#### **WACDEP Project 2**

#### Community flood-proofing and adaptation for climate resilience

#### **SUMMARY REPORT**

Malaysian Water Partnership (MyWP) under the Global World Partnership (GWP) aims to create a platform and pathway to the community to be flood-proofing and adapt for the climate resilience. Global Environment Centre has been entrusted as a working partner to implement this activity. A series of stakeholder consultations and meetings were held to identify and achieve the aim through the targeted community. The first meeting was held with Majlis Perbandaran Kajang (MPKj) on 16<sup>th</sup> May 2014 as a potential partner for this project, the journey of identification of partners and targeted site continued to 7<sup>th</sup> October 2014 where another local authority with urban flood problem, Majlis Perbandaran Klang (MPK), agreed to become a partner of this project through their Local Agenda 21 (LA21) unit.

Following this, a working group committee was formed consisting of internal agencies within MPK as well as personnel from river and flood agencies, and NGOs such as Department of Irrigation and Drainage (DID) River Basin Management Division, Malaysia, Selangor Water Management Authority (LUAS), Institute for Environment and Development, Universiti Kebangsaan Malaysia (LESTARI-UKM) and Malaysian Medical Relief Society (MERCY). Three working group committee meetings were carried out for the Community Flood-Proofing and Adaptation for Climate Resilience seminar which was successfully held on 13<sup>th</sup> December 2014. About 230 participants were involved in the seminar where five papers were presented, focusing on the flood scenario and its mitigation and community actions. Flood mitigation brochures were distributed to the participants of the seminar for their future actions on handling flood scenario.

Survey forms were distributed to participants to get their feedback on the seminar and on their post-seminar involvement. Analysis of the survey showed that 96% of the respondents felt that the community plays a major role in protecting the environment. In addition, 92% of respondents agreed to be part of the programmes organised in order to include local community as the main players to find solution for environmental related issues especially in save-guarding the water source. To sustain this programme as well as addressing the community's response, a Training of Trainers (ToT) for selected communities is planned to be conducted in 2015.



Working group committee meeting



Seminar



Flood mitigation brochure

#### **CONSULTANT REPORT**

#### **INTRODUCTION**

In Malaysia flooding is an issue affecting most states, and communities need to know and learn to be resilient against the expected more frequent and higher intensity floods resulting from climate change. Via the successful reception of the community awareness programme on integrated flood management (IFM) conducted in 2012 through Malaysian Water Partnership (MyWP) and MyCDNet, community awareness and flood-proofing facilitation module for Integrated Flood Management is developed for implementation and dissemination for all stakeholders. The 2014 programme further improvise the module to be a community-centric approach especially for urban community.

The programme is aimed at educating the community and getting them to understand both the structural measures and the non-structural measures being implemented in flood mitigation by the government and others. This also needs to be supported with community pro-activeness in taking steps in flood-proofing themselves against the effects of flood by enhancing self- preparedness through understanding the changing temporal and spatial nature of floods due to climate change especially in urban area.

#### **OBJECTIVE**

The main objective of the Programme is to ensure effective communication with stakeholders on water security and climate resilient development by understanding of issues around water security and climate resilience with a wide range of stakeholders.

#### **TARGET OUTPUT**

Awareness raising and facilitation for flood proofing and adaptation of a new flood-prone community using the prepared modules.

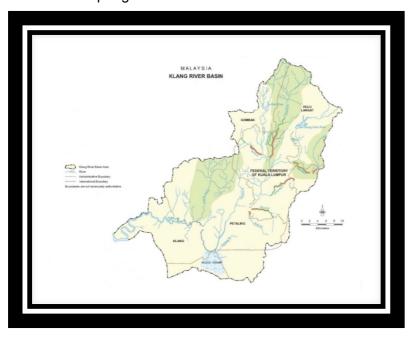
#### **PROJECT PARTNERS**

MyWP partners with GEC, DID and Majlis Perbandaran Klang (MPK), the local authority of selected flood probe area. MPK through their Local Agenda 21 programme have been actively involving the residential association, schools, and other nearby local authorities.

#### **SELECTED PROJECT SITE**

Klang basin focusing at the downstream of the Klang River which flows into the Straits of Malacca to the west was selected for the programme. Klang River originates in the

highlands, 25 km northeast of Kuala Lumpur with 11 major tributaries which include Gombak River, Batu River, Kerayong River, Damansara River, Keruh River, Kuyoh River, Penchala River and Ampang River.



#### **ACTIVITIES**

The project activities focus on developing the Communication Strategy, Developing strategic messages, Outreach and Knowledge sharing with the local community.

#### **Stakeholder Consultation**

A committee group was formed where MPK under the LA21 unit was selected as the secretariat of the committee. The committees consist of personnel's from the river and flood focus agencies as Department of Irrigation and Drainage (DID) River Basin Management Division; Selangor Water Management Authority (LUAS), Institute for Environment and Development (LESTARI) Universiti Kebangsaan Malaysia (UKM) and Malaysian Medical Relief Society (MERCY) beside MyWP, GEC and MPK.

#### **Targeted Groups**

- i. Community based Organisation (Residential Association, Rukun Tetangga, JKKK)
- ii. River Ranger Sg Klang
- iii. Schools
- iv. Public
- v. MPK Council and departments
- vi. Other Local Authorities
- vii. Government Agencies

#### **Project Working Meeting**

1<sup>st</sup> meeting was carried out among MyWP, GEC, LESTARI and proposed LA at the initial stage, Majlis Perbandaran Kajang on 16<sup>th</sup> May 2014; however Majlis Perbandaran Kajang did not send any representative for the meeting. Follow-up with the Majlis Perbandaran Kajang from May 2014 to end of July 2014 did not lead to any formal engagement on the proposed programme which led to the changes in the project target area.

Majlis Perbandaran Klang (MPK) was approached with the similar concept which led to the first project introduction meeting on 7<sup>th</sup> October 2014. The meeting focuses on GEC presenting the proposed project concept and how MPK can assist the implementation of the project. For the proposed programme, 2 Project Working Group (PWG) were carried out on 7<sup>th</sup> November 2014 and 8<sup>th</sup> December 2014 respectively. The Minutes of Meetings were attached in **Annex 1.** 

#### **Presentation Modules**

As the follow up from the meetings, a half day Seminar on Community flood-proofing for climate resilience was proposed to be carried out in the month of December 2014. In order to conduct the seminar relevant agencies and personnel's from MPK, DID, LUAS, MERCY, GEC, LESTARI and few others were approached to present papers during the seminar. The presentation slides includes the civic science approach which includes facilitation and cooperative learning activities, as well as addressing the relevant components and messages in relation to community's roles addressing flood issues. On 13<sup>th</sup> December, 5 papers were presented as tabulated below:

Title	Presenter
Paper 1:Klang - Towards Sustainable	Mr. Zaireezal bin Ahmad Zainuddin, Corporate
Welfare Society & Municipal	and Community Services Director
Paper 2: Introduction to Integrated	Ms Bibi Zarina Bt Che Omar, Deputy Director
Flood Management	of Flood Management Division, DID Malaysia.
Paper 3: Integrated Environmental	Tn. Hj. Md Khairi Bin Selamat, Director
Management Klang River Basin	Lembaga Urus Air Selangor (LUAS).
Paper 4:Local Communities roles	Dr. K. Kalilthasan dari Global Environment
addressing/ preventing floods -	Center (GEC/MyWP)
Drainage System	
Paper 5: Community Prepareness in	Miss Syakirah dari MERCY
addressing Flood In Malaysia	

#### Seminar

Seminar on Community flood-proofing and adaptation for climate resilience was carried out on 13<sup>th</sup> December 2014 at Dewan Serbaguna Pejabat Daerah/Tanah Klang. The half day training focused on the 5 topics as tabulated above. The seminar was officiated by Y.D.H Dato' Setai Diraja Abdul Ghani Bin Pateh Akhir ( Dato' Orang Besar Daerah, Klang). YBhg Dato' Ir. Haji Hanapi Mohamad Noor, Honorable Secretary of MyWP conducted the closing ceremony.

The seminar was attended by 230 participants with breakdown as tabulated:

Participant Breakdown	No.Participants	
Residential Associations Representatives	130	
Public/school	20	
RIVER Ranger Sg Klang	8	
MPK (9 departments)	13	
Councilors/Politicians	8	
Representatives from 8 other local authorities (Majlis	14	
Daerah Hulu Selangor, Sabak Bernam & Kuala Langat;		
Majlis Perbandaran Selayang, Sepang, Ampang Jaya &		
Subang Jaya, Majlis Bandaraya Shah Alam		
Project partners, Presenters, exhibitors & Secretariat	17	
Total	210	

The agenda, presentation slides and photos captured is attached in **Annex 2**.

#### **MATERIAL PRODUCTION**

Throughout the project period from September 2014 – December 2014, one flood mitigation brochure was developed and one flood mitigation module incorporating cartoon graphic elements is in progress and relevant updates on the components of the cartoon book attached in **Annex 3** for reference.

#### **EXHIBITION**

During the seminar, exhibition and information booths operated by the relevant agencies as:

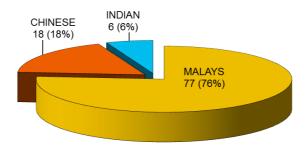
- a) River Ranger Sungai Klang
- b) Local Agenda 21, Klang Town Palnning Depatment, MPK.
- c) Department of Irrigation and Drainage (DID) Selangor
- d) Global Environment Centre (GEC/MyWP)

#### **VISIBILITY**

There was video filming been carried out which will be shared and uploaded into youtube by end of March 2015.

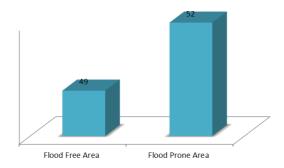
#### **SEMINAR EVALUATION**

Evaluation was carried out among the participants of the Seminar. In total 185 forms were distributed and 101 was received at the end of the seminar. The feedback received were from 77 Malays, 18 chinese and 6 Indian participants respectively.

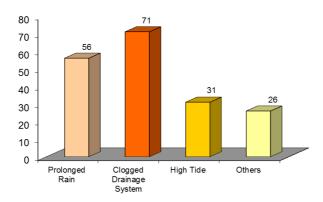


Among the key feedback and finding:

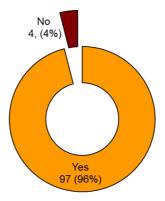
52 person (51.5%) responded categories Klang as flood prone area whereas 49 orang (48.5%) responded that Klang is save from flood.



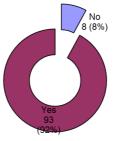
71 voted clogged drainage system followed by prolongeed heavy rain (56), High Tide (31) and others (26) as the contributing factors that leads towards flood at Klang,



Participants agreed that the local community have and will play active roles in protecting their water sourse , drainage cleaning via clean-up, stop littering and via community programmes. 96% responded community plays major role in protecting the environments with only 4% voting to rely on other parties for our environement cleanliness.



From the survey conducted, the participants agreed to play an active role on river care and water source protection programme. 92 % agreed to be part of programmes organised in order to include local community as the main players to find solution for environmental related programmes especially in saveguarding water source.



#### **WAY FORWARD**

The seminar received good response from local community which express their willingness to be proactive on flood-proofing. The practical handbook for community will be finalized and distributed and shared among the local community and relevant agencies and other stakeholders especially during the proposed TOT

#### CONCLUSION

In summary, the participants realized that as a local community, they have a major role in dealing with the issues related to flood and are willing to take bigger roles in order to address the pertaining issues with flood and water resource management. It was also concluded that the quest to enrol local community to address the flood issues doesn't end here. A Training of Trainers (ToT) workshop for Local Community on Flood Mitigation and Measures will be conducted in early 2015 and the Community Flood Action Graphic book will be disseminated to all of them as part of information sharing.

# **ANNEXES**

# **ANNEX 1: MINUTES OF MEETINGS**

No	Meeting	Date	Venue	Discussed points
1	First	7 October 2014	Meeting room, Park and Recreational Department, Klang Municipal Council	Meeting with Town Planning Department, Klang Municipal Council. Dr. K. Kalithasan from GEC on behalf of MyWP briefed about the project and proposed programme in collaboration with Klang Municipal Council which Town Planning Department will take lead. He also briefed on selecting Klang which is due to its flood prone-nature and other associated factors. In the meeting, two tentative dates which are 29 <sup>th</sup> November 2014 and 13 <sup>th</sup> December 2014 respectively planned for the seminar targeting 230 participants. Potential venues for the workshop also been discussed and task been divided among the internal agencies within Klang Municipal Council.
2	Second	7 November 2014	Meeting room, Town Planning Department, Klang Municipal Council	Meeting involves representatives from relevant agencies within Klang Municipal council with GEC on behalf of MyWP. 13 December 2014 confirmed as the date of seminar and agenda of the programme been discussed. Five (5) talks with respective speakers were planned to fill the core part of the seminar. Partnership between Klang Municipal Council and GEC/MyWP discussed and made it clear. Checklist for the seminar been discussed and draws comments from committee members for the betterment of the seminar. Contents of flood module and brochure been discussed too.
3	Third	8 December 2014	Meeting room, Town Planning Department,	This serves as the final working group meeting before the seminar. Final checklist been discussed and commented. Participants' list

Klang Municipal	updated and preparation work been briefed.
Council	Coordination between agencies involved
	discussed again for the efficient flow of the
	program. Certificate and banner design
	finalized and set for printing. VIP and other
	guests' list also been finalized.

# ANNEX 2: SEMINAR OF COMMUNITY FLOOD-PROOFING AND ADAPTATION FOR CLIMATE RESILIENCE

# (i) AGENDA.

<u>Time</u>	<u>Items</u>		
8.30 am	Registration		
9.00 am	Welcoming Speech		
9.20 am	Opening Speech by:		
	Y.D.H Dato' Setai Diraja Abdul Ghani Bin Pateh Akhir ( Dato' Orang Besar Daerah, Klang)		
9.30 am	Tea Break		
9.45 am	Talk 1: Klang - Towards Sustainable Welfare Society & Municipal		
	Speaker : En. Zamri bin Othman		
	Agency : Jabatan Kejuruteraan, Majlis Perbandaran Klang		
10.05 am	Talk 2:Introduction to Integrated Flood Management		
	Speaker: Pn. Bibi Zarina		
	Agency : Bahagian Pengurusan Banjir, JPS Malaysia		
10.45 am	Talk 3: Integrated Environmental Management Klang River Basin		
	Speaker : Tn Hj. Md Khairi Bin Selamat Pengarah, LUAS		
	Agency: LUAS		
11.25 am	Talk 4: Local Communities roles addressing/ preventing floods - Drainage System		
	Speaker : Dr Kalithasan Kailasam		
	Agency : GEC		
12.05 pm	Talk 5: Community preparedness in addressing Flood In Malaysia		
	Penceramah : Pn Syarirah		
	Agensi : MERCY		
12.45 pm	Closing Speech by:		
	Yg. Bhg Dato' Ir. Haji Hanapi		
	Honorable Secretary MyWP /Director River Basin Division of DID Malaysia		
	Certificate giving		
1.00 pm	Lunch		
2.00 pm	End		

#### (ii) PRESENTATION SLIDES



## 1<sup>st</sup> presentation

Focuses on the definition of Flood and types of Floods in Malaysia. The presentation also includes the mitigation steps taken by DID to address the problem



# 2<sup>nd</sup> presentation

Focuses on Environmental management of river basins and coastal areas where appropriate management will indirectly reduce the risk of flooding. Focuses generally affecting river basins around Selangor and Klang Valley.



# 3<sup>rd</sup> presentation

Community participation towards the care and management of drainage systems and water resources to avoid the occurrence of floods.

Generally, flooding can not be prevented, but can only be mitigated through good practice of water resources and drainage / irrigation.



## 4<sup>th</sup> presentation

Focuses on the measures taken by the community in the face of floods include step before flooding occurs, during and after flooding events. And sharing of information on the action and assistance of the related agencies in the face of disaster.

# (iii) PHOTOS



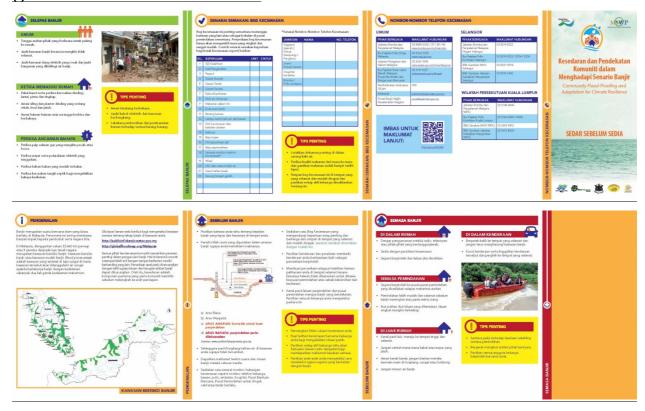






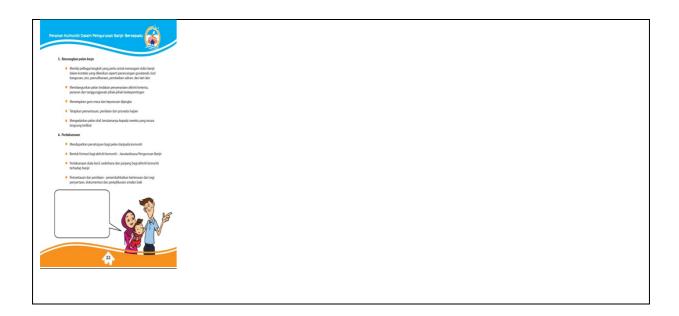
## ANNEX 3:

#### (i) FLOOD MITIGATION BROCHURE



#### (ii) OUTLINE OF THE FLOOD MITIGATION COMIC BOOK





# (iii) SEMINAR BANNER



#### (iv) CERTIFICATE OF PARTICIPATION

