MEMORANDUM FROM THE DEPUTY NATIONAL PROGRAM DIRECTOR

FOR : **The REGIONAL DIRECTOR**
Regional Offices CAR, I, III, IV-A, IV-B, V, VI, VII, VIII, IX, X, XI, XII and CARAGA

ATTENTION : **THE REGIONAL PROGRAM MANAGER**
DEPUTY REGIONAL PROGRAM MANAGER
REGIONAL COMMUNITY DEVELOPMENT SPECIALIST
REGIONAL INFRASTRUCTURE ENGINEER
KC-NCDDP

SUBJECT : **GUIDELINES FOR SAFETY FROM HAZARDS AND DEVELOPMENT ACTIVITIES IN THE IMPLEMENTATION OF KC-NCDDP COMMUNITY-IDENTIFIED PROJECTS**

DATE : 08 May 2015

Section 1: INTRODUCTION

1.1 The Kalahi CIDSS - National Community Driven Development Program is committed to helping communities in post Yolanda rehabilitation thru a CDD-based approach that accentuates the role of citizens in DRRM. Global experience shows that communities that are encouraged to participate directly in decision-making and implementation using key elements of the community-driven development approach, has a greater chance to rebuild more sustainably after a disaster.

1.2 The World Bank in 2005 indicated that over a third (36%) of the population in the Philippines was exposed to three or more hazards and nearly three quarters (74%) was exposed to two or more hazards. About 70 percent of the total population live in coastal communities, which is considered high risks to climate-induced hazards including storm surges, sea level rise, and extreme events.

1.3 Typhoon Yolanda struck the Philippines on November 9, 2013. According to an official document of NEDA (Reconstruction Assistance for Yolanda: Implementation for Results), about 490,000 homes were totally damaged by Yolanda and 520,000 homes partially damaged. The high numbers is said to be mainly due to the poor quality of construction, and the location of affected sites, being positioned in coastal areas where the storm surge hit.

1.4 As part of the overall government response to address needs resulting from the damage from Typhoon Yolanda, while at the same time ensuring that rehabilitation efforts are consistent with the principles of building back better as well as ensure improved resiliency from future disasters,

the Joint DENR-DILG-DND-DPWH-DOST Memorandum Circular NO. 2014-01, issued on 05 November 2014 and with subject: **Adoption of Hazard Zone Classification in Areas Affected by Typhoon Yolanda (Haiyan) and Providing the Guidelines for Activities Therein** (herein attached as Annex A), provides specific guidance on the Hazard Zone Classification and Recommended Action (Section 6), and Criteria for Hazard Zone Classification (Section 7).

1.5 To ensure consistency with government rehabilitation efforts, the KC-NCDDP hereby adopts the above-named JMC, and in particular Sections 6 and 7 therein, in (i) determining suitable locations for community subprojects to be proposed for KC-NCDDP support, and; (ii) providing guidance to Area Coordinating Teams (ACT) in assisting communities to make decisions on subprojects, as well as appropriate subproject design options, to address hazards.

Section 2: POLICY BASIS

2.1 These guidelines are based on the following relevant national laws and policies;

a. Republic Act No. 7160, the Local Government Code of the Philippines, Section 20 (c): "*The local government units shall, in conformity with existing laws, continue to prepare their respective comprehensive land use plans enacted through zoning ordinances which shall be the primary bases for the future use of land resources: Provided, that the requirements for food production, human settlements, and industrial expansion shall be taken into consideration in the preparation of the plans.* "

b. Republic Act No. 386, the Civil Code of the Philippines, Article 638: "*The banks of rivers and streams, even in case they are of private ownership, are subject throughout their entire length and within a zone of three meters along their margins, to the easement of public use in the general interest of navigation, floatage, fishing and salvage.*"

c. Republic Act No. 8371, the Indigenous Peoples Rights Act;

i. Section 7 on Rights to Ancestral Domains: *"The rights of ownership and possession of ICCs/IPs to their ancestral domains shall be recognized and protected."*

ii. Section 8 on Rights to Ancestral Lands: *"The rights of ownership and possession of ICCs/IPs to their ancestral lands shall be recognized and protected."*

iii. Section 29 on Protection of Indigenous Culture, Traditions and Institutions: *"The State shall respect, recognize and protect the right of ICCs/IPs to preserve and protect their culture, traditions and institutions. It shall consider these rights in the formulation and application of national plans and policies."*

iv. Section 34 on Right to Indigenous Knowledge Systems and Practices and Develop own Science and Technologies: *"ICCs/IPs are entitled to the recognition of the full ownership and control and protection of their cultural and intellectual rights. They shall have the right to special measures to control, develop and protect their sciences, technologies and cultural manifestations, including human and other genetic*

resources, seeds, including derivatives of these resources, traditional medicines and health practices, vital medicinal plants, animals and minerals, indigenous knowledge systems and practices, knowledge of the properties of fauna and flora, oral traditions, literature, designs, and visual and performing arts."

d. Presidential Decree No. 1067, the Water Code of the Philippines, Article 51: *"The banks or rivers and streams and the shores of the seas and lakes throughout their entire length and within a zone of three (3) meters in urban areas, twenty (20) meters in agricultural areas and forty (40) meters in forest areas, along their margins, are subject to the easement of public use in the interest of recreation, navigation, floatage, fishing and salvage. No person shall be allowed to stay in this zone longer than what is necessary for recreation, navigation, floatage, fishing or salvage or to build structures of any kind."*

e. Presidential Decree No. 1096, the National Building Code of the Philippines, Section 105 on Site Requirements: *"The land or site upon which will be constructed any building or structure, or any ancillary or auxiliary facility thereto, shall be sanitary, hygienic or safe. In the case of site or buildings intended for use as human habitation or abode, the same shall be at a safe distance, as determined by competent authorities, from streams or bodies of water and or sources considered to be polluted; from a volcano or volcanic site and/or any other building considered to be a potential source of fire or explosion."*

f. Presidential Decree No. 705, the Revised Forestry Code of the Philippines, Section 16: *"Areas needed for forest purposes. The following lands, even if they are below eighteen per cent (18%) in slope, are needed for forest purposes, and may not, therefore, be classified as alienable and disposable land, to wit:*

i. Twenty-meter strips of land along the edge of the normal highwaterline of rivers and streams with channels of at least five (5) meters wide;

ii. *Strips of mangrove or swamplands at least twenty (20) meterswide, along shorelines facing oceans, lakes, and other bodies of water, and strips of land at least twenty (20) meters widefacing lakes;*

g. Republic Act No. 10121, the Philippine Disaster Risk Reduction and Management Act of 2010, Section 2 (g): *"Mainstream disaster risk reduction and climate change in development processes such as policy formulation, socio-economic development planning, budgeting and governance, particularly in the areas of environment, agriculture, water, energy, health, education, poverty reduction, land use and/or urban planning, and public infrastructure and housing, among others."*

h. Joint DENR-DILG-DND-DPWH-DOST Memorandum Circular: *"Adoption of Hazard Zone Classification in Areas Affected by Typhoon Yolanda"* ***(Annex A)*** *particularly Section 6. Hazard Zone Classification and Recommended Activities, and; Section 7. Criteria for Hazard Zone Classification"*

i. Environment Management Bureau Memorandum Circular 005 series of 2014*: "Revised guidelines for coverage screening and standardized requirement under the Philippine EIA system particularly section 3b, Technical Definition of Environmentally Critical Area and Corresponding Operations Guide*

Section 3: OBJECTIVES, SCOPE AND COVERAGE

3.1 This document aims to provide guidance to the ACTs in facilitating community decision-making around selecting subprojects, determining appropriate location, and determining and agreeing on options for subproject design, consistent with existing national laws and policies and the principles of building back better, and shall be used in conjunction with processes and activities outlined in the Accelerated and Standard Community Empowerment Process (CEAC) of the Kalahi CIDSS – National Community-Driven Development Program (KC-NCDDP).

3.2 All RPMOs are directed to follow the specific steps, objectives, and general guidelines enumerated in this guidance note.

Section 4: DEFINITION OF TERMS

4.1 Unless otherwise explicitly stated, the following terms as used in these guidelines shall carry the meanings as described below;

Adaptive Capacity - *ability to adjust to climate change to moderate damage, take advantage of opportunities or cope with consequences.* Adaptive capacity is a function of the relative level of a society's economic resources, access to technology, access to climate information, skills to make use of the information, institutions and equitable distribution of resources. In ecosystems, adaptive capacity is closely linked to biodiversity .

Ancestral Domain Sustainable Development Protection Plan (ADSDPP) – is defined in the NCIP Administrative Order No. 1, Series of 2004 as the consolidation of the plans of ICCs/IPs within an ancestral domain for sustainable management and development of their land and natural resources as well as development of human and cultural resources based on their indigenous knowledge, systems and practices.

Comprehensive Land Use Plan – refers to a document that shall determine the specific uses of land and other physical and natural resources, both private and public, within their territorial jurisdiction including areas co-managed with the national government and, as appropriate, management plans for ancestral domains, critical watersheds, river basins, and protected areas. (HLURB CLUP Guidebook Volume 1, 2013)

Community Empowerment Activity Cycle (CEAC) – refers to the five stage community mobilization process of the KC-NCDDP, involving (i) Social Preparation and Participatory Situation Analysis; (ii) Community Planning and Subproject Development and Approval; (iii) Community-managed Implementation and Community-Based Organization (CBO) Formation; (iv) Community Monitoring, and; (v) Transition.

Comprehensive Rehabilitation and Recovery Plan (CRRP) – articulates the over-all strategic vision and integrated short-term, medium-term and, long-term plans and programs across the 171 priority cities and municipalities that were heavily affected by TS Yolanda.

Controlled Zones – for purposes of this guidance notes, these are areas identified in local government zoning ordinances and/or comprehensive land use plans, for controlled use and development due to existence of multiple hazards but where development can be undertaken subject to appropriate mitigating measures and/or engineering interventions.

Environmental and Social Management Framework (ESMF) – the document that presents KC-NCDDP's environmental and social safeguards policies, standards, procedures, tools and monitoring that must be considered for every CDD project proposed and implemented by the community.

Exposure - Character, magnitude and rate of hazard or climate signal to which a system is exposed, normally based on location.

Hazard – a dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihood and services, social and economic disruption, or environmental damage.

Hazard Zones – areas identified in the hazard maps as susceptible to natural hazards such as flooding, rain-induced landslides and storm surges.

Hydro-meteorological hazard map – map indicating the level of susceptibility of areas to natural hazards such as flooding, landslides, storm surge, etc.

Indigenous Knowledge, Systems, and Practices (IKSP) – is defined in the Implementing Rules and Regulations of the Indigenous Peoples Rights Act of 1997 (IPRA), to refer to systems, institutions, mechanisms and technologies comprising a unique body of knowledge evolved through time that embody patterns of relationships between and among peoples, their lands and resource environment, including such spheres of relationships which may cover social, political, cultural, economic, religious spheres, and which are the direct outcome of the indigenous peoples' responses to certain needs consisting of adaptive mechanisms which have allowed indigenous peoples to survive and thrive within their given socio-cultural and biophysical conditions.

No-Build Zone – these are the easement areas defined by the water code, civil code and revised forestry code of the Philippines) except for critical government infrastructure in support of economic development (i.e. ports, fish landings etc).

No Dwelling Zone –areas not recommended for human habitation

Reconstruction Assistance on Yolanda (RAY) - the Government's strategic plan to guide the recovery and reconstruction of the economy, lives, and livelihoods in the affected areas. The objective of the plan is to restore the economic and social conditions of these areas at the very least to their pre-typhoon levels and to a higher level of disaster resilience.[1]

Risk – the combination of the probability of an event and its negative consequences on lives, property, natural resources, infrastructures, livelihood and assets. Risks are classified as high, medium or low depending on the magnitude of consequence or potential impact of the event.

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[1] www.neda.gov.ph

Safe Zone or Suitable Areas – areas identified outside hazard zones and not covered by existing regulations (i.e. water code, civil code, revised forestry code) on human activity and use.

Susceptibility – or sensitivity *degree to which a human or natural system can be affected, negatively or positively, by changes in climate*

Zoning Ordinance – a legally binding set of rules and regulations affirming the usage of the land in a city/municipality. The preparation of a zoning ordinance is based on the Comprehensive Land Use Plan and is enacted by the Local Sanggunian through a resolution.

Vulnerability - is the degree to which a system is susceptible to, and unable to cope with adverse effects of climate change. Vulnerability is a function of exposure to climate stresses, sensitivity and adaptive capacity. Vulnerability increases as the magnitude of climate change or sensitivity increases, and decreases as adaptive capacity increases.

Section 4: SPECIFIC GUIDELINES

4.1 The following table provides specific guidance to the Area Coordinating Team (ACT) in ensuring that resiliency standards and safe settlements issues are surfaced, discussed, and addressed by communities, along the CEAC.

STAGE 1: SOCIAL PREPARATION

Activity	Key Steps	Tools/Forms
1.1 Municipal Orientation (MO)	1.1.1 Prior to the conduct of Municipal Orientation, the Area Coordinating Team (ACT) shall gather data on (i) existing hazards, risks, and vulnerabilities of barangays within their assigned municipality, using available multi-hazard maps, resource assessments and vulnerability assessments undertaken by government and development organizations; (ii) land use classification of specific, hazard-prone areas, using the updated Comprehensive Land Use Plan when available, Zoning Ordinance, and other relevant information. 1.1.2 During the MO, the RPMO with the MDDRMO shall present, discuss, and show examples of areas that are hazard-prone or exposed to risk, and vulnerable areas in the municipality, and the possible issues and concerns that may arise related to locating sub-projects in these areas, as part of the presentation on KC-NCDDP Safeguards Framework and Policies. The RPMO shall also ensure presence of LGU department heads namely the MPDC, MENRO, MSWDO, and Municipal Engineer (ME).	• Hazard Maps • Comprehensive Land Use Map • ADSDPP (where relevant) • OECD Barangay-Based Disaster Management Action Plan • OPLAN LISTO LGU plans to integrate DRR in LGU planning. • KC-NCDDP Safeguards Policies Orientation Materials
1.2 Consultation Meeting (CM)	1.2.1 Prior to CM, the ACT with the assistance of the S/RPMO together with the LGU resource persons (MDRRMO, MPDC, MENRO, MSWDO) shall facilitate analysis of the	• Hazard Maps • Joint DENR-DILG-DND-

Activity	Key Steps	Tools/Forms
	multi-hazard maps, resource assessments, and vulnerability assessments (if available), to be able (i) to determine the hazard-prone and risk-exposed areas within the municipality, and; (ii) if there are settlement areas/barangays that fall under the following classification: • No build Zone • No dwelling Zone • Safe Zone To facilitate analysis, the ACT may prepare a presentation material, or request the MDRRMC to prepare a visual presentation on the information above. The presentations should also capture the impact of the recent disaster. 1.2.2 In areas where the above information are limited or not available, the ACT shall facilitate discussion among participants on identifying risky and vulnerable areas, using the "Simple Risk and Vulnerability Assessment Tool" (Annex B). Locations of high, medium, and low risk areas, in relation to settlements and built-up areas shall be pinpointed on a municipal map. 1.2.3 During the CM, the AC shall explain to the validation team (composed of ACT, MLGU, NGA, CSO and BRT members) that their task will be to validate with community members the results of the analysis of risks and vulnerabilities during the 1st Barangay Assembly.	DPWH-DOST Memorandum Circular: "Adoption of Hazard Zone Classification in Areas Affected by Typhoon Yolanda" • EMB Memorandum Circular 005, 2014
1.3 Community Consultation (1st Barangay Assembly)	1.3.1 During the BA, the MDRRMC representative, assisted by the CEF, shall present and discuss findings on of the analysis on risks and vulnerabilities made during the CM, and the hazards and risks to settlements and other built-up areas in the barangay. Because risk and vulnerability are location specific, the CEF must gather community inputs to the analysis results, which shall be integrated into the hazard maps. To ensure inclusion of vulnerable groups, separate consultations with women, Indigenous People (IP), persons with disabilities, and others should be conducted, for this purpose. In the absence of official hazard maps, the community shall determine the extent of risks and vulnerabilities of settlement sites in their barangay that are posed by hazards. The Criteria for Hazard Zone Classification, as contained in Section 7 of the JMC (Annex A), may be used for this purpose. 1.3.2 In facilitating discussion on possible subprojects to address post-disaster recovery and rehabilitation needs, the CEF shall facilitate screening of sub-project ideas using the "Decision Tool for Determining Allowable Activities based on Site Risks and Vulnerabilities"	• Hazard Maps • Section 6 and 7 of the Joint DENR-DILG-DND-DPWH-DOST Memorandum Circular: "Adoption of Hazard Zone Classification in Areas Affected by Typhoon Yolanda" • MGB Threat Advisories on rain-induced landslides, flooding, and others. • Susceptibility Maps (DOST-

Activity	Key Steps	Tools/Forms
	(Annex C), and show to the community the range of activities that may be "allowable" and "not-allowable", based on the degree of risk and vulnerability posed by specific locations. If the proposed site is identified as within the hazard zone, the ACT should refer to the Hazard Zone Classifications Matrix (Section 6 of the JMC) for corresponding mitigating measures that should be observed and integrated into the subproject design. This matrix shall also be presented to the community during the 1st BA to help them identify the appropriate location or in the absence of other area, the appropriate design for their sub-project. 1.3.3 Settlements shall not be allowed on the no build zones and hazard zones with high risk.	NOAH) • Information from the NAMRIA Geo-Portal. • Other relevant maps (i.e. IP community maps) where available.

STAGE 2: COMMUNITY PLANNNG AND PROJECT PROPOSAL DEVELOPMENT

Activity	Key Steps	Tools/Forms
2.1 Municipal Forum	2.1.1 During the MF, the MDRRMO, assisted by the AC, shall discuss and present the results of the validation during the 1st BA. This is to present, in visual form through maps, the presently existing as well as potential hazards in the municipality, and ensure that all proposed SPs are feasible in terms of safety of site/location, by considering these information in community planning.	• List of priority sub-projects
2.2 Project Proposal Development	2.2.1 In the proposal preparation stage, beginning with the Project Development Workshop (PDW), the ACT shall ensure that all SPs with location under the hazard zone with low and moderate risks shall take into account the guidelines provided on Section 6.1 of the JMC. During the PDW and site visits, the CEF, with the assistance of the Technical Facilitator and representatives of the MDRRMC, shall facilitate screening of sub-project ideas/concepts using the "Community-based Rapid Risk and Vulnerability Checklist" tool (Annex D), to identify factors that need to be considered and integrated into the final choice and/or technical design of subprojects. 2.2.2 Because identified high risk and no build zones are not safe locations for settlements, the ACT together with the MDRRMC and the MLGU, shall facilitate community-led identification of suitable alternative locations, giving due consideration to the Program's safeguards policy on Land Acquisition, Resettlement, and Rehabilitation (LARR), as described in the Environmental and Social Management Framework. 2.2.3 The TF shall ensure the structural soundness of the project as well as the consistency of the sub-project	• Section 6.1 of the Joint DENR-DILG-DND-DPWH-DOST Memorandum Circular: "Adoption of Hazard Zone Classification in Areas Affected by Typhoon Yolanda" • Environmental and Social Management Plan

Activity	Key Steps	Tools/Forms
	design in accordance with applicable standards and codes adapted by the KC-NCDDP. 2.22. The CEF, with the assistance of the TF, shall likewise ensure that the Environmental and Social Management Plan (ESMP) is properly filled out by the PPT (Annex E), with the first draft prepared during, and submitted immediately after the PDW.	
2.3 Community Consultation (2nd Barangay Assembly)	2.3.1 The PPT, with the assistance of the CEF, presents the final project proposal with specified location and design for endorsement to the MIAC. 2.3.2 The CEF shall facilitate realistic time planning and detailed schedule preparation; taking into consideration factors that may require significant programming (i.e. some projects may require materials that are not easily available locally due to new standards). Does this consider the seasonality of some hazards - such as flooding during habagat, etc. 2.3.3 If projects are located in no-dwelling zones or medium to high risk areas, the CEF shall facilitate discussion and community decision-making on formulating local policies to ensure safety of people availing of services from these facilities, including establishing rules on regulating access and use of such facilities, in consideration of seasonality of extreme events, and increasing capacity for disaster preparedness (e.g. policy to closing-off or declare "no-entry" or "limited access to specific persons" during extreme weather events such as typhoons). Such policies should be incorporated into the final Operation and Maintenance (O&M) plan.	
1.1 Subproject Final Technical Review and Approval for Fund Release	1.1.1 The PPT presents to the MIAC the final project proposal. The MIAC conducts final technical review of proposals, with a due attention to consistency of (i) the SP technical design, and; (ii) the SP location, with the guidelines described herein.	

STAGE 3: COMMUNITY MANAGED IMPLEMENTATION AND ORGANIZATIONAL FORMATION AND DEVELOPMENT

Activity	Key Steps	Tools/Forms
3.1 Community-Managed Implementation of Projects	3.1.1 The ACT shall ensure that the mitigating measures reflected in the ESMP are undertaken, and sub-project implementation follows approved design and location. 3.1.2 The TF, in close coordination with the Municipal Engineer (ME) and representatives of the MDRRMC,	• Approved ESMP • SP Design • Work Schedules

Activity	Key Steps	Tools/Forms
	shall undertake close monitoring and supervision of SPs implemented in "no-dwelling" and medium-risk areas. Because the weather may affect implementation activities, the TF, together with the CEF and ME, shall facilitate discussion on policies on "work stoppage" and/or limited work activities during extreme weather events (i.e typhoons). This should be factored into the scheduling of work of CVs.	
3.2 Formation of Community Organization for Operation and Maintenance	3.2.1 The ACT shall include disaster preparedness in the CV orientation and training program. This shall include local policies of the community on regulations on the "no or limited use" of facilities during extreme weather events.	

STAGE 4: COMMUNITY MONITORING AND TRANSITON

Activity	Key Steps	Tools/Forms
4.1 Accountability Reporting	4.1.1 The Accountability Reporting sessions at the end of each cycle shall incorporate discussion of issues arising from new experiences of communities in projects for recovery and rehabilitation with consideration on safety and standards. These lessons shall be considered in formulation of relevant policies for succeeding KC-NCDDP cycles in the municipality.	
4.2 Functionality Audit and Sustainability Evaluation	4.2.1 The Functionality Audit immediately after subproject completion, and subsequent Sustainability Evaluation Tests six month and one year after completion shall include assessment of utilization of projects in no-habitation zones or medium risk areas to draw relevant policy implications.	

For your strict compliance.

ASSISTANT SECRETARY CAMILO G. GUDMALIN

Annex A: JMC

NOV 0 5 2014

JOINT DENR-DILG-DND-DPWH-DOST
MEMORANDUM CIRCULAR
No. 2014-01

SUBJECT : **ADOPTION OF HAZARD ZONE CLASSIFICATION IN AREAS AFFECTED BY TYPHOON YOLANDA (HAIYAN) AND PROVIDING GUIDELINES FOR ACTIVITIES THEREIN**

In line with the Government's effort to promote safety and protection of its people, particularly in the Yolanda (Haiyan) affected areas, the classification of hazard zones susceptible to the onslaught of typhoons, flooding, landslides, and other hydro-meteorological hazards is hereby adopted and the guidelines for activities therein are hereby issued for the information and guidance of all concerned.

Section 1. Basic Policy

1.1 It is the policy of the state to maintain peace and order, protect life, liberty, and property, and promote the general welfare of the people as essential for the enjoyment by all the people of the blessings of democracy.

1.2 It is also the policy of the State to serve, protect and promote the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature.

1.3 It is the policy of the state to uphold the people's constitutional rights to life and property by addressing the root causes of vulnerabilities to disasters, strengthening the country's institutional capacity for disaster risk reduction and management and building the resilience of local communities to disaster including climate change impact.

Section 2. Legal Basis

2.1. Republic Act 386 known as the Civil Code of the Philippines

Art. 638. The banks of rivers and streams, even in case they are of private ownership, are subject throughout their entire length and within a zone of three meters along their margins, to the easement of public use in the general interest of navigation, floatage, fishing and salvage.

2.2 Presidential Decree No. 1067 known as the Water Code of the Philippines

Article 51. The banks or rivers and streams and the shores of the seas and lakes throughout their entire length and within a zone of three (3) meters in urban areas, twenty (20) meters in agricultural areas and forty (40) meters in forest areas, along their margins, are subject to the easement of public use in the interest of recreation, navigation, floatage, fishing and salvage. No person shall be allowed to stay in this zone longer than what is necessary for recreation, navigation, floatage, fishing or salvage or to build structures of any kind.

2.3 Presidential Decree No. 1096, the National Building Code of the Philippines

Section 105. Site Requirements.

The land or site upon which will be constructed any building or structure, or any ancillary or auxiliary facility thereto, shall be sanitary, hygienic or safe. In the case of site or buildings intended for use as human habitation or abode, the same shall be at a safe distance, as determined by competent authorities, from streams or bodies of water and or sources considered to be polluted; from a volcano or volcanic site and/or any other building considered to be a potential source of fire or explosion.

2.4 Presidential Decree No. 705, the Revised Forestry Code of the Philippines

Section 16. Areas needed for forest purposes. The following lands, even if they are below eighteen per cent (18%) in slope, are needed for forest purposes, and may not, therefore, be classified as alienable and disposable land, to wit:

2.4.1 Twenty-meter (20) strips of land along the edge of the normal high waterline of rivers and streams with channels of at least five (5) meters wide.

2.4.2 Strips of mangrove or swamplands at least twenty (20) meters wide, along shorelines facing oceans, lakes, and other bodies of water, and strips of land at least twenty (20) meters wide facing lakes.

2.5 Republic Act No. 10121, the Philippine Disaster Risk Reduction and Management Act of 2010

Section 2 (g). Mainstream disaster risk reduction and climate change in development processes such as policy formulation, socio-economic development planning, budgeting and governance, particularly in the areas of environment, agriculture, water, energy, health, education, poverty reduction, land use and/or urban planning, and public infrastructure and housing, among others.

Section 3. Objectives

3.1 To regulate the activities in hazard-prone areas, particularly those that are within the immediate vicinity of oceans, seas, lakes, rivers and other bodies of water, and unstable slopes;

3.2 To provide guidelines and mechanisms in the determination of appropriate activities and development in hazard prone areas; and

3.3. To provide guidance in the issuance of early warning to residents during typhoons, flooding, and landslides.

Section 4. Definition of Terms

DENR – the Department of Environment and Natural Resources

DILG – the Department of the Interior and Local Government

DND – the Department of National Defense

DPWH – the Department of Public Works and Highways

DOST – the Department of Science and Technology

LGU – the Local Government Units

MGB – the Mines and Geosciences Bureau

NAMRIA – the National Mapping and Resource Information Authority

OCD – the Office of Civil Defense

Yor Info Center - the Yolanda Rehabilitation Scientific Information Center established by the DENR and DOST based at the National Engineering Center, University of the Philippines-Diliman. It is the repository of Yolanda-related scientific information, imageries and maps.

Flood – rise in water level or overflow of a body of water beyond its confines causing inundation of water onto a normally dry area.

Hazard zones – areas identified in the hazard maps as susceptible to natural hazards, such as flooding, rain-induced landslides and storm surges; maybe Low, Moderate or High.

Hydro-meteorological hazard – process or phenomenon of atmospheric, hydrological, or oceanographic nature that may cause loss of life, injury or other health impacts, property damage, loss of livelihood and services, social and economic disruption, or environmental damage. These include: 1) floods; 2) storm surge and; 3) rainfall-induced landslides.

Hydro-meteorological hazard map – map indicating the level of susceptibility of areas to natural hazards, such as flood, landslides, storm surge, etc.

Landslide (rain-induced) – downward movement of a mass of earth, rock, or debris due to gravity and triggered by rainfall.

No-Build Zone – the easement areas defined by the Water Code, Civil Code and Revised Forestry Code of the Philippines excluding areas for critical government infrastructure in support of economic development (i.e., ports, fish landings, etc.).

No Dwelling Zone –areas not recommended for human habitation.

Safe Zone – areas identified outside hazard zones and not covered by existing laws (i.e., Water Code, Civil Code, Revised Forestry Code) on human activity and use.

Storm surge – abnormal rise of sea water over and above the astronomical tide due to the presence of a storm. This rise in water level can cause heavy flooding in coastal areas, particularly when extreme storm surges coincide with high tide reaching twenty (20) feet or six (6) meters in some cases.

Section 5. Roles and Responsibilities

5.1 Department of Environment and Natural Resources

5.1.1 Prepare and make available, through the Mines and Geosciences Bureau in coordination with the DOST, the geohazard (rain-induced landslide and flood) maps of the 171 cities and municipalities affected by Typhoon Yolanda (Haiyan), at a scale of 1:10000;

5.1.2 Integrate, through the National Mapping and Resource Information Authority (NAMRIA), all hazard maps and make available to all government agencies concerned the multi-hazard maps at the scale of 1:10000;

5.1.3 Establish, through NAMRIA, a segment in the Geoportal for the multi-hazard maps for access of all concerned;

5.1.4 Demarcate on the ground, through the Regional Offices in coordination with DND, DILG and DPWH, the easements for all water bodies provided and required by law;

5.1.5 Establish, together with DND, DILG, DOST and DPWH, visible warning signages on areas identified as high hazard zones.

5.2 Department of the Interior and Local Government

5.2.1 Issue instructions to the LGUs for the adoption of the hydro-meteorological hazard maps as basis for declaration of Safe, No-Dwelling and No-Build Zones through the issuance of local ordinance/s;

5.2.2 Consider hydro-meteorological hazard maps in the preparation of the Comprehensive Land Use Plan (CLUP) of the LGUs concerned;

5.2.3 Strictly implement the allowable activities within the legal easements;

5.2.4 Provide the DENR-NAMRIA with the CLUPs and zoning maps of all LGUS, in GIS ready format;

5.2.5 Provide security during the demarcation of easement and installation of warning signages, particularly on areas with peace and order problem; and

5.2.6 Pursue Information, Education and Communication (IEC) campaign on the multi-hazard maps together with DND-OCD and other government agencies.

5.3 Department of National Defense

5.3.1 The DND, through the Office of Civil Defense (OCD), shall develop and ensure implementation of standard operating procedures in carrying out disaster risk reduction programs including preparedness, mitigation, response and rehabilitation works, relative to the provisions herein;

5.3.2 Ensure that the LGUs, through the Local Disaster and Risk Reduction and Management Offices (LDRRMO) are properly informed and adhere to the national standards and programs;

5.3.3 Ensure that government agencies and LGUs give top priority and take adequate and appropriate measures in disaster risk reduction and management;

5.3.4 Pursue IEC campaign on the multi-hazard maps together with DENR, DILG, DND-OCD, DOST, and other government agencies; and

5.3.5 Assists the DILG in the monitoring of the adoption of this JMC by the LGUs.

5.4 Department of Public Works and Highways

5.4.1 Provide guidelines, criteria and standards on structural engineering measures for infrastructure in areas identified as hazard zones;

5.4.2 Approve design plans for government infrastructures proposed to be constructed on hazard prone areas; and

5.4.3 Provide DENR-NAMRIA with all the maps of road networks, bridges and flood control and drainage systems along national roads.

5.5 Department of Science and Technology

5.5.1 Prepare and make available the hazard maps of the 171 cities and municipalities affected by Typhoon Yolanda (Haiyan) involving storm surge, and other natural hazards at a scale of 1:10000 or better;

5.5.2 Provide DENR-NAMRIA with all hazard maps for integration into a multi-hazard map and inclusion in the Geoportal;

5.5.3 Provide DENR-NAMRIA with the raw very high resolution images and LiDAR DTMs and DSMs; and

5.5.4 Conduct continuing science-based assessment and modeling of hydro-meteorological hazards zones/areas for integration with DENR-MGB maps.

Section 6. Hazard Zone Classification and Recommended Activities

6.1 Hazard Zone Classifications and Recommended Actions

HAZARD	HAZARD ZONE		
	LOW	MODERATE	HIGH
FLOOD	During impending flood events, people may stay in their dwellings and workplace provided that these are structurally sound and early warning system and preparedness plans are in place. Evacuation centers should not be established in this zone unless these are structurally sound and have vertical evacuation capabilities.	During impending flood events, all people except disaster response personnel should not be in this zone. Evacuation centers should not be established in this zone.	During impending flood events, all people except disaster response personnel should not be in this zone. Evacuation centers should not be established in this zone.

HAZARD	HAZARD ZONE		
	LOW	MODERATE	HIGH
FLOOD	Dwelling and development may be allowed provided possible flood heights and structural integrity are considered in the design	Dwelling and development may be allowed provided that possible flood heights and structural integrity are considered in the design.	Floodplains should be used as retention basins to accommodate swelling of rivers. These places may be transformed into recreational areas, such as parks, etc., provided possible flood heights are considered in the design. Appropriate flood control mitigation structures, i.e., dikes, revetments, spur dikes, detention tanks, may be recommended and approved by DPWH Recommended as not suitable for commercial, industrial, residential (subdivisions), and institutional developments. Flood warning signages should be installed in this zone.
LANDSLIDE	Dwelling and development may be allowed provided that continuous monitoring of the slope (upslope and on site) is conducted. Evacuation centers should not be established in this zone unless appropriate engineering intervention measures are implemented with continuous monitoring.	Dwelling and development may be allowed provided that appropriate engineering intervention measures are made with continuous monitoring. Evacuation centers should not be established in this zone.	Dwelling should not be allowed. Critical facilities may be allowed provided that appropriate engineering intervention measures are implemented with continuous monitoring. Evacuation centers should not be established in this zone Landslide warning signages should be installed in this zone.

HAZARD	HAZARD ZONE		
	LOW	MODERATE	HIGH
STORM SURGE	Dwelling may be allowed and residents may stay in their homes during impending storm surge events provided that their houses have a second floor, and are structurally sound Evacuation centers should not be established in this zone unless it has vertical evacuation capabilities	Dwelling may be allowed but during impending storm surge events, all residents should not be in this zone Evacuation centers should not be established in this zone	During impending storm surge events, all people should not be in this zone. Evacuation centers should not be established in this zone. Natural and man-made coastal defences, such as mangroves (soft interventions), break water (hard interventions), etc. should be established. Recommended as not suitable for commercial, industrial, residential (subdivisions), and institutional developments Storm surge warning signages should be installed in this zone.

6.2 Limitations

As provided for by existing laws, no building activities, except for critical facilities, shall be allowed in the following

6.2.1 Legal easements

6.2.1.1 Urban areas - three (3) meters easement from riverbanks or shorelines;

6.2.1.2 Agricultural areas - twenty (20) meters easement from riverbanks or shorelines

6.2.1.3 Forest areas - forty (40) meters easement from riverbanks or shorelines

6.2.2 Areas for forest protection purposes

6.2.2.1 Twenty-meter (20) strips of land along the edge of the normal high waterline of rivers and streams with channels of at least five (5) meters wide; and

6.2.2.2 Strips of mangrove or swamplands at least twenty (20) meters wide, along shorelines facing oceans, lakes, and other bodies of water, and strips of land at least twenty (20) meters wide facing lakes.

Section 7. Criteria for Hazard Zone Classification

The hazard zone classification is based on the following criteria as provided by the agencies concerned:

7.1 Landslide

7.1.1 High landslide susceptibility – areas with steep to very steep slopes and underlain by weak materials, recent landslides, escarpments and tension cracks, as well as numerous old/inactive landslides; also includes areas that can be affected by landslide debris (debris flow path/possible accumulation zones).

7.1.2 Moderate landslide susceptibility – areas with moderately steep slopes. Soil creep and other indications of possible landslide occurrence are present.

7.1.3 Low landslide susceptibility – gently sloping areas with no identified landslide

7.2 Flood

7.2.1 High flood susceptibility - areas likely to experience flood heights of greater than one (1) meter and/or flood duration of more than three (3) days. These areas are immediately flooded during heavy rains of several hours; includes landforms of topographic lows, such as active river channels, abandoned river channels and area along river banks; also prone to flashfloods.

7.2.2 Moderate flood susceptibility - areas likely to experience flood heights greater than 0.5 up to one (1) meter and/or flood duration of more than one (1) to three (3) days. These areas are subject to widespread inundation during prolonged and extensive heavy rainfall or extreme weather condition. Fluvial terraces, alluvial fans and in-filled valleys are areas moderately subjected to flooding.

7.2.3 Low flood susceptibility - areas likely to experience flood heights of 0.5 meter or less and/or flood duration of less than one (1) day. These areas include low hills and gentle slopes. They also have sparse to moderate drainage density.

7.3 Storm Surge

7.3.1. High storm surge susceptibility – areas that are likely to experience storm surge flood heights greater than one and a half (1.5) m. These include low-lying coastal regions, coastlines with concave shape, wide and shallow-sloped continental shelves and shallow bays.

7.3.2 Moderate storm surge susceptibility – areas that are likely to experience storm surge flood heights of 0.5 to one and a half (1.5) meters. These include coastlines with convex shape and narrow and steep-sloped continental shelves.

7.3.3 Low storm surge susceptibility – areas likely to experience storm surge with flood heights of 0.5 meters or less. This includes inland areas that are not adjacent to the sea and have elevations generally higher than the mean sea level.

7.4 Other Hazards

Other hazards not considered in this Joint Memorandum Circular, such as earthquakes, volcanic activities, and ground subsidence shall be provided by the mandated agencies concerned.

Section 8. Implementation

8.1 Production of Hazard Maps

8.1.1 Standardization of the format of existing maps of DOST and DENR for easier understanding of target clientele, particularly the LGUs;

8.1.2 Integration of hydro-meteorological hazard model simulations with DENR-MGB data to maximize use of high resolution topographic data (i.e., LIDAR and IFSAR);

8.1.3 Completion of the hydro-meteorological hazard maps for the 171 municipalities and cities affected by Typhoon Yolanda by DENR and DOST by December 2014; and

8.1.4 Use of the DENR-MGB and DOST integrated hazard maps in determining areas susceptible to flooding, landslides and storm surges.

8.2 Implementation Strategy

8.2.1 Provision of the standardized maps to the LGUs and other stakeholders by the Yolanda Rehabilitation Scientific Information Center (YoR Info Center);

8.2.2 Refinement and updating of hazard maps and corresponding action plans and inclusion in the Disaster Risk Reduction Management (DRRM) plans of each LGU with technical information from DENR and DOST;

8.2.3 Development of hazard assessment training module and map appreciation exercises for the Information, Education Campaign (IEC);

8.2.4 Conduct of IEC by DENR, DILG, DOST, DPWH, and DND-OCD as lead agency;

8.2.5 Monitoring of the implementation of this Joint Memorandum Circular by the Inter-Agency Committee with DILG as Lead Agency; and

8.2.6 Provisions of fund by the respective agencies for the effective implementation of JMC.

To ensure the development of the standardized maps and understanding by the target clientele, especially the LGUs, an Inter-agency Committee and Technical Working Group composed of representatives of DENR, DILG, DPWH, DOST and DND shall be created. The Inter-Agency Committee shall define the functions of the TWG and supervise its activities.

This Joint Memorandum Circular shall take effect immediately.

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
SENR038297

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VTG-147157

Annex B:

Simple Risk and Vulnerability Assessment Tool

The conduct of risk and vulnerability assessment combines scientific information provided by mandated government agencies such as PAGASA, MGB and Philvocs, with information coming from local sources primarily the LGU and the communities, including indigenous peoples. The assessment areas based on type of hazards are those which are commonly occurring and do not as yet include all possible hazards that are caused by climate change specifically those that are slow and creeping in terms of characteristics such as sea level rise or long droughts.

In using the tool, the ACT is advised to gather data at the level of the barangay and sitios as hazards are location specific and depends on the topography and physical geographic characteristics such as type of soil, hydrology, and presence of forests.

Assessment Areas based on Type of Hazards	Methodology	Source	Description of Hazard[2]	Scale of Risk (Rate from 1-5)[3]
1. Landslide	(i) Analysis of available and relevant primary data and secondary official data, Hydro-Meteorological hazard maps, and community maps (where available); (ii) Conduct of FGD	MGB, DOST-NOAH, LGU, Communities		
2. Flooding	(i) Analysis of available and relevant primary data and secondary official data, Hydro-Meteorological hazard maps, and community maps (where available); (ii) Conduct of FGD	MGB, DOST-NOAH, LGU, communities		
3. Storm Surge	(i) Analysis of available and relevant primary data and secondary official data, Hydro-Meteorological hazard maps, and community maps (where available); (ii) Conduct of FGD	DOST-PAGASA, DOST-NOAH, LGU, communities		

[2] Describe the impact or extent of the effect, number of affected persons and historical frequency
[3] Rating: 5 – high risk; 4 - high to medium risk; 3 - medium to low risk; 2 - low risk, and; 1 - safe

4. Earthquake	(i) Analysis of available and relevant primary data and secondary official data, Multi-hazard maps, and community maps (where available); (ii) Conduct of FGD	Philvocs, LGU, communities		
5. Tsunami	(i) Analysis of available and relevant primary data and secondary official data, Hydro-Meteorological and Geological hazard maps, and community maps (where available); (ii) Conduct of FGD	Philvocs, DOST-PAG ASA, LGU, Communities		
6. Subsidence/Sink holes	(i) Analysis of available and relevant primary data and secondary official data, Hydro-Meteorological and Geological hazard maps, and community maps (where available); (ii) Conduct of FGD	MGB, LGU, communities		
7. Others	(i) Analysis of available and relevant primary data and secondary official data, Hydro-Meteorological and Geological hazard maps, and community maps (where available); (ii) Conduct of FGD	DA, PAGASA, DENR, MGB, LGU, communities		

Annex C:

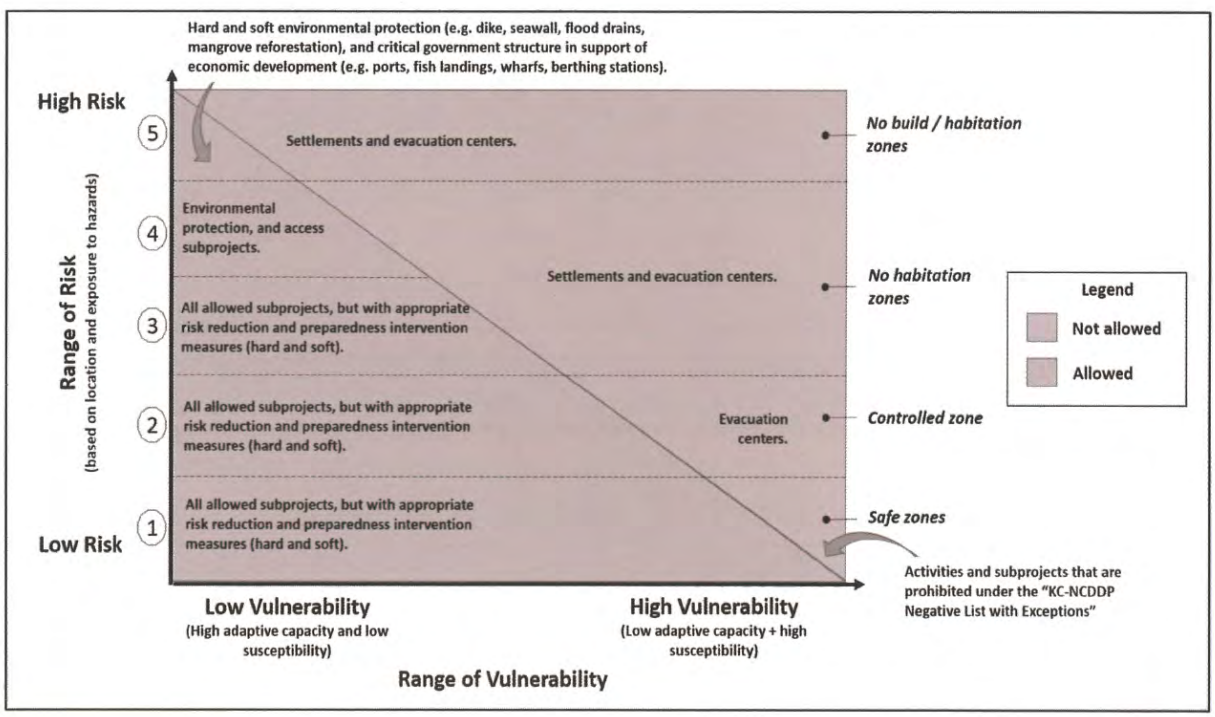
Decision Tool
for
Determining allowable activities based on degree of site risks and vulnerability

Overview:

This tool (i.e. matrix) attempts to capture risk and vulnerability factors derived from the guidance provided by the Joint DENR-DILG-DND-DPWH-DOST Memorandum Circular: *"Adoption of Hazard Zone Classification in Areas Affected by Typhoon Yolanda",* for use in deciding on allowable development activities in locations with varying degrees of risk and vulnerability to natural hazards.

The JMC addresses 3 hazards (flooding, landslide and storm surge) and provides guidelines on development activities based on classification of risks (high, medium and low).

The matrix provides simple parameters for communities to analyze the operational implications of the choice of development activities (i.e. subprojects) they will make, and help them to decide whether to proceed or not to proceed ("Go-No Go decision") with a proposed community project, based on available information on risks and vulnerabilities, consistent with the JMC and other relevant national, local, and program-specific policies.



Using the tool/matrix:

The most ideal use of this tool is in combination with geological, hydrological, and meteorological-hazard or multi-hazard maps of the municipality/barangay, with at least a scale of 1:20,000. If multi-hazard maps are not available, then the community will have to be the sole basis for information on the hazard history of specific locations within the barangay and the municipality, as well as on the assessment of risk exposure and vulnerability of settlements and built-up areas within these locations.

Use of this tool is designed to be facilitated by the CEF (if used during a barangay meeting/assembly) or the AC (if used during a municipal-level meeting). The tool will be used differently, depending on the availability of geo-hazard or multi-hazard maps at the appropriate, useable scale. If these maps are available, proposed subprojects and their locations should be checked against the maps, and a decision taken on whether to proceed or not to proceed with the subproject proposed, consistent with both national, local, and program-specific policies and guidelines.

In situations where maps of the appropriate scale are limited or not available, the matrix/tool may be used through the following process;

How to facilitate simple mapping of hazards by community members and volunteers:

1. Facilitate a community-mapping exercise with community volunteers/members. The map should be as detailed as possible, showing important features of the community or barangay. Most barangays have a barangay map. Local communities, including IP groups, may also have their own community maps, prepared through different exercises, which can be used as inputs in this stage. If these are in a large enough format (e.g the size of a bulletin board), use this instead, or copy the map onto a large sheet of craft paper or manila paper.

2. Using the map prepared, facilitate discussion among the community members/volunteers of extreme events (this can be geological, hydrological, or meteorological) they have experienced in the past. Encourage them to recall events as far back into the past as they can remember (in this exercise, it would be good to have older members of the community present). Separate discussions may be held with vulnerable groups such as women, indigenous people, persons with disabilities, to get their unique perspectives and inputs. Ask participants to locate (i) where these events took place, and; (ii) the extent of effect of the event, both in terms of the area, and the number of people affected. Mark these on the map. Note that the events may be different in nature (i.e. flooding, land slide, earthquake, sinkhole, storm surge, strong winds, etc.). These should be represented differently in the map, either using a different color marker or crayon, or a different colored card. Better yet and if available, clear plastic sheets may be used as an overlay on the maps, with different sheets for different types of events.

3. Once the map is completed, facilitate discussion among the community (with separate discussions for vulnerable groups) on the criteria to be used for designating specific areas of the community or barangay as (i) high risk; (ii) high to medium risk; (iii) medium to low risk; (iv)

low risk, and; (v) safe and/or suitable, based on the results of their mapping exercise. The criteria used by national government agencies (such as the MGB and NDRRMC) or the local government unit, if these are available, should also be explained and discussed.

4. Using the criteria agreed, facilitate discussion and agreement on designating specific areas as (i) high risk; (ii) high to medium risk; (iii) medium to low risk; (iv) low risk, and; (v) safe/suitable. Plot these areas down on the map. Take care to capture the inputs of vulnerable groups. Conduct separate discussions with these groups if needed.

5. Use this community-prepared map of hazard areas in conjunction with the matrix above in making decisions on subproject choices.

Using the matrix for decision-making on subproject choices based on location:

In facilitating community discussion and decision-making on the range of activities that can be implemented in high, medium, and low risk areas, using the hazard maps and the decision-matrix above, the following should be considered;

1. In areas identified as "No Build Zones", particularly those areas covered by the policies on easements as contained in the water code and other national laws, and with "High" risk and vulnerabilities from hazards and climate-induced stressors (e.g. flooding, landslides and storm surge), there should be no new activities to be developed nor will there be any rehabilitation of existing public facilities. Settlements within these areas are discouraged. However, activities that can strengthen resilience of biophysical systems such as mangrove and forest reforestation, riverbanks and shore protection, flood drain canals, and other similar projects can be undertaken with due consideration on technical requirements.

2. As the designation of areas as "No Build Zones" depend on (i) the legal prohibition on easements as contained in various national policies, and; (ii) vulnerability to multiple hazards, there may be areas within "No Build Zones" that are (i) outside of the legally-designated easements, and; (ii) are classified as "medium risk". These areas should be declared "no habitation areas". A limited set of activities can be undertaken within these areas, but under a "conditional go".

3. A "conditional go" decision means that the location is exposed to a certain level of risk – within either of two ranges; (i) high to medium range of risk, or; (ii) medium to low risk – but where the risk can be mitigated and/or managed depending on how the project will be designed. Projects to be implemented in these areas should be designed and implemented in strict adherence to standards that will be up to par with (i) identified level of hazards, and; (ii) future projections of climate-induced events such as typhoons, sea level rise, and increase volume of precipitation. The effective use of information on identified risks (including future scenarios) in enhancing the design and standards of vertical structures in particular should be a key facilitation agenda of ACTs. This requires that KC-NCDDP Program, through its regional and

sub-regional offices, closely coordinate with the mandated agencies such as DPWH, DEPED, DOH, and DENR, for specific technical inputs and standards.

4. No evacuation centers should be constructed in "No Build Zones" and "No habitation areas".

5. Activities in areas classified as "safe zones" should be taken with caution, as the classification of these areas are based thus far on only three hazards (i.e. flooding, landslide, and storm surge). The behavior and path of extreme events, such as Yolanda, cannot be projected way in advance. Therefore, due consideration should be made in the choice of location, and the design of projects for areas classified as safe zones but with high vulnerabilities, especially of poor communities, indigenous peoples, and remote upland communities.

6. Addressing vulnerabilities of the affected community members, and the local government unit, whose exposure and sensitivity to hazard may be high, should likewise ba part of the facilitation agenda of the ACT. Discussions on how to incorporate activities related to increasing the level of preparedness of LGUs (such as capacity building, communication and information system for quick action and response, etc.) and communities (such as mapping of evacuation routes and installation of community-based early warning systems, among others), should be incorporated into the facilitation plan of the ACT. In addition, some LGUs may have already formulated their CCA-DRR plans, based on prior risk and vulnerability assessments, which preceded Yolanda. The ACT should be able to consult these plans, and assist the LGU in (i) assessing the integrity of the researches and scientific studies from which the plans were formulated, and; (ii) update these plans, if needed.

7. Classification of risks follows the standards set by relevant agencies on landslides, flooding, and storm surge. (referring to the color coded signals attached to the advisories)

Annex D:

Community-based Rapid Risk and Vulnerability Check for NCDDP Projects

Procedures in filtering the location of community-identified projects and ensuring that standards on structures are in accordance with the JMC issued to guide development activities in Yolanda-affected areas.

Question			Required Procedure
Step 1: Filter for type of activity and Safety of Location	***Yes***	***No***	
1.1 Is the proposed project a new project to be located in a no-build zone?			If yes, proceed to 2.1. If no, proceed to 1.2.
1.2 Is the proposed project a new project to be located in an identified high-risk area as defined by multi-hazard map issued by MGB?			If yes, proceed to 2.2. If no, proceed to 2.3.
1.3 Is the proposed project an old project for rehabilitation and located in a no build zone?			If yes, proceed to 2.1. If no, proceed to1.4.
1.4 Is the proposed project an old project for rehabilitation and located in an identified high-risk area as defined by multi-hazard map issued by MGB?			If yes, proceed to 2.2. If no, proceed to 2.3.
Step 2: Check for Standards and Design	***Yes***	***No***	
2.1 If in a no build zone			
2.1.1 Does the proposed project involve on-site construction or rehabilitation of assets such as irrigation systems and small ports or docking areas, considered crucial to the economic activity of the area and the			If yes, ensure that standard designs for structures meet technical requirements based on Building Code and new issuances for Yolanda affected areas. If no, proceed to 2.1.2.

	livelihoods of community members?			
2.1.2	Is the proposed project meant to address risk reduction of exposure or sensitivity to a hazard, can be considered as an adaptation measure? (e.g. dikes, sea wall, mangrove reforestation)			If yes, ensure that standard designs for structures meet technical requirements based on Building Code and new issuances for Yolanda affected areas. If no, proceed to 2.1.3.
2.1.3	Does the proposed project involve construction, repair, and/or rehabilitation access facilities? (e.g. access roads and trails, footpaths, bridges)			If yes, If yes, ensure that standard designs for structures meet technical requirements based on Building Code and new issuances for Yolanda affected areas.. If no, proceed to 2.1.4.
2.1.4	Does the proposed project involve the rehabilitation of existing vertical public infrastructure considered as essential for the delivery of basic services such as health and education, or for disaster response? (e.g. school building, daycare centers evacuation centers)			If yes, no go. If no, proceed to 2.1.5.
2.1.5	Does the proposed project involve on-site rehabilitation of existing human settlements involving community members?			If yes, no go. If no, proceed to 2.1.6.
2.1.6	Does the proposed project involve resettlement of existing human settlements involving community members?			If yes, proceed to 3.2. If no, proceed to 3.1.
2.2 If outside the no build zone but in high risk, no habitation zone.				

2.2.1	Does the proposed project involve on-site construction or rehabilitation of assets such as irrigation systems and small ports or docking areas, considered crucial to the economic activity of the area and the livelihoods of community members?			If yes, ensure that standard designs for structures meet technical requirements based on Building Code and new issuances for Yolanda affected areas. If no, proceed to 2.2.2.
2.2.2	Is the proposed project meant to address risk reduction of exposure or sensitivity to a hazard, can be considered as an adaptation measure? (e.g. dikes, sea wall, mangrove reforestation)			If yes, ensure that standard designs for structures meet technical requirements based on Building Code and new issuances for Yolanda affected areas. If no, proceed to 2.2.3.
2.2.3	Does the proposed project involve construction, repair, and/or rehabilitation access facilities? (e.g. access roads and trails, footpaths, bridges)			If yes, If yes, ensure that standard designs for structures meet technical requirements based on Building Code and new issuances for Yolanda affected areas.. If no, proceed to 2.2.4.
2.2.4	Does the proposed project involve the rehabilitation of existing vertical public infrastructure considered as essential for the delivery of basic services such as health and education, or for disaster response? (e.g. school building, daycare centers evacuation centers)			If yes, no go. If no, proceed to 2.2.5.
2.2.5	Does the proposed project involve on-site rehabilitation of existing human settlements involving community members?			If yes, no go. If no, proceed to 2.2.6.

2.2.6	Does the proposed project involve resettlement of existing human settlements involving community members?			If yes, proceed to 3.1 and 3.2. If no, proceed to 3.1.
2.3 If in a moderate risk, no habitation zone, or low risk controlled zone.				
2.3.1	Does the proposed project involve on-site construction or rehabilitation of assets such as irrigation systems and small ports or docking areas, considered crucial to the economic activity of the area and the livelihoods of community members?			If yes, ensure that standard designs for structures meet technical requirements based on Building Code and new issuances for Yolanda affected areas. If no, proceed to 2.3.2.
2.3.2	Is the proposed project meant to address risk reduction of exposure or sensitivity to a hazard, can be considered as an adaptation measure? (e.g. dikes, sea wall, mangrove reforestation)			If yes, ensure that standard designs for structures meet technical requirements based on Building Code and new issuances for Yolanda affected areas. If no, proceed to 2.3.3.
2.3.3	Does the proposed project involve construction, repair, and/or rehabilitation access facilities? (e.g. access roads and trails, footpaths, bridges)			If yes, ensure that standard designs for structures meet technical requirements based on Building Code and new issuances for Yolanda affected areas. If no, proceed to 2.3.4.
2.3.4	Does the proposed project involve the repair, rehabilitation of existing public infrastructure considered as essential for the delivery of basic services such as health, education, water and sanitation? (e.g. school building, daycare centers, health clinics, water			If yes, ensure that standard designs for structures meet technical requirements based on Building Code and new issuances for Yolanda affected areas. If no, proceed to 2.3.5.

systems)			
2.3.5 Does the proposed project involve construction of evacuation centers?			If yes, no go. If no, proceed to 2.3.6.
2.3.6 Does the proposed project involve on-site rehabilitation of existing human settlements involving community members?			If yes, no go. The project can only be allowed in safe zones. Proceed to 3.2. below. If no, proceed to 2.2.6.
2.3.7 Does the proposed project involve resettlement of existing human settlements involving community members?			If yes, proceed to 3.1 and 3.2. If no, proceed to step 3.
Step 3: Check for Strategic Adaptation	***Yes***	***No***	
3.1 Is the proposed project a new activity, which will continuously expose community members to a hazard or a potential event?			If yes, ensure that standard designs for structures meet technical requirements based on Land Use, Building Code and new Check rules and regulations for declaration of and conditions for no-dwelling zones and consider this in design and policies. The project may proceed on condition that proper coordination with other relevant agencies should be included as part of the project development and implementation activities. If no, the project may proceed, on condition that it is not specifically prohibited in the negative list, with exemptions.
3.2 Is the project a risk reduction and adaptation measure that will strengthen resiliency of communities, local government units, essential public infrastructures, and natural ecosystems and habitats (e.g. relocation of settlements; watershed			If yes, this is a development activity which will require the cooperation and collaboration of other agencies and development partners. The project may proceed on condition that proper coordination with other relevant agencies should be included as part of the project development

management; construction of dikes, evacuation centers and the like)			and implementation activities. If no, the project may proceed, on condition that it is not specifically prohibited in the negative list, with exemptions.

Annex E:

Environmental and Social Management Plan (ESMP) and Mitigating Measures for Eligible Sub-projects under the KC-NCDDP

(_____ Barangay, Municipality of _____ Province of _____, Region _____)

NOTE: Summary of consultations (signed by community empowerment facilitator) must be attached with the following information for each consultation: (i) date of consultation; (ii) venues of consultation; (iii) who are the participants (for example: residents of the barangay, women, indigenous peoples, etc.), number of participants (number of women, number of men, number of members of ethnic minority/indigenous peoples); (iv) topics discussed; (v) issues and questions raised by participants; (v) conclusion on issues and questions raised

Potential Impacts	**Mitigation/ Enhancement Measures**	**Monitoring Parameter**	***Responsible Entity***	***Implementation* Schedule**	**Cost and Source of Funds**	**Remarks**
Phase 1: Planning, Development, and Pre-Implementation/Pre-Construction Phase						
1.1 In Compliance with: **Govt. Policies on a) Program policies on participation of women, and Gender and Development, and; b) GOP: RA 7192 Women in Development and Nation Building;**						
1.1.1 1.1.2 …						
1.2 In compliance with **RA 8371 Indigenous Peoples Rights Act (IPRA) and NCIP AO No. 3 series 2012, and WB and ADB safeguards policies on Indigenous Peoples**						
1.1.1 1.1.2 Notes: 1. Describe the positive and/or negative impacts on indigenous peoples and include the						

Potential Impacts	Mitigation/ Enhancement Measures	Monitoring Parameter	*Responsible Entity*	*Implementation* Schedule	Cost and Source of Funds	Remarks
following information: - Types of impact[4] and number of affected IP households and IP persons <u>for each ethnic group</u> - Severity of impacts[5] - Baseline socioeconomic information on affected IP communities[6]						
1.3 In compliance with **PD 1067 Water Code of the Philippines, regulations on easements, and guidelines on No build, No dwelling, and Multi-hazard risk areas.**						
1.1.1 1.1.2 …						
1.4 In compliance with **RA 8974 and RA 7279; EO 1035 Acquisition of Private Property, and latest issuances on WB and ADB safeguards policies on <u>involuntary resettlement</u>**						
1.1.1 1.1.2 … Note: 1. Where there are land acquisition and/or involuntary resettlement impacts, include details on: - Number of Affected Households for each	Note: For sub-projects with involuntary resettlement and/or land or right of way (ROW) acquisition, state amount and arrangements for					

[4] Impacts can be NEGATIVE or POSITIVE in one or more of the following aspects: (i) customary/traditional rights of use and access to land and natural resources; (ii) socioeconomic status; (iii) cultural and communal integrity; (iv) health, education, livelihood and social security status; (v) indigenous knowledge.

[5] State whether or not the impacts can be reversed or mitigated and if these are permanent

[6] For example, include the following information on <u>each affected indigenous group</u>: percentage of the indigenous group in the total population; literacy/education level; main source of livelihood; poverty status, other **factors that may affect their effective participation in the Project and whether or not they benefit from the Project.**

Potential Impacts	Mitigation/ Enhancement Measures	Monitoring Parameter	*Responsible Entity*	*Implementation* Schedule	Cost and Source of Funds	Remarks
category of impact or type of loss[7] (disaggregated by ethnic group and gender of household head) - Number of Affected Persons - Severity of loss[8]	compensation and other rehabilitation measures for each type of loss on land and non-land fixed assets and/or income sources and/or access to resources based on the Project Resettlement Framework and prior consultation[9] with project-affected persons					
1.5 In compliance with **PD 1144 Fertilizer and Pesticides Act, and ADB and WB regulations on the use of pesticides.**						
1.1.1 1.1.2 …						
1.6 In compliance with other relevant laws and regulations						
1.1.1 1.1.2 …						
Phase 2: Implementation / Construction Phase						
2.1 Physical Environment						
2.1.1 Land a. b. …						
2.1.2 Water Quality/Hydrology a. b. …						
2.1.3 Air Quality						

[7] Example of type of loss: permanent and/or temporary loss of residential land, commercial land, productive land, etc.; total or partial loss of structures (house, fence, etc); loss of crops, trees, etc.

[8] For example: (number) of households will permanently/temporarily lose a total of ____ m2 of _____ land. There are (number) of severely affected households with (number) of severely affected persons (severely affected households are those who (i) lose 10% or more of their total productive assets (e.g. productive land, income sources); and/or (ii) are physically displaced or relocated due to the project.

[9] This must be reflected in the summary of consultations that will be attached to the plan.

Potential Impacts	Mitigation/ Enhancement Measures	Monitoring Parameter	*Responsible Entity*	*Implementation* Schedule	Cost and Source of Funds	Remarks
a. b. …						
2.2 Biological Environment						
2.2.1 Forest and plant life a. b. …						
2.2.2 Wildlife a. b. …						
2.2.3 Fisheries, Aquatic life a. b. …						
2.3 Social Environment						
2.3.1 Participation of women in paid labor and implementation management a. b. …						
2.3.2 impacts on indigenous peoples (IP), including participation in paid labor and implementation/management of the sub-project, participatory monitoring Note: include information on the number of affected IP households and persons for each type of impact and for each ethnic group a. b.						

Potential Impacts	Mitigation/ Enhancement Measures	Monitoring Parameter	*Responsible Entity*	*Implementation* Schedule	Cost and Source of Funds	Remarks
…						
2.3.3 Safety in construction a. b. …						
2.3.4 Resettlement Impacts during construction, including access restriction, temporary impacts on livelihood Note: provide the following information: - Number of affected households and affected persons - Ethnicity of the affected households - Any other factors that make the affected household vulnerable[10] a. b. …						
2.4 Other impacts						
a. b. …						
Phase 3: Operation and Maintenance Phase						
3.1 Physical Environment						
3.1.1 Land a. b. …						
3.1.2 Water Quality/Hydrology						

[10] For example, socioeconomic status (the house is poor), headed by a woman or the elderly without additional means of support, etc.

Potential Impacts	Mitigation/ Enhancement Measures	Monitoring Parameter	*Responsible Entity*	*Implementation* Schedule	Cost and Source of Funds	Remarks
a. b. …						
3.1.3 Air Quality a. b. …						
3.2 Biological Environment						
3.2.1 Forest and plant life a. b. …						
3.2.2 Wildlife a. b. …						
3.2.3 Fisheries, Aquatic life a. b. …						
3.3 Social Environment						
3.3.1 Participation of women in management of O&M a. b. …						
3.3.2 IP participation in O&M a. b. … Notes: 1. Information to be disaggregated by ethnic group 2. Consider and state the factors that may affect the households' ability to						

Potential Impacts	Mitigation/ Enhancement Measures	Monitoring Parameter	*Responsible Entity*	*Implementation* Schedule	Cost and Source of Funds	Remarks
participate in O&M						
1.3.3. Participation of Households affected by involuntary resettlement in O&M a. b. … Note: consider and state the factors that may affect the households' ability to participate in O&M						
3.3.4 Access and/or use restriction a. b. … Note: Information to be disaggregated by ethnic group						
3.3.5 Induced activities with negative cumulative effects a. b. … Note: Information to be disaggregated by ethnic group						
3.4 Other impacts						
a. b. … Note: Information to be disaggregated by ethnic group						
Phase 4: Abandonment Phase						

Potential Impacts	Mitigation/ Enhancement Measures	Monitoring Parameter	*Responsible Entity*	*Implementation* Schedule	Cost and Source of Funds	Remarks

Prepared by:

_____

PPT

Date: _____

The LGU OF BRGY._____ is confirming its willingness and commitment to implement and allocate funds for the abovementioned ESMP.

_____

Barangay Chairperson

Date: _____

Approved and noted by:

_____

Municipal Mayor

Date: _____

Reviewed and Endorsed to the SRPMO by: _____ **Area Coordinator** Date: _____	Reviewed and Endorsed to the RPMO by: _____ **SRPMO Head** Date: _____