

Initial Environmental Examination (IEE) Checklist Report Form for Dams and Irrigation Projects

DAMS / IRRIGATION PROJECTS ENVIRONMENTAL IMPACT MANAGEMENT AND MONITORING PLAN

Possible Environmental/Social Impacts	Baseline Environment	Preventive/Mitigating Measures	Monitoring Parameters/ Implementation	REMARKS
		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
LAND				
<input checked="" type="checkbox"/> Consistency with land use	<p>Current land use w/in 1km radius (as per zoning ordinance):</p> <p><input type="checkbox"/> Residential</p> <p><input type="checkbox"/> Commercial/ Institutional</p> <p><input type="checkbox"/> Industrial</p> <p><input type="checkbox"/> Agricultural/ Recreational</p> <p><input type="checkbox"/> Protected Areas</p> <p><input type="checkbox"/> Others, specify</p> <p>Actual land uses w/in 1km radius:</p> <p><input type="checkbox"/> Residential</p> <p><input type="checkbox"/> Commercial/ Institutional</p> <p><input type="checkbox"/> Industrial</p> <p><input type="checkbox"/> Agricultural/ Recreational</p> <p><input type="checkbox"/> Protected Areas</p> <p><input type="checkbox"/> Others, specify</p>	<p><input checked="" type="checkbox"/> See attached proof of compatibility with land use</p> <p><input checked="" type="checkbox"/> Limit project activities to what is compatible to the land use</p> <p><input type="checkbox"/> Others, specify</p>	<p>Actual land uses w/in 1km radius:</p> <p><input type="checkbox"/> Residential</p> <p><input type="checkbox"/> Commercial/ Institutional</p> <p><input type="checkbox"/> Industrial</p> <p><input type="checkbox"/> Agricultural/ Recreational</p> <p><input type="checkbox"/> Protected Areas</p> <p><input type="checkbox"/> Others, specify</p>	

Project Name: _____

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		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
<input type="checkbox"/> Land tenure / compatibility issue	Identify Land Tenure /compatibility issues: <input type="checkbox"/> CARP <input type="checkbox"/> CADC/ CADT/ CALC/ CALT <input type="checkbox"/> ROW <input type="checkbox"/> Informal settlers <input type="checkbox"/> Ecologically sensitive or protected area <input type="checkbox"/> Others, specify	<input type="checkbox"/> Obtain the following clearances/ permits from concerned agencies: <input type="checkbox"/> Resettlement Plan prepared <input type="checkbox"/> Provide relocation/disturbance compensation packages <input type="checkbox"/> Ensure participation of IPs in consultations and dialogues <input type="checkbox"/> MOA prepared/signed <input type="checkbox"/> Provide adequate buffer <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regularly monitor presence/absence of complaints <input checked="" type="checkbox"/> Regular coordination with LGU or appropriate agencies <input type="checkbox"/> Others, specify	
<input type="checkbox"/> Disturbance to wildlife due to vegetation clearing	Existing vegetation in the area: <input type="checkbox"/> Forestland <input type="checkbox"/> Marshland <input type="checkbox"/> Grassland <input type="checkbox"/> Mangrove <input type="checkbox"/> Wetland <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Comply with conditions of DENR/LGU SLUP, Tree Cutting Permit, ROW, PCA Permit <input checked="" type="checkbox"/> Limit land clearing as much as possible <input checked="" type="checkbox"/> Provide temporary fencing for vegetation that will be retained <input checked="" type="checkbox"/> Promote restoration of damaged or destroyed vegetation where possible (e.g., tree planting) <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Annual inspection of area replanted/ re-vegetated <input type="checkbox"/> Others, specify	

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<input type="checkbox"/> Change in surface landform/ topography/terrain/ slope <input type="checkbox"/> Soil Erosion	Slope: <input type="checkbox"/> Flat (0-3%) <input type="checkbox"/> Gently sloping to rolling (3-18%) <input type="checkbox"/> Steep (>18%) Is the project site located in an area identified by MGB/ PAG-ASA/ PHIVOLCS as hazard prone? <input type="checkbox"/> Yes <input type="checkbox"/> No	Considering the natural hazards and climate projections in the area: <input type="checkbox"/> Employ appropriate erosion control and slope protection measures <input type="checkbox"/> Designate a Spoils Storage Area, with topsoil set aside for later use and allow maximum re-use of spoils <input type="checkbox"/> Construct during dry season <input type="checkbox"/> Stabilize embankment with grasses or other soil cover <input type="checkbox"/> Conduct Engineering Geological and Geo-hazard Assessment (EGGA) and implement corresponding recommendation <input type="checkbox"/> Others, specify	<input type="checkbox"/> Regular inspection of slope protection measures in erosion-prone areas <input type="checkbox"/> Regular inspection for new eroded areas near the site <input type="checkbox"/> Others, specify	

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Building of structures and improper solid waste disposal leading to: <input type="checkbox"/> Impairment of visual aesthetics <input type="checkbox"/> Devaluation of land values	Solid Waste Management Scheme in the area: <input type="checkbox"/> SLF <input type="checkbox"/> MRF <input type="checkbox"/> Composting <input type="checkbox"/> Regular Collection of Solid Wastes Presence of visually significant landforms/landscape/structures? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Implement recovery, re-use and recycling of waste materials <input type="checkbox"/> Provide receptacles / bins for solid wastes <input type="checkbox"/> Set up temporary fence around the construction area <input type="checkbox"/> Implement proper segregation, collection and disposal of domestic wastes in designated areas <input type="checkbox"/> Implement proper collection, labeling and storage of hazardous waste <input type="checkbox"/> Coordinate with the municipal / city waste collectors <input type="checkbox"/> Engage third party company for waste collection <input type="checkbox"/> Implement landscaping and other beautification measures <input type="checkbox"/> Provide adequate buffer <input type="checkbox"/> Compensate adjacent property owners <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Daily inspection of waste handling including segregation in waste/recycling bins <input checked="" type="checkbox"/> Weekly inspection of waste accumulation and disposal <input type="checkbox"/> Regular inspection of landscaping and other beautification activities <input type="checkbox"/> Regular monitoring of buffer zones <input checked="" type="checkbox"/> Regular monitoring for presence/absence of complaints from adjacent property owners <input checked="" type="checkbox"/> Others, specify	
WATER				
<input type="checkbox"/> Increased siltation due to project activities <input type="checkbox"/> Water quality degradation <input type="checkbox"/> Others, specify	Specify nearest water body:	<input checked="" type="checkbox"/> Set up proper and adequate sanitary facilities <input checked="" type="checkbox"/> Ensure strict observance of proper waste handling and disposal and proper sanitation including by the contractors and its workers (if any)	Regular (ocular) inspection of: <input type="checkbox"/> Drainage/canal systems <input type="checkbox"/> Wastewater treatment facility (i.e., grease trap, septic tank, etc.	

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	<p>Distance to nearest water body:</p> <p><input type="checkbox"/> 0 to less than 0.5 km</p> <p><input type="checkbox"/> 0.5 to 1 km</p> <p><input type="checkbox"/> More than 1 km</p> <p>Size of population using receiving surface water:</p> <p><input type="checkbox"/> ≤ 1,000 persons</p> <p><input type="checkbox"/> >1,000 and ≤ 5,000 persons</p> <p><input type="checkbox"/> >5,000 persons</p> <p>Classification of nearest water body :</p> <table border="1" data-bbox="465 778 848 1094"> <tr> <td><input type="checkbox"/> Freshwater</td> <td><input type="checkbox"/> Marine/ coastal water</td> </tr> <tr> <td><input type="checkbox"/> AA</td> <td><input type="checkbox"/> SA</td> </tr> <tr> <td><input type="checkbox"/> A</td> <td><input type="checkbox"/> SB</td> </tr> <tr> <td><input type="checkbox"/> B</td> <td><input type="checkbox"/> SC</td> </tr> <tr> <td><input type="checkbox"/> C</td> <td><input type="checkbox"/> SD</td> </tr> <tr> <td><input type="checkbox"/> D</td> <td></td> </tr> </table> <p>Current Water Use:</p> <p><input type="checkbox"/> Fishery</p> <p><input type="checkbox"/> Tourist Zone / Park</p> <p><input type="checkbox"/> Recreational</p> <p><input type="checkbox"/> Industrial</p> <p><input type="checkbox"/> Agricultural</p> <p><input type="checkbox"/> Others, specify:</p>	<input type="checkbox"/> Freshwater	<input type="checkbox"/> Marine/ coastal water	<input type="checkbox"/> AA	<input type="checkbox"/> SA	<input type="checkbox"/> A	<input type="checkbox"/> SB	<input type="checkbox"/> B	<input type="checkbox"/> SC	<input type="checkbox"/> C	<input type="checkbox"/> SD	<input type="checkbox"/> D		<p><input type="checkbox"/> Provide wastewater treatment facility (e.g., septic tank, oil and water separator, etc.)</p> <p><input type="checkbox"/> Set up silt trap/settling ponds to minimize downstream siltation</p> <p><input type="checkbox"/> Others, specify</p>	<p><input type="checkbox"/> Water body for turbidity and/or silted condition and for floating wastes or debris</p> <p>Regular ambient water monitoring for the following:</p> <table border="1" data-bbox="1431 494 1807 659"> <thead> <tr> <th>Parameter</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> TSS concentration</td> <td> <input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly </td> </tr> </tbody> </table>	Parameter	Frequency	<input type="checkbox"/> TSS concentration	<input type="checkbox"/> Annual <input type="checkbox"/> Semi-annual <input type="checkbox"/> Quarterly	
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		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
	Distance of project area to the nearest well used: <input type="checkbox"/> 0 to less than 0.5 km <input type="checkbox"/> 0.5 to 1 km <input type="checkbox"/> More than 1 km Use of nearest well: <input type="checkbox"/> Drinking/Domestic <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Others:			
<input type="checkbox"/> Competition in water use <input type="checkbox"/> Depletion of water resources	Size of population using proposed water source: <input type="checkbox"/> ≤ 1,000 persons <input type="checkbox"/> >1,000 and ≤ 5,000 persons <input type="checkbox"/> >5,000 persons Available/nearest water source. <input type="checkbox"/> Deepwell <input type="checkbox"/> Water district/LGU <input type="checkbox"/> Surface water <input type="checkbox"/> Others, specify	<input type="checkbox"/> Implement rainwater harvesting and similar measures as an alternative source of water <input checked="" type="checkbox"/> Observe water conservation measures <input type="checkbox"/> Carefully select project site to avoid disruption of traditional water uses <input checked="" type="checkbox"/> Obtain Water Permit from NWRB <input checked="" type="checkbox"/> Improve efficiency of water supply and distribution system <input type="checkbox"/> Implement community ponds and similar measures as alternative water source and options for fish cultivation	<input checked="" type="checkbox"/> Regular monitoring for presence/absence of complaints <input checked="" type="checkbox"/> Regular coordination with concerned agencies <input checked="" type="checkbox"/> Regular monitoring for occurrences of water shortages <input type="checkbox"/> Others, specify	

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		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
		<input checked="" type="checkbox"/> Increase, when practical, storage capacities of water supply structures for resilience to greater climate variations and extremes <input type="checkbox"/> Use drought resistant species which require less water input and hence have less impact on water tables <input checked="" type="checkbox"/> Modify irrigation techniques, including amount, timing or technology <input checked="" type="checkbox"/> Improve water management to prevent water logging, erosion and leaching <input type="checkbox"/> Modify crop calendars and/or implement seasonal climate forecasting (e.g., timing or location of cropping activities) <input type="checkbox"/> Others, specify		

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		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
<input type="checkbox"/> Increased occurrence of flooding	Is the project site located in an area identified by MGB/ PAG-ASA as flood prone? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Use appropriate design for project facilities <input type="checkbox"/> Implement appropriate drainage system <input type="checkbox"/> Regularly remove debris and other materials that may obstruct water flow <input type="checkbox"/> Use appropriate technology (e.g., raised hand-pumps) to protect drinking water from flood contamination <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regular monitoring for presence/absence of complaints <input checked="" type="checkbox"/> Regular coordination with concerned agencies <input checked="" type="checkbox"/> Regular monitor of increased frequency of flooding <input type="checkbox"/> Others, specify	
AIR / NOISE				
Air quality degradation	Distance to nearest community: <input type="checkbox"/> 0 to less than 0.5 km <input type="checkbox"/> 0.5 to 1 km <input type="checkbox"/> More than 1 km Is the wind direction blowing towards the nearest community most of the year? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Properly operate and maintain all emission sources (e.g., vehicles, pumps, generator, etc.) <input type="checkbox"/> Install, when applicable, the appropriate air pollution control device/s <input type="checkbox"/> Strictly enforce good housekeeping practices <input type="checkbox"/> Control vehicle speed to lessen suspension of road dust <input type="checkbox"/> Conduct water spraying to suppress dust sources and minimize discomfort to nearby residents <input type="checkbox"/> Use covered vehicles to deliver materials that may generate dust <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regular monitoring for presence/absence of complaints Regular (ocular) inspection of: <input type="checkbox"/> Absence of white or black smoke from vehicles, power generator, etc. <input type="checkbox"/> Presence of truck cover during deliveries	

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		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
<input type="checkbox"/> Nuisance due to noise generation	Distance to nearest community: <input type="checkbox"/> 0 to less than 0.5 km <input type="checkbox"/> 0.5 to 1 km <input type="checkbox"/> More than 1 km	<input type="checkbox"/> Properly operate and maintain all noise sources (e.g., vehicles, pumps, generator, etc.) <input type="checkbox"/> Install, when applicable, the appropriate noise control device/s (e.g., mufflers, silencer, sound barriers, etc.) <input type="checkbox"/> Implement appropriate operating hours <input type="checkbox"/> Provide adequate buffer and/or planting of trees <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regular monitoring for presence/absence of complaints <input type="checkbox"/> Regular monitoring of buffer zones <input type="checkbox"/> Quarterly monitoring of noise level	
PEOPLE				

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		<input checked="" type="checkbox"/> Cost of preventive/mitigating as well as monitoring integrated in the construction /operation cost		
<input type="checkbox"/> Displacement of residents including indigenous people in the project site and within its vicinity <input type="checkbox"/> Enhanced employment and/or livelihood opportunities <input type="checkbox"/> Reduced employment and/or livelihood opportunities <input type="checkbox"/> Increased revenues for LGU <input type="checkbox"/> Disruption/Competition in delivery of public services (e.g., education, peace and order, etc.) <input type="checkbox"/> Enhanced delivery of public services (e.g., education, peace and order, etc.) <input type="checkbox"/> Increase in traffic volume and worsening of traffic flow	<p>Size of population of host barangay/s:</p> <p><input type="checkbox"/> ≤ 1,000 persons</p> <p><input type="checkbox"/> >1,000 and ≤ 5,000persons</p> <p><input type="checkbox"/> >5,000person</p> <p><input type="checkbox"/> Indigenous People Size:</p> <p>Classification of host barangay:</p> <p><input type="checkbox"/> Urban</p> <p><input type="checkbox"/> Rural</p> <p><input type="checkbox"/> Employment/Livelihood Opportunity Rate in the host Municipality:</p> <p><input type="checkbox"/> High</p> <p><input type="checkbox"/> Low</p> <p>Description:</p>	<input type="checkbox"/> Provide relocation/disturbance compensation packages <input checked="" type="checkbox"/> Prioritize local residents for employment <input checked="" type="checkbox"/> Promptly pay local taxes and other financial obligations <input checked="" type="checkbox"/> Regular coordination with LGU <input type="checkbox"/> Conduct prior consultation and coordination to minimize disruption of daily domestic activities and to ensure respect for IP rights and cultural practices <input type="checkbox"/> Ensure participation of IPs in consultations and dialogues <input type="checkbox"/> Provide appropriate traffic/warning signs, lighting, etc <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Presence/Absence of complaints <input checked="" type="checkbox"/> Regular coordination with LGU <input type="checkbox"/> Others, specify	
<input type="checkbox"/> Impacts on community health and safety <input type="checkbox"/> Others, specify	<p>Available services within/near the host barangay:</p> <p><input type="checkbox"/> Schools (e.g. elementary, high school, college)</p> <p><input type="checkbox"/> Health facilities (e.g., clinics,</p>	<input checked="" type="checkbox"/> Regularly coordinate with LGU <input type="checkbox"/> Provide appropriate warning signs, lighting and barricades, whenever practicable <input checked="" type="checkbox"/> Observe proper housekeeping <input type="checkbox"/> Provide on-site medical services for	<input checked="" type="checkbox"/> Regular monitoring for presence/absence of complaints <input checked="" type="checkbox"/> Regular coordination with LGU	

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	hospitals, etc.) <input type="checkbox"/> Peace and order (e.g., police outpost, Brgy. Tanod, etc.) <input type="checkbox"/> Recreation and sports facilities <input type="checkbox"/> Others, specify	any emergency. <input type="checkbox"/> Participate in public awareness programs on health and safety <input type="checkbox"/> Implement appropriate safety programs for both community and workers <input type="checkbox"/> Others, specify	<input checked="" type="checkbox"/> Regular submission of reports to concerned agency <input type="checkbox"/> Others, specify	
<input type="checkbox"/> Destruction/disturbance of physical cultural resources. <i>(✓ if project site has been identified to have such by NM, NHCP, NCAA and LGUs)</i>	Physical Cultural resources within the vicinity of the project site	<input type="checkbox"/> Implement appropriate protocols based on NM, NHCP, NCAA and LGU guidelines including those for chance finds (if any). Specify:	<input type="checkbox"/> Regular coordination with NM, NHCP, NCAA and LGU	