Logbook

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1 Topic selection

Credit Pic : minnos_oglan

Although, I am aware of why am I doing what I am doing right now, the little monster often comes up asking 'why r u doing, what u're doing. Flippant'

Let's address this, face it bravely.

1.1 First Topic

Healthcare accessibility in small scattered islands

Archipelago region is spatially hard to map, given their scattered typology and their small available dataset open publicly. Even just a small population, in these area they face challenges

even for basic services such as healthcare. Travelling by the sea in Indonesia settings also presents challenges due to wave, weather, and monsoon. To capture this condition, I had involved in project to map these challenges by generating marine network using Euclidean distances between ports. I initially thought I can use this work to explore more as my dissertation topics (using SIM, generating clustered small islands to identify which are the 'main islands' , which are the satellite). However, when ethic comes up I was doubting the administrative process to get the dataset formally is done within 2 weeks, I was doubting had the works I did year ago had been disseminating already? let alone can I even get access to it :((

If I do it manually, it will take time, if I explore using automated OD matrix will also takes time, and this was just the generating data phase. Even applying spatial interaction model which I thought beneficial to clustering these small island is challenging as I am not sure is there any population - data movement between these islands? I was considering capturing these small islands' vulnerability using RS data from literature as there are modelling such as sea level rise, monitoring mangrove areas. However, this is not the vulnerability that I want to explore, I want vulnerability that explain how hard it is just to access basic needs. Later I found journals to map electricity level, and I might use this dataset with NTL imageries (I found article that utilize NTL to understand power outage after Turkey's earthquake earlier this year, by improving the 500m resolution to be ~30 m resolution . I had reached out to him via twitter, he provided me with his tutorial' but then the baseline data is using VIIRS, I checked the dataset in GEE on these small islands. The result is dark, the island size and its population make it challenging to map the electricity level using NTL.

1.2 Second Topic

Mapping informal settlement in railway corridor

The intuition behind the analysis is to investigate whether it has historically been a common practice in the past to build homes along railway corridors or when exactly these informal settlements began to intensify, how it varies in urban and rural settings, and how building morphology (size, height, and building materials) has differed between the past and current eras. As the time passes, does the materials become permanent or the more it built vertically. The analysis will also examine the condition of informal settlements five years before the regulation (regulation on 6 m railway operational areas) is officially legalized, to determine whether the regulation is failing to mitigate or just mitigating to fail.

1. Concern

   - *The term.* The term of informal should be carefully used because it is unavoidably linked with land tenure and building permission, almost with the same nuance with illegal. Thus, in one of Governor's regulation regarding Jakarta settlement which characterized as a high density, lack access to water electricity, poor housing, and low accessibility is categorized as a slum not informal. I also tried to discuss with

some of colleagues in Jakarta's institution and got feedback that I 'have to use the term carefully'. This part is honestly missed during the period I submit CASA Form.

- *The study area.* Railway corridor is another issue as this location is the subject of conflict for a long time between the government, railway company, and the people. By publishing the distribution map of informal settlement, whichever the medium resolution is, it still indicates the location, easily tracked. My concern is the spatial data regarding distribution of 'illegal settlement' is not meant to be an open source data, because the governments or railway company keep it private following its sensitivity. If I published the map, I am afraid the research will against this

- I might not be the only researcher bringing this topic, however as far as I know researches about informal settlement + railway areas mainly focused on their livelihood to cope in such environment, not necessarily in the process they evolved as of now which actually lead to an insight about the government's ignorance or lack of control during initial development, and specifically the period, causing them to evolve towards today

1.3 How to avoid changing topic (again)

First solution : change terminology into slum.

why it might not work : Although, the term slum and informal settlement can be used interchangeably, but the term slum is closely linked with the lack of basic service such as water or electricity and potentially the research will shift focus on the lack of basic service (I don't mind with this)

However, the term "slum" often brings a connotation of marginalization, which might overshadow my aim to highlight this informal settlement as the challenge. Besides, If I change into slum, I also have a hard time to link with the urgency of mapping it specifically at the railway corridors. *Why not the whole city?*

Second solution : change the location/ do for the whole city

why it might not work : Other cities in Indonesia might not have informal mapping as the main issue or challenge as much as Jakarta. If any, the distribution is not that massive, as they do not have railway services within the city

Third solution : just use the term settlement

I almost adopt this, by understanding how and why it evolves to this point, how settlements' position are relative to railway areas then the result would be it becomes more irregular, with less networks could be identified using RS. Won't the term informal be mentioned here?

1.4 CASA Ethical Feedback

I got feedback from the Department regarding ethic which is the similar concern that I had :

This looks good, but I do want to raise the question of which countries you'll be studying here, as certain governments have used open source data to locate informal settlements and later dismantle or otherwise disadvantage them (as frequently these are not constructed under the full auspices of the law). I would be extremely cautious to ensure that whichever context you're considering, **you determine what the relationship between national/local government and informal settlements has historically been***, lest this project pose a risk to the populations being mapped. Even if it's not a question in the country you're studying, it's extremely important to highlight the potential for misuse from an ethical standpoint because those in informal settlements are often vulnerable persons.*

After I get this feedback, I browse and explore articles and there was a publication that spesifically addressing the term of informal, irregular, slum settlement in Jakarta. Taking the name informal in Jakarta's case is unavoidably linked with this connotation:

> strongly in this case. What are deemed "informal" settlements in popular discourse are mostly located on lands where residents have historically held autochthonous claims that were established under Dutch colonial rule and were explicitly recognized in post-colonial legislation (notably the Basic Agrarian Law of 1960) (Leaf, 1993). The dualism between lands held under registered freehold title and other usership claims, and those held under legally recognized autochthonous claims, is to some extent visually manifest in the contrast between developer and state-built areas, and low-rise *kampung* settlements with mason-built homes and organically formed street networks, although as will be discussed later the latter type of settlements often contain significant numbers of households who have registered their claims and obtained freehold title. Yet bureaucratic valence of autochthonous claims has gradually eroded for a variety of reasons, some of which are clearly related to inconsistent and contradictory practices of the state itself. These include irregularities in the registration of sales and inheritance of *kampung* land (which is partially due to inconsistent practices in local bureaucracies), and the inability or unwillingness of many claimholders to register and title lands (which studies have indicated is due in part to corruption and inefficiency in the National Land Agency, or Badan Pertanahan Nasional [BPN]) (Fitzpatrick, 2007). As the analysis of state mapping exercises that follow will illustrate, the non-accordance of *kampungs* with spatial planning regulations is also a factor in their informalization, so that such settlements sometime come to be labeled as "informal", "irregular", or "slum" regardless of the mix of freehold, autochthonous, and other claims they contain.

Shatkin, G., Braswell, T. H. and Martinus, M. (2023) 'Mapping and the politics of informality in Jakarta', *Urban Geography*, 44(5), pp. 939–963. doi:

10.1080/02723638.2022.2059321.

I had some discussion with colleague that work in areas that related to that issue and might give me some 'proper' opinion in that settings. His comment : should be used carefully.

I know I will just address how and why, the morphological process of informal settlements were in railways corridors. However, in a real world setting It doesn't stop with this how and why, shouldn't I atleast vaguely position my findings in some decision making process related to them? by positioning I should take on a stance on defining this settlement around the railways as a vulnerable groups or as an opposite in regard to safety operation of railway areas. I think CASA Ethical Feedback is really on point on this, even when I had not explicitly mentioned the location they summed up the implications really well.

'you determine what the relationship between national/local government and informal settlements has historically been, lest this project pose a risk to the populations being mapped. Even if it's not a question in the country you're studying, it's extremely important to highlight the potential for misuse from an ethical standpoint because those in informal settlements are often vulnerable persons.'

In conclusion, should I stick with a topic that, if I pursue it at some point, I'll have to constantly adjust and tread carefully? I know we can state the boundary and limitation of our research but with my short of understanding limiting something that have a strong correlation is not a limitation but I feel like it is an ignorance in this case. Additionally, concern about publishing maps related to informal settlements near railway areas remains, as this type of data might be intended to kept private by some institutions and may not be appropriate for published openly.

One more thing, I should work on how to communicate everything well in short amount of time too. It is a big decision but I just emailed my spv with one paragraph not summarizing all the important points. Now, enough with self-doubting, self-blaming and enough with complaining....let's starting afresh in deforestation. If one scenario won't work, unlike informal settlements mapping, deforestation can provide flexibility and abundant perspectives to explore. Now, smile and continue collecting some research memes !

To keep sanity, need a daily dose of this man channel !

2 Introduction

This is a book created from markdown and executable code.

See Knuth (1984) for additional discussion of literate programming.

```
1 + 1
```

```
[1] 2
```

3 Summary

In summary, this book has no content whatsoever.

```
1 + 1
```

```
[1] 2
```

References

Knuth, Donald E. 1984. "Literate Programming." *Comput. J.* 27 (2): 97–111. https://doi.org/10.1093/comjnl/27.2.97.