

Field Survey of the Sanitation Condition of Coastal Communities in Belakang Padang Island Toward Appropriate Sanitation Facilities on Small Islands

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1 INTRODUCTION

- Sanitation issues are significant because they have a negative impact on many aspects of life.
- Indonesia is a Southeast Asian country comprised of **17,508 islands** located between the Indian and Pacific oceans.
- Small islands in Indonesia suffer from poor sanitation** due to a lack of facilities as shown in Fig.1.
- In order to improve environmental conditions and public health, sanitation facilities and infrastructure must be developed.

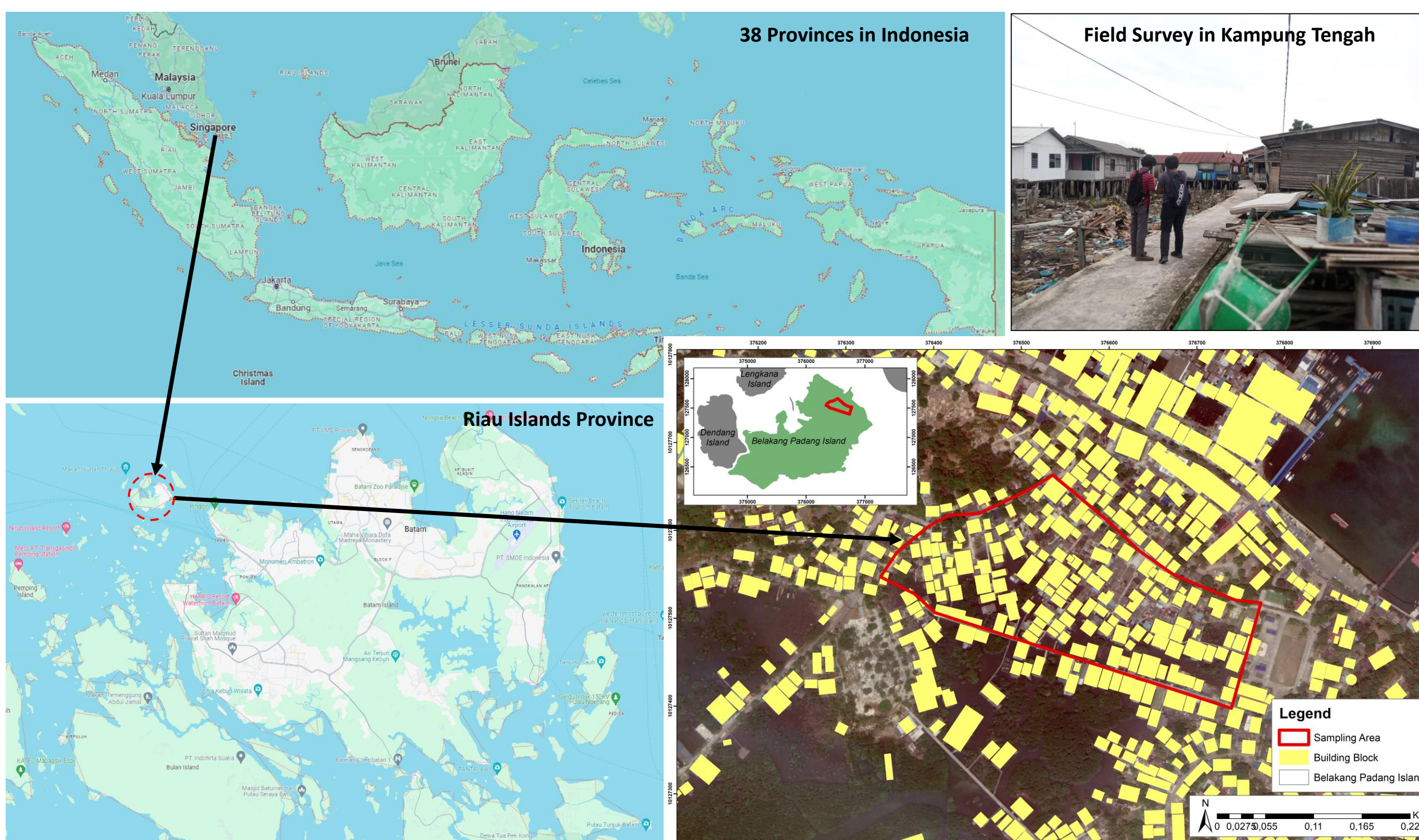


2 OBJECTIVES

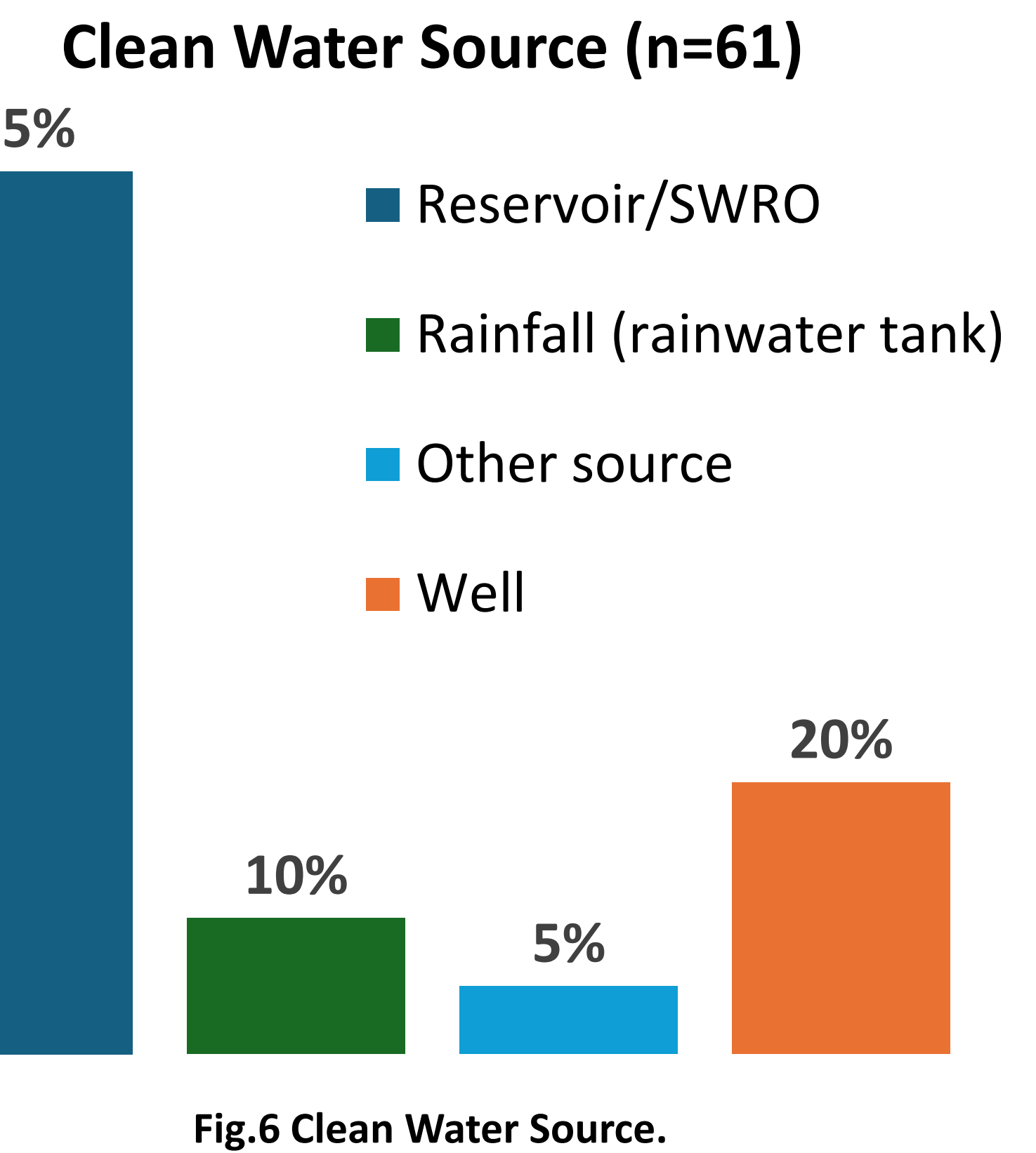
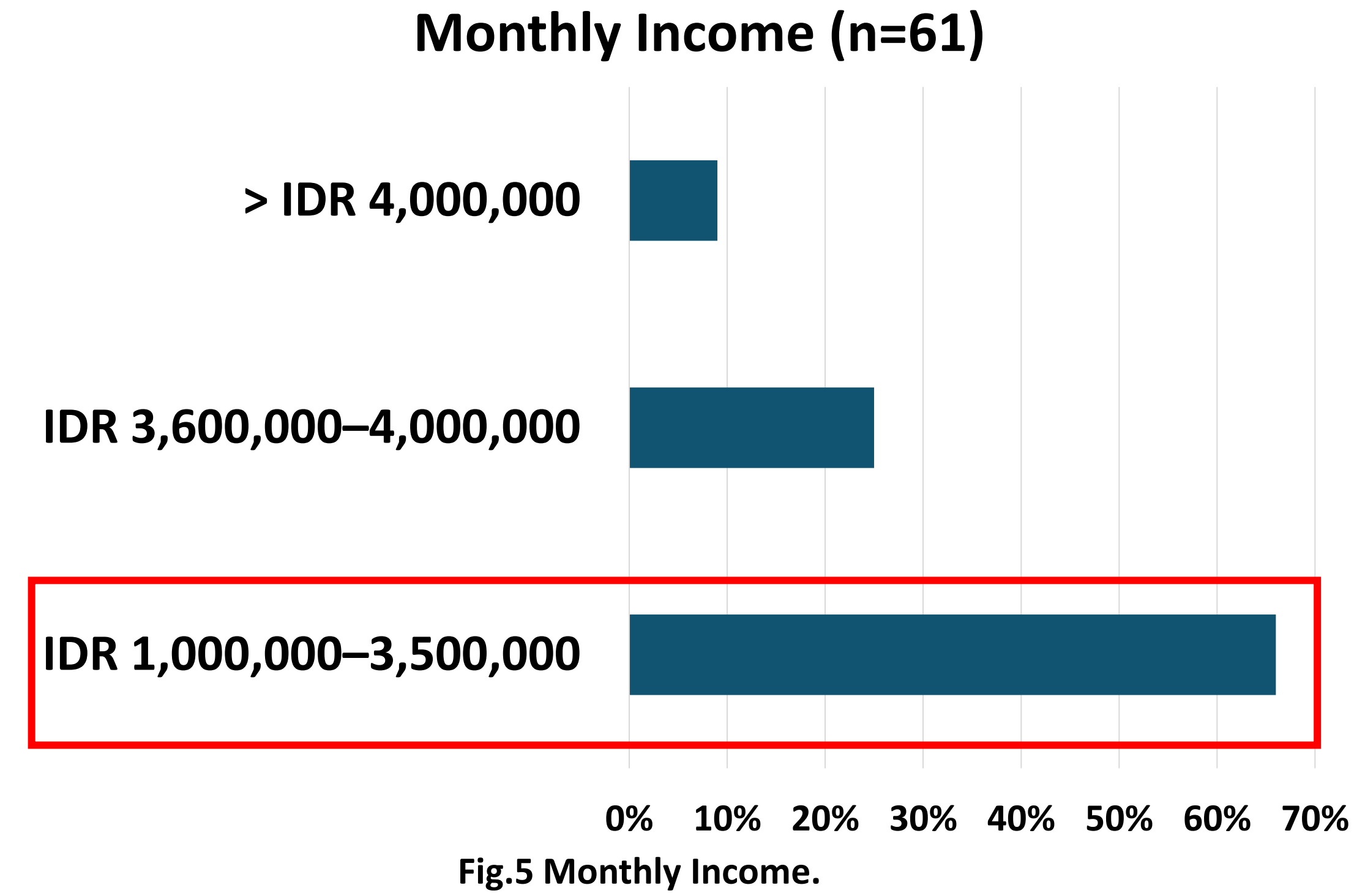
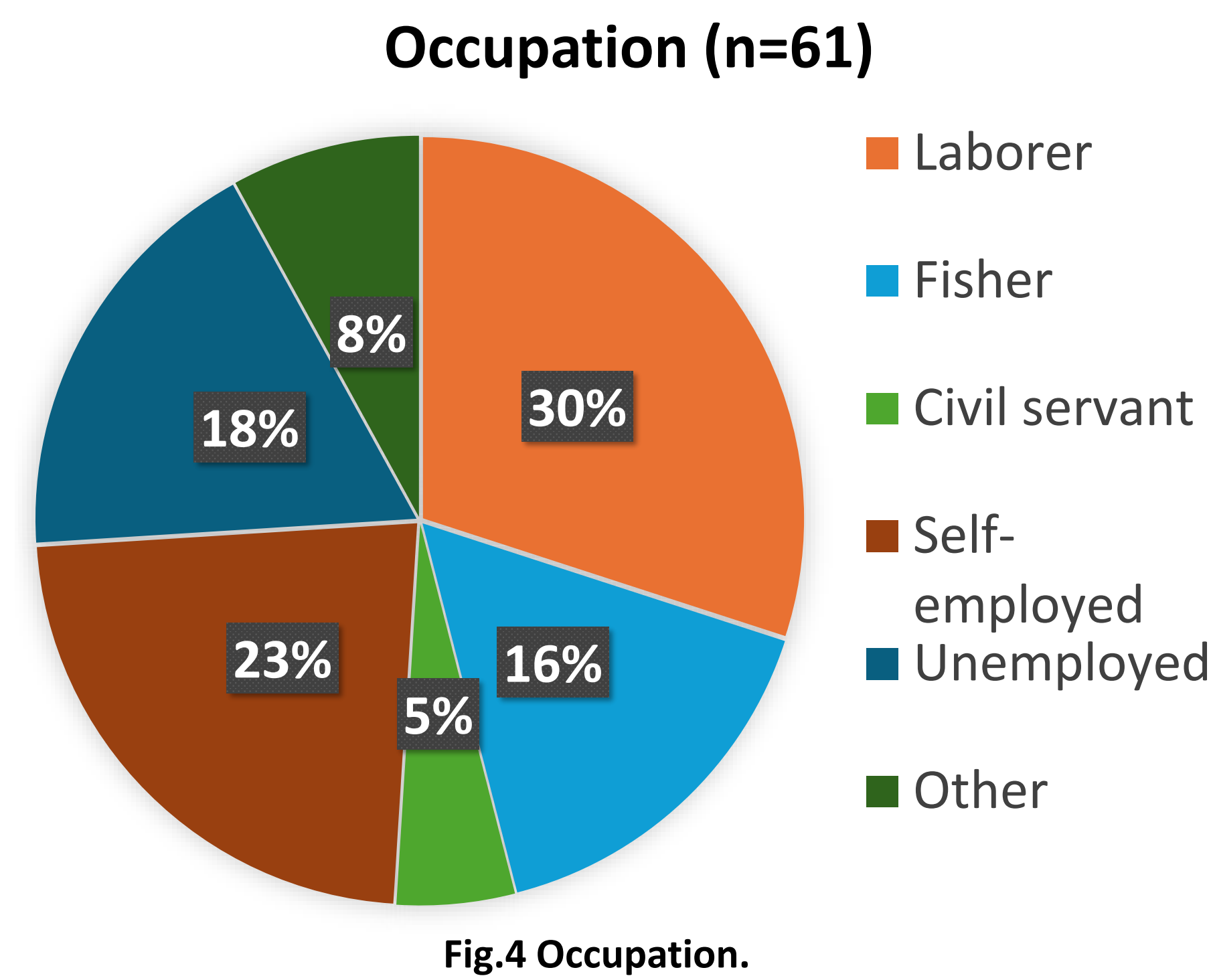
Purpose of this study is to **determine the condition of sanitation problems** and investigate the appropriate sanitation facilities on small islands.

3 METHOD

- The study location is located on Belakang Padang Island, part of Riau Islands Province in Indonesia (Fig.2). The area of **Belakang Padang Island is 2.317 km²**.
- The method were a combination of **structured questionnaires** and **interviews**, as well as **direct observation** on a small island (Fig.3).
- Interviews with residents of Belakang Padang Island were conducted in **October 2022 in Kampung Tengah**, Tanjung Sari sub-district RT No.002/RW No.002, with a total of **61 households**.



4 RESULTS AND DISCUSSIONS



- The occupation are varied. **66% of households have an income per month** below the standard salary of a big city near the island (Fig.4-5).
- Clean water sources are varied and dominated by reservoir/SWRO (65%), and 20% of households also use underground water (well) which has a risk from contamination due to inappropriate sanitation facilities (Fig.6-7).
- The results showed that from 61 houses, **84% of houses** in Kampung Tengah **do not have a septic tank**, and 16% of houses in Kampung Tengah already have a septic tank (Fig.8).
- It was also shown that **toilet conditions are inadequate**, the environment around the house is **dirty** and has **slum conditions**. Also, all houses do not have sewerage facilities (Fig.8).

Septic tank	Available	16%
	Not Available	84%

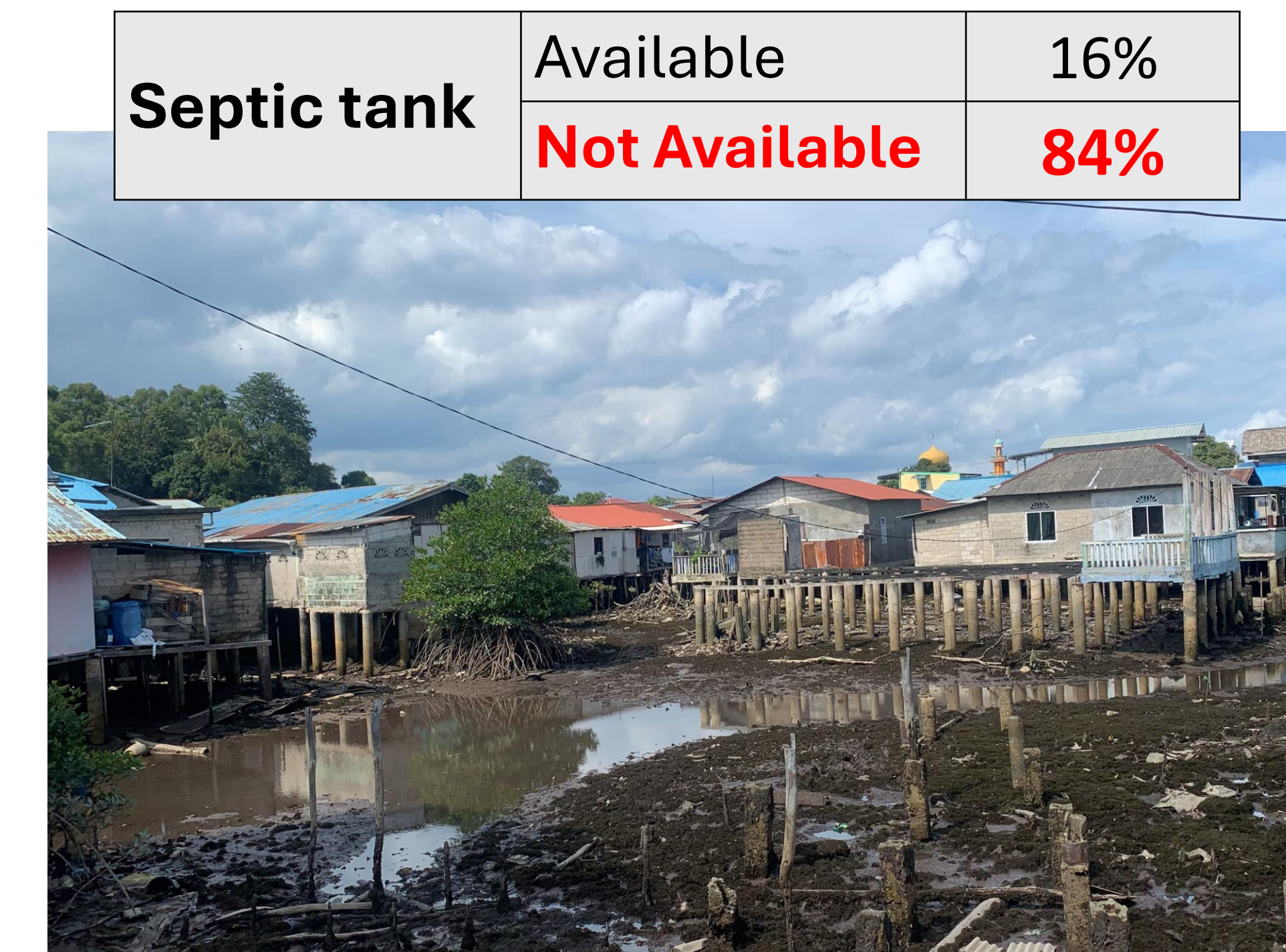


Fig.8 The environment around Kampung Tengah

5 CONCLUSIONS

- From the results of the study, it was found that there are many factors that influence residents **not to have Septic tanks**, one of which is **economic factors** where the average resident still earns a **low income** between IDR 1,000,000 – 3,500,000.
- Domestic wastewater disposal, is still a problem** that must be addressed by the government, precisely in Kampung Tengah RW 002 / RT 002 Tanjung Sari Village, Kecamatan Belakang Padang, because people are still accustomed to disposing of **domestic waste such as detergent water, laundry residue, soap water, and fecal water directly into sea water**, they still believe that the tides will carry waste to the middle of the sea and there will be an exchange of sea water.
- Introducing **a communal septic tank can be a solution** for the residents of Kampung Tengah, who have limited land and cannot afford to build their own septic tank.

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