## First PARTneR Advanced training on

## Disaster Risk Management and Risk Tools

## **Worksheets**

**Activity 1)**

What are the underlying issues and barriers that result in poor DRM planning/ decision making?

**Activity 2)**

Key DRM terms- write down examples:

Risk

* The probability that loss will occur as the result of an adverse event, given the hazard and vulnerability
* **Hazard x Vulnerability = Risk**

Ex. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hazard

* A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.

Ex. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Asset

* A person or man-made or natural resource that has a tangible or intangible value.

Ex. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Attribute

* Characteristics of an asset that affect its vulnerability

Ex. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Exposure

* Assets that will be impacted by a hazard event or scenario

Ex. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Vulnerability

* The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard.

Ex. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Aggregation

* Area or location for calculating hazard impacts.

Ex. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Activity 3)**

Scenario: There is a category 4 cyclone headed this way and we are all stuck in this building.

* + Name the hazard(s)
	+ Identify the assets
	+ Identify what assets are exposed
	+ List the attributes that make this building vulnerable/ not vulnerable
	+ What is one of the aggregation units are we located in?
	+ Is the risk high, medium or low?
	+ What other information would be useful to assess the risk?

**Activity 4)**

**Review of the RiskScape Interface**

* How would you add new data?
* Where are the builder tools located, and what do they do?
* How can you identify features in the map?
* How can you change your settings i.e. the memory RiskScape uses?
* Where can you turn layers on and off?

RiskScape User Interface (UI)



**Activity 5)**

**Required Data to collect for RiskScape Tsunami Calculations**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Label | Represents | Options if more than one | Choices or default?  |  |
| X | Latitude |  | Write Latitude |  |
| Y | Longitude |  | Write Longitude |  |
| OBJECTID\_1 | Unique number |  | Default- gives new number | Default- gives new ID number |
| ID | Unique number |  | Default- gives new number | Default- gives new ID number |
| BLDG\_ID | Not required |  |  |  |
| POINT\_X | Latitude |  | Write Latitude |  |
| POINT\_Y | Longitude |  | Write Longitude |  |
| Use\_Cat | Building Use |

|  |
| --- |
| 1 : Residential Dwellings |
| 2 : Commercial - Business |
| 3 : Commercial - Accommodation |
| 4 : Industrial - Manufacturing, Storage |
| 5 : Industrial - Chemical, Energy, Hazardous |
| 6 : Fast Moving Consumer Goods |
| 7 : Government |
| 8 : Territorial Authority/Civil Defence |
| 9 : Lifeline Utilities |
| 10 : Police |
| 11 : Hospital, Clinic |
| 12 : Fire Station |
| 13 : Community |
| 14 : Education |
| 15 : Resthome |
| 16 : Religious |
| 17 : Forestry, Mining |
| 18 : Farm |
| 19 : Lifestyle |
| 20 : Parking |
| 21 : Clear Site |
| 22 : Other |

 | Choose number |  |
| Storeys | Number of Stories |  | Write number of stories |  |
| Flr\_Area | Floor area in sq. metres |  | Write floor area |  |
| Flr\_Hgt | Height of ground floor in metres |  | Write floor height |  |
| Const\_Type | Construction type |

|  |
| --- |
| 1 : Reinforced Concrete Shear Wall |
| 2 : Reinforced Concrete Moment Resisting Frame |
| 3 : Steel Braced Frame |
| 4 : Steel Moment Resisting Frame |
| 5 : Light Timber |
| 6 : Tilt Up Panel |
| 7 : Light Industrial |
| 8 : Advanced Design |
| 9 : Brick Masonry |
| 10 : Concrete Masonry |
| 11 : Unknown Residential |
| 12 : Unknown Commercial |

 | Choose number |  |
| Wall\_Clad | Outside Wall type |

|  |
| --- |
| 1 : Weatherboard |
| 2 : Stucco, Roughcast |
| 3 : Corrugated Iron |
| 4 : Plastic |
| 5 : Fibre Cement Sheet |
| 6 : Fibre Cement Plank |
| 7 : Reinforced Concrete |
| 8 : Concrete Masonry |
| 9 : Brick |
| 10 : Glass |
| 11 : Curtain Wall Glazing |
| 12 : Sheet Metal |
| 13 : Other Sheet - Combustible |
| 14 : Other Sheet - Non-Combustible |
| 15 : Other |

 | Choose number |  |
| Rep\_Cost | Replacement cost of the building in local currency |  | Estimate replacement cost |  |
| Cont\_Value | Contents value in local currency |  | Estimate contents value |  |
| Occ\_Day | Number of people in the day |  | Write number of occupants |  |
| Occ\_Night | Number of people at night |  | Write number of occupants |  |
| Flr\_Type | Floor type |

|  |
| --- |
| 1 : Timber |
| 2 : Concrete Slab |

 |  |  |
| Build\_Earn | Building earning potential |  | Default | Default- 0 |
| Year\_Const | Year constructed |  | Choose year constructed |  |
| Stock\_value | Stock value |  | Default | Default- 0 |
| Plant\_Value | Plant value |  | Default | Default- 0 |

**Activity 6)**

**RiskScape Feedback**

Make a list of the positive and negative aspects of the RiskScape tool for the following components:

* Overall user interface
* How to run a scenario
* How the results are formatted