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STEP 6.1: UNDERSTAND WHY AND WHEN TO USE A SIMULATION

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IFRC and CADRIM's simulation guide (see [toolbox](#)) distinguishes between four types of simulation exercises:

Tabletop exercises: A discussion-based exercise whereby stakeholders discuss actions to be taken during a made-up disaster situation. The goal of a tabletop exercise is to identify and resolve problems while allowing participants to better understand each other's responsibilities, resources and operational procedures.

Objectives of a tabletop exercise for anticipatory action include:

- Evaluate the decision-making capacity of staff and volunteers responsible for implementing the early actions outlined in an s/EAP or anticipatory action plan.
- Validate the anticipatory action plan, e.g. s/EAP and its assumptions.
- Test the coordination mechanisms of internal and external stakeholders with a role in the anticipatory action plan.
- Prepare those with decision-making authority to manage relevant aspects of the anticipatory action plan during activation.

Drills: An operations-based exercise that requires mobilization and the use of resources during a made-up disaster scenario. The goal of a drill is to test a single specific operation, function, or system. For example, a drill for shelter strengthening kits can be used to test the National Societies procedure for this early action.

Objectives of a drill for anticipatory action include:

- Test the feasibility, viability and timeliness of the early actions.
- Identify possible challenges in coordination among stakeholders involved.
- Evaluate abilities and the use of techniques, tools, resources, and actions related to the implementation of the anticipatory action plan.
- Test the capacity of volunteers and branches to successfully implement the anticipatory action plan, e.g. s/EAP in order to identify gaps.
- Assess the general response of a sample community to the early actions foreseen, if applicable.

Functional exercises: A fully simulated operations-based exercise that tests the capacity of an organization to respond to a made-up situation. This exercise also requires the mobilization and use of resources, but it differs from a drill in that it is used to test multiple functions of an organization's operations plan.

Field exercises: A full-scale operations-based exercise that is conducted in a highly stressful environment, usually lasting up to several days. This type of exercise tests most functions within an operations plan as it involves the mobilization of all the equipment and emergency personnel needed in a real situation.



In 2019, the Philippine Red Cross (PRC) organized three simulations to test the Typhoon EAP early actions, namely: early harvesting of abaca trees in Catanduanes Island, shelter strengthening in Aurora Province, and livestock evacuation in Davao Oriental Province.

PRC Tabletop + Drill Format

Although the early actions tested varied, the three-day format for all PRC chapters remained the same:

Day 1

The first day was used for a tabletop exercise to review what must be done by the chapter to simulate the moment the chapter received the message that the trigger was reached (four-days before the typhoon will make landfall).

Day 2

The second day the PRC employed a drill, which covered the early actions to be taken three and two days before landfall.

Day 3

The final day was reserved for a thorough debriefing of the simulation exercise.

For each simulation exercise, PRC encouraged additional PRC chapters to join and also invited provincial government partners. The participants were split on the second day to go to different communities (with different early actions).

Each simulation required ample preparation prior to the exercise taking place. It is crucial that the simulation be jointly planned with all involved agencies at the province level as well as the involved communities at an early stage (at least a month prior).

The criteria below represent the minimum PRC preparation components:

- A typhoon scenario as close to reality as possible
- Engagement of all agencies and participants needed to execute all EAP roles and responsibilities
- Resources (e.g. transport, material, volunteers)

PRC's 2019 Simulation Report (in the toolbox) details the approach.

Practicing simulations has yielded significant benefits for the PRC. The German Red Cross Anticipatory action delegate at the time of the simulation put it like this:

"The simulation was a great help in enabling the Catanduanes PRC chapter to activate early actions December 2, 2019 prior to the landfall of Typhoon Tisoy. In past storms, when Abaca trees were destroyed, this not only meant significant losses for farmers, but also a continuous lack of income for those workers normally employed for processing the fibres. PRC volunteers were on their own as our team didn't manage to reach the island three days before typhoon landfall. However, the Catanduanes chapter took full agency of their early actions, and executed everything as planned: Five barangays (communities) were selected with Caramoran municipal authorities, and volunteers were deployed to each of them to (i) recruit 20 workers, (ii) validate the list of the farms that should be assisted in early harvesting of abaca trees, and (iii) supervise the early harvesting of matured abaca trees in the selected farms. Although coordination with provincial authorities could have been a bit better, the volunteers applied the learnings from the simulation exercise – and even tested leaf trimming for the young abaca trees.

Aside from the importance of training chapters, authorities and volunteers, simulation exercises are very important to validate some of the assumptions we make in the EAP: like the time needed to strengthen houses with shelter strengthening kits, how best we can orient workers and beneficiaries, how to do the registration of animals being evacuated, etc. All these learnings can be only gathered through real time testing (and if we don't have a typhoon to do activation, it is best to do simulations)."