

## **Integration of Disaster Risk Reduction and Climate Change Adaptation in the EIA Requirements in the Philippines**

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**ABSTRACT:** Considering that the Philippines is among the countries most vulnerable to natural disasters due to inherent natural hazards, as well as, climate change triggers the integration of Disaster Risk Reduction and Climate Change Adaptation (DRR and CCA) concerns is seen as an important aspect in project planning and development. The Philippine EIS System, having been established and implemented for four (4) decades now was identified as an ideal entry point in mainstreaming DRR and CCA concerns into the regulatory system for project planning and development. The integration was undertaken in 2011 as part of the Country's commitment under the United Nations Framework Convention on Climate Change (UNFCCC) and the priorities set in the Philippine Development Plan. The EIA Technical Guidelines is intended to promote DRR and CCA at the project level as well as to streamline the Environmental Impact Assessment requirements in the Philippines. With its implementation since 2011, various challenges and gaps were identified.

### *1. Introduction*

The Philippines is one of the early adopters of the EIA System. It was perceived in the Philippines in 1977 with the issuance of the Philippine Environmental Policy (PD 1151) that mandates all national government agencies, including government-owned and controlled corporations, firms and entities to prepare an Environmental Impact Statement (EIS) for any project or activity that significantly affects the quality of the environment. The EIA in the Philippines was officially established under Presidential Decree 1586 and referred to as the Philippine Environmental Impact Statement System (PEISS) on June 11, 1978. It is established as a mechanism to attain and maintain an orderly balance between socio-economic growth and environmental protection. Consistent with the thrust for the achievement of optimum economic development, the continuous effective implementation of the PEISS ensures that the present generation meets its needs without compromising the needs and environmental quality of future generations.

As a basic principle, EIA is used to enhance planning and guide decision-making. The EIA in the Philippines is in the context of a requirement to integrate environmental concerns in the planning process of projects at the feasibility stage. Through the EIA Process, adverse environmental impacts of proposed actions are considerably reduced through a reiterative review process of project siting, design and other alternatives, and the subsequent formulation of environmental management and monitoring plans.

Considering that the Philippines is among the countries most vulnerable to natural disasters due to inherent natural hazards, as well as, climate change triggers as discussed in preceding sections, the integration of DRR and CCA concerns is seen as an important aspect in project planning and development. The Philippine EIS System, having been established and implemented for more than three (3) decades now was identified as an ideal entry point in mainstreaming DRR and CCA concerns into the regulatory system for project planning and development primarily because of the following: (1) it is a well-established system where DRR and CCA concerns can readily be integrated; (2) it is a planning tool, required before undertaking or implementing any Environmentally Critical Projects (ECPs) or projects to be located in Environmentally Critical Areas (ECA); and, (3) the current scope of EIAs required under the PEISS also includes some assessments of natural hazards and climate.

In this context and consistent with the Environmental Management Bureau's (EMB) efforts to standardize and rationalize the EIA system, as well as, the Philippine's commitment under the United Nations Framework Convention on Climate Change (UNFCCC), Sendai Framework for Disaster Risk Reduction (SFDRR) and the priorities set in the Philippine Development Plan, EMB MC 2011-005 was signed and enacted.

## *2. Integration of DRR CCA in the Philippine EIS System*

EMB MC 2011-005 provides for the adoption of "*EIA Technical Guidelines incorporating Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) concerns*" (*EIA DRR/CCA Technical Guidelines*) to promote climate change adaptation and disaster risk reduction at the project level.

To guide the project proponents, the EIA DRR/CCA Technical Guidelines in integrating DRR and CCA concerns in the project design was formulated. The guidelines provide mechanism for ensuring that future projects are resilient and that their environmental impacts do not aggravate natural hazards or climate change's effects on human or natural systems, guidance on examining the implications of disaster and climate change risks on proposed projects during the conduct of an EIA; and direction on a sector-specific basis on how disaster risks and climate change are to be considered in an EIA.

With the the integration of DRR/CCA in the EIS System, no additional process was included. Instead it was mainstreamed at the various stages of the EIA process. The mainstreaming of DRR/CCA in the PEISS is focused on integration in assessment of the environmental impact of the project, particularly, the possibility of exacerbating the effects of natural hazards and climate change. The discussion on the effects of natural hazards on the project will be taken in the context of it being a trigger or aggravating factor to a project impact (e.g., inundation of surrounding communities due to dam failure caused by natural hazard).

### *3. Challenges in implementing EMB MC 2011-005*

In 2014, EMB with the aid of Asian Disaster Preparedness Center (ADPC) reviewed and evaluated the implementation of EMB MC 2011-005. Case studies were undertaken and various challenges and gaps were identified. This includes among others the availability of data needed for the impact assessment. Although it was clear in the technical guidelines that data and maps should be sourced from mandated agencies, on some areas in the Philippines there are no available data for a specific location. Most data are on a macro level making it difficult to assess the potential impacts locally. Another, challenge encountered is the undefined monitoring parameters to assess the effectivity of measures instituted. The Environmental Management and Monitoring Plan (EMMoP) provided in the EIS do not include the impacts aggravated by climate change and disaster risk.

### *4. Conclusion*

Most of the projects proponents that integrated Disaster Risk Reduction and Climate Change Adaptation (DRR/CCA) were able to see the benefits of EMB MC 2011-005. The findings in the EIA were integrated in their engineering design to lessen the probable impacts of climate change and disaster risk. The technical guidelines need to be updated to include a more comprehensive guidance to project proponents.

Moreover, since EIA in the Philippines is on a project level, it is difficult to assess the cumulative impacts. DRR and CCA concerns are best integrated for Strategic Environmental Assessment (SEA) to include policy, plans and programs. With the Philippines, being vulnerable to the impacts of climate change and disaster risk, it is logical to look it on holistic approach rather than individual projects. SEA in the Philippines is yet to be conceived but there are already initiatives to do this. The programmatic EIA being practiced is already a stepping-stone to go beyond a project level approach.