

**CABINET CLUSTER ON
CLIMATE CHANGE ADAPTATION, MITIGATION AND
DISASTER RISK REDUCTION (CCAM-DRR)
PERFORMANCE AND PROJECTS ROADMAP (2018-2022)**

A. Background

Section 10 of Executive Order (E.O.) No. 24 “Reorganizing the mandates of each cluster to formulate its performance and projects roadmap. The Climate Change Adaptation, Mitigation and Disaster Risk Reduction (CCAM-DRR) Cabinet Cluster Roadmap for 2018-2022 was drafted by the Department of Environment and Natural Resources (DENR) and Presidential Management Staff (PMS).

This was based on the baseline data on climatic trends and disaster risk provided by the DOST, thru PAGASA and PhiVolcs. Other references include the international frameworks (Sendai and the Asia-Pacific Economic Cooperation Disaster Risk reduction Framework) and the national plans (Philippine Development Plan and the National Strategic Framework on Climate Change).

The roadmap was presented during the 2nd CCAM-DRR Cabinet Cluster Meeting dated 31 August 2017. Inputs from the National Economic and Development Authority (NEDA), Office of the Cabinet Secretary (CabSec), and the Climate Change Commission (CCC) were considered for integration in the draft roadmap.

This version of the CCAM-DRR Roadmap indicates the corresponding indicators for each expected outcome, lists of program/activity/project (PAPs) for 2018 categorized as funded based on the National Expenditures Program (NEP) and unfunded and the forward estimates for 2019 to 2022 for the potential PAPs (to be initiated, continued, expanded and scaled-up).

B. Overall Goal

The overall goal of the roadmap is aimed at achieving ***“Climate- and Disaster-Resilient Communities Supporting Equitable and Sustainable Development”***.

C. Outcomes

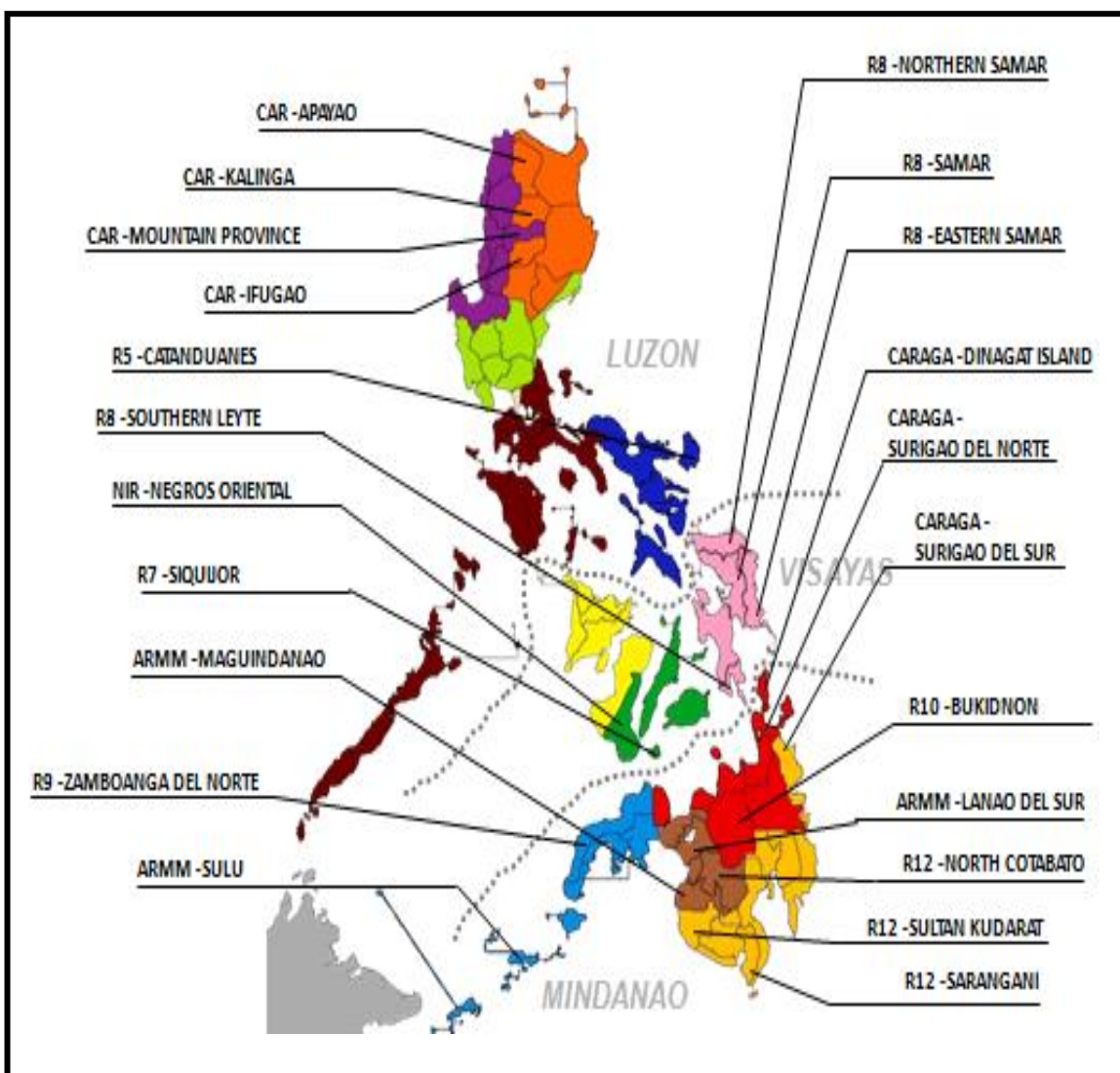
The roadmap has four (4) outcomes, namely: 1) Increased Adaptive Capacities of Vulnerable Communities; 2) Ensured Adequate Supply of Clean Air, Water, and other Natural Resources; 3) Increased Resilience of Critical Infrastructure; and 4) Enhanced Knowledge, Access to Information and Institutional Capacities.

D. Focused Areas

The focus areas of the roadmap are the twenty-two (22) vulnerable provinces, 822 coastal municipalities and the major urban centers (Metro Manila, Cebu, Iloilo and Davao). The prioritization criteria applied are as follows:

For vulnerable provinces and coastal municipalities:

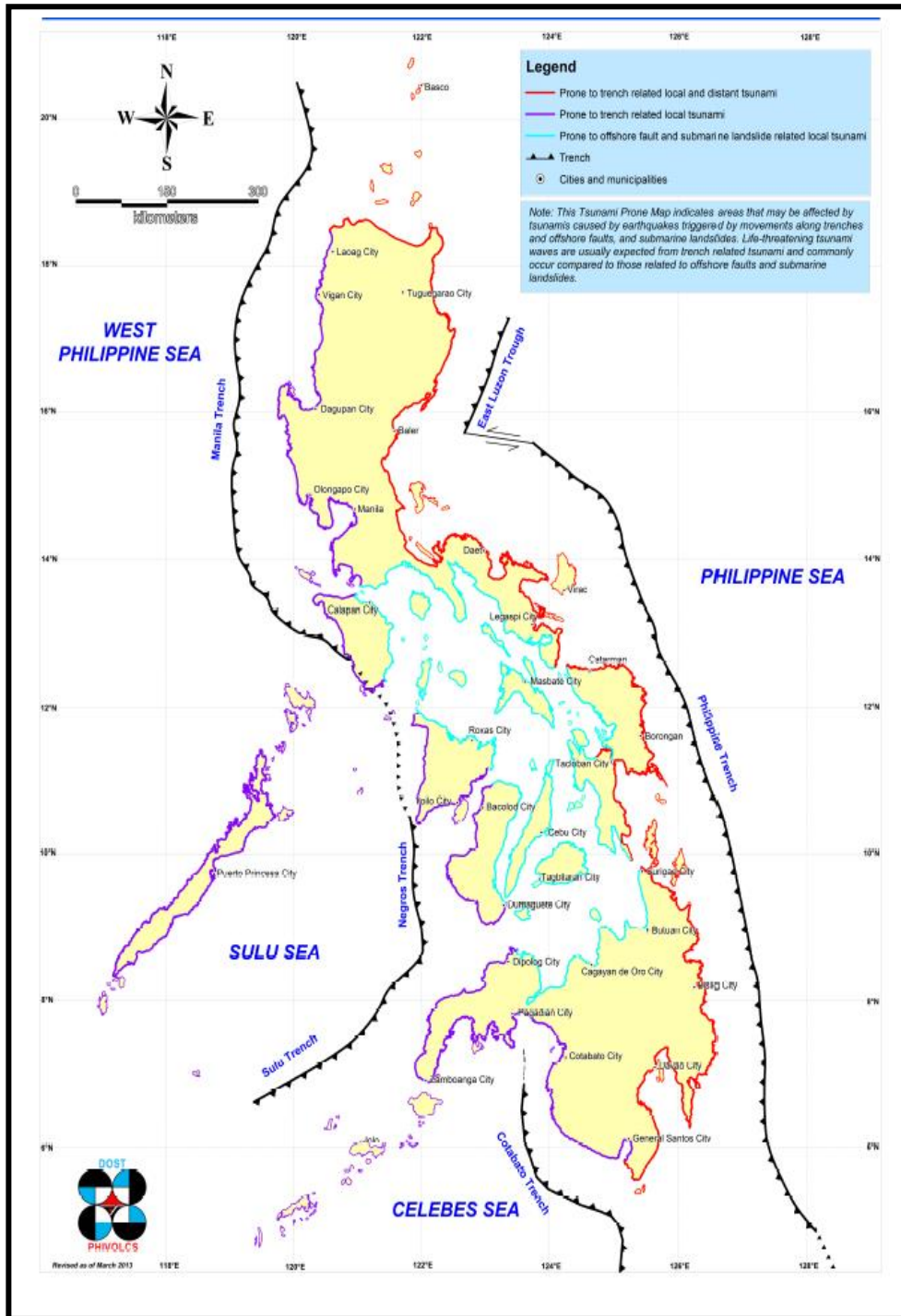
- High poverty incidence;
- High susceptibility or exposure to hazards such as:
 - Drought;
 - Strong winds;
 - Flooding;
 - Rain-induced landslide;
 - Storm surge; and
- Situated in critical and degraded watershed



22 Vulnerable Provinces

The RRP will focus on eight provinces for FY 2019”

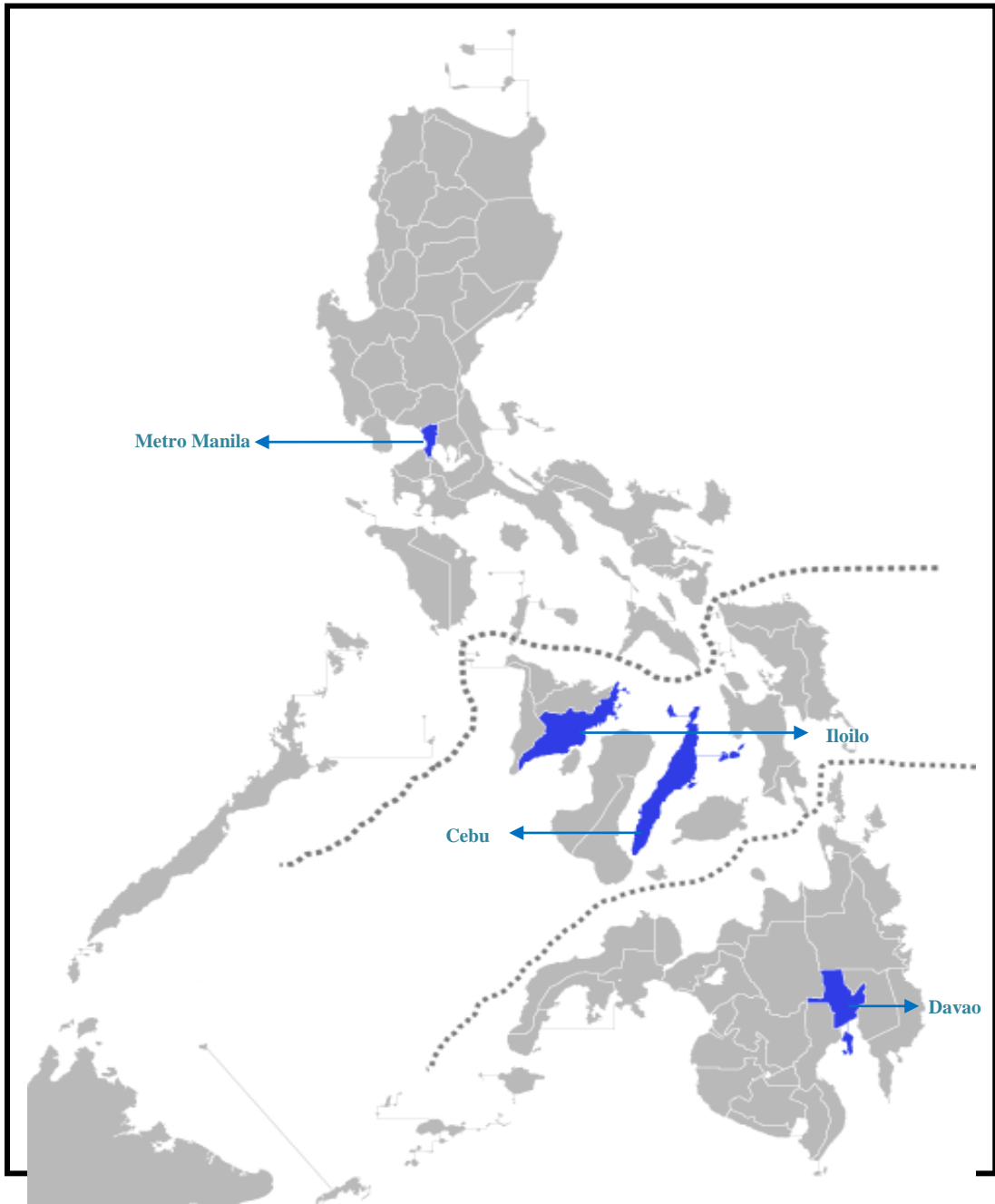
- | | |
|----------------------|--------------------|
| 1. Western Samar | 5. Surigao del Sur |
| 2. Negros Oriental | 6. Dinagat |
| 3. Sarangani | 7. Sorsogon |
| 4. Surigao del Norte | 8. Masbate |



822 Coastal Municipalities

For urban centers:

- Population
- Floods
- Landslides
- Winds from rains
- Sea level rise
- Rain-induced landslides
- Storm surges
- Earthquakes
- Beach erosion
- Tsunami



Major Urban Centers

E. Outcome/Indicator/Program

The indicators and programs for each outcome are presented as follows:

Outcome 1: Increased Adaptive Capacities of Vulnerable Communities

<i>Indicator</i>	<i>Program</i>
1. Percent reduced number of people and families affected by climate and geologic hazards in target communities.	1. Community-Based Disaster Risk Reduction Management (DRRM) Program
2. Percent reduced incidence of climate related diseases	2. Health Program for the prevention and mitigation of Climate-related Diseases
3. Percent increase in income and employment from biodiversity-friendly enterprises and agriculture-based industries in target communities and households	3. Community Livelihood and Enterprise Continuity Program
4. No. of communities with access to environmentally-sound adaptation technologies	4. Disaster Risk Transfer Financing Program
5. Increased number of families and community organizations with access to livelihood and enterprise capital financing and insurance	5. Implement the National Spatial Strategy (NSS) which seeks to address the challenges of agglomeration economies, connectivity and vulnerability.

Outcome 2: Ensured Adequate Supply of Clean Air, Water, and Other Natural Resources

<i>Indicator</i>	<i>Program</i>
1. Increased number and percentage of highly urbanized and other major urban centers compliant to the ambient air quality standards	1.) Air and Water Quality Improvement Program
2. Percentage of priority water bodies within water quality guidelines increased	2.) Integrated Water Resources Management Program
3. Quality and availability of water in water-stresses and drought-prone areas improved	3.) Coastal Resources Management Program
4. Solid waste diversion rate increased	4.) Development of sustainable resource-based industries
5. Percent reduction in the area of denuded and degraded forest areas (M ha, cumulative)	5.) Sustainable Consumption and Production Program
6. Percent increase in forest areas under effective management	6.) Enhancement of green spaces in urban areas
7. Area of priority terrestrial protected areas effectively managed increased	7.) Strengthening of Environmental and social safeguards for mineral resources development
8. Area (hectares) of priority marine protected areas effectively managed increased	
9. Area of priority wetlands effectively managed	
10. No. of incentive mechanisms and market-based instruments for enhanced ecosystem-based management formulated and implemented in priority areas	

Outcome 3: Increased Resilience of Critical Infrastructure

<i>Indicator</i>	<i>Program</i>
1. New and restored protective infrastructures designed and implemented conforming to existing legislation and guidelines (e.g. Structural Codes of the Philippines, DPWH Guidelines)	1.) Resilient Water Supply and Distribution System
	2.) Resilient Food Supply and Distribution Chain
	3.) Resilient Energy Supply and Distribution System
	4.) Resilient Communication Infrastructure Network System/ Program
2. Percent increase in disaster resilient investments	5.) Resilient Schools and Other Educational Facilities
3. Percentage reduction in the number of infrastructures damaged during disasters (such as water supply, energy, search and rescue center, communication and transport facilities, public and private offices, schools, shelters, hospitals, and evacuation centers)	6.) Resilient Road and other Transportation Network System
	7.) Retrofitting and Construction of Resilient Shelter
	8.) Modernization of Government Hospitals
	9.) Resilient Fire Prevention and Response Infrastructure
	10.) Modernization of Search and Rescue Center
4. Percentage reduction in budget utilization for infrastructure repair and rehabilitation (cost-benefit)	11.) Establishing Emergency Government and Financial Center
5. Percentage decrease of areas prone to flooding in selected River Basins with upgraded infrastructure	

Outcome 4: Enhanced Knowledge, Access to Information, and Institutional Capacities

<i>Indicator</i>	<i>Program</i>
<p>1. Percent of climate and hazard information uploaded and accessible in digital platform Additional: Percent of LGUs connected to the Philippine Geoportal</p>	<p>1.) Easy Access to Real Time Understandable and Usable Climate and Natural Hazard Information and Data</p>
<p>2. Utilization rate of web applications including those with offline functions for climate and natural hazard information</p>	<p>2.) Inculcating Climate and Disaster Resilience Consciousness in the Communities</p>
<p>3. Percent of LGUs with VRAs conducted Percent and no of LGUs using updated climate and hazard information in local planning, such as the enhanced CLUP, CDP, LCCAP and LDRRM Plan</p>	<p>3.) Institutionalizing Climate and Disaster Resilience-Oriented Laws and Policies</p>
<p>4. No of schools with curricula and education materials that includes CCAM-DRR concepts and practices</p>	
<p>5. Operational mechanisms and resources for nationwide public awareness plan to stimulate CCAM-DRR developed and implemented Percent of LGUs adopting Early Warning Systems for natural hazards and plans</p>	
<p>6. Percent of LGUs with CC-DRR sensitive plans (CLUP, LCCAP, DDRMP, and other relevant plans) Percent of LGUs with permanent DRRM officers</p>	
<p>7. Percent of non-government and private sector organizations</p>	

<i>Indicator</i>	<i>Program</i>
<p>adopting CC-DRR sensitive plans (such as Business Continuity Plans, others)</p> <p>8. Compliance rate for CC-DRR resilient housing, socializes housing (covered by outcome 3) Suggestion: No. and percent of local government engineers trained on the DPWH 2015 DGCS</p> <p>9. Percent Increase in area coverage of upgraded and modern forecasting equipment Suggestion: Percent of total Philippine area covered by high-resolution multi-hazards maps</p> <p>10. No. of groundwater resource assessments conducted by 2022</p> <p>11. No. of water-related plans and programs using the results of water resource-related R&D results</p> <p>12. National protocol to improve access to government scientific researches and studies, geospatial information, and climate projection developed and implemented No. of seismic and earthquake induced landslide R&D knowledge products and communication, education and public awareness programs implemented</p> <p>13. Percentage coverage of implementation of the Monitoring and Detection of Ecosystems Changes for Enhancing Resilience and Adaptation in the Philippines (MODECERA)</p>	

<i>Indicator</i>	<i>Program</i>
14. Percent area coverage and implementation of improved Weather, Marine Meteorology and Short Range Climate Forecasting	

The projects/activities identified under each of program per outcome are of combination of existing (under GAA) and the proposed projects. Further, these PAPs are categorized as on-going and ideal.

Attached are the annexes for the PAPs identified outcomes, PAPs for 2018 funded and unfunded projects and the 2019-2022 PAPs forward estimates: those to be initiated, continued, expanded & scaled-up and the working documents in finalizing the CCAM-DRR Cabinet Cluster Roadmap.

