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| Title of activity | **PARTICIPATION TO THE 2-DAY FORUM ON THE PHILIPPINE HAZARDS AND NDRRMOC EARLY WARNING SYSTEM AND RESPONSE MECHANISM ON 23-24 APRIL 2025** |
| Venue | FACEBOOK LIVE (OCD FACEBOOK PAGE) |
| Date conducted | APRIL 23-24, 2025 |
| Implementing agency | OCD-CO |
| Person/s who attended | VINCENT WADE G. FERRANCO |
| Highlights of the activity | **DAY 1 – April 23, 2025**  **Topics discussed:**  **1. Hydrometeorological Hazards**  **Overview**: Philippine weather is shaped by geography, topography, air streams, and climate systems. Hydromet hazards—atmospheric or hydrological phenomena—pose risks to lives and property.  **Types of Hazards**:   * **Thunderstorms**: Heavy rain, lightning, thunder, and strong winds; can cause tornadoes, hail, and downbursts. * **Monsoons**: Seasonal wind reversals   + *Habagat* (SW) and *Amihan* (NE) * **Shear Line**: Cold and warm air convergence * **ITCZ**: Low-pressure zone near equator where trade winds meet * **LPA**: Low atmospheric pressure zones indicating bad weather * **Tropical Cyclones**: Large systems bringing strong winds and rain   **Effects**: Floods, landslides, strong winds, storm surges  **2. Tropical Cyclones & Rainfall Forecasting**  **Tropical Cyclones (TCs)**: Form over warm waters with rotating clouds. The Philippines sees ~20 annually (8–9 make landfall).  **TC Parts**:   * Eye (calm center), Eye wall (intense rain/wind), Rain bands   **Intensity Categories**: Tropical Depression (TD)-1 km/h or less  Tropical Storm (TS)-662 - 88 km/h  Severe Tropical Storm (STS)-89 - 117 km/h  Typhoon (TY)-118 - 184 km/h  Super Typhoon (STY)-185 km/h or higher  **Forecasting Process**:   * *TC Outlook*: Every 6 hrs (if far) * *Advisory*: Every 12 hrs (if closer) * *Bulletins*: Every 6 hrs (in PAR); every 3 hrs (near landfall)   **Rainfall Warnings**:   * *Yellow*: 7.5–15 mm/hr * *Orange*: 15–30 mm/hr * *Red*: >30 mm/hr   **Weather Advisories** (within 3 days):   * Moderate to Heavy: 50–100 mm * Heavy to Intense: 100–200 mm * Intense to Torrential: >200 mm   **3. Flood Forecasting & Early Warning**  **PAGASA’s Role**: Leads non-structural flood mitigation via:   * Telemetered basin ops * Dam ops * Forecasting for ungauged basins   **Products**:   * **Hydrological Forecast**: Daily (9 AM) * **Basin Bulletins**: 2x daily or as needed * **General Flood Advisory**: For non-major basins * **Dam Updates**: Daily dam levels and discharge info * **Public Warning Signals**: ALERT → ALARM → CRITICAL → RECESSION → TERMINATION   **4. Earthquakes, Volcanoes, and Tsunamis**  **Philippine Profile**:   * 300+ volcanoes (24 active, 27 potentially active) * Frequent seismic activity (~20 quakes/day)   **Volcanic Hazards**:   * *Primary*: Ash, lava, pyroclastic flows * *Secondary*: Lahar, ground fissures   **Earthquakes**:   * Caused by active faults and trenches * Measured by *magnitude* (energy) and *intensity* (effects)   **Monitoring**:   * PHIVOLCS uses seismic, geochemical, and deformation tools * 8 observatories, 7 volcano networks with real-time data   **Preparedness Tips**:   * Know local hazards, secure homes, build emergency kits * Follow PHIVOLCS alerts   **5. Landslide & Flood Warnings by DENR-MGB**  **Legal Basis**: RA 10121 & NDRRMP 2020–2030  **Outputs**:   * GeoHazard advisories * Barangay risk listings * Reports, artcards, and visual aids * Media briefings & community updates   **6. Operation L!STO (DILG)**  **Purpose**: Build LGU capacity in disaster risk reduction and climate adaptation.  **Focus**:   * Strengthen planning, budget use, and risk financing * Develop manuals for various hazards * Promote grassroots engagement and civil society involvement   **7. Management of the Dead & Missing (MDM)**  **Guidelines (NDRRMC MC No. 19, s. 2016)**:   * Dignified handling of the dead * Three SRR phases: Pre-op, Operational, Post-op * Proper tagging, documentation, and handover * Disposal: Burial or return to family   **Missing Persons**:   * Identified as individuals unaccounted for post-disaster   **Bereaved Families**:   * Managed by local social welfare offices   **Mental Health Support**:   * Psychological first aid, referrals, and trauma counseling   **Importance of Casualty Validation**:   * Supports benefits processing and ensures official report   **Day 2 (April 24, 2025):**  **1. Data Analytics Technologies and Operations Services (DATOS) & Philippine Space Agency (PhilSA)** Under RA 11363, PhilSA leads national efforts in space science and technology. It focuses on six key areas: national security, R&D, education, international cooperation, industry development, and hazard/climate studies. PhilSA supports disaster preparedness through:   * Mapping: land cover, mangroves, corn, onions, etc. * Monitoring: NO₂, SO₂, urban heat, etc. * Mobilizing: flood impacts, landslides, oil spills, fires. Challenges include limited expertise, data access, and policy gaps. Plans include expanding user-friendly tools and building a national space data network.   **2. Early Alert to Effective Disaster Response** The ESR system follows a 6-step process: Detection, Filtering, Verification, Assessment, Reporting, Response. Alerts are classified from local to international concerns. Tools include SMS alerts, integrated code alerts, and the SPEED system for post-disaster surveillance.  **3. NDRRMOC Alert & Response System** RA 10121 mandates the NDRRMOC to coordinate alerts, monitoring, and inter-agency response. Alert Levels:   * White: Normal * Blue: Partial activation * Red: Full activation Uses official data sources (PAGASA, PHIVOLCS, etc.) and coordination platforms like the Inter-Agency Coordinating Cell (IACC). Rapid response teams and robust communication tools are deployed during emergencies.   **4. Emergency Alert and Warning Message (EAWM)** Standardized alerts with specific triggers for hazards like earthquakes, tsunamis, and volcanic activity. Disseminated via SMS and Cell Broadcast, though effectiveness may vary due to phone/device limitations or signal issues.  **5. Pre-Disaster Risk Assessment (PDRA)** PDRA-Scenario Building is activated by threats from natural or man-made hazards. Risk levels: **Standby, Alpha, Bravo, Charlie** (increasing severity). Used to guide early preparedness and coordinated response planning.  **6. 2024 NDRRMOC SOPG** Serves as a manual for duty personnel outlining operations, coordination, communications, reporting, and media interaction protocols. It ensures consistent, timely, and accurate information flow during disasters. Reporting system covers incident classification, real-time updates, and consolidated SitReps. |
| Concerns the RD should know | N/A |
| Action request/s coming from the activity | N/A |
| Deadline for action request/s | N/A |
| Action Taken | N/A |
| Remarks | N/A |
| Date submitted | APRIL 25, 2025 |
| Signature/s of staff | Prepared by: Reviewed by:  **VINCENT WADE G. FERRANCO** **ENGR. AARON C. ESCLAMADO**  Project Technical Assistant I Science Research Specialist II  Noted by:  **JELYN E. DOCTOR**  OIC, Technical Services Division |