



UTS2708



# WATER GOVERNANCE IN ASIA

Case studies of rivers in Yogyakarta and Jakarta, Indonesia



## INTRODUCTION

### WHAT IS THE FIELD TRIP ABOUT?

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Our group embarked on a transformative journey into Indonesia. This field trip was more than just the study of water governance - it was an immersive, interdisciplinary exploration into the complex dynamics of the livelihoods in Indonesia. As we set out to unravel the complexities of managing water resources in Indonesia, the transect walks and interactions with policymakers played pivotal roles in helping us understand the delicate balance between local needs and environmental sustainability .

### READ MORE

This blog serves as a platform for us to recount the riveting experiences we encountered during our trip into the realms of Indonesia's water governance. Come with us as we dive into the depth of Indonesia's water governance and decipher the effectiveness of various policies implemented by different stakeholders.

### WHAT DID WE LEARN?

# WATER MANAGEMENT

As the name of this course implies, the primary purpose of the field trip is to delve into the intricate dynamics of water management in Indonesia. Our exploration unfolded through transect walks along Kali Code and Kali Ciliwung, which provided us with valuable opportunities to engage with different stakeholders. This has enabled us to gain a comprehensive understanding of the intricacies of their government systems.

## ➤➤➤ FIELDWORK OBSERVATION

- Downstream: Exploring the lower reaches of the Kali Ciliwung, we observed the implementation of both normalisation and naturalisation methods to address flooding. Plantations and embankments lining the riverbanks indicate stakeholders' ongoing efforts to revise policies that may prove ineffective.
- Midstream: Transitioning to the middle section of the river, residents reported a lack of flooding during the rainy seasons. However, in the dry season, severe water shortages occur as wells dry up, compelling locals to seek alternative water sources.
- Upstream: While water cleanliness doesn't appear to be an issue, concerns may arise regarding water accessibility in the upstream areas.

## ➤➤➤ ISSUES

Our group has identified two pressing issues related to water management in Indonesia, namely flooding and sanitation for clean water. Regarding flooding, houses were constructed in very close proximity to rivers. Despite existing policies mandating a minimum distance of twenty meters between housing and riverbanks, the implementation has proven to be ineffective due to complex government structure of Indonesia. Consequently, residents living near the river bank are vulnerable to floods during the monsoon season.

The second prominent problem pertains to sanitation and hygiene of water consumption among locals. Although residents claim that they do not face water shortage, our observation reveals a lack of awareness regarding the importance of clean water usage. Local communities do not have a proper sanitation system for river water, raising significant health concerns for residents.

## ➤➤➤ WORKSHOPS AND DISCUSSIONS

During the workshop with the policies makers, we were able to present our ideas to them regarding the issues we identified during our trips to the river. Together with our Causal Loop Diagram, we outlined the concerns stemming from various issues observed during the transect walks. By engaging in discussions with the policy maker, we have received useful feedbacks. We were advised to do stakeholder mapping to further establish what each governing body should do in relation to water governance, as having a centralised system at the top is not possible. To help us in this area, we were encouraged to refer to literatures of governance.

## PERSONAL REFLECTION

**I really enjoyed this trip. Other than studying water governance, I had the chance to immerse myself in Indonesia's rich culture. I was given opportunities to interact with local residents which provided me with insights into their daily lives. Experiencing these scenes firsthand was undeniably more impactful than merely reading from research papers.**



# WASTE MANAGEMENT

Waste is very visible along River Kali Code and Kali Ciliwung, be it along the river banks or in the river. We studied the causes and realised the nature of the issue is rather hard to manage with current efforts and ignorance attitude from locals. This can potentially render the rivers to be unsustainable in the long run, leading to social and environmental consequences.

## >>> FIELDWORK OBSERVATIONS

**Kali Code:** river water is rather polluted with garbage. Waste management differ spatially, leading to unequal access of proper waste management across certain areas. Local efforts include waste banks, monuments making as a form of plastic processing, and cleanliness efforts for competitions.

**Kali Ciliwung:** waste mainly come from upstream. The mid-stream has a lot of community efforts like eco-bricks, eco-enzymes, making of fertilisers to process plastic and organic waste. Despite education to reduce waste generation, waste accumulation at the downstream can be observed ranging from solid waste to liquid waste (e.g. from Tofu company)

## >>> ISSUES

Main issues associated with waste management is the lack of government effort to construct proper waste management system. This results in a lot of community efforts rolled out by local villages in an attempt increase education on proper waste processing.

However, this is faced by another social factor of fixed mindset and lack of awareness. Many villages do not cherish the river they live along, and felt no responsibility towards keeping the river clean, thus relentlessly dumping waste along the river banks due to convenience. Victim blaming and the lack of incentive can further reduce cooperation and participation to the seemingly tedious waste management processes.

## PERSONAL REFLECTION

**The state of river Kali Ciliwung was especially mind blowing to me as I have never seen such polluted rivers before. This taught me to not take what I have in Singapore for granted and treasure the clean water we have here.**

**-Xiong Lu**

## >>> WORKSHOPS & DISCUSSIONS

Through discussions and linking of ideas, we learnt that there are a lot of immigrants who moved to Kali Ciliwung where they are still close to the city to enjoy lower cost of living. Thus it is a reason as to their ignorance attitude to practice proper waste management. We also find that the accumulation of waste at the downstream instil a sense of hopelessness and further reduced motivations and effort for local to start practising proper waste disposal.

Sustainability and environment of the rivers will definitely be threatened in the long run if no immediate actions are taken to ease the situations. This can in turn affect the quality of water, and more so the livelihood and health of the locals.



# GOVERNING BODIES

On this trip, we were introduced to Indonesia's political structure, a key insight that further shaped our perspectives towards the various problems we identified. Understanding the distinct governance style within Indonesia was crucial to contextualising the issues and challenges of its existing public policies and regulations.

## ➤➤➤ FIELDWORK OBSERVATIONS

From our visits to local villages located downstream of Kali Code and Kali Ciliwung, we gathered that efforts to manage water and waste have largely been bottom-up approaches - community-organised initiatives in an attempt to garner further governmental assistance. There was no real enforcement of the regulations in place - not being allowed to live within 15-30m of the river bank, for instance. We touched on two different river management techniques - *normalisasi* (normalisation) and *naturalisasi* (naturalisation). These policies shifted back and forth based on incoming provincial governors' preferences. We also observed the construction of the Giant Sea Wall, a *normalisasi* project to protect Jakarta from floods.

## ➤➤➤ ISSUES

There exists a conflict between governmental and communal interests. In addition to preferring *naturalisasi* over *normalisasi*, the people desire more government intervention as opposed to managing waste entirely by themselves. Constantly undoing policies signifies wasted resources and uncertain resilience towards hazards such as floods. Overall, the highly decentralised governance style leads to a lack of synergy, resulting in ineffective regulatory measures and the stagnation of efforts to improve water governance. Implementing *normalisasi* also requires a steep budget, raising sustainability concerns especially in the case of the Giant Sea Wall.

## PERSONAL REFLECTION

Overall, this trip was a profound eye-opener, introducing me to the theoretical and practical realms of public policy. The importance of forming policies tailored to the context of different regions stood out to me; without a comprehensive understanding of the situation, any policy, no matter how ingenious, would be a Fix that eventually Fails.

-Chloe

## ➤➤➤ WORKSHOPS & DISCUSSIONS

During Dr Ario's presentation in Jakarta, we learned the specifics of Indonesia's governmental structure - one similar to the Dutch colonisers, characterised by autonomy across the hierarchy. Subsequently, with this context in mind, we attributed the various issues we identified to 3 different mindsets that stakeholders might have (growth, wrong and fixed), explaining how it affected the quality of water governance with the help of a Causal Loop Diagram.





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# CLOSING

Final thoughts and case study



## SUMMING THINGS UP



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In conclusion, our trip proved to be a multifaceted odyssey, weaving together academic exploration and cultural immersion. The transect walks along Kali Code and Kali Ciliwung unveiled a series of problems faced by the residents living along the river, underscoring the interconnectedness of human communities with their water ecosystem.

### READ MORE



As we continue to delve deeper into the study of water governance - mainly in the context of Kali Ciliwung, our group aims to identify the main issue lying behind these challenges faced by various communities in Indonesia. By using our knowledge, we hope to suggest some possible solutions that can be considered by policymakers to help improve the situation of the river.

## WHAT'S NEXT?