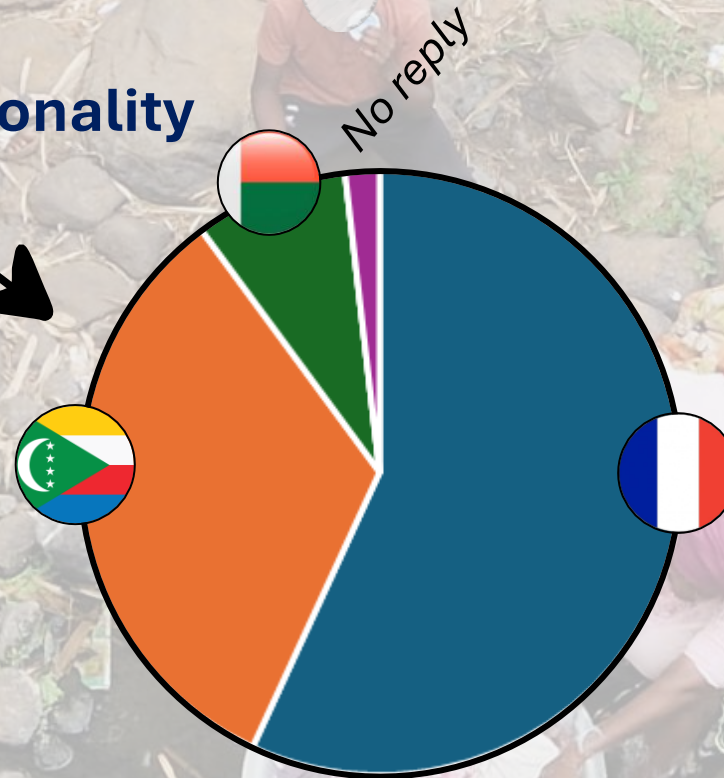
How to manage the plastic and wastes pollutions in the shantytown ?

Respondants profiles and situations

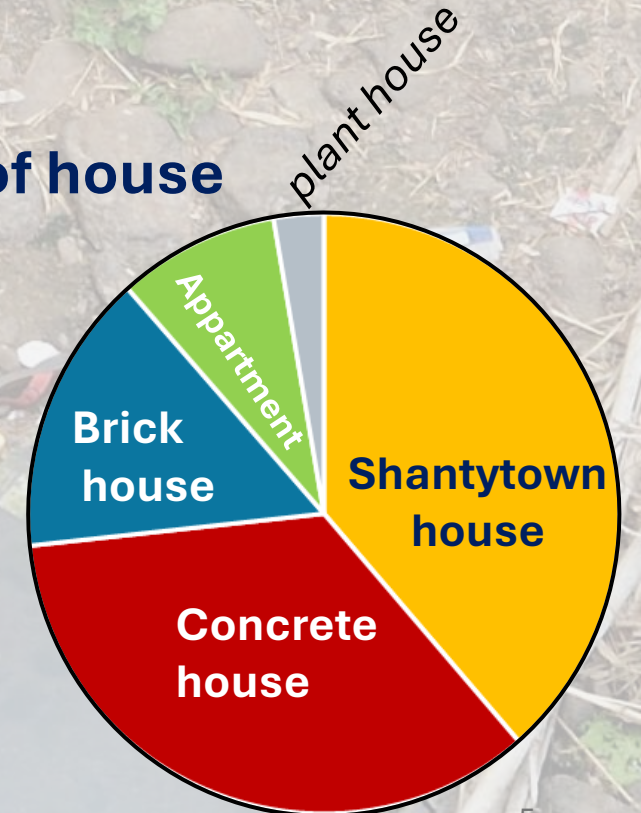
352 interviews performed



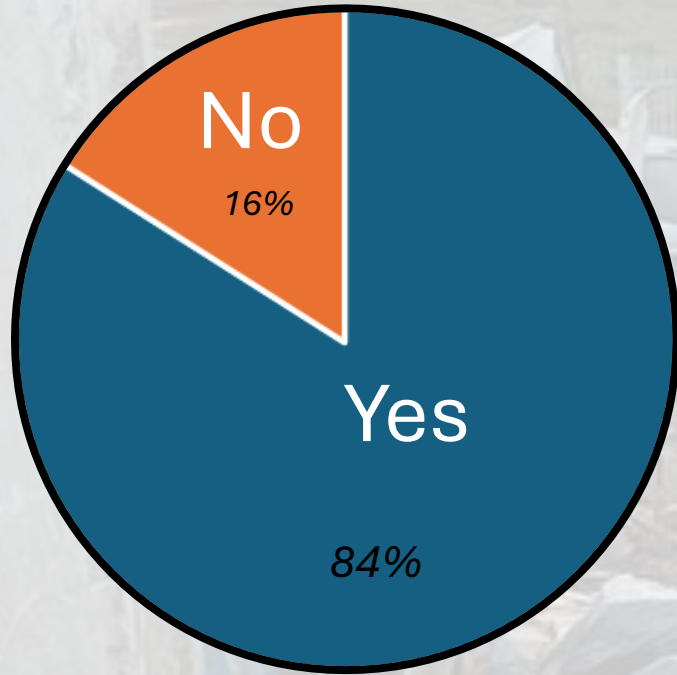
Nationality



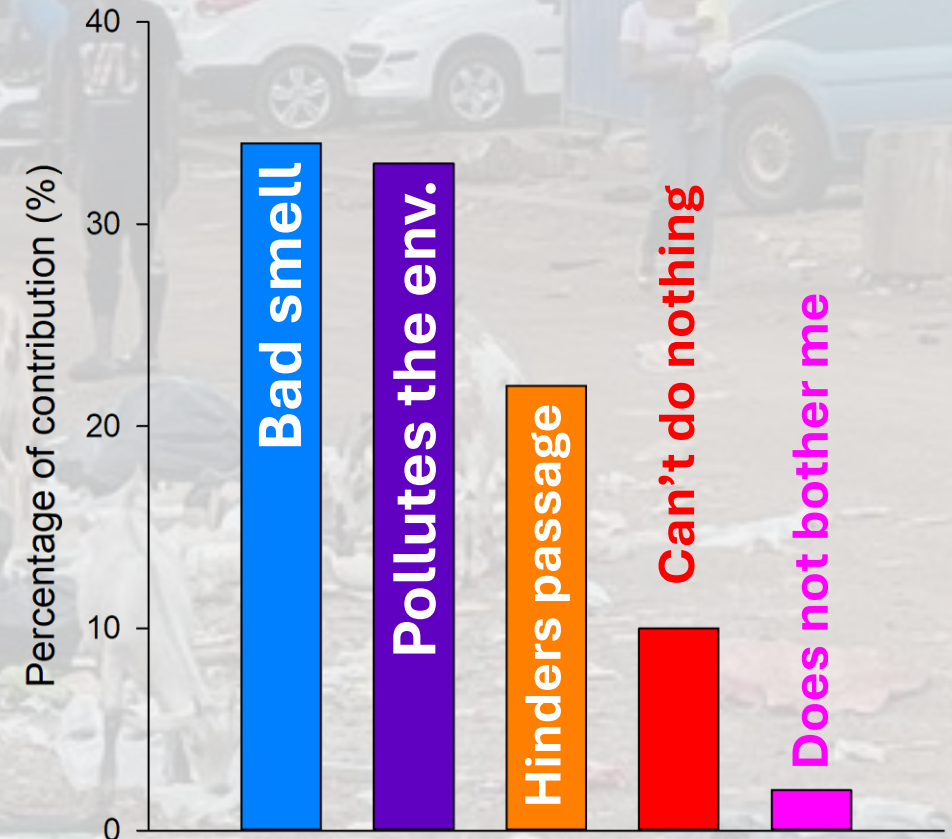
Type of house



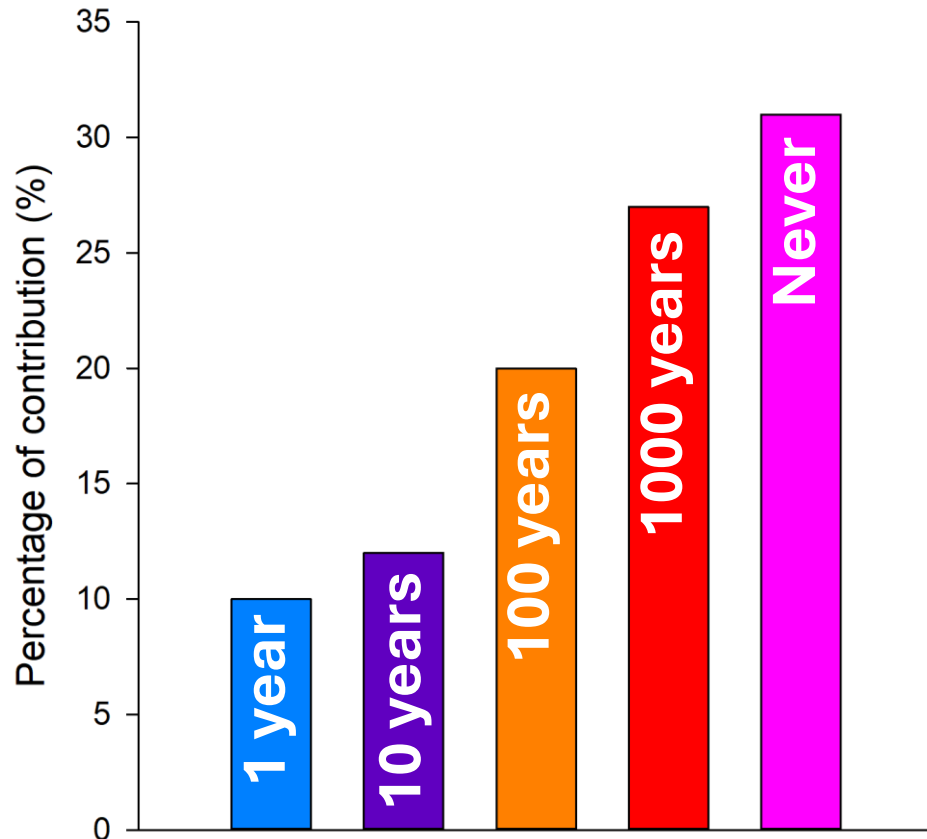
Do you think plastic is a pollutant?



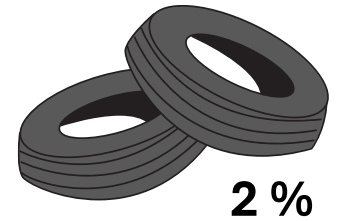
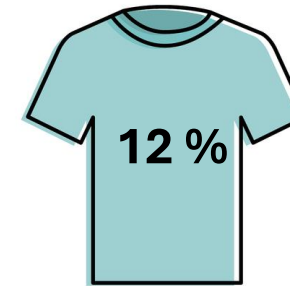
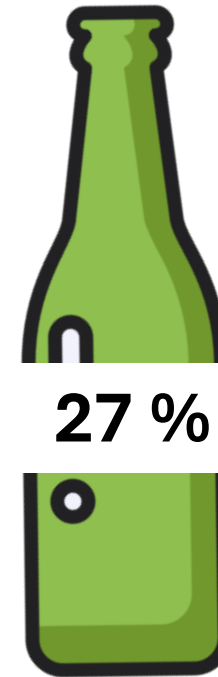
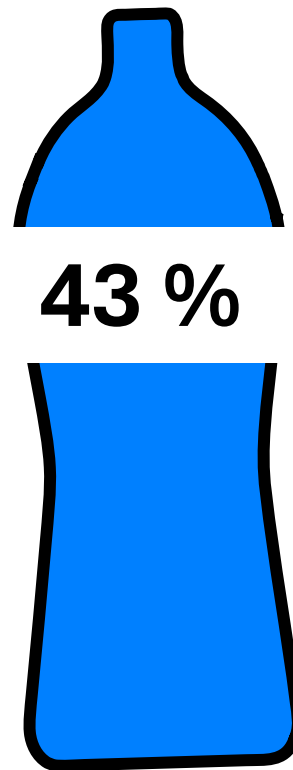
What do you think about littering?



How long do you think it takes for a plastic bag to disappear?



Do you keep some waste for reuse?



A lack of interest in waste sorting?

Do you have a garbage can in your **home**?



Do you think there are enough garbage cans in your **neighborhood**?

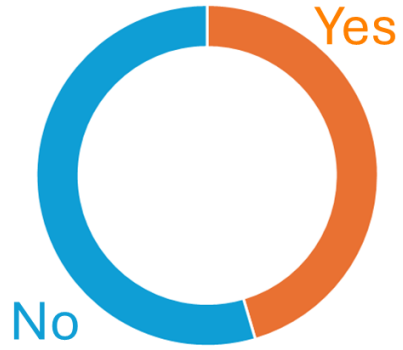


Do you use the containers near you?

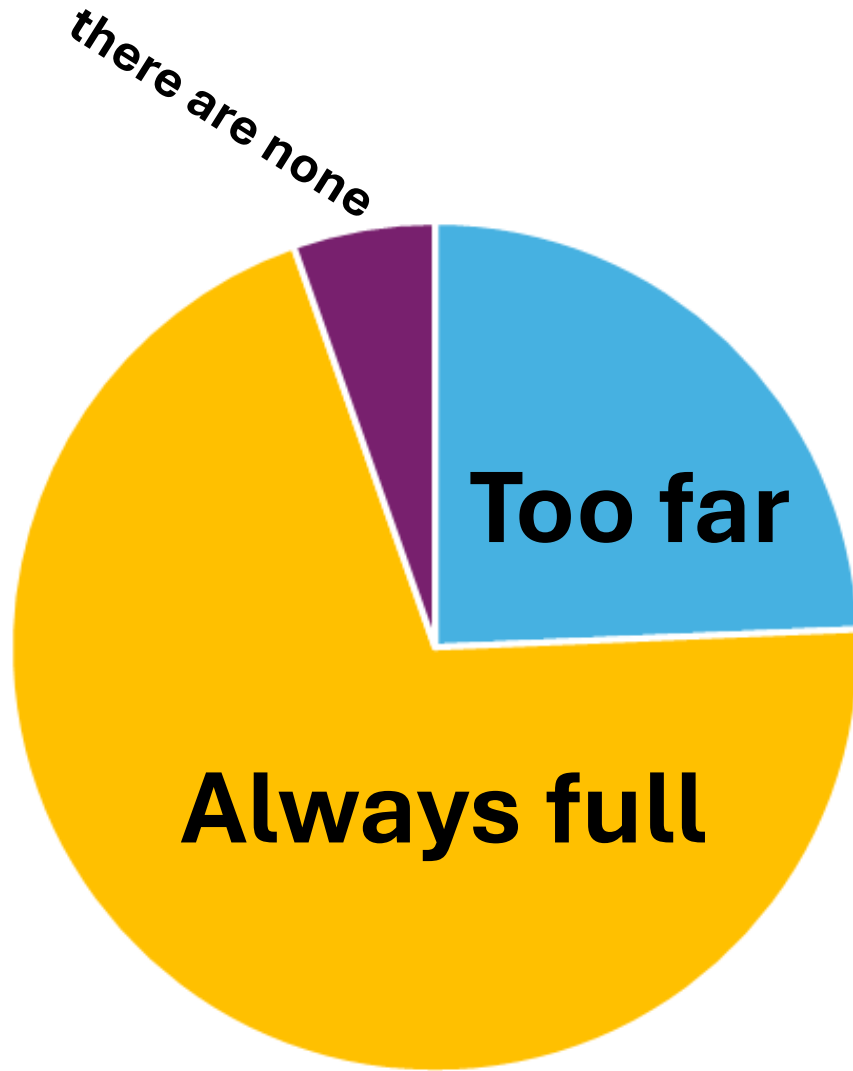


A lack of interest in waste sorting?

Do you use the containers near you?



Why not ?



Who's in charge of disposing of the rubbish at home?

Mother

Father

Children



12 %

12 %

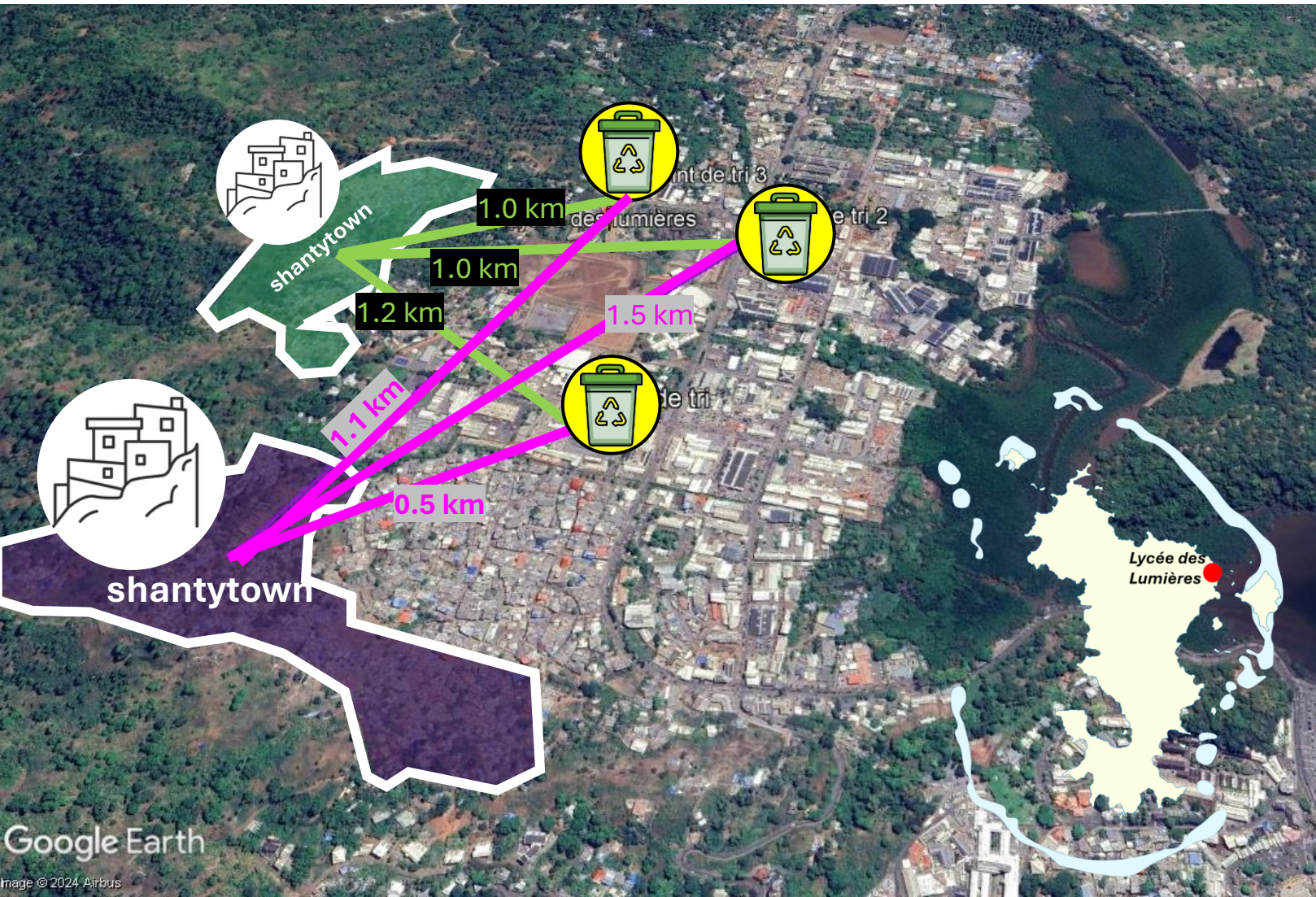
33 %



43 %

A serious lack of waste infrastructure!

Distance from the shantytown to the various waste sorting and collection points in Kaweni (High school des Lumières)



People, and **children** in particular, need to **travel an average of 1 km to dispose of their garbage !!**



In general, it is the **children who throw away the family's rubbish on their way to school.**

How can we explain this lack of practices concerning waste?

UN-Habitat defines slums and informal housing according to five criteria:



UN-HABITAT

- Inadequate access to **clean water**;
- Inadequate access to **sanitation and infrastructure**;
- Lack of **structural quality of housing**;
- **Over-occupation** of dwellings;
- **Unsafe residential** status

This situation seems to apply particularly in the case of Mayotte.

Indeed, 21% of respondents do not have regular access to tap water.

7% of respondents have no electricity.

This proportion depends on the type of housing, and is 40% for those living in tin or green-roofed houses.

Mayotte and waste: an emergency made worse by CHIDO



In December 2024, hurricane **CHIDO** ravaged the island of Mayotte, causing total destruction of the shantytowns.

This disaster **exacerbated the presence and poor management of waste** on the island.

Our study gives an overview of the problem of waste management in the shantytowns.

This participatory school-scientists is currently performed to highlight the situations post-Chido

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Creation of a **River Parliament**

that brings together a multitude of stakeholders (residents, state institutions, scientists, etc.) to **find concrete solutions** together to **better preserve Mayotte and reduce pollution.**

Social representation of waste management in Mayotte: a cooperation between residents and scientists

Thank you for your attention

