GUIDELINE FOR TOWN WATCHING ACTIVITY

Guidelines for Town Watching Activity

INTRODUCTION

FLOOD Ranger Programme is a community-based programme developed in 2014 by the Global Environment Centre (GEC) and Malaysia Water Partnership (MyWP) that empowers the stakeholders in preparing for flood disasters. The FLOOD Ranger Programme emphasised on six components; i.e. SMART Partnership, Module, Training/Workshop, Tools and Materials (guideline and form), PREPARE Training and Post Training Activities.

The flood **PREPARE** approach was customised to suite the bottom-up and civic science approach specifically on community-based flood resilience through the following steps: (1) **Preparedness**; (2) **Action**; and (3) **Recovery**. Under the step number 2 of **Action**, a Town Watching activity will be executed through the development of Community-based Flood Hazard Map and Community-based Flood Response Plan.

Town Watching is an activity that engages the communities in integrated flood management. It was originally used in town planning; however, it can also be used in prevention of disaster impact such as flooding. It is used to identify areas prone to danger and routes that are safe for travel during the flooding within the community residential area. The Town Watching activity focuses on two main outputs (Community-based Flood Hazard Map and Response Plan) that will be combined into one simple map known as Town Watching Map.

INTRODUCTION OF CBFHM AND CBFRP

COMMUNITY-BASED FLOOD HAZARD MAP (CBFHM)

emphasises on how local community can develop their own map using:

- local knowledge and experience; and
- the current condition

1. Compile all potential hazards/risks found within the area.
2. Compile all the proposed safe routes.
3. Discuss the advantages and disadvantages of the proposed safe routes and finalise the best (safest and fastest).
4. Once finalised, transfer all the information into map.

   This map helps the communities to better understand their disaster risks, allowing them to take actions to reduce the risks and be aware of the safe spaces and evacuation routes that will be used during flooding.

COMMUNITY-BASED FLOOD RESPONSE PLAN (CBFRP)
is a list of actions to take in preparing the safe route during flooding and emphasise on things to be done prior involving:

- individual;
- community;
- agencies; and
- others

1. Discuss on the mitigation measures for every potential hazards/risk found within CBFHM.
2. Compile all identified Local Community Flood Gathering Centre (LCFGC).
3. Discuss the advantages and disadvantages of the proposed:
   - mitigation measures; and
   - Local Community Flood Gathering Centre.
4. Once finalised, transfer all theinformation into a map.
   The map should be their main reference during flood disaster.

FOUR MAIN COMPONENTS

1. SELECTION OF PROJECT SITE

A. Based on the need

- Flood prone areas
- Frequently affected community

B. Suggestion/Recommendation

- Local authorities
- Agencies

C. Project needs/funder/supporter

2. EARLY PREPARATION

A. Identifying area of concern

i. Identify targeted location of Town Watching activity
   - Flood disaster prone area (priority)
   - Interested community group

ii. Identify community members
   - Local leaders/champions – e.g.: Residents Association

iii. Identify stakeholder
   - Local government, relevant agencies, NGOs, associations, etc.

B. Preparation of area map

i. Get the map of the targeted area

- A3 sized map
- Topography or/and street map
- Ensure map is very clear (high resolution)
- Simplify the map as reference and work sheet
  Highlight the streets, buildings and other facilities as well features like river and drainage system in the map

ii. Break the targeted area map into smaller areas

- Community can be divided into a few groups to cover all areas

C. Preparation of necessary tools

Set a checklist of all tools and materials needed during the activity.

- Sticky notes
- Colored Pen/ Markers/pencils
- Colored stickers
- Digital Camera/Phone camera
- GPS Navigators (optional)
- Clip board and notebooks
- Mahjong Paper or A1 sized paper
- Town Watching Form

D. Prepare Town Watching Mapping Form

i. Use the Town Watching Mapping Form for the onsite activity.
Download and print from the RIVER Ranger website (http://www.riverranger.my/FloodRanger)

ii. The main focuses are to:

- Identify the Local Community Flood Gathering Centre (LCFGC);
- Propose the safe route(s) to LCFG from respective houses;
- Identify all hazards & risks along the proposed safe routes;
- Collect information on related community profiles; and
- Identify any resources in that area.

E. Identification of Resource Person

i. Identify the trainer, group leader(s), facilitator(s) and resource personnel (internal and external).

- Appoint those who are familiar with the area (local knowledge).
- Having a resource person that knows the area or experienced in disaster management and community preparedness is an added advantage; agencies, NGOs, experience community champions or subject-matter experts (if available).

ii. Plan the details and specific task/role of each community member.

- Divide the tasks accordingly especially during the on-site activity; e.g., observer (specific task), photographer, note-taker, community inter-viewer.

F. Determine the meeting/discussion facility

i. Identify the area/building suitable for group discussion and presentation

- To ensure the location is accessible to all
- Usually located in the middle of the targeted area

ii. Ensure basic facilities are available

- Tables, chairs, toilet, power supply etc.

G. Insurance

- Coverage for the event (training) - covers all the participating members.

3. IMPLEMENTATION OF TOWN WATCHING ACTIVITY

A. Preliminary Review of the Area:

- Introduce the targeted area using printed map or PowerPoint and videos to the participating communities.
- Divide the participants into few groups as per needs.
- Manage the time (appoint a time keeper); ensures all aspect of the guidelines and checklist are covered.
- Provide each group with their own area/base map.
- Ensure participants make notes and take photographs of the aspects found within the area: disadvantageous (hazards/risks) and advantageous (resources).
- Interview other local residents to obtain specific local information and past experiences, identify the people that requires special assistance.

B. Town Watching Map Development:

- Once preliminary review is completed, participants need to tidy up their finding(s)/ observation(s) and compile all data to be converted into a flood hazard map and flood response plan.
- Each group's flood hazard map and flood response plan should include information of potential risk areas, hazard obstacles, previous inundation areas, evacuation shelters and routes, locations of the vulnerable people, etc.
- Record and sketch all observations and surveys.
- Attach all information, photos and notes from the review with the map, to develop their own Community-based Town Watching Map: CBFHM & CBFRP.

C. Presentations and Discussions:

- Discuss the OVERALL vulnerabilities, possible counter measures, priorities, degrees of difficulty and responsibilities to implement each proposed mitigation, etc.
- Each group presents their community-based hazard map and response plan to the members of the other groups and discuss the feasibilities and ways to integrate between the groups.
- Then, the trainer/coordinator/leader combines and merges all the sub-plan into one main plan.
- Finally, the trainer need to summarise the problems, proposed mitigation and future action plans that had been developed by this Town Watching exercise.

D. Submission and Sharing:

The completed Town Watching Map should contain:

- Handover to the related/relevant agencies for their record and action.
- Distribute to public spaces (community hall, religious centre).
- Promote its use to the community and remind constantly during meetings/ gathering.

4. FOLLOW UP

Organise a follow-up discussion with agencies:

- On the feedback and response from agencies;
- Types of support can be provided, i.e., upgrade drainage system, flood gate etc.;
- Mitigations of the risk(s) and hazard(s) identified; and/or
- Endorsement of Community Flood Gathering Center (CFGC) and safe route.

Town Watching Mapping Form

COMMUNITY NAME:

DATE:

LOCATION:

This form is used to identify:

- the safe area as a Local Community Flood Gathering Centre;
- the safe route to the Local Community Flood Gathering Centre;
- the hazards and risks along safe routes to the Local Community Flood Gathering Centre;
- the methods and propose improvements to mitigate the identified hazards and risks; and
- the stakeholder (esp. agencies) responsibilities to take action on the proposed mitigation of the hazards identified including the cost and timeline.

CHECKLIST FOR THE TOWN WATCHING ACTIVITY

BASELINE INFORMATION		
Group Number:	Group Leader's Name:	
Start time:	End Time:	Base Map: ☐ Yes ☐ No
Digital/Phone Camera: ☐ Yes ☐ No	Photo reference Number: ☐ Yes ☐ No	
Photo Number:	Issues/Description:	

SITE/COMMUNITY AREA	
Name of the Area/Community site:	
GPS Coordinate:	
Local Government:	
Type of area/residential:	No. of People /Families:
Was the area flooded before? ☐ Yes ☐ No If yes, how frequently does the area floods every year on average: ☐ more than 3 times ☐ once	
When was the last time the area flooded? (year/date)	
Flood type: ☐ River floods ☐ Regional floods ☐ Localised floods ☐ Coastal floods ☐ Urban floods ☐ Rural and agriculture floods ☐ Flash floods	
Maximum level during recent floods: feet/cm	
Local rainfall data: ☐ Yes; mm/year ☐ No	
Presence of floods early warning system in the area: ☐ Yes ☐ No	
Alert of areas likely to be affected by future floods: ☐ Yes ☐ No	
Availability of public information board for flooding: ☐ Yes ☐ No	

FACILITIES WITHIN THE COMMUNITY AREA

No. of facilities:

- School and university:
- Mosque/temple/church:
- Community hall:

Residential plan: ☐ Yes ☐ No

Drainage map: ☐ Yes ☐ No

Emergency Facilities:

- Police station: ☐ Yes, distance: ___ km ☐ No
- Fire Department: ☐ Yes; distance ___ km ☐ No
- Clinic/Hospital: ☐ Yes; distance ___ km ☐ No
- Community Centre: ☐ Yes; distance ___ km ☐ No
- Welfare Centre: ☐ Yes; distance ___ km ☐ No
- Others: ☐ Yes; distance ___ km ☐ No

FLOOD EVACUATION CENTER/ SHELTERS

Available of flood evacuation centers /shelters: ☐ Yes ☐ No

Type of space: ☐ Open ☐ Closed

More than one storey: ☐ Yes ☐ No

Ownership: ☐ Public ☐ Private ☐ Others:

Capacity: ___ pax

Owner's Name:

CRITICAL NEED FACILITIES

Water Supply: ☐ Yes: ___ in working condition/ ___ requires upgrades ☐ No

Power Supply: ☐ Yes: ___ in working condition/ ___ requires upgrades ☐ No

Access Road: ☐ Yes: ___ in working condition/ ___ requires upgrades ☐ No

Communication: ☐ Yes: ___ in working condition/ ___ requires upgrades ☐ No

Sufficient Toilets: ☐ Yes: ___ in working condition/ ___ requires upgrades ☐ No

Food Storage/Supply: ☐ Yes: ___nearby/ storage area ☐ No

Accessible by special needs/disable communities:
☐ Yes: ___ in working condition/ ___ requires upgrades ☐ No

Others:

Note: Provide detailed information on the availability of the facilities and issues regarding the facilities.

EVACUATION ROUTES

Available routes: ☐ Yes ☐ No	Alternative routes during a flood: ☐ Yes ☐ No
Helipad: ☐ Yes ☐ No	Near to Evacuation Centre: ☐ Yes; distance ___ km ☐ No
Others:	

HAZARD AREAS

Landslide prone areas: ☐ Yes ☐ No	Flood prone areas: ☐ Yes ☐ No
The area/building located on/near slope of more than 30 degrees: ☐ Yes ☐ No	
Storm surge prone areas: ☐ Yes ☐ No	River/stream/water bodies: ☐ Yes ☐ No

ELEMENTS AT RISK

Trees seen as obstacle: ☐ Yes ☐ No	Poor quality infrastructures: ☐ Yes ☐ No
Other barriers: ☐ Yes: _____ ☐ No	
Street lights: ☐ Yes ☐ No	Electric poles/wiring on the road: ☐ Yes ☐ No
Power House in flood prone Area: ☐ Yes ☐ No	
Unstable structures: ☐ Yes ☐ No	Narrow bridge: ☐ Yes ☐ No

COMMUNITY PROFILE

No. of local people interviewed: ___ pax (details of each interview recorded separately)	
No. of elderly: ___ pax	Special needs/disabled people: ___ pax
Families with babies/children: ___ family unit with babies; ___ family unit with children	
Families with pets: ___ family unit	Families with livestock: ___ family unit
Others:	

Notes:

- *Buildings'/infrastructures' attributes are important to note as they can be useful (advantage) during a flood.*
- *The information found during site visits (preliminary review of area) should be available during the discussion session.*
- *The Discussion should cover: (1) mitigation measures: dangerous spots, any solutions; evacuation places, easily accessible; evacuation routes, available/safe; any additional shortcuts required and warning information, reachability; (2) recommendations and solutions.*

1. LOCAL COMMUNITY FLOOD GATHERING CENTRE

Proposed Local Community Flood Gathering Centre	Strengths & Advantages	Weaknesses & Enhancement needed	Timeframe	Agencies (Person In Charge)	Estimated Cost

Note:

Basic information required: name of the building, the owner's name, the GPS coordinate, the capacity of the centre, distance from your residence and to the evacuation centre.

2. LIST OF HAZARD / RISK ALONG THE PROPOSED SAFE ROUTES AND COMMUNITY PROFILE

No	Hazard / Risk	Area / street / route / GPS coordinate	Image (no. of reference)	Detailed Description (notes)

Description includes:

a) **Type of hazard:** Erosion/landslide prone area - high probability to collapse i.e. bridges, levees/dykes, roads, buildings, dangerous spots which might submerged during the flooding, huge or dead tree trunks.

b) **Elements at Risk:** Road barriers, electric poles, live power cables (construction work), wiring on the road, power circuit, water bodies (drain, lake, pond or river), sharp and/or dangerous tools/items, uprooted trees or at risk of falling, houses at lowland or near riverbank, debris/dumping area.

3. GROUP FINDINGS: Community-based HAZARD MAP AND RESPONSE PLAN

	Detailed Description
Area /Street/ Route	
GPS Coordinate	
Image (reference number)	
Identified Problem	
Hazard / Risk / Liability / Asset	
Proposed solution / improvement / Suggestion	
Timeline/framework	
Expected outcome	
Proposed responsible agencies/stakeholders	
Estimated Budget	

4. OVERALL FINDINGS: Community-based HAZARD MAP AND RESPONSE PLAN

IMPORTANT NOTE:

1. Table 1 is used to identify the possible community flood gathering centres before finalising the best centre.
2. The information from Table 2 and 3 (group work) are compiled to develop the final Community-based Hazard Map and Response Plan (Table 4).
3. The combined information in Table 4 will then be used to establish possible routes to the community flood gathering centre as well as to the designated evacuation centre (by agencies).
4. The information will then be translated into map which later can be digitalised, printed and shared with the respective community members, agencies and other stakeholders.

	Detailed Description
Area /Street/ Route	
GPS Coordinate	
Image (reference number)	
Identified Problem	
Hazard / Risk / Liability / Asset	
Proposed solution / improvement / Suggestion	
Timeline/framework	
Expected outcome	
Proposed responsible agencies/stakeholders	
Estimated Budget	