ANNEX PIIA_9-7

SELF-SCREENING CHECKLIST (CAGAYAN)

ANNEX 2-7a

SCOPING and PROCEDURAL SCREENING CHECKLIST FOR ENVIRONMENTAL IMPACT STATEMENT (EIS)

B. TECHNICAL SCOPING CHECKLIST [1]

NOTE: Attach list of issues raised by the attending community representatives during the Public Scoping (Annex 2-7c). Integrate the issues in the Technical Scoping Checklist below.

List of Key Environmental Issues		Relevance based on PD and Project Location[2] LS = Likely Significant; LI = Likely Insignificant; NR= Not Relevant			a) Basis of Assessment of Relevance; b) Proposed Method of Impact Assessment; c) Other Instructions per Project Phase?	Description of Environment	Required?		Proposed Methodology of Securing and Presenting Information; Other Considerations in EIA Study	Page in the EIA Document	Verified acceptable by EMB CH?	
		LS	LI	NR			Y	N			Y	N
1.0	**THE LAND**					**THE LAND**						
1.1	**Land Use and Classification**					**Land Use and Classification**						
1.1.1.	Change/Inconsistency in land use					Description of existing land use/zoning/ classification	√					
1.1.2.	Encroachment in Protected Area under NIPAS			√		Land Use Map *(include location of any ECAs and special land features)*	√					
1.1.3.	Encroachment in other ECAs			√								
1.2	**Geology/Geomorphology**					**Geology/Geomorphology**						
1.2.1.	Change in surface landform /topography/terrain/slope	√				Slope and Elevation Map		√				

[1] This table has two major columns: Key environmental issues to be addressed, and the Description of Environment (primary or secondary data) based on one or more environmental issues identified. There is no one-to-one correspondence between the potential issue columns to the left and the baseline information to the right. These columns are provided to ensure the EIA Study focuses on the most relevant environmental issues. **LS = likely significant, LI = likely insignificant, NR = nor relevant**. LS requires in depth quantitative analysis depending on the availability of mathematical methods. LI requires qualitative analysis. NR column is provided since there are listed impacts that may not be after all existent due to the nature of the project and location. During the EIA study, some project aspects may be discovered as significant and may be the basis of Additional Information in the review.

List of Key Environmental Issues		Relevance based on PD and Project Location[2] LS = Likely Significant; LI = Likely Insignificant; NR= Not Relevant			a) Basis of Assessment of Relevance; b) Proposed Method of Impact Assessment; c) Other Instructions per Project Phase?		Description of Environment	Required?		Proposed Methodology of Securing and Presenting Information; Other Considerations in EIA Study	Page in the EIA Document	Verified acceptable by EMB CH?	
		LS	LI	N R				Y	N			Y	N
1.2.2.	Change in sub-surface/ underground geomorphology (e.g. underground mining)			√			Regional/General Geological Map	√					
1.2.3.	Inducement of subsidence			√			Geological Cross-Sections		√				
1.2.4.	Inducement of landslides or other natural hazards			√			Sequence Stratigraphic Column of Rock Units		√				
1.2.5.							Geomorphological Map		√				
1.2.6.							g factor Contour Map for Rocks		√				
1.2.7.							Seismicity Map	√					
1.2.8.							Differential Settling Hazard Map		√				
1.2.9.							Bathymetric and Morphostructural Map		√				
1.2.10.							Results of Petrographic and Mineragraphic Analyses		√				
1.2.11.							Results of Geochemical Analyses of Rock Samples		√				
1.3	**Pedology**						**Pedology**						
1.3.1.	Soil Erosion						Summary of Soil Investigation Report on soil type and quality	√		Sediment soil sampling for heavy metals			
1.3.2.	Change in soil quality (e.g. in irrigation areas)						Laboratory Results of Soil Sample Analysis	√		ditto			
							Erodibility Potential		√				
1.4	**Terrestrial Biology**						**Terrestrial Biology**						
1.4.1.	Vegetation removal and loss of habitat			√			Flora and Fauna Species Inventory or Survey	√		Very general survey only			
1.4.2.	Threat to existence of important			√			Summary of Endemicity		√				

List of Key Environmental Issues		Relevance based on PD and Project Location[2] LS = Likely Significant; LI = Likely Insignificant; NR= Not Relevant			a) Basis of Assessment of Relevance; b) Proposed Method of Impact Assessment; c) Other Instructions per Project Phase?		Description of Environment	Required?		Proposed Methodology of Securing and Presenting Information; Other Considerations in EIA Study	Page in the EIA Document	Verified acceptable by EMB CH?	
		LS	LI	N R				Y	N			Y	N
	local species						/Conservation Status						
1.4.3.	Threat to abundance, frequency and distribution			√			Summary of Abundance, Frequency and Distribution		√				
1.4.4.	Hindrance to wildlife access			√			Site Observation/ Transect Walk Map		√				
2.0	**THE WATER**						**THE WATER**						
2.1	**Hydrology/Hydrogeology**						**Hydrology/Hydrogeology**						
2.1.1.	Change in drainage morphology	√					Topographic Map showing Drainage System	√					
2.1.2.	Change in stream, lake water depth		√				Regional Hydrogeologic Map		√				
2.1.3.	Reduction in stream volumetric flow	√					Streamflow Measurements/ Mean Monthly Flow Data	√					
2.1.4.	Inducement of flooding	√											
2.1.5.	Water resource competition			√			Flood Peaks, Volumes, frequency rating curves and Stormwater flow estimates	√					
2.1.6.	Reduction/Depletion of groundwater flow			√			Spring and Well Inventory and location map		√				
							Flow measurement location map		√				
2.2	**Oceanography**			√			**Oceanography**						
2.2.1.	Change in circulation pattern			√			Predicted Tides		√				
2.2.2.	Change in bathymetry			√			24-Hour Tidal Cycles		√				
2.2.3.							Surface Current System		√				
2.3	**Water Quality**						**Water Quality**						
2.3.1.	Groundwater pollution			√			Physico-Chemical Characteristics of Wells and Springs		√				

List of Key Environmental Issues		Relevance based on PD and Project Location[2] LS = Likely Significant; LI = Likely Insignificant; NR= Not Relevant			a) Basis of Assessment of Relevance; b) Proposed Method of Impact Assessment; c) Other Instructions per Project Phase?		Description of Environment	Required?		Proposed Methodology of Securing and Presenting Information; Other Considerations in EIA Study	Page in the EIA Document	Verified acceptable by EMB CH?	
		LS	LI	N R				Y	N			Y	N
2.3.2.	Stream water pollution		√				Physico-Chemical Characteristics of Inland Surface Waters	√		Presence of heavy metals			
2.3.3.	Lake water pollution			√			Physico-Chemical Characteristics of Coastal Waters		√				
2.3.4.	Marine water pollution			√			Bacteriological Characteristics of Wells and Springs		√				
							Bacteriological Characteristics of Inland Surface Waters		√				
							Bacteriological Characteristics of Coastal Waters		√				
							Sampling Site Map	√					
2.4	**Freshwater Ecology**												
2.4.1.	Threat to abundance, frequency and distribution of species						Abundance of ecologically and economically important species	√					
2.4.2.	Loss of important species						Presence of Pollution indicator Species	√					
2.4.3.	Loss of habitat						Sampling Site Map		√				
2.5	**Marine Ecology**												
2.5.1.	Threat to abundance, frequency and distribution						Abundance of ecologically and economically important species		√				
2.5.2.	Loss of important species						Presence of Pollution indicator Species		√				
2.5.3.	Loss of habitat						Marine Resource Map		√				
2.5.4.							Abundance/Densities/Distribution of mangroves, coral reefs, fishes, sea grasses, algae, seaweeds,	√		Mangrove map			

List of Key Environmental Issues		Relevance based on PD and Project Location[2] LS = Likely Significant; LI = Likely Insignificant; NR= Not Relevant			a) Basis of Assessment of Relevance; b) Proposed Method of Impact Assessment; c) Other Instructions per Project Phase?		Description of Environment	Required?		Proposed Methodology of Securing and Presenting Information; Other Considerations in EIA Study	Page in the EIA Document	Verified acceptable by EMB CH?	
		LS	LI	N R				Y	N			Y	N
2.5.5.							plankton, etc						
							Sampling Site Map		√				
3.0	**THE AIR**						**THE AIR**						
3.1	**Meteorology/Climatology**						**Meteorology/Climatology**						
3.1.1.	Change in the local climate, e.g. local temperature	√					Monthly Average Rainfall of the Area	√					
3.1.2.	Contribution to global greenhouse gas	√					Climatological Normals/Extremes	√					
							Wind Rose Diagrams		√				
							Frequency of Tropical Cyclones	√					
3.2	**Air Quality (& Noise)**						**Air Quality (& Noise)**						
3.2.1.	Air pollution	√					Ambient concentrations of TSP, SO_x, NO_x, PM10, etc., 1-hour, 24-Hour Sampling	√		TSP, PM, SOx			
3.2.2.	Increase in noise	√					Noise Levels	√					
							Sampling Station Map (air and noise)	√					
4.0	**THE PEOPLE**						**THE PEOPLE**						
4.1.1.	Displacement of settler	√					Demography	√					
4.1.2.	Change in land ownership	√					Settlement Map and Population Distribution Map	√					
4.1.3.	Displacement of property	√					Population Growth Rate	√					
4.1.4.	Right-of-way conflict	√					Number of Households and Household Size by Barangay	√					
							Summary of Demographic data per Barangay to be directly affected:	√					

List of Key Environmental Issues	Relevance based on PD and Project Location[2] LS = Likely Significant; LI = Likely Insignificant; NR= Not Relevant			a) Basis of Assessment of Relevance; b) Proposed Method of Impact Assessment; c) Other Instructions per Project Phase?	I	Description of Environment	Required?		Proposed Methodology of Securing and Presenting Information; Other Considerations in EIA Study	Page in the EIA Document	Verified acceptable by EMB CH?	
	LS	LI	N R				Y	N			Y	N
						Land Area, Population, Population Density, Main Sources of Income, Gender and Age Composition, Literacy, Highest Educational Attainment, Employment Status	√					
4.1.5. In-migration						Household Profile based on results of the Socio-Economic/Perception Survey	√					
4.1.6. Presence of Indigenous People						Indigenous Peoples	√					
4.1.7. Cultural Change						Health	√					
4.1.8. Threat to public health						Morbidity and Mortality Rates (Infants and Adults) from Direct Impact Areas	√					
4.1.9. Local benefits from the project						5-Year Trend in Morbidity and Mortality		√				
						Notifiable Diseases in the Area including Endemic Diseases		√				
						Local Health Resources (Government and Private)	√					
						Environmental Health and Sanitation Profile: water supply, human excreta mgt, waste mgt and disposal systems and food hygiene	√		Solid waste management system only			
4.1.10. Threat to delivery of basic services						Water Supply and Demand		√				
						Power Supply and Demand		√				
4.1.11. Traffic congestion						Transportation/Traffic situation		√				
SUMMARY/HIGHLIGHTS OF TECHNICAL SCOPING												For Procedural

List of Key Environmental Issues	Relevance based on PD and Project Location[2] LS = Likely Significant; LI = Likely Insignificant; NR= Not Relevant	a) Basis of Assessment of Relevance; b) Proposed Method of Impact Assessment; c) Other Instructions per Project Phase?	Description of Environment	Required?		Proposed Methodology of Securing and Presenting Information; Other Considerations in EIA Study	Page in the EIA Document	Verified acceptable by EMB CH?	
	LS / LI / NR			Y	N			Y	N

	Considering all project activities and phases, select the most critical Environmental Aspects (major sources of most significant impacts)	List of Associated Most Significant Environmental Issues/Stressors	Agreed EIA Approach in Impact Assessment and Mitigation on key environmental aspects and impacts/issues	Remarks	Screening: Page in EIA Document	Screening: Verified Acceptable by EMB CH? Y	Screening: Verified Acceptable by EMB CH? N
1							
2							
3							

C. ENVIRONMENTAL RISK ASSESSMENT

If the project has the following:	Required Study/Report	Y	N
1. Facilities for the production or processing of organic or inorganic chemicals using: alkylation, amination by ammonolysis, carbonylation, condensation, dehydrogenation, esterification, halogenation and manufacture of halogens, hydrogenation,hydrolysis, oxidation, polymerization, sulphonation, desulphurization, manufacture and transformation of sulphur-containing compounds, nitration and manufacture of nitrogen-containing compounds, manufacture of phosphorus-containing compounds, formulation of pesticides and of pharmaceutical products, distillation, extraction, solvation	Risk Screening Study		√
2. Installations for distillation, refining or other processing of petroleum products.	Risk Screening Study	√	
3. Installations for the total or partial disposal of solid or liquid substances by incineration or chemical decomposition	Risk Screening Study	√	
4. Installations for the production or processing of energy gases, for example, LPG, LNG, SNG	Risk Screening Study	√	
5. Installations for the dry distillation of coal or lignite	Risk Screening Study	√	
6. Installations for the production of metals or non-metals by a wet process or by means of electrical energy	Risk Screening Study	√	
7. Installations for the production of metals or non-metals by a wet process or by means of electrical energy	Risk Screening Study	√	
8. Specific facilities or the use of certain processes listed in the **Risk Thresholds Table** below.	Risk Screening Study	√	
9. Facilities that would use, manufacture, process or store hazardous materials in excess of **Level 1** threshold inventory in **Risk Thresholds Table** below.	Hazard Analysis Study, and Emergency/ Contingency Plan based on the study and worst-case scenario.	√	

If the project has the following:	Required Study/Report	Y	N
10 Facilities that would use, manufacture, process or store hazardous materials in excess of **Level 2** threshold inventory in **Risk Thresholds Table** below.	Quantitative Risk Assessment (QRA) and Emergency/Contingency Plan based on the QRA		√

Risk Thresholds Table

CATEGORY	LEVEL 1 (tons)	LEVEL 2 (tons)	CATEGORY	LEVEL 1 (tons)	LEVEL 2 (tons)
1. Explosives	10	50	7. Toxic substances (medium)	10	50
2. Flammable substances	5,000	50,000	8. Toxic substances (high)	5	20
3. Highly flammable substances	50	200	9. Toxic substances (very high)	0.2	1
4. Extremely flammable substances	10	50	10. Toxic substances (extreme)	0.001	0.1
5. Oxidizing substances	50	200	11. Unclassified (Type A)	100	500
6. Toxic substances (low)	50	200	12. Unclassified (Type B)	50	200

NEED FOR PUBLIC HEARING/CONSULTATION /SITE VISIT OR SITE/VALIDATION DURING EIA REVIEW	BASIS FOR RECOMMENDATION/DECISION
1) Proponent's Request	
2) EIARC Evaluation	
3) EMB Evaluation	

SCOPED BY: EIARC MEMBERS

NAME	EXPERTISE	SIGNATURE	NAME	EXPERTISE	SIGNATURE

EIA PERSONNEL REPRESENTATIVE DURING TECHNICAL SCOPING:		REPRESENTATIVE/S OF THE PROJECT PROPONENT:	
Signature over Printed name	Signature over Printed name	Signature over Printed name	Signature over Printed name
NOTED BY: EIAM Division Chief		REPRESENTATIVE/S OF THE EIA PREPARER:	
Signature over Printed name		Signature over Printed name	Signature over Printed name

ANNEX PIIA_9-8

COMPARISON BETWEEN CONTENTS OF EIA REPORT FOR CATEGORY "A" PROJECT IN FORMER JBIC GUIDELINE AND IEE REPORT IN PEIAS

COMPARISON BETWEEN CONTENTS OF JBIC GUIDELINE AND LARRIPP

Description of Category of JBIC Guideline

- Category A: i) Projects likely to have significant adverse impacts on the environment and society, ii) Projects with complicated impacts or unprecedented impacts, which are difficult to assess or which have a wide range of impacts or irreversible impacts, iii) Projects are required detailed EIA by related laws and the standards of the recipient governments.

- Category B: Their potential adverse impacts are less than those of Category A projects. Generally they are site-specific; few if any are irreversible; and in most cases normal mitigation measures can be designed readily.

- Category C: They are likely to have minimal or little adverse impacts.

- Category FI: The proposed project is categorized as FI if it satisfies all of following: i) JBIC's funding of the project is provided to a financial intermediary etc. ii) the selection and assessment of the actual sub-projects is substantially undertaken by such an institution only after JBIC's approval of the funding and therefore the sub-projects cannot be specified prior to JBIC's approval of funding (or assessment of the project), iii) those sub-projects are expected to have potential impact on the environment.

Table 1 Comparison between contents of EIA report for category "A" project in JBIC guideline and IEE report in PEIAS

JBIC Guideline	IEER in PEIAS	Difference
[Executive Summary] - discusses concisely significant findings and recommended actions.	[Project Description Report] Background, process and methodology of assessment, study team composition, study schedule are described.	Non
[Policy, legal and administrative framework] discusses the policy, legal and administrative framework within which the EIA report is to be carried out	[Political, regal and administrative Framework] Philippine EIA System (PEIAS) follows DAO-37/1996, Environment study is carried out under PEIAS	EIS report does not require the item, but it is described by the Project Description Report.
[Project description] - describes the proposed project and its geographic, ecological, social and temporal context, including any off-site that may be required (e.g. dedicated pipelines, access roads, power plants, water supply, housing, and raw material and product storage facilities). - Indicates the need for any resettlement or social development plan. - Normally includes a map showing the project site and the area affected by the project.	[Project Description] - Necessity of project - Alternatives - Project site - Other project near the project site - Summary of phase-wise activities	None

JBIC Guideline	IEER in PEIAS	Difference
[Baseline data] - Assesses the dimensions of the study area and describes relevant physical, biological and socio-economic conditions, including all changes anticipated before the project commences. - Additionally, takes into account current and proposed development activities within the project area but not directly connected to the project. - Data should be relevant to decisions about project site, design, operation, or mitigatory measures - The section indicates accuracy, reliability and sources of the data.	[Baseline data] - Describe physical, biological environment conditions, cultural, socio-economical conditions and regal framework - Include alternative without project	None
[Environmental Impacts] - Predicts and assesses the project's likely positive and negative impacts, in quantitative terms to the extent possible. - Identifies mitigation measures and any negative environmental impacts that cannot be mitigated. - Explores opportunities for environmental enhancement. - Identifies and estimates the extent and quality of available data, essential data gaps and uncertainties associated with predictions - Specifies topics that do not require further attention.	[Environmental impacts] - Predicts impacts on each project phase - Summarizes evaluation specific impacts; water, soil and air conditions - Evaluates specific socio-economy and cultural impacts	None
[Analysis of alternatives] - Systematically compares feasible alternatives to the proposed project site, technology, design and operation including the "without project" situation in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training and monitoring requirements. - For each of the alternatives, quantifies the environmental impacts to the extent possible, and attaches economic values where feasible. - States the basis for selecting the particular project design proposed and offers justification for recommended emission levels and approaches to pollution prevention and abatement.		The comparison of alternatives is considered by the content of basic information.

JBIC Guideline	IEER in PEIAS	Difference
[EMP] - Describes mitigation, monitoring and institutional measures to be taken during construction and operation to eliminate adverse impacts, offset them, or reduce them to acceptable levels.	[EMP] - Prepares the matrix, which includes mitigation measures, management cost estimation and responsibility. - Includes records of discussion with stakeholders. - Includes monitoring plan (if any), counter measures for unpredictable accidents, and responsible organization and minutes of agreement.	None
[Consultation] - Record of consultation meetings, including consultations for obtaining the informed views of the affected people, local NGOs and regulatory agencies.	[Stakeholders meeting] -All data/notes are attached to the main report.	
None	[Recommendation] - Write recommendation based on results of assessments for IEE targets projects. - DENR will tale attention on these contents such as, list of mitigation measures to predicted impacts, prediction after taking measures.	JBIC guideline does not include recommendation.
Source: Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and social Considerations, April 2002		

Table 2 Comparison between contents of JBIC guideline and LARRIPP

JBIC Guideline	LARRIPP	Difference
Appropriate consideration must be given to vulnerable social groups, such as women, children, the elderly, the poor, and ethnic minorities, all of whom are susceptible to environmental and social impact and who may have little access to the decision-making process within society.	The consideration for the women, elderly is described in Chapter V as: "The women, elderly who are among the PAPs shall likewise be consulted and mobilized to participate in the consultation meeting, and discussed with them the socio-cultural implication of the Resettlement Action Plan.".	LARRIPP adverts the importance of participation in the consultation ,meeting s and discussion the RAP only,
The project proponents, etc. must make efforts to enable the people affected by the project, to improve their standard of living, income opportunities and production levels, or at least to restore them to pre-project levels.	LARRIPP describes as "iv. (skills training and other development activities) equivalent to PhP15, 000 per family per municipality will be provided in coordination with other government agencies, if the present means of livelihood is no longer viable and the PAF will have to engage in a new income activity." in Chapter III A. 4. e.	None.

JBIC Guideline	LARRIPP	Difference
Appropriate participation by the people affected and their communities must be promoted in planning, implementation and monitoring of involuntary resettlement plans and measures against the loss of their means of livelihood.	The consideration for the women, elderly is described in Chapter V as: "The women, elderly who are among the PAPs shall likewise be consulted and mobilized to participate in the consultation meeting, and discussed with them the socio-cultural implication of the Resettlement Action Plan.".	LARRIPP does not advert to the participation of PAPs to the planning. The monitoring results shall be report to PAPs but their participation is not.
Projects must comply with laws, ordinances and standards relating to environmental and social considerations established by the governments that have jurisdiction over the project site (including both national and local governments). They are also to conform to environmental and social consideration policies and plans of the governments that have jurisdiction over the project site.	LARRIPP describes in Chapter V. A.4 as "if also in this case they (PAPs) do not agree, the DPWH will promptly seek the services of Land Bank, DBP or an independent appraiser to determine the fair market value". And the possibility of difference between the BIR zonal valuation and the fair market value shall be explained to PAPs at the beginning.	None.
People to be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported by the project proponents, etc. in timely manner.	LARRIPP writes clearly as "Owners of structures who have full title, tax declaration, or who are covered by customary law (e.g. possessory rights, usufruct, etc.) or other acceptable proof of ownership."	There is no description of assistance for the informal settlers.
In cases where sufficient monitoring is deemed essential for the achievement of appropriate environmental and social considerations, such as the projects for which mitigation measures should be implemented while monitoring their effectiveness, project proponents must ensure that project plans include monitoring plans which are feasible.	The objectives, scope, contents are described in Chapter VIII of LARRIPP. The monitoring is classified by the internal monitoring (by ESSO) and the external monitoring (by external institutions). The frequency, framework, etc. are described in detail.	None.

APPENDICES

MINUTES OF THE MEETING
FIRST STAKEHOLDERS' MEETING
THE PREPARATORY STUDY FOR SECTOR LOAN ON
DISASTER RISK MANAGEMENT

Crown Hotel Conference Hall
Tuguegarao City, Region II
June 9, 2009

Attendance:

Government of Tuguegarao City

1.	Hon. Julio C. Liggayu	-	Vice Mayor Enrile
2.	Mr. Wilson P. Gaffud	-	SB Member -Enrile
3.	Mr. Leon A. Callangan Jr.	-	SB Member-Enrile
4.	Mr. Hononato M. Carag Jr.	-	SB Member-Enrile
5.	Mr. Vergilio A. Mamauag	-	SB Member-Enrile
6.	Mr. Melecio A. Buslig	-	SB Member-Enrile
7.	Ms. Magdalena P. Palattao	-	PDO-III-PPDO
8.	Mr. Marcelo C. Soriano	-	PDO-III-PPDO
9.	Ms. Angela B. Abidua	-	AO-II
10.	Ms. Maria Fe Villania	-	CPDC
11.	Ms. Sylvia M. Tonaryo	-	HRMO-III
12.	Mr. Emiso Mataagunan	-	Clerk-SB
13.	Ms. Fehcitas A. Tuliño	-	Clerk III
14.	Mr. Romeo B. Battuy	-	SB Member-Enrile
15.	Mr. E. Camora	-	HRMO-III
16.	Ms. Yimanda L. Pamitta	-	HRMO-II

DPWH

1.	Engr. E. Agustin Jr.	-	DPWH-II
2.	Engr. CM Santos	-	DPWH-II
3.	Engr. Jerry Fano	-	DPWHN-FCSEC
4.	Engr. Zoisimo L. Balisi	-	DPWH-II
5.	Engr. Crisogono T. Decena	-	DPWH-II

Other Agency

1.	Mr. Gresal W. Tapulno	-	NEDA
2.	Ms. Susan P. Danao	-	Economist
3.	Mr. Ronante V. Regino	-	NEDA
4.	Engr. Reynaldo L. Victorina	-	NEDA

JICA Study Team w/ Local Consultants

1.	Kazuto SUZUKI	-	Structural Engineer
2.	Dr. Lope R. Villenas	-	Institutional and Organization, O&M Specialist

Local Consultant Conducting IEE

1.	Ms. Bethela Castro-DelNero	-	Environmental Specialist, CESM

Academe / Religious / NGO's – Non-Government Organization / PO's – People's Organization

1. None

Communities

1. None

Abbreviations

1. PPDO – Provincial Planning Development Office
2. PPDC – Provincial Planning Development Coordinators
3. PSWDO – Provincial Social Welfare and development Office
4. MPDO – Municipal Planning Development Office
5. MPDC – Municipal Planning Development Coordinators
6. MENRO – Municipal Environmental and Natural Resource Office
7. MSWDO – Municipal Social Welfare and Development Office
8. NWRB – National Water Resource Board
9. NEDA - National Economic and Development Authority
10. PDO-Deputized Provincial Officers
11. CPDC-City Planning and Development Coordinator
12. HRMO-Human Resource Management Office
13. FCSEC-Flood Control and Sabo Engineering Center
14. NEDA-National Economic and Development Authority
15. CESM-Center for Environmental Studies and Management

Proceedings:

The Stakeholder's Meeting, facilitated by Engr. Elmer Camarao, formally started at around 2:00 in the afternoon with an Invocation. This was followed shortly by Opening Prayer and singing of the Philippine National Anthem.

Mr. Eugenio R. Pipo (DPWH Regional Director) introduced the JICA and its Study Team. He stressed out that the focus of the study is to concentrate on most pressing issues. He hopes that after the meeting, everybody will be enlightened on the purpose of the project which is the mitigation of Tuguegarao's flooding occurrences and by doing so, it will eventually uplift the condition of the people living along the risk areas, as well as the whole Tuguegarao.

Engr. Elmer C. Camarao the City Engineer introduced all participants from other National Agencies and Local Government Representatives. After which, Engr. Maria Guillen gave the welcome remarks.

Brief of Engr. Jerry Fano, DPWH PMO-FCSEC
Engr. Jerry Fano of DPWH PMO-FCSEC made a brief address remark on the Sector Loan Project.

The Philippine experience high rainfall every year and the frequency of typhoon occurrences in the country is about 20 per year.

He said that JICA is re-strategizing and is focusing on prioritizing the core and most disaster prone areas.

He hopes that this meeting will be a venue of exchange of ideas, and meeting of minds. If this city is willing for an equity, meaning there will be equal sharing, co-ownership, then they are on their way to the success of this project. He then proceeded to introduce Mr. Kazuto Susuki to present the Study.

Presentation of Mr. Kazuto SUZUKI: The Preparatory Study for Sector Loan on Disaster Risk Management in the Republic of the Philippines

He presented the objective, flow of project, operation maintenance activities, the need to deal with ROW issues, the conditionality of the Sector Loan, etc. Harmonization is very essential.

Mr. Kazuto SUZUKI of JICA Preparatory Study Team presented the Study contents and its progress based on the results in the Steering Committee Meeting dated April 28, 2009. Before Mr. SUZUKI started his presentation, he expressed his thanks to various government and organizations that has extended support to the Study since the very beginning and also to the participants.

Mr. SUZUKI mentioned that the study includes the conduct of Feasibility Study on the Cagayan River Flood Mitigation Project, which would concentrate into built-up areas, such as City Proper of Tuguegarao and the high risk area of Enrile.

He continued his presentation about the current status of flood control projects conducted by DPWH during the past 33 years. He addressed that some projects have induced the lowering benefit and effectiveness against flood resulting from (1) the Delay of Construction due to ROW acquisition procedure problem and Cost Overrun, and (2) Lack of O&M activities for

river structures completed by such projects. In this connection, Mr. Suzuki emphasized that the cooperation and initiatives of LGUs in the Project are absolutely imperative for the Project, to wit; (1) due effort for ROW acquisition by the concerned LGUs, (2) harmonized Project implementation between DPWH and LGUs, and (3) development and enhancement of flood management capacity for concerned organizations.

According to Mr. SUZUKI, the study team also gathered some information regarding the existing river alignment and cross sectional shapes, land-use and development in the project site. Aside from this, he also reiterated the status or situation of the river channels, some major cause of flooding in the project site and the basic concept in formulating the mitigation plan including the proposed structural and non-structural measures to be presented in expected succeeding stakeholders' meetings.

With regards to the mitigation that needs to be undertaken, the Study Team aims to propose the following:

For non-structural measures:
(1) measures for river channel that includes community-based flood mitigation and restraint of illegal land occupation in the river area;
(2) measures for basin that includes land use control and control of disorderly land development; and
(3) measures for damage mitigation that includes development and dissemination of flood hazard map, establishment of evacuation and flood fighting & preparedness against flood and unification of related agencies for flood mitigation.

For the structural measures the team identified potential mitigation measures against flood and these are:
(1) widening of river channel improvement,
(2) construction of flood protection dike, and
(3) construction of dredging of riverbed.

Open Forum

An Open Forum was conducted after the presentations facilitated by Angela Abique, moderator. Some of the important concerns and issues raised during the open forum were the following:

1. Question: ***Hon. Julio C. Liggayu*** of Enrile said he is very grateful for this study. However, he recalled that about 10 years ago, a similar activity was conducted in the area and until now, it hasn't materialized yet. He asked JICA how long will it take until the project will be implemented this time. If it will take another 10 years, Enrile is in danger of being wiped out. His concern is not only to save corn fields but provincial roads as well. They have already passed many resolutions, in fact there was supposed to be a 32M project but funds was not released by central office. He is hoping that this study will not take long and will be implemented soon. ***(Hon. Julio C. Liggayu, Vice Mayor Of Enrile)***

Answer: The people have to understand that Cagayan River is very large and that an integrated river basin project will mean very large cost and will need a very large budget. The problems of ROW JICA had been encountering the past 33 years with previous projects was reiterated. Hence, JICA had to re-strategize how proponent agencies will improve project activities, hence, sector loan was created. If LGU-DPWH take effort how to deal with the ROW, maybe by 2011, the project will commence subject to clearance of some issues. ***(Mr. Kazuto Suzuki, JICA Study Team).***

Mr. Alijandro Sosa, PMO-MPFCP II gave a short description of the project's timeframe:

- FS, 1st stage – till November
- Come up with materials for sector loan – 1 yr
- Approval – detailed design: 1 yr
- Bidding –
- Total – may take 3 yrs

Engr. Melanio C. Briosos, Assistant RD of DPWH, said that the 32 M funds Hon. Julio C. Liggayu mentioned earlier was not released, but hopefully, it will be included in the 2010 National Budget.

Engr. Maria Fe Villania informed the crowd that the 1st flood control project they conducted is in Catagaman, which is a very vulnerable area. In fact it has changed over the years. They followed the designs that was proposed in the 2002 FS and put a new design last year (concrete blocks). ***(Engr. Maria Fe Villania, City Planning officer).***

On ROW issues: they are just waiting advice from NHA, but to date, about 48 families had already signed a waiver.

On the proposed widening of the river zone, she was a bit surprised/struck by how wide Mr. Suzuki is proposing for the easement area, this may pose a big problem for people with real properties.

2. Comments: Engr. Reginaldo Victorino from NEDA-X said that there are a lot of information and reports available at NEDA X that would be useful for the Study Team. He also gave inputs and suggestions for the conduct of the flood control studies (i) it is true that flood control is given a low priority by the national government; (ii) status of the national flood masterplan has been taken into continuous note; (iii) he appreciate it very much that the Cagayan River was one of the selected river basin for the sector loan; (iv) NEDA have several documents that would assist the study. ***(Engr Reginaldo Victorino from NEDA)***

3. Question - Engr. Emilio Matanggihan, City Engineer of Tuguegarao said that a copy the 2001 FS Flood Control Project of the Lower Cagayan River was given to them wherein about 800m was identified as priority projects in Catagaman area. He wanted to suggest to fast track the project, not to conduct the preparatory study and jump to construction already.

4. Answer - Engr. Maria Fe Villania, City Planning officer corrected him and said that this study is for the sector loan and not for the whole project.

Engr. Melanio C. Briosos clarified that this sector loan is not part or connected with the previous 2001 FS of the Cagayan River. This Preparatory Study will be concentrated to Tuguegarao City and its core high risk areas only and will not include the whole stretch of Cagayan River. Clarification by ***Engr. Melanio C. Briosos, Assistant RD of DPWH.***

In addition, Mr. Kazuto Suzuki said that the project will be divided into 4 phases but cannot consider the construction of diversion channel due to high cost. This study will concentrate on the construction of dikes and other protection works of high risk core areas only. It will make use of the 2001 masterplan and adopt some very good ideas but will not entirely follow it. Rest assured, he will not force his ideas to the LGUs. ***(Mr. Kazuto Suzuki of JICA Study Team)***

5. Comments - Ms. Yoko Nomura added that JICA has a limited budget but their ultimate aim is to mitigate flood issues in order lessen human damage. Therefore, before sector loan approval, JICA wants to address/focus on sectoral issues i.e. ROW and maintenance. ***(Ms. Yoko Nomura JICA Project Formulation Adviser)***

She gave the 3 components of Preparatory Study:
1. Choose high risk areas
2. Establish disaster response fund
3. Identify difficulties, before during and after the implementation of flood control to smoothly implement project.

6. Comments Ms. Maria Fe Villania informed the audience and the JICA Study Team that aside from flood, another source of danger is earthquake at intensity of 7.5 at the Sierra Madre which is able to trigger landslide that can bury the whole City down, therefore this should be taken into consideration in the study also. ***(Ms. Maria Fe Villania, City Planning Officer)***

Engr. Alijandro Sosa said that the Cagayan River Basin ranked at the top of DPWH's priorities for disaster risk mitigation. But the policy of DPWH is equitable distribution on LUZVIMIN so they

have to choose one River Basin per area. Cagayan River Basin was chosen for Luzon. ***(Engr. Alijandro Sosa PMO-MPFCP II)***

7. Comments - Angela Abique said that as of now, Tuguegarao is willing to give 10% equity. Maybe after discussion with the Mayor and other officials, they can be able to increase it. ***(Angela Abique, Open Forum Moderator)***

Engr. Jerry Fano emphasized the good things that transpired during this meeting and that his expectations, the 2C's (Cooperation and Coordination) were met. So all in all, it was a good meeting. He also said that DPWH is already grateful for the 10% equity and will not ask for more. (***Engr. Jerry Fano, DPWH-PMO-FCSEC)***

Mr. Kamoto Minoru gave a concluding remark that this preparatory study for sector loan is a new study concept. It will concentrate to protect core areas and it is not a holistic masterplan. It will consider the most effective and urgent works to prevent flooding. ***(Mr. Kamoto Minoru , JICA Adviser)***

Engr. Briosos, the Assistant RD of DPWH close and mark the meeting. He thanked the JICA Representatives and he pleaded for assistance from the LGU especially for the resettlement action plan.

Prepared by:

Kazuto SUZUKI
Structural Engineer
JICA Preparatory Study Team

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Revised by

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Revised by

Approved by

MINUTES OF THE MEETING
SECOND STAKEHOLDERS' MEETING
THE PREPARATORY STUDY FOR SECTOR LOAN ON
DISASTER RISK MANAGEMENT

Crown Hotel Conference Hall
Tuguegarao City, Region II
August 11, 2009

Government of Tuguegarao City

1.	Timoteo Alan	-	Assistant Provincial Engr. PEO
2.	Leo C. Bassig	-	LGU-Enrile MIPDC
3.	Wilsen P. Gaffuig	-	SB Member of Enrile
4.	Julio C. Laggayu	-	Vice Mayor of Enrile
5.	Virgilio A. Mamuag	-	SB Member of Enrile
6.	Leon A. Callangan Jr	-	SB Member of Enrile
7.	Romeo B. Battung	-	Provincial Office
8.	Melecio A. Buslig	-	SB Member/ Enrile
9.	Angela B. Abiqui	-	Adm. Officer V
10.	James P. Ferrer	-	Provincial Engr. III
11.	Richard B. Pastor	-	Provincail Engr. II
12.	Delfin T. Ping	-	Tuguegarao Mayor
13.	Regina D. Carrau	-	PDO III
14.	Edwin T. Rosales	-	Pronicial Engr.
15.	Sylvia M. Tamayao	-	HRMO I
16.	Felicitas A Tuliao	-	Clerk III
17.	Noli Agatep	-	Computer Operator
18.	Robbert Turingan	-	Enrile Mayor
19.	Kaye E. Aggabao	-	LGU-Emrile
20.	Emilio Matangun	-	LGU-Tuguegarao

DPWH

1.	Crisogono T. Decena	-	Engr. III DPWH Region II
2.	Zoisimo L. Balisi	-	Engr. V DPWH Region II
3.	Michael T. Alpasan	-	Engr. IV PMO-FCSEC DPWH
4.	Cesar M. Baquira	-	DPWH-CTDEO
5.	Joselito T. Arao	-	DPWH-CTDEO
6.	Edmund B. del Vira	-	DPWH-Region II

Other Agency

5.	Melanio C. Briosos	-	ARD NEDA
6.	Gresal Tapugao	-	Sr. EDS-RDC
7.	Ramoncito V. Reginaldo	-	Sr. EDS-RDC
8.	Jose Armand Araneta Jr	-	ARD – OCD II
9.	Glenn P. Palor	-	OCD – Operation Officer

JICA Study Team w/ Local Consultants

3.	Kazuto SUZUKI	-	Structural Engineer
4.	Antonio P. Basilio	-	JICA

Local Consultant Conducting IEE

2. Ms. Bethela Castro-DelNero - Environmental Specialist, CESM
3. Aldwin Camance - CESM Team Leader
4.

Academe / Religious / NGO's – Non-Government Organization / PO's – People's Organization

2. None

Communities

8. None

Abbreviations

16. PPDO – Provincial Planning Development Office
17. PPDC – Provincial Planning Development Coordinators
18. PSWDO – Provincial Social Welfare and development Office
19. MPDO – Municipal Planning Development Office
20. MPDC – Municipal Planning Development Coordinators
21. MENRO – Municipal Environmental and Natural Resource Office
22. MSWDO – Municipal Social Welfare and Development Office
23. NWRB – National Water Resource Board
24. NEDA - National Economic and Development Authority
25. PDO-Deputized Provincial Officers
26. CPDC-City Planning and Development Coordinator
27. HRMO-Human Resource Management Office
28. FCSEC-Flood Control and Sabo Engineering Center
29. NEDA-National Economic and Development Authority
30. CESM-Center for Environmental Studies and Management
31. RDC- Regional Development Council
32. OCD- Office of Civil Defense

PROCEEDINGS:

The Stakeholder's Meeting formally started at around 1:30 in the afternoon with invocation and the singing of the Philippine National Anthem. It is followed by the presentation of the project by the JICA Preparatory Study Team.

Mr. Kazuto Suzuki of the JICA Preparatory Study Team presented the basic concepts of structural measures and the required activities for the implementation to LGUs. He discussed about the basic concept of flood control measures protecting only the core areas, its precise concept and structural alternative. He also emphasized the required responsibilities and activities of the LGU should the project will be implemented and this will be entered into a Memorandum of Agreement (MOA) between the said LGU and DPWH. The MOA will contain the responsibilities of the LGU in land acquisition and relocation activities, establishment of Disaster Risk Management Committee, setting up of a Query Window, modification of Comprehensive Land Use Plan, livelihood programs for relocated families, operation and maintenance activities and execution of non-structural measures.

After his presentation, he showed the proposed design of the flood mitigation structural measures using an Aerial Photography to better explain the concept of the proposed design. **Mayors Delfin Ting of Tuguegarao** and **Robert Turingan of Enrile** actively participated in the discussion and recommendation of probable design. The two (2) Mayors suggested that the

project should concentrate on the construction of revetment or river slope protection works for critical eroded areas by river flow. The two (2) mayors also suggested that a channel should be cut-off and dredged to recourse and divert the flow of river water. This will be more effective than just constructing a dike to selected areas. Mr. Suzuki's concern is the effect of this design to the downstream area and the overall implication of this design to the surrounding towns as well as to the costs, yet he is willing to consider the 2 mayor's proposal. Mayor Ting estimated only a total project cost of about PhP 600M and assured the Team that there are no ROW problems in the area. Further discussions followed until it was suggested by the CESM Team that both parties (The Mayors and JICA Study Team) will come up with cost estimates of their proposed designs then compare which is more beneficial and cost-effective (still within the Sector Loan budget). This should be backed-up with further studies and modeling, taking into consideration the elevation and on its over-all effect to the environment and the people.

Engr. Aldwin Camance of the Environmental Study Team presented the progress of the environmental and social survey for the project. He discussed the project planning cycle, the legal framework of the Philippine Environmental Impact Assessment (PEIA), the social acceptability and public participation of affected stakeholders, as well as the legal basis of resettlement under the Philippine Law System. He presented the objective of the study and the scope of the environmental survey. He also gave a brief overview on the different factors that contributes to the occurrence of flooding especially in a river ecosystem.

The meeting concluded with Ms. Bethela DelNero's gratitude remarks to the delegates.

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DISASTER RISK MANAGEMENT
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Tuguegarao City, Region II
October 13, 2009

Government of Tuguegarao City

21. Leo C. Bassig	-	LGU-Enrile MPDC
22. Leon A. Callangan Jr	-	SB Member of Enrile
23. Romeo B. Battung	-	LGU Enrile
24. Robbert Turingan	-	Enrile Mayor
25. Roderick A. Allan	-	Staff/Municipal of Enrile
26. Dominic Lalimag	-	SB Member Enrile
27. Restituto Vargas	-	PSWDO
28. Christopher Laragas	-	PSWDO
29. Enrico T. Camilag	-	SB Member
30. Henorato M. Carag	-	LGU Enrie

DPWH

7. Crisogono T. Decena	-	Engr. III DPWH Region II
8. Zoisimo L. Balisi	-	Engr. V DPWH Region II
9. Grecile Christopher Damo	-	Engr. IV PMO-FCSEC DPWH
10. Joselito T. Arao	-	DPWH-CTDEO
11. Susan P. Danao	-	DPWH-Economist
12. Sylvia M. Tamayao	-	DPWH-HRMO-I
13. Felicitas A. Tuliao	-	DPWH-Clerk III
14. Melanio C. Briosos	-	Asst. Regional Director DPWH-II
15. Elmer C. Camarao	-	DPWH- HRMO III
16. Quirico Capiral	-	DPWH-DEO

Other Agency

10. Melanio C. Briosos	-	ARD NEDA
11. Leo L. Bunag	-	PAGASA
12. George C. Canapi	-	DENR
13. Mario Trinidad	-	PDCC-Cagayan

JICA Study Team w/ Local Consultants

5. Kazuto SUZUKI	-	Structural Engineer

Local Consultant Conducting IEE

5. Ms. Bethela Castro-DelNero	-	Environmental Specialist, CESM
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48. RDC- Regional Development Council
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Proceedings:

The third stakeholders meeting commenced with a prayer and the singing of the Philippine national anthem.

The assistant regional director introduced Mr. Kazuto Suzuki and the rest of the JICA study team present. The city government officials of Tuguegarao were conspicuously absent in the meeting although the Catagaman community had a representative. Representatives from other government units such as DENR, PAGASA and NEDA were also mentioned. He welcomed everyone in attendance and discussed a brief overview of the meeting.

The first presenter, Mr. Kazuto Suzuki explained the basics of the sector loan project. Tuguegarao city was the area being protected and posted the 2008 land use photos and CLUPS which had the location of fields and residential areas. The projections for 10 and 25 year periods were displayed as he discussed about diking systems and cut off channels. These diking systems and cut-off channels were said to be effective in protecting city and municipal areas. But Mr. Kazuto Suzuki stressed that budget is limited. He then later showed how inundation varies with and without the project.

Subsequently, Mr. Kazuto Suzuki gave a detailed description of the revetment areas and its specifications followed by his recommendations and requirements. A memorandum of agreement was also brought up which deal with implementation, land acquisition, relocation and construction. He stressed the importance of responsibilities of each party so the project moves forward smoothly.

The next presenter, Mr. Aldwin Camance began his presentation with the discussion of the cost of the project. For the whole project the total is said to be 10 Billion Pesos which if spread out leaves 1 Billion Pesos for this project in Tuguegarao. He described the inundation

areas and the projection models for certain period of years based on historical records. The revetment and quarry areas for the project were also clarified. He emphasized that flooding in the area will not change but erosion will be controlled.

Question:

How will u transport the excavated material to the other side considering that the soil and sediments that will be used for the Enrile and Alibago revetments will come from Tuguegarao while the soils and sediments to be used for the Catagaman revetments will come from Enrile?

RESPONSE:

Trucking the excavated materials so that only soils and sediments from the Tuguegarao side will be used for the Catagaman revetments and only soils and sediments from the Enrile side will be used for the Alibago and Enrile revetments will be considered but this will mean about 50,000 trips by truck for the three revetments. The amount of dust that will be released plus the amount of fuel that will be used if trucking will be the method of transferring of the excavated materials instead of barging should be taken into consideration since this will not only exacerbate the environmental impact of the project but will also contribute further to GHG emissions. At most, there should be an agreement between the municipality of Enrile and the City of Tuguegarao as to how this will be done, whether by barge or by truck.
It was likewise clarified that the excavation was not merely to provide foundation for the revetments but also to ensure that the river width at the revetments remain the same. Hence, there may be a need to continually excavate in the future due to the effects of sedimentation and deposition which narrows the river. These should be included in the MOA between the DPWH and the local government units involved.

Issue:

The main issue raised was the speed by which the loan may be processed and approved by both the government of the Philippines and Japan because the stakeholders already need the structural interventions built at the soonest possible time.

RESPONSE:

The response of the JICA Study Team was that every effort was being done to expedite the release of funds but the approval process cannot be shortened since this was a loan agreement that has to be agreed upon by both parties. The JICA Study Team may be able to submit the feasibility study by January which will need to be approved by the ICC Cabinet Committee which will take another 2 months. The advent of the May elections makes the situation quite unclear as to how long the process will take. At most, the team is looking at two years for project approval.

Mr. Grecile Christopher Damo of the DPWH talked about the river basins which are part of the sector loan and some structural and non-structural method. He mentioned that everything follows the process and gave it two years before implementation considering that they also want this project to be implemented as soon as possible.

Issue:

They already have a project regarding flood control in the Tuguegarao Cagayan River area with the ICC way back in 2003. They asked if it would be possible to table this as an update of the previous project

RESPONSE:

That would be difficult if not impossible because this project and that project are different in scope and probably under different loan stipulations. This will have to be packaged as a different project and will have to go the same method of approval by the ICC-CC.

Closing and Conclusion:

The project stakeholders basically did not disagree with the designs and conclusions presented in the meeting even if the core areas will not be saved from flooding. As long as the critical areas of Alibago, Enrile, and Catagaman are spared the effects of river erosion which they suffer every year, they want the project to start as soon as possible.

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