# RISK ASSESSMENT, RESPONSE AND RECOVERY PHASES OF DM.

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#### What is Risk?

- Risk is a situation involving exposure to danger.
- The analysis of Risks involved in a particular disaster situation is necessary.
- Risks are rather predictable and hence proactive action is required to assess them, layout plans for responding to them and help the affected land and property recover from it as soon as possible.

#### COMPONENTS OF RISK ANALYSIS

- A curated archive of the Geographic and climatic conditions of the area under scrutiny.
- Assigning a diverse team to analyse and record the possible risks that may exist in that area based on history and current climatic conditions.
- Draft plans to counter the risk and also have an eye out for rescue operations.
- Make sure that people in the area are well aware of the plans in place so that they can be better prepared.

# RISK ANALYSIS (contd.)

- Once the Period of Risk ends, analyse the area and record the potential damage hindered to life and property.
- Compare and Contrast the changes made prior to the Risk Period and understand the effectiveness of the changes that were made.
- Generate a feedback from external experts to come with better solutions for the future.

#### RISK ASSESSMENT — UNDP's STEPS

- Step 1: Understanding of current situation, needs and gaps to assess what already exists, avoid duplication of efforts, and build on existing information and capacities. This is done through a systematic inventory and evaluation of existing risk assessment studies, available data and information, and current institutional framework and capabilities.
- Step 2: Hazard assessment to identify the nature, location, intensity and likelihood of major hazards prevailing in a community or society.
- Step 3: Exposure assessment to identify population and assets at risk and delineate disaster prone areas.
- Step 4: Vulnerability analysis to determine the capacity (or lack of it) of elements at risk to withstand the given hazard scenarios.

# RISK ASSESSMENT (Contd.)

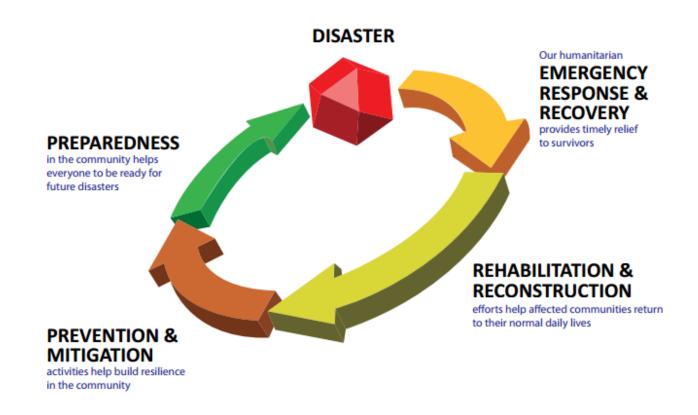
- Step 5: Loss/impact analysis to estimate potential losses of exposed population, property, services, livelihoods and environment, and assess their potential impacts on society.
- Step 6: Risk profiling and evaluation to identify cost-effective risk reduction options in terms of the socio-economic concerns of a society and its capacity for risk reduction.
- Step 7: Formulation or revision of DRR strategies and action plans that include setting priorities, allocating resources (financial or human) and initiating DRR programmes.

### UNDP IN ACTION - INDONESIA

- The development of a disaster loss database for Indonesia gained momentum when the National Disaster Management Agency (BNPB) was formally established in January 2008.
- Since then, and through the UNDP-supported multi-year 'Safer Communities through Disaster Risk Reduction in Development Programme', the implementation of the database has picked up pace. Disaster Data and Information of Indonesia (DiBi) was launched by the head of BNPB in July 2008 with data from 2002-2006.
- UNDP, in partnership with the Government of Indonesia, is customizing the database system to suit government requirements. While much work remains to be done to collect and validate historical disaster data from the past 30 years, government ownership is established and considerable momentum achieved. The database is being used to guide the ongoing process for developing a national DRR plan and for monitoring the impact of crisis on poverty at the community level.

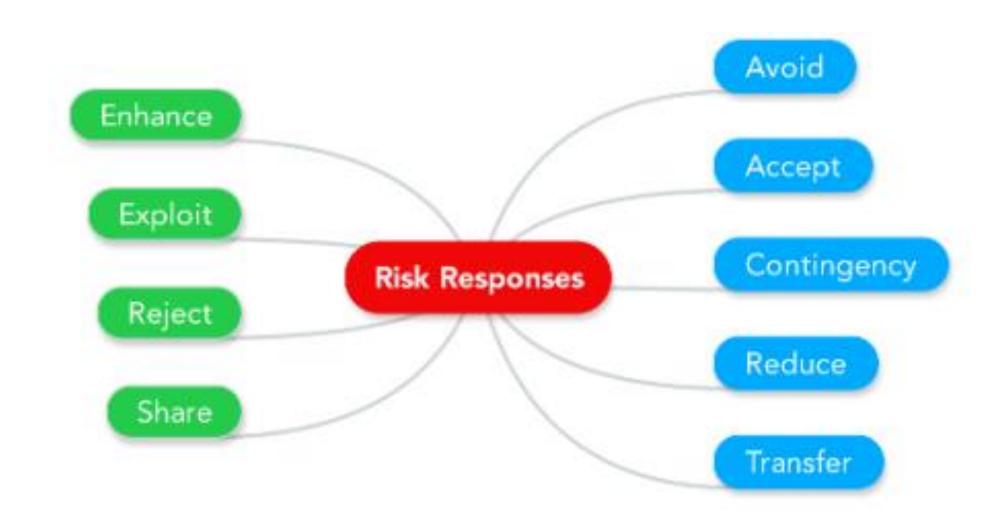
### **PHASES**

#### TOTAL DISASTER RISK MANAGEMENT (TDRM)



#### RISK RESPONSE

- Risk Response refers to the proactive actions that are put in place once the impending risk are assessed.
- They are framed only after rigorous analysis of all possible options and their effectiveness in combating the risk when it occurs.
- There may be more than one way to solve a problem and hence the best possible course of action will be decided upon and implemented by the team.



#### RISK RESPONSE — CASE STUDY

- You are the director of the City community center. There is no risk management plan in place. You have just been notified by the City Manager that all facilities will now have a risk management plan pertinent to their programs and services. Chart the risk identification and assessment, then suggest possible risk response strategies.
- Step 1: Identification of risks Using the legal-based classes of loss, list as many risks as you can under each class.
- Step 2: Assessment of risks Subdivide this column into three subcolumns and for each of the risks listed in Step 1, assess the frequency, the severity, and the financial consequences.
- Step 3: Risk response assessment For each risk identified and assessed, suggest possible risk control strategies (avoidance, reduction, type of transfer) and risk financing strategies (retention, type of transfer to third party)

#### RISK RECOVERY

- Risk recovery is the process of analysing the damage caused due to a risk or disaster and framing proper timelines for restoring the area back to normalcy.
- Experts from various fields have to be consulted for deducing the time constraints and monetary constraints involved in the recovery process.

#### RISK RECOVERY - BENEFITS

- Providing a sense of security
- Minimizing Delays
- Guaranteeing the reliability of standby systems
- Providing a standard for testing the plan
- Minimizing decision-making during a disaster
- Reducing potential legal liabilities
- Lowering unnecessarily stressful work environment

#### RISK RECOVERY — CASE STUDY

- Any disaster recovery plan must take into account people, property, and priorities. By this, we mean the employees that are essential to bring operations back online, with the necessary equipment and resources to do their jobs, in the order that best facilitates the recovery of the company.
- In addition to all of this, you must have your data backups accessible in a timely manner in order to restore them to your recovery servers. The best solution is to store your data backups in multiple offsite locations. This can quickly become a logistical and security nightmare if you have a significant volume of data.
- One affordable solution is to use the Internet to back up your data.
- iSCSI is a technology that uses backup devices located in various geographic locations by using the Internet to transport and back up your data. It stands for 'Internet Small Computer System Interface'. Originally developed for storage area networks that ran over Ethernet, it can now run over any IP-based network, including the Internet.
- Also, remember laptops and portable devices that carry critical data for your company. If these devices are lost, stolen or destroyed, this too can seriously impact your company. Plan a backup strategy that covers devices like these in order to minimize the impact your company.