



**Technical Assistance:** A Multi-Hazard Platform for forecasting local climate extremes and physical hazards

**Location:** Iskandar, Malaysia

**Solution:** Development of a Multi-Hazard Platform for monitoring and managing climate risk, particularly coastal hazards

**UNEP CTCN grant:** USD 184,500



A prototype Multi-Hazard Platform for Malaysia © UNEP-CTCN

Rapid urbanization and a growing population lead to increases in vulnerability to coastal hazards such as floods and storm surges. This project develops a prototype of a Multi-Hazard Platform (MHP) for forecasting climate extremes and physical hazards. It enhances disaster resilience by providing access to localized weather forecasting, hazard mapping, and early warning, with a focus on coastal flood risk.



## Objectives

- The primary objective is to strengthen the region’s capacity to manage climate risk by creating a Multi-Hazard Platform (MHP) that offers real-time data and forecasting capabilities.
- The project targets local government authorities, disaster management agencies, and coastal communities, providing them with the tools and information needed to anticipate and respond to climate hazards effectively.



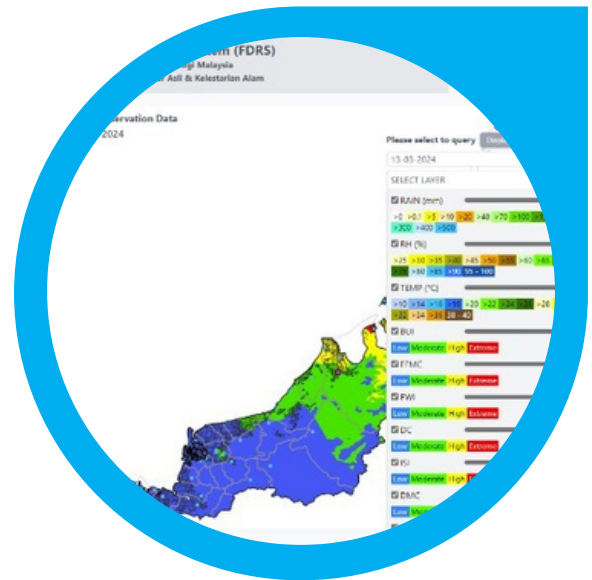
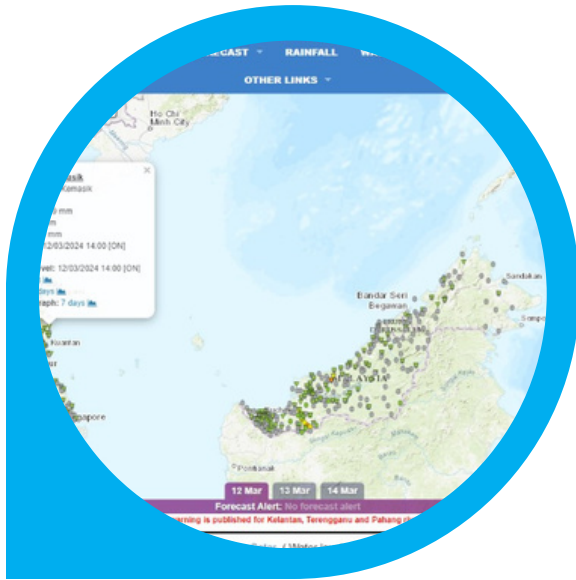
## Social Impact

- The project supported a total of 2,315,000 beneficiaries, including 8 direct beneficiaries and 2,315,000 indirect beneficiaries.
- Among the direct beneficiaries, 60% were women, while 46% of the indirect beneficiaries were women. Additionally, 48% of the indirect beneficiaries were youth.
- The project enhances the region’s capacity to forecast and manage local climate extremes and coastal hazards.



## Adaptation Impact

- **Enhanced Climate Risk Management and Coastal Resilience:** Timely and accurate information on potential climate hazards supports better preparedness and response, reducing the impact of extreme weather events on coastal communities.
- **Improved Decision-Making:** The MHP supports informed decision-making by integrating data on climate extremes and hazards. This allows authorities to take proactive measures, reducing the long-term impact of climate change on the region.
- **Strengthened Community Preparedness:** The project focuses on social innovation, ensuring that local communities are actively involved in climate risk management and have access to the information they need to protect themselves from climate hazards.



### Other Co-Benefits

- Better decision-making by authorities and communities.
- Reduced vulnerability to climate-induced disasters.
- Strengthened community involvement in disaster preparedness.



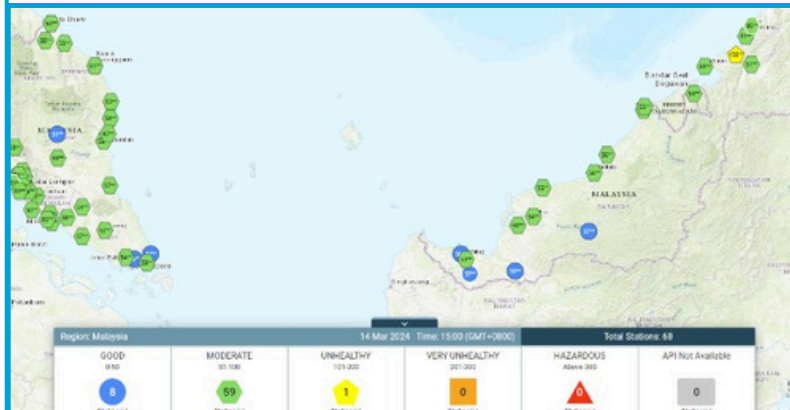
### Innovation & Technology

- Multi-Hazard Platform (MHP): Development of a user-friendly platform that integrates diverse datasets for real-time monitoring and forecasting of climate hazards.
- Social Innovation: Focus on community engagement and the development of people-centered forecasting systems that ensure the information provided by the MHP is accessible and actionable by key stakeholders.
- Data Integration: Combining data from various sources to provide a comprehensive overview of climate risk, enabling more effective disaster management.



### Replication Potential

- The project demonstrates potential for replication particularly in coastal regions, which can benefit from a system providing relevant climate information for action and adaptation, as well as risk management.



### Key Figures

- USD 184,500 project budget
- 2,315,000 people benefitted in total
- 16 different national stakeholders, including government agencies, have participated or were reached by the project
- The project contributed to the following SDGs:

