



# A DATA-DRIVEN FUTURE FOR

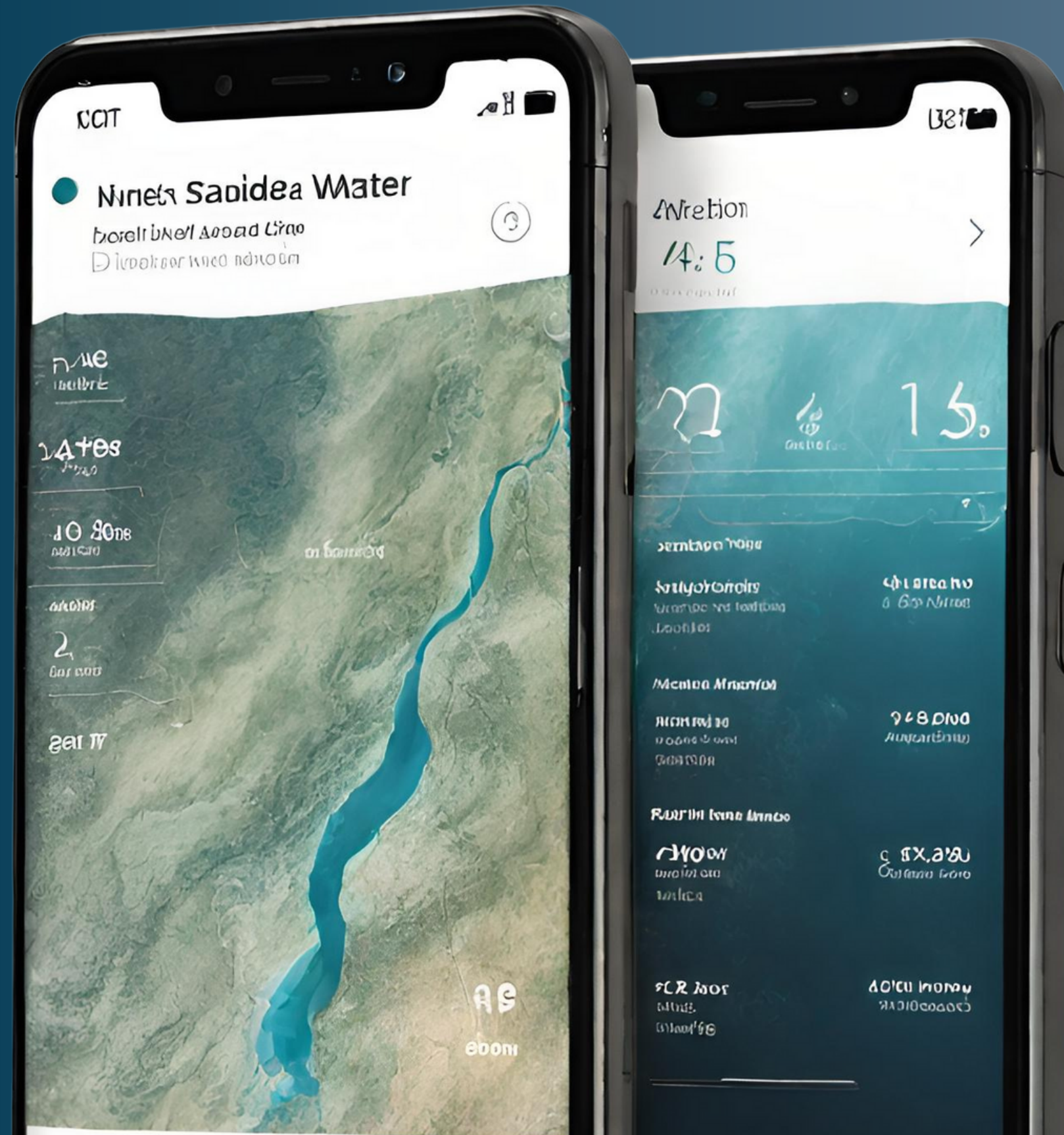
Digitalisation for a more sustainable and prosperous future.

---

Presented by:  
Team MAKE WATER OK (MALAYSIA)



# Our Proposed Solution

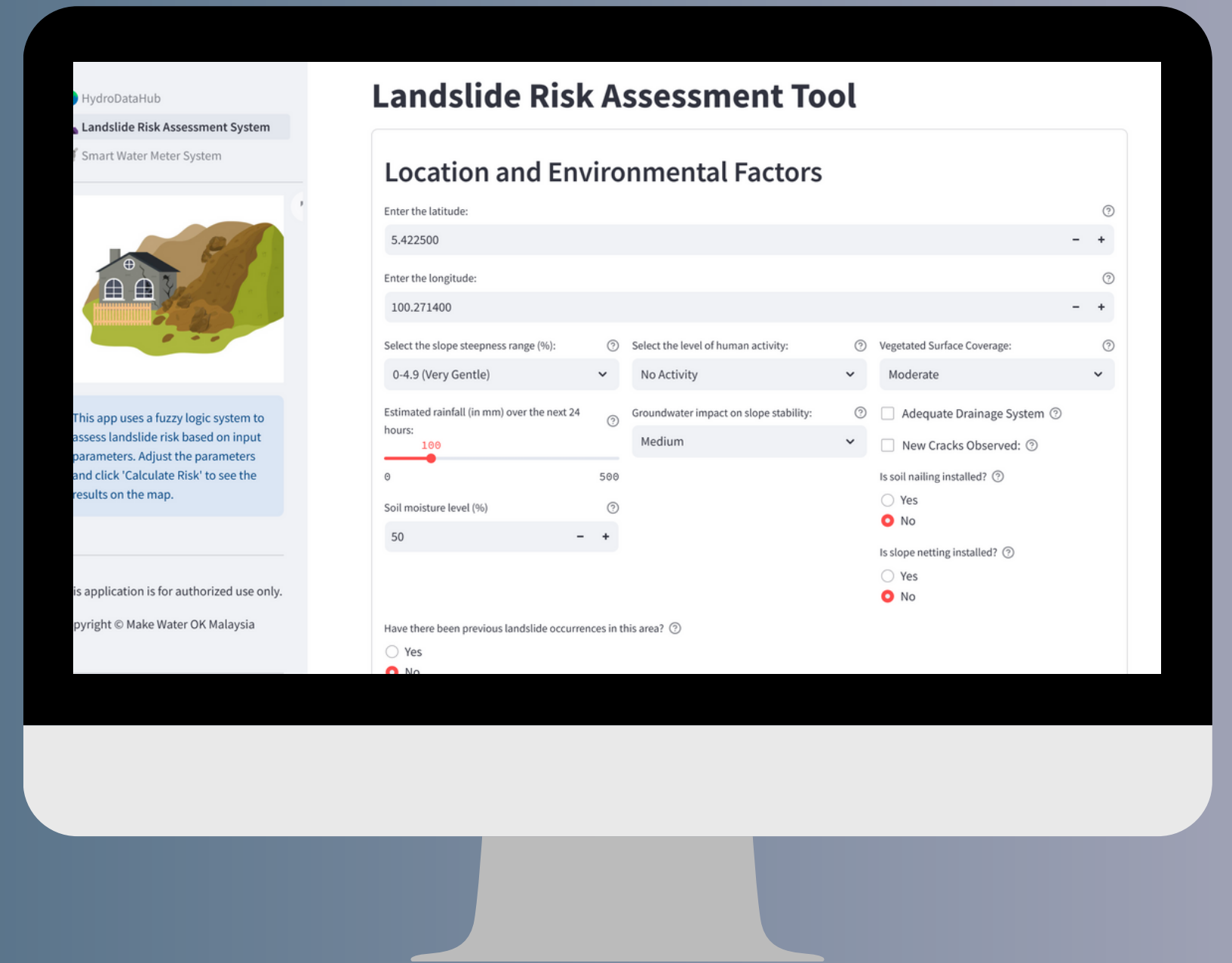


## Hydrodata Hub

*“An application that integrates MASSIVE **Smart Water Meter (SWM)** data & **Landslide data**”*

# LANDSLIDE RISK ASSESSMENT SYSTEM

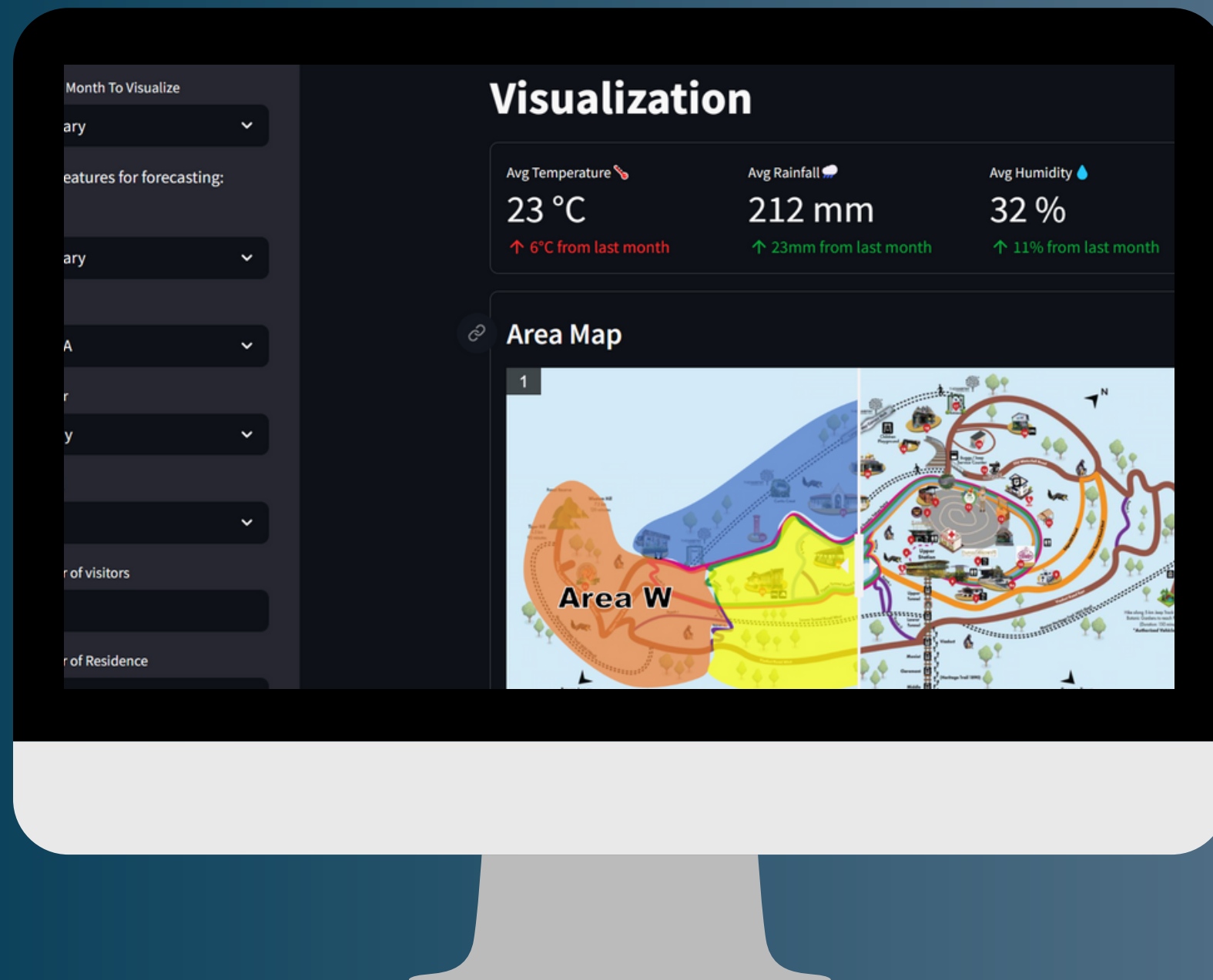
- The Landslide Risk Assessment System uses fuzzy logic to evaluate landslide risks by analyzing factors such as rainfall, soil moisture, terrain, and historical occurrences.
- It assigns risk scores to areas, incorporates image analysis for onsite safety features, and provides detailed reports with maps to aid urban planners, builders, and environmental researchers in making informed decisions for safety.
- **Technology involved: Fuzzy Logic, Geographical Information System, Algorithmics**





# SMART WATER METER SYSTEM

- The Smart Water Meter System visualize water usage data of different areas of Penang Hill and all the reservoir water level in Penang.
- These visualizations and comparisons can help the authorities to have a better understanding of the demand and supply of water in Panang Hill to make informed decision.
- **Technology involved: Machine Learning, Data Visualization**







# Objectives



**PROVIDE DETAILED AND SOLID  
INFORMATION**



**VISUALIZE DATA**

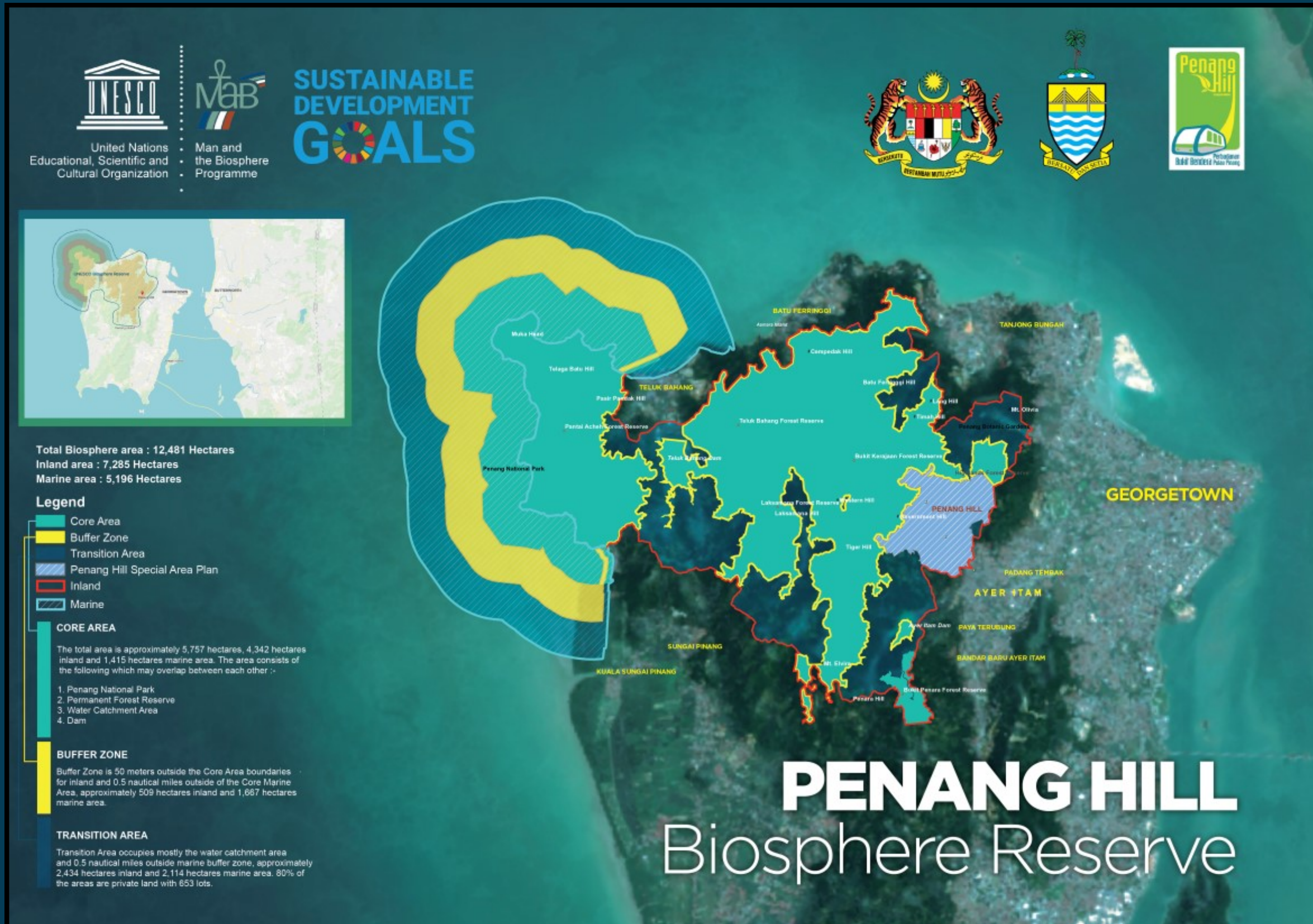


**CREATE A CENTRALIZE DATA  
PLATFORM**



# Designated Site Chosen

# Penang Hill Biosphere Reserve (PHBR)



- It poses serious problems.

- It holds high economic value. (Dermawan, 2023)

[2023], American daily USA Today's list

Rank 9th - the world's biggest tourist traps (only Asian attraction in the top 10).



# Penang Hill Site Visit



Understanding the structure of Penang Hill



Meeting with Senior Project Officer of PHBR



Understanding the landslide prevention effort of the authorities



# Stakeholder Engagement



Guided tour with Senior Project Officer of PHBR



Getting feedback from the Director of PHBR



Meeting with officer from PBA





# Plan For The Next 2 Weeks

## WEEK 5



**Gather feedbacks from the authority and refine the system.**

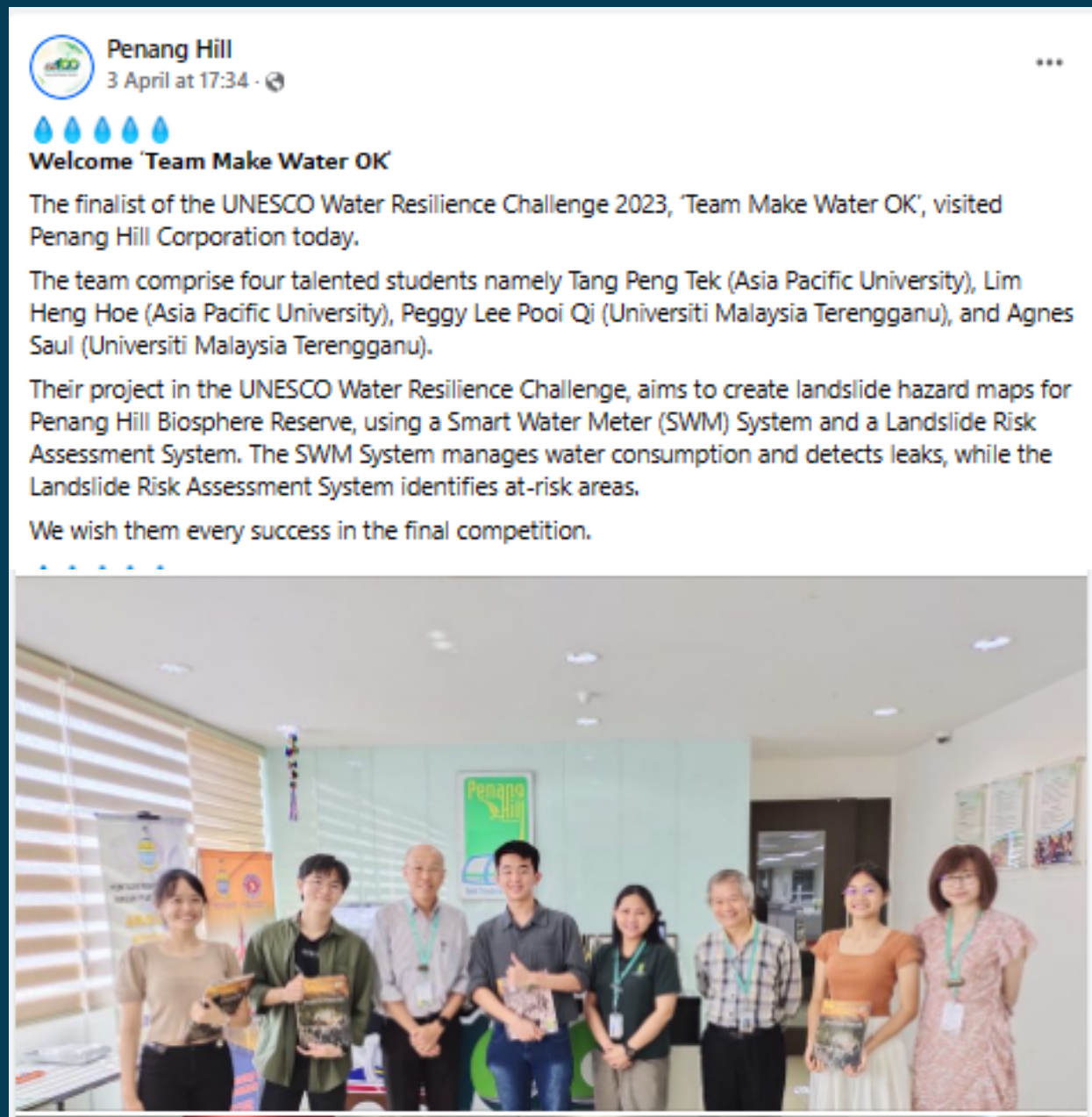
## WEEK 6



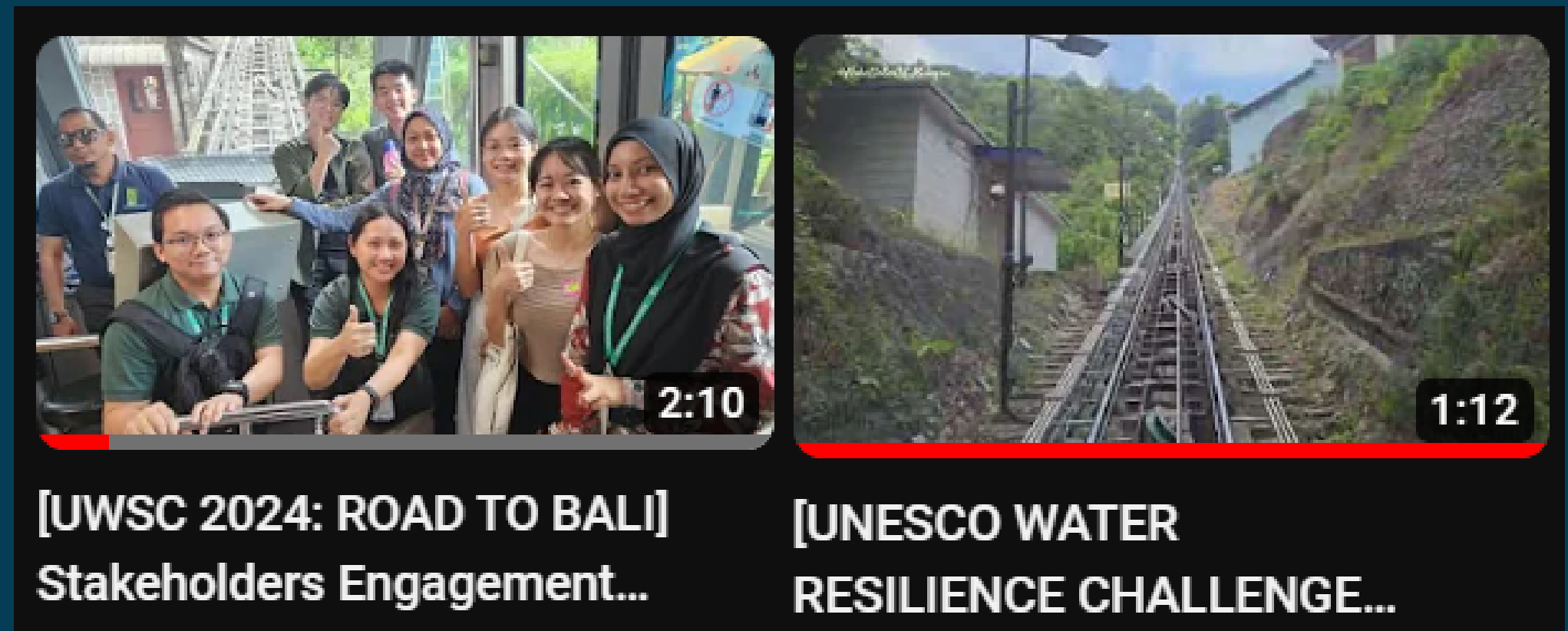
**Finalize the documents gathered in the past month and prepare for the presentation.**



# Project Digitization



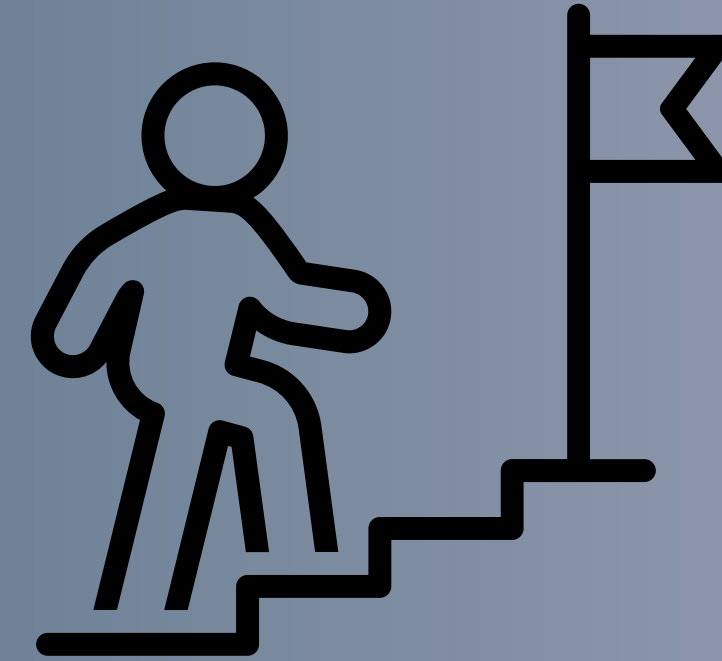
Facebook post by PHBR official page



Posted two YouTube Videos



# Possible Challenges and Mitigation Plan



- Stakeholders might not be satisfied with our app.
- Might encounter technical errors.

- prioritize their feedback and make necessary improvements.
- Thoroughly document any drawbacks of the app if certain improvements are not feasible for future talents to solve.





# THANK YOU

Presented by:  
Team MAKE WATER OK (MALAYSIA)