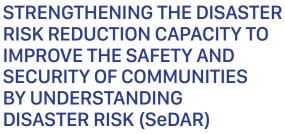


FINAL REPORT















About the Publication:

This publication is documentation and reporting of the activities and results under the JPP SeDAR program to enable replication of CBDRR activities in states throughout Malaysia. This document is intended as reference for DRR planners and implementors.

This publication was developed by Prof. Takako Izumi (IRIDeS, Tohoku University) and Eriko Motoyama (JPP SeDAR Malaysia).

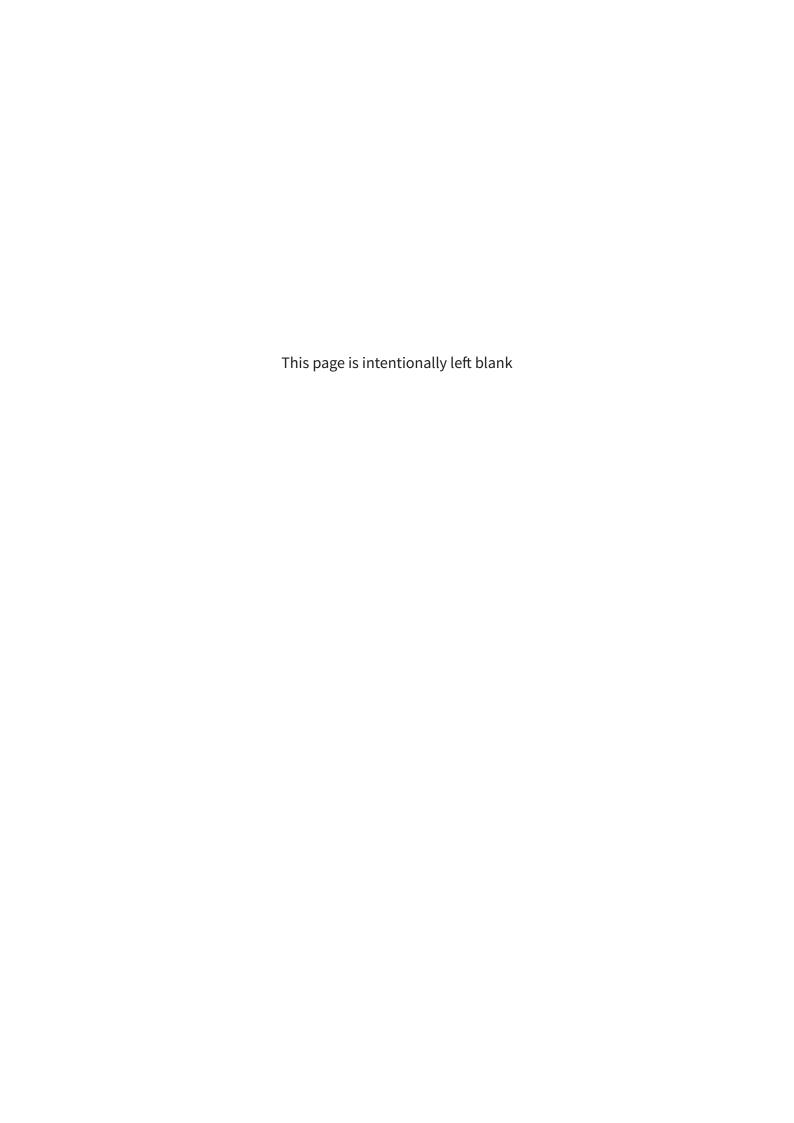
April 2024

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FINAL REPORT FOR JICA PARTNERSHIP PROGRAM (JPP)'S 'STRENGTHENING THE DISASTER RISK CAPACITY TO IMPROVE THE SAFETY AND SAFETY OF COMMUNITIES BY UNDERSTANDING DISASTER RISK' (SeDAR)

APRIL 2024



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Government

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Department of Irrigation and Drainage (JPS) Selangor

Slope Engineering Branch, Public Works Department (CKC, JKR)

Selangor Islamic Religious Department

Department of Education (JPN) Selangor

Department of Welfare (JKM) Selangor

Royal Malaysia Police (PDRM) Selangor

Fire and Rescue Department (BOMBA)

Selangor

District and Land Office (PDT) Klang

District and Land Office (PDT) Hulu Langat

District and Land Office (PDT) Gombak

Klang Municipal Council (MPK)

Kajang Municipal Council (MPKj)

Ampang Jaya Municipal Council (MPAJ)

Village Leaders and Committees, Kapar

sub-district

Village Leaders and Committees, Hulu

Langat sub-district

Community Leaders and Members, Ulu

Klang

Takako Izumi

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Science (IRIDeS), Tohoku University

Principal Investigator (PI) and Project Manager, JPP SeDAR

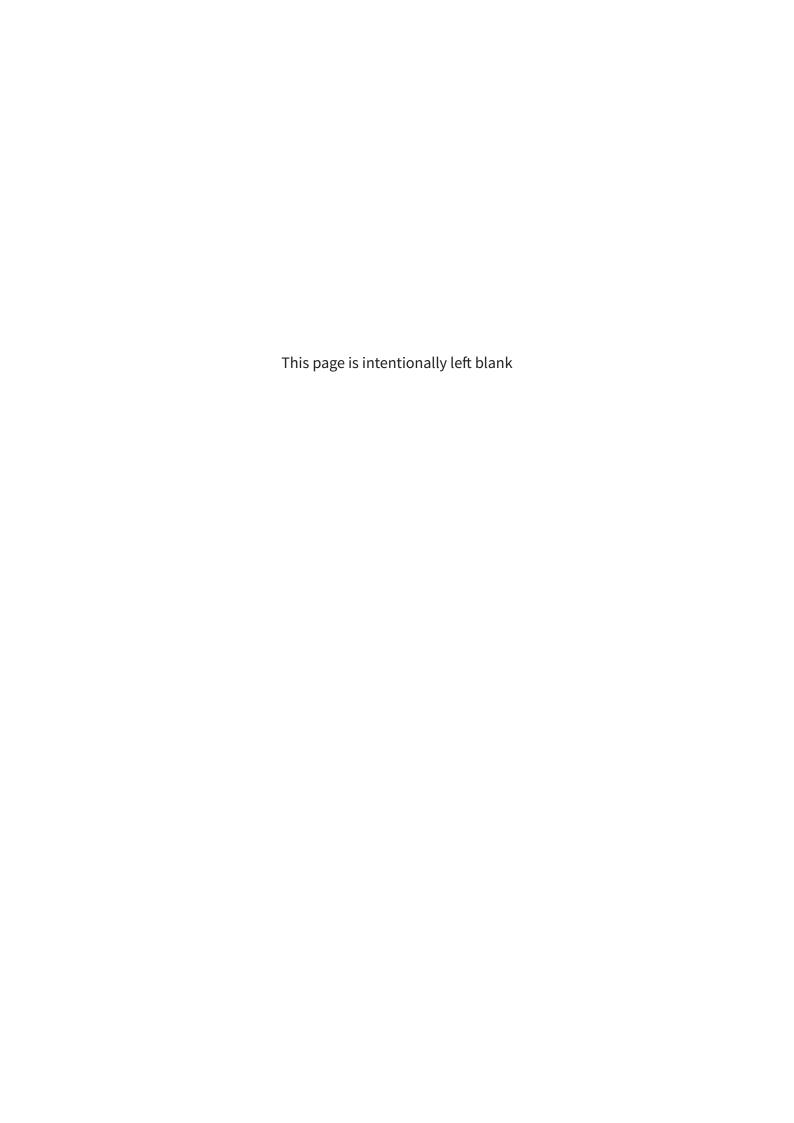
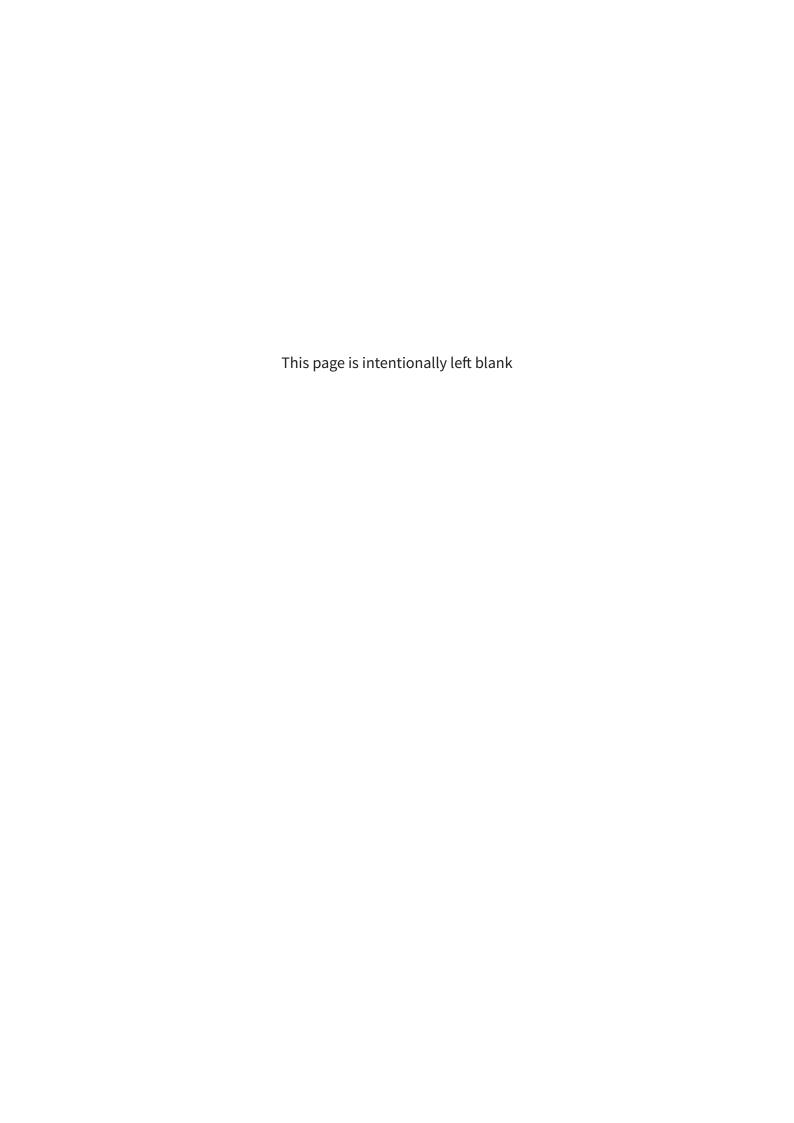


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1 Introduction

The program was initiated and led by the International Research Institute of Disaster Science (IRIDeS), Tohoku University. The program started in June 2018 and was completed in April 2024.

1.1 About the SeDAR Program

The aim of the SeDAR program was to equip local governments as well as community leaders with the skills and know-how to build a disaster risk reduction program at the grassroots level, from the bottom up. This program takes a unique approach to community by:

- Instilling a science-based understanding of disaster risks among the community leaders, member and local authorities
- Having them work together to develop DRR activities and programs that are best suited to their understanding and needs.

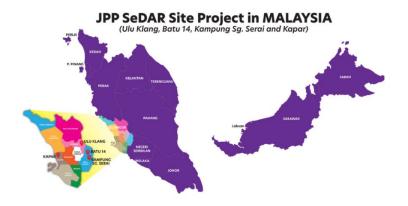
This community-oriented approach towards disaster risk reduction was an important step towards building disaster-resilient communities.

1.2 Target Groups within the Program

- Local community leaders
- Local authorities and district officers
- Members of the communities

1.3 Program Details

The SeDAR project runs as a 4-year program targeted to four communities in the state of Selangor.



The communities selected as case studies in this report were:

- Ulu Klang, Gombak
- Batu 14, Hulu Langat
- Kampung Sg. Serai, Hulu Langat
- Kampung Tok Muda, Kapar

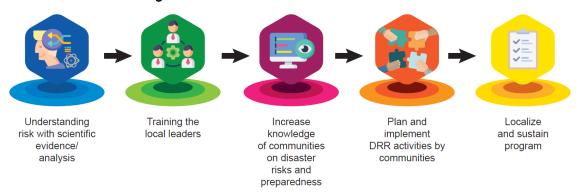
All of these areas have experienced major flooding or landslide incidents at some point in the past. However, their experiences are not unique to these locations. All these sites have characteristics or conditions similar to those found throughout the country. Thus, the lessons to be learned from running programs in these areas can be applied to other locations within Malaysia.

1.4 Key Concepts of the SeDAR Program

- Understanding of disaster risks by local government and community stakeholders
- · Leadership and ownership by stakeholders to lead DRR projects
- Ensure sustained continuity of the programs

1.4.1 SeDAR Program Flow

Phases of the SeDAR Program



1.4.2 Step-by-Step Methodology for CBDRR under the SeDAR Program

Based on the experience of the 4-year SeDAR program, the following steps have been identified and are recommended for CBDRR programs.

SeDAR Process for CBDRR

- 1. Secure the budget to initiate the CBDRR program and design the course of activities for at least 2-3 years' timeframe.
- 2. Assign a team or designated office to coordinate, implement, and manage the CBDRR process and program.
- Ensure the involvement of both community leaders and local government as well as relevant
 agencies involved in the sciences and emergency response (i.e., civil defence, police, or fire
 dept) and build relationships between the key players. Enhance their knowledge on DRR and
 risk management.
- 4. Train leaders at the local level who can effectively educate on DRR to the public.
- 5. Conduct science-based risk assessment/ identification and have leaders communicate the risks to the public.
- 6. Conduct town-watching (familiarizing with the risks surrounding the community), create community maps to identify hotspots, safe zones and other areas of interest, and identify solutions to address the risks.

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- 7. Have communities understand early warning systems and communicate how it works with the public.
- 8. Create maps to show evacuation centres and actions to take when warning sirens activate and conduct evacuation drills (make them a regular event yearly or every six months)
- 9. Plan and implement DRR activities together with the local government and communities with support from experts and ensure sustainability of the activities with local community ownership.
- 10. Share experience and knowledge with other districts/states.
- 11. Engage trainers at government and community levels who have been trained throughout the project for DRR activities and use them as an asset.

Key Success Factors

- One of the key success factors under SeDAR was the priority and effort put into building and
 maintaining a strong partnership with stakeholders to ensure their involvement and
 collaboration throughout the project's duration. Without a dedicated program team and
 government agencies such as the Selangor Disaster Management Unit, it would have been
 challenging to manage and sustain the program.
- Leadership and coordination at both the government and local levels were also key to the
 program. It is especially vital to get community involvement and allow community members
 to take ownership of the program as they play a key role in maintaining the knowledge and
 managing the DRR activities for the long term.
- 3. Finally, it was advantageous to obtain guidance and input from DRR experts from time to time to improve the quality of the activities.





1.5 Program Partners

SeDAR was a collaboration between the International Research Institute of Disaster Science (IRIDeS) of Tohoku University, Selangor Disaster Management Unit (SDMU) of the Selangor State Government and the Disaster Preparedness and Prevention Centre (DPPC) of the Malaysia-Japan International Institute of Technology (MJIIT), Universiti Technology Malaysia, Kuala Lumpur (UTMKL).

In 2019, the Malaysia Civil Defence Force (APM) expressed their desire to become a program partner. In consideration of their valuable contribution and efforts in implementing the SeDAR program, they were promoted in the program as 'Program Partner'.

- IRIDeS is the project proponent that manages and provides direction in the implementation of the SeDAR project, as well as imparting skills and know-how that leverages on its vast experience in disaster management in Japan
- **SDMU** is the local implementer that serves as the link between the communities, government agencies and academia, thus ensuring smooth implementation
- DPPC is the local technical expert that transforms SeDAR objectives into local content for the communities, merging science and local knowledge for a more comprehensive approach to DRR
- **APM** provides hands-on, practical experience in implementing the program as well as providing manpower in the various districts through their organizational network

1.6 Program Duration

The duration of the SeDAR program was planned for 4 calendar years, from 2018 to 2022. However, due to an interruption caused by the global COVID pandemic in 2020, there was a period of no community activity out of concern of close contact among the community population.

However, during this time, the Training-of-Trainers (TOT) Guidebook on CBDRR was developed and usability tests on the Manual were conducted. Group gathering activities resumed in March 2022 and the program was extended until April 2024.

2 Summary of Program Activities

The Summary of Program Activities is a reporting of all the major activities that have taken place within the duration of the program period.

A. LAUNCH CEREMONY

No.	Date	Event	Venue	Attendance
1.	Jun 29, 2018	Project Launch & Workshop	Concorde Hotel Shah	64
			Alam	

B. DISASTER RISK REPORT HANDOVER

No.	Date	Event	Venue	Attendance
1.	Aug. 23, 2019	Handover Ceremony to Selangor	Shah Alam Convention	70
		State Government and Knowledge	Centre	
		Sharing Seminar by Flood and	Plenary Hall	
		Landside Experts		

C. RISK COMMUNICATION SESSIONS

No.	Date	Sub- District	Event	Venue	Attendance
1.	Oct. 7, 2019	Ulu Klang	Risk Communication to	Hulu Kelang Sub-	39
			Local Govt &	District Chief Village	
			Community Leaders	Leader Complex	
2.	Oct. 21, 2019	Hulu Langat	Risk Communication to	Hulu Langat	27
			Local Govt &	District/Land Office	
			Community Leaders		
3.	Nov. 14, 2019	Kapar	Risk Communication to	Klang District/Land	30
			Local Govt &	Office	
			Community Leaders		

D. TRAINING OF TRAINERS (TOT)

D1. TO MASTER TRAINERS (GOVT)

No.	Date	Sub-	Event	Venue	Total	Certified
		District			Attended	Trainers
1.	Apr. 21-22,	Ulu Klang,	TOT to Master	Jubli Perak Hall,	34	19
	2022	Hulu	Trainers (landslides)	Selangor State		
		Langat		Govt Building		
2.	May 18-19	Kapar, Hulu	TOT to Master	Jubli Perak Hall,	29	12
	2022	Langat	Trainers (floods)	Selangor State		
				Govt Building		
	TOTAL CERTIFIED GOVT TRAINERS					

D2. TO COMMUNITY LEADERS

No.	Date	Sub- District	Event	Venue	Total Attended	Certified Trainers
1.	Aug. 10, 2022	Ulu Klang	TOT to Community	MPAJ Training	35	13
			Leaders	Hall, Ampang		
				Jaya Municipal		
				Office		
2.	(a) Aug. 25,	Kapar	TOT to Community	Klang District &	53	23
	2022		Leaders	Land Office		
	(b) Nov. 29,			MPKK Hall Bukit		
	2022			Kapar, Kapar		
3.	Oct. 1, 2022	Hulu		Hulu Langat	64	45
		Langat		District & Land		
				Office		
			TOTAL CERTI	FIED COMMUNITY	TRAINERS	81

E. COMMUNITY WORKSHOPS

No.	Date	Sub- District	Event	Venue	Attendance (Community)
1.	(a) Oct. 16, 2022 (b) Dec. 18, 2022	Ulu Klang	Community Workshop	MPAJ Hall, Ukay Perdana Community Hall, Hijauan Apts, Ukay	104 (73)
	2022			Perdana	
2.	Dec. 10, 2022	Kapar	Community Workshop	Kg. Tok Muda Community Hall, Kapar	47 (35)

F. TOWN WATCHING & COMMUNITY MAPPING

No.	Date	Sub-	Event	Venue	Attendance
		District			(Community)
1.	Feb. 19, 2023	Ulu Klang	Town Watching &	MPAJ Hall, Ukay	90 (71)
			Community Mapping	Perdana	
2.	Feb. 26, 2023	Batu 14 &	Town Watc hing &	Dato' Nazir Hall, Hulu	53 (30)
		Hulu Langat	Community Mapping	Langat	
3.	Mar. 5, 2023	Kapar	Town Watching &	Kg. Kerayong	43 (31)
			Community Mapping	Community Hall,	
				Kapar	
4.	Mar. 12, 2023	Kg. Sg. Serai	Town Watching &	Sri Nanding	57 (35)
		& Hulu	Community Mapping	Community Hall, Hulu	
		Langat		Langat	

G. WORKSHOP ON PLANNING DRR ACTIVITIES WITH EXPERTS

No.	Date	Sub- District	Event	Venue	Attendance
1.	Mar. 21, 2023	Kapar	Workshop on Activity	Klang District & Land	23
			Planning with Experts	Office	

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No.	Date	Sub- District	Event	Venue	Attendance
2.	Mar. 22, 2023	Batu 14 & Hulu Langat	Workshop on Activity Planning with Experts	Demense Hall, Hulu Langat District & Land Office	33
3.	Mar. 22, 2023	Kg. Sg. Serai & Hulu Langat	Workshop on Activity Planning with Experts	Demense Hall, Hulu Langat District & Land Office	28
4.	Mar. 23, 2023	Ulu Klang	Workshop on Activity Planning with Experts	Disaster Preparedness & Prevention Centre, UTM KL	29

H. SYMPOSIUM

No.	Date	Sub-District	Event	Venue	Attendance
1.	Oct. 19-20,	N/A	Symposium	Geno Hotel, Subang	Day 1: 134
	2023			Jaya	Day 2: 102

I. CBDRR ACTIVITIES IN THE FOUR PROJECT AREAS

No.	Date	Sub- District	Event	Venue	Attendance
ULU KLANG, GOMBAK DISTRICT					
1.	Jun. 25, 2023	Ulu Klang	Civil Defence Emergency Response Training (CDERT)	MPAJ Community Hall, Taman Bukit Mulia, Bukit Antarabangsa	41
2.	Feb. 4, 2024	Ulu Klang	Official Opening of DRR Resource Centre	MPAJ Community Hall, Taman Bukit Mulia, Bukit Antarabangsa	66
KG. BATU 14, HULU LANGAT DISTRICT					
3.	Jul. 9, 2023	Batu 14 & Hulu Langat	Visual Slope Monitoring Workshop with JKR and JMG	Dato' Nazir Hall, Hulu Langat	57
4.	Sep. 23, 2023	Batu 14 & Hulu Langat	DRR for Schoolchildren	Abdul Jalil High School	424
KAPAR, KLANG DISTRICT					
5.	Sep 16, 2023	Kapar	Community Evacuation Route Drill	At-Taqwa Mosque, Kapar	55
6.	Dec. 17, 2023	Kapar	PPS Location Poster Handover event	Kg. Tok Muda Community Hall, Kapar	87
KG. SG. SERAI, HULU LANGAT DISTRICT					
7.	Sep 2, 2023	Kg. Sg. Serai & Hulu Langat	PLOGGING	School KAFAI Kg. Sg. Serai	117
8.	Nov. 18-19, 2023	Kg. Sg. Serai & Hulu Langat	Pre-Drill Briefing Community Evacuation Route Drill	Taman Sri Nanding Community Hall, Taman Sri Nanding, Hulu Langat	(a) 18th: 73 (b) 19th: 125

3 Program Activities

A. Project Launch Ceremony & Workshop

Project Launch Ceremony & Workshop (June 29, 2018)

Description:

The one-day Project Kick-Off and Workshop was an event for launching the SeDAR program as well as sharing the experiences of disaster response and DRR in Japan and Malaysia. It was attended by local, state and district government agencies as well as NGOs and community organizations.

Attendance: 64

Participants from Japan:

- Prof. Fumihiko Imamura, Director of IRIDeS, Tohoku University
- Prof. Takako Izumi, IRIDeS, Tohoku University
- Assoc. Prof. Shuichi Kure, Toyama Prefectural University
- Mr. Tomoki Suzuki, Sendai City Government
- Ms. Rika Kanazawa, Sendai City Government

Special guest (Malaysia):

Datuk Zamani Ahmad Mansor, Deputy State Secretary, Selangor State Government

Highlights of the Event:

Keynote Presentation

'Sharing Experience/Lessons in the 2011 Tohoku Earthquake and Tsunami for Future Disaster Mitigation' by Prof. Imamura, IRIDeS, Tohoku University. Covered (1) scientific data and information and events on the Earthquake and (2) activities in CBDRM at IRIDeS

Session 1, Science and Technology for DRRM

- a) Experiences from Japan: 'Development of Flood Hazard Maps for Planning DRRM' by Prof. Shuichi Kure, Toyama Prefectural University. Presented on: (1) flood management in Japan, (2) some river information in Japan, and (3) importance of identification of high-risk zones for implementing CBDRR
- b) Experience from Sendai City, 'Japan: Disaster Risk Reduction Measures by City of Sendai' by Mr. Suzuki, City of Sendai. Presented on: (1) damage from the Great East Japan Earthquake in 2011 and the subsequent measures, especially against the tsunami and (2) the damage from the Kanto Tohoku Heavy Rainfall in 2015 and the subsequent measures, especially the creation of a hazard map.
- c) Experience from Malaysia: 'Landslide Assessment in Malaysia: Progress and Challenges' by Dr. Khamarrul Azahari Razak. Presented on: (1) Current issues and challenges, (2) National slope initiatives, landslide hazard risk assessment and mainstreaming DRR into development planning in Malaysia, and (3) Landslide community programs

Session 2: Experiences of Local Government

- a) **'Briefing on the Smart Selangor Communication Centre'** by Mr. Ahmad Fairuz bin Mohd Yusof, Selangor Disaster Management Unit on: (1) Data gathering and display at control centre, (2) Role & responsibilities in disaster response, and (3) Smart Selangor Communication Centre assets
- b) 'BOSAI of Sendai' by Ms. Kanagawa of City of Sendai about: (1) Overview of damage by the Great East Japan Earthquake, (2) Restoration of essential utilities and evacuee count, (3) Operation of evacuation centres, (4) Support measures for vulnerable people, and (5) Awareness & education on disaster prevention and reduction
- c) 'Understanding Disaster Risk and Community-Led Disaster Risk Reduction using MCDF CDERT for Community' by Dr. Hj. Norhafifi bin Hj Ismail of Malaysia Civil Defence Agency (APM) on: (1) Disaster response mechanism and (2) What is CDERT for Community
- d) 'Creating Disaster Resilient Cities in Malaysia' by Dr. Dzul Khaimi bin Khailani, Plan Malaysia on planning guidelines for disaster resilient cities

Press Conference

Fifteen members of the print and broadcast media from NHK KL, the New Straits Times, Shin Chew, Radio Television Malaysia, Selangor Kini, and TV Selangor posed questions to the Honorable Hee and Dr. Imamura









B. DISASTER RISK REPORT HANDOVER CEREMONY

Handover Ceremony to Selangor State Government and Knowledge Sharing Seminar by Flood and Landside Experts (August 23, 2019)

Description:

A one-day ceremony involving official handover to the State Government and press conference at the venue, as well as a handover and press conference with the Chief Minister of Selangor at the Selangor Economic Action Council (MTES) meeting.

Attendance: 70

Executive Council Member, Selangor State

Government

National Disaster Management Agency

(NaDMA)

Department of Irrigation and Drainage

Malaysia (JPS)

Department of Survey and Mapping

Malaysia (JUPEM)

Department of Mineral and Geoscience

(JMG) Selangor

Department of Statistic Malaysia (DOSM)

National Water Research Institute Malaysia

(NAHRIM)

Dept of Town & Country Planning

(PlanMalaysia)

Selangor Water Management Authority

(LUAS)

Malaysia Remote Sensing Agency (ARSM)

National Centre for Hydrography Malaysia

(PHN)

Slope Engineering Branch, Public Works

Department (CKC, JKR)

JKR Selangor

District & Land Office (PDT) Hulu Langat

District & Land Office (PDT) Klang

District & Land Office (PDT) Gombak

Klang Municipal Council (MPK)

Kajang Municipal Council (MPKj)

Ampang Jaya Local Council (MPAJ)

Universiti Kebangsaan Malaysia (UKM)

Universiti Teknologi Mara (UiTM)

Village Management Committees (MPKK)

MERCY Malaysia

Kapar Energy Ventures (KEV)

Ministry of Economic Affairs (MEA)

State Economic Planning Unit (UPEN)

Embassy of Japan

JICA Malaysia

Selangor Disaster Management Unit

(SDMU)

IRIDeS

UTM KL

Highlights of the Event:

Official Handover Ceremony

Project Manager Prof. Izumi (IRIDeS) handed over the Disaster Risk Report to the Honorable Hee Loy Sian, Selangor Executive Council member

Introduction of the Disaster Risk Report to the State Cabinet Meeting to the Chief Minister

- a) Presentation of the Report by Project Manager, UTM KL, and SDMU to the Chief Minister of Selangor at a cabinet meeting
- b) Press conference where the Chief Minister announced the budget allocation for data gathering in DRR

Knowledge Sharing Seminar

- a) Presentation 1, 'Science Based Risk Analysis of Landslides in Ulu Klang and Hulu Langat Sites' by Dr. Khamarrul Azahari Razak, UTM Kuala Lumpur who explained how hazard and risk maps were used to show risk to the general public
- b) Presentation 2, 'Numerical Simulation of Batu 14 Landslide' by Dr. Shuji Moriguchi, Tohoku University who showed his 3D simulation of the 2011 Hulu Langat Landslide
- c) Presentation 3, 'Science Based Risk Analysis for Floods in Kampung Sg. Serai, Hulu Langat' by Dr. Shuichi Kure, Toyama Prefectural University who covered his analysis of the flood risk in Kg. Sungai Serai
- d) Presentation 4, 'Science Based Risk Analysis for Kampung Tok Muda, Kapar' by Dr. Mohamad Hidayat Jamal, UTM Skudai who explained how a digital terrain map was prepared to analyse inundation levels in Kg. Tok Muda









C. RISK COMMUNICATION SESSIONS

1. Risk Communication to Local Govt & Community Leaders – Ulu Klang, Gombak District (October 7, 2019)

Description:

One-day session was conducted to communicate landslide risk to the communities within Ulu Klang.

Attendance: 39

Selangor State Assemblyperson Member of Parliament District and Land Office (PDT) Gombak Ampang Jaya Municipal Council (MPAJ) Local Councilor, Zone 4 and 5, MPAJ Chief Village Leader, Hulu Kelang Village Leaders Reps from mosques and temple

Highlights of the Event:

'Overview of Landslide Disasters in Ulu Klang' by Mohammad Izzat Haziq, SDMU

'Communicating Risks in Ulu Klang' by Dr. Khamarrul Azahari, UTM KL

<u>Question</u>: Apart from slopes, do risk maps monitor water flows, land clearing? <u>Answer</u>: Risk maps not only cover slopes, but also geology, geomorphology, underground water

<u>Question</u>: How to verify local government decision on slope development?

<u>Answer</u>: Protesting against slope development must have scientific basis. SeDAR aims to provide more knowledge on the science of risk.

'Community-Based Experience from Japan' by Dr. Shohei Matsuura
Comment from audience: Fully support the SeDAR program. Developers and private slope
owners should also create their own hazard map before submitting any development
proposal









2. Risk Communication to Local Govt & Community Leaders – Batu 14, Kg. Sungai Serai & Hulu Langat Sub-District, Hulu Langat District (October 21, 2019)

Description:

One-day session to communicate landslide risk to the communities within Kg. Batu 14 and Kg. Sungai Serai, Hulu Langat.

Attendance: 27

Hulu Langat District & Land Office Kajang Local Authority Department of Irrigation and Drainage (JPS) Hulu Langat Public Works Department Hulu Langat Chief Village Leader Hulu Langat Village Leader, Kg. Sungai Serai Village Leader, Kg. Batu 14

Highlights of the Event:

'Communicating Flood Risks in Hulu Langat' by Dr. Faizah Che Ros, UTM KL

Question: About whether development within the area that may contribute to the flooding and whether the area is gazetted as water catchment area.

<u>Answer:</u> The area is mostly of natural forest with recreational areas and hiking spots. The flooding is mainly caused by the built-up land being too low and too close to the river bank

Village leaders are aware of the studies undertaken by the government and said they want to focus on actions that can be taken

'Communicating Landslide Risks in Hulu Langat' by Dr. Khamarrul, who talked about the effect of bad slope management, questionable land clearing practices, and building homes near slopes

Village Leader Batu 14 commented on the latest incidents of landslides that are occurring frequently with the rainy season. He questioned what are the actions that should the government do for such events. Why should action only come once the damage is done?

'Community-Based Experience from Japan' by Prof. Takako Izumi, who conveyed to the village leaders that despite mitigation measures by government, damages and losses by natural disasters is difficult to prevent. Emphasized that importance of everyone being involved in disaster risk reduction.





3. Risk Communication to Local Govt & Community Leaders – Kg. Tok Muda & Kapar Sub-District, Klang District (November 14, 2019)

Objective:

One-day session to communicate landslide risk to the communities within Kg. Tok Muda and Kapar sub-district, Klang District.

Attendance: 30

Member of Parliament Kapar State Assembly Sementa District Klang District Office Public Works Department (JKR) Klang Department of Irrigation and Drainage (JPS) Klang Kapar Energy Ventures (KEV) Kapar Sub-District Chief Village Leader Village leaders of Kapar and Sementa Mosque managers

Highlights of the Event:

'Overview of Flood Disasters in Mukim Sementa, Klang' by Muhammad Izzat, SDMU

'Communicating Flood Risks in Mukim Sementa, Kapar' by Dr. Mohamad Hidayat Jamal, UTM Skudai. Topics: (1) Coastal bund erosion: Dr Hidayat showed an example of a community activity in Johor Bahru and Semerang, Indonesia to mitigate river pollution and land subsidence. (2) Dr Hidayat also highlighted the importance of conserving the mangrove forests as protection and mangrove planting activities as a community.

<u>Question</u>: If river bunds made from soil erode, is it possible to remake the bund out of other materials, say concrete or rocks?

<u>Answer:</u> Soil bunds are easiest to be sourced and maintained. Concrete or rocks may cost more, especially since bunds stretch along the coast.

Question: Is the environment a concern if the river bunds were to be upgraded with other materials?

Answer: The main concern is costing and practicality to maintain the bund

Izzat SDMU mentioned a projected sea level rise flood map by 2050 that went viral online recently. Dr Hidayat gave a brief explanation behind the flood map also based on statements from JPS and NAHRIM

'Community-Based Experience from Japan' by Eriko Motoyama, SeDAR





D. TRAINING OF TRAINERS (TOT)

1. TOT to Government Master Trainers

A total of 31 Master Trainers were trained in two sessions in April and May 2022.

1-1. April Training (April 21-22, 2022)

Description:

One-and-a-half day training session to train the Selangor State agencies to become 'Master Trainers'. This session focused on areas that were affected by landslides.

Attendance: 34

Master Trainers receiving TOT Certificates: 19

Trainees:

District & Land Office (PDT) Gombak
District & Land Office (PDT) Hulu Langat
Ampang Jaya Municipal Government (MPAJ)
Kajang Municipal Council (MPKj)
Police Department (PDRM) Hulu Langat
Police Department (PDRM) Hulu Kelang
Fire Department (BOMBA) Hulu Langat
Fire Department (BOMBA) Hulu Kelang
Malaysia Civil Defence Force (APM)

Trainers:

Dr. Khamarrul Azahari Dr. Faizah Che Ros Dato' Zakaria Mohamad Eriko Motoyama Col. (PA) Ts. Dr. Mohamad Fazli Sardi Hafiz Amirrol

Highlights of the Event:

Presentations followed the content of the TOT Guidebook:

'Introduction to the SeDAR Program' and 'The CBDRR Workflow' by Eriko Motoyama

Module 1, 'Understanding DRR Concepts' by Eriko Motoyama

Module 2, 'Understanding Local Risks' by Dr. Khamarrul Azahari and Dr. Fazli Sardi. Science and evidence-based explanation of landslide hazard and risk using maps in Ulu Klang by Dato' Zakaria Mohamad

Science and evidence-based explanation of floods using flood modelling in Kg. Sungai Serai by Dr. Faizah Che Ros

Module 3, 'Planning, Implementing and Evaluating CBDRR Programs' (an exercise in Problem Analysis as a group activity) by Hafiz Amirrol





1-2. May Training (May 18-19)

Description:

One-and-a-half day training session to train the Selangor State agencies to become 'Master Trainers'. This session focused on areas that were affected by floods.

Attendance: 29

Master Trainers receiving TOT Certificates: 12

Trainees:

District & Land Office Klang (PDT) Klang
District & Land Office (PDT) Hulu Langat
Klang Municipal Government (MPK)
Fire Department (BOMBA) Klang
Civil Defence Force Malaysia (APM)
Department of Irrigation and Drainage (JPS)
Selangor
Police Department (PDRM) North Klang
Department of Mineral and Geoscience
(JMG) Selangor

Plus: Four certificates issued to Selangor Disaster Management Unit (SDMU)

Trainers:

Dr. Khamarrul Azahari Razak
Dr. Faizah Che Ros
Dato' Zakaria Mohamad
Eriko Motoyama
Col. (PA) Ts. Dr. Mohamad Fazli Sardi
Dr. Mohamad Hidayat Jamal
Hafiz Amirrol

Highlights of the Event:

Training module presentations followed the content of the TOT Guidebook:

'Introduction to the SeDAR Program' and 'The CBDRR Workflow' by Eriko Motoyama

Module 1, 'Understanding DRR Concepts', by Eriko Motoyama

Module 2, '**Understanding Local Risks'**, by Dr. Fazli Sardi. Concepts on hazard vs. risk and how to implement using community-based approach were taught.

Science and evidenced based explanation of landslide hazard and risk using maps in Ulu Klang by Dato' Zakaria Mohamad

Science and evidenced based explanation of floods using flood modelling in Kg. Sungai Serai by Dr. Faizah Che Ros

Science and evidence based explanation of coastal floods using digital elevation map in Kapar by Ir. Dr. Mohamad Hidayat

Module 3, 'Planning, Implementing and Evaluating CBDRR Programs' by Hafiz Amirrol, which included an exercise in Problem Analysis as a group activity





D2. TOT to Community Leaders

A total of 81 Community Trainers over 3 sessions were trained.

2-1. Community Leaders - Ulu Klang, Gombak District (August 10, 2022)

Description:

One-day training session by the Master Trainers to the community leaders in Ulu Klang so that they can become community trainers in CBDRR.

Attendance: 35

Community Trainers Receiving TOT Certificates: 13

Community Trainees:

Local councilor (representative for local authority)

Representative for state cabinet member

Sub-district community leader

Mosque leaders

Head of housing subdivisions

Head of villages

Master Trainers:

Ampang Jaya Municipal Government (MPAJ)

Malaysia Civil Defence Force (APM)

Selangor

Klang Municipal Government (MPK)

APM Training Academy (ALPHA)

Mineral and Geoscience Department (JMG)

Police Department (PDRM)

District & Land Office (PDT) Klang

Highlights of the Event:

The contents and flow of the training session followed the ToT Guidebook:

'Introduction to the SeDAR Program' and 'The CBDRR Workflow' by Eriko Motoyama

Module 1, 'Understanding DRR Concepts', by Ampang Jaya Municipal Council and Malaysia Civil Defence Force

Module 2, 'Understanding Local Risks' by

Concepts on hazard vs. risk and how to implement using community-based approach by Dr. Khamarrul Azahari and Dr. Fazli Sardi.

Science and evidenced based explanation of landslide hazard and risk using maps in Ulu Klang by Dato' Zakaria Mohamad

Science and evidenced based explanation of floods using flood modelling in Kg. Sungai Serai by Dr. Faizah Che Ros

Module 3, 'Planning, Implementing and Evaluating CBDRR Programs' by Malaysia Civil Defence Force, APM Academy, Klang District Office. The session included an exercise in Problem Analysis as a group activity





2-2. Community Leaders - Kg. Tok Muda & Kapar Sub-District, Klang District (August 25, 2022 & November 29, 2022)

Description:

One-day training session by the Master Trainers to the community leaders in Kg. Tok Muda & Kapar sub-district so that they can become community trainers in CBDRR.

Note: This training session was conducted twice for maximum reach and exposure with the Kapar area.

Attendance: 53

Community Trainers receiving TOT Certificates: 23

Community Trainees:Master Trainers:Local councilorAPM Training Academy (ALPHA)State Assembly memberMalaysia Civil Defence Force (APM)Chief Village LeaderSelangorVillage Leaders and committee membersMineral and Geoscience Department (JMG)Mosque leadersSelangor Disaster Management Unit (SDMU)

Highlights of the Event:

The contents and flow of the training session followed the ToT Guidebook:

'Introduction to the SeDAR Program' and **'The CBDRR Workflow'** by Mohd Azzuan Syah, SDMU

Module 1,' Understanding DRR Concepts', was presented by Muhammad Izzat, SDMU and Capt. Dzaifullah, ALPHA

Module 2, 'Understanding Local Risks' by Mohd Khairudin of Ampang Jaya Municipal Council, Muhammad Ramzanee of the Department of Mineral and Geoscience, and Capt. Ruslan of APM Hulu Langat. Technical presenter Dr. Rozaimi of UTM KL gave a brief scenario description of the coastal and upstream river flooding in Kapar

Module 3, 'Planning, Implementing and Evaluating CBDRR Programs' by Lt. Azli, Capt. Alip of ALPHA, and Capt. Ruslan of APM Hulu Langat

During the hands-on **Disaster Timeline exercise**, the participants raised three major issues afflicting the Kapar area, which can be summarized as:

- Coastal and river flooding (major events that occur during seasonal monsoon seasons)
- Flash flooding (caused by inadequate or damaged drainage systems). Some communities experienced flooding every month (every time it rains heavily), causing property damage
- They also cite urban development that causes flooding in adjacent existing housing areas





District & Land Office (PDT) Klang

2-3. Community Leaders – Batu 14, Kg. Sungai Serai & Hulu Langat Sub-District, Hulu Langat District (October 1, 2022)

Objective:

One-day training session by the Master Trainers to the community leaders in Batu 14, Kg. Sungai Serai & Hulu Langat sub-district so that they can become community trainers in CBDRR.

Attendance: 64

Community Trainers Receiving TOT Certificates: 45

Community Trainees:

Village heads Village committee members Chief village heads (Sub-district level)

Master Trainers:

Malaysia Civil Defence Force (APM)
Selangor
APM Training Academy (ALPHA)
Department of Mineral and Geoscience
(JMG) Selangor
Selangor Disaster Management Unit
(SDMU)
Police Department (PDRM) Ampang Jaya
District & Land Office (PDT) Gombak

Highlights of the Event:

The contents and flow of the training session followed the ToT Guidebook:

'Introduction to the SeDAR Program' and **'The CBDRR Workflow'** by Muhammad Izzat Haziq, SDMU

Module 1, 'Understanding DRR Concepts', was presented by Azzuan and Muhammad Izzat Haziq, both of SDMU

Module 2, 'Understanding Local Risks' by Mohd Khairudin of Ampang Jaya Municipal Council, Muhammad Ramzanee of the Department of Mineral and Geoscience, and Capt. Ruslan of APM Hulu Langat. Technical presenter Dr. Rozaimi of UTM KL gave a brief scenario description of the coastal and upstream river flooding in Kapar

Module 3, 'Planning, Implementing and Evaluating CBDRR Programs' by Lt. Azli, Capt. Alip of ALPHA, and Capt. Ruslan of APM Hulu Langat

Special presentation by Batu 13 Village Leader by Abdul Rashid Ahmad, who had prepared a 15-minute presentation on the December 2021 disaster and how the residents responded to the disaster

During the hands-on **Disaster Timeline exercise**, several challenges were raised by the participants, which are as follows:

<u>Changing people's mindset to be more proactive and not complacent</u>. The SeDAR activities have to be creative to attract the community to participate. The use of social media could be useful in addition to traditional print media.

Residents in Kg. Sungai Serai have a mindset of not listening to the authorities even though warnings of impending disaster have been announced. Thus, the residents will not move from their respective areas and rather wait and see.

<u>Selfish attitude of the residents</u>. Participants stated that residents do not join to help or be proactive. They wait for the authorities to tell them what to do.

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Received valuable feedback on the participants' understanding of the causes of landslides and floods in Hulu Langat:

- The river is shallow due to illegal development
- Garbage disposal in the river
- River cleaning and river management are not done well
- The construction of Highway EKVE closed the original route of water flow
- Agricultural and housing development does not follow legal and enforcement guidelines
- Cutting the slope of the land and building a house at the foot of the slope
- Slope and urban development sometimes do not get planning permission









E. COMMUNITY WORKSHOPS

NOTE: Workshops were conducted for Ulu Klang and Kapar. The two workshops for Hulu Langat (Batu 14 and Kg. Sg. Serai were combined with the Town Watching events)

Community Workshop - Ulu Klang, Gombak District (October 16 & December 18, 2022)

Description:

Half-day workshop for Community Trainers to present the CBDRR modules to the community-at-large in Ulu Klang.

Note: This workshop was conducted twice for maximum reach and exposure within the Ulu Klang area.

Attendance: 28 (October) and 89 (December). Total of 104 participants from the communities

Community Trainers:

Ngasri Jaafar Nazli Idris
Mohamad Arshad Raji How Say Sze
Farid Faiz Sa'adah Salleh

Badrulisham Mohd Akhirin

Highlights of the Event:

The contents and flow of the training session followed the ToT Guidebook:

'Introduction to the SeDAR Program' and **'The CBDRR Workflow'** by Eriko Motoyama of SeDAR and Ngasri Jaafar

Module 1, 'Why Do We Need CBDRR?', was presented by Dato' Mohamad Arshad Raji, Farid Faiz, and Sa'adah Salleh

Module 2, 'Understanding Hazards and Risks in our Community' by Badrulisham Akhirin

Module 3, 'What's Next: Planning and Taking Action' by How Say Sze, Sa'adah Salleh and Farid Faiz

The **Question and Answer Session** with the participants raised some issues and challenges in Bukit Antarabangsa and Ukay Perdana, which can be summarized as:

- Distrust and frustration towards the local government and unwillingness of communities to engage in programs involving government agencies
- Thus, efforts such as SeDAR are very much welcomed. It is hoped that SeDAR can get the engagement of representatives from each housing development (*taman*). It is not easy to engage each and every member of the community, so it is important that every taman is represented.





2. Community Workshop - Kg. Tok Muda & Kapar Sub-District, Klang District (December 10, 2022)

Description:

Half-day workshop for Community Trainers to present the CBDRR modules to the community-at-large in Kg. Tok Muda & Kapar sub-district.

Attendance: 47

Community Trainers:

Md Jamaludin bin Ramlan Mohd Fauzi bin Ariffin Zulkifli bin Ismail Shamsuddin bin Liman Md Jamaludin bin Ramlan Committee Mohd Norhizam bin Hussein Umi binti Jumaina

Highlights of the Event:

The contents and flow of the training session followed the ToT Guidebook:

'Introduction to the SeDAR Program' and **'The CBDRR Workflow'** by Eriko Motoyama of SeDAR

Module 1, 'Why Do We Need CBDRR?', was presented by Mohd Rizan and Umi Jumaina

Module 2, 'Understanding Hazards and Risks in our Community' by Zulkifli Ismail and Shamsuddin Liman

Module 3, 'What's Next: Planning and Taking Action' by Mohd Norhizam and Md Jamaludin

The **Question and Answer Session** with the participants raised some issues and challenges in Kapar, which were:

- Coastal flooding due to combination of high tide and stormwater runoff from upstream areas (Sungai Kapar Besar)
- Construction/development with inadequate drainage system in the area that causes flash flooding
- Flash flooding due to more development of urban and industrial zones (concrete surface that leads to more runoff into rivers and drainage system)
- Another challenge that the participants cited was the poor attitude of the community members towards community-based DRR
- However, as heads of the villages, the Village Leaders said they will continue to support the SeDAR program and elicit participation from the communities to the best of their ability.





F. TOWN WATCHING & COMMUNITY MAPPING

1. Town Watching & Community Mapping - Ulu Klang, Gombak District (February 19, 2023)

Description:

One-day workshop with communities to conduct Town Watching and Community Mapping in Ulu Klang.

Attendance: 90

Heads of Residents Associations Mosque members Community-based organizations Police Department Ampang Jaya Municipal Government (MPAJ)
District & Land Office (PDT) Gombak
Department of Mineral and Geoscience
(JMG) Selangor

Highlights of the Event:

Pre-Town Watching

- a) Technical Briefing: 'Explanation on Landslide Hazard & Risk' by Qalam Azad Rosle, JMG Selangor to explain briefly on the geology of Ulu Klang and the kinds of slope failures that occur
- b) Data Gathering Briefing: 'Items to Record as Hazard, Safe, Useful and Special Feature' by Eriko Motoyama
- c) Logistics Briefing: 'Rules, Timing, Safety and Roles' by Dr. Fazli Sardi, ALPHA

Town Watching

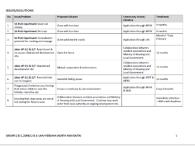
Groups for each zone walked about and recorded observations of 'danger', 'safe', 'useful' and 'special' spots in their respective zones. Each spot was labeled as 'positive' or 'negative':

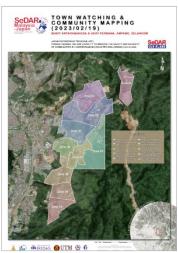
- a) Zone 1: Taman Sierra Ukay
- b) Zones 2 & 3: Ukay Perdana
- c) Zone 4: Taman Sering Ukay
- d) Zone 5: Taman Kelab Ukay
- e) Zones 6 & 7: Riverdale Park, Villa Ria (Taman Bukit Mulia) and Kg. Sungai Sering
- f) Zone 9: Taman Bukit Jaya

Community Mapping

Each group created a map based on the findings (positive/negative) and observations (danger, safe, useful, special) during the town watching.







Identifying Issues/Problems/Solutions

Participants listed out issues and problems in their zones and proposed possible solutions. Out of the 35 items as issues/problems/solutions, 2 stood out as potential DRR activities:

- a) <u>Issue 1:</u> Lack of community awareness and preparedness for disaster <u>Proposed solution 1:</u> Educate with a program, together with communities
- b) <u>Issue 2:</u> Lack of information, dialogues, discussions between local government and communities on slopes for better understanding of decisions made within the communities <u>Proposed solution 2:</u> (1) Need better communication between local authorities and communities. (2) Set up a Resource Centre within the community to share and disseminate slope related (and other environmental) matters in the community









2. Community Workshop, Town Watching & Community Mapping - Batu 14 & Hulu Langat Sub-District, Hulu Langat District (February 26, 2023)

Description:

One day for (1) conducting Community Workshop and (2) carry out Town Watching and Community Mapping in Batu 14 and Hulu Langat sub-district

Attendance: 53

Chief Village Leader
Village Leaders & Committee Members
Residents
Kajang Municipal Council
Selangor Disaster Management Unit
(SDMU)

Malaysia Civil Defence Force (APM) Hulu Langat Disaster Preparedness & Prevention Centre (DPPC), UTM KL

Highlights of the Event:

[Community Workshop]

The contents and flow of the training session followed the ToT Guidebook:

- a) 'Introduction to the SeDAR Program' and 'The CBDRR Workflow' by Eriko Motoyama
- b) Module 1, 'Understanding DRR Concepts' by Abdul Rashid Ahmad
- c) Module 2, 'Understanding Local Risks' by Amran Ahmad
- d) **Module 3, 'Planning, Implementing and Evaluating CBDRR Programs'** by Eriko Motoyama

Pre-Town Watching

- a) Data Gathering Briefing: 'Items to Record as Hazard, Safe, Useful and Special Feature' by Eriko Motoyama
- b) **Logistics Briefing: 'Rules, Timing, Safety and Roles'** by Capt. Ruslan, APM Hulu Langat

Town Watching

Groups for each zone walked about and recorded observations of 'danger', 'safe', 'useful' and 'special' spots in their respective zones. Each spot was labeled as 'positive' or 'negative':

- a) EKVE Semungkis (Zone 1)
- b) Jalan Felcra Semungkis (Zone 2)
- c) Jalan Felcra Semungkis (Zone 3)
- d) Jalan Felcra Semungkis (Zone 4)

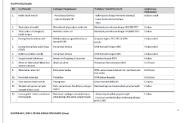
Community Mapping

Each group created a map based on the findings (positive/negative) and observations (danger, safe, useful, special) during the town watching.



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Identifying Issues/Problems/Solutions

The participants then drafted a list of issues/problems in their area as well as possible solutions that the communities can do. Out of the 15 items as issues/problems/solutions, 2 stood out as potential DRR activities:

- a) <u>Issue 1:</u> Lack of landslide warning siren
 <u>Proposed solution 1:</u> Install siren by either JMG or JKR
- b) <u>Issue 2:</u> Risk of landslides <u>Proposed solution 2:</u> Cooperate with the local community, hazard warning signs, sirens needed









3. Town Watching & Community Mapping - Kg. Tok Muda & Kapar Sub-District, Klang District (March 5, 2023)

Description:

One-day workshop day workshop with communities to conduct Town Watching and Community Mapping in Kg. Tok Muda and Kapar sub-district.

Attendance: 43

Chief Village Leader Village Leaders & Committee Members Residents Klang Municipal Council (MPK) Selangor Disaster Management Unit (SDMU) Malaysia Civil Defence Force(APM) Hulu Langat Disaster Preparedness & Prevention Centre (DPPC), UTM KL

Highlights of the Event:

Pre-Town Watching

- a) Data Gathering Briefing: 'Items to Record as Hazard, Safe, Useful and Special Feature' by Eriko Motoyama
- b) Logistics Briefing: 'Rules, Timing, Safety and Roles' by Capt. Ruslan, APM Hulu Langat

Town Watching

Groups for each zone walked about and recorded observations of 'danger', 'safe', 'useful' and 'special' spots in their respective zones. Each spot was labeled as 'positive' or 'negative':

- a) Jalan Pencawang Pantai (Zone 1)
- b) Jalan Janakuasa 1 (Zone 2)
- c) Jalan Janakuasa 2 (Zone 3)
- d) Taman Intan & Saga (Zone 4)
- e) Kampung Bukit Kerayong (Zone 5)
- f) Kampung Bukit Kapar (Zone 6)

Community Mapping

Each group created a map based on the findings (positive/negative) and observations (danger, safe, useful, special) during the town watching.







Identifying Issues/Problems/Solutions

The participants drafted a list of issues/problems in their area as well as possible solutions that the communities can do. Out of the 26 items as issues/problems/solutions, 2 stood out as potential DRR activities:

- a) <u>Issue 1:</u> Not all residents know the location of the evacuation centre <u>Proposed solution 2:</u> Inform residents where the temporary evacuation centre is located (put up signs)
- b) <u>Issue 2:</u> The sound of the siren is not loud <u>Proposed solution 2:</u> Repair sirens or announcements can be made through mosques









4. Community Workshop, Town Watching & Community Mapping - Kg. Sungai Serai & Hulu Langat Sub-District, Hulu Langat District (March 12, 2023)

Description:

One day for (1) conducting Community Workshop and (2) carry out Town Watching and Community Mapping in Kg. Sungai Serai and Hulu Langat sub-district.

Attendance: 57

Chief Village Leader
Village Leaders and Committee Members
Residents
Kajang Municipal Council
Dept of Irrigation and Drainage (JPS)
Selangor State Assemblyman
Selangor Disaster Management Unit
(SDMU)

Malaysia Civil Defence Force (APM) Hulu Langat APM Training Academy (ALPHA) Disaster Preparedness & Prevention Centre (DPPC), UTM KL

Highlights of the Event:

Community Workshop

The contents and flow of the training session followed the ToT Guidebook:

- a) 'Introduction to the SeDAR Program' and 'The CBDRR Workflow' by Eriko Motoyama
- b) 'Module 1, Understanding DRR Concepts' by Mohamad Hanafiah Hussin
- c) 'Module 2, Understanding Local Risks' by Sa'adin Ahmad
- d) 'Module 3, Planning, Implementing and Evaluating CBDRR Programs' by Eriko Motoyama

Pre-Town Watching

- a) Data Gathering Briefing: 'Items to Record as Hazard, Safe, Useful and Special Feature' by Eriko Motoyama
- b) **Logistics Briefing: 'Rules, Timing, Safety and Roles'** by Capt. Ruslan, APM Hulu Langat

Town Watching

Groups for each zone walked about and recorded observations of 'danger', 'safe', 'useful' and 'special' spots in their respective zones. Each spot was labeled as 'positive' or 'negative':

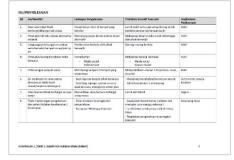
- a) Kampung Sungai Serai (West) (Zone 1)
- b) Kampung Sungai Serai (East) (Zone 2)
- c) Jalan Sungai Betung (West) (Zone 3)
- d) Jalan Sungai Betung (East) (Zone 4)
- e) (additional site upon request by Village Leader) Jalan Kampung Sg. Tekali (about 10 km away)



Community Mapping

Each group created a map based on the findings (positive/negative) and observations (danger, safe, useful, special) during the town watching.





Identifying Issues/Problems/Solutions

The participants drafted a list of issues/problems in their area as well as possible solutions that the communities can do. Out of the 23 items as issues/problems/solutions, four (4) stood out as potential DRR activities:

- a) <u>Issue 1:</u> Existing siren does not function/Not enough sirens in the area <u>Proposed solution1:</u> Appoint streets rep volunteers to inform about flood warnings
- b) <u>Issue 2:</u> Residents do not know the safe alternative evacuation route <u>Proposed solution 2:</u> Alerts on social media (Whatsapp) and authorities to inform
- c) <u>Issue 3:</u> Lack of knowledge on emergency action plan <u>Proposed solution 3:</u> Increase knowledge at the community level
- d) <u>Issue 4:</u> Need temporary warning/safe sign <u>Proposed solution 4:</u> Request the district office for the preparation of signs









G. WORKSHOP ON PLANNING DRR ACTIVITIES WITH DRR EXPERTS

1. Workshop on Planning DRR Activities - Kg. Tok Muda & Kapar Sub-District, Klang District (March 21, 2023)

Description:

Half-day workshop for communities to identify and plan DRR activities for Kg. Tok Muda & Kapar sub-district with input from DRR experts.

Attendance: 23

Participants:

Chief Village Leader of the Kapar subdistrict Five (5) Village Leaders Klang Municipal Council (MPK) Selangor Disaster Management Unit (SDMU)

Universiti Teknologi Malaysia (UTM) KL

DRR Experts (Japan and local):

Prof. Rajib Shaw, Keio University Dr. Yasutaka Ueda, Niigata University Prof. Takako Izumi, Tohoku University Assoc. Prof. Shohei Matsuura, JICA (UTM KL) Dr. Khamarrul Azahari, UTM KL

Highlights of the Event:

Presentation on Town Watching/Community Mapping results and Listing of Issues/Problems/Suggested Actions

Presented by Village Leader Jamaluddin

- a) For each zone, he highlighted the issues in the area, as written in the Results summary for Kapar
- b) In particular, he focused on the issue of sedimentation in the streams and drainage system

DRR Expert Review: Comments and Feedback

Based on the presentation and inputs from the participants, the DRR Experts summarized the issues into 6 potential actions, which are:

- a) Canal/Drainage System Management
- b) Bund/Dyke Management
- c) Public Warning System
- d) Evacuation (including signage)
- e) Awareness/Monitoring/Capacity
- f) Digital platform for showcasing activities/Reporting to authorities

Group Discussion Session Among the Participants

The participants discussed the feasibility of the above 6 potential actions

Identifying DRR Actions

Out of 6 proposed actions, 4 were shortlisted by the community participants together with the DRR experts: public warning system, evacuation centre (signage), awareness/monitoring/capacity building, and digital platform.

Kapar			
No.	Activity	Specifics	
1.	Canal Management		
2.	Bund/Dyke Management		
3.	Public Warning System		
4.	Evacuation Centre (signage)		
5.	Awareness/Monitoring/Capacity	Sendai Bosai Leader (SBL)	
6.	Digital platform for showcasing activities/Reporting to		
	authorities		

The participants and the DRR Experts discussed the feasibility of implementing these activities from the standpoint of local capacity, budget and time.

Final Selection of Community DRR Activities

Out of this, 3 were selected and finalized as community activities:

- a) Public warning system: Use mosque loudspeaker systems for public warning system
- b) **Awareness and education:** Use mosques as venue for creating DRR awareness (not just for using as relief centres only)
- c) Government-community platform: Create platform for visibility for community efforts









2. Workshop on Planning DRR Activities - Batu 14 & Hulu Langat Sub-District, Hulu Langat District (March 22, 2023)

Description:

Half-day workshop for communities to identify and plan DRR activities for Kg. Tok Muda & Kapar sub-district with input from DRR experts.

Attendance: 33

Participants:

Chief Village Leader
Nine (9) village leaders
Selangor Disaster Management Unit
(SDMU)
APM Training Academy (ALPHA)
Malaysia Civil Defence Force (APM)
Kajang Municipal Council (MPKj)

Dept of Irrigation & Drainage (JPS) National Security Council (MKN)

DRR Experts (Japan and local):

Prof. Rajib Shaw, Keio University
Dr. Yasutaka Ueda, Niigata University
Prof. Takako Izumi, Tohoku University
Assoc. Prof. Shohei Matsuura, JICA (UTM KL)
Dr. Khamarrul Azahari, UTM KL

Highlights of the Event:

Presentation on Town Watching/Community Mapping results and Listing of Issues/Problems/Suggested Actions

By Village Leader Mohamad Hanafiah Hussin, who presented the community maps and list of issues/solutions for the 4 zones created during the previous Town Watching/Community Mapping events. He summarized the issues in the area as follows:

- a) Flash flooding (especially at site of recently constructed expressway)
- b) Inadequate drainage system
- c) Absence of early warning system for slopes

DRR Expert Review: Comments and Feedback

Based on the presentation and inputs from the participants, the DRR Experts made several observations and comments:

- a) <u>Lack of Awareness & Education about Slopes</u> The 2011 landslide at the orphanage took 12 years after slope cutting to occur. The signs were there, but people were not aware of them.
- b) <u>Community Preparedness</u> Communities have mentioned that there have not been many landslides in this area recently, but they should be aware that disasters can happen when they are least expected
- c) Need for dialogue with stakeholders doing development in the area There needs to be a dialogue between agencies and communities for resolving issues
- d) <u>Preparedness drills and Inclusivity</u> The need to include all members of the family in disaster preparedness, including children and mothers; not just the male heads of households

Based on the presentation and inputs from the participants, the DRR Experts summarized the issues into 5 potential actions, which are:

- a) Dialogue with EKVE (Zone 1)
- b) Disaster drill (Evacuation route/early warning/inclusive)

- c) Community-based landslide warning
- d) Waste monitoring
- e) Digital platform for showcasing activities/Reporting to authorities

Group Discussion Session Among the Participants

The participants discussed each category topic in detail based on existing challenges, constraints and community capability. One point made by a participant was to involve schools in DRR education.

Identifying DRR Actions

Out of 5 proposed actions, 2 were shortlisted by the community participants together with the DRR experts: community-based landslide warning and digital platform.

The participants and the DRR Experts discussed the feasibility of implementing these activities from the standpoint of local capacity, budget and time.

Batu 14

No.	Activity	Specifics		
1.	Dialogue with EKVE (Zone 1)			
2.	Disaster drill (Evacuation route/early warning/inclusive)			
3.	Community-based landslide warning			
4.	Waste monitoring			
5.	Digital platform for showcasing activities/Reporting to			
	authorities			

Final Selection of Community DRR Activities

Out of this, 1 activity was selected and finalized as a community activity, which is the warning system. Another new activity, education and preparedness (not on the list) was proposed and finalized:

- a) Warning system: Community-based landslide warning
- b) Education and preparedness: DRR for schoolchildren









3. Workshop on Planning DRR Activities - Kg. Sungai Serai & Hulu Langat Sub-District, Hulu Langat District (March 22, 2023)

Description:

Half-day workshop for communities to identify and plan DRR activities for Kg. Sungai Serai & Hulu Langat sub-district with input from DRR experts.

Attendance: 28

Participants:

Chief Village Leader
Village leaders
Selangor Disaster Management Unit
(SDMU)
APM Training Academy (ALPHA)
Civil Defence Force (APM)
Kajang Municipal Council (MPKj)
Dept of Irrigation & Drainage (JPS)
National Security Council (MKN)

DRR Experts (Japan and local):

Prof. Rajib Shaw, Keio University
Dr. Yasutaka Ueda, Niigata University
Prof. Takako Izumi, Tohoku University
Assoc. Prof. Shohei Matsuura, JICA (UTM KL)
Dr. Khamarrul Azahari, UTM KL

Highlights of the Event:

Presentation on Town Watching/Community Mapping results and Listing of Issues/Problems/Suggested Actions

By Village Leader Zainuddin Mohamad Tasar, who presented the community maps and list of issues/solutions for the four (4) zones created during the previous Town Watching/Community Mapping events. The main issues were:

- a) Siren there is a flood warning siren but coverage is limited
- b) Temporary evacuation centre not enough capacity and difficult to access
- c) Signage there are none, and thus there is a need for directions showing how to get to it
- d) <u>Knowledge</u> overall knowledge on actions to take when flooding occurs is lacking. Such knowledge needs to be more inclusive.
- e) <u>Lack of official authorization given to the village leaders in emergencies</u> the village leaders have tried to give instructions to the communities but the community members question the directives. They need higher-up authorities to back them up.

DRR Expert Review: Comments and Feedback

The DRR Experts made observed that since the sirens cannot be heard (early warning), the community could focus on public warning. Which is to extend coverage of warning and relay warning alert through community dissemination.

Based on the presentation and inputs from the participants, the DRR Experts summarized the issues into 6 potential actions, which are:

- a) Plogging
- b) Public warning system
- c) Knowledge
- d) Monitoring
- e) Preparedness
- f) Digital platform for showcasing activities/Reporting to authorities

Group Discussion Session Among the Participants

Mr. Zainuddin stated that he would be interested in re-engaging his community for clean-up activities. He mentioned a form of clean-up called 'plogging'

Identifying DRR Actions

Out of 6 proposed actions, 3 were shortlisted by the community participants together with the DRR experts.

Kg. Sungai Serai

No.	Activity	Specifics
1.	Plogging	a. Community clean-up
		b. Reduce plastic waste
2.	Public warning system	a. Appoint street rep for
		warning
		b. Social media for warning
		c. Signage
3.	Knowledge	a. Education
4.	Monitoring	a. Report blocked drains
		b. Development
5.	Preparedness	c.
6.	Digital platform for showcasing activities/Reporting to	
	authorities	

Final Selection of Community DRR Activities

Out of this, 2 were finalized as community activities:

- a) **Plogging:** Community clean-up
- b) Public warning system: signage and social media for warning/community evacuation drill









4. Workshop on Planning DRR Activities - Ulu Klang, Gombak District (March 23, 2023)

Description:

Half-day workshop for communities to identify and plan DRR activities for Kg. Tok Muda & Kapar sub-district with input from DRR experts.

Attendance: 29

Participants:

Six (6) volunteer residents in Bukit
Antarabangsa and Ukay Perdana
APM Training Academy (ALPHA)
Civil Defence Force (APM)
Ampang Jaya Municipal Council (MPAJ)
Department of Irrigation & Drainage (JPS)
Department of Mineral & Geoscience (JMG)
Public Works Dept (JKR)
National Security Council (MKN)
Selangor Disaster Management Unit (SDMU)

DRR Experts from Japan and local:

Dr. Yasutaka Ueda, Niigata University Prof. Takako Izumi, Tohoku University Assoc. Prof. Shohei Matsuura, JICA (UTM KL) Dr. Khamarrul Azahari, UTM KL

Highlights of the Event:

Presentation on Town Watching/Community Mapping results and Listing of Issues/Problems/Suggested Actions

By resident Farid Faiz, who presented the community maps and list of issues/solutions for the 9 zones created during the previous Town Watching/Community Mapping events. The issues fell under the categories of:

- a) Maintenance (drainage, slopes)
- b) Land use (new development, abandoned land)
- c) Knowledge (on emergency preparedness, signage)
- d) Monitoring of slopes
- e) Early warning systems

DRR Expert Review: Comments and Feedback

The DRR Experts made several observations:

- a) Risk communication needs science communication to grasp real risk and not just perceived risk
- b) <u>Government system approach</u> communities must understand how the government system works. They need to understand the limitations of government based on budget available and scope of work/responsibilities
- c) Sustainability the ability of the community to sustain and continue DRR activities
- d) <u>Value addition</u> community doing DRR activities will add value to the process of place or city making

Based on the presentation and inputs from the participants, the DRR Experts summarized the issues into 7 potential actions, which are:

- a) Maintenance (buildings, roads)
- b) Land use
- c) Maintenance (drainage system, slopes)
- d) Knowledge

- e) Emergency Preparedness
- f) Slope Monitoring
- g) Early Warning System

Group Discussion Session Among the Participants

The participants and the DRR experts discussed on the above topics in details, with the purpose of including the above items into the DRR actions

Identifying DRR Actions

Out of 7 proposed actions, 1 activity with several actions for spreading and sharing knowledge was shortlisted.

Ulu Klang

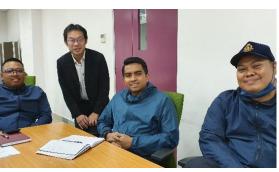
No.	Activity	Specifics
1.	Maintenance (buildings, roads)	Clear drains (gotong royong)
		Reduce plastic waste
2.	Land use (new development, abandoned brownfield)	Monitoring
3.	Maintenance (drainage system, slopes)	Clear drains
4.	Knowledge	CDERT
		Education
		Community Resource Centre
		Community network and
		structure
5.	Emergency Preparedness	Development
6.	Slope Monitoring	Observe, report signs
7.	Early Warning System	Doesn't have to be
		equipment-based. Can be
		community-based.

Final Selection of Community DRR Activities

Two were finalized as community activities:

- a) Knowledge: Civil Defence Emergency Response Training (CDERT)
- b) Knowledge: Set-up of a Community DRR Resource Centre









H. SYMPOSIUM

Localizing DRR Actions: Public, Private, Academic & Community Collaboration in Reducing Disaster Risk (October 19-20, 2023)

Description:

One-and-a-half day symposium to officially wrap up and share the 5-year results. The event consisted of:

- a) Key presentations by IRIDeS; SDMU; ALPHA; UTM KL
- b) 4 sessions (presentations and panel discussions)
- c) Project Handover to Selangor State by SeDAR team

Attendance: 134 (Day 1) and 102 (Day 2)

Selangor agencies Private sector

Federal agencies Institutes, agencies and government bodies

Out-of-state agencies - Japan
Community Academia
Local Govt & District NGO

Highlights of the Event:

DAY 1 (19 OCTOBER 2023)

Key Presentations

- a) 'Achievements of JPP SeDAR Program' by IRIDeS, Tohoku University
- b) 'CBDRR in Malaysia/DRR Initiatives by SDMU' by Selangor Disaster Management Unit
- c) 'From Community-Based Response to Community-Based Mitigation' by ALPHA (APM Training Academy)
- d) 'Local Disaster Resilience Strategies in Malaysia: Best Practices & Prospective Agenda' by UTM Kuala Lumpur

Session 1, 'Community Leadership'

1. PRESENTATIONS

Community leaders and local champions in the 4 project areas presented on (1) the history of local disasters, (2) description of their DRR activities, (3) what was the benefit of the SeDAR program, and (4) what will they do to continue the program.

Kg. Tok Muda & Kapar Sub-District, Klang District (Floods)

Presented by Md Jamaludin bin Ramlan and Shamsuddin bin Liman



Changes within the Communities as a Result of the SeDAR Program:

- a) **Increased knowledge** 'Increased knowledge about disaster risk reduction' and 'Understand the causes of flood disasters'
- b) **Change in mindset** 'Increased community awareness about preparedness for major flood disasters'

Future Plans in DRR:

- a) Outreach Would like to reach out to communities outside of Kapar sub-district for DRR
- b) Spread awareness of DRR to others Useful knowledge will help all levels of society
- c) **Maintain close relationship with government agencies** Hope to keep lines of communication open with the communities. Want to work together, not against each other.
- d) Funding Need solid financial support to continue running this kind of program

Kg. Sungai Serai & Hulu Langat Sub-District, Hulu Langat District (Floods)

Presented by Mohd Yusof bin Abd Manan and Saadin bin Ahmad



Changes within the Communities as a Result of the SeDAR Program:

- a) **Change in mindset** 'Opened our eyes to collaboration between residents & community leaders'
- b) **Communal effort** The entire community needs to cooperate and be committed (not just the village leaders)
- c) Change in behavior Taught the communities to act more systematically and accurately

Future Plans in DRR:

- a) **Continued learning** Have benefited from the knowledge sharing from the government agencies on floods and disasters and would like to continue more
- b) **Continued technical support from government** Would like continued technical advice from government agencies on DRR
- c) **Continued funding support from government** Would like continued funding from government agencies to carry out DRR activities

Batu 14 and Hulu Langat Sub-District (Landslides)

Presented by Noor Azam bin Mohammad Isa and Amran bin Ahmad



Changes within the Communities as a Result of the SeDAR Program:

- a) **Change in mindset** Started SeDAR program with mindset of ad-hoc program involvement in DRR (as usual). But in the end, the communities felt a sense of ownership in DRR initiatives.
- b) **Heightened sensitivity to environment** Aware of changes in the environment landscape, especially slopes
- c) Deepened community-government working relationship Established a deeper level of working relationship with government agencies, such as APM, JPS, JKR, JMG and the Hulu Langat District Office. Prior to SeDAR, there was no platform to work with agencies at this level

Future Plans in DRR:

- a) **Continued learning** Have benefited from the knowledge sharing from the government agencies on floods and disasters and would like to continue more
- b) **Continued technical support from government** Would like continued technical advice from government agencies on DRR
- c) **Continued funding support from government** Would like continued funding from government agencies to carry out DRR activities

Ulu Klang, Gombak District (Landslides)

Presented by Badrulisham bin Mohd Akhrin and Nazli binti Idris



Changes within the Communities as a Result of the SeDAR Program:

- a) Developed human capital in DRR
- b) Benefited from use of scientific data in explaining landslide risk
- c) SeDAR program was platform for education by technical experts/Reduce false understanding by residents
- d) Set up a physical DRR centre

Future Plans in DRR:

- a) Reach Out to Schools and Other Sectors in Society Can reach out to schools, NGOs, etc. with the help of local authorities to promote and advocate the awareness of DRR actions
- b) **Connect climate change to disasters** People need to understand the implication of climatic change and disasters. This is real and in future will affect more lives and incur economic losses if not managed well by authorities and supported by communities.

2. PANEL DISCUSSION - 'CBDRR Practices: Challenges and Future'

Moderated by: Dr. Khamarrul Azahari, UTM KL. Panelists: Community leaders, APM Selangor, SDMU

- i. <u>Challenges Faced:</u> Communities want to wait until too late to take action. But SeDAR has changed the awareness of community to take proactive action
- ii. <u>Expectations:</u> Risk communication (especially showing the scientific risk maps) was effective in getting the communities to realize that they were in a high-risk area. Need to increase the number of exercises for preparation before a disaster and ensure funding for these activities
- iii. On Developing Culture of Resilience: Request SDMU to have the village heads / village volunteers to continue the efforts in the future by providing funding
- iv. On Future Aspirations: Extend the implementation of programs in other schools

Session 2: DRR INITIATIVES and ITS FUTURE IN MALAYSIA

- 1. PRESENTATION 'NADMA's Disaster Management System in Malaysia' by National Disaster Management Agency (NADMA)
- 2. PANEL DISCUSSION 'DRR Experience in Malaysia and Lessons Learned'

Moderated by Assoc. Prof. Shohei Matsuura of National Research Institute for Earth Science and Disaster Resilience (NIED). Panelists: APM HQ, SDMU and State Secretary Offices of Penang, Sarawak and Kelantan.

DAY 2 (20 OCTOBER 2023)

Session 3: SCIENCE AND TECHNOLOGY IN DRR

- 1. PRESENTATION 'Role of Science and Technology for Building Disaster Resilience in Japan' by NIED
- 2. PANEL DISCUSSION 'Application of Science and Technology in CBDRR in Malaysia' Moderated by Prof. Takako Izumi, IRIDeS. Panelists: JMG Selangor; UTM KL, NAHRIM, NIED and Dr. Nik & Associates

Session 4: POLICY RECOMMENDATIONS AND PROJECT HANDOVER

- 1. PRESENTATION 'Policy Recommendations and Brief' by Prof. Takako Izumi, IRIDeS
- 2. PROJECT HANDOVER TO SELANGOR STATE: Handover of plaque from Prof. Takako Izumi to Mohd Najwan bin Halimi, Selangor State Executive Council Member and Chairman of State Disaster Committee

Media Coverage

Publishing of articles about the JPP SeDAR Program and its achievements in 5 media outlets and 7 articles





Agenda of the Event:

DAY 1

TIME	DURATION	AGENDA	ACTIVITY
8:30 am	60 min	Registration	Participant arrival and registration
9:30 am	10 min	Prayer recital	Prayer recital
		Welcoming	Undersecretary, Management Services Division,
		speech	Selangor State Government
		Speech	Senior Representative, Japan International
			Cooperation Agency (JICA)
9:40 am	10 min		Group Photo
9:50 am	10 min		Video Presentation of JPP SeDAR Program
10:00 am	50 min		Key Presentations
			'Achievements of JPP SeDAR Program' by:
			International Research Institute of Disaster Science
			(IRIDeS), Tohoku University
			'CBDRR in Malaysia / DRR Initiatives by SDMU' by:
			Selangor Disaster Management Unit
			'From Community-Based Response to
			Community-Based Mitigation' by:
			APM Training Academy (ALPHA)
			'Local Disaster Resilience Strategies in Malaysia:
			Best Practices & Prospective Agenda' by:
			Disaster Preparedness & Prevention Centre (DPPC),
			Universiti Teknologi Malaysia (UTM) Kuala Lumpur
10:50 am	20 min	Break	
SESSION 1: 0	COMMUNITY LEA	DERSHIP	
11:10 am	20 min	Presentation	Community DRR Presentation by:
			Local champions/village leaders of Pekan Kapar,
			Klang District
11:30 am	20 min	Presentation	Community DRR Presentation by:
			Local champions/village leaders of Kampung Sg.
			Serai, Hulu Langat District
11:50 am	20 min	Presentation	Community DRR Presentation by:
			Local champions/village leaders of Batu 14, Hulu
			Langat District
12:10 pm	20 min	Presentation	Community DRR Presentation by:
			Local champions/village leaders of Ulu Klang,
			Gombak District'
12:30 pm	10 min	Certificate	Certificates of Recognition and Appreciation to be
		handout	awarded to village leaders and local champions
12:40 pm		BREAK	Lunch
2:15 pm	45 min	Panel discussion 1	'CBDRR Practices: Challenges and Future'
			Moderated by: DPPC, UTM KL
			Panelists: Local champions/village leaders, SeDAR
			Coordinator, APM Selangor, SDMU

SESSION 2: DRR INITIATIVES AND ITS FUTURE IN MALAYSIA			
3:00 pm	20 min	Presentation	'NADMA's Disaster Management System in Malaysia'
			by: National Disaster Management Agency (NADMA)
3:20 pm	15 min	Afternoon Break	
3:35 pm	45 min	Panel discussion 2	'DRR Experience in Malaysia and Lessons Learned' Moderated by: NIED
			Panelists: APM HQ, SDMU and State Secretary
			Offices for Penang, Sarawak and Kelantan
4:20 pm		END DAY 1	

DAY 2

TIME	DURATION	AGENDA	ACTIVITY
8:30 am	60 min	Registration	Participant arrival and registration
9.30 am	10 min	Briefing	Briefing of day's agenda
SESSION 3: SCIENCE AND TECHNOLOGY IN DRR			
9:40 am	15 min	Presentation	'Role of Science and Technology for Building Disaster Resilience in Japan' by: National Research Institute for Earth Science and Disaster Resilience (NIED)
9:55 am	40 min	Panel discussion 3	'Application of Science and Technology in CBDRR in Malaysia' Moderated by: IRIDeS Panelists: Dept of Mineral and Geoscience Malaysia, DPPC, National Water Research Institute of Malaysia (NAHRIM), Dr Nik & Associates, and NIED
10:35 am	15 min	Break	
SESSION 4:	POLICY RECOM	MENDATIONS AND PRO.	IECT HANDOVER
10:50 am	10 min	Policy Recommendations	'Policy Recommendations and Brief from the SeDAR Program' by IRIDeS
11.00 am	30 min	Moving Forward in DRR	Open Floor Directed Discussion Facilitated by: DPPC UTM
11:30 am	10 min	Project Handover ceremony	Project Handover to Selangor State Presented to: YB Tuan Mohd Najwan bin Halimi, Selangor State Executive Council Member Presented by: SeDAR Project Partners
11.40 am	10 min	Speech	Closing comments by YB Tuan Mohd Najwan bin Halimi
11.50 am		End of program	For symposium participants
11.50 am	30 min	Press Conference	For press conference participants
12.20 pm		End Press Conference	









4 CBDRR Activities in the Four Project Areas

4.1 Ulu Klang, Gombak District

Two activities for this project area: (1) Civil Defence Emergency Response Training and (2) Setting Up of the Community DRR Resource Centre.

1. Civil Defence Emergency Response Training (CDERT) (June 25, 2023)

Description: Half-day workshop on emergency response training for community members. Living in a landslide-prone area, the community members wanted to gain knowledge on how to respond in a landslide disaster.

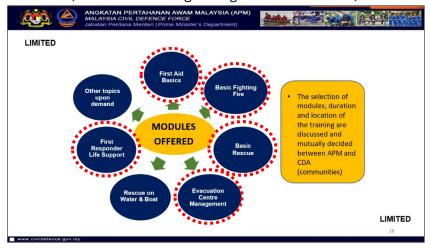
Attendance: 41

Communities within Ulu Klang Civil Defence Force Malaysia (presenter) Selangor Disaster Management Unit (SDMU)

Highlights of the Event:

The training was provided by the Malaysia Civil Defence Force (Gombak).

- a) Introduction Module to Malaysia Civil Defence Force
- b) <u>Basic First Aid:</u> circulatory system and the epidermis layers (skin), identifying shock due to loss of blood, types of wounds, choking and breathing difficulties
- c) <u>Overview of Evacuation Centre Management</u>: operations of a centre, roles of agencies, setup, food preparation, counseling, safety, amenities
- d) Basic on Emergency Rescue: methods of removing and carrying victims in various scenarios
- e) <u>Basic on Firefighting</u>: causes and types of fires, movement and dispersion of heat and flames, methods of extinguishing based on material, hands-on exercise



Modules selected for the Ulu Klang communities (in red dotted lines)

The entire session was a combination of theory, tips, demonstration, and hands-on practice.

Result: This activity had a profound effect on setting the right mindset of the community members. They learned some essential skills in responding to emergency situations and how community members can help each other in a disaster.









2. Setting Up of the Community DRR Resource Centre

Description: The residents of Ulu Klang had a need for a centre to be set up to have access to information and resources related to DRR, landslides and the environment. Thus, a Community DRR Resource Centre was conceptualized, designed, set up and is now entirely run by community members. The Resource Centre features a gallery of colourful and informative posters, 3D terrain model of Ulu Klang, audio/visual displays, mini-library of resource books and pamphlets, and hands-on displays.

About the Centre:

The Centre was formerly a municipal government community hall that was donated to SeDAR and the community of Ulu Klang for the purpose of setting up an educational centre on DRR. Resource material such as posters and maps on scientific information has been donated by the technical government agencies. As such, it is truly a collaboration between the local government, the communities, and the technical government agencies.

A Committee of the Resource Centre was set up and consists of 17 members who actively set up the Centre with guidance from SeDAR.

The Resource Centre was handed over by SeDAR to the Ulu Klang communities in February 2024 and is now completely managed by community volunteers.

Mission Statement of the Community DRR Resource Centre:

- a) Providing a communal space for learning about the physical environment within the community
- b) Building local capacity through training

- c) Providing access to science-based material and resources
- d) Serving as a meeting place for discussions and dialogues between technical agencies and communities



Official Launch:

Centre was launched on February 4, 2024 with attendance of 66. Participants included:

Ampang Jaya Municipal Government (MPAJ)
Gombak District and Land Office (PDT
Gombak)
Civil Defence Force (APM)
Department of Mineral and Geoscience
(JMG) Selangor
Public Works Department (JKR)

Royal Malaysia Police (PDRM)
Department of Fire and Safety (BOMBA)
Department of Education (JPN) Selangor
Civil Defence Force Malaysia (APM)
Selangor Disaster Management Unit
(SDMU)
Universiti Teknologi Malaysia (UTM)

Result: It is a physical legacy and showcase of the knowledge imparted through the SeDAR program. It is run and managed entirely by community volunteers, as well as a team of tour guides to show visitors around the Centre gallery









4.2 Batu 14 & Hulu Langat Sub-District, Hulu Langat District

Two activities for this project area: (1) Community Slope Monitoring Workshop and (2) DRR for Schoolchildren.

1. Community Slope Monitoring Workshop (July 9, 2023)

Description: One-day workshop to teach communities on how to monitor slopes as a visual inspection and early warning of the signs of landslides. As there are no early warning systems for landslides set up in this project area, community members were educated about a visual inspection system of the signs of landslides that can be valuable in detecting potential landslides.

Attendance: 57

Communities within Hulu Langat subdistricts Public Works Department (JKR) Department of Mineral and Geoscience (JMG) Civil Defence Force (APM)
Selangor Disaster Management Unit (SDMU)
Universiti Teknologi Malaysia (UTM)

Highlights of the Event:

The workshop consisted of a series of talks in the morning, followed by site inspections in the afternoon.

Morning Session

JMG provided basic knowledge on the geology of the Hulu Langat area and why it was prone to landsliding.

JKR provided engineering/geotechnical explanation on the causes of landslides and basic knowledge about slopes.

Afternoon Session

Participants divided into 2 groups and headed out to 2 sites in Batu 14 for visual inspection. Observations made at the site were:

- a) <u>Site 1: EKVE Expressway</u> Flash flooding occurs in the area, where there are residential homes and religious schools.
- b) <u>Site 2: Former orphanage location of the 2011 landslide</u> JMG engineers explained how the unengineered cut slope caused a landslide that killed 16 children and teachers.

Upon returning from the site visits, a speaker from each group presented the findings and engaged in discussion with the two agencies.

- a) The participants from each group showed their observations and explained the cause and nature of the problem.
- b) The participants concluded the session by saying that the session was useful in giving them awareness of signs to prevent landslides from occurring.

Result: Routine visual inspection and monitoring of slopes as a form of early warning against potential landslides is an activity that communities can engage in and not be entirely dependent on local government action.



2. DRR for Schoolchildren – (1) DRR Workshop (September 23, 2023) and (2) Design, Print and Install DRR Mural Poster (April 4, 2024)

Two activities for this project area: (1) DRR Workshop for Students and (2) Design, Print and Install a DRR Mural Poster

ACTIVITY 1: DRR Workshop

Description: A DRR Workshop for Students was carried out at the Abdul Jalil High School to introduce and teach DRR concepts to students. The response was very positive and there was a sense that programs in DRR such as this were needed, especially in areas that are hard hit by landslides and floods.



Attendance: 424

Level 1, 2 and 3 Students (15-, 16, and 17year olds) Teachers Parent-Teacher Association Department of Mineral and Geoscience (JMG) Selangor Malaysia Civil Defence Force (APM) Hulu Langat Selangor Disaster Management Unit (SDMU)

Highlights of the Activity:

The workshop format was a combination of presentation/lecture and hands-on activity/game. It was important to keep the lecture short and include hands-on activities to keep the student audience focused and engaged.

Presentation topics were:

- a) 'Understanding Landslides and Floods' by JMG Selangor
- b) 'Concepts in Disaster Risk Reduction (DRR)' by the SeDAR team
- c) 'Preparation and Response' by APM Hulu Langat

The hands-on activity was a "**Ready To Go Game**" involving a contest among student groups to pack emergency grab bags conducted by APM Hulu Langat

Result: Schoolchildren were equipped with the knowledge of DRR and what they can do to prepare for future disasters. The District Department of Education showed a strong interest in conducting similar programs in other schools in the Hulu Langat district.

ACTIVITY 2: Design, Print and Install DRR Mural Poster

Description: A handover ceremony was conducted to pass the mural poster to the headmistress of the high school, accompanied by SDMU, JMG, APM and the Kajang Municipal Council. DRR Mural Poster for Schoolchildren is a wall poster measuring 7 metres x 1.8 metres to cover the length of a corridor within the premises of the Abdul Jalil High School in Batu 14, Hulu Langat. The poster is divided into 3 sections: (1) Hazards becoming disasters because of high vulnerability and low capacity, (2) how to reduce vulnerability and increase capacity, and (3) DRR actions that students can take.



Result: The mural poster has become a showcase piece in a hallway that has been converted as 'Environment Corridor' that will feature material and resources with an environment theme.



4.3 Kg. Tok Muda & Kapar Sub-District, Klang District

Three activities for this project area: (1) Community evacuation drill, (2) Development and distribution of information sharing materials, and (3) Handover ceremony of information sharing materials to communities.

1. Community Evacuation Drill (September 13 & 16, 2023)

Description: A two-day event to have communities (1) become familiarized with community evacuation drill procedures and (2) find out whether the flood sirens can be heard within the community area. Although Kapar and the surrounding area is prone to coastal, river, and flash flooding, there have never been any drills or DRR activities conducted in the past. Hence, there was a need to carry out the community evacuation drill in the project area.

Attendance: 55

- Community members within Kapar sub-district
- Village leaders
- Local NGO for disaster response

Highlights of the Event:

Pre-Drill Briefing and Orientation (13 September)

Briefing and orientation on:

- a) upcoming activities for the drill
- b) description of the sirens to be sounded
- c) what actions to take
- d) explanation of the logistics on the day of the drill

Evacuation Drill (19 September)

- a) Implementation of the drill leaving from home to reaching the evacuation centre
- b) Registration
- c) Participate in Feedback Session conducted by SeDAR team

Feedback Session

- a) Extent of the flood siren sound the flood siren can only be heard for approximately 500 metres, whereas the mosque announcement can be heard for almost 1 kilometre
- b) <u>Arrival to evacuation centre</u> Most of the participants came by vehicle (67%) rather than by foot (33%). Majority of them (74%) came directly from their homes
- c) Flood experience An overwhelming majority (93%) experienced flood disaster before
- d) <u>Flood warnings and sirens</u> Most of the participants (83%) have never heard sirens before and 35% said they receive alerts from their community leaders (others by various media and sources)
- e) <u>Location of evacuation centre</u> A majority said they knew of the evacuation centre location prior to the drill exercise (this could be because the participants had a briefing a few days prior to the drill)
- f) <u>Potentially dangerous locations along evacuation route</u> many identified open drains that they can fall into and get swept away in the current

- g) <u>Potential obstacles or challenges in a real flood situation</u> roads that are impassable due to rushing waters, floating debris and live electricity cables in the floodwaters, strong currents to wade through
- h) <u>Knowledge of the flood evacuation process</u> Before this drill, 70% said they knew very little or knew a little about the evacuation process

Result: (1) The communities and the state government agencies have established a stronger working relationship, (2) community leaders realized they can conduct drills on their own initiative without initiation from the government, and (3) the community members realized the needs of vulnerable groups during the evacuation drill process.









2. Development and Distribution of Information Sharing Materials: (1) Evacuation Centre Location & (2) Public Warning System Procedures

Description: Posters and fridge magnets showing the names and locations of the evacuation centres in the villages and public warning system procedures were created.

Many residents in Kapar did not know or vaguely knew the locations of the evacuation centres in their communities. They also did not know the course of action to take when the flood siren or alert is activated.

Public warning procedures for communities had not been formally established by the government. Therefore, in collaboration with the chief village leaders, community leaders, district offices, and the state/district Department of Irrigation and Drainage, the public warning steps were identified. The locations of the evacuation centres were also confirmed and verified with the help of the agencies. These posters are put up in public places such as community halls, schools, and mosques.

Development of Posters, Fridge Magnets, and Signage

Posters and Fridge Magnets for Evacuation Centre Locations and Public Warning System Procedures





Examples of A0 and A1-sized evacuation centre location poster

Result: 6 poster designs for villages in Kapar showing evacuation centre locations in each village. A total of 150 posters were produced in Kapar, with each village receiving 5 A0-sized posters and 20 A1-sized posters.

In addition, the contents of the posters were made into A5-sized fridge magnets to be placed at handy, prominent place within the residents' homes, such as a refrigerator door. The magnets at the back of the mini-posters will ensure that such information would not get lost or misplaced.





A5-sized fridge magnets to be put in homes of affected residents

Result: 6 magnet designs for villages in Kapar. Altogether a total of 1,200 pieces were printed for Kapar, with each village receiving fridge magnets for 100 households.

Signage for Evacuation Centres

Description: Signages measuring 2 feet x 3 feet for evacuation centres (PPS) were designed, printed, and distributed for installation at evacuation centre facilities.

Many community members in the Kapar sub-district were unaware of the locations of the evacuation within their areas.

The signage was co-designed with considerable input from the village leaders. The signage was reviewed and verified by the agencies that own/manage the evacuation centre premises such as the Klang District and Land Office, Klang Municipal Council, Selangor Department of Education, and Selangor Islamic Religious Department. The signage has also been endorsed by the National Disaster Management Agency (NADMA).



Result: A total of 21 signages was distributed for all the evacuation centres in Kapar

Distribution of Posters and Fridge Magnets

Handover Ceremony of Posters and Fridge Magnets to Communities (December 17, 2023)

Description: Official handover of the information sharing material (posters and fridge magnets) to each village leaders in Kapar was carried out, marking the end of the DRR activities in this project area.

Attendance: 87

Representative from the Member of Parliament (Kapar)

Chief Village Leader of Kapar sub-district Head of villages and the council members from 6 villages in Kapar

Residents from housing developments Klang District and Land Office (PDT Klang) Department of Irrigation and Drainage (JPS) Selangor

Klang Municipal Government (MPK)

Department of Islamic Religion Selangor (JAIS)

District Office of Islamic Religion (PAID)
Department of Education (JPN) Selangor
District Office of Education (PPD) Klang
Department of Welfare (JKM) Selangor
Malaysia Civil Defence Force (APM)
Selangor Disaster Management Unit
(SDMU)

Universiti Teknologi Malaysia (UTM)

Highlights of the Event:

Briefing was conducted on (1) flood early warning system in Kapar, (2) community actions to take when sirens activate, and (3) how to prepare for evacuation.

Certificates of Appreciation to the government agencies that had participated and given support to the SeDAR program were distributed.

Official handing over of the PPS Location Maps and Fridge Magnets by Prof. Izumi to each village leader.









4.4 Kg. Sungai Serai & Hulu Langat Sub-District, Hulu Langat District

Three activities for this project area: (1) Plogging, (2) Community evacuation drill, and (3) Development and distribution of information sharing materials.

1. Plogging: Trash Clean-Up to Prevent Flash Floods (September 2, 2023)

Description: One-day family day event, which included quizzes, interactive games, and light physical activities to teach how DRR actions such as 'plogging' can help mitigate flash floods caused by trash littering and drainage clogging

Attendance: 117

Students Selangor Disaster Management Unit Parents (SDMU)

Village leaders Malaysia Civil Defence Force (APM)

School principal and teachers

Highlights of the Event:

Plogging field activity was facilitated by APM, SDMU, Kg. Sg. Serai Village Committee, and SeDAR team

Briefing on Disaster Risk Reduction & Pop Quiz was conducted by SeDAR team.

Prize Giveaway was carried out for the most volume of trash collected by team.

As the event was family-themed, the families were enthusiastic to take part and thoroughly enjoyed the plogging activity. They were also interested in learning about DRR as it was a new concept to most of them and beneficial as they lived in flood-prone areas.

The DRR briefing was interactive and well received by the participants. Both students and parents enthusiastically took part in the Q&A sessions, which tested the knowledge of the participants from the briefing. Overall, participants understood the DRR briefing and answered the questions well.

Result: Participants learned the value of drainage system maintenance and trash clean-up to prevent flash floods.





2. Community Evacuation Drill (November 18-19, 2023)

Description: A two-day event to have communities (1) become familiarized with community evacuation drill procedures and (2) find out whether the flood sirens can be heard within the community area. Unlike Kapar, the communities in Hulu Langat have conducted evacuation drills but they have been government response drills. Thus, the community evacuation drill is the first such exercise for Hulu Langat.

Attendance: 125

- Community members
- Village leaders
- Local NGO for disaster response
- Malaysia Civil Defence Force (APM)
- Selangor Disaster Management Unit (SDMU)

Highlights of the Event:

Pre-Drill Exercise Briefing and Orientation (18 November 2023)

Briefing and orientation on:

- a) upcoming activities for the drill
- b) description of the sirens to be sounded
- c) what actions to take
- d) explanation of the logistics on the day of the drill

Community Evacuation Drill Exercise (19 November 2023)

- a) Implementation of the drill leaving from home to reaching the evacuation centre
- b) Registration
- c) Participate in Feedback Session conducted by SeDAR team

Feedback Session

- a) Finding on the flood siren Found out that the flood siren nor the mosque announcement cannot be clearly heard by the drill participants
- b) <u>Arrival at evacuation centre</u> Most of the participants came by foot (97%) rather than by foot (2%). Majority of them (98%) came directly from their homes
- c) Flood experience Almost all participants (99%) have experienced flood disaster before
- d) Flood warnings and sirens Most of the participants (92%) have never heard sirens before and 14% said they only knew about the flooding when water entered the home, 18% said visual observation of river and drains, 12% said social media such as WhatsApp, 4% said neighbours informed them, and 1% said emergency first responders came to their homes.
- e) <u>Location of evacuation centre</u> Fifty percent (50%) said they did not know the location of the evacuation centre prior to the drill exercise.
- f) <u>Potentially dangerous locations along evacuation route</u> Many identified open drains that they can fall into and get swept away in the current
- g) <u>Potential obstacles or challenges in a real flood situation</u> Not wanting to evacuate over concerns over loss of valuable or personal items, floating debris, strong currents to wade through, lack of support for the elderly, physically disabled or people with children

- h) <u>Knowledge of the flood evacuation process</u> Before this drill, 90% said they knew very little or knew a little about the evacuation process
- i) Residents requiring assistance Families with elderly and disabled reported that they had difficulties to evacuate and needed outside assistance
- j) <u>Protection of Belonging and Assets</u> Also, during an actual flood, most would prioritize transferring their vehicles to higher ground beforehand
- k) Resistance to evacuation It was further noted that some community members would only evacuate if they thought the flood was inevitable.
- l) Overall, the community was very engaged as they had all experienced flood disasters and had been interested in participating in the exercise.

Result: All member of the community understood the importance of pro-active, community-led actions in DRR. Since the drill event, leaders have initiated actions of their own to solve issues and obstacles that prevent them from better preparedness towards flood disasters, such as preparing a list of residents requiring assistance during evacuation.









3. Development and Distribution of Information Sharing Materials: (1) Evacuation Centre Location & (2) Public Warning System Procedures

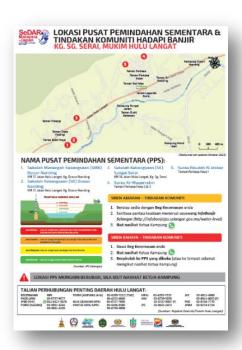
Description: Posters and fridge magnets showing the names and locations of the evacuation centres in the villages and public warning system procedures were created. Similar to Kapar, residents in Hulu Langat did not know or vaguely knew the locations of the evacuation centres in their communities. They also did not know the course of action to take when the flood siren or alert is activated.

Public warning procedures for communities had not been formally established by the government. Therefore, in collaboration with the chief village leaders, community leaders, district offices, and the state/district Department of Irrigation and Drainage, the public warning steps were identified. The locations of the evacuation centres were also confirmed and verified with the help of the agencies. These posters are put up in public places such as community halls, schools, and mosques.

Development of Posters, Fridge Magnets, and Signages

Posters and Fridge Magnets for Evacuation Centre Locations and Public Warning System Procedures





Examples of A0 and A1-sized evacuation centre location posters

Output: 14 poster designs for villages in Hulu Langat showing evacuation centre locations in each village. A total of 182 posters were produced in Hulu Langat, with each village receiving 3 A0-sized posters and 10 A1-sized posters.

In addition, the contents of the posters were made into A5-sized fridge magnets to be placed at handy, prominent place within the residents' homes, such as a refrigerator door.





A5-sized fridge magnets to be put in homes of affected residents

Result: 14 magnet designs for villages in Hulu Langat. Altogether a total of 1,400 pieces were printed for Hulu Langat, with each village receiving fridge magnets for 50 households.

Signage for Evacuation Centres

Description: Signages measuring 2 feet x 3 feet for evacuation centres (PPS) were designed, printed, and distributed for installation at evacuation centre facilities.

Many community members in the Hulu Langat sub-district were unaware of the locations of the evacuation within their areas.

The signage was co-designed with considerable input from the village leaders. The signage was reviewed and verified by the agencies that own/manage the evacuation centre premises such as the Hulu Langat District and Land Office, Kajang Municipal Council, Selangor Department of Education, and Selangor Islamic Religious Department. The signage has also been endorsed by the National Disaster Management Agency (NADMA).



Result: 28 signages for all the evacuation centres in Hulu Langat sub-district

5 Reports, Publications and Videos

5.1 DRR Risk Report

The 'Disaster Risk Report: Understanding Landslide and Flood Risks for Science-Based Disaster Risk Reduction in the State of Selangor' explains the role of science in risk analysis and describes the disaster scenario in the state of Selangor as well as the country. The Report then goes into detail on science-based risk identification for each of the 4 project area identified for this project, which are: Ulu Klang (Gombak District), Batu 14 (Hulu Langat District), Kg. Sungai Serai (Hulu Langat District), and Kg. Tok Muda, Kapar (Klang District).

Because of this report, communities understood the reason behind the natural disaster incidents happening in their area and the government agencies realized the importance of a publicly available risk report as a tool for communicating risk to affected communities.



5.2 TOT Guidebook

To carry out Training-of-Trainers activity in this Program, a guidebook had to be created. The 'Training of Trainers Guidebook for Planning and Implementing Community-Based Disaster Risk Reduction Programs' is a step-by-step manual comprising three modules: (1) Understanding DRR Concepts, (2) Understanding Local Risks, and (3) Planning, Implementing and Evaluating CBDRR Programs. Module 3 is particularly useful as it states the key success factors of CBDRR programs and how to sustain CBDRR programs.

There are also annexes that contain useful information. Annexe 1 provides step-by-step instructions on how to plan CBDRR activities while Annexe 4 provides a toolkit of CBDRR exercises and games.

This publication describes the first systematic, step-by-step approach to the CBDRR process introduced in the state of Selangor. It has crystallized into one publication all the steps, the training tool aids and guidelines needed for an integrated approach to CBDRR.

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5.3 Brochures

Three sets of brochures were produced under the SeDAR Program. One brochure explains the JPP SeDAR Program, another explains what is CBDRR and how to carry out CBDRR programs, and the last is about the Community DRR Resource Centre. All are available in English and Malay languages.





About the JPP SeDAR Program (English)





About the JPP SeDAR Program (Malay)

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On CBDRR (English and Malay)







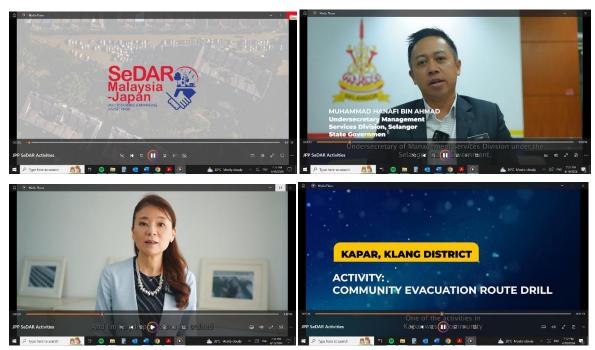


About the Community DRR Resource Centre (English and Malay)

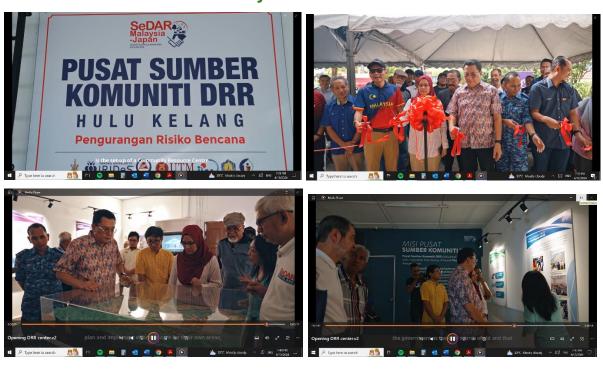
5.4 Videos

A total of 3 videos were produced under the SeDAR Program, which are (1) CBDRR Activities in the Four Project Areas, (2) Introduction to the Community DRR Resource Centre, and (3) Instructional Video on How to Conduct a Community Evacuation Drill.

CBDRR Activities in the 4 Project Areas



Introduction to the Community DRR Resource Centre



Instructional Video on How to Conduct a Community Evacuation Drill









5.5 Policy Brief



Towards the end of the SeDAR Program, a Policy Brief that summarized the project's achievements, challenges and policy recommendations was drafted. It draws upon the experiences and observations made during project implementation as well as outlining the SeDAR methodology for CBDRR process. The recommendations provide direction for future CBDRR initiatives in the state of Selangor moving forward. The Policy Brief was presented at the DRR Symposium in October 2023 and distributed to various state agencies.

Eight (8) recommendations were made in the Brief, which are:

- Set up a data hub to ensure the collection and storage of data, sharing them for risk analysis and identification, and strengthening the application of science and technology.
- 2. Increase disaster education at schools and public awareness raising on DRR.
- 3. Strengthen early warning systems and risk communication.
- 4. Government to support communities to initiate CBDRR and communities to combine DRR into their everyday lives.
- 5. Increase communication between local governments and communities.
- 6. Allocate a budget for or invest in DRR activities for both structure and non-structural measures.
- 7. Design a DRR program with a timeframe at least for 2-3 years.
- 8. For future consideration: incorporate the concept of 'Inclusivity' into the CBDRR program.

6 Challenges

There have been a number of challenges faced during the course of the implementation of the SeDAR program. They are listed as follows.

1. Collecting and accessing the data necessary for risk identification and modelling

- i. Identifying, analysing, and understanding risks through collection of relevant data is the first step of DRR. The results from these data can be used to make decisions on how best to prepare for, respond to, and recover from disasters.
- ii. Disaster risks can be understood through the lens of science and technology, for instance through the application of remotely sensed and real-time digital data.
- iii. However, countries have difficulties tracking and maintaining records of disasters and damage from these disasters, as well as sharing the data among policy makers and government agencies due to the lack of resources and staff turnover.

2. Changing the mindset that DRR and management is solely the responsibility of the government

- i. Governments are responsible for taking the initiative to reduce and manage disaster risks, allocating budgets for DRR activities, training human resources, adopting science and technology for improvement, establishing networks and coordination mechanisms among various stakeholders, installing early warning systems, implementing disaster awareness and education programs, among others.
- ii. However, it is not possible for governments to carry out all these activities on their own.
- iii. Communities can also take the initiative on numerous activities as they are familiar with the local situation and are therefore in the best position to propose solutions.

3. Access to early warning and clear risk communication

- i. Early warning is a major element in DRR, as it could help in making the decision to evacuate and take timely action to protect lives. Early warning systems are integrated systems for hazard monitoring, forecasting, prediction, disaster risk assessment, communication, and preparedness activities and processes. Therefore, it is essential for government agencies to collaborate in issuing timely and accurate warning signs.
- ii. However, warning alerts often do not reach the communities at risk, owing to technical problems and a general lack of knowledge of what these alerts mean.
- iii. Thus, early warning systems are more effective when implemented through effective risk communication using multiple and clear communication channels and steps.

4. Understanding the relationship between environmental issues and disasters

- i. Climate-related hazards such as floods and landslides have been increasing recently due to climate change. However, the link between environmental issues and DRR is not clearly understood by the public.
- ii. One of the target communities in the project identified solid waste dumping and the accumulation of dumped garbage, which increases flood risk by blocking flood water from receding. There is also the possibility of small fires in the garbage.
- iii. By properly disposing garbage and maintaining a clean and safe environment, they could reduce these disaster risks.

5. Low interest in pre-disaster (DRR) and high interest in post-disaster (rescue and relief efforts) by government agencies

- It is essential for governments to respond urgently and effectively to any emergency.
 They must also strengthen their capacity to save lives and provide immediate support.
- ii. However, they need to understand that investing in and conducting DRR before an emergency occurs are an effective means of reducing its impact. Merely strengthening response capacity is not sufficient to mitigate damage or save people's lives from future disasters. DRR efforts require a varied, multi-prong approach, and risk reduction is a long-term process.
- iii. Therefore, it is important for governments to understand the importance of DRR, initiate efforts urgently, lead related processes, and establish a platform or mechanism for effective collaboration among stakeholders.

7 Project Impact

The SeDAR program has resulted in 3 major impacts.

7.1 Established a Mechanism for Enabling Local Governments and Communities to Plan and Implement CBDRR

This project has established a mechanism to plan and implement CBDRR in Selangor by local stakeholders. Towards the end of the project, the State Government announced its commitment to an annual budget to replicate the CBDRR activities in other districts in Selangor using the same process and methodology developed under the SeDAR project.

The Selangor Disaster Management Unit (SDMU) plans, designs, and implements the activities in collaboration with other government agencies such as the Malaysia Civil Defense Force. The district government officials and the community leaders trained as DRR trainers through the SeDAR project play an important role as trainers at future trainings and workshops in other areas in Selangor.

The institutionalization of DRR at the state level and the involvement of local government and agencies and the community leaders ensured sustainability and continuity of DRR activities, which was one of the goals of the SeDAR program.



Prior to the SeDAR program, disaster management in the state of Selangor had focused predominantly on disaster response and recovery. While pre-disaster actions (disaster risk reduction) were carried out, they were not done within the context of an established and systematic framework.

The SeDAR program has been instrumental in setting up such a framework. SeDAR has created a pathway for the Selangor State Government to institutionalize and formalize a DRR infrastructure at the state level.

Impact: In light of the achievements made under the program, the Selangor State Government has designated the program as a model for future DRR initiatives in the state.

To maintain continuity and sustainability of the SeDAR program, the Chief Minister of Selangor has committed to allocate a budget for training-of-trainers programs to be carried out in 9 districts within the state at the 2024 Budget State Assembly Conference. According to the Selangor Disaster Management Unit, this will be followed by the next phase of the DRR program in the following year.

This financial commitment by the Selangor State Government is testament to the success of the SeDAR program.





7.2 Change in Mindset/DRR Becoming a Part of Everyday Life

After 5 years of the SeDAR project, the community members have changed their mindset and attitudes, which have resulted in proactive behavior and practices that incorporate DRR into their regular community activities. These changes were presented at the 2023 Symposium by the community leaders who spoke about the changes made in their communities in mindset and action. The changes made included (1) increased knowledge about DRR, (2) understanding the causes of the disasters in their communities, (3) importance of inclusive, communal effort, (4) strengthening the collaboration between residents and community leaders and between the authorities and the communities, (5) increasing awareness on environmental changes and issues, and (6) understanding the effectiveness and benefit of the use of the scientific data in explaining disaster risks.

A constant theme throughout the course of the SeDAR program has been the need to change the mindset of the community members so that DRR becomes a part of everyday life. In discussions and surveys taken among the community members, they said that prior to SeDAR, they had not heard of DRR as a concept, let alone conduct activities in DRR. Time and time again, community leaders bemoaned the fact that community members were apathetic and indifferent to any proactive actions that would prevent or mitigate the impacts of disasters in their areas.

Examples of the changes are:

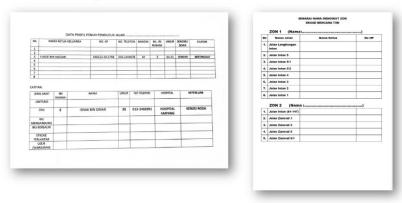
1. Community leaders are able to share DRR knowledge to their communities – Increased knowledge about DRR and understanding the causes of the disasters in their communities have enabled community leaders and local champions to present and teach others.





2. Communities' proactive abilities to come up with DRR actions and solutions to address issues and problems— Community leaders have started engaging in proactive actions. An example is the preparation of a list of people requiring assistance during evacuation such as the physically disabled and the elderly residents, which they identified as a need after conducting the community evacuation drill.

Forms for Residents Requiring Assistance during Community Evacuation



3. **Resource centre management –** The concept/idea of establishing a DRR resource center came from the community members themselves. They then proceeded to develop and manage the Centre on their own. A group of volunteers from the community have been trained as tour guides to the poster gallery at the DRR Resource Centre. They are well-equipped for this role as they are also community trainers under the SeDAR program. They are eager for more workshops and training related to DRR at the Centre and further develop it as a knowledge hub within the community.

Impact: Community members have an increased awareness and understanding of local risks and DRR practices, which has resulted in behavioural changes

7.3 Created a Network of DRR Collaborators at the Government and Community Level

The SeDAR program has created a DRR network of many players with diverse profiles and skills to contribute to a synergy of DRR planning and implementation. Although the SeDAR project initially involved only a few players—IRIDeS, SDMU, UTM and APM—many other agencies have joined such as the Department of Mineral and Geoscience, Department of Irrigation and Drainage, the Public Works Department, Department of Education, Selangor Islamic Religious Department, and others.

Likewise, at the community level, community leaders have realized the importance of communal effort such that the entire community needs to cooperate and be committed, not just the community leaders. Inclusivity was one of the key points that they have realized.

And under SeDAR, these two groups—government agencies and communities—have worked together to forge a deepened community-government working relationship. Prior to SeDAR, there was no platform for these two groups to collaborate at this level. It is anticipated that communities shall maintain the close relationship with government agencies by keeping lines of

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communication open and working together. Additionally, it is vital for communities to continue receiving technical and funding support from the government to sustain DRR at the community level.

Government agencies have expressed similar aspirations during the course of the project, and with the continued collaboration between government and communities, DRR activities can be sustained and continued long after the SeDAR program has ended.

Impact: Beyond the program partners (IRIDeS, Selangor Disaster Management Unit, Malaysia Civil Defence Force and Universiti Teknologi Malaysia), more government agencies became involved in the SeDAR program, resulting in a network of DRR experts. The DRR experts were also encouraged to further engage with communities and utilize their technical knowledge to increase the community's awareness. SeDAR succeeded in enabling the development of strong ties and relationships between the local government and the communities, and this will significantly contribute to planning, implementation, and continuity of DRR activities into the future.





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