ANNEXURES

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

PHILIPPINES RURAL DEVELOPMENT PROJECT SCALE-UP

Department of Agriculture

April 24, 2023

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ANNEX A: PROTECTED AREAS IN THE PHILIPPINES

(as on December 2022)

Region	Protected Area	Province	Area (Hectares)
1	Agoo-Damortis Protected Landscape & Seascape	La Union	10,774.68
1	Tirad Pass Protected Landscape	Ilocos Norte	7,507.60
1	Northern Luzon Heroes Hill National Park	Ilocos Norte	5,397.30
1	Kalbario-Patapat Natural Park	Ilocos Norte	3,903.19
1	Ilocos Norte Metro Watershed Forest Reserve	Ilocos Norte	2,247.74
1	Manleluag Spring Protected Landscape	Pangasinan	1,938.83
1	Hundred Island National Park	Pangasinan	1,762.11
1	Lididda Banayoyo Protected Landscape	Ilocos Sur	1,042.29
1	Bessang Pass Natural Monument/Landmark	Ilocos Sur	581.05
1	Paoay Lake National Park	Ilocos Norte	378.78
1	Tanap Watershed Forest Reserve	Ilocos Norte	303.30
1	Salcedo Protected Landscape	Ilocos Sur	196.33
1	Bigbiga Protected Landscape	Ilocos Sur	142.87
1	Naguilian Watershed Reservation	La Union	86.78
1	Libunao Protected Landscape	Ilocos Sur	47.15
1	Santa Watershed Forest Reserve	Ilocos Sur	27.17
2	Bawa Watershed Forest Reserve	Cagayan	9,447.17
2	Dupax Watershed Reservation	Nueva Vizcaya	338.52
2	Fuyot Springs National Park	Isabela	1,160.30
2	Isabela (Monte-alto Timber Resource Corporation Parcel 1&2) (Indicative)	Isabela	1,139.24
2	Northern Sierra Madre Natural Park	Isabela	356,969.32
2	Palaui Island Marine Reserve	Cagayan	8,048.57
2	Peñablanca Protected Landscape	Cagayan	118,653.66
2	Quirino Protected Landscape	Quirino	183,364.76
2	Salinas Natural Monument	Nueva Vizcaya	5,966.05
2	Tumauini Watershed Forest Reserve	Isabela	6,509.38
2	Wangag Watershed Forest Reserve	Cagayan	6,924.40
2	Magapit Protected Landscape	Cagayan	3,851.15
2	Casecnan Protected Landscape	Nueva Vizcaya, Quirino & Aurora	86,246.77
2	Batanes Protected Landscape & Seascape	Batanes	210,687.81
2	Bangan Hill National Park	Nueva Vizcaya	13.08
3	Angat Watershed and Forest Range	Bulacan	6,671.63
3	Aurora Memorial National Park	Aurora	6,516.93
3	Aurora Watershed Forest Reserve	Aurora	1,636.75
3	Bataan National Park	Bataan	20,004.17
3	Calabgan Watershed Forest Reserve	Aurora	4,629.50
3	Dibalo-Pingit-Zabali-Malayat Watershed Forest Reserve	Aurora	4,571.83
3	Dinadiawan River Protected Landscape	Aurora	3,366.54
3	Dipaculao Watershed Forest Reserve	Aurora	2,678.32
3	Doña Remedios-General Tinio Watershed	Nueva Ecija	20,930.85
3	Lake Malimanga Bird & Fish Sanctuary	Zambales	22.86
3	Masinloc and Oyon Bay Marine Reserve	Zambales	7,558.13
3	Mt. Arayat National Park	Pampanga	3,726.50
3	Olongapo Naval Base Perimeter	Zambales	4.60
3	Olongapo Watershed Forest Reserve	Zambales	6,293.50
3	Pantabangan-Caranglan Watershed Reservation	Bulacan	94,864.96
3	Roosevelt Protected Landscape	Bataan	950.43

Region	Protected Area	Province	Area (Hectares)
3	Simbahan-Talagas Protected Landscape	Aurora	2,284.38
3	Talavera Watershed Reservation	Nueva Ecija	27,486.49
3	Talaytay Protected Landscape	Aurora	3,598.31
3	Watershed Purposes of Mariveles (Palanas)	Bataan	347.09
3	Minalungao National Park	Nueva Ecija, Bulacan	2,018.37
3	Biak-na-Bato National Park	Bulacan	2,112.40
3	Angat Watershed Forest Reserve District (Metro Water District)	Bulacan	54,574.30
3	Amro River Protected Landscape	Aurora	6,431.30
3	Philippine Rise Marine Resource Reserve	-	357,903.10
4A	Buenavista Protected Landscape	Quezon	287.24
4A	Hinulugan Taktak Protected Landscape	Rizal	3.58
4A	Infanta Watershed Forest Reserve	Quezon	479.78
4A	Island of Alibjaban / Alibjaban Island PLSS	Quezon	1,072.34
4A	Lopez Watershed Forest Reserve	Quezon	440.56
4A	Maulawin Spring Protected Landscape	Quezon	183.15
4A	Mts. Banahaw-San Cristobal Protected Landscape	Quezon, Laguna	11,310.61
4A	Mts. Palay-palay-Mataas ng Gulod	Cavite, Batangas	3,972.70
4A	Mulanay Watershed Forest Reserve	Quezon	29.66
4A	Pagsanjan Gorge National Park	Laguna	166.52
4A	Palsabangan River up to Mazintuto River, Bacong River to Sandoval Pt	Quezon	866.59
4A	Polilio Watershed Forest Reserve	Quezon	125.98
4A	Quezon Protected Landscape	Quezon	1,042.85
4A	Taal Volcano Protected Landscape	Batangas	62,292.16
4A	Tibiang-Damagandon Watershed Forest Reserve	Quezon	274.47
4A	Unname National Park, Wildlife Sanctuary and Game Preserve (PP1636)	Laguna, Quezon, Rizal and Bulacan	115,447.63
4A	Upper Marikina River Basin Protected Landscape	Rizal	26,125.64
4A	Pamitinan Protected Landscape	Rizal	609.15
4A	Island of Polilio, Alabat, Cabelete, Jomalig, Patnanongan, Kalotkot, Kalongkooan	Quezon	4,750.43
4A	Calauag Watershed Forest Reserve	Quezon	306.98
4A	Binahaan River Watershed Forest Reserve	Quezon	476.27
4A	Alabat Watershed Forest Reserve	Quezon	316.88
4B	Mt. Guiting-Guiting Natural Park	Romblon	15,525.22
4B	Mt. Mantalingahan Protected Landscape	Palawan	121,886.57
4B	Mts. Iglit-Baco National Park	Occidental Mindoro & Oriental Mindoro	106,655.50
4B	Naujan Lake National Park	Palawan	15,326.45
4B	Palawan Flora and Fauna Watershed Forest Reserve (Parcel 2)	Palawan	3,240.29
4B	Palawan Game Refuge and Bird Sanctuary-Proc 219	Palawan	1,088,181.26
4B	Puerto Princesa Underground River	Palawan	21,908.63
4B	Rasa Island Wildlife Sanctuary	Palawan	1,994.84
4B	Sibuyan Island (Mangrove)	Romblon	504.71
4B	Torrijos Watershed Forest Reserve	Marinduque	157.84
4B	Tubbataha Reefs Natural Park	Palawan	451,600.56
4B	Palawan Flora and Fauna Watershed Forest Reserve (Parcel 1)	Palawan	4,799.18
4B	Malampaya Sound Protected Landscape	Palawan	201,018.26

Region	Protected Area	Province	Area (Hectares)
4B	Calavite & F.B. Harrison Game Refuge and Bird Sanctuary	Occidental Mindoro	106,479.07
4B	Calatrava, San Andres, San Agustin Watershed Forest Reserve	Romblon	2,614.28
4B	Apo Reef Natural Park	Occidental Mindoro	15,799.23
5	Bondsalay Natural Park	Masbate	518.90
5	Bulusan Volcano Natural Park	Sorsogon	3,641.57
5	Capalonga Watershed Forest Reserve	Camarines Norte	358.92
5	Caramoan National Park	Camarines Sur	347.09
5	Chico Island Wildlife Sanctuary	Masbate	7.84
5	Dahican Watershed Forest Reserve	Camarines Norte	42.24
5	Island of Basot and Quinalaang	Camarines Sur	3,583.98
5	Island of Dampalit	Masbate	16.53
5	Island of Guinauycan and Pobre	Masbate	150.92
5	Island of Majaba and Napayuan	Masbate	440.83
5	Laganoy Natural Biotic Area	Masbate	443.63
5	Malabungot Protected Landscape & Seascape	Camarines Sur	147.71
5	Malaquing River to Mabunga River, Cueva Point to Kimartines Point, Kabugao Point	Masbate	446.58
5	Mangrove Areas from Del Pilar to Palita Island, Bo. Salvacion and Dahican	Camarines Norte	2,420.36
5	Mt. Mayon Natural Park	Albay	5,327.15
5	Mt. Isarog Natural Park	Camarines Sur	10,090.89
5	Naro Island Wildlife Sanctuary	Masbate	110.01
5	Pigbucan Point to Paron Point Mangrove	Albay	194.53
5	Putiao River to Malbog River, Getumbro Pt. to Prieto Diaz, Panuntingan Pt to Tagdon River	Sorsogon	2,593.46
5	Tanglar Pt to Bicol River up to islands of Lahay, Locsuhin, Haponan, Quina	Camarines Sur	3,141.83
5	Ticao Burias Pass Protected Seascape	Masbate	414,244.00
5	Tugbo Natural Biotic Area	Masbate	244.00
5	Libmanan Caves National Park	Camarines Sur	18.52
5	Catanduanes Watershed Forest Reserve	Catanduanes	48,924.05
5	Buhi Wildlife Sanctuary	Camarines Sur	1,620.65
5	Bicol Natural Park	Camarines Norte, Camarines Sur	5,466.35
5	Abasig-Matogdon Mananap Natural Biotic area	Camarines Norte	5,918.31
6	Dalanas River Watershed Forest Reserve	Antique	7,594.74
6	Jalaur River Watershed Forest Reserve	Capiz	9,463.36
6	Kabangkalan Watershed Forest Reserve	Negros Occidental	416.86
6	Maasin Watershed Forest Reserve	Iloilo	6,539.95
6	Northern Negros Natural Park	Negros Occidental	70,826.16
6	Northwest Panay Peninsula Natural Park	Antique	12,009.29
6	Pan-ay River Watershed Forest Reserve	Capiz	4,076.56
6	Sagay Marine Reserve	Negros Occidental	32,515.05
6	Sibalom Natural Park	Antique	6,778.44
6	Taklong Island National Marine Reserve	Guimaras, Iloilo	1,143.57
6	Sicogon Island Wildlife Sanctuary	-	283.00
6	Mt. Kanlaon Natural Park	Negros Occidental, Negros Oriental	23,559.76
6	Ilog-Hilabangan Watershed Forest Reserve	Negros Occidental	10,475.57
6	Bulabog-Putian National Park	Iloilo	889.25
6	Aklan River Watershed Forest Reserve	Aklan	24,131.88

Region	Protected Area	Province	Area (Hectares)
7	Apo Island Protected Landscape/Seascape	Negros Oriental	691.40
7	Camotes Island Protected Landscape & Seascape	Bohol	1,436.98
7	Central Cebu Protected Landscape	Cebu	28,488.57
7	Chocolate Hills Natural Monument	Bohol	13,994.95
7	Island of Ambugan/Hambungan & Inabanga River (MSFR)	Bohol	1,214.59
7	Island of Bantayan	Cebu	11,259.58
7	Island of Budlanan, Bugatusan, Panga, Silo, Cabgan, Canconstino, Tabaon	Bohol	38.30
7	Island of Catiil, Colangaman, Lomislis, Tagangdio, Tintinan, and islet of Pamasuan	Bohol	219.27
7	Island of Pamusuan, Handayan, Majanay..Islets of Bonoon, Lapinig, Pinahon	-	2,850.75
7	Loboc Watershed Forest Reserve	Bohol	8,889.68
7	Olango Island Wildlife Sanctuary	Cebu	1,382.30
7	Rajah Sikatuna Protected Landscape	Bohol	10,964.64
7	Talibon Group of Islands Protected Landscape & Seascape	Bohol	6,446.31
7	Tañon Strait Protected Seascape	Cebu, Negros Occidental, Negros Oriental	534,589.05
7	Panglao Island Protected Seascape	Bohol	2,445.08
7	Guadalupe Mabugnao Mainit Hot Spring National Park	Cebu	62.34
7	Balisasayao Twin Lakes Natural Park	Negros Oriental	8,016.05
7	Alihawan Cansujay Anibongan River Watershed Forest Reserve	Bohol	3,737.44
8	Cuatro Islas Protected Landscape/Seascape	Leyte	11,407.46
8	Kuapnit Balinsasayao National Park	Leyte	376.84
8	Lake Danao Natural Park	Leyte	2,244.11
8	MacArthur Landing National Park	Leyte	6.78
8	Mangrove Areas along the coastline of Dupon Bay from Sacay Pt to Mount of Dupon River, Apalit Pt to Calunganan Pt Puerto Bello Lao Mangrove from Bo. Tuban and Bo. Manpagui Santa Cruz	Leyte	2,737.60
8	Palompon Watershed Forest Reserve	Leyte	5,631.04
8	Samar Island Natural Park	Northern Samar	335,105.57
8	Mahagnao Volcano Natural Park	Leyte	340.82
8	Guiuan Protected Landscape/Seascape	Eastern Samar	66,752.26
8	Calbayog-Pan-As Hayiban Protected Landscape	Samar	5,067.93
8	Biri Larosa Protected Landscape/Seascape	Northern Samar	32,284.14
9	Buug Natural Biotic Area	Zamboanga del Sur	1,261.46
9	Great and Little Sta. Cruz Islands Protected Landscape & Seascape	Zamboanga del Sur	1,827.16
9	Jose Rizal Memorial Protected Landscape	Zamboanga del Norte	474.82
9	Mangrove Areas from Tagasilay to the Mouth of Tigbao River including east of Vitali Island	Zamboanga del Sur	2,660.81
9	Mount Timolan Protected Landscape	Zamboanga del Sur	2,244.54
9	Murcielagos Island Protected Landscape and Seascape	Zamboanga del Norte	100.40
9	Naga-Kabasalan Protected Landscape	-	5,505.45
9	Pasonanca Natural Park	Zamboanga City	12,102.08

Region	Protected Area	Province	Area (Hectares)
9	Selinog Island Protected Landscape and Seascape	Zamboanga del Norte	959.41
9	Siocon Resource Reserve	Zamboanga del Norte	855.59
9	Turtle Islands Wildlife Sanctuary	Tawi Tawi	242,958/28
9	Mangrove Areas in Tumalong Bay, Baong River, Pongca Bay, Mangrice in Pisan, Sagapayan, Tintacuan and Sakol Island	Zamboanga del Sur	8,989.55
9	Dumanquilas Protected Landscape/Seascape	Zamboanga del Sur	26,112.21
9	Basilan Natural Biotic Area	Basilan	4,545.99
9	Aliguay Island Protected Landscape/SEascape	Zamboanga del Norte	1,188.39
10	Intao-Libertad Protected Landscape and Seascape	Misamis Oriental	921.02
10	Mangrove Areas from Liangan River to Lipatan River of the Municipality of Lapayan	Lanao del Norte	191.16
10	Mimbilisan Protected Landscape	Misamis Oriental	106.83
10	Mt. Balatukan Range Natural Park	Misamis Oriental	8,437.87
10	Mt. Kalatungan Range Natural Park	Bukidnon	22,225.11
10	Mt. Kitanglad Range Natural Park	Bukidnon	47,234.20
10	Mr. Malindang Natural Park	Misamis Oriental	52,423.51
10	Mt. Timpoong Hibok-Hibok Natural Monument	Camiguin	2,203.39
10	Mt. Inayawan Range Natural Park	Lanao del Norte	4,236.18
10	Mt. Inayawan Range Natural Park	Lanao del Norte	4,236.18
10	Mahugunao Watershed Forest Reserve	Misamis Oriental	147.24
10	Barrio Bagumbang to Malautan River (mangrove)	Misamis Occidental	543.20
10	Baliangao Protected Landscape/Seascape	Misamis Occidental	315.50
11	Mabini Protected Landscape and Seascape	Davao del Sur	7,292.62
11	Malagos Watershed Reservation	Davao City	235.34
11	Mangrove from Baculin Pt to Lakud Pt from Tanuio Pt to Quinablangan Island and Samal Island	Davao	1,849.03
11	Mati Protected Landscape	Davao Oriental	884.46
11	Mt. Hamiguitan Range Wildlife Sanctuary	Davao Oriental	7,137.40
11	Pujada Bay Protected Landscape/Seascape	Davao Oriental	20,873.43
11	Mt. Apo Natural Park	Cotabato	64,111.47
11	Mainit Hotspring Protected Landscape	Compostela Valley	1,422.63
11	Baganga Protected Landscape	Davao Oriental	114.87
11	Aliwagwag Protected Landscape	Compostela Valley	10,261.07
12	Libungan Watershed Forest Reserve	North Cotabato	52,820.56
12	Sarangani Bay Protected Seascape	-	210,887.69
12	Mt. Matutum Protected Landscape	South Cotabato, Sarangani	13,947.00
12	Lake Buluan GRBS	North Cotabato	8,367.36
12	Allay Valley Watershed Forest Reserve	Sultan Kudarat, South Cotabato	98,533.65
13	Andanan Watershed Forest Reserve	Agusan del Sur	17,185.63
13	Island of Awasan, Cabilan, Capaquian, Sugbuhan and Tagboaba	Surigao del Norte	4,671.57
13	Islang of Dinagat, Hikdop, Sibate and Hanigad	-	1,898.02
13	Island of Lamagon (Lamayan), Cepaya and Cobeton	Surigao del Norte	586.71
13	Mangrove Areas along Municipalities of Lavigan, Valencia up to Taon River Municipality Barcelona, Islands of Masopelid,	-	1,310.62

Region	Protected Area	Province	Area (Hectares)
	Mahaba, Condona, Bayagnan, Bilabid and Caye		
13	Siargao Protected Landscape/Seascape	Surigao del Norte	283,974.76
13	Surigao Watershed Forest Reserve	Surigao del Norte	951.93
13	Tinuy-an Falls Protected Landscape	Bislig City	4,321.75
13	Island of Rasa	-	293.04
13	Cabadbaran Watershed	Agusan del Norte	15,180.33
13	Alamio, Buayan, Carac-an, Panikian River and Sipangpang Falls Watershed Forest Reserve	Agusan del Norte	43,345.66
13	Agusan Marsh Wildlife Sanctuary	Agusan del Sur	40,940.96
CAR	Lower Agno Watershed Forest Reserve	Tuba, Itogon, Benguet, and Baguio City; San Manuel and San Nicolas, Pangasinan	39,082.28
CAR	Mt. Pulag National Park	Buguias, Kabayan, Benguet; Kiangan, Ifugao & Kayapa, Nueva Vizcaya	11,602.00
CAR	Mt. Data National Park	Benguet, Ifugao & Mt. Province	5,512.05
CAR	Upper Agno River Basin Resource Reserve	Benguet Province; Hungduan and Kiangan, Ifugao	78,005.32
CAR	Marcos Highway Watershed Forest Reserve	Agoo, La Union; Baguio City and Tuba, Benguet	31,542.47
CAR	Cassamata Hill National Park	-	55.15
CAR	Balbalasang-Balbalan National Park	Balbalan, Kalinga; and Apayao	21,567.53
ARMM	Lake Lanao Watershed Reservation	Lanao del Sur	171,292.80
ARMM	Mt. Dajo National Park	Sulu	212.42
ARMM	Pantuwaraya Lake National Park (Indicative)	Lanao del Sur	19.12
ARMM	RUngkunan National Park (indicative)	Lanao del Sur	967.73
ARMM	Salikata National Park (indicative)	Lanao del Sur	659.64
ARMM	South Upi Watershed Forest Reserve	Maguindanao	1,738.62
ARMM	Sacred Mountain National Park	Marawi City	89.61
ARMM	Mado Hot Spring National Park	Cotabato	48.73
ARMM	Lake Dapao National Park	Lanao del Sur	998.13
ARMM	Lake Butig National Park	Lanao del Sur	35.32
NCR	Manila Bay Beach Resort	Metro Manila	464.66
NCR	Ninoy Aquino Parks & Wildlife Center	Metro Manila	23.85
NCR	Luneta Park	Metro Manila	16.04
NCR	LPPCHEA	Metro Manila	181.61

Source: Biodiversity Management Bureau, https://bmb.gov.ph/index.php/protected-areas-paoemd/facts-and-figures-paoemd/list-of-protected-areas-pa (accessed December 27, 2022)

ANNEX B: ENVIRONMENTAL AND SOCIAL SAFEGUARDS EARLY SCREENING FORM FOR COMMODITY INVESTMENT PLANS
(I-PLAN)

Instructions:

(i) The Social and Environmental Safeguards (SES) early screening for I-PLAN shall involve review of the investment planning process in PCIP Formulation and Updating and of the priority investments, subjecting these to a SES screening criteria to avoid any possible adverse impacts to the environment and community in implementing the provincial investment program.

(ii) Detailed location-specific data will not be required at this time but will be a requirement during subproject preparation under I-BUILD/I-REAP.

(iii) The SES screening for I-PLAN will be conducted by the Provincial Core Planning Team (CPT) with technical Support from the Regional CPT, in coordination with the RPCO SES Unit and Geo-mapping and Government Unit (GGU).

(iv) Key information and references during SES screening are the Comprehensive Land Use Plan (CLUP), Expanded Vulnerability & Suitability Analysis (E-VSA), Climate Risk Vulnerability Assessment (CRVA), Fishery Vulnerability and Suitability Tool (FishVool), results of participatory planning, and geomapping of GGU identifying the natural, climate and geologic hazards, proximity to protected areas and ancestral domains of IPs.

(v) Use √ mark in answering the questions (Yes or No columns)

(vi) Use the "remarks" section to discuss the eligibility or requirements for evaluation.

Province		
Commodities Covered:		
Nature of PCIP Updating: 1. Addition of Commodity 2. Integration of Climate 3. Updating of Data and Strategies	□ new	□ updating

Screening Question	Yes	No	Remarks
A. Eligibility Screening			
1. Would any intervention in the investment plan encroach into or be located in officially declared strict protection zone of protected areas (e.g. national parks, key biodiversity areas, and primary forest reserves)?			If YES, identified intervention is recommended for exclusion from PCIP and from the priority list for funding under PRDP Scale-Up.
2. Would any intervention in the investment plan result in significant conversion and/or encroachment or disturbance of any critical natural habitats (i.e. primary forest, critical wetlands, endangered species habitat, etc.)?			If YES, identified intervention is recommended for exclusion from PCIP and from the priority list for funding under PRDP Scale-Up.

Screening Question	Yes	No	Remarks
3. Would any intervention in the investment plan involve cutting of mangroves / conversion of mangrove or beach forests, dewatering of mudflats, reclamation of floodplains, or coastal areas?			If YES, identified intervention is recommended for exclusion from PCIP and from the priority list for funding under PRDP Scale-Up.
4. Would any intervention in the investment plan involve harvesting of mangrove, coral reefs or beach sand?			If YES, identified intervention is recommended for exclusion from PCIP and from the priority list for funding under PRDP Scale-Up.
5. Would any intervention in the investment plan involve commercial forest product harvesting?			If YES, identified intervention is recommended for exclusion from PCIP and from the priority list for funding under PRDP Scale-Up.
6. Would any intervention involve any dam construction of more than 15 meters in height (measured as the vertical distance between the lowest point in the original streambed measured at the toe of the dam)?			If YES, identified intervention is recommended for exclusion from the priority list for funding under PRDP Scale-Up.
7. Would any intervention involve hunting or fishing in game refuge, bird sanctuaries, marine and seashore parks?			If YES, identified intervention is recommended for exclusion from PCIP and from the priority list for funding under PRDP Scale-Up.
8. Would any intervention in the investment plan fall into the high-risk category based on the results of eVSA, CRVA, FishVool, and multi-risk criteria assessment tools?			If YES, identified subproject intervention is recommended for exclusion from PCIP and from the priority list for funding under PRDP Scale-Up.
9. Would any intervention in the investment plan alter, damage, or render inaccessible any cultural resources and practices, structures or heritage sites?			If YES, identified subproject intervention is recommended for exclusion from PCIP and from the priority list for funding under PRDP Scale-Up.
B. Other Environment and Social Criteria/Requirements			
10. Would any intervention in the investment plan be located in ancestral domain of IPs and/or located in an area with IP community/ies?			If YES, identified subproject intervention may be considered in the PCIP and in the priority list for funding under PRDP Scale-Up, provided that it is designed to create positive impacts on the IP community/ies. Integrate ADSDPP or in the absence of

Screening Question	Yes	No	Remarks
			an ADSDPP, any existing plan of the IP community into the Commodity System Investment Planning (CSIP).
11. Are there IPs, marginalized, and vulnerable groups in the area?			If YES, conduct consultation with vulnerable stakeholders, i.e. IPs, marginalized groups. Provide documentation of these consultation meetings.
12. Would any of the interventions in the investment plan result to changes in land uses?			If YES, check congruence with the approved land use plan of the province/city/municipality.

Name and Signature of LGU Screening Officer: _____

Date Completed: _____

Screening Result Summary

(To be filled up by the Screening Officer)

Check the box that applies:

□ The PCIP currently does not qualify for PRDP Scale-Up funding but may be resubmitted for consideration after complying with the following requirements/actions. [*check applicable requirements based on the above screening table]:*

_____ Stakeholder identification and analysis

_____ Documentation of stakeholder consultation meetings on PCIP/VCA

_____ Overlay maps and assessment of natural, geologic and climate hazards and measures to respond/manage identified disaster/calamities, climate adaptation or climate-mitigation measures

_____ Disaster and emergency response plan, climate resiliency, adaptation and mitigation measures (for PCIP with interventions in “no-build zones”)

_____ Integrate the ADSDPP or in the absence of an ADSDDP any existing plan of the IP community into the commodity system investment planning (if located in AD or affecting IP community/ies)

_____ Multi-risk Analysis Result

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SAFEGUARD CLEARANCE (To be filled only after review of the PCIP)

□ This PCIP is not yet cleared of safeguards requirements pending compliance of the following [Write down pending requirements]:

.

□ This PCIP is cleared of safeguards requirements and may proceed with finalization of the draft investment plan.

Recommended for Clearance by: _____

RPCO SES Unit Head

Cleared by: _____

PSO SES Unit Head

ANNEX C: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREENING FORM FOR SUBPROJECTS
(I-BUILD AND I-REAP)

Instructions:

(i) The screening form should form part of the Subproject proposal package.
(ii) Respond to each question assuming the "without mitigation" scenario to identify potential impacts of the subproject. SPs with Significant adverse risks and impacts to be screened out
(iii) Use √ mark in answering the questions (Yes or No columns)
(iv) Use the "remarks" section to discuss the eligibility or requirements for evaluation.

Name of Subproject:		
Proponent:		
Subproject location:		
Component Activity:	□ I-BUILD	□ I-REAP

Screening Question	Yes	No	Remarks
A. Subproject Eligibility			
1. Will the subproject involve construction or operation of facilities or extracting resources such as aggregates or timber in declared strict protection zone of protected areas (e.g. national parks), key biodiversity areas, and primary forest reserves by the government?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
2. Will the subproject result in conversion, encroachment or disturbance of any critical natural habitats (i.e. primary forest, critical wetlands, endangered species habitat, etc.)?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
3. Will the subproject alter, damage or render inaccessible any cultural resources and practices, structures or heritage sites?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
4. Will the subproject involve cutting of mangroves / conversion of mangrove or beach forests, dewatering of mudflats, reclamation of floodplains or coastal areas?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
5. Will the subproject involve logging, commercial forest product harvesting?			If YES, subproject is not eligible for funding under PRDP Scale-Up.

Screening Question	Yes	No	Remarks
6. Will the subproject involve hunting or fishing in game refuge, bird sanctuaries, marine and seashore parks?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
7. Will the subproject involve the collection and trade of wildlife, rare, threatened and endangered flora and fauna?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
8. Will the subproject involve harvesting of mangrove or coral reefs or beach sand?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
9. Will the subproject involve the purchase of chainsaw, extractive equipment and explosives?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
10. Will the subproject involve the operation of sawmills or lumberyards?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
11. Will the subproject involve the use of project funds to purchase or use any prohibited agro-chemicals (herbicides, pesticides, insecticides, fertilizers)?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
12. Will the project use phased-out hydrofluorocarbons (HFCs) and other ozone-depleting substances (ODS) (i.e. cold chain and refrigeration systems) which are prohibited under the country's commitments to the Montreal Protocol and Kigali Agreement?			If YES, subproject is not eligible for funding under PRDP Scale-Up
13. Will the subproject involve any dam construction of more than 15 meters in height (measured as the vertical distance between the lowest point in the original streambed measured at the toe of the dam)?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
14. Will the subproject involve employment of children under 15 years of age?			If YES, subproject is not eligible for funding under PRDP Scale-Up.
15. Will the subproject involve salaried activities that employ minors between 15-18 years old in jobs that are dangerous to their health or their physical, moral, mental or social			If YES, subproject is not eligible for funding under PRDP Scale-Up.

Screening Question	Yes	No	Remarks
development?			
B. ESS1: Assessment and Management of Environmental and Social Risks and Impacts			
16. Is the subproject a Category A (Environmentally Critical Project) as per DENR Administrative Order 2003-30 and DENR Revised guidelines for coverage screening and Standardized Requirements under the Philippine EIS System (MC 2014-005)?			If YES, subproject needs to undergo the EIA process and secure ECC from DENR-EMB Central Office/MENRE. Include sections on Environmental and Social Assessments and Environmental and Social Management Plan (ESMP) in the feasibility study and business plan.
17. Is the subproject a Category B (Non-Environmentally Critical Project) as per DENR Administrative Order 2003-30 and Revised guidelines for coverage screening and Standardized Requirements under the Philippine EIS System (MC 2014-005) ?			If YES, subproject needs to complete the Environmental Impact Statement (EIS) / Initial Environmental Examination (IEE) / EPRMP and secure the ECC from DENR Regional Office/MENRE. Include sections on Environmental and Social Assessments and Environmental and Social Management Plan (ESMP) in the feasibility study and business plan.
18. Is the subproject a Category C (Environmental Enhancement or Direct Mitigation Project) as per DENR Administrative Order 2003-30, and Revised guidelines for coverage screening and Standardized Requirements under the Philippine EIS System (MC 2014-005)?			If YES, subproject needs to prepare the Project Description and confirm the coverage with DENR. Include sections on Environmental and Social Assessments and Environmental and Social Management Plan (ESMP) in the feasibility study and business plan.
19. Is the subproject a Category D (Not Covered) as per DENR Administrative Order 2003-30 and Revised guidelines for coverage screening and Standardized Requirements under the Philippine EIS System (MC 2014-005)?			If YES, subproject needs to secure the CNC from DENR/MENRE. Include sections on Environmental and Social Assessments and Environmental and Social Management Plan (ESMP) in the feasibility study and business plan.
20. Is the subproject located in an area that is low to moderately susceptible to natural hazards such as flooding, landslides, etc. as identified by MGB and Phivolcs?			If YES, subproject needs to request for a hazards assessment from Phivolcs and MGB and develop structural for inclusion in the DED and non-structural mitigation measures in the ESMP

Screening Question	Yes	No	Remarks
21. Will the subproject result in cutting of mountain sides or slopes and the filling of low-lying areas?			If YES, appropriate slope protection or slope stabilization interventions must be incorporated in the Detailed Engineering Design, Program of Works, and ESMP.
22. Is the subproject located in an area declared by government as a "no-build zone" to build semi-permanent to permanent structures?			If YES, subproject shall provide the following: i) Clearance from DENR-MGB, PAGASA, PHIVOLCS or any equivalent body is secured by the proponent with the corresponding assessment report/study ii) Climate-resilient and adaptation design related measures
23. Will the subproject encroach into or be located in a highly susceptible areas to physical, geological and climatic hazards such as flood, landslide, tsunami, storm surge, seismic risks due to presence of fault line, and high to extreme risks zones around active volcanoes			If YES, the following shall be incorporated/submitted: i) Appropriate climate-smart mitigation measures and relevant climate-resilient engineering designs and specifications are provided in accordance with the PRDP I-BUILD Operations Manual. ii) Clearance from DENR, PAGASA, PHIVOLCS or any equivalent body is secured by the proponent including the corresponding assessment report/study.
C. ESS2: Labor and Working Conditions			
24. Will the subproject involve hiring of salaried workers?			If YES, subproject shall prepare a code of conduct during implementation and operation in accordance with the Projects LMP to include the following: i. Establishment of GRM including procedures for Gender-Based Violence Sexual Exploitation, Abuse and Harassment (GBV SE/AH) ii. Occupational Safety and Health Plan
25. Will the subproject pose risks and impacts related to occupational health and safety due to physical, chemical, and biological hazards during project construction and operation that will adversely affect the health			If YES, include the occupational Safety and Health measures during construction and operation of the facility in the ESMP.

Screening Question	Yes	No	Remarks
and well-being of the construction workers, including project workers?			
D. ESS3: Resource Efficiency and Pollution Prevention and Management			
26. Will the subproject involve the extraction or use of surface or groundwater?			If YES, subproject needs to secure the Water Permit from NWRB and submit together with the potable water testing.
27. Will the subproject require a large amount of energy, water or other resources during project construction or operation?			If YES, provide water-use / resource-use efficiency measures in the ESMP, i.e. cleaner production technologies, energy efficiency, environmentally sound production and packaging, etc.
28. Will the subproject result in the discharge of wastewater from the facility?			If YES, subproject needs to provide a wastewater treatment facility to comply with the DENR Effluent Standards. For I-REAP subprojects and I-BUILD other Infrastructures, the procedures on wastewater handling, treatment and disposal shall form part of the subproject Operations Manual.
29. Will the subproject result in the production of a large volume of surplus excavated materials?			If YES, a waste disposal site should be identified prior to contractor's mobilization. Corresponding agreement / permit to dispose from the authority (landowner or the LGU) shall be submitted along with the business proposal and feasibility study.
30. Will the subproject result in the significant emission of air pollutants, gaseous and odor emissions?			If YES, the subproject needs to provide mitigation measures to comply with the ambient air quality standards prescribed by the DENR. For I-REAP subprojects and I-BUILD other Infrastructures, the procedures on air and odor emission management shall form part of the subproject Operations Manual.
31. Will the subproject result to the generation of hazardous wastes?			If YES, the subproject needs to comply with the provisions of R.A. 6969 as part of ESMP. For I-REAP subprojects and I-BUILD other Infrastructures, the procedures on hazardous waste handling,

Screening Question	Yes	No	Remarks
			treatment and disposal shall form part of the subproject Operations Manual.
32. Will the subproject result in the generation of compostable waste?			If yes, the subproject must provide a composting site that is distanced properly from the facility. Alternatively, the waste must be transferred to a disposal facility or sanitary landfill.
33. Does the proponent have an Environment, Health and Safety Officer?			If NO, the Proponent shall designate or hire an EHS officer and include in the ESMP. If YES, please ensure that the person is knowledgeable of the ESS standards and reporting system.
E. ESS4: Community Health and Safety			
34. Will the subproject result to potential diseases transmission from inadequate waste disposal?			If YES, provide occupational health and safety measures and community health and safety measures in the ESMP.
35. Will the subproject pose risks and adverse impacts due to physical, chemical, and biological hazards generated during construction and operation that would adversely affect the health and well-being of the community members on a temporary or even permanent basis?			If YES, provide community health and safety measures during construction and operation of the facility in the ESMP.
36. Will the subproject cause community health and safety risks due to the transport, storage and use and/or disposal of materials likely to create physical, chemical and biological hazards during construction, operation, and decommissioning?			If YES, provide mitigation measures for community health and safety in the ESMP.
37. Will the subproject involve construction of dam up to 10 but less than 15 meters in height (measured as the vertical distance between the lowest point on the dam crest and the lowest point in the original			If YES, Subproject would undergo processing under the Environmental and Social Management Framework (ESMF).

Screening Question	Yes	No	Remarks
streambed measured at the toe of the dam)?			
38. Is the project area under community quarantine status for prevention of communicable diseases such as COVID-19?			If YES, closely coordinate with the concerned LGUs on the schedule and details of project activities and secure applicable clearance/permit to proceed works. Include COVID-19 and emerging communicable diseases preventive measures in the ESMP.
39. Will the subproject expose and cause community health and safety risks due to the presence of migrant workers?			If YES, prepare a community safety and health measures that includes the prevention and treatment of communicable and sexually transmitted diseases and other appropriate mitigation measures in the ESMP.
40. Would there be any impacts on ecosystems which in turn would lead to impacts on communities?			If YES, prepare relevant mitigation measures to include as part of the ESMP
F. ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement			
41. Will the subproject adversely affect lands, crops, structures, other properties and/or livelihood?			If YES, conduct a survey of Project Affected Persons (PAP), electric posts, streetlights, lifeline facilities, and those that will lose access to their properties (landlocked properties) and document evidence of consultation to be included in the subproject proposal package.
42. Will the subproject displace people's homes and/or people's livelihood or restrict access to traditional economic resources?			If YES, prepare a Resettlement Action Plan with livelihood restoration assistance plan.
43. Will the subproject involve, require or result in acquisition of land, right-of-way and/or easements rights?			If YES, prepare proper Land Acquisition Documents, clearing showing transfer of ownership or rights from landowners to concerned LGU. Acceptable documents include: TCT, Deed of Sale, Deed of Donation (individual or group); and Quit Claim and Waiver of Rights (individual or group).
44. Is the land to be used still classified under public land?			If YES, secure tenurial instrument from DENR (i.e. Special Land Use Permit, Gratuitous Special Use Permit, Forest Land Use Agreement for forest lands,

Screening Question	Yes	No	Remarks
			and Foreshore/Miscellaneous Lease Agreement for Foreshore areas)
45. Is the subproject located in a reclaimed area?			If YES, subproject needs to present a permit from the Philippine Reclamation Authority.
G. ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources			
46. Will the subproject affect ecosystem services such as mangroves and coral reefs providing shoreline protection; important fishing areas and fish nurseries; vegetation serving as flood buffer; water retention/protection during flooding seasons?			If YES, the subproject needs to assess the significance of project activities and value of such ecosystem services as part of the environmental and social assessment and to develop mitigation measures as part of the ESMP to protect the ecosystem service(s).
47. Is the subproject located in forest land?			If it is located in the buffer zone of a natural park, forest reserve or Ancestral Domain, the subproject needs to secure a Special Land Use Permit / Forest Land Agreement (FLAG) from DENR-FMB and if in the latter from the tribal community and NCIP.
48. Will the subproject affect rare, threatened and endangered tree species including the century old trees?			If YES, avoid cutting trees to the extent possible.
49. Will the subproject involve Tree Cutting?			If YES, undertake the following: i. The SP should apply for tree cutting permit from DENR. ii. The subproject will use indigenous/endemic/native and non-invasive species of trees as replacement for trees to be cut. iii. Submit and implement the Tree Replacement Plan iv. Should also comply with other conditions in the Tree Cutting Permits issued by DENR.

Screening Question	Yes	No	Remarks
50. Is the subproject site located close or adjacent to any protected areas and primary forests designated by the government (national park, forest reserve world heritage site, or forest lands for strict protection and conservation, etc.)?			If YES, prepare an ESMP that includes measures to ensure that project activities do not encroach into protected areas and forest lands for strict protection and conservation and that measures are provided to avoid, minimize or mitigate any impacts of subproject activities into nearby protected areas and forest lands or strict protection and conservation.
51. Is the subproject site located within marine and aquatic ecosystems or close to any waterbody?			If YES, prepare an ESMP and Biodiversity Management Plan that includes measures to ensure that project activities do not cause pollution to marine and aquatic ecosystems. For I-REAP subprojects in aquatic areas, the LGU shall ensure ecological integrity and good water quality for the sustainability of the enterprise.
52. Will the subproject encroach into or be located inside a multiple use zone or buffer zone of an officially declared protected areas of natural habitats (e.g. national parks), key biodiversity areas, and forest lands within a multiple use, sustainable use, or agroforestry zone?			If YES, subproject is eligible for funding under PRDP Scale-Up provided that subproject is already existing and would not result to potential adverse impacts (i.e. expansion resulting to conversion of natural habitat, encroachment, and damages to flora and fauna, etc.). Appropriate mitigation measures as per provisions of the E-NIPAS law or any law creating the national park should be provided. Clearances from DENR and PAMB or equivalent body should be secured by the proponent.
53. Does the project/LGU proposes introduction of alien species?			If YES, please ensure that such interventions are screened out at the initial screening stage itself.
H. ESS7: Indigenous Peoples			
54. Is the subproject an identified situation in the IPPF, as follows : ● overlap or are located inside any declared or proposed IP Ancestral Domain or those that, while not located inside, will directly affect any declared or proposed IP Ancestral			If YES, the subproject needs to undertake the FPIC process and secure the Certificate of Precondition from NCIP.

Screening Question	Yes	No	Remarks
Domain. ● cause relocation of Indigenous Peoples from land and natural resources subject to traditional ownership or under customary use or occupation or those that are referred to as Ancestral Domains; ● have significant impacts on Indigenous Peoples' cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of the affected Indigenous Peoples ● locate or commercially develop natural resources on land traditionally owned by, or under the customary use or occupation of Indigenous Peoples or those that are referred to as Ancestral Domains; ● propose to use for commercial purposes the cultural heritage and Indigenous Knowledge Systems and Practices (IKSPs) of Indigenous Peoples communities, whether tangible or intangible or both			
55. If the subproject is not within any ancestral domain, are there any IP community/ies in the subproject's influence area to be affected (either positively or adversely) by the subproject and does not meet the 3 criteria for FPIC under ESS 7?			If YES, the subproject must undergo meaningful consultations with the IP community/ies. The entire consultation process shall be undertaken and documented by the concerned LGUs in coordination with NCIP/MIPA. Documents required are as follows: ● Dated information campaign materials in local language or in language widely understood by the community; ● Dated gender disaggregated attendance sheets of consultation dialogues and Photographs of actual consultation sessions undertaken; ● Dated minutes of meetings and matrix of clarifications, issues and

Screening Question	Yes	No	Remarks
			concerns raised and how they were explained or addressed by the LGU.
I. ESS8: Cultural Heritage			
56. Is the subproject site within or near a known archaeological or paleontological site or will pose risks and impacts to the cultural resources of the community?			If YES, subproject needs to prepare and implement the Cultural Heritage Management Plan (CHMP) with Chance Find Procedure as part of subproject proposal.
57. Does the subproject is expected to affect or impact intangible cultural heritage including practices, representations, expressions, knowledge, skills			If YES, prepare CHMP with relevant measures to mitigate such impacts. These measures need to be integrated as part of the ESMPs
J. ESS10: Stakeholder Engagement and Information Disclosure			
58. Will the project present considerable Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?			If yes, prepare a Code of Conduct and training on managing GBV and SEA.
59. Has there been a history of conflict or an existing conflict in the area?			If YES, please conduct the conflict context assessment (proceed to the next section) and ensure that the risks identified are addressed and mitigated through the conduct of social preparation and continuous dialogue with the community especially with community and religious leaders in the locality.
60. Will the entry of the PRDP Scale-Up subproject trigger and/or exacerbate the identified conflict in the area?			If YES, the proposed subproject should be redesigned/adjusted to avoid exacerbating the conflict.
61. Has a series of public consultations been conducted to introduce the subproject and secure social accountability?			If YES, please attach documentation. If NO, please conduct and document them.

Conflict Context Assessment Guide Questions	
Assessment Question	**Response**
1. Has there been a history of conflict in the area? Please establish the identified conflict-affected areas: a. Subproject area b. Adjacent barangays	

Conflict Context Assessment Guide Questions	
Assessment Question	**Response**
c. Areas to be traversed going to the area d. RIA/PIA (project area of influence)	
2. How long ago was the last incident of conflict and/or armed violence?	
3. What was the nature of conflict? (i.e. Land, ethnic, economic, religious, political) What were the conflict triggers?	
4. Was there disruption of social services and economic activities due to the conflict?	
5. Who were involved? 6. What are their interests? 7. Are they direct or indirect players/conflict actors? 8. What are the dividers or sources of tension between/among the groups/communities? 9. What connects the groups/communities or what are local capacities for peace? (i.e. Clans, non-Muslim IP groups, Moro people, non-visible players)	
10. What development projects have been implemented (govt and private) in the area? Or any existing projects in the area? How was the implementation? Please enumerate: - What projects - Who are the implementers - What is the status of the projects - Contractor's experienced extortion from armed groups	

Screening Result Summary

(To be filled up by the Screening Officer)

Check the box that applies:

□ The subproject is not eligible for funding under PRDP Scale-Up due to [*state reason(s) briefly]:*

_____

_____

_____

□ The subproject proposal currently does not qualify for PRDP Scale-Up funding but may be resubmitted for consideration after complying with the following requirements/actions. [*check applicable requirements based on the above screening table]:*

- Change of location/site (i.e. avoiding protected area of natural habitat/key biodiversity areas, purchase of banned agro-chemicals from project funds, avoid cultural heritage property sites)
- Change subproject design to address the following [please specify such as Wastewater treatment Facility, etc.]: _____

  _____

  _____

[Note that subprojects that are revised and resubmitted will be subjected again to the above screening checklist.]

□ The subproject as proposed is eligible for funding and may proceed to comply with the processing and preparation of the following safeguard instruments (check only those that apply based on the above screening):

_____ Map of the location of the subproject overlaid with the nearest Protected Area, Ancestral Domain, and Forest Land

_____ Map of the location of the subproject overlaid with natural and geologic hazard assessments (seismic, geologic, hydrometeorological)

_____ EIS/IEE/ESA and ECC issued by DENR

_____ Clearance from PAMB or any equivalent body if inside Protected Areas MUZ

_____ Clearance from DENR/PHIVOLCS/PAGASA or any equivalent body if in a disaster or hazard prone area

_____ Tenurial Instrument from DENR as appropriate

_____ Biodiversity Management Plan

_____ Integrated Pest Management Plan

_____ Water Permit issued by NWRB for PWS and CIS subprojects

_____ Water Quality Test for CIS

_____ Water Potability Test for PWS, Enterprises and other facilities as applicable

_____ Evidence of IPM-FFS conducted/ KASAKALIKASAN coverage in the area

_____ Evidence of training on proper pesticide use, handling, and storage

_____ Waste Management Plan

_____ ESMP with Quarry Site, Batching Plant, and Borrow Pits

_____ Certificate of Pre-Condition/Certificate of Non-Overlap from NCIP

_____ Evidence of Free Prior Informed Consultation among IP Communities

_____ Evidence of IP Community Support (Resolution, Endorsement, Letter, etc.)

_____ Cultural Heritage Management Plan with Chance Find Procedure
_____ Resettlement Action Plan
_____ Tree Replacement Plan
_____ Electric Post Transfer Plan
_____ Minutes of consultations with beneficiaries and Project affected persons
_____ PAPs Entitlement Survey
_____ Land Acquisition Documents (lands acquired must cover all ROW and easemen requirements of the subproject)

[Note that the specific issues/recommended measures identified in the above screening checklist shall also be addressed in the relevant safeguard instruments. During the review, the instruments will be checked against the above checklist.]

Name and Signature of LGU Screening Officer: _____

Date Completed: _____

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SAFEGUARD CLEARANCE (To be filled only after review of the subproject proposal package)

□ This subproject is deemed ineligible because of the following reasons *[State valid reasons]*

.

□ This subproject Is not yet cleared of safeguards requirements pending compliance of the following [Write down pending requirements and sign with initials of the reviewing officer]:

.

□ This subproject is given conditional clearance and may proceed to implementation subject to the compliance of the following requirements on or before the specified deadlines. [*Write down requirements and their agreed deadlines. Note that this option should only be resorted to when the pending requirements are already underway and will not have implications on the implementation of the subproject*]:

Requirement	Deadline
_____	_____
_____	_____
_____	_____

□ This subproject is cleared of safeguards requirements and may proceed with implementation.

Recommended for Clearance by: _____

RPCO SES Unit Head

Cleared by: _____

PSO SES Unit Head

ANNEX D: SOCIAL INCLUSIVENESS SCORING SYSTEM FOR PROPONENT GROUP (PG) SEEKING I-REAP FUNDING

Instructions:

1. This Social Inclusiveness Scoring Sheet should be submitted together with the subproject proposal package of the Proponent Group (PG) seeking I-REAP funding. PG is defined under PRPD Scale-Up as the recipient of the I-REAP subproject grant. The eligible PG for I-REAP subprojects are:

   (a) **Local Government Units (LGUs).** The LGUs are required to identify a partner FCA, cluster of FCAs; and
   (b) **Farmer/Fisherfolk Cooperative or Association (FCA) or cluster FCAs (FCA cluster).** The lead FCA or FCA cluster would be responsible for the subproject proposal formulation, implementation and operation, which may be done in partnership with a private agribusiness entity.

   Subproject proposals submitted by an LGU or FCA/FCA cluster may also be initiated by a private agribusiness entity, but the proposal would be required to identify the partner LGU or FCA/FCA cluster who would be the proponent of the subproject.

2. The purpose of filling-up the Social Inclusiveness Scoring Sheet is to determine the degree of social inclusiveness of the subproject proposal based on the eight (8) criteria as enumerated below. To qualify for funding, the results of the ratings must not have zero score on - any of the following four criteria - Criterion#1, Criterion #4, Criterion #5 or Criterion #6 - and must have a total score of at least 30.
3. If there are scores with a low rating or zero - on any of the criteria, then the PG must then look into these items and take any action that would enable them to meet/satisfy these criteria.
4. The Social Inclusiveness Scoring Sheet shall be accomplished by the LGU-SES and validated by the RPCO-SES during PG validation until the finalization of the Business Plan. This should be done in close coordination with the I-REAP Component.
5. The Scoring Sheet shall be filled-up through interview with the FCA/FCA cluster or partner FCA of the LGU and review of related documents (i.e. By Laws of the FCA, Business Plan among others). For FCA cluster, each FCA cluster member should fill-up this scoring sheet. Each FCA will be subjected to criteria numbers 1 to 4 while the proposed business plan of the PG will be subjected to criteria numbers 5 to 8 to complete the rating process. All FCA Cluster members must have at least a total score of 30.
6. Please see attached scaling guide as reference in assigning the appropriate rating for each criterion.

Subproject Title:

Subproject Location:

Subproject PG: LGU: _____
FCA: _____

Subproject Scale: __Micro __Small __Medium __Large

Sub - project Type:

Estimated Subproject Cost:

Criterion	Score Range	Rating
1. Open membership/ stockholder policy	0-10	
2. Plan for expansion of membership tied up to the grant	0-5	
3. Farmers and/or fishers are themselves members/stockholders of the FCA	0-10	
4. Historically, the FCA has a high turn-over of set of officers and election of officers is held regularly	0-5	
5. Business plan shall show clear increase in farmers and/or fishers incomes (both members and non-members)	0-10	
6. Tangible benefits to the workers of the enterprise, including any plan to increase wage, fringe benefits and any plan to increase the number of workers	0-5	
7. Lot where permanent facilities to be funded will be constructed should be covered by sufficient security of tenure for the PG. For subproject proposals involving purchase of equipment, PG should have a designated lot covered by sufficient security of tenure for the PG where equipment can be stored properly and is accessible to the members of FCA/FCA cluster.	0-5	
8. No potential economic displacement of existing similar or exactly the same enterprise/business in the area	0-5	
Total score	**3-55**	

Scaling Guide as reference in assigning the appropriate rating per criterion

Criterion and Indicators	Ranking Guide	PG Rating	Remarks
1. Open membership/stockholder policy ● Open membership/stockholder policy is indicated in the By-Laws of the FCA. ● There is no restriction aside from relevance of livelihood/profession to the enterprise (e.g. only dairy farmers may be a member in a dairy cooperative). ● There are no artificial barriers to membership/stockholders such as family affiliation, controlling stock, political affiliation, gender, religion, ethnicity or the use of political boundaries to restrict membership in natural resource-based FCA.	If all of the indicators are present – 10 points If 2 of the indicators are missing – 5 points If no written by-laws and membership is exclusive – 0 points		

Criterion and Indicators	Ranking Guide	PG Rating	Remarks
● The cooperative or association must not amend their membership/share of stock policy such that it will effectively place such or similar barriers, during the entire economic life of the proposed enterprise. ● Requirements for membership must be simple enough to accomplish (i.e. documentary requirements) and membership fee is reasonable even for small farmers/fisherfolks to be members.			
2. **Plan for expansion of membership** ● With concrete, feasible and attainable targets (e.g. after 2 years of implementation there is a 5 % increase in membership) ● With Action Plan that specifies steps/activities on how to achieve the target (e.g. conduct of pre-membership orientation and seminar that discusses the VMG, values and principles of the FCA).	If both indicators are present – 5 points If there are targets, but no specified concrete steps on how to achieve the targets - 3 points If no plans indicated - 0 points		
3. **Farmers and/or fishers are themselves members of the FCA** ● farmers and/or fishers are themselves members of the FCA with equal (income of enterprise equally distributed) and equitable sharing (patronage refund) ● there is meaningful participation of both men and women farmers' in decision-making processes of the FCA (refer to minutes of the meeting and attendance sheet to check gender balance ratio and if discussions reflect views of women. Check also the kind of leadership roles women play in the FCA) ● conducts regular assembly ● majority of the member-beneficiaries are small farmers and fisherfolks[1]	If all indicators are present – 10 points If no participation – 5 points If all indicators are not present – 0 points		
4. Historically, the FCA has a high turn-over of set of officers and election of officers is held regularly	If yes – 5 points If no – 0 points		
5. **Business plan shall show clear increase in farmers and/or fishers incomes** (both members and non-members)	If all the indicators are present – 10 points		

[1] Small farmers refer to small-scale farmers who own or are still amortizing lands that are not more than (3) hectares, tenants, leaseholders, and stewards. Small fisherfolks refer to those directly or indirectly engaged in taking, culturing, or processing fishery or aquatic resources. These include, but are not to be limited to, those engaged in fishing using gears that do not require boats, or boats less than three (3) tons, in municipal waters, coastal and marine areas; workers in commercial fishing and aquaculture; vendors and processors of fish and coastal products; and subsistence producers such as shell-gatherers, managers, and producers of mangrove resources, and other related producers. (Source: Administrative Order No. 21, s. 2011 Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 8425, or the Social Reform and Poverty Alleviation Act)

Criterion and Indicators	Ranking Guide	PG Rating	Remarks
● Business plan show clear increase in income of members ● Business plan show clear increase in income of non-members ● Business plan show other benefits to the members and non-members ● If a private agribusiness entity is involved in the subproject proposal, business plan must clearly show that FCA/FCA cluster and private sector will establish linkages in terms of marketing agreements, arrangements for technology transfer, supplier credit or provision of other types of services, along with safeguard requirements and financial viability.	If only increase in income of members - 5 points If does not clearly show benefits to farmers/fisherfolks - 0 points.		
6. **Tangible benefits to the workers of the enterprise**, including any plan to increase wage, fringe benefits and any plan to increase the number of workers ● Plan to increase wage ● Benefits offered include SSS, Pag-ibig, PhilHealth ● Plan to increase the number of workers ● Availability of other benefits (such as but not limited to fringe benefits, presence of particular benefits for the needs of women, benefits for PWD workers).	If all the indicators are present – 5 points If 2 of the indicators are not present – 3 points If no benefits – 0 points		
7. **Lot where permanent facilities to be funded will be constructed** should be covered by sufficient security of tenure for the PG. For subproject proposals without permanent facilities to be constructed but involves the purchase of equipment, PG should have a designated lot covered by sufficient security of tenure for the PG where equipment can be stored properly and is accessible to the members of FCA/FCA cluster. Owned by PG (however if to be owned by PG but still in the process of acquiring lot during the time of Business Plan preparation only 4 points will be given) or Leased with option to buy provided that: ● If rights are to be acquired through lease, the terms shall at least cover the entire economic life of the enterprise as projected in the FS. ● The lessor of the lot should not be a key official of the PG (LGU or FCA) or should not occupy a managerial position in enterprise such that he/she can influence in the continued viability of the enterprise. ● The lessor may be a key official of the PG provided that the following are present: (if PG is an FCA/FCA cluster)	5 points: • Owned by PG • Leased with option to buy with the conditions stated herein • For aqua-based enterprise, project area assigned to the FCA by the LGU and the area is covered by the LGU as per Fisheries Code 3 points: • Leased only and no option to buy (following the same stated considerations herein if lessor is a key official) • For aqua-based enterprise, if the project area is not yet assigned to the FCA but is covered by the LGU 0 points:		

Criterion and Indicators	Ranking Guide	PG Rating	Remarks
1. Cost of lease is cleared by the BOD and comparable to the prevailing rates in the area 2. Historically, the PG has a high turn-over of set of officers and election of officers is held regularly 3. The owner of the property/land should not be the one directly managing the enterprise 4. The contract should include provisions for the fate of the facility in the leased property in case of bankruptcy of the enterprise If enterprise is aqua-based i.e. seaweeds, mussels, oysters, the project area should be assigned to the FCA by the LGU and the area is covered by the LGU as per Fisheries Code. In instances where the aqua-based enterprise will need a lot where permanent facilities to be funded will be constructed, the other indicators shall still apply. It should also be noted that a Usufruct is only applicable if the intended subproject site is a government-owned lot. Please refer to the LARPF under Modes of Acquisition. *Note: Basis for "economic life" can be: a) COA Circular 2003-007 Annex A wherein "useful life" is qualified as 30 years for concrete building; 20 years for mixed and 10 years for wood material. Cost of the infrastructure should also be taken into consideration in assessing if lease of contract should be more than 30 years; or b) the economic life of the enterprise as discussed in the Business Plan.*	• Neither owned by PG or leased (no security of tenure) • For aqua-based enterprise, if project area is not assigned to the FCA by the LGU and the area is not covered by the LGU as per Fisheries Code		
8. No potential economic displacement of existing similar or exactly the same enterprise/business in the area ● There are no existing similar or exactly the same enterprise/business in the area ● Creation of the enterprise/business does not deliberately and unfairly compete with the identified existing enterprise/s ● Captured market/clientele is clearly defined in the Business Plan and doesn't overlap with existing operations in the area	If all of the indicators are present – 5 points If proposed enterprise is found to be competing with existing hard working individuals, small scale enterprises or small household-based businesses but will not displace their captured market – 3 points If there are existing similar or exactly the same enterprise/business in the		

Criterion and Indicators	Ranking Guide	PG Rating	Remarks
	area, wherein the proposed enterprise would unfairly compete with these existing businesses (especially the small scale enterprises or small household-based businesses) – 0 points		
Total score	**3-55**		

Scored/Evaluated by :_____

Designation/Position :_____

Unit :_____

Date :_____

Reviewed/Validated by :_____

Designation/Position :_____

PRDP RPCO Unit :_____

Date :_____

ANNEX E: GUIDANCE FOR THE PREPARATION OF THE ENVIRONMENTAL AND SOCIAL ASSESSMENT (ESA) PORTIONS OF THE SUBPROJECT FEASIBILITY STUDY REPORTS AND THE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) FOR I-BUILD SUBPROJECTS

A. Social Safeguard Aspects

The Social Assessment section of the FS should provide the following information:

Subproject Beneficiaries – Who are the beneficiaries of the subproject? Please provide gender-disaggregated population data. What is their socioeconomic status? Have they been consulted? Describe the consultation process (indicate date, location and gender-disaggregated attendees of meetings). Have they accepted the proposed project? What are their concerns and inputs? Describe the minutes of the meetings. Are the women and vulnerable groups represented in these consultations (describe attendance of women taking into consideration a gender balanced ratio and vulnerable groups)? What are their concerns/inputs (describe any particular inputs from women, if any)? Please refer to the Stakeholder Engagement Plan (SEP) for the various methods of engagement.

Note: Below are the Suggested Agenda for the community consultation:

- □ *Presentation of the Proposed Subproject (Full Disclosure of subproject details)*
- □ *Road Right of Way, Entitlement Policy and Compensation (refer to LARPF)*
- □ *Grievance Redress Mechanism*
- □ *Open forum on the concerns and issues especially of women and other vulnerable groups*
- □ *Others*

Indigenous Cultural Community/Indigenous Peoples (ICC/IPs) – Is the subproject located inside an ancestral domain? If the subproject is not situated inside any ancestral domain, is it going to affect any extant IP/ICC community or are there beneficiaries who are members of the IPs/ICC community? Please provide population data with gender-disaggregation. What particular IPs/ICC community is involved? What is their socioeconomic status as compared to the mainstream group? Will the subproject have adverse impacts on Indigenous Peoples rights, dignity, aspirations, identity, culture, indigenous knowledge systems and practices (IKSPs), natural resource-based livelihoods of Indigenous Peoples and intergenerational well-being of IP communities? Did the IPs/ICC community solicit the subproject themselves? If they did not solicit the subproject, have they been consulted and have they given their endorsement of the project? Describe the meaningful consultation process conducted with the IP communities. If Free, Prior and Informed Consent (FPIC) process is required under the conditions stipulated in the IPPF, please discuss. Indicate date, location and gender-disaggregated attendees of meetings. Discuss the highlights of the minutes of the meetings. What are their concerns and inputs? If the project is not located inside an ancestral domain and there are no IPs/ICC, thoroughly discuss the area of the nearest ancestral domain and/or location of the IPs/ICC and provide a map of the subproject site overlaid with the nearest ancestral domain. Refer to the IPPF for the necessary subproject requirements depending on the results of this social assessment.

If there are minority IP/ICCs, please discuss if an IP plan is needed or not. If needed, discuss briefly the IP Plan. Aspects to consider in the assessment are: i) if the IP/ICC organized or currently practice as one group/s; ii) is the SP one of the priorities of the IP/ICC, and iii) Is their socio-economic status lower as compared to mainstream group. If the SP is not the priority of the organized or practicing IP/ICC and their socio-economic status is lower compared to the mainstream group, an IP Plan should be submitted.

Note that IP Plan is needed in cases where IP/ICCs (i.e. an extant, fully functioning IP/ICC community, either organized or only loosely associated but practicing common customs and traditions different from

the mainstream society) are present within the Subproject's influence area and when they are either: (a) not the proponent of the subproject; or, (b) only a minority of the proponents. It should also be provided before project completion, hence there's a need to ensure that activities can be easily funded and provided by the LGU. Refer to IPPF for details.

Site and Right-of-Way Acquisition– What is the ownership status of the proposed site or right-of-way? Describe the site requirement in terms of area (sq. m), land tenure, and existing land use. Describe the right-of-way requirements in terms of width, the types, ownership of lands and existing land use of the lands to be traversed by the subprojects. Tabulate the Project Affected Persons (PAPs) with matrix: a) Name of PAPs (disaggregate from declared owner based on proof of ownership and actual occupant); Total Land Holdings; Status of Ownership (leased, owned as seen in land title/TCT/tax declaration, heir of the owner in land title/TCT/tax declaration); Area to be acquired; Remarks if it is for donation or compensation. Indicate as to whether the PAP is a Senior Citizen, Single Parent, Widow/Widower, Pregnant and if PWD or has a PWD household member. Discuss as well if vulnerable PAPs will be given additional assistance. Assess if additional assistance is needed based on their socio-economic status and access to basic social services. Refer to the ESMF, IPPF and LARPF for the necessary documentary subproject requirements depending on the results of this social assessment.

Damage to standing crops, houses and/or properties – Will the construction of the subproject result in losses in any crop and/or properties? Describe and quantify the potential damage based on the accomplished Entitlement Survey Form (refer to LARPF).

Discuss and tabulate the type of losses (i.e. loss of crops, loss of trees, loss of structures, loss of business among others) of the Project Affected Persons (PAPs) and the appropriate mitigating measures to be implemented based on the entitlement matrix as stipulated in the LARPF. Discuss if there are electric posts, and underground utilities such as water pipes that will be affected and the corresponding mitigating measures/agreement. If there will be e-posts to be affected, e-post plan with timeline and appropriation of funds should be submitted. Discuss briefly the plans and agreements under this section.

Note that (potential) damage to crops and/or properties/assets should be inventoried and suitable compensation schemes should be worked out through consultation with the owners of the crops and properties. Compensation of damages following the agreed schemes should be based on replacement cost without depreciation without deductions for salvaged materials and without deduction for taxes and/or transaction costs (refer to LARPF).

Physical displacement of persons – Will the proposed subproject result in the relocation of households? How many households will be relocated? Describe the conditions of the affected households and their properties. What are the socioeconomic conditions of the affected households?

Economic displacement of persons –Will the proposed subproject result in the loss of livelihood or reduced access of families to their traditional livelihood sources? Note that loss of livelihood may result from: loss of a significant portion (20% and more) of the household's farmland, loss of crop, loss of productive trees, loss of business such as due to loss of vending stalls, house for rent etc. Describe the nature of loss if any and the mitigation measures in avoiding, minimizing, or compensating the loss.

Note that subprojects that will involve physical and/or economic displacement whether temporary or permanent are required to prepare a ***Resettlement Action Plan (RAP)****. Refer to LARPF for details.*

Grievance Redress Mechanism- Discuss Grievance Redress Mechanism of the subproject (especially the plan and procedure on feedbacks/grievance handling). Discuss it in the Organization and Implementation Structure of the Feasibility Study and include a Grievance Point Person/Committee in the Executive Order

of the LGU. Refer to the SEP for the GRM details and the Labor Management Procedures (LMP) for GRM specific for project workers.

Labor-related risks **-** Discuss potential labor-related risks such as labor influx. Assessment should be based on the projected maximum number (at the peak of construction activities) of non-resident workers (migrant workers) to be hired by the subproject given the need and local availability; the cultural vulnerability of host population; crime rates; gender imbalance; current epidemics, cultural differences, exposure of the population to modern ways; among others. Refer to the LMP for other potential labor-related risks such as child labor and forced labor and gender-based violence.

Conflict Context Assessment - discuss the results of the conflict context assessment (as per SES Screening Form) and the appropriate mitigating measures to be implemented to ensure the safety of the community and project workers and to avoid exacerbating the identified conflict.

B. Environmental Safeguard Aspects

The Environmental Assessment Section of the FS should provide adequate information on the following:

1. ***Natural habitat*** –Describe the project site (i.e., the lands to be traversed by the proposed road, the actual site of the PWS or irrigation structure, etc.) in terms of land use, vegetation, wildlife, presence of water ecosystems, endangered and other important species. How are they going to be impacted by the project? Is the project site within an officially declared or proposed protected area of natural habitat? Is the project site located near forest areas, wetlands, or mangrove areas? What ecosystem services will be affected, i.e. mangroves and coral reefs providing shoreline protection, fishing areas and fish nurseries and nutrient protection; intact vegetation serving as flood buffer, protecting infrastructure by retaining water when rivers rise during flooding seasons?

Note that: PRDP loan should not be used to fund subprojects involving civil works that encroach into Protected Areas of natural habitat such as areas declared as Natural Parks under NIPAS, expect for subprojects that are allowed as per provisions of the NIPAS law of Buffer Zone, or Multiple Use Zone, and the law creating the Natural Park.

2. ***Physical Cultural Resources*** – Are there any structure, monuments or Physical Cultural Resources on site that will be affected by the subproject? Describe the cultural and historical significance of the structure/s, if any. Describe the impact of the project to the structure/s. Is the project site part of an important natural feature or landscape? How will the project change or impact the landscape? Is the project area a potential archaeological site? If there are no such structures or monuments or Physical Cultural Resources to be affected, the assessment should clearly say so. However, a discussion on the Procedure of Archaeological/Paleontological Chance Finds (Annex I) should be stated.

Note that: The World Bank ESS8 on Physical Cultural Resources requires that physical cultural resources likely to be affected by the project should be identified and the project's potential impacts on these resources be assessed as an integral part of the ESA. Cultural resources are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance.

When the project is likely to have adverse impacts on physical cultural resources, appropriate measures for avoiding or mitigating these impacts shall be identified in the EA. These measures may range from full site protection to selective mitigation, including salvage and documentation, in cases where a portion or all of the physical cultural resources may be lost.

If the area is a potential archaeological site, the mitigation plan should include provisions for managing chance finds. For example: in case of archaeological finds during construction, civil works must be immediately suspended and the National Museum/National Commission of Culture and Arts/National Historical Institute contacted.

3. Terrain, Soil Types and Rainfall – What is the topography of the proposed subproject site? What is the type of soil? Describe the soil in terms of looseness and erosion potential. What is the amount of rainfall in the area?

Note for FMR*: if all these factors are present (i.e. the terrain is hilly, the soil is generally loose, and rainfall in the area is generally heavy) such that the potential for sedimentation and erosion is high, corresponding fortifications/items in the design may be warranted (i.e., extra slope protection works, concrete pavement, and canal lining, etc.) as opposed to the standard subproject design.*

4. Natural and Geologic Hazard/Risk Assessment– Describe the drainage situations, erosion, and flooding potential, seismic and geologic hazards of the project site. Indicate the basis of the hazard assessment. How is it going to be impacted by the proposed subprojects? Discuss Hazard/Risk due to the horizontal and vertical alignment/sections of the proposed road. What will be the mitigating measures for such identified natural and geologic hazards? Discuss safety of the community and plans on the lay-bys, access ramps of the community especially the houses/stores and other establishments near the road. Briefly discuss the hazards/risk assessment in relation to COVID 19 and communicable diseases prevention. Discuss disaster risk management during construction and how the contractor will be able to safeguard themselves during calamities and emergencies.

5. Integrated Pest Management and DA-KASAKALIKASAN - Describe the Integrated Pest Management and Status of DA-KASAKALIKASAN Project of the proposed subproject in the road influence area. If no IPM or DA-KASAKALIKASAN in the RIA, describe the present practice of Pest Management and how to transform such into the IPM Project. Include other environmentally friendly practices such as Good Agricultural Practices (GAP) and Organic Agriculture (OA). If no IPM or DA-KASAKALIKASAN, GAP, or OA implementation in the RIA, describe the present practice of Pest Management and how to transform such into the IPM Program. Provide a timeline and responsible office.

6. Status of Environmental Clearances – Describe the environmental clearances issued by DENR (ECC/CNC); Tree Cutting Permits and brief discussion on Tree Replacement Plan; List of Accredited Quarry Sources and Hauling of Quarry Materials; Batching Plant; Waste Disposal; Potability Test, Water Quality Test; National Water Resources Board (NWRB) Permit and other clearances.

C. Social and Environmental Impacts of Subproject and Ancillary Facilities

Discuss in brief the major potential impacts of the subproject and corresponding mitigating measures on the following concerns: Batching plants, Quarry sites, and increase in the use of pesticides, disruption of traffic flow, labor influx and other details mentioned in the duly signed standalone ESMP.

D. Preparation of the Environmental and Social Management/Mitigation Plan (ESMP) based on the ESA

1. The ESMP should include both environmental and social management measures and it should be based on the results of the ESA in the FS as well as technical information about the proposed subproject (i.e. the type, scale and extent of the subproject, the planned alignment of roads, the structures to be built, etc. or initial/draft engineering design if already available). This means that the impacts and the measures identified in the ESMP should be consistent with the findings of the Social and Environmental Assessments and with the subproject type, scale and design.

2. To facilitate the preparation of the ESMPs, templates have been prepared for the most common subprojects namely, Farm to Market Roads, Communal Irrigation and Potable Water Supply.

3. Note that measures identified in the ESMP should be reflected in the relevant subproject documents (i.e. the Contract, the DED and/or the POW). Measures that are part of the social safeguard aspect (e.g. acquisition of right-of-way, crop/property damage compensation, IP endorsements, etc.) should be reflected in the corresponding social safeguards documents (e.g. deed of donations, survey of entitlements, survey of project affected persons, resettlement plan, IP Plan, etc.) Measures that are the responsibility of the contractor should be included as part of the Contract. These include mandatory repair/restoration of any damage to existing road or other public structure due to heavy equipment traffic, or due to other construction activities during construction, proper handling of construction waste, provision of toilet facilities and safety measures during construction. Measures that have something to do with the subproject's design should be reflected in the DED, while those that have something to do additional work should be reflected in the Project of Work. Measures that are applied as part of the maintenance and operation of the subproject should be indicated as such in the ESMP. These include measures that require introduction of new technologies in the influence areas by the DA. Otherwise, those ESMP measures that cannot be funded within the present subproject budget should automatically be part of the commitment of the LGU/community as part of future subproject enhancement.

4. The ESMPs shall necessarily include monitoring, supervision, reporting, capacity building, and budget for implementation.

ANNEX F:GUIDANCE FOR THE PREPARATION OF THE ENVIRONMENTAL AND SOCIAL ASSESSMENT (ESA) IN THE SUBPROJECT BUSINESS PROPOSAL AND THE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) FOR I-REAP SUBPROJECTS

A. Social Safeguard Aspects

The social assessment section of the business proposal/plan should include the following information:

Subproject Beneficiaries - Who are the beneficiaries of the subproject, please gender-disaggregate the population data. What is their socioeconomic status? Have they been consulted? Describe the consultation process (indicate date, location and gender-disaggregated attendees of meetings). Have they accepted the proposed project? What are their concerns and inputs? Describe the minutes of the meetings if any? Are the women and vulnerable groups represented in these consultations (describe attendance of women taking into consideration a gender balanced ratio and vulnerable groups)? What are their concerns/inputs (describe any particular inputs from women, if any).

On the social inclusiveness and equitable benefit-sharing of the enterprise, what are the services that the members and non-members will obtain in the enterprise? What are the FCA''s membership structures, close or restrictive membership policies? How will the FCA expand membership, provide or extend services to non-members? How will the FCA improve the welfare of the enterprise workers? (please refer the discussion to the results of the Social Inclusiveness Scoring System)

Indigenous Cultural Community/Indigenous Peoples (IP/ICC) - Is the project located inside an ancestral domain? If the project is not situated inside any ancestral domain, is it going to affect any extant IP/ICC community or are there beneficiaries who are members of the IP/ICC community? What particular IP/ICC community is involved? What is their socioeconomic status as compared to the mainstream group? Will the subproject have adverse impacts on Indigenous Peoples rights, dignity, aspirations, identity, culture, indigenous knowledge systems and practices (IKSPs), natural resource-based livelihoods of Indigenous Peoples and intergenerational well-being of IP communities? Did the IP/ICC community solicit the subproject themselves? Is there a member of the FCA that is an IP member? If they did not solicit the project, have they been consulted and have they given their endorsement of the project? Describe the meaningful consultation process conducted with the IP communities. If Free, Prior and Informed Consent (FPIC) process is required under the conditions stipulated in the IPPF, please discuss. Indicate date, location and gender-disaggregated attendees of meetings. Discuss the highlights of the minutes of the meetings. What are their concerns and inputs? If the subproject is not located within AD, provide location of the nearest AD/ IP community. Refer to the IPPF for the necessary subproject requirements depending on the results of this social assessment.

Site Acquisition - What is the ownership status of the proposed site/s (e.g. expansion of the production area, land for the civil works, etc.)? Describe the location and site requirement in terms of area (sq. m), land tenure, existing land use, and the land use within 1km radius of the subproject location. Site and Right-of-Way acquisition should not only consider the site for the infrastructure but the entire site development plan which includes the parking space, right of way, access to water and electricity during operation. For subproject proposals without permanent facilities to be constructed but involves the purchase of equipment, PG should have a designated lot covered by sufficient security of tenure for the PG where equipment can be stored properly and is accessible to the members of FCA/FCA cluster. **Refer to the ESMF, IPPF and LARPF for the necessary documentary subproject requirements depending on the results of this social assessment.**

Damage to standing crops, houses and/or properties - Will the construction of the project result to any crop and/or properties? Describe and quantify the potential damage. Who will be responsible in the

clearing and demolition of the site? If there will be structures to be affected, will there be reconstruction? Who will be responsible for such activity? Discuss and tabulate the type of losses (i.e. loss of crops, loss of trees, loss of structures, loss of business among others) of the Project Affected Persons (PAPs) and the appropriate mitigating measures to be implemented based on the entitlement matrix as stipulated in the LARPF.

Note that (potential) damage to crops and/or properties/assets should be inventoried, and suitable compensation schemes should be worked out through consultation with the owners of the crops and properties. Compensation of damages following the agreed schemes should be based on replacement cost without depreciation without deductions for salvaged materials and without deduction for taxes and/or transaction costs (refer to LARPF).

Physical displacement of persons – Will the proposed subproject result in the relocation of households? How many households will be relocated? Describe the conditions of the affected households and their properties. What are the socioeconomic conditions of the affected households?

Economic displacement of persons –Will the proposed subproject result in the loss of livelihood or reduced access of families to their traditional livelihood sources? Note that loss of livelihood may result from: loss of a significant portion (20% and more) of the household's farmland, loss of crop, loss of productive trees, loss of business such as due to loss of vending stalls, house for rent etc. Describe the nature of loss if any and the mitigation measures in avoiding, minimizing, or compensating the loss.

Note that subprojects that will involve physical and/or economic displacement whether temporary or permanent are required to prepare a ***Resettlement Action Plan (RAP)****. Refer to LARPF for details.*

Grievance Redress Mechanism - Discuss Grievance Redress Mechanism of the subproject (especially the plan and procedure on feedbacks/grievance handling). Please include it in the Organization and Implementation Structure and make sure that the Grievance Point Person/Committee is in the Executive Order of the LGU and that the FCA/FCA cluster will have a representative as Grievance Point Person. Refer to the SEP for the GRM details and the Labor Management Procedures (LMP) for GRM specific for project workers.

Labor-related risks **-** Discuss potential labor-related risks such as labor influx. Assessment should be based on the projected maximum number (at the peak of construction activities) of non-resident workers (migrant workers) to be hired by the subproject given the need and local availability; the cultural vulnerability of host population; crime rates; gender imbalance; current epidemics, cultural differences, exposure of the population to modern ways; among others. Refer to the LMP for other potential labor-related risks such as child labor and forced labor and gender-based violence.

Conflict Context Assessment - discuss the results of the conflict context assessment (as per SES Screening Form) and the appropriate mitigating measures to be implemented to ensure the safety of the community and project workers and to avoid exacerbating the identified conflict.

B. Environmental Safeguard Aspects

The environmental assessment section of the business proposal/plan should provide information on the following:

Natural habitat - Describe the project site (civil works and expansion of production area) in terms of land use, vegetation, wildlife, presence of water ecosystems, endangered and other important species. How are they going to be impacted by the project? Is the project site within an officially declared or proposed

protected area of natural habitat or any forest? If the site is not inside a natural habitat or forest, indicate the nearest natural habitat or forest with the site's location. If the site is near a natural habitat or forest, provide mitigation measures that no encroachment will occur. What ecosystem services will be affected, i.e. mangroves and coral reefs providing shoreline protection, fishing areas and fish nurseries and nutrient protection; intact vegetation serving as flood buffer, protecting infrastructure by retaining water when rivers rise during flooding seasons?

Note that: PRDP Scale-Up excludes subprojects involving civil works that encroach into Protected Areas of natural habitat such as areas declared as Natural Parks under NIPAS. For subprojects in multiple use zone or buffer zones of protected areas, the following are documentary requirements:

- □ PAMB Resolution endorsing the subproject as part of business proposal/plan
- □ PAMB Clearance approved by the DENR prior to implementation
- □ Special Agreement in Protected Area (SAPA) approved by the DENR prior to implementation.

Physical Cultural Resources - Are there any structures, monuments or Physical Cultural Resources (as defined below) on site that will be affected by the subproject? Describe the cultural and historical significance of the structure/s, if any. Describe the impact of the project to the structure/s. Is the project site part of an important natural feature or landscape? How will the project change or impact the landscape? Is the project area a potential archaeological site? If there are no such structures or monuments or Physical Cultural Resources to be affected, the assessment should clearly say so. Describe the procedure in case of Archaeological/Paleontological Chance Funds. Refer to I of the ESMF.

Note that: The ESS8 on Physical Cultural Resources requires that physical cultural resources likely to be affected by the project should be identified and the project's potential impacts on these resources be assessed as an integral part of the ESIA. Cultural resources are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance.

When the project is likely to have adverse impacts on physical cultural resources, appropriate measures for avoiding or mitigating these impacts shall be identified in the ESIA. These measures may range from full site protection to selective mitigation, including salvage and documentation, in cases where a portion or all of the physical cultural resources may be lost.

If the area is a potential archaeological site, the mitigation plan should include provisions for managing chance finds. For example: in case of archaeological finds during construction, civil works must be immediately suspended and the National Museum/National Commission of Culture and Arts/National Historical Institute contacted.

Terrain, Soil Types and Rainfall - What is the topography of the proposed subproject site for expansion of crop production and civil works? What is the type of soil? Describe the soil in terms of looseness and erosion potential. What is the amount of rainfall in the area?

Natural and Geologic Hazard/Risk Assessment - Describe drainage, erosion and flooding potential of the site for expansion of crop production and civil works. Describe the results of climate vulnerability and suitability analyses and the measures to address these risks.

Resource Conservation and Pollution Control – Describe the sources of raw materials, water supply and power supply and methods to be introduced by the subproject to conserve and manage these resources. Describe potential land, air and water contamination during operation and environmental receptors of potential contamination (i.e. river, creek, surrounding land, etc.). Describe the management of liquid wastes, solid wastes, and hazardous wastes from the construction and operation of enterprise. Describe the permits to be secured from DENR/MENRE to comply with the discharge and emission standards and

disposal of wastes. Describe whether the subproject will involve the removal of vegetation trees? Use of agro-chemicals? Result to soil erosion and sedimentation? Describe the waste management plan in the ESMP.

Note that: if the subproject will result to the generation of wastes and pollution, the following are the applicable requirements to be included in business proposal/plan:

- □ Description of the wastewater treatment facility to meet the DENR Effluent Standards
- □ Description of air pollution control facility to meet the air emission standards
- □ Description of solid waste management procedures
- □ Description of management of chemicals and hazardous wastes

If the subproject will utilize groundwater resources or surface water resources for water supply, the subproject is required to present the NWRB Water Permit application as part of the business proposal/plan and the approved NWRB Water Permit prior to drilling or development of the water supply source.

A subproject is encouraged to incorporate in the business proposal/plan any measure to conserve resources such as: use of solar energy or other renewable energy source, introduction of waste minimization approaches, and cleaner production technologies.

Occupational Health and Safety - Describe the number and types of workers to be employed by the subproject (regular and contractual), hours of operation, and the potential occupational safety issues during operation. Describe the mitigation measures to ensure occupational health and safety during construction and operation of the enterprise.

Community Health and Safety – Describe whether the subproject would cause community impacts in terms of spread of communicable diseases (i.e. COVID19) and sexually transmitted diseases and other construction-related nuisances. Identify the measures in CESMP and COSH.

Integrated Pest Management and DA-KASAKALIKASAN - Describe the Integrated Pest Management Project and Status of DA-KASAKALIKASAN Project of the proposed subproject. If no IPM or DA-KASAKALIKASAN in the proposed subproject, describe the present practice of Pest Management and how to transform such into the IPM Project.

Status of Environmental Clearances - Describe the status of the environmental clearances such as ECC/CNC, Tree permits and any necessary clearances.

Social and Environmental Impacts - Discuss in brief the major potential impacts of the subproject and corresponding mitigating measures on the concerns indicated in the duly signed standalone ESMP.

C. Preparation of the Environmental and Social Management/Mitigation Plan (ESMP) based on the Assessments

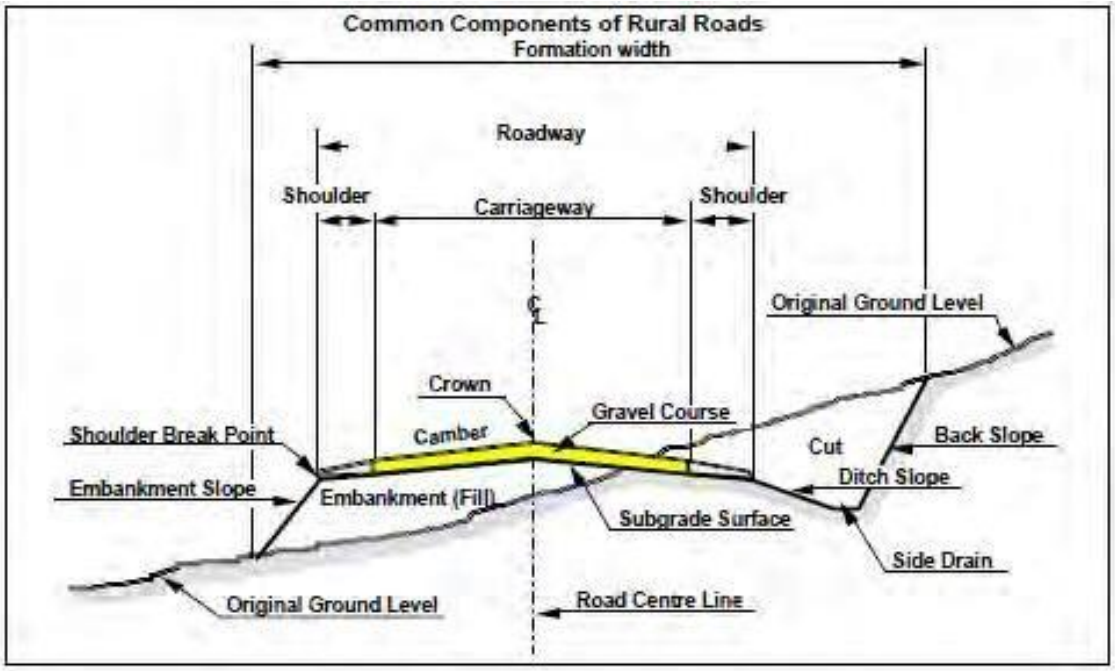
1. The ESMP should include both environmental and social management measures and it should be based on the results of the Social and Environmental Assessments in the business proposal/plan as well as technical information about the proposed subproject. This means that the impacts and the measures identified in the ESMP should be consistent with the findings of the ESIA and with the subproject type, scale and design.
2. To facilitate the preparation of the ESMPs, templates have been prepared for the I-REAP subprojects namely, crop production; multi-commodity processing plants; aquaculture/mariculture/hatcheries/fishponds; slaughterhouses/dressing plants/ hatcheries/ meat processing/ dairy processing; fish landing/ feeder ports; milling/ drying/packaging facilities; cold

storage/ warehouses/greenhouses/ trading and market centers; and batching plants/spoils disposal and borrow pits.

3. Note that measures identified in the ESMP should be reflected in the relevant subproject documents (i.e. the Contract, the DED and/or the POW). Measures that are part of the social safeguard aspect (e.g. acquisition of right-of-way, crop/property damage compensation, IP endorsements, etc.) should be reflected in the corresponding social safeguards documents (e.g. deed of donations, survey of entitlements, survey of project affected persons, resettlement plan, IP Plan, etc.) Measures that are the responsibility of the contractor should be included as part of the Contract. These include mandatory repair/restoration of any damage to existing road or other public structure due to heavy equipment traffic, or due to other construction activities during construction, properly handing of construction waste, provision of toilet facilities and safety measures during construction. Measures that have something to do with the subproject's design/operations should be reflected in the DED/Operations Manual, while those that have something to do additional work should be reflected in the Project of Work. Measures that are applied as part of the maintenance and operation of the subproject should be indicated as such in the ESMP. These include measures that require introduction of new technologies in the influence areas by the DA. Otherwise, those ESMP measures that cannot be funded within the present subproject budget should automatically be part of the commitment of the LGU/community as part of future subproject enhancement.
4. The ESMPs shall necessarily include monitoring, supervision, reporting, capacity building, and budget for implementation.

ANNEX G: ILLUSTRATED TECHNICAL PLANNING GUIDELINES FOR RURAL ROADS

1. Establish appropriate design standards. Technical considerations in the design of rural roads shall vary according to the terrain, prevailing weather, vehicle types and most importantly the anticipated volume of traffic that shall utilize the road. Site selection and design criteria shall also include economic justification, reliability (either all-weather or allow reasonable level of delays during rainy season), tolerable roughness and speed, access to higher-level networks, and access to local social and economic services. A typical cross-section of rural roads is shown below. A four (4) meter carriage way is adapted for traffic volume of less than 200 ADT and a 5 meter carriage way for equal to 200 and above.

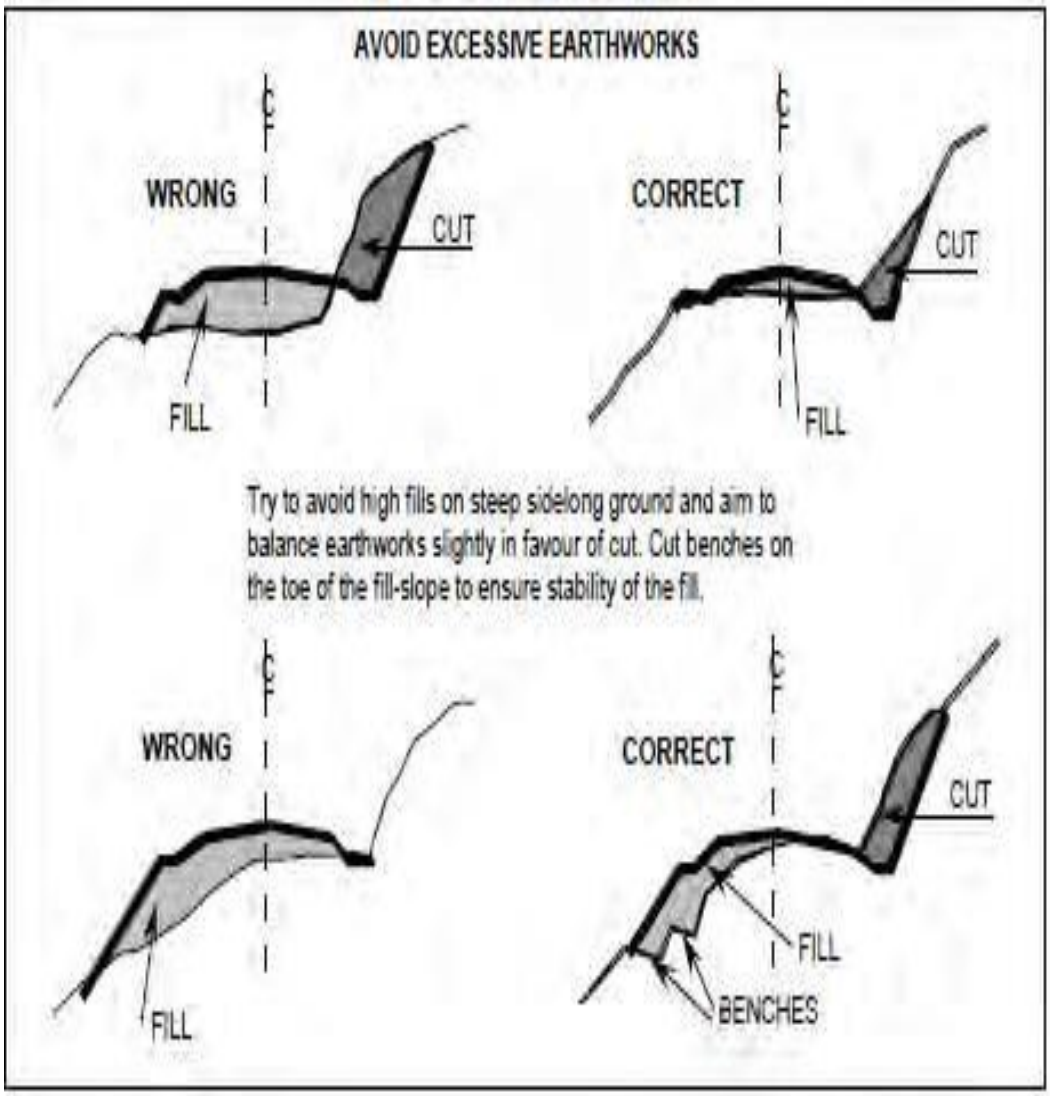


Typical dimensions, depending on the agreed design standards appropriate for the locality are as follows:

- Formation width 9 to 10 meters
- Roadway 7 to 8 meters
- Carriageway 4 to 5 meters
- Shoulder 1.5 meters both sides
- Item 200 or 201 Minimum of 15 cm
- Camber 1.5% for PCCP and 3% for gravel shoulder
- Embankment elevation At least½ meter above flood level
- Minimum curve radius 30 meters

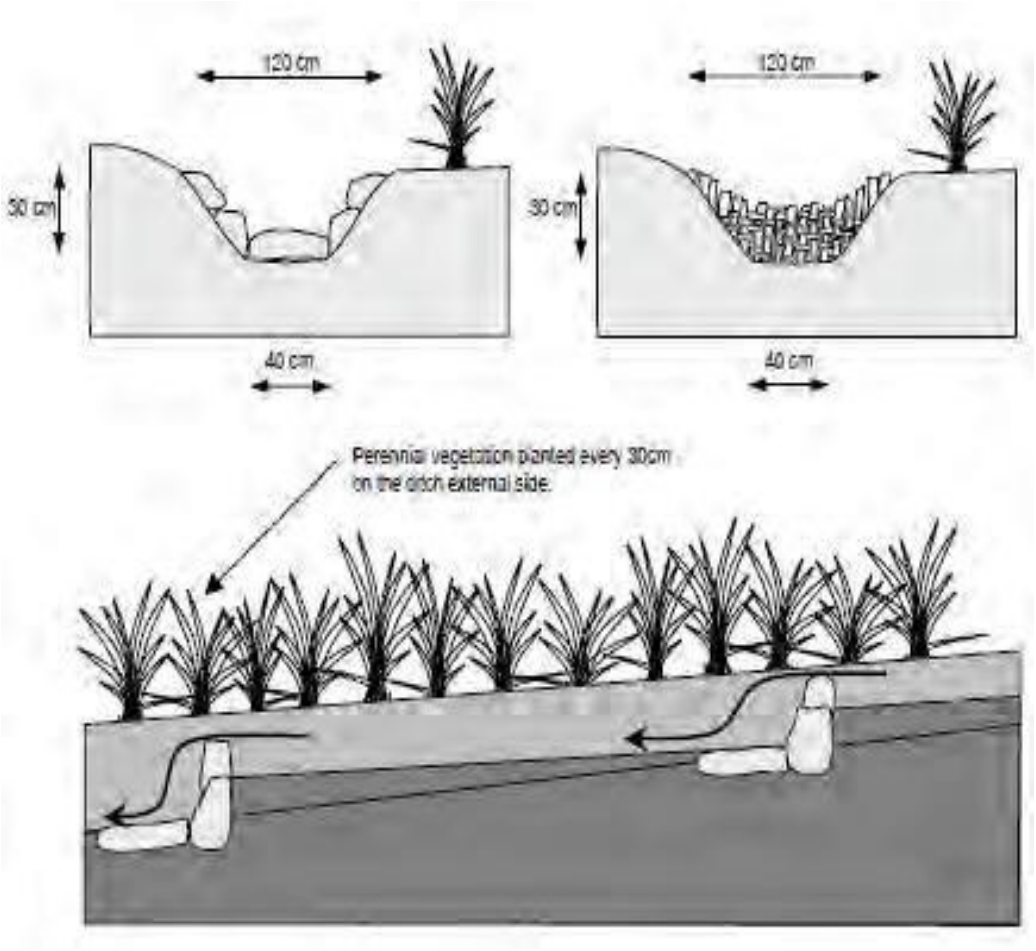
Exemption in the attainment of the 9 – 10 meters formation width will be applied in mountainous terrain where the 1.5 meters shoulder from the back slope of the side – cut would be sacrificed to avoid massive excavation and reducing environmental damages. The cost of mitigating measures must render the subproject still economically viable.

2. Minimize earthworks. If the alignment lies on steep sidelong (steep slope) ground, the centerline has to be carefully located to minimize earthworks. However, it should be located in favor of cut material, rather than fill, to reduce the risk of the fill material sliding down the slope.



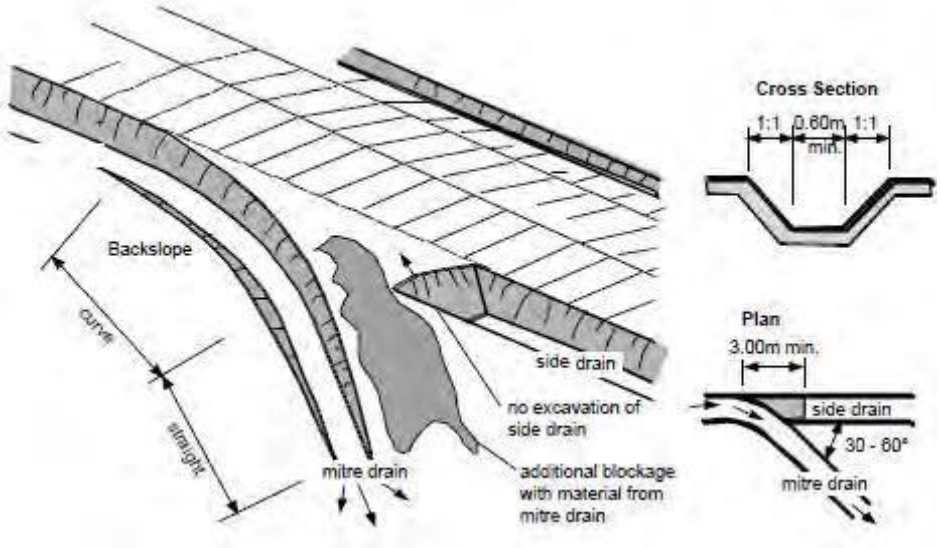
3. Pay particular attention to drainage. The removal of surface water is crucial for the success of rural roads, since at this traffic level the weather causes more damage than does the traffic. This means that a good camber of 1.5 % for PCCP and 3% for gravel shoulder, adequate side drains, and carefully designed cross drainage structures are required.

   Where side ditches are provided, they must be equipped with scour checks if the gradient exceeds4% and mitre drains (or turnouts) every 20meters to protect against erosion. A typical scour check is shown in the following figure:



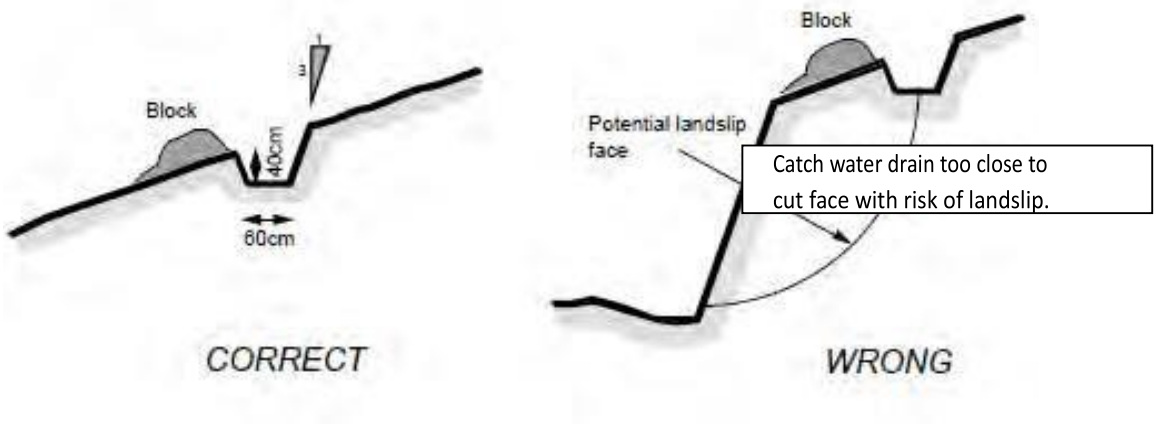
Scour checks are to be installed every 5m (slope>8%); 8m (8% > 6%); 15m (< 6%)

Whenever possible mitre drains should be constructed at intervals of 20 meters along the road alignment. Identify mitre drain locations before ditching in order to spare blocks from being excavated. Where the gradient of the mitre drain is more than 4%, scour checks might be required. A typical mitre drain or turnout is shown in the following figure:

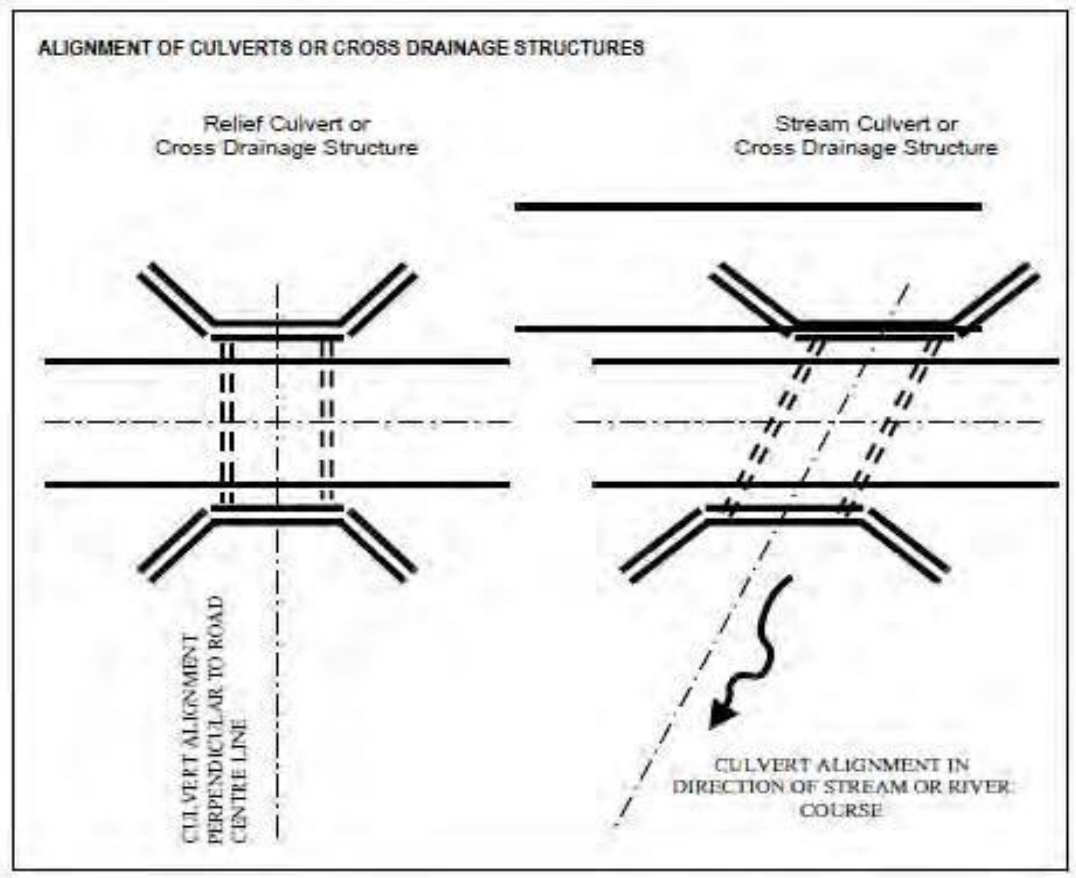


Catch water drains are usually required in hilly or mountainous terrain where there is a lot of surface water. This needs to be collected and safely led away before it reaches the excavated slope on the hillside. Where catch water drains have to be

located outside the road right of way, cooperation with the landowners has to be sought. A typical catch water drain is shown below:

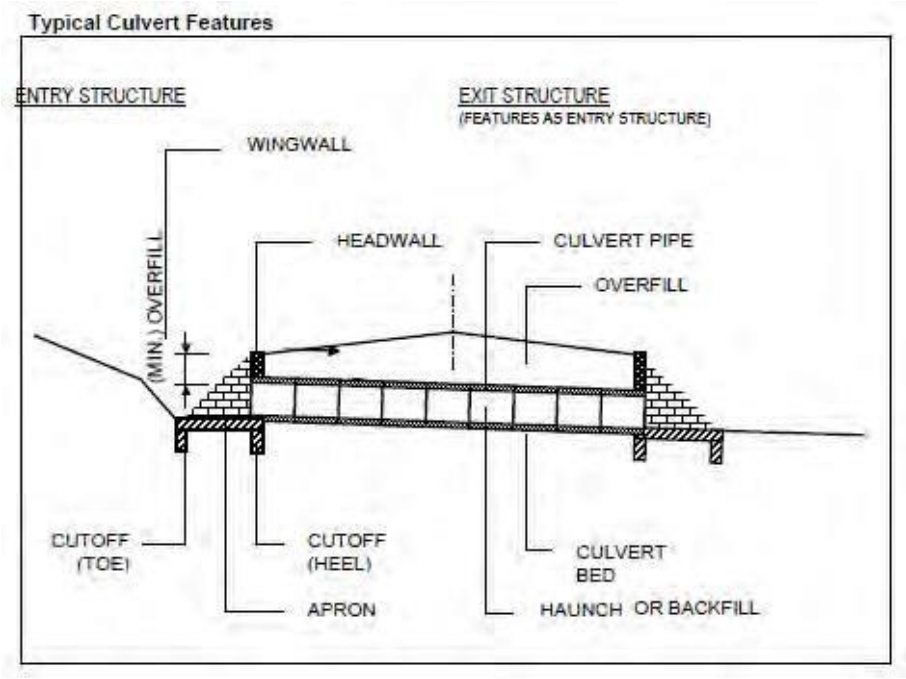


Relief culverts or cross drainage structures are placed perpendicular to the (horizontal) road alignment. Stream culverts must be set out in the direction causing the lowest possible disruption to the natural flow of the watercourse.



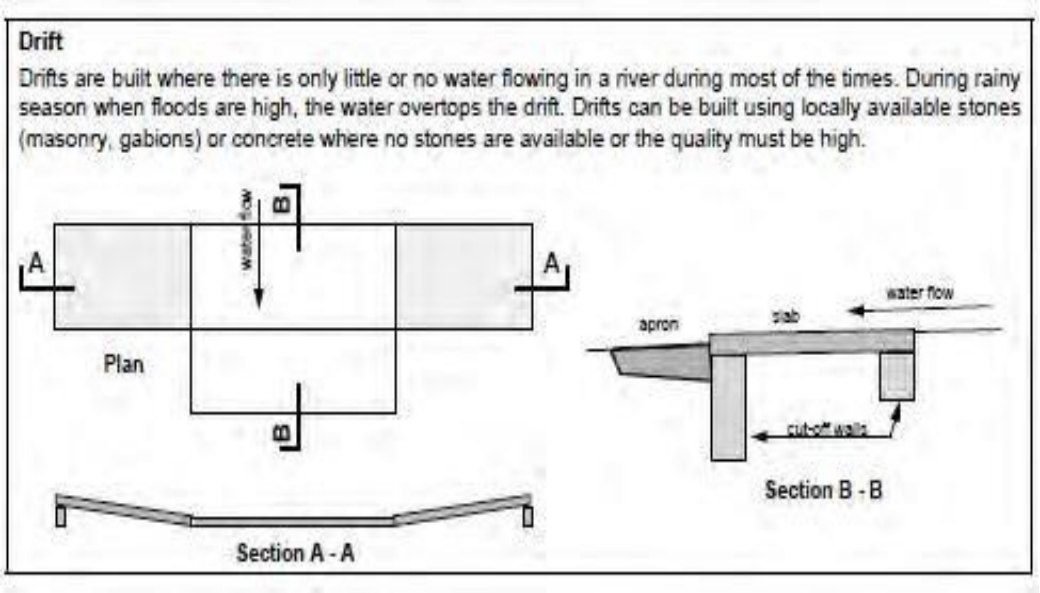
Important Notes Working with Culverts:

- Particular attention must be given to location and levels of culverts to prevent erosion, siltation and long outfalls.
- In general culvert outfall drains should not exceed 20m length
- Some locations require the road alignment to be raised to accommodate the culvert. The maximum ramp gradient should be 5%.
- Culvert rings should be well seated on a shaped bed (check with template and boning rods), or concrete bedded.
- Overfill must be at least 0.60 m over the top of the culvert.
- Provision of haunching or full concrete surround is required if overfill is less than 2/3 barrel diameter
- Provision of cement stabilised bedding, haunching or full concrete surround is required in poor in situ soil.
- Dry stone headwalls may be adequate for intermittent flows. Masonry, concrete or brick aprons are always required.
- Masonry/concrete/brick headwalls and outlet apron cut-offs are required for permanent water courses or high flows.
- All aprons should have cut – off walls, toe and heel, on both inlet and outlet slides.



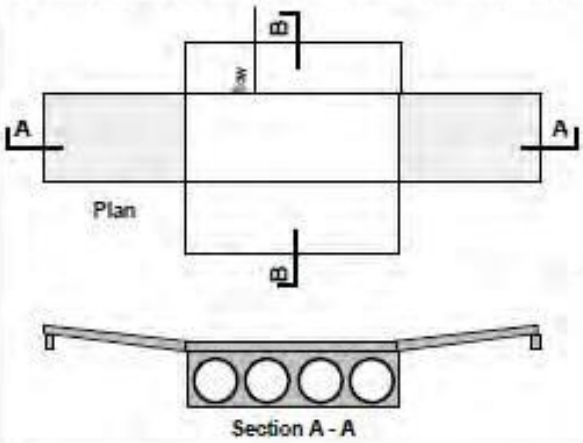
Drifts or spillways are very common structures especially in areas where rivers are seasonal. In case where a constant flow of water has to be accommodated, vented drifts are built. Short – span bridges can be built as box culverts or stone-arch culverts.

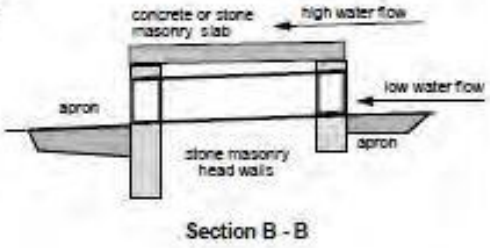
Some principal features are provided in the following diagrams:



Vented Drift

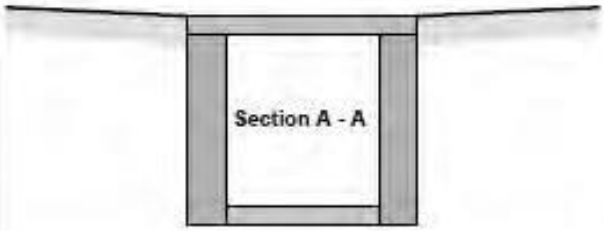
The culvert pipes accommodate the normal water flow. During high floods the water is allowed to overtop the structure. In most cases the slab is made of concrete or masonry. The head walls are masonry while the culverts can be of concrete or steel (Armco). Also mini arches made of masonry are possible.

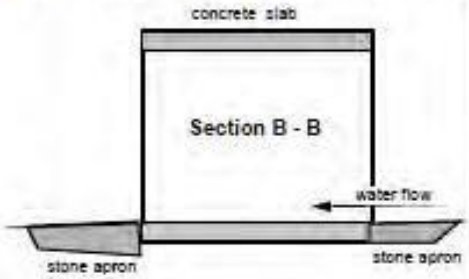




Box Culvert

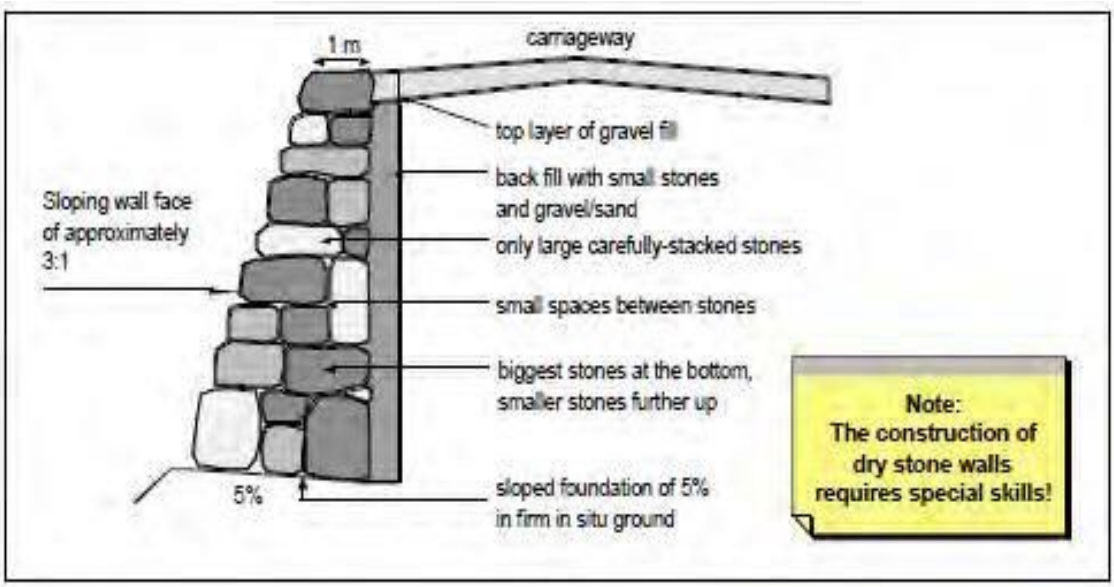
The walls and the bottom slab of box culverts are usually made of masonry. The deck has to be reinforced concrete.



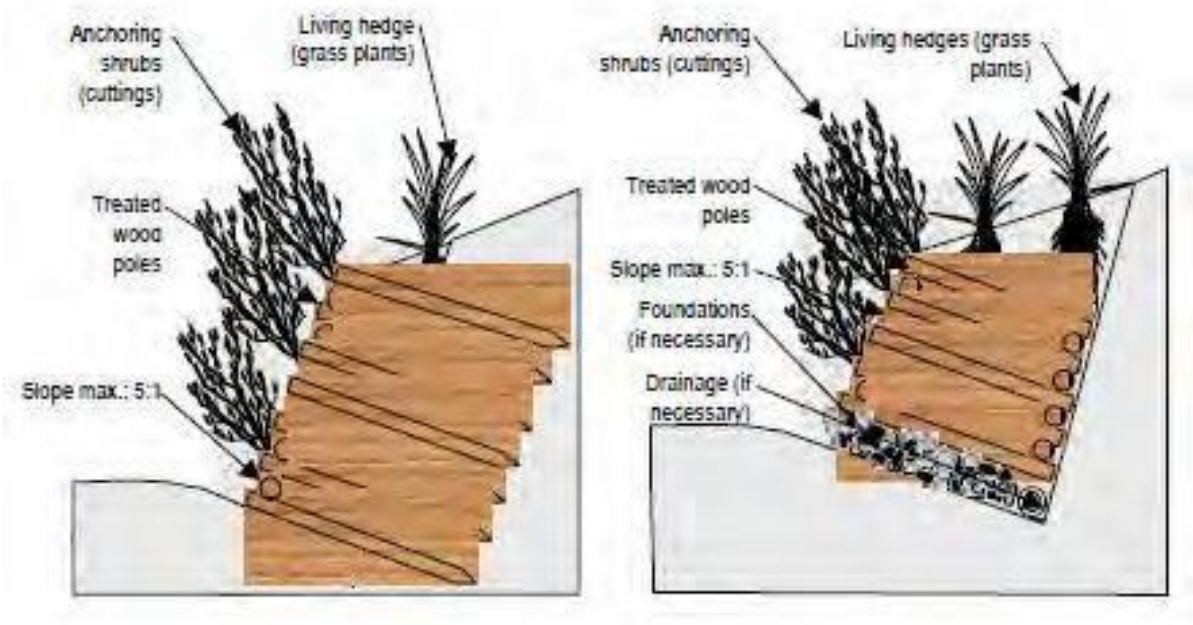


4. Common structures for sloped areas and raised roads. Special attention must be paid to slope stability. Existing alignments are usually fairly stable, and problem areas are obvious. However, new alignments can precipitate slip failure on uphill cut-faces, and create severe erosion problems downstream of drainage outlets. Considerable care must be taken with stabilization measures.

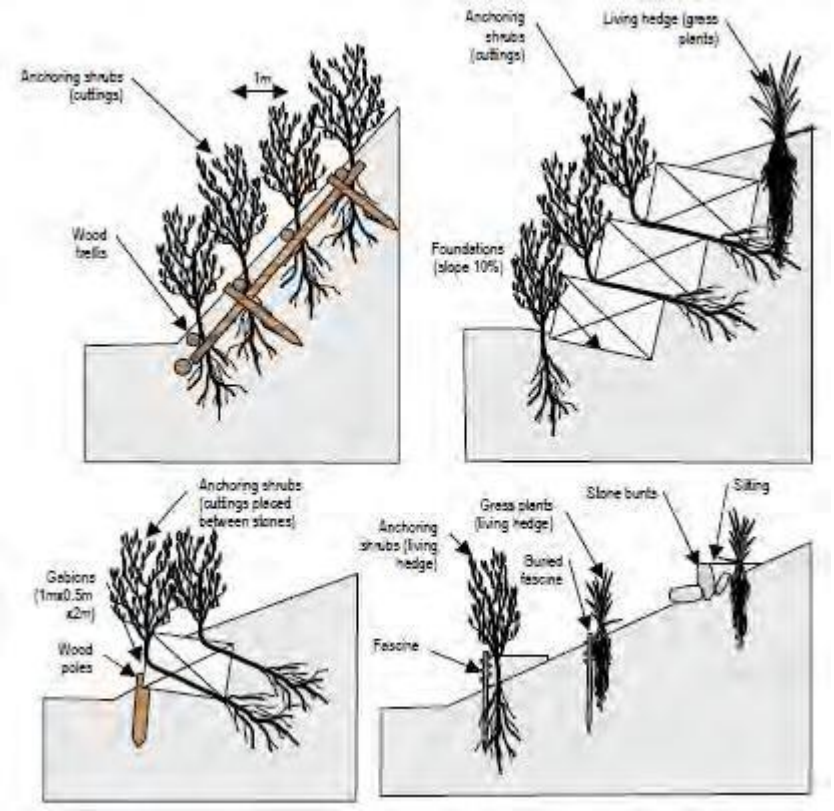
   Retaining walls are required on both the valley and mountain side depending on the stability of the material, especially where vegetation cannot stabilize the slopes. Retaining walls should be constructed using dry masonry for heights up to 4 meters and gabion walls for heights above 4 meters or where there is increased earth pressure. Cement-bound masonry should only be used where absolutely necessary. A typical design of dry masonry wall is shown below:



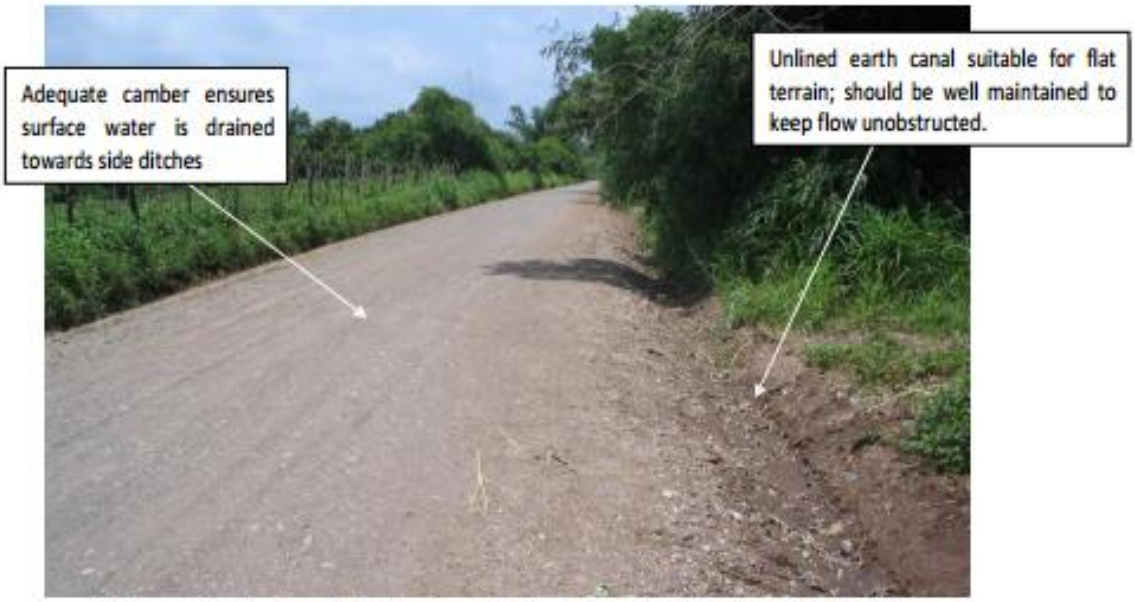
Bio-engineering approaches, utilizing appropriate plants (e.g. vetiver grass) to solve structural and environmental problems, have proven very cost-effective in many areas. These sustainable methods are both labor-intensive and replicable forrural areas. An example of a bio-engineered retaining wall is shown below:



Another example of a bio-engineered slope protection approach is shown as follows:



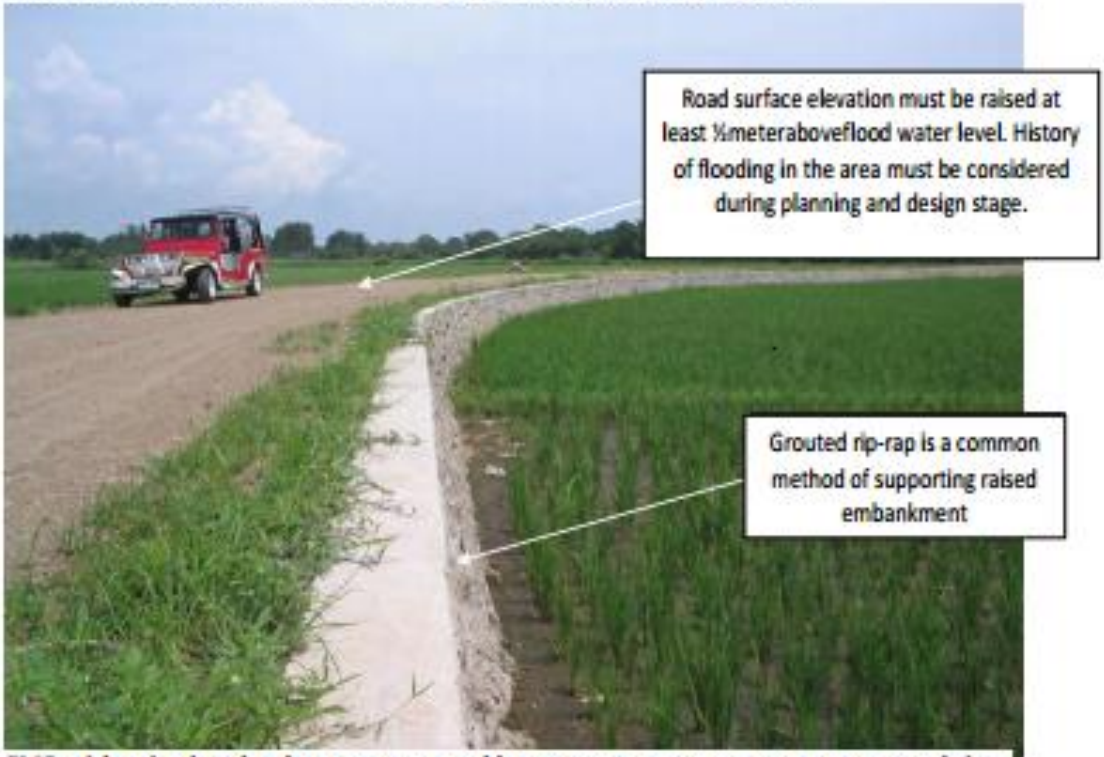
C. Photos of Common Environmental Issues in Rural Roads.



Well-constructed, well drained road with unlined earth canal. (ARCDP2)

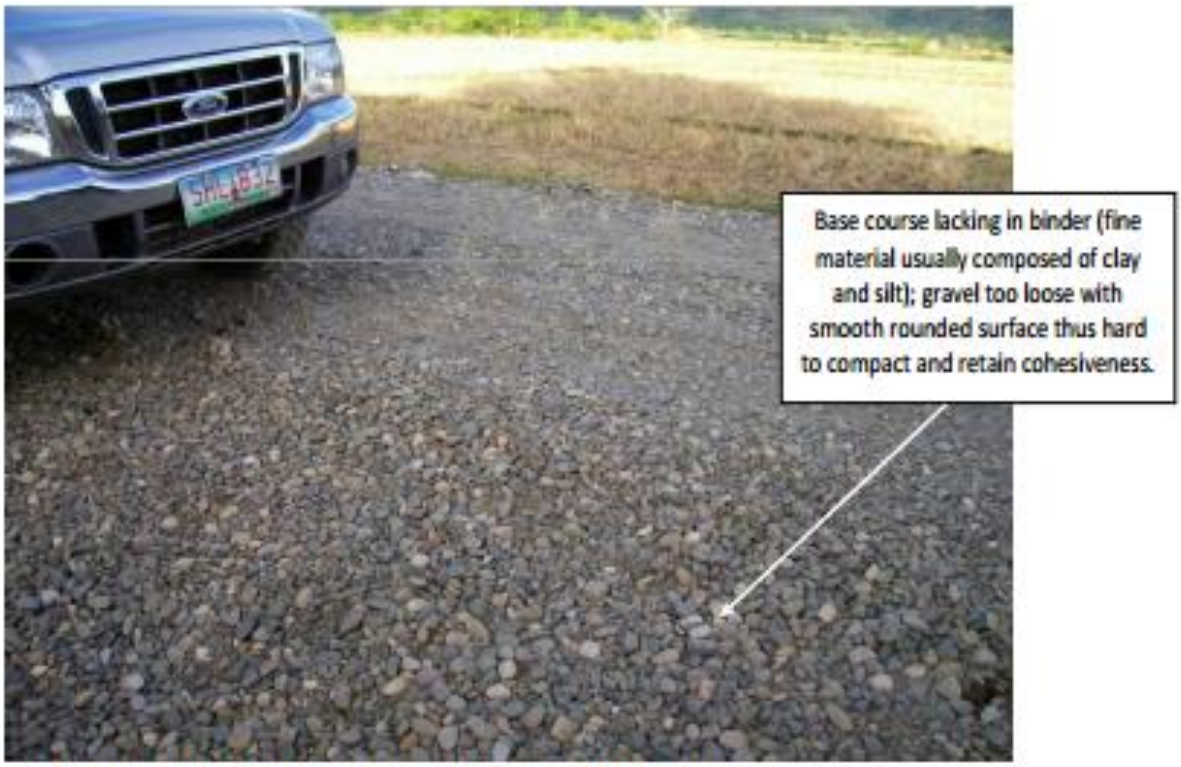
FMR with concrete/stone masonry lined canal. (ARCDP2)

FMR with side ditches covered with over grown vegetation. (ARCDP2)



FMR with raised embankment supported by concrete stone masonry or grouted rip-rap retaining walls. (ARCDP2)

FMR is provided with paved carriage way along steep gradient.(CMARPRP)



Road surface is not according to specifications. (ARCDP2)

FMR above is provided with appropriate road sign. (ARCDP2)

Poorly designed drainage structure (MRDP1)

FMR provided with barrier to control vehicle passage on the road.

Cross drainage structure half-filled with debris. (MRDP1)

Damage on the road carriage way due to poor drainage.(ARCDP2)

Steep side slopes on the right should be protected from possible landslide. (ARCDP2)

Shown above is a member of the local O&M group doing his share in cleaning the road's side canal. (ARCDP2)

In some cases a concrete tire path maybe a more practical alternative design for rural roads. (ASFP)

ANNEX H: ILLUSTRATED TECHNICAL PLANNING GUIDELINES FOR COMMUNAL IRRIGATION SYSTEMS

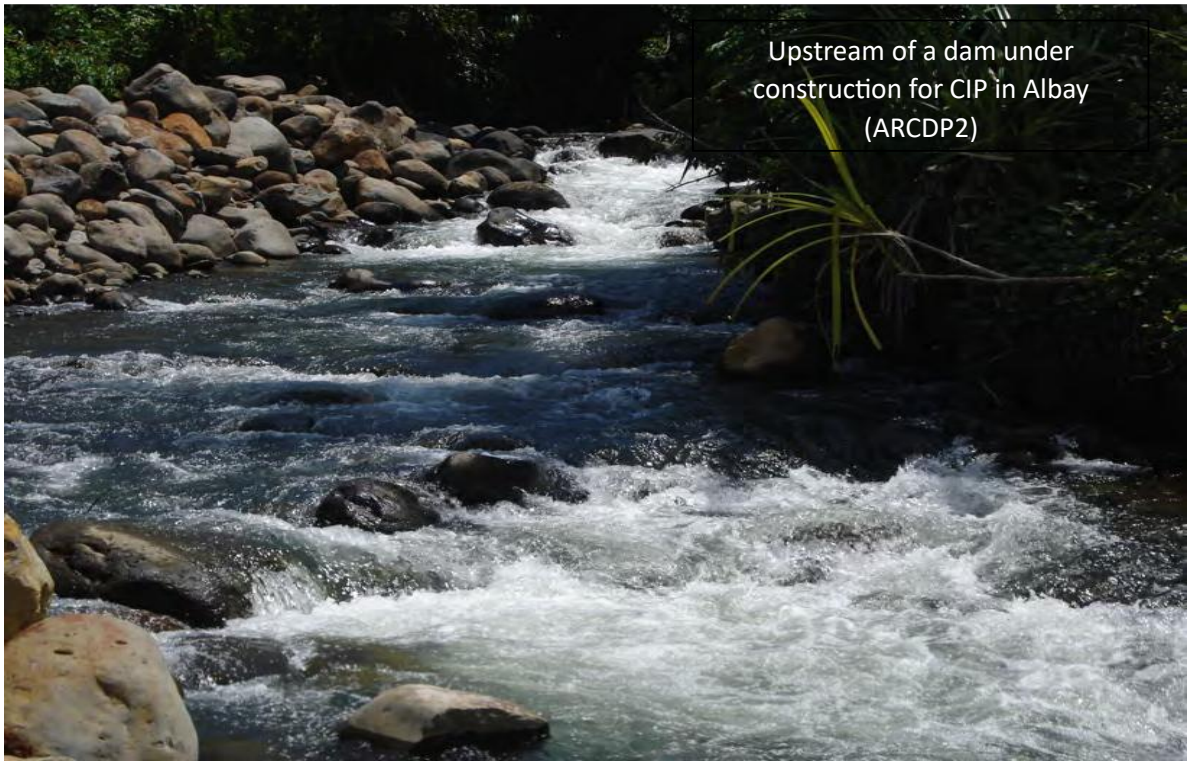
The following are the basic environmental safeguard requirements for irrigation subprojects:

Regulatory requirements

- For a communal irrigation system subproject (new or rehabilitation / improvement) With a service area of less than or equal to 300 hectares, the proponents, in this case the local government unit needs only to prepare and submit an Environmental Management Plan.
- For an irrigation subproject with a service area of more than 300 but less than 1,000 hectares, an initial Environmental Examination (IEE) Checklist should be submitted prior to securing an Environmental Compliance Certificate (ECC) from the DENR.
- For a subproject with service area greater than or equal to 1,000 hectares, an IEE Report is needed prior to securing an Environmental Compliance Certificate (ECC) from the DENR.
- A sub project with a service of area greater than 1,000 hectares should submit a municipal watershed management plan in addition to an Environmental Impact Statement (EIS) to be submitted to the DENR-EMB.

Site selection, Planning and Design

- Base the irrigation system design and capacity on adequate historical and updated information to correctly estimate the water requirement and the range of discharge or flow of the surface water source in varying seasons.



Upstream of a dam under construction for CIP in Albay (ARCDP2)

- Integrate in the determination of water flows to be diverted downstream the river water requirements
- Conduct water sampling and testing to assess water quality to determine if water is suited for irrigation and to establish baseline so that any future degradation and environmental / public health threats can be detected.
- Provide slope protection through bank compaction, rip-rapping on critical sections, or vegetative stabilization construction.
- Designate a Spoils Storage Area, with top soil set aside for later use and allow maximum re-use of spoils.
- Provision of adequate drainage system and proper grading of canals so that IS structure will not be prone to flooding & consequent erosion.

Concrete canal is best against erosion and seepage.

Operation and Maintenance

- Practice water-saving irrigation techniques, such as Controlled Irrigation, which has been shown to reduce water used in rice production by 16-35% without decreasing grain yield.
- Continuous flooding, in contrast to Controlled Irrigation, not only wastes scarce water resources but also triggers too much leaching, soil nutrient imbalance (zinc deficiency), and lodging problem sowing to weak base and anchorage of the plant. It also results in lesser and untimely water in the fields near the tail-end, high water-use in gravity irrigation systems, and too much water cost in pump irrigation systems.
- Promote controlled application of agrochemicals based on the Integrated Pest Management (IPM) Plan.
- Training of the farmers on the proper selection, dosage and timing of agro-chem applications to ensure maximum absorption by the plant and soil.
- Periodic analysis of the irrigation water near the downstream part of the service area prior to exit to natural waterways.
- Regular removal of debris and other waste that may obstruct water flow.

Use just enough irrigation water during land preparation to facilitate soil puddling, organic matter decomposition, and land leveling

Photo courtesy of PhilRice

Photo courtesy of PhilRice

Photo courtesy of PhilRice

Photo courtesy of PhilRice

Farmers clearing irrigation canals of debris that may obstruct water flow

IFAD Photo by Louis Dematteis

IFAD Photo by Louis Dematteis

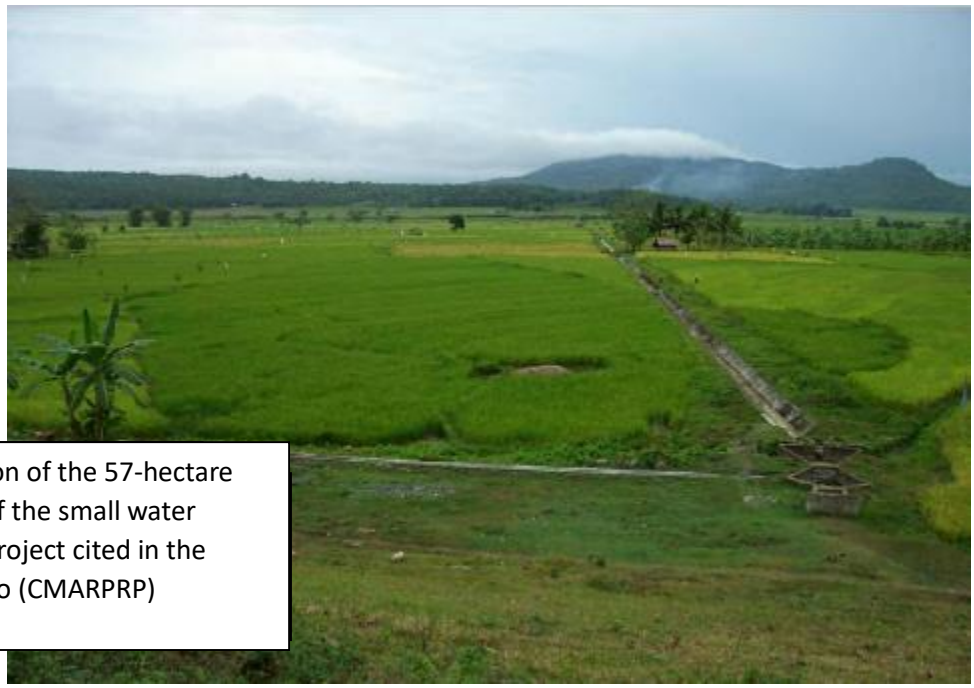
CIS dam and diversion works

For subproject involving the construction, rehabilitation or improvement of irrigation system; a municipal watershed management plan shall be mandatory when the total area served by irrigation systems in the municipality exceeds 1000 hectares. Irrigation systems implemented by National Irrigation Administration (NIA), Asian Development Bank (ADB) and other entities are to be included in the computation of total area.

Small water Impounding Project

A portion of the submerged area of a small water impounding project rehabilitated in Aumbay, Samal Island. (CMARPRP)

A Protection of watershed of this SWIP is essential for its long-term sustainability.



This is a portion of the 57-hectare service area of the small water impounding project cited in the previous photo (CMARPRP)

ANNEX I: ILLUSTRATED TECHNICAL PLANNING GUIDELINES FOR WATER SYSTEMS

The following are some basic technical guidelines in planning and implementing rural water supply systems.

1. Decide on the level of service to be provided–how, where, and in what quantities water will be delivered to users. System design options are:

   a) Single Point systems (Level1), which usually consist of dug wells or small - diameter drilled wells from which water is drawn using a hand-pump.
   b) Stand pipes or Communal Faucets (Level II): piped distribution systems which feed a limited number of public or communal taps, each of which serves all households, and other users, in the vicinity.
   c) Household Connection (Level III): piped systems which deliver water to taps in individual household compounds or homes.

Definition and Features of Water Supply Systems

Particulars	Level I	Level II
1. Definition	Point source facility. Generally suitable for areas where houses are sparsely distributed.	Communal faucet system. More appropriate in areas where houses are clustered.
2. Water source	Drilled / driven shallow well Drilled/driven deep well. Dug well. Spring, Rain collector.	Drilled shallow/deep well. Spring. Infiltration gallery.
3. Water treatment	Generally none Disinfection of wells is conducted periodically by local health authorities.	Generally none
4. Distribution	None	Piped systems provided with reservoir(s).
5. Delivery of water	At point (within 250-meterradius)	Communal faucet (within25– meter radius)
6. Service level	15Hh/ point source; 1Hh/ private well.	4 to 6 Hh/communal faucet
7. Consumption	At least 20 lcpd	At least 60 lcpd

2. Explore three (3) potential categories of sources of water:

   a. Groundwater –occurs under most of the world's land surface, but there are great variations in the depths at which it is found, its mineral quality, the quantities present and the rates of infiltration (thus yield potential) and the nature of the ground above it (thus accessibility). In hilly areas it emerges from the ground in places as natural springs, otherwise wells have to be constructed and pumps or other lift mechanisms installed.

FACTORS TO CONIDER FOR SITTING WELLS

Location:

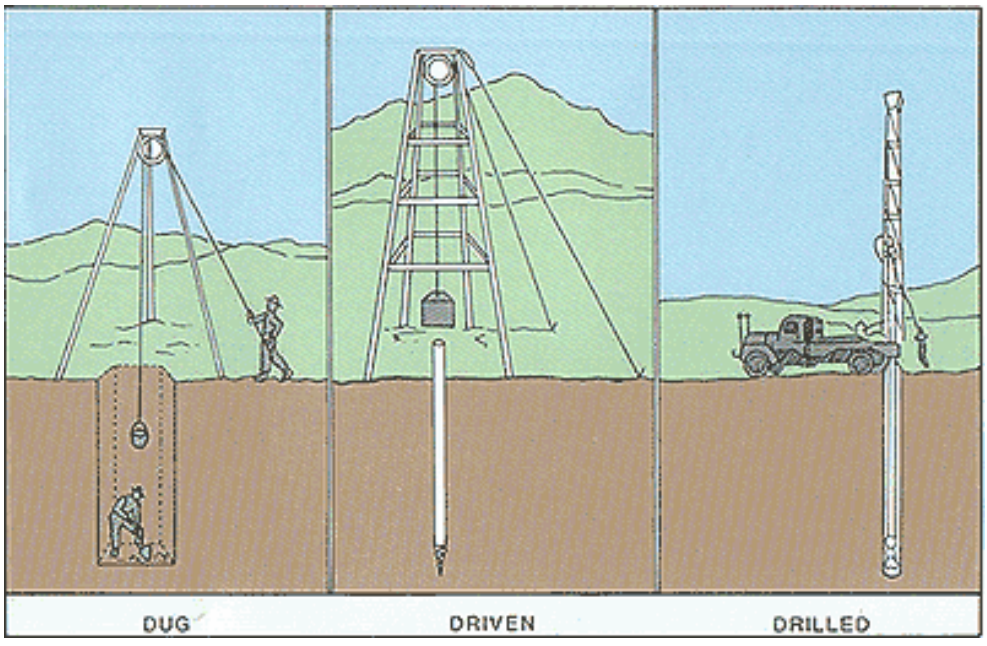
- Locate the well at the highest point on the property.
- Avoid positioning down slope from potential sources of contamination including surface water flows and flooding conditions.
- Locate the well in a site easily accessible for maintenance.
- Define a sanitary protective area around the wellhead that is kept in its natural state.

Potential Contamination:

- Yield and quality of water supply will depend on soil type (which determines filtering capacity and transmissivity).
- Course gravel, limestone, and disintegrated rock can allow contaminants to travel quickly with little opportunity for natural purification.
- Distance to nearest pointy of potential contamination is site and aquifer specific. The following minimum distances from potential sources of contamination are best practice for sites with sand – like filtering capabilities:
    - 150 ft (45.7 m) from a preparation area or storage area of spray materials, commercial fertilizers, or chemicals that may cause contamination of the soil or groundwater.
    - 100 ft. (30.5 m) from a below – grade manure storage area.
    - 75 ft. (22.9 m) from cesspools, leaching pits, and dry wells.
    - 50 ft. (15.2 m) from buried sewer, septic tank, subsurface disposal field, grave animal or poultry yard or building, privy, or other contaminants that may drain into the soil.
    - The distance between a septic tank leach field and a down-gradient well should be greater than 100 ft. (30.5 m) if the soil is coarser than the fine sand the groundwater flow rate is greater than 0.03 ft/day (0.01 n/day).

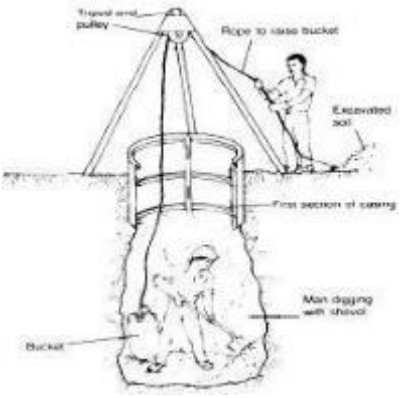
Source: Driscoll, Groundwater and Wells, second Edition

The following are methods of developing sources of groundwater:



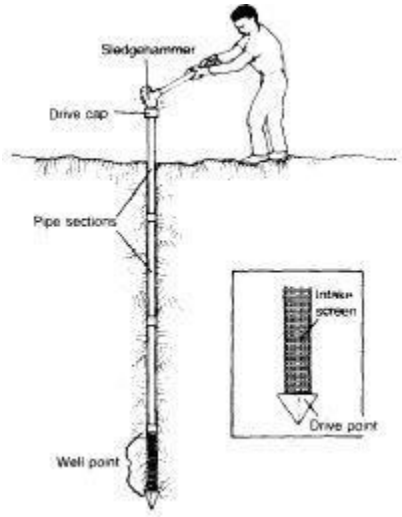
Hand-dug Well

Historically, dug wells were excavated by hand shovel to below the water-table until Incoming water exceeded the digger's bailing rate. The well was lined with stones, brick, tile or other material to prevent collapse, and was covered with a cap of wood, stone, or concrete. Modern large - diameter dug wells are dug or bored by power equipment and typically are lined with concrete tile. Because of the type of construction large-diameter bored wells can go deeper beneath the water-table than can hand-dug wells.



Driven Well

Driven point (sand point) wells are constructed by driving assembled lengths of pipe into the ground with percussion equipment or by hand. These pipes are normally 2 inches or less in diameter and less than 50 feet deep. These can only be installed in areas having relatively looses oils, such as sand or gravel. Usually a screened well point is attached to the bottom of the casing before driving. Driven wells are relatively simple and economical to construct. This type of well poses a moderate to high risk and is easily contaminated from nearby surface sources.



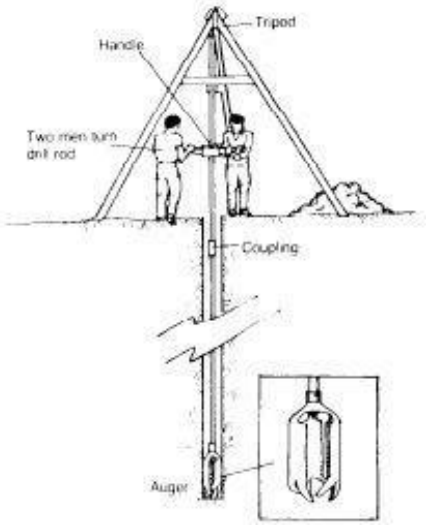
Jetted Well

This method of well drilling involves the use of a high velocity stream or jet of fluid to cut a hole in the ground and transport the loosened material up and out of the hole. The equipment used maybe the same equipment that is used for rotary drilling minus the bit. Protective casing should be installed to at least 25 feet and the well should be grouted to a minimum depth of 10feet to protect the well against contamination from the surface.

Jetted wells can only be installed in unconsolidated formations and are best suited for bore holes 4 inches in diameter.

Bored Well

An earth auger rotated, by hand or power, bores the hole and carries the earth to the surface. Casing is usually steel, concrete or plastic pipe. Borehole diameter ranges from 50 to 200 mm. Bored wells can be up to 15 meters deep.



Drilled or Cable Tool Well

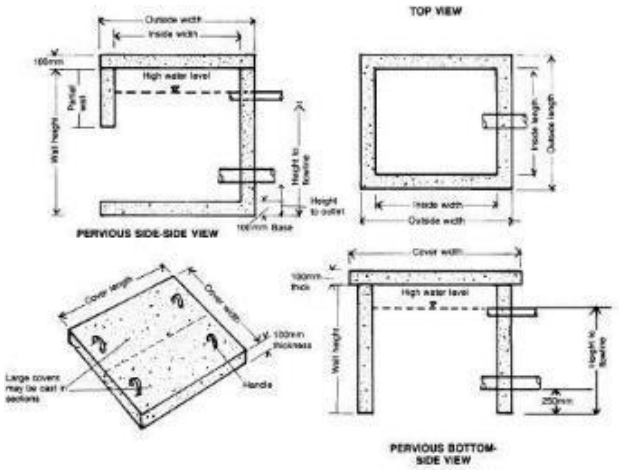
Most modern wells are drilled, which requires a fairly complicated and expensive drill rig. Drill rigs are often mounted on big trucks. They use rotary drill bits that chew away at the rock, percussion bits that smash the rock, or, if the ground is soft, large auger bits. Drilled wells can be drilled more than 1,000 feet deep. Often a pump is placed at the bottom to push water up to the surface.

Comparison of Types of Wells

FACTOR	WELLTYPE				
	Hand-dug	Driven	Jetted	Bored	Cable Tool
Method of sinking shaft	Soil excavated by pick and shovel and lifted out by Rope and bucket.	Well point and steel pipe driven Into ground.	Jet of water and rotating action of Bit force pipe into ground.	Auger is rotated and fills with soil, Lifted out of hole And emptied.	Bit rotated and dropped to Pulverize soil and rock; debris is mixed with water
Average diameter	1.0–1.3m	30–50mm	40mm	50–200mm	50–100mm
Maximum Practical depth	10m	8m	60m	15m	75m
Principal tools And equipment	Pick, shovel, rope and bucket, steel form for concrete, hoist for lowering casing	Sledge, drive pipe, or drive weight, raised platform	Boring pipe, raised platform or tripod, pump and hoses, jetting bits	Augers, drill line, Raised platform	Motorized vehicle, tripod, pulleys, ropes, heavy drill bits, suction pump, bailer

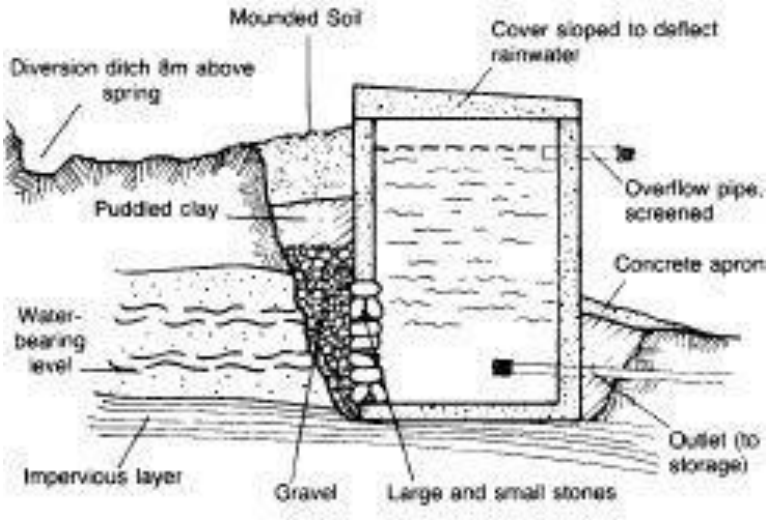
Casing materials	Cement, sand, gravel, and water (for concrete)	Steel pipe	Steel pipe	Steel or concrete pipe	Steel pipe
Intake	Porous concrete sections, or gravel-lined bottom	Specially-made Well point	Well screen	Well screen or Perforated pipe	Well screen
Skill of workers	Minimal	Minimal	Moderate	Moderate	Experienced
Outside water needed for construction	No	No	Yes	No	Yes

Constructing Structures for Spring Development:

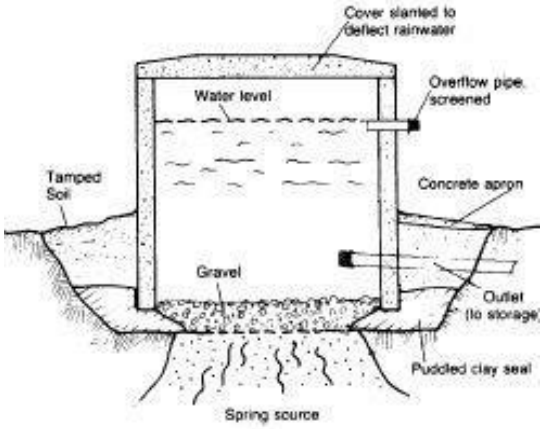


Typical Spring Box Design

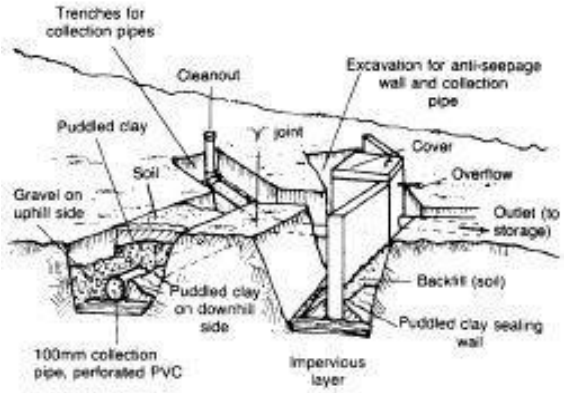
Spring Box with Open Side



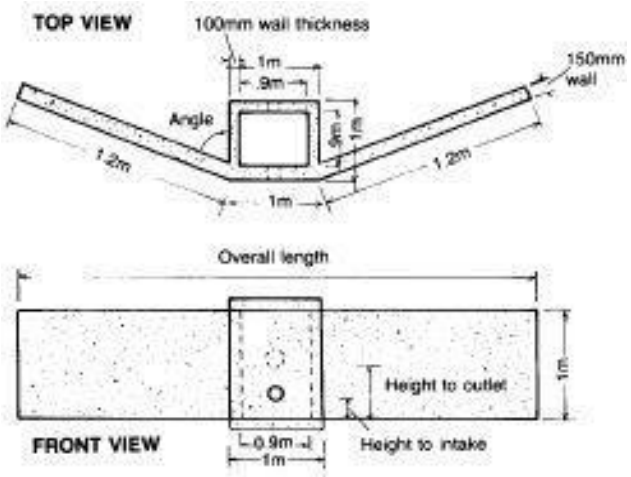
Spring Box with Open Bottom



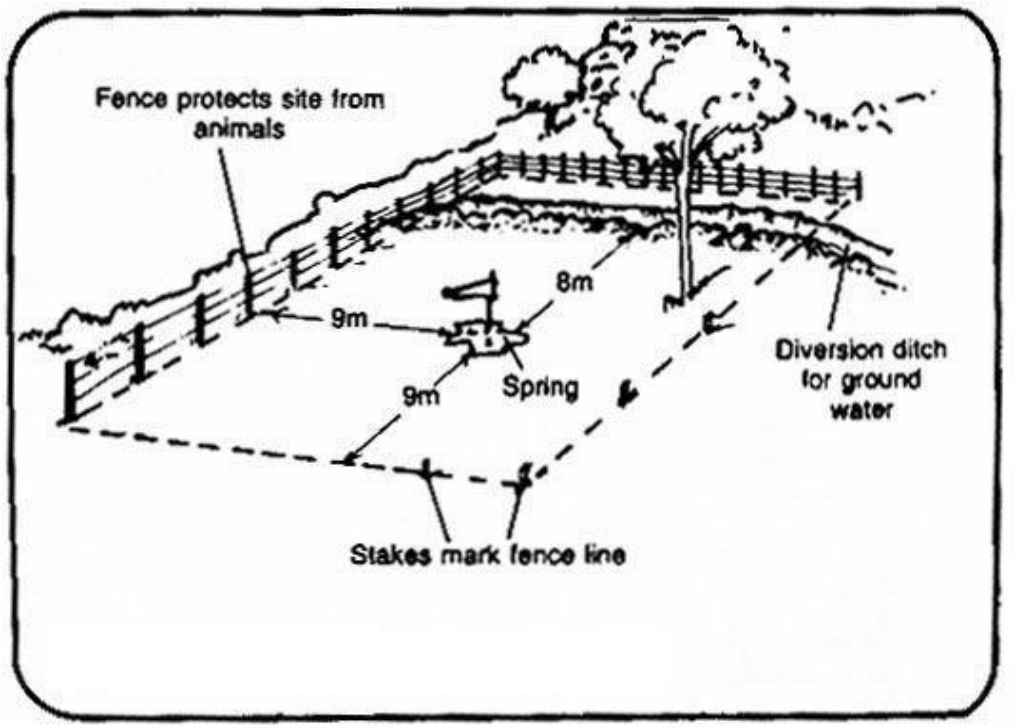
Seep Collection System



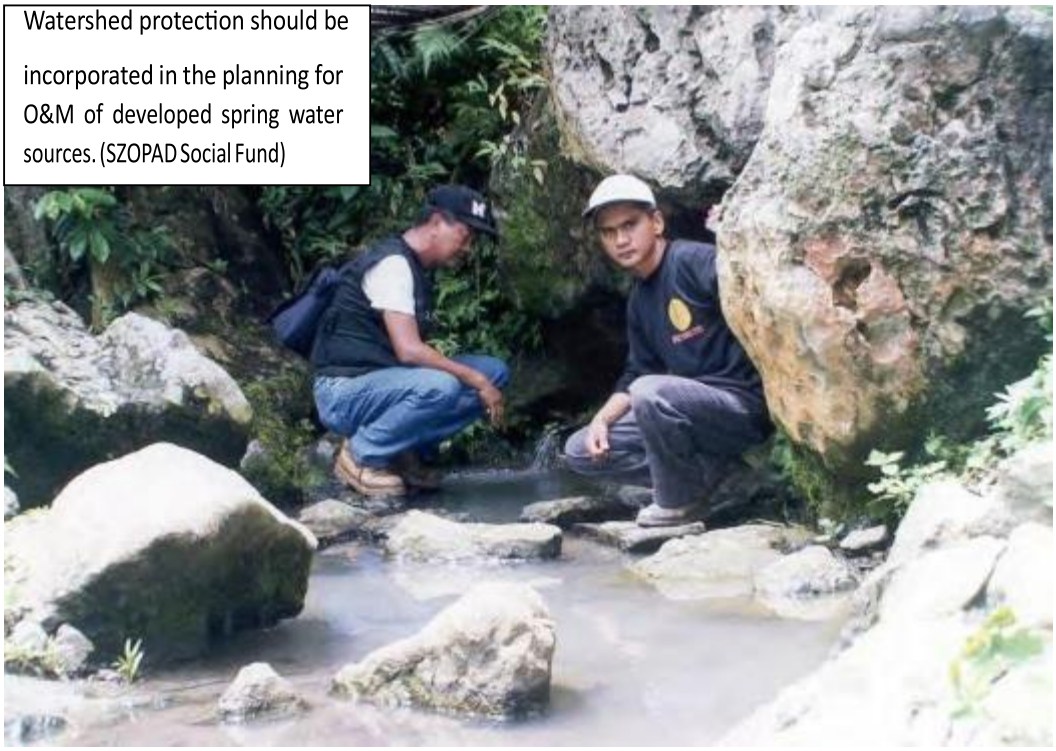
Anti-sepage wall and collection box



Preparation of spring box site to protect it from animals



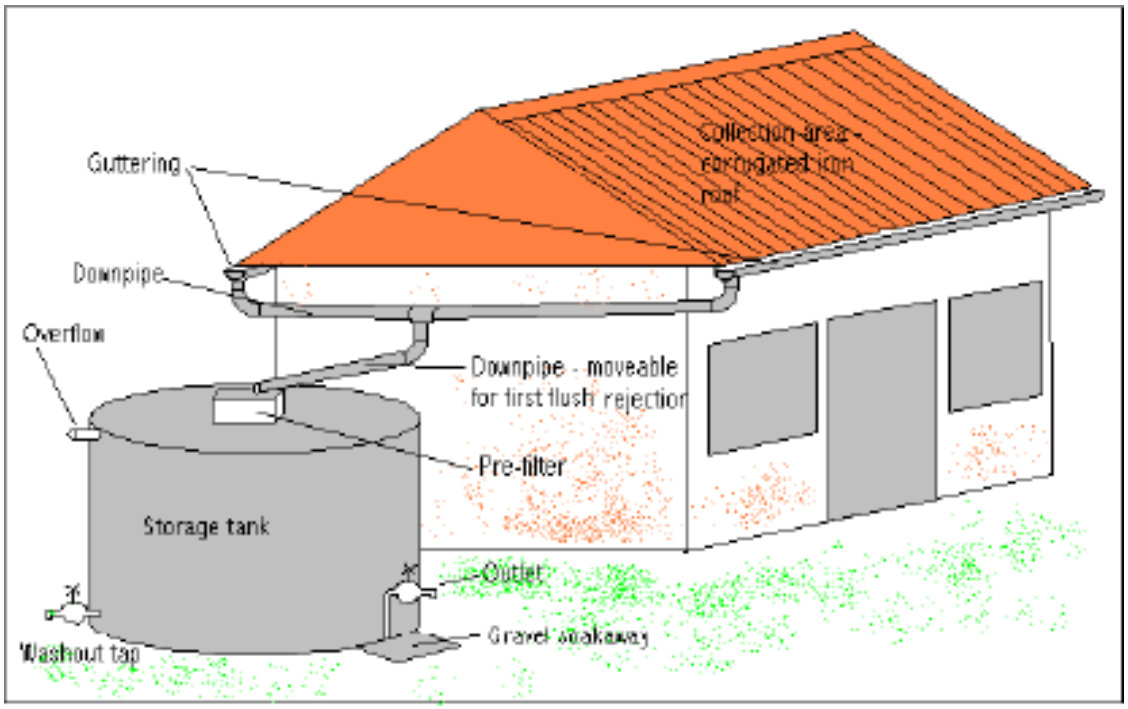
The following are actual sample sites of spring water sources:



Watershed protection should be incorporated in the planning for O&M of developed spring water sources. (SZOPAD Social Fund)

Rate of discharge and quality of spring water must be assessed during planning and design. (SZOPAD Social Fund)

Rainwater collection–from roofs or larger catchment areas, can be utilized as a source of drinking water, particularly where there are no other safe water sources available (for example in areas where ground water is polluted or too deep to economically tap).



Typical domestic rainwater harvesting system, showing the main components of the system.

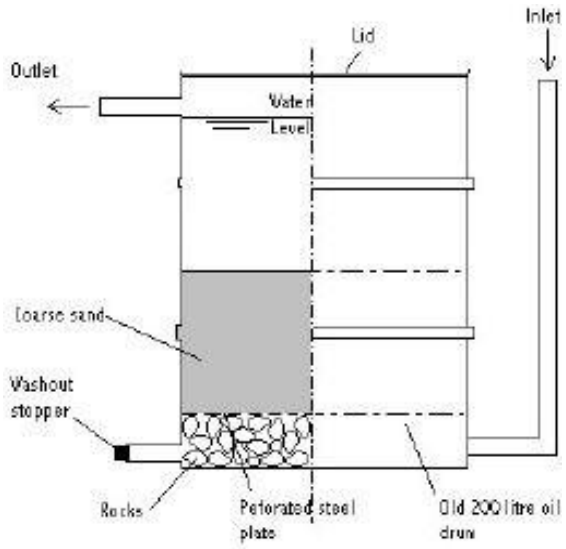
Types of cisterns or rain water collecting tanks

CISTERN TYPES		
MATERIAL	**FEATURE**	**CAUTION**
PLASTICS		
Garbage Cans (20 – 50 gallon)	Commercially available, inexpensive	Use only new cans
Fiber glass	Commercially available Alterable and moveable	Degradable, requires exterior coating
Polyethylene/Polypropylene	Commercially available Alterable and moveable	Degradable, requires exterior coating
METALS		
Steel Drums (55 gallon)	Commercially available Alterable and moveable	Verify prior use for toxics, corrodes, and rusts, small capacity
Galvanized Steel Tanks	Commercially available Alterable and moveable	Possible corrosion and rust
CONCRETE AND MASONRY		
Ferro cement	Durable, immoveable	Potential to crack and fall
Stone, Concrete Block	Durable, immoveable	Difficult to maintain
Monolithic/Poured in place	Durable, immoveable	Potential to crack

Common rain water treatment techniques

TREATMENT TECHNIQUES		
METHOD	**LOCATION**	**RESULT**
SCREENING		
Strainers and Leaf Screens	Gutters and Leaders	Prevent leaves and other debris from entering tank
SETTLING		
Sedimentation	within Tank	Settles particulate matter
FILTERING		
In Line/ Multi Cartridge	After pump	Steve sediment
Activated Charcoal	At tap	Removes chlorine*
Reverse Osmosis	At tap	Removes contaminants
Mixed media	Separate Tank	Traps particulate matter
Slow Sand	Separate Tank	Traps particulate matter
DISINFECTING		
Boiling/Distilling	Before use	Kills microorganisms
Chemical Treatments:		
Chlorine or Iodine	Within Tank or at pump (Liquid, tablet, or granule)	Kills microorganisms
Ultraviolet lights	Ultraviolet light systems should be located after the activated carbon filter before trap	Kills microorganisms
Ozonation	Before tap	Kills microorganisms

*Should only be used after chlorine or iodine has been used as a disinfectant. Ultraviolet light and ozone systems should be located after the activated carbon filter but before the tap.



Above is a simple up flows and filter for post treatment of stored water

a. Surface Water –in streams, lakes and ponds is readily available in many populated areas, but it is almost always polluted, often grossly so it should only be used after some for more filtration if there are no other safe sources of water available.

3. Typical structures commonly used in rural water supply systems. Stand pipe or communal faucet

Single point system (deep well) with Laundry Tub and Shed

Concrete apron around the well prevents contamination of source and keep the area easier to clean.

Good drainage provision around the facility to prevent contamination of well source and stagnant water in the vicinity.

Communal faucet with laundry tub

Multiple faucets allows several users to simultaneously tap from the stand pipe

Flexible pipes/hoses leading to individual households nearby should not be allowed under this system.

Concrete apron and drainage keep the immediate vicinity clean and tidy.

Concrete Water Tank/Reservoir on Ground

Ferro-cement water tank for rainwater collection

Plastic tank for rain water collection.

4. Consider the following potential environmental impacts of water supply projects and their causes.

PROBLEMS	POSSIBLE IMPACTS	POSSIBLE CAUSES
1. Depletion of fresh water resources (surface and groundwater)	Destruction of natural resource Destruction of aquatic life Loss of economic productivity Loss of recreation areas Land subsidence Increased cost of water supplies in the future or in down-gradient locations	Overestimation of water supplies Underestimation of water demand Over-pumping of water resources Lack of information on resource yields Waste and leakage of potable water Poor water pricing policies and practices, leading to excessive use, waste and leakage
2. Chemical degradation of the quality of potable water sources (surface and ground water)	Concentration of pollution in surface water sources Salt water intrusion Poorer quality water, with associated health problems Increased water treatment costs in the future or in down – gradient locations	Depletion of surface and groundwater resources (see above) Reduced stream flows Runoff/drainage from improper solid and liquid waste or excreta disposal
3. Creation of stagnant (standing) water	Increase in vector-borne diseases Contamination of standing water with fecal matter, solid waste, etc. leading to health problems Soil erosion/sedimentation	Drainage systems lacking or poorly designed Leakage from pipes/wastage from taps Lack of user/operator concern for

		stagnant water
4. Degradation of terrestrial, aquatic, and coastal habitats	Alteration of ecosystem structure and function and loss of biodiversity Loss of economic opportunity Loss of natural beauty Loss of recreational values Soil erosion/sedimentation	Improper siting of facilities (within wetlands or other sensitive habitats, etc.) Poor construction practice Leakage/wastage from pipes and taps Increased population density/agricultural activity because of new water systems
5. Supply of Contaminated water	Arsenic poisoning Mercury poisoning Water – related infectious diseases	Failure to test water quality before developing the water resource Lack of ongoing water quality monitoring Inadequate protection of wells and water supply points Biological nitrite/nitrate and/ or pesticide contamination
Source: Adapted from Alan Wyatt, William Hogrews and Eugene Brantly (1992). *Environmental Guidelines for PVOs and NGOS; Potable Water Sanitation projects.* Water and Sanitation for Health Project.USAID.		

1. Adhere to the following minimum quality standards in water for human health:

SELECTED WATER QUALITY STANDARDS FOR HUMAN HEALTH

- Arsenic < 0.01 mg/L
- Total Coliforms = not detectable in any 100ml sample Lead < 0.01 mg/L
- Copper < 2 mg/L
- Nitrate (NO3) < 50 mg/L
- Nitrite(NO2) < 0.2 mg/L for long term exposure Fluoride < 1.5 mg/L

Sanitation and Hydrology

Preventing microbial contamination of groundwater sources depends on several factors:

- **Type of latrine** – the rate of flow of pathogen – containing liquid from latrine pits to the soil beneath is proportional to the quantity of liquid in the pit (static head). Dry latrines present the smallest risk of groundwater contamination.
- **Water Table** – a latrine pit must be above the water table during all seasons. 1.5 m below the surface is the minimum depth necessary to ensure the pit contents remain dry. The greater the distance between the base of the pit and the water table, the more time is required for pathogens to seep from the pit into the groundwater, thus allowing more pathogens to die – off naturally.
- **Soil Type** – Clay, Silt and Fine sand soil types all have grain sizes small enough to act as natural filters for microbial contaminants (<0.02mm). Certain Clay soils can also absorb viruses.

- **Distance to nearest water source** – the risk of contamination of a surface or groundwater source by a latrine depends on the distance to the source, the direction and velocity of the flow of water in the soil (hydraulic gradient), and the soil/rock permeability. 30m is considered the minimum separation for most soil type.

Balancing these factors to determine the best combination of siting and sanitation technology should involve input from engineers and/or hydrologist. For more information see S. Sugden, *WELL Factsheet: the Microbial Contamination of Water Supplies*. 2004 http://wwww.lboro.ac.uk/well/resouces/fact-sheets/fact-sheets-

Annex J-1: ESMP Template for Farm-to-Market Roads and Bridges

Guidance Notes:

This template is designed to manage the environmental and social risks and impacts of farm-to-market roads and bridges including related infrastructures to provide access to value chains. It may consist of new/rehabilitated/upgraded access roads/tracks/pathways that are linked to an existing sealed, market access road. Below are characteristics of these subprojects:

Subproject Type	Description
Farm-to-market road	5.00 / 6.10 meters carriageway width, depending on the traffic count (based on DPWH DO 112, series of 2019, in addition to Department Order 11, series of 2014) including: ● Mandatory concreting of shoulders with road gradient above 10% ● Mandatory concreting of canals with road gradient above 10% regardless of soil classification ● Provision of slope protection structures on all side cuts. The design of the slope protection shall depend on the soil classification and slope stability. (reinforced concrete structures, stone masonry, grouted riprap, concrete sheet piles, crib walls, gabions, and slope stabilization through bio-engineering and rock netting, rock nailing technology)
Bridge	5.60 / 6.70 meters carriageway, depending on the PCCP width 20 tons live load capacity depending on current and projected traffic load (based on DPWH DO No. 179, series of 2015 which uses HL-93 as live load consideration and seismic load in accordance with DPWH LRFD Bridge Seismic Design Specifications (BSDS), 1st edition, 2013); Structural design based on AASHTO HS20-44/HL 93 live loads criteria Revetment at bridge abutments 50 meters upstream and downstream of the bridge for slope protection

The ESMP is prepared following the results of the SES screening in Annex C and the Environmental and Social Assessment (ESA) in the feasibility study. The ESMP sets out specific plans, including budgets, organization arrangements and responsibilities for social and environmental impact management during project implementation. The ESMP should be specific in its description of the individual mitigation and monitoring measures and the assignment responsibilities to address identified risks and impacts of the subproject. The ESMP will contain, as appropriate, sub-plans on waste management, occupational safety and health, construction site management, materials management, and monitoring and reporting plan, Resettlement Action Plan (RAP) and Indigenous Peoples Plan (IPP) .

A. Site and Design Considerations

[Do not proceed with the subproject preparation including this ESMP unless all items below are confirmed.]

1. The road does not encroach into or traverse any declared strict protection zone of protected area of natural habitat.
2. The subproject will not displace, disfigure or render inoperable/inaccessible any monument or physical structure of known cultural and historical significance.

B. Environmental Issues and Mitigation Measures

The issues identified in the ESMP template are based on frequently associated issues in Farm to Market Roads such as ROW acquisition, possible encroachment on areas with significant ecosystem value, ancestral domains, construction-related issues, health and safety. Any new environmental and social impacts that will be identified from the SES screening and environmental and social impact assessment shall be added in the ESMP together with the appropriate mitigation measures, monitoring indicators, cost, and responsible unit.

TEMPLATE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR FMR AND BRIDGES

Name of Subproject: _____ Location: _____
Implementing LGU: _____
Estimated Number of Beneficiaries: _____
New or Rehabilitation? □ New □ Rehabilitation
Scale: _____
Estimated Total Cost: _____

Check whichever is applicable to the subproject:

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
A. Feasibility Study / Detailed Engineering Design				
1. Presence of IPs/ICC in the influence area ☐ The site is inside an ancestral domain (AD) or will traverse an AD ☐ The road is not inside an AD nor will it traverse an AD but there are IP/ICC in the area. ☐ The site is not in an AD and there are no IP/ICC in the area as per LGU records and onsite validation.	☐ Conduct FPIC ☐ Secure certification from the Tribal Chieftain expressing support to the subproject. ☐ Prepare and implement IP Plan ☐ No measure required	☐ Document of FPIC among IP communities ☐ Evidence of IP community support (resolution, endorsement letter, etc.) ☐ Certificate of Precondition from NCIP ☐ Certificate of Non-Overlap from NCIP ☐ Approved IP Plan ☐ No monitoring parameter needed.	Include cost of FPIC, consultations, and other mitigation and monitoring parameters in overall subproject cost.	LGU
2. Site and right-of-way (ROW) acquisition for the subproject ☐ The subproject will not require ROW acquisition since it is an existing municipal/provincial road. ☐ There are road sections requiring private land acquisition.	☐ Conduct consultations with Project Affected Persons (PAPs) to determine entitlements, just compensation or voluntary donation/waiver. ☐ Submit proof of land ownership. ☐ LGU to facilitate annotations of the land titles. ☐ For land acquisition by compensation, LGU to ensure that just compensation is agreed by both parties (LGU and	☐ Land title(s) ☐ ROW acquisition documents (Forms 1 and 2 in the LARPF) ☐ Land Title with Deed of Donation ☐ Tax Declaration with Waiver ☐ Assessor's Certification on property verification ☐ Cadastral Map ☐ Parcellary Map	Include cost of ROW acquisition in overall subproject cost.	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
	PAPs).	☐ Notarized duly-signed agreement between the PAPs and LGU for compensation of their properties and proof of compensation		
☐ The subproject will displace PAPs.	☐ Prepare and submit a Resettlement Action Plan (RAP) ☐ Relocation prior to commencement of construction works	☐ Approved Resettlement Action Plan (RAP) ☐ MOA with PAPs ☐ Proof of Compensation ☐ Entitlement Survey Form	Include in overall cost of subproject	LGU
☐ The subproject have sections requiring acquisition of government land.	☐ Consult the Government agency and present the proposed subproject.	☐ Appropriate tenurial instrument ☐ Transferred Title	Include in overall cost of subproject	LGU
☐ The subproject will encroach on agricultural land that requires land conversion.	☐ Comply with the land conversion process of DAR	☐ DAR Land Conversion Order	Include in overall cost of subproject	LGU
3. The subproject will encroach on buffer zone of declared protected area.	☐ Secure PAMB Resolution ☐ Secure PAMB Clearance ☐ Prepare the Comprehensive Development and Management Plan and Rehabilitation Plan as required by the Special Use Agreement in Protected Area (SAPA) application. ☐ Prepare an Ordinance on Management and Protection	☐ PAMB Resolution ☐ PAMB Clearance ☐ SAPA ☐ Ordinance on Management and Protection ☐ Biodiversity Management Plan (BMP)	All costs attendant to implementing the mitigation measures will be included in the overall subproject cost	LGU
4. The subproject will have sections that traverse/encroach on: o mangrove forest o secondary forests o ecologically significant surface water, marshlands, or wetlands	☐ Re-alignment of road/bridge sections to avoid critical areas. ☐ Prohibit cutting of mangrove forest ☐ Secure Forest Land Use Agreement (FLAg) from DENR ☐ Design vegetated buffer zones and habitat corridors ☐ Study on the aquatic fresh/marine environment and geotechnical study	☐ Design of re-aligned road sections/bridge ☐ FLAg ☐ Design of vegetated buffer zones ☐ Design of biodiversity restoration, offsets ☐ Inventory of aquatic resources ☐ Geotechnical Report	Include in overall cost of subproject	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
	☐ Include in the subproject, design biodiversity restoration, offsets, or creation of ecologically comparable areas for biodiversity			
5. Presence of natural, geologic and climate hazards in the subproject area that may affect safety and vulnerability of the infrastructure	☐ Validate information generated from CRVA, e-VSA and georisk mapping from site-specific information on occurrences of flooding, soil erosion, landslides, liquefaction, storm surge, tsunami, earthquakes, etc. ☐ Secure clearance from DENR/PHIVOLCS/PAGASA or any equivalent body if in a disaster or hazard prone area ☐ Design structures in accordance with the standards of the National Building Code and Structural Code of the Philippines ☐ Adopt climate resilient measures: _____ ☐ Adopt climate mitigation measures: _____	☐ DED/POW that includes the design of climate resilient and climate adaptation/mitigation measures ☐ Hazard analysis from DENR/PHIVOLCS/PAGASA or any equivalent body ☐ Clearance from DENR/PHIVOLCS/ PAGASA or any equivalent body	Include in overall cost of subproject	LGU
6. Cutting of trees ☐ Coconut trees ☐ Fruit-bearing trees ☐ Timber Trees ☐ Planted Trees ☐ Naturally growing trees	☐ Avoid tree cutting to the extent possible by re-aligning the ROW. ☐ Conserve affected trees through earth balling/transfer and replanting ☐ Implement tree replacement and replanting in accordance with DENR requirements ☐ Conduct consultation with PAPs and secure permission from owner ☐ Secure Tree Cutting Permit ☐ Secure Tree Earth balling Permit	☐ Design of re-alignment of ROW ☐ Tree Cutting Permit from DENR ☐ Tree Earth balling Permit ☐ PCA Permit (for coconut trees) ☐ Signed Compensation Agreement with owner/s of tree(s) ☐ Waiver of Rights / Quit Claim (if trees in private land will be donated; refer to Form 1 in LARPF) ☐ Proof of Compensation (for affected trees	Include in overall subproject cost	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
		in private land) ☐ Tree Replacement Plan		
7. Road will affect existing agricultural crops Specify _____ ☐ ☐	☐ Conduct meaningful consultations with PAPs to ensure just compensation, entitlements or voluntary donation/waiver ☐ LGU/PPMIU should coordinate with the owners of the land or tenant/farmer regarding the start of project implementation to avoid untimely crop clearing ☐ LGU to compensate the owners of the crops that will be affected	☐ Waiver of Rights/Quit Claim (if crops will be donated as reflected in Form 1 ☐ Signed Compensation Agreement with the owner(s) and Proof of compensation (if crop owners require compensation)	Include in overall subproject cost	LGU Contractor
8. Demolition and reconstruction of affected structures ☐ Permanent structures (e.g. concrete structures) will have to be removed/demolished during road construction ☐ Temporary structures will have to be removed/demolished during road construction ☐ The road construction will not affect any permanent or temporary structures.	☐ Conduct consultation with PAPs ☐ Compensate the owners of the structures that will be affected ☐ Assist the owners of the structure in the removal and in relocating/reconstruction of the affected structures ☐ LGU to coordinate with Barangay and PAPs prior to the removal/demolition of affected structures	☐ MOA with the owner(s) (if requiring compensation/reconstruction/assistance ☐ Waiver of Rights/Quit Claim (if owner/s will not require compensation as reflected in Form 1)	Include in overall subproject cost	LGU Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
9. Road will affect existing electric posts and cause disruption of electricity ☐ Road will affect (*number*) of electric posts that needs to be relocated ☐ Road will not affect any electric post.	☐ Coordinate with the electricity utility service provider/ electric cooperative ☐ Consult private owners of the structures ☐ Provide assistance in the removal and relocation of affected electric posts ☐ LGU will inform the affected community about the temporary disruption of electricity prior to implementation.	☐ LGU and Electric Cooperative Agreement on relocation of electric post(s) and appropriation of funds ☐ Electric Post Transfer Plan ☐ MOA with the owners (if private owner require compensation/assistance) ☐ Waiver of Rights/Quit Claim (if private owner will not require compensation as reflected in Form 1.	Include in overall subproject cost	LGU Contractor
10. Road will traverse mountainous areas necessitating deep cuts on mountain sides.	☐ Include in the RROW the area for side cuts ☐ Identify road sections needing slope protection, e.g. Sections __ to __ ☐ Include slope protection for side cuts greater than 3 meters that has not attained the required slope in the detailed engineering design (DED) and program of works (POW) such as: o Concrete sheet piles o Crib walls o Gabions o Grouted riprap o Rubble masonry o Rock net o Terracing o Concrete protection wall o Revetment at bridge abutment o Others: _____ ☐ Include slope stabilization measures in side cuts that is greater than 3 meters with attained required slope such as: o Bioengineering o Planting of fast growing shrub	☐ Design of slope protection works ☐ DED and POW ☐	Include in the subproject cost	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
	species on side slopes ○ Rock netting ○ Rock nailing ○ Others: _____ ☐ Construction of berm for side cuts more than 5 meters height in common and unclassified soil			
11. Potential increased encroachments of human activities into nearby forest areas ☐ The road will increase human access to forest areas that would intensify slash and burn cultivation, illegal logging, and poaching activities. ☐ Intensification of pesticide use for cash crop production in the area due to improved access roads ☐ Potential increase of build up area	☐ Coordinate with the DENR regarding the enactment of ordinance deputizing local community as forest rangers to enforce forestry laws ☐ Prepare an Ordinance on Management and Protection ☐ Training of communities on sustainable crop production practices specifically the IPM ☐ Preparation of an Integrated Pest Management Plan (IPMP)	☐ Operations and Maintenance Plan ☐ Ordinance on Management and Protection ☐ Biodiversity Management Plan (BMP) ☐ Capacity Building Plan ☐ IPMP ☐ CLUP and Zoning Ordinance	Include in the subproject cost	LGU
B. Construction Phase				
12. Soil erosion from excavation, siltation from washing of construction equipment and stockpiles of materials ☐ Topography of the road alignment necessitate massive earthmoving and cutting of clayey or loose topsoil ☐ Cut materials will consist mainly of hard rocks and are	☐ Conduct earthmoving and cutting of slopes during dry months ☐ Locate stockpile of excavated soil, aggregates and sand away from drainage canals and waterways ☐ Install silt traps, sedimentation ponds, and other sediment control measures ☐ Prohibit washing of cement mixers and other construction vehicles at the site ☐ Conduct daily cleaning and sweeping of the construction site and	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Letter Agreement with private land owner for the disposal of excess soil	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
unlikely to generate significant sediments ☐ Washing of construction vehicles including cement mixers may occur at the site and cause soil and cement runoff. ☐ Stockpiles of materials may cause sediment runoff.	periodically remove soils, stones, and wastes from gutters, drainage canals and ditches ☐ During rain events, check the drainage system to see if these are blocked. Remove blocked materials. ☐ Hauling of excess excavated soil/incompatible soil for filling to designated disposal location in compliance to DPWH DO 168			
13. Inadequate drainage resulting in flooding or ponding	☐ Install cross drains at the following sections: _____ ☐ Construction of temporary drainage canals/storm water diversion channel while side canals are not yet constructed	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
14. Contamination of surface water and groundwater with oil/grease	☐ Proper handling and disposal of waste oil, grease, diesel and gasoline ☐ Preparation of hazardous waste management procedure ☐ Conduct of training on oil spill response	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Waste Management Procedure as part of the ESA and Contractors ESMP ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
15. Dust from construction activities, materials stockpiles, and movement of construction vehicles	☐ Conduct watering and dust abatement measures during dry and windy conditions ☐ Require workers to wear particle mask ☐ Keep stockpile of aggregate and sand materials covered with well-fixed plastic sheeting, tarpaulins or other geotextiles to avoid suspension or	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
	dispersal of fine soil particles during dry and windy days. ☐ Equip concrete mixing equipment with dust shrouds. ☐ Periodically clean-up debris at the work site. ☐ Prohibit idling of construction vehicles while unloading materials at the site. ☐ Impose speed limit on construction vehicles particularly when passing communities, residential or commercial areas or sensitive areas			
16. Noise and vibration from construction activities and movement of materials ☐ Subproject is located near community areas with sensitive receptors such as schools, hospitals, residential areas, and cultural heritage structures ☐ Subproject will require concrete chipping and drilling activities.	☐ Barricade the construction area and shield sensitive receptors. ☐ Implement construction activities in consideration to time, duration, and scale to optimize the use of construction equipment, machineries, and vehicles in accordance with the noise emission standard. ☐ Strictly prohibit concrete chipping and drilling activities beyond 8:00PM particularly in areas near sensitive receptors and residential areas. ☐ Deliver fabricated steel plates and cut/bend reinforcing steel to desired size to minimize cutting activities onsite. ☐ Require workers to wear ear plugs. ☐ Strictly control construction activities close to historical/archaeological sites, if any.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
17. Generation of construction wastes ☐ Biodegradable wastes (e.g. food wastes) ☐ Non-biodegradable wastes (e.g. debris, concrete / soil debris, wood chips) ☐ Recyclable wastes (rebars, wires, nails, etc.) ☐ Hazardous wastes (empty containers of paints and solvents, resins, adhesives and degreasers, oily rags, busted lamps, spent welding electrode sticks/rods, discarded batteries, etc.)	☐ Implement waste segregation and provide separate waste bins for biodegradable and non-biodegradable wastes ☐ Designate an area for recyclable materials such as metal, wires, etc. ☐ Coordinate with the LGU on the regular collection of biodegradable and non-biodegradable wastes. ☐ Coordinate with waste recycler for the disposal of recyclable materials ☐ Commission the services of third-party hazardous waste transporter and treater with license from DENR in the collection and treatment of hazardous wastes. ☐ Prohibit burning of wastes. ☐ Provision of secondary containment for all hazardous wastes	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
18. Sanitation and domestic sewage from construction camp	☐ Provide clean water and hand-washing facilities at the construction camp ☐ Provide temporary toilet facilities with septic tanks; Locate temporary septic tank more than 25 meters from an existing water supply well or surface water body ☐ Provide portable toilets (portalets); ensure contents of portalets are regularly collected by the third party portalet provider for safe offsite treatment and disposal. ☐ Ensure that the third-party portalet provider has a Discharge Permit from DENR.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
19. Traffic congestion caused by temporary road closure and construction of bridge	☐ Inform affected communities at least one week in advance of road closure through billboards/signages and public announcement ☐ Assign flag persons to direct flow of vehicles ☐ Adequate traffic safety and warning signs and devices to be install and maintain ☐ Provide alternate route or detour for commuters ☐ Coordinate with local government and communities about schedule of movement of construction vehicles	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐	Cost of mitigation measures to be shouldered by the contractor	Contractor LGU
20. Road accidents during construction ☐ Poor horizontal and vertical road alignment ☐ High road embankments causing hazard to road users	☐ Provision of guard rails/concrete railings at the following sections: _____ _____ ☐ Designate traffic aides/ flagmen ☐ Provide pavement markings at critical curves ☐ Implement speed control ☐ Install road warning signages ☐ Orient drivers on precautionary measures when passing through community areas and times of day to reduce risk of accidents ☐ Observe extra caution when passing through dangerous routes ☐ Implement limits for trip duration and arranging driver rosters to avoid overtiredness of drivers. ☐ Regular maintenance of vehicles to minimize serious accidents caused by vehicle malfunction.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
	☐ Provision of sufficient lighting system			
21. Potential damage to existing road due to hauling of quarry materials and movement of construction vehicles	☐ Restoration and repair of existing road by the contractor	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
22. Occupational health and safety risks and hazards ☐ Use of hazardous materials and chemicals ☐ Hazardous working conditions such as trenches, excavations, working in heights or in confined spaces ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19)	☐ Implement an Occupational Safety and Health (OSH) Plan in compliance with the DOLE OSH guidelines. ☐ Designate an onsite Safety Officer duly accredited by DOLE. ☐ Establishment of GRM for workers ☐ Require workers to wear safety gadgets/PPEs such as hard hats, gloves, safety belts, rubber boots, and goggles, appropriate to the task. ☐ Post safety signs/reminders in strategic areas within the construction area. ☐ Provide sufficient lighting at night. ☐ Provide barricades / safety barriers particularly at excavations and stockpiles of aggregates. ☐ Provide first-aid kit at the construction site to ensure immediate medical attention in case of accidents. ☐ Comply with the COVID-19 health and safety guidelines of the Government.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ approved CHSP by DOLE ☐ LMP and Code of Conduct	Cost of mitigation measures to be shouldered by the contractor	Contractor
23. Labor disputes over terms and conditions of employment	☐ Priority hiring of qualified local residents ☐ Set-up a grievance redress mechanism for workers including	☐ Functioning GRM for workers ☐ LMP and code of conduct	Cost of mitigation measures to be shouldered by the contractor	LGU PSO/RPCO

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
	GRM posters, GRM drop boxes at project site and bulletin boards ☐ Assign a Grievance Point Person ☐ Construction will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.			Contractor
24. Community health and safety risks and hazards ☐ Noise nuisance ☐ Airborne dust ☐ Dangerous excavation and trenches ☐ Improper restoration of disturbed areas	☐ Conduct consultations with neighboring communities and Barangay about the project and the schedule of works. ☐ Schedule noisy works during daytime in sites near sensitive receptors ☐ Watering of areas prone to airborne dust during dry season ☐ Provide barriers around trenches and open excavations ☐ Install warning signs. ☐ Ensure proper restoration and clean-up of areas disturbed during construction	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH)	Cost of mitigation measures to be shouldered by the contractor	Contractor
25. Impacts of labor influx such as: ☐ Exposure of community to communicable diseases (e.g. COVID19) and sexually transmitted diseases (HIV/AIDS) ☐ Misconduct of workers causing tension and peace and order issues in the community due to differences in traditions, culture, religion, ethnicity ☐ Increased criminality in the area	☐ Conduct orientation of workers on proper behavior and community values, cultural traditions and practices ☐ Orientation of workers on prevention of COVID-19, HIV/AIDS and other communicable diseases ☐ Prohibit use of dangerous drugs, smoking, and alcohol consumption ☐ Give priority to qualified local laborers in hiring construction workers ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE ☐ GRM records	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)				
26. Impacts on cultural properties	☐ Implement chance find procedure in accordance with the requirements of the National Cultural Heritage Act (2009) and Cultural Properties Preservation and Protection Act ☐ Immediately suspend any activities upon discovery of chance find and report to the LGU and RPCO SES focal person	☐ Cultural Heritage Management Plan ☐ Chance Find Procedure	Cost of mitigation measures to be shouldered by the contractor	Contractor
27. Security and conflict risk	☐ Social preparation and meaningful consultations ☐ Proper coordination with relevant authorities ☐ LGUs mandated to ensure and maintain peace and order within their respective areas are to formulate and implement their POPS Plans as per DILG Memorandum Circular No. 2022-118 Guidelines on the Development and Formulation of the Peace and Order and Public Safety Plan (POPS-PLAN) 2023-2025 dated September 19, 2022. POPS Plan should be updated accordingly ☐ evacuation plan in case of insurgency or conflicts as part of POPS Plan	☐ Local Government Unit's (LGUs) Peace and Order and Public Safety Plan (POPS) Plan	Cost of mitigation measures to be shouldered by the LGU	Local Government Unit (LGU)
C. Site Selection, Operation and Abandonment of Batching Plant, Quarry Site, Borrow Pit and Excess Excavation/Waste Dumping Site				
27. Impacts of operation of batching plant	☐ Contractor to comply with the site selection, operation and abandonment guidelines for batching plant	☐ CESMP in the DED/POW and contract	Cost of mitigation measures to be shouldered by the contractor	Contactor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring (Php)	Institutional Arrangement
28. Impacts of operation of quarry site	☐ Contractor to comply with the site selection, operation and abandonment guidelines for quarry site	☐ CESMP in the DED/POW and contract ☐ Hauling Certificate	Cost of mitigation measures to be shouldered by the contractor	Contactor
29. Impacts of operation of borrow pit	☐ Contractor to comply with the site selection, operation and abandonment guidelines for borrow pit	☐ CESMP in the DED/POW and contract	Cost of mitigation measures to be shouldered by the contractor	Contactor
30. Impacts of operation of excess excavation/waste dumping site	☐ Contractor to comply with the site selection, operation and abandonment guidelines for excess excavation/waste dumping site	☐ CESMP in the DED/POW and contract ☐ Waste Management Procedure as part of theESA and Contractor's ESMP		Contactor

Prepared by: _____

Conforme: _____

PPMIU/MPMIU Head

Noted by the local community:

_____

Barangay Captain

ANNEX J-2: ESMP TEMPLATE FOR POTABLE WATER SUPPLY SUBPROJECTS

Guidance Notes:

This template is designed to manage the environmental and social risks and impacts of potable water supply infrastructures. It may consist of the development of new Level 1 or Level 2 water supply sources or rehabilitation of potable water supply projects previously constructed by government agencies in areas that have been abandoned or are non-operational. Below are characteristics of these subprojects:

Subproject Type	Description
Potable water supply	- Level 1 (single point system) such as dug or drilled wells with handpump, spring, rain collector - Level 2 (stand pipes or communal faucet system) drilled shallow/ deep well, spring, infiltration gallery, with piped distribution systems with reservoir(s) which feed a limited number of public or communal taps (within 25-meter radius)

The ESMP is prepared following the results of the SES screening in Annex C and the Environmental and Social Assessment (ESA) in the feasibility study. The ESMP sets out specific plans, including budgets, and responsibilities for social and environmental impact management during project implementation. The ESMP should be specific in its description of the individual mitigation and monitoring measures and the assignment responsibilities to address identified risks and impacts of the subproject. The ESMP will contain, as appropriate, sub-plans on waste management, occupational safety and health, construction site management, materials management, and monitoring and reporting plan.

A. Site and Design Considerations

[Do not proceed with the subproject preparation including this ESMP unless all items below are confirmed.]

1. The PWS will not encroach into or traverse any declared strict protection zone of protected areas of natural habitat by DENR.
2. The water source is at least 25 meters away from any septic tank or any raw wastewater discharge source, sanitary landfill, pasture areas with livestock; and 50 meters away from cemetery *(c.f. Code of Sanitation of the Philippines).*
3. There is no prior evidence(s) (anecdotal or otherwise) indicating non-potability of water (e.g. high coliform, salinity, elevated iron or manganese, etc. at the proposed water source.
4. Preliminary potability test(s) conducted confirmed potability of the source.
5. The design of the potable water supply subproject will address the potability issues of the raw water source.
6. The subproject will not displace, disfigure or render inoperable/inaccessible any monument or physical structure of known cultural and historical significance.
7. The subproject will not result to loss of ecosystem services and depletion of water source for downstream uses and other community needs.

B. Environmental Issues and Mitigation Measures

The issues identified in the ESMP template are based on frequently associated issues in water supply projects such as sustainability of water source, water quality/potability, land acquisition, possible encroachment on areas with significant ecosystem value, ancestral domains, construction-related issues, health and safety. Any new environmental and social impacts that will be identified from the SES

screening and environmental and social impact assessment will be added in the ESMP together with the appropriate mitigation measures, monitoring indicators, cost, and responsible unit.

TEMPLATE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR POTABLE WATER SUPPLY SUBPROJECTS

Name of PWS Subproject: _____ Location: _____

Implementing LGU: _____

Scale: ☐ Level 1 ☐ Level 2

New or Rehabilitation? ☐ New ☐ Rehabilitation

Number of Households: _____

Estimated Total Cost: _____

Check whichever is applicable to the subproject:

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
A. Feasibility Study and Detailed Engineering Design				
1. Excessive water abstraction would cause depletion of water resources and cause competition with existing water users	☐ Secure Water Permit from NWRB to ensure allocation of water rights ☐ Redesign the PWS based on feasible rate of water abstraction ☐ Ensure release of adequate environmental flows in case water supply subproject requires a dam or impounding structure ☐ Conduct consultation with existing users of the water supply source.	☐ NWRB Water Permit ☐ DED/POW	Include in overall subproject cost	LGU
2. PWS particularly water intake structures may be located in sensitive ecosystems. ☐ Identified as fish spawning area (for surface water source) ☐ Identified as site with threatened and endangered species ☐ Identified as site with land subsidence issues (for groundwater source) ☐ Identified as site with saline	☐ Coordinate with FARMCs to avoid spawning areas and breeding season of fish ☐ Consider low velocity intake design to minimize entrainment or impingement of fish and other aquatic organisms ☐ Avoid sites with known threatened and endangered species ☐ Avoid groundwater intake source with saline water intrusion issues and land subsidence issues	☐ Design of intake with provisions against entrainment or impingement of fish and other aquatic organisms ☐ Operation and Maintenance Plan ☐ Training of BAWASA	Include in overall subproject cost	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
water intrusion issues				
3. Raw water source is not potable or unsuitable for drinking ☐ With historical/anecdotal/ocular evidence of poor water quality ☐ Source is within a highly mineralized area such as mining site, geothermal resource area, near landfill site or former/existing chemical factories, waste sites.	☐ Before finalizing DED/POW, conduct standard potability test for: ○ Coliform ○ Arsenic ○ Mercury ○ Led ○ Iron ○ Magnesium ○ Cadmium ○ Others: ___ ☐ Look for alternative source of raw water ☐ Design water treatment process as part of subproject design	☐ Certificate of Potability (compared by the PNSDW) ☐ Design of water treatment process reflected in the DED/POW	Include in overall cost of subproject	LGU
4. Potential drainage issues at communal faucets resulting in the formation of permanent pools of water and muddy soil near the faucets. ☐ Presence of clayey soils that become easily muddy ☐ Waterlogging in low-lying areas	☐ Provide concrete platforms in communal faucets ☐ Provide drainage canals in communal faucets and low-lying areas	☐ DED/POW ☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) ☐ Vicinity map showing the communal faucet, pipelines and the drainages	Include in overall cost of subproject	LGU Contractor
5. Presence of IP/ICC in the influence area ☐ The site is inside an ancestral domain (AD) or will traverse an AD ☐ The PWS is not inside an AD nor will it traverse an AD but there are IP/ICC in the area. ☐ The site is not in an AD and that there are no IP/ICC in the	☐ Conduct FPIC ☐ Secure certification from the Tribal Chieftain expressing support to the subproject ☐ No measures needed	☐ Document of FPIC among IP communities ☐ Minutes of meetings/consultations ☐ Evidence of IP community support (resolution, endorsement letter, etc.) ☐ Certificate of Pre-condition from NCIP ☐ Certificate of Non-Overlap from NCIP	Include cost of FPIC, consultations, and other mitigation and monitoring parameters in overall subproject cost.	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
area as per LGU records and onsite validation. ☐ The IPs are themselves beneficiaries of the PWS.				
6. The subproject is located on agricultural land that require land use conversion.	☐ Comply with the land use conversion process of DAR	☐ DAR Land Conversion Order	Include in overall cost of subproject	LGU
7. The subproject is located on buffer zone of declared protected area.	☐ Secure PAMB Resolution ☐ Secure PAMB Clearance ☐ Prepare the Comprehensive Development and Management Plan and Rehabilitation Plan as required by the Special Use Agreement in Protected Area (SAPA) application.	☐ PAMB Resolution ☐ PAMB Clearance ☐ SAPA ☐ Biodiversity Management Plan ☐ Ordinance on Protection and Management	All costs attendant to implementing the mitigation measures will be included in the overall subproject cost	LGU
8. Presence of natural, geologic and climate hazards in the subproject area that may affect safety and vulnerability of the infrastructure	☐ Validate information generated from CRVA, e-VSA and georisk mapping from site-specific information on occurrences of flooding, soil erosion, landslides, liquefaction, storm surge, tsunami, earthquakes, etc. ☐ Secure clearance from DENR/PHIVOLCS/PAGASA or any equivalent body if in a disaster or hazard prone area ☐ Design structures in accordance with the standards of the National Building Code and Structural Code of the Philippines ☐ Adopt climate resilient measures: _____ ☐ Adopt climate mitigation measures: _____	☐ DED/POW that includes the design of climate resilient and climate adaptation/mitigation measures ☐ Clearance from DENR/PHIVOLCS/ PAGASA or any equivalent body ☐ Hazard analysis from DENR/PHIVOLCS/PAGASA or any equivalent body	Include in overall cost of subproject	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	_____			
9. Cutting of trees ☐ Coconut trees ☐ Fruit-bearing trees ☐ Timber Trees ☐ Planted Trees ☐ Naturally growing trees	☐ Avoid tree cutting to the extent possible. ☐ Conserve affected trees through earth balling, transfer and replanting ☐ Implement tree replacement and replanting in accordance with DENR requirements ☐ Conduct consultation with PAPs and secure permission from owner ☐ Secure Tree Cutting Permit ☐ Secure Tree Earth balling Permit ☐ Contractor to coordinate with BLGU and PAPs prior to removal/cutting of affected trees	☐ Tree Cutting Permit from DENR ☐ Tree Earth balling Permit ☐ PCA Permit (for coconut trees) ☐ Signed Compensation Agreement with owner/s of tree(s) ☐ Waiver of Rights / Quit Claim (if trees in private land will be donated; refer to Form L1) ☐ Proof of Compensation (for affected trees in private land) ☐ Tree Replacement Plan	Include in overall subproject cost	LGU
10. PWS will affect existing fy _____ ☐	☐ Conduct meaningful consultations with PAPs to ensure just compensation, entitlements or voluntary donation/waiver ☐ LGU should coordinate with the owners of the land or tenant/farmer regarding the start of project implementation to avoid untimely crop clearing ☐ LGU to compensate the owners of the crops that will be affected	☐ Waiver of Rights/Quit Claim (if crops will be donated as reflected in Form L1 ☐ Signed Compensation Agreement with the owner(s) and Proof of compensation (if crop owners require compensation)	Include in overall subproject cost	LGU
11. Demolition and reconstruction of affected structures ☐ Permanent structures (e.g. concrete structures) will have to be removed/demolished during construction	☐ Conduct consultation with PAPs ☐ Compensate the owners of the structures that will be affected ☐ Assist the owners of the structure in the removal and in relocating/reconstruction of the	☐ Signed Compensation Agreement with the owner(s) (if requiring compensation/assistance ☐ Waiver of Rights/Quit Claim (if owner/s will not require compensation as reflected in Form L1)	Include in overall subproject cost	LGU Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Temporary structures will have to be removed/demolished during construction ☐ The PWS construction will not affect any permanent or temporary structures.	affected structures ☐ LGU to coordinate with Barangay and PAPs prior to the removal/demolition of affected structures	☐ Consultation Documentations		
12. Ownership issue of site of water source and reservoir ☐ Land is privately owned ☐ Site is public land	☐ Negotiate with landowner for the acquisition of sites for the water source structures (e.g. by purchase, donation or quit claim) ☐ Coordinate with agency/owner of public land and seek MOA/clearance/permit with the agency/owner	☐ Deed of Sale or Deed of Donation as part of procurement package ☐ Special Land Use Permit / Gratuitous Special Use Permit from DENR ☐ Land Use Permit from concern agency (i.e National Power Corporation) ☐ MOA with agency/owner of public land	Include in overall subproject cost	LGU
13. Potential ROW conflict in the location of distribution lines and communal faucet sites ☐ Lands to be traversed by the pipelines are privately owned ☐ Potential damage to/displacement of properties/structures along the pipeline routes ☐ Pipelines will traverse paved roads	☐ Secure Quit Claims from land owners along the pipeline routes and communal faucet sites ☐ consultations/negotiations with owners of affected properties. ☐ Rehabilitation of structures damaged to its original condition	☐ Waiver of Rights/Quit Claim ☐ MOA with the owner(s) and Proof of compensation (if land owners require compensation) ☐ Permit to enter from property owner/s along the pipeline routes and signed MOA for communal faucet sites. ☐ No objection Letter from DPWH/PEO ☐ Permit to excavate	Include in overall subproject cost	LGU
14. Potential lack of maintenance of water source and communal faucets/collection point sites ☐ Presence of bathing and washing activities near or at the water intake site (for	☐ Develop Operations and Maintenance Plan with provision for regular cleaning of the water intake and communal faucet/box sites and immediate vicinity ☐ Develop a Water Safety Plan as part of	☐ Operations and Maintenance Plan with Water Safety Plan ☐ Ordinance on Protection and Management	Include in overall subproject cost	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
springs) or at the well site (for artesian wells) ☐ Communal faucets/box sites (for Level II PWS) could become cluttered and strewn with garbage	the O&M Plan that include regular sampling and potability tests as required under DOH Admin Order No. 2007-0012 ☐ Prohibit washing/bathing activities within 25 meters from the source ☐ Training of BAWASA on water safety			
6. Construction Phase				
15. Soil erosion from excavation, siltation due to washing of construction equipment and stockpiles of materials ☐ Activities will necessitate earthmoving from excavation activities ☐ Cut materials will consist mainly of hard rocks and are unlikely to generate significant sediments ☐ Washing of construction vehicles including cement mixers may occur at the site and cause soil and cement runoff. ☐ Stockpiles of materials may cause sediment runoff.	☐ Conduct excavation and earthmoving during dry months ☐ Locate stockpile of soil, aggregates and sand away from drainage canals and waterways ☐ Install silt traps, sedimentation ponds, and other sediment control measures ☐ Prohibit washing of cement mixers and other construction vehicles at the site ☐ Conduct daily cleaning and sweeping of the construction site and periodically remove soils, stones, and wastes from gutters, drainage canals and ditches ☐ During rain events, check the drainage system to see if these are blocked. Remove blocked materials. ☐ Hauling of excess excavated soil/incompatible soil for filling to designated disposal location in compliance to DPWH DO 168	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ MOA with private land owner for the disposal of excess soil	Cost of mitigation measures to be shouldered by the contractor	Contractor
16. Contamination of surface water and groundwater with oil/grease	☐ Proper handling and disposal of waste oil, grease, diesel and gasoline ☐ Preparation of hazardous waste management procedure	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Conduct of training on oil spill response	☐ Waste Management Procedure as part of the ESA and Contractor's ESMP ☐ Approved Construction Safety and Health Program (CSHP) by DOLE		
17. Dust from construction activities, materials stockpiles, and movement of construction vehicles	☐ Conduct watering and dust abatement measures during dry and windy conditions ☐ Require workers to wear particle mask ☐ Keep stockpile of aggregate and sand materials covered with well-fixed plastic sheeting, tarpaulins or other geotextiles to avoid suspension or dispersal of fine soil particles during dry and windy days. ☐ Equip concrete mixing equipment with dust shrouds. ☐ Periodically clean-up debris at the work site. ☐ Prohibit idling of construction vehicles while unloading materials at the site.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
18. Noise and vibration from construction activities and movement of materials ☐ Subproject is located near community areas with sensitive receptors such as schools, hospitals, residential areas and cultural heritage structures. ☐ Subproject will require concrete chipping and drilling activities.	☐ Barricade the construction area and shield sensitive receptors. ☐ Strictly prohibit concrete chipping and drilling activities beyond 8:00PM particularly in areas near sensitive receptors and residential areas. ☐ Implement construction activities in consideration to time, duration, and scale to optimize the use of construction equipment, machineries, and vehicles in accordance to the noise emission standard. Deliver fabricated steel plates and cut/bend	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	reinforcing steel to desired size to minimize cutting activities onsite. ☐ Require workers to wear ear plugs. ☐ Strictly control construction activities close to historical/archaeological sites, if any.			
19. Generation of construction wastes ☐ Biodegradable wastes (e.g. food wastes) ☐ Non-biodegradable wastes (e.g. debris, concrete / soil debris, wood chips) ☐ Recyclable wastes (rebars, wires, nails, etc.) ☐ Hazardous wastes (empty containers of paints and solvents, resins, adhesives and degreasers, oily rags, busted lamps, spent welding electrode sticks/rods, discarded batteries, etc.)	☐ Implement waste segregation and provide separate waste bins for biodegradable and non-biodegradable wastes ☐ Designate an area for recyclable materials such as metal, wires, etc. ☐ Coordinate with the LGU on the regular collection of biodegradable and non-biodegradable wastes. ☐ Coordinate with waste recycler for the disposal of recyclable materials ☐ Commission the services of third-party hazardous waste transporter and treater with license from DENR in the collection and treatment of hazardous wastes. ☐ Prohibit burning of wastes. ☐ Provision of secondary containment for all liquid and hazardous wastes ☐ Garbage bins in elevated areas shall be covered to prevent wastes from being carried by wind	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Waste Management Procedure as part of the ESA and Contractor's ESMP ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
20. Sanitation and domestic sewage from construction camp	☐ Provide clean water and hand-washing facilities at the construction camp ☐ Provide temporary toilet facilities with septic tanks; Locate temporary septic tank more than 25 meters from an	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	existing water supply well or surface water body ☐ Provide portable toilets (portalets); ensure contents of portalets are regularly collected by the third party portalet collector for safe offsite treatment and disposal. ☐ Ensure that a third-party siphoning service provider provider has a Discharge Permit from DENR.			
21. Traffic congestion caused by side street parking of construction vehicles	☐ Prohibit prolonged side street parking of construction vehicles ☐ Assign flag persons to direct flow of vehicles ☐ Coordinate with local government and communities about schedule of movement of construction vehicles	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
22. Traffic-related accidents during construction ☐ Movement of materials delivery trucks ☐ Open excavations and trenches	☐ Implement speed control for delivery trucks ☐ Install warning signages in open excavations and trenches ☐ Provide barricades and lighting at night in construction sites with open excavations ☐ Orient drivers on precautionary measures when passing through community areas and times of day to reduce risk of accidents ☐ Observe extra caution when passing through dangerous routes ☐ Implement limits for trip duration and arranging driver rosters to avoid overtiredness of drivers.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Regular maintenance of vehicles to minimize serious accidents caused by vehicle malfunction. ☐ Provision of sufficient lighting system			
23. Potential damage to existing road due to hauling of quarry materials and movement of construction vehicles	☐ Restoration and repair of existing road by the contractor ☐	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH)	Cost of mitigation measures to be shouldered by the contractor	Contractor
24. Occupational health and safety risks and hazards ☐ Use of hazardous materials and chemicals ☐ Hazardous working conditions such as trenches, excavations, working in heights or in confined spaces ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19)	☐ Implement an Occupational Safety and Health (OSH) Plan in compliance with the DOLE OSH guidelines. ☐ Designate an onsite Safety Officer duly accredited by DOLE. ☐ Assign a contact person onsite to Establishment of GRM for workers ☐ Require workers to wear safety gadgets/PPEs such as hard hats, gloves, safety belts, rubber boots, and goggles, appropriate to the task. ☐ Post safety signs/reminders in strategic areas within the construction area. ☐ Provide sufficient lighting at night. ☐ Provide barricades / safety barriers particularly at excavations and stockpiles of aggregates. ☐ Provide first-aid kit at the construction site to ensure immediate medical attention in case of accidents. ☐ Comply with the COVID-19 health and safety guidelines of the Government.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE ☐ LMP and Code of Conduct	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
25. Labor disputes over terms and conditions of employment	☐ Priority hiring of qualified local residents ☐ Set-up a grievance redress mechanism for workers including GRM posters, GRM drop boxes at the construction site office and bulletin board ☐ Assign a Grievance Point Person ☐ Construction will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Functioning GRM for workers ☐ LMP and Code of Conduct	Cost of mitigation measures to be shouldered by the contractor	LGU PSO/RPCO Contractor
26. Community health and safety risks and hazards ☐ Noise nuisance ☐ Airborne dust ☐ Dangerous excavation and trenches ☐ Improper restoration of disturbed areas	☐ Conduct consultations with neighboring communities and Barangay about the project and the schedule of works. ☐ Schedule noisy works during daytime in sites near community areas and sensitive receptors ☐ Watering of areas prone to airborne dust during dry days ☐ Provide barriers around trenches and open excavations ☐ Install warning signs ☐ Ensure proper restoration and clean-up of areas disturbed during construction	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
27. Impacts of labor influx such as: ☐ Exposure of community to communicable diseases (e.g. COVID19) and sexually transmitted diseases (HIV/AIDS) ☐ Misconduct of workers causing tension and peace	☐ Conduct orientation of workers on proper behavior and community values, cultural traditions and practices ☐ Orientation of workers on prevention of COVID-19, HIV/AIDS and other communicable diseases	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE ☐ GRM records	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
and order issues in the community due to differences in traditions, culture, religion, ethnicity ☐ Increased criminality in the area ☐ Increase cases related to Gender-based violence, Sexual Exploitation and abuse / Sexual Harassment (GBV SEA/SH)	☐ Prohibit use of dangerous drugs, smoking, and alcohol consumption ☐ Give priority to qualified local laborers in hiring construction workers ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive			
28. Impacts on cultural properties	☐ Implement chance find procedure in accordance with the requirements of the National Cultural Heritage Act (2009) and Cultural Properties Preservation and Protection Act ☐ Immediately suspend any activities upon discovery of chance find and report to the LGU and RPCO SES focal person	☐ Cultural Heritage Management Plan ☐ Chance Find Procedure	Cost of mitigation measures to be shouldered by the contractor	Contractor
29. Security and conflict risk	☐ Social preparation and meaningful consultations ☐ Proper coordination with relevant authorities ☐ LGUs mandated to ensure and maintain peace and order within their respective areas are to formulate and implement their POPS Plans as per DILG Memorandum Circular No. 2022-118 Guidelines on the Development and Formulation of the Peace and Order and Public Safety Plan (POPS-PLAN) 2023-2025 dated September	☐ Local Government Unit's (LGUs) Peace and Order and Public Safety Plan (POPS) Plan	Cost of mitigation measures to be shouldered by the LGU	Local Government Unit (LGU)

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	19, 2022. POPS Plan should be updated accordingly ☐ evacuation plan in case of insurgency or conflicts as part of POPS Plan			
7. Site Selection, Operation and Abandonment of Batching Plant, Quarry Site, Borrow Pit and Excess Excavation/Waste Dumping Site				
30. Impacts of operation of batching plant	☐ Contractor to comply with the site selection, operation and abandonment guidelines for batching plant	☐ CESMP in the DED/POW and contract	Cost of mitigation measures to be shouldered by the contractor	Contactor
31. Impacts of operation of quarry site	☐ Contractor to comply with the site selection, operation and abandonment guidelines for quarry site	☐ CESMP in the DED/POW and contract	Cost of mitigation measures to be shouldered by the contractor	Contactor
32. Impacts of operation of borrow pit	☐ Contractor to comply with the site selection, operation and abandonment guidelines for borrow pit	☐ CESMP in the DED/POW and contract	Cost of mitigation measures to be shouldered by the contractor	Contactor
33. Impacts of operation of excess excavation/waste dumping site	☐ Contractor to comply with the site selection, operation and abandonment guidelines for excess excavation/waste dumping site	☐ CESMP in the DED/POW and contract		Contactor

Prepared by: _____

Conforme: _____
PPMIU/MPMIU Head

Noted by the local community:

_____
Barangay Captain

ANNEX J-3: ESMP TEMPLATE FOR IRRIGATION SUBPROJECTS

Guidance Notes:

This template is designed to manage the environmental and social risks and impacts of irrigation infrastructures. Below are characteristics of these subprojects:

Subproject Type	Description
Irrigation	Communal irrigation systems (CIS), small-scale irrigation facilities for high-value crops, solar-powered irrigation systems, ram pumps, sprinklers, spring development irrigation, drip irrigation projects

The ESMP is prepared following the results of the SES screening in Annex C and the Environmental and Social Assessment (ESA) in the feasibility study. The ESMP sets out specific plans, including budgets, organization arrangements and responsibilities for social and environmental impact management during project implementation. The ESMP should be specific in its description of the individual mitigation and monitoring measures and the assignment responsibilities to address identified risks and impacts of the subproject. The ESMP will contain, as appropriate, sub-plans on waste management, occupational safety and health, construction site management, materials management, and monitoring and reporting plan.

A. Site and Design Considerations

[Do not proceed with the subproject preparation including this ESMP unless all items below are confirmed.]

1. The irrigation structures will not encroach into or traverse any declared protected area of natural habitat.
2. In case of run-of-the-river system, there are no ongoing sand/gravel quarrying within 500 meters upstream and 1 km downstream of the diversion point, otherwise, the LGU has signified that all quarrying activities within the said stretch shall be stopped once he construction of he irrigation system starts and that no quarry permits will be issued in the future.
3. The subproject will not displace, disfigure or render inoperable/inaccessible any monument or physical structure of known cultural and historical significance.
4. The subproject will not result to loss of ecosystem services and depletion of water source for downstream uses and other community needs.
5. For new construction, the water source shall meet the water quality standard for irrigation, i.e. minimum silt content and absence of water-borne bacteria/organisms (e.g. those causing schistosomiasis, malaria, etc.); damage/disturbance to ecologically significant flora and fauna shall be minimal; and intake point or diversion is outside core zones of protected areas or critical watersheds.

B. Environmental Issues and Mitigation Measures

The issues identified in the ESMP template are based on frequently associated issues in irrigation projects such as sustainability of water source, impact on downstream ecosystem and other users of the water source, water quality, possible encroachment on areas with significant ecosystem value, ancestral domains, construction-related issues, health and safety. Any new environmental and social impacts that will be identified from the SES screening and environmental and social impact assessment will be added in the ESMP together with the appropriate mitigation measures, monitoring indicators, cost, and responsible unit.

TEMPLATE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR IRRIGATION SUBPROJECTS

Name of Irrigation Subproject: _____ Location: _____

Implementing LGU: _____

Type of Irrigation System: ☐ CIS ☐ Small-scale irrigation for high-value crops ☐ Solar-powered irrigation ☐ Ram pumps ☐ Spring development irrigation ☐ Drip irrigation ☐ Sprinkler system

New or Rehabilitation? ☐ New ☐ Rehabilitation

Number of Beneficiaries: _____

Number of hectares of service area: _____

Estimated Total Cost: _____

Check whichever is applicable to the subproject:

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
A. Feasibility Study and Detailed Engineering Design				
1. Changes in downstream ecology due to reduction in river water flow ☐ Depletion of water resources due to draw down of more than 30% of river flow. ☐ Competition with existing water users	☐ Secure Water Permit from NWRB to ensure allocation of water rights ☐ Redesign the irrigation system based on feasible rate of water abstraction ☐ Ensure release of adequate environmental flows in case subproject requires a dam or impounding structure ☐ Conduct consultation with existing users of the river. ☐ Monitor ecological changes in. downstream as part of O&M Plan	☐ NWRB Water Permit ☐ DED/POW ☐ Operation and Maintenance Plan ☐ Monitoring report on implementation of O&M Plan (During and after project completion)	Include in overall subproject cost	LGU
2. Irrigation structure may be located in sensitive ecosystems. ☐ Identified as fish spawning	☐ Coordinate with FARMCs to avoid spawning areas and breeding season of fish ☐ Avoid fish spawning areas; Consider	☐ Operation and Maintenance Plan	Include in overall subproject cost	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
area ☐ Identified as site with threatened and endangered species	diversion weirs and fish passages in the design ☐ Avoid sites with known threatened and endangered species			
3. The subproject will encroach on buffer zone of declared protected area.	☐ Secure PAMB Resolution ☐ Secure PAMB Clearance ☐ Prepare the Comprehensive Development and Management Plan and Rehabilitation Plan as required by the Special Use Agreement in Protected Area (SAPA) application.	☐ PAMB Resolution ☐ PAMB Clearance ☐ SAPA ☐ Biodiversity Management Plan ☐ Ordinance on Protection and Management	All costs attendant to implementing the mitigation measures will be included in the overall subproject cost	LGU
4. The subproject will have sections that traverse/encroach on: o mangrove forest o secondary forests o ecologically significant surface water, marshlands, or wetlands	☐ Re-alignment of irrigation canal sections to avoid critical areas. ☐ Prohibit cutting of mangrove forest ☐ Secure Forest Land Use Agreement (FLAg) from DENR ☐ Design vegetated buffer zones and habitat corridors ☐ Include in the subproject, design biodiversity restoration, offsets, or creation of ecologically comparable areas for biodiversity ☐ Study on the aquatic fresh/marine environment and geotechnical study	☐ Design of re-aligned irrigation canal sections ☐ FLAg ☐ Design of vegetated buffer zones ☐ Design of biodiversity restoration, offsets ☐ Geotechnical Report	Include in overall cost of subproject	LGU
5. Presence of natural, geologic and climate hazards in the subproject area that may affect safety and vulnerability of the infrastructure	☐ Validate information generated from CRVA, e-VSA and georisk mapping from site-specific information on occurrences of flooding, soil erosion, landslides, liquefaction, storm surge, tsunami, earthquakes, etc. ☐ Secure clearance from DENR/PHIVOLCS/PAGASA or any equivalent body if in a disaster or hazard	☐ DED/POW that includes the design of climate resilient and climate adaptation/mitigation measures ☐ Clearance from DENR/PHIVOLCS/ PAGASA or any equivalent body	Include in overall cost of subproject	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	prone area ☐ Design structures in accordance with the standards of the National Building Code and Structural Code of the Philippines ☐ Adopt climate resilient measures: _____ ☐ Adopt climate mitigation measures: _____			
6. Potential risk of schistosomiasis ☐ The vector snail (*Oncomelania sp.*) is not present in the area but there is a risk that the species may be introduced in the area. ☐ The vector snail is endemic but there is no reported case of infection in the area. ☐ Disease is already prevalent in the area based on regular DOH health surveillance and treatment.	☐ As part of the Operations and Management Plan: ○ Irrigation Management Organization (IMO) of NIA and IA to coordinate with the DOH and LGU in instituting a system of screening planting materials, soils from endemic areas ○ Screening of animals and people from infected areas ○ Improve sanitation ☐ IMO/IA to support existing DOH project and support sanitation improvement and information education campaign	☐ Operations and Management Plan ☐ Monitoring report on implementation of O&M Plan (During and after project completion) ☐ Capacity building plan ☐ Report of capacity building activities	Include in overall subproject cost	LGU
7. Safety of irrigation canals and intake areas ☐ There were cases of accidental drowning in the area ☐ There has been reported case of drowning but. There are dangerous areas in the irrigation system.	☐ Provide fence or barriers and warning signs in hazardous areas	☐ POW ☐ Operations and Maintenance Plan	Include in overall cost of subproject	LGU
8. River bank scouring/erosion due to altered direction/flow of river	☐ Provide river bank protection	☐ DED/POW	Include in overall cost of subproject	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
9. Deterioration of soil quality (i.e. increase salinization, acidity of rice fields due to permanent flooding with irrigation water)	☐ As part of the O&M Plan, o Provide adequate irrigation water control (or turnouts) at the farm o Provide adequate drainage o Conduct occasional draining of farms	☐ O&M Plan ☐ Monitoring report on implementation of O&M Plan (During and after project completion)	Include in overall cost of subproject	LGU
10. Lack of garbage collection and disposal system in the community resulting to accumulation of garbage in the irrigation canals	☐ Enforcement of Ecological Solid Waste Management Act ☐ As part of the O&M Plan, conduct regular inspection along the canal.	☐ O&M Plan ☐ Monitoring report on implementation of O&M Plan (During and after project completion)	Include in overall cost of subproject	LGU
11. Households and commercial establishments dispose their liquid wastes into the irrigation canals	☐ Enforcement of Clean Water Act and Sanitation Code ☐ As part of the O&M Plan, monitor irrigation canals	☐ O&M Plan ☐ Monitoring report on implementation of O&M Plan (During and after project completion)	Include in overall cost of subproject	LGU
12. Presence of IP/ICC in the influence area ☐ The site is inside an ancestral domain (AD) or will traverse an AD ☐ The irrigation subproject is not inside an AD nor will it traverse an AD but there are IP/ICC in the area. ☐ The site is not in an AD and that there are no IP/ICC in the area as per LGU records and onsite validation. ☐ The IPs are themselves beneficiaries of the irrigation system.	☐ Conduct FPIC ☐ Secure certification from the Tribal Chieftain expressing support to the subproject. ☐ Prepare and implement IP Plan ☐ No measure required	☐ Document of FPIC among IP communities ☐ Minutes of meetings/consultations ☐ Evidence of IP community support (resolution, endorsement letter, etc.) ☐ Certificate of Pre-condition from NCIP ☐ Certificate of Non-Overlap from NCIP ☐ Approved IP Plan	Include cost of FPIC, consultations, and other mitigation and monitoring parameters in overall subproject cost.	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
13. Cutting of trees ☐ Coconut trees ☐ Fruit-bearing trees ☐ Timber Trees ☐ Planted Trees ☐ Naturally growing trees	☐ Avoid tree cutting to the extent possible. ☐ Conserve affected trees through earthballing, transfer and replanting ☐ Implement tree replacement and replanting in accordance with DENR requirements ☐ Conduct consultation with PAPs and secure permission from owner ☐ Secure Tree Cutting Permit ☐ Secure Tree Earthballing Permit ☐ Contractor to coordinate with BLGU and PAPs prior to removal/cutting of affected trees ☐ Implement tree replacement and replanting in accordance with DENR requirements	☐ Tree Cutting Permit ☐ Tree Earthballing Permit ☐ PCA Permit (for coconut trees) ☐ Signed Contract Agreement with owner/s of tree(s) ☐ Waiver of Rights / Quit Claim (if trees in private land will be donated; refer to Form 1) ☐ Proof of Compensation (for affected trees in private land) ☐ Tree Replacement Plan	Include in overall subproject cost	LGU Contractor
14. Irrigation system will affect existing cropland ☐ Rice ☐ Corn ☐ Sugarcane ☐ vegetables ☐ cash crops/agricultural crops	☐ Conduct meaningful consultations with PAPs to ensure just compensation, entitlement or voluntary donation/waiver ☐ LGU/PPMIU should coordinate with the owners of the land or tenant/farmer regarding the start of project implementation to avoid untimely crop clearing ☐ LGU to compensate the owners of the crops that will be affected	☐ Waiver of Rights/Quit Claim (if crops will be donated as reflected in Form 1 ☐ Signed Compensation Agreement with the owner(s) and Proof of compensation (if crop owners require compensation)	Include in overall subproject cost	LGU Contractor
15. Site and right-of-way (ROW) acquisition for the subproject ☐ The subproject will not require ROW acquisition. ☐ There are irrigation canal sections requiring private	☐ Conduct consultations with Project Affected Persons (PAPs) to determine entitlements, just compensation or voluntary donation/waiver. ☐ Submit proof of land ownership. ☐ LGU to facilitate annotations of the land	☐ Land title(s) ☐ ROW acquisition documents (Forms L1 and L2) ☐ Land Title with Deed of Donation ☐ Tax Declaration with Waiver ☐ Assessor's Certification on property	Include cost of ROW acquisition in overall subproject cost.	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
land acquisition.	titles. ☐ For land acquisition by compensation, LGU to ensure that just compensation is agreed by both parties (LGU and PAPs).	verification ☐ Cadastral Map ☐ Parcellary Map ☐ Notarized duly-signed agreement between the PAPs and LGU for compensation of their properties and proof of compensation		
☐ The subproject will displace PAPs.	☐ Prepare and submit a Resettlement Action Plan ☐ Relocation prior to commencement of construction works	☐ Resettlement Action Plan (RAP) ☐ MOA with PAPs ☐ Title of resettlement site ☐ Proof of Compensation ☐ Entitlement Policy	Include in overall cost of subproject	LGU
☐ The subproject have sections requiring acquisition of government land.	☐ Consult the Government agency and present the proposed subproject.	☐ MOA with Government agency ☐ Transferred Title ☐ Tenurial Instrument	Include in overall cost of subproject	LGU
16. Demolition and reconstruction of affected structures ☐ Permanent structures (e.g. concrete structures) will have to be removed/demolished during construction ☐ Temporary structures will have to be removed/demolished during construction ☐ The construction will not affect any permanent or temporary structures.	☐ Conduct consultation with PAPs ☐ Compensate the owners of the structures that will be affected ☐ Assist the owners of the structure in the removal and in relocating/reconstruction of the affected structures ☐ LGU to coordinate with barangay and PAPs prior to the removal/demolition of affected structures	☐ MOA with the owner(s) (if requiring compensation/reconstruction/assistance ☐ Waiver of Rights/Quit Claim (if owner/s will not require compensation as reflected in Form 1)	Include in overall subproject cost	LGU Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
B. Construction Phase				
17. Soil erosion from excavation, siltation from washing of construction equipment and stockpiles of materials ☐ Activities will necessitate earthmoving from excavation activities ☐ Cut materials will consist mainly of hard rocks and are unlikely to generate significant sediments ☐ Washing of construction vehicles including cement mixers may occur at the site and cause soil and cement runoff. ☐ Stockpiles of materials may cause sediment runoff.	☐ Conduct excavation and earthmoving during dry months ☐ Locate stockpile of soil, aggregates and sand away from drainage canals and waterways ☐ Install silt traps, sedimentation ponds, and other sediment control measures ☐ Prohibit washing of cement mixers and other construction vehicles at the site ☐ Conduct daily cleaning and sweeping of the construction site and periodically remove soils, stones, and wastes from gutters, drainage canals and ditches ☐ During rain events, check the drainage system to see if these are blocked. Remove blocked materials. ☐ Hauling of excess excavated soil/incompatible soil for filling to designated disposal location in compliance to DPWH DO 168	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ MOA with private land owner for the disposal of excess soil	Cost of mitigation measures to be shouldered by the contractor	Contractor
18. Contamination of surface water and groundwater with oil/grease	☐ Proper handling and disposal of waste oil, grease, diesel and gasoline ☐ Preparation of hazardous waste management procedure ☐ Conduct of training on oil spill response	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Waste Management Procedure as part of the ESA and Contractor's ESMP ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
19. Dust from construction activities, materials stockpiles, and movement of construction vehicles	☐ Conduct watering and dust abatement measures during dry and windy conditions ☐ Require workers to wear particle mask ☐ Keep stockpile of aggregate and sand materials covered with well-fixed plastic sheeting, tarpaulins or other geotextiles to avoid suspension or dispersal of fine soil particles during dry and windy days. ☐ Equip concrete mixing equipment with dust shrouds. ☐ Periodically clean-up debris at the work site. ☐ Prohibit idling of construction vehicles while unloading materials at the site. ☐ Impose speed limit on construction vehicles particularly when passing communities, residential or commercial areas or sensitive areas	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
20. Noise and vibration from construction activities and movement of materials ☐ Subproject is located near community areas with sensitive receptors such as schools, hospitals, and residential areas. ☐ Subproject will require concrete chipping and drilling activities.	☐ Barricade the construction area and shield sensitive receptors. ☐ Implement construction activities in consideration to time, duration, and scale to optimize the use of construction equipment, machineries, and vehicles in accordance with the noise emission standard. ☐ Strictly prohibit concrete chipping and drilling activities beyond 8:00PM particularly in areas near sensitive receptors and residential areas. ☐ Deliver fabricated steel plates and cut/bend reinforcing steel to desired size to minimize cutting activities onsite. ☐ Require workers to wear ear plugs.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Strictly control construction activities close to historical/archaeological sites, if any.			
21. Generation of construction wastes ☐ Biodegradable wastes (e.g. food wastes) ☐ Non-biodegradable wastes (e.g. debris, concrete / soil debris, wood chips) ☐ Recyclable wastes (rebars, wires, nails, etc.) ☐ Hazardous wastes (empty containers of paints and solvents, resins, adhesives and degreasers, oily rags, busted lamps, spent welding electrode sticks/rods, discarded batteries, etc.)	☐ Implement waste segregation and provide separate waste bins for biodegradable and non-biodegradable wastes ☐ Designate an area for recyclable materials such as metal, wires, etc. ☐ Coordinate with the LGU on the regular collection of biodegradable and non-biodegradable wastes. ☐ Coordinate with waste recycler for the disposal of recyclable materials ☐ Commission the services of third-party hazardous waste transporter and treater with license from DENR in the collection and treatment of hazardous wastes. ☐ Prohibit burning of wastes. ☐ Provision of secondary containment for all hazardous wastes	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
22. Sanitation and domestic sewage from construction camp	☐ Provide clean water and hand-washing facilities at the construction camp ☐ Provide temporary toilet facilities with septic tanks; Locate temporary septic tank more than 25 meters from an existing water supply well or surface water body ☐ Provide portable toilets (portalets); ensure contents of portalets are regularly collected by the third party portalet provider for safe offsite treatment and disposal. ☐ Ensure that third-party portalet provider has a Discharge Permit from DENR.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
23. Traffic congestion caused by side street parking of construction vehicles	☐ Prohibit prolonged side street parking of construction vehicles ☐ Assign flag persons to direct flow of vehicles ☐ Coordinate with local government and communities about schedule of movement of construction vehicles ☐ Provision of alternate route	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH)	Cost of mitigation measures to be shouldered by the contractor	Contractor
24. Road accidents during construction ☐ Movement of materials delivery trucks ☐ Open excavations and trenches	☐ Implement speed control for delivery trucks ☐ Install warning signages in open excavations and trenches ☐ Provide barricades and lighting at night in construction sites with open excavations ☐ Orient drivers on precautionary measures when passing through community areas and times of day to reduce risk of accidents ☐ Observe extra caution when passing through dangerous routes ☐ Implement limits for trip duration and arranging driver rosters to avoid overtiredness of drivers. ☐ Regular maintenance of vehicles to minimize serious accidents caused by vehicle malfunction. ☐ Provision of sufficient lighting system	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
25. Potential damage to existing road due to hauling of quarry materials and movement of construction vehicles	☐ Restoration and repair of existing road by the contractor	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health Plan (COSH)	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
		☐ Approved Construction Safety and Health Program (CSHP) by DOLE		
26. Occupational health and safety risks and hazards ☐ Use of hazardous materials and chemicals ☐ Hazardous working conditions such as trenches, excavations, working in heights or in confined spaces ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19)	☐ Implement an Occupational Safety and Health (OSH) Plan in compliance with the DOLE OSH guidelines. ☐ Designate an onsite Safety Officer duly accredited by DOLE. ☐ Establishment of GRM for workers ☐ Require workers to wear safety gadgets/PPEs such as hard hats, gloves, safety belts, rubber boots, and goggles, appropriate to the task. ☐ Post safety signs/reminders in strategic areas within the construction area. ☐ Provide sufficient lighting at night. ☐ Provide barricades / safety barriers particularly at excavations and stockpiles of aggregates. ☐ Provide first-aid kit at the construction site to ensure immediate medical attention in case of accidents. ☐ Comply with the COVID-19 health and safety guidelines of the Government.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOL ☐ LMP and Code of Conduct	Cost of mitigation measures to be shouldered by the contractor	Contractor
27. Labor disputes over terms and conditions of employment	☐ Priority hiring of qualified local residents ☐ Set-up a grievance redress mechanism for workers including GRM posters, GRM drop boxes at project site ☐ Assign a Grievance Point Person ☐ Construction will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Functioning GRM for workers ☐ LMP and code of conduct	Cost of mitigation measures to be shouldered by the contractor	LGU PSO/RPCO Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
28. Community health and safety risks and hazards ☐ Noise nuisance ☐ Airborne dust ☐ Dangerous excavation and trenches ☐ Improper restoration of disturbed areas	☐ Conduct consultations with neighboring communities and Barangay about the project and the schedule of works. ☐ Schedule noisy works during daytime in sites near sensitive receptors ☐ Watering of areas prone to airborne dust during dry season ☐ Provide barriers around trenches and open excavations ☐ Install warning signs. ☐ Ensure proper restoration and clean-up of areas disturbed during construction	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health Plan (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
29. Impacts of labor influx such as: ☐ Exposure of community to communicable diseases (e.g. COVID19) and sexually transmitted diseases (HIV/AIDS) ☐ Misconduct of workers causing tension and peace and order issues in the community due to differences in traditions, culture, religion, ethnicity ☐ Increased criminality in the area ☐ Gender Based Violence (GBV) Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH)	☐ Conduct orientation of workers on proper behavior and community values, cultural traditions and practices ☐ Orientation of workers on prevention of COVID-19, HIV/AIDS and other communicable diseases ☐ Prohibit use of dangerous drugs, smoking, and alcohol consumption ☐ Give priority to qualified local laborers in hiring construction workers ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE ☐ GRM records	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
30. Impacts on cultural properties	☐ Implement chance find procedure in accordance with the requirements of the National Cultural Heritage Act (2009) and Cultural Properties Preservation and Protection Act ☐ Immediately suspend any activities upon discovery of chance find and report to the LGU and RPCO SES focal person	☐ Cultural Heritage Management Plan ☐ Chance Find Procedure	Cost of mitigation measures to be shouldered by the contractor	Contractor
31. Security and conflict risk	☐ Social preparation and meaningful consultations ☐ Proper coordination with relevant authorities ☐ LGUs mandated to ensure and maintain peace and order within their respective areas are to formulate and implement their POPS Plans as per DILG Memorandum Circular No. 2022-118 Guidelines on the Development and Formulation of the Peace and Order and Public Safety Plan (POPS-PLAN) 2023-2025 dated September 19, 2022. POPS Plan should be updated accordingly ☐ evacuation plan in case of insurgency or conflicts as part of POPS Plan	☐ Local Government Unit's (LGUs) Peace and Order and Public Safety Plan (POPS) Plan	Cost of mitigation measures to be shouldered by the LGU	Local Government Unit (LGU)
C. Site Selection, Operation and Abandonment of Batching Plant, Quarry Site, Borrow Pit and Excess Excavation/Waste Dumping Site				
32. Impacts of operation of batching plant	☐ Contractor to comply with the site selection, operation and abandonment guidelines for batching plant	☐ CESMP in the DED/POW and contract	Cost of mitigation measures to be shouldered by the contractor	Contactor
33. Impacts of operation of quarry site	☐ Contractor to comply with the site selection, operation and abandonment guidelines for quarry site	☐ CESMP in the DED/POW and contract	Cost of mitigation measures to be shouldered by the contractor	Contactor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
34. Impacts of operation of borrow pit	☐ Contractor to comply with the site selection, operation and abandonment guidelines for borrow pit	☐ CESMP in the DED/POW and contract	Cost of mitigation measures to be shouldered by the contractor	Contactor
35. Impacts of operation of excess excavation/waste dumping site	☐ Contractor to comply with the site selection, operation and abandonment guidelines for excess excavation/waste dumping site	☐ CESMP in the DED/POW and contract		Contactor

Prepared by: _____

Conforme: _____
PPMIU/MPMIU Head

Noted by the Irrigators Association:

_____

ANNEX J-4: ESMP TEMPLATE FOR CROP PRODUCTION

Guidance Notes:

This template is designed to manage the environmental and social risks and impacts of crop production. It consists of the process of cultivating crops on a large scale such as rice, corn, sugarcane, cassava, and vegetables. The crop production enterprise will be implemented by the proponent local government unit together with Farmers Cooperatives (FC) or clusters of Farmers Cooperative Associations (FCAs). Below are characteristics of these subprojects:

Subproject Type	Description
Crop production	Agricultural cultivation of varieties of crops and agricultural products such as rice, corn, sugarcane, vegetables, and cash crops Priority is given on environmentally-friendly cultivation practices that conserve water, minimize use and runoff of fertilizers and pesticides (e.g. through the use of greenhouse, plastic culture, IPM, drip irrigation, leaf nutrient testing, organic agriculture, etc.) Priority is also given to agricultural practices adopting more climate resilient technologies (e.g. improved varieties of crops more resilient to heat and/or water stress, insects, parasites, regenerative agriculture, multi-diversity, etc.)

The ESMP is prepared following the results of the SES screening in Annex C and the Environmental and Social Assessment (ESA) in the feasibility study. The ESMP sets out specific plans, including budgets, organization arrangements and responsibilities for social and environmental impact management during project implementation. The ESMP should be specific in its description of the individual mitigation and monitoring measures and the assignment responsibilities to address identified risks and impacts of the subproject. The ESMP contains subplans on biodiversity assessment and integration of agriculture climate adaptation measures, climate vulnerability assessment, waste management, occupational safety and health, and monitoring and reporting plan.

2. **Site and Design Considerations**

[Do not proceed with the subproject preparation including this ESMP unless all items below are confirmed.]

1. The subproject does not encroach into or traverse any declared strict protection zone of protected area or natural habitat (e.g. primary forest, critical wetlands, endangered species habitat, key biodiversity areas)
2. The subproject does not involve extracting resources such as timber and forest products, mangroves or beach forests, endangered flora and fauna.
3. The subproject does not involve the use of any prohibited agro-chemicals (herbicides, pesticides, insecticides, fertilizers)
4. The subproject will not displace, disfigure or render inoperable/inaccessible any monument or physical structure of known cultural and historical significance.
5. The subproject is not located in an area that is vulnerable to natural hazards such as flood, landslide, tsunami, storm surge, seismic risks and high to extreme risk zones around active volcanoes.

B. Environmental Issues and Mitigation Measures

The issues identified in the ESMP template are based on frequently associated issues in crop production such as use of pesticides and agro-chemicals, soil erosion and sedimentation from land tillage and/or crop harvesting, impacts on biodiversity, possible encroachment on areas with significant ecosystem value, ancestral domains, construction-related issues, health and safety. Any new environmental and social impacts that will be identified from the SES screening and environmental and social impact assessment will be added in the ESMP together with the appropriate mitigation measures, monitoring indicators, cost, and responsible unit.

TEMPLATE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR CROP PRODUCTION SUBPROJECT

Name of Subproject: _____ Location: _____
Implementing LGU: _____ FCA/FCA Cluster: _____ Contact No:_____
Type of Crop: _____ Tillage Area: _____
Type of Irrigation _____ Description of crop production technique: _____

Estimated Number of Beneficiaries (gender disaggregate): _____
Estimated Number of IP Beneficiaries (gender disaggregate): _____
Estimated Total Cost: _____

Check whichever is applicable to the subproject:

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
A. Feasibility Study / Business Planning				
1. Presence of IP/ICC in the influence area ☐ The site is inside an ancestral domain (AD) or will traverse an AD ☐ The site is not inside an AD nor will it traverse an AD but there are IP/ICC in the area. ☐ The site is not in an AD and that there are no IP/ICC in the area as per LGU records and onsite validation.	☐ Conduct FPIC ☐ Secure certification from the Tribal Chieftain expressing support to the subproject. ☐ Prepare and implement IP Plan ☐ No measure required	☐ Document of FPIC among IP communities ☐ Evidence of IP community support (resolution, endorsement letter, etc.) ☐ Certificate of Pre-condition from NCIP ☐ Certificate of Non-Overlap from NCIP	Include cost of FPIC, consultations, and other mitigation and monitoring parameters in overall subproject cost.	LGU/FCA/FCA Cluster
2. Land acquisition for the subproject ☐ Private individuals ☐ Cooperative ☐ Government	☐ Conduct consultations with Project Affected Persons (PAPs) to determine entitlements, just compensation or voluntary donation/waiver. ☐ Submit site acquisition documents: o Deed of Donation	☐ Land title(s) ☐ ROW acquisition documents (Forms L1 and L2) ☐ Land Title with Deed of Donation ☐ Deed of Sale	Include cost of site acquisition in overall subproject cost.	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	○ Deed of Sale ○ Certification of Use as consent by the affected land owners ○ Deed of Usufruct Agreement with Government ☐ LGU to facilitate annotations of the land titles. ☐ For land acquisition by compensation, LGU to ensure that just compensation is agreed by both parties (LGU and PAPs). ☐ For lease of land, FCA to ensure acceptable terms as determined by the Project.	☐ Certification of Use as consent by the affected land owners ☐ Deed of Usufruct Agreement with Government ☐ Notarized duly-signed agreement between the PAPs and LGU for compensation of their properties and proof of compensation ☐ Contract of lease		
3. The subproject will encroach on buffer zone of declared protected area.	☐ Secure PAMB Resolution ☐ Secure PAMB Clearance ☐ Prepare the Comprehensive Development and Management Plan and Rehabilitation Plan as required by the Special Use Agreement in Protected Area (SAPA) application.	☐ PAMB Resolution ☐ PAMB Clearance ☐ SAPA ☐ Biodiversity Management Plan ☐ Ordinance on Protection and Management	All costs attendant to implementing the mitigation measures will be included in the overall subproject cost	LGU/FC/FCA Cluster
4. The subproject will traverse/encroach on: ○ mangrove forest ○ secondary forests ○ ecologically significant surface water, marshlands, or wetlands	☐ Prohibit cutting of mangrove forest ☐ Secure Forest Land Use Agreement (FLAg) from DENR for forest areas ☐ Design vegetated buffer zones and habitat corridors ☐ Include in the subproject, design biodiversity restoration, offsets, or creation of ecologically comparable areas for biodiversity	☐ FLAg ☐ Design of vegetated buffer zones ☐ Design of biodiversity restoration, offsets	Include in overall cost of subproject	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
6. Presence of natural, geologic and climate hazards in the subproject area that may affect sustainability of crop production	☐ Validate information generated from CRVA, e-VSA and georisk mapping from site-specific information on occurrences of flooding, soil erosion, landslides, liquefaction, storm surge, tsunami, earthquakes, etc. ☐ Adopt climate resilient measures: _____ ☐ Adopt climate mitigation measures: _____	☐ POW that includes the design of climate resilient and climate adaptation/mitigation measures	Include in overall cost of subproject	LGU/FCA/FCA Cluster
5. Land conversion to make way for the plantation ☐ High elevation and forest area converted to (*crop*) production ☐ The proposed plantation site is idle and ideal for farming and classified within agricultural zone ☐ The proposed site is already planted with (*crop*).	☐ Ensure consistency with land use plan of municipality/city ☐ Secure proof of land use compatibility from municipality/city	☐ Zoning Certification ☐ Locational Clearance ☐ SB Resolution on Reclassification	Include in overall cost of subproject	LGU/FCA/FCA Cluster
6. Disturbance to flora and fauna due to vegetation clearing and cutting of trees ☐ Coconut trees ☐ Fruit trees ☐ Trees in private land ☐ Naturally growing trees	☐ Avoid tree cutting to the extent possible. ☐ Conserve affected trees through earth balling, transfer and replanting ☐ Implement tree replacement and replanting in accordance with DENR requirements ☐ Conduct consultation with PAPs and secure permission from owner ☐ Secure Tree Cutting Permit prior to start of works ☐ Secure Tree Earth balling Permit prior to start of works	☐ Tree Cutting Permit ☐ Tree Earth balling Permit ☐ PCA Permit (for coconut trees) ☐ MOA with owner/s of tree(s) ☐ Waiver of Rights / Quit Claim (if trees in private land will be donated; refer to Form L1) ☐ Proof of Compensation (for affected trees in private land)	Include in overall subproject cost	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
B. During Crop Cultivation				
7. Change in land surface structure/topography/terrain and slope Slope: ☐ Flat (0-3%) ☐ Gently sloping to rolling (3-18%) ☐ Steep (>18%)	☐ Provide erosion control and slope protection measures ☐ Designate a spoil storage area, with topsoil set aside for later use and allow maximum reuse of spoils ☐ Soil plowing/cultivation during the dry season ☐ Stabilization of embankment with grasses or other soil cover ☐ Use of contour plowing and ripraps to prevent soil wash out due to rain ☐ Others: _____	☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster
8. Encroachment of farming activities to nearby forest, grazing lands and other nearby land close to the plantation	☐ LGU and DENR to closely monitor land boundaries for crop production ☐ LGU to immediately act on any land encroachment issue particularly on forest land	☐ Monitoring reports	Include in overall subproject cost	LGU in coordination with DENR
9. Loss of genetic resources and variability in crop production ☐ Transfer of genes to other species (weedy or invasive) ☐ Increased pest resistance from introduction of genetically modified organisms, species and pests	☐ Use low-till and no-till strategies in crop production to maintain the structure of soil ecosystems ☐ Use certified crop seeds that do not contain seeds from invasive alien species ☐ Use agro-chemicals approved by FPA and avoid using banned or prohibited pesticides ☐ Implement Integrated Pest Management (IPM) ☐ Proper storage, handling and application of agro-chemicals	☐ Evidence of use of FPA-approved pesticide and agro-chemicals ☐ CITES Clearance ☐ Sanitary/Phytosanitary Clearance ☐ Food Safety Clearance ☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	consistent with Good International Industry Practice (GIIP) ☐ Promote use of organic agricultural practices ☐ Assess compliance of GMO crops with DENR-DA-PCSD Administrative Order 01, series of 2014 ☐ Ensure CITES species that may be farmed or propagated are subject to DENR requirements on EIA, testing and reporting ☐ Require CITES Clearance, Sanitary/Phytosanitary Clearance and Food Safety Clearance, as applicable ☐ Training of FCA/FCA clusters on sustainable crop production practices, IPM			
10. Waste generation ☐ During cultivation (e.g. empty containers of agro-chemicals) ☐ during post-harvest (e.g. decomposing plant fiber, discarded parts of plants)	☐ Composting of plant waste to produce organic fertilizers ☐ Consider use of plant fibers as animal feed ☐ Use plant fiber and wastes as soil additives/enhancers ☐ Prohibit burning of wastes	☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster
11. Degradation of water quality of creeks/rivers due to runoff of fertilizers, pesticides, sediments ☐ Name of nearest receiving water body: _____ ☐ Distance of subproject to nearest receiving water body: _____	☐ Provide silt trap/stilling ponds to minimize siltation of receiving water body ☐ Provide water impoundment for water recycling and irrigation purposes	☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
12. Degradation of soil quality due to indiscriminate use of inorganic fertilizers and other agro-chemicals	☐ Training of farmers on soil management, IPM, and proper use of agro-chemicals ☐ Conduct soil test to determine appropriate/approved fertilization ☐ Promote organic farming rather than use of synthetic chemicals ☐ Seek assistance of DA's IPM KASAKALIKASAN for pest management.	☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster
13. Competition in use of water resources	☐ Implement rain water harvesting and similar measures as alternative sources of irrigation water ☐ Observe water conservation measures through recycling ☐ Avoid disruption of traditional water uses in the community ☐ Ensure that the irrigation water source has a Water Permit from NWRB	☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster
14. Occupational health and safety risks and hazards ☐ Use of hazardous materials and chemicals (e.g. agro-chemicals) ☐ Hazardous working conditions such as extreme heat, rain ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19)	☐ Provision of appropriate equipment and working clothes for protection from extreme sunlight and sheds for rain ☐ Allocate suitable rest area ☐ Assign a contact person onsite to receive/respond to complaints from the barangay/community; provide the name/contact number of the responsible person to the Barangay. ☐ Provide first-aid kit at the site to ensure immediate medical attention in case of accidents.	☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Monitoring reports	Include in overall subproject cost	FAC/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ FCA/FCA clusters shall comply with government health protocols in deployment of workers and continuation of crop production activities in line with the COSH			
15. Conflict between members of the FCA/FCA clusters ☐ Unclear policy on project beneficiary prioritization ☐ Unclear policy on project implementation ☐ Labor disputes over terms and conditions of employment	☐ Conduct consultations with members of the FCA/FCA clusters ☐ Establish the grievance redress mechanism (GRM) including GRM posters, GRM drop boxes at project site, barangay halls, municipal halls, provincial halls ☐ Assign a GRM focal/point person ☐ Subproject will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Operation and Management Plan ☐ Appointment of LGU and PSO/RPCO Grievance Point Person/Grievance Officer ☐ Monitoring Reports	Cost of mitigation measures to be shouldered by the contractor	Contractor
16. Impacts on cultural properties	☐ Implement chance find procedure in accordance with the requirements of the National Cultural Heritage Act (2009) and Cultural Properties Preservation and Protection Act ☐ Immediately suspend any activities upon discovery of chance find and report to the LGU and RPCO SES focal person	☐ Cultural Heritage Management Plan	Cost of mitigation measures to be shouldered by the contractor	Contractor

Prepared by: _____

Adopted by PPMIU/MPMIU: _____

PPMIU/MPMIU Head

Noted by the local community:

_____

Barangay Captain

ANNEX J-5: ESMP TEMPLATE FOR MULTI-COMMODITY PROCESSING PLANTS

Guidance Notes:

This template is designed to manage the environmental and social risks and impacts of multi-commodity processing plants. Multi-commodity processing plants consists of a variety of interventions that are involved in processing and manufacturing of agricultural raw materials. These are small to large-scale pre- and post-harvest processing, logistics, and distribution facilities. The enterprise will be implemented by the proponent local government unit together with Farmers Cooperatives (FCs) or clusters of Farmers Cooperative Associations (FCAs) under the I-REAP component of PRDP Scale-Up. Below are characteristics of these subprojects:

Subproject Type	Description
Multi-commodity processing plants	● Food supply hubs, i.e. consolidation, trading posts/centers, and food terminals equipped with cold or dry storage facilities, pre-processing/processing facilities, and logistics facilities (hauling and delivery vehicles) ● Multicommodity processing plants (e.g., dehydrated products, powder, puree, juice) ● Multicommodity Cold Storage/ Cold Chain Facilities ● Fiber processing facilities (abaca, coco coir, etc.) *Note: A separate ESMP template is available for enterprise activities involving cold or dry storage facilities, logistics facilities, consolidation, trading posts/centers, and food terminals.*

The ESMP is prepared following the results of the SES screening in Annex C and the Environmental and Social Assessment (ESA) in the business plan The ESMP sets out specific plans, including budgets, organization arrangements and responsibilities for social and environmental impact management during project implementation. The ESMP should be specific in its description of the individual mitigation and monitoring measures and the assignment responsibilities to address identified risks and impacts of the subproject. The ESMP contains subplans on raw materials conservation, resource efficiency (water and energy consumption), waste management, pollution control, occupational safety and health, and monitoring and reporting plan.

2. **Site and Design Considerations**

[Do not proceed with the subproject preparation including this ESMP unless all items below are confirmed.]

1. The subproject does not encroach into or traverse any declared strict protection zone of protected area or natural habitat (e.g. primary forest, critical wetlands, endangered species habitat, key biodiversity areas).
2. The subproject does not involve extracting resources such as timber and forest products, mangroves or beach forests, endangered flora and fauna.
3. The subproject will not displace, disfigure or render inoperable/inaccessible any monument or physical structure of known cultural and historical significance.
4. The subproject is not located in an area that is high to extreme risk zones around active volcanoes and fault lines.

B. Environmental Issues and Mitigation Measures

The issues identified in the ESMP template are based on frequently associated issues in waste generation, water, air and odor from processing plants, possible encroachment on areas with significant ecosystem value, ancestral domains, construction-related issues, worker and community health and safety. Any new environmental and social impacts that will be identified from the SES screening and environmental and social impact assessment will be added in the ESMP together with the appropriate mitigation measures, monitoring indicators, cost, and responsible unit.

TEMPLATE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR MULTI-COMMODITY PROCESSING PLANTS

Name of Subproject: _____ Location: _____

Implementing LGU: _____ FCA/FCA Cluster: _____ Contact No.:_____

Type of Commodity: _____ Type of Processing Plant: (e.g., dehydrated products, powder, puree, juice; fiber processing) _____

New or Expansion? ☐ New ☐ Expansion:

Production Capacity: _____

Utility Requirement: Water: _____m^3 Source of Water: _____

Electricity: _____kWH Source of Electricity: _____

Back-up Power Supply (capacity): _____

Total Land Area: _____ m^2 Building Floor Area: _____m^2

Other Buildings in the Plant Premises: ☐ Manufacturing plant ☐ Storage/warehouse ☐ Office Others: _____

Estimated Number of Beneficiaries (gender disaggregate): _____

Estimated Number of IP Beneficiaries (gender disaggregate): _____

Estimated Total Cost: _____

Check whichever is applicable to the subproject:

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
A. Business Planning				
1. Land ownership of the subproject location ☐ Private individuals ☐ Cooperative ☐ Government	☐ Conduct consultations with Project Affected Persons (PAPs) to determine entitlements, just compensation or voluntary donation/waiver. ☐ Submit site acquisition documents: o Deed of Donation o Deed of Sale o o Deed of Usufruct Agreement with Government	☐ Land title(s) ☐ ROW acquisition documents (Forms L1 and L2) ☐ Land Title with Deed of Donation ☐ Deed of Sale ☐ ☐ Deed of Usufruct Agreement with Government ☐ Notarized duly-signed agreement	Include cost of site acquisition in overall subproject cost.	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ LGU to facilitate annotations of the land titles. ☐ For land acquisition by compensation, LGU to ensure that just compensation is agreed by both parties (LGU and PAPs). ☐ For lease of land, FCA to ensure acceptable terms as determined by the Project.	between the PAPs and LGU for compensation of their properties and proof of compensation ☐ Contract of lease with option to buy		
3. Land conversion / inconsistency with approved land use plan of the city/municipality Current land use within 1 km radius (as per zoning ordinance) ☐ Residential ☐ Commercial ☐ Institutional ☐ Industrial ☐ Agricultural ☐ Recreational ☐ Protected area ☐ Others: _____	☐ Ensure consistency with land use plan of municipality/city ☐ Secure proof of land use compatibility from municipality/city ☐ Acquisition of DAR Conversion Order ☐ LGU Reclassification	☐ Zoning Clearance ☐ Locational Clearance ☐ SB Resolution on Reclassification ☐ DAR Conversion Order	Include in overall cost of subproject	LGU/FCA/FCA Cluster
4. The subproject will encroach on buffer zone of declared protected area.	☐ Secure PAMB Resolution ☐ Secure PAMB Clearance ☐ Prepare the Comprehensive Development and Management Plan and Rehabilitation Plan as required by the Special Use Agreement in Protected Area (SAPA) application.	☐ PAMB Resolution ☐ PAMB Clearance ☐ SAPA ☐ Biodiversity Management Plan ☐ Ordinance on Protection and Management	All costs attendant to implementing the mitigation measures will be included in the overall subproject cost	LGU/FC/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Prepare an Ordinance on Management and Protection			
5. The subproject will traverse/encroach on: o mangrove forest o secondary forests o ecologically significant surface water, marshlands, or wetlands	☐ Prohibit cutting of mangrove forest ☐ Secure Forest Land Use Agreement (FLAg) from DENR for forest areas ☐ Design vegetated buffer zones and habitat corridors ☐ Study on the aquatic fresh/marine environment and geotechnical study ☐ Include in the subproject, design biodiversity restoration, offsets, or creation of ecologically comparable areas for biodiversity	☐ FLAg ☐ Design of vegetated buffer zones ☐ Design of biodiversity restoration, offsets ☐ Biodiversity Management Plan ☐ Ordinance on Protection and Management	Include in overall cost of subproject	LGU/FCA/FCA Cluster
6. Presence of natural, geologic and climate hazards in the subproject area that may affect safety and vulnerability of the enterprise and its structures.	☐ Validate information generated from CRVA, e-VSA and georisk mapping from site-specific information on occurrences of flooding, soil erosion, landslides, liquefaction, storm surge, tsunami, earthquakes, etc. ☐ Secure clearance from DENR/PHIVOLCS/PAGASA or any equivalent body if in a disaster or hazard prone area ☐ Design structures in accordance with the standards of the National Building Code and Structural Code of the Philippines ☐ Adopt climate resilient measures: _____ ☐ Adopt climate mitigation measures: _____	☐ DED/POW that includes the design of climate resilient and climate adaptation/mitigation measures ☐ Hazard analysis from DENR/PHIVOLCS/PAGASA or any equivalent body ☐ Clearance from DENR/PHIVOLCS/ PAGASA or any equivalent body	Include in overall cost of subproject	LGU/FCA/FCA Cluster
2. Presence of IP/ICC in the influence area	☐ Conduct FPIC	☐ Document of FPIC among IP communities	Include cost of FPIC, consultations, and other	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ The site is inside an ancestral domain (AD) or will traverse an AD ☐ The site is not inside an AD nor will it traverse an AD but there are IP/ICC in the area. ☐ The site is not in an AD and that there are no IP/ICC in the area as per LGU records and onsite validation.	☐ Prepare and implement IP Plan ☐ Secure certification from the Tribal Chieftain expressing support to the subproject.	☐ Evidence of IP community support (resolution, endorsement letter, etc.) ☐ Certificate of Pre-condition from NCIP ☐ Certificate of Non-Overlap from NCIP ☐ Approved IP Plan	mitigation and monitoring parameters in overall subproject cost.	
7. cutting of trees ☐ Coconut trees ☐ Fruit-bearing trees ☐ Timber Trees ☐ Planted Trees ☐ Naturally growing trees	☐ Avoid tree cutting to the extent possible. ☐ Conserve affected trees through earth balling, transfer and replanting ☐ Implement tree replacement and replanting in accordance with DENR requirements ☐ Conduct consultation with PAPs and secure permission from owner ☐ Secure Tree Cutting Permit prior to start of works ☐ Secure Tree Earth balling Permit prior to start of works.	☐ Tree Cutting Permit ☐ Tree Earth balling Permit ☐ PCA Permit (for coconut trees) ☐ Signed Compensation Agreement with owner/s of tree(s) ☐ Waiver of Rights / Quit Claim (if trees in private land will be donated; refer to Form L1) ☐ Proof of Compensation (for affected trees in private land) ☐ Tree Replacement Plan	Include in overall subproject cost	LGU/FCA/FCA Cluster
8. Competition with community in use of water resources	☐ Adopt in the subproject design, water resource efficiency and conservation measures through recycling of water ☐ Avoid disruption of traditional water uses in the community ☐ Identification of an alternative source of water for operations	☐ POW/DED incorporating water resource efficiency and conservation	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
9. Competition with community in use of electricity	☐ Integrate energy efficiency measures such as utilization of renewable energy (solar, wind, etc.) Specify: _____ ☐ Identification of an alternative source of electricity	☐ POW/DED incorporating energy efficiency and conservation plan	Include in overall subproject cost	FCA/FCA Cluster
10. Generation of wastewater from washing of raw materials and equipment that could cause water pollution to receiving water body.	☐ Integrate in subproject design. the provision of wastewater treatment facility that will meet the Effluent Standards prescribed by the DENR Specify capacity: _____m^3 ☐ Include monitoring of effluent quality to ensure compliance of wastewater discharge with the Effluent Standards.	☐ POW/DED incorporating treatment of wastewater to meet the Effluent Standards ☐ Operations and Maintenance Plan incorporating monitoring of the effluent quality	Include in overall subproject cost	FCA/FCA Cluster
11. Generation of air pollution ☐ from operation of generators, boilers, and other air pollution source installations ☐ Odor from processing of organic raw materials	☐ Integrate air pollution control in pollution sources. Specifically: _____ ☐ Include in the O&M Plan the monitoring of air emission from stationary sources of air pollution ☐ Integrate cleaner production and good housekeeping practices to manage and minimize odor	☐ Operations Manual incorporating cleaner production, waste minimization, and air/odor pollution control measures ☐ Operations and Maintenance Plan incorporating monitoring of the air emission quality	Include in overall subproject cost	FCA/FCA Cluster
12. Generation of wastes from processing plant ☐ Biodegradable wastes (fruit/crop peelings, etc.) ☐ Non-biodegradable wastes (empty containers, packaging materials, etc.) ☐ Hazardous wastes (busted lamps, waste electronic	☐ Integrate cleaner production approaches such as reuse of crop/fruit peelings, composting, etc. ☐ Integrate waste management procedure with procedures for waste minimization, segregation and proper disposal ☐ Commission the services of third-party hazardous waste transporter and	☐ Operations Manual incorporating waste management procedure ☐ Composting Site Plan and procedure	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
equipment, batteries, oily rags, etc.)	treater with licensed from DENR			
B. Construction Phase				
13. Soil erosion from excavation, siltation due to washing of construction equipment and stockpiles of materials ☐ Activities will necessitate earthmoving from excavation activities ☐ Washing of construction vehicles including cement mixers may occur at the site and cause soil and cement runoff. ☐ Stockpiles of materials may cause sediment runoff.	☐ Conduct excavation and earthmoving during dry months ☐ Locate stockpile of soil, aggregates and sand away from drainage canals and waterways ☐ Install silt traps, sedimentation ponds, and other sediment control measures ☐ Prohibit washing of cement mixers and other construction vehicles at the site ☐ Conduct daily cleaning and sweeping of the construction site and periodically remove soils, stones, and wastes from gutters, drainage canals and ditches ☐ During rain events, check the drainage system to see if these are blocked. Remove blocked materials. ☐ Hauling of excess excavated soil/incompatible soil for filling to designated disposal location in compliance to DPWH DO 168	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ MOA with private land owner for the disposal of excess soil	Cost of mitigation measures to be shouldered by the contractor	Contractor
14. Contamination of surface water and groundwater with oil/grease	☐ Proper handling and disposal of waste oil, grease, diesel and gasoline ☐ Preparation of hazard waste management procedure ☐ Conduct of training on oil spill response	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Waste Management procedure ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
15. Dust from construction activities, materials stockpiles, and movement of construction vehicles	☐ Conduct watering and dust abatement measures during dry and windy conditions ☐ Require workers to wear particle mask ☐ Keep stockpile of aggregate and sand materials covered with well-fixed plastic sheeting, tarpaulins or other geotextiles to avoid suspension or dispersal of fine soil particles during dry and windy days. ☐ Equip concrete mixing equipment with dust shrouds. ☐ Periodically clean-up debris at the work site. ☐ Prohibit idling of construction vehicles while unloading materials at the site. ☐ Impose speed limit on construction vehicles particularly when passing communities, residential or commercial areas or sensitive areas	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
16. Noise and vibration from construction activities and movement of materials ☐ Subproject is located near community areas with sensitive receptors such as schools, hospitals, and residential areas. ☐ Subproject will require concrete chipping and drilling activities.	☐ Barricade the construction area and shield sensitive receptors. ☐ Implement construction activities in consideration to time, duration, and scale to optimize the use of construction equipment, machineries, and vehicles in accordance with the noise emission standard. ☐ Strictly prohibit concrete chipping and drilling activities beyond 8:00PM particularly in areas near sensitive receptors and residential areas. ☐ Deliver fabricated steel plates and cut/bend reinforcing steel to desired	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	size to minimize cutting activities onsite. ☐ Require workers to wear ear plugs. ☐ Strictly control construction activities close to historical/archaeological sites, if any.			
17. Generation of construction wastes ☐ Biodegradable wastes (e.g. food wastes) ☐ Non-biodegradable wastes (e.g. debris, concrete / soil debris, wood chips) ☐ Recyclable wastes (rebars, wires, nails, etc.) ☐ Hazardous wastes (empty containers of paints and solvents, resins, adhesives and degreasers, oily rags, busted lamps, spent welding electrode sticks/rods, discarded batteries, etc.)	☐ Implement waste segregation and provide separate waste bins for biodegradable and non-biodegradable wastes ☐ Designate an area for recyclable materials such as metal, wires, etc. ☐ Coordinate with the LGU on the regular collection of biodegradable and non-biodegradable wastes. ☐ Coordinate with waste recycler for the disposal of recyclable materials ☐ Commission the services of third-party hazardous waste transporter and treater with license from DENR in the collection and treatment of hazardous wastes. ☐ Prohibit burning of wastes. ☐ Provision of secondary containment for all hazardous wastes	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract	Cost of mitigation measures to be shouldered by the contractor	Contractor
18. Sanitation and domestic sewage from construction camp	☐ Provide clean water and hand-washing facilities at the construction camp ☐ Provide temporary toilet facilities with septic tanks; Locate temporary septic tank more than 25 meters from an existing water supply well or surface water body	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Provide portable toilets (portalets); ensure contents of portalets are regularly collected by the third party portalet provider for safe offsite treatment and disposal. ☐ Ensure that the third-party portalet siphoning service provider has a Discharge Permit from DENR.			
19. Traffic congestion caused by side street parking of construction vehicles	☐ Prohibit prolonged side street parking of construction vehicles ☐ Assign flag persons to direct flow of vehicles ☐ Coordinate with local government and communities about schedule of movement of construction vehicles ☐ Provision of alternate route	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH)	Cost of mitigation measures to be shouldered by the contractor	Contractor
20. Road accidents during construction ☐ Movement of materials delivery trucks ☐ Open excavations and trenches	☐ Implement speed control for delivery trucks ☐ Install warning signages in open excavations and trenches ☐ Provide barricades and lighting at night in construction sites with open excavations ☐ Prohibit entry of unauthorized persons at the construction site ☐ Orient drivers on precautionary measures when passing through community areas and times of day to reduce risk of accidents ☐ Observe extra caution when passing through dangerous routes ☐ Implement limits for trip duration and arranging driver rosters to avoid overtiredness of drivers.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Regular maintenance of vehicles to minimize serious accidents caused by vehicle malfunction. ☐ Provision of sufficient lighting system			
21. Potential damage to existing road due to hauling of materials and movement of construction vehicles	☐ Restoration and repair of existing road by the contractor	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
22. Occupational health and safety risks and hazards ☐ Use of hazardous materials and chemicals ☐ Hazardous working conditions such as trenches, excavations, working in heights or in confined spaces ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19)	☐ Implement an Occupational Safety and Health (OSH) Plan in compliance with the DOLE OSH guidelines. ☐ Designate an onsite Safety Officer duly accredited by DOLE. ☐ Establishment of GRM for workers ☐ Require workers to wear safety gadgets/PPEs such as hard hats, gloves, safety belts, rubber boots, and goggles, appropriate to the task. ☐ Post safety signs/reminders in strategic areas within the construction area. ☐ Provide sufficient lighting at night. ☐ Provide barricades / safety barriers particularly at excavations and stockpiles of aggregates. ☐ Provide first-aid kit at the construction site to ensure immediate medical attention in case of accidents. ☐ Comply with the COVID-19 health and safety guidelines of the Government.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE ☐ LMP and Code of Conduct	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
23. Labor disputes over terms and conditions of employment	☐ Priority hiring of qualified local residents ☐ Set-up a grievance redress mechanism for workers including GRM posters, GRM drop boxes at project site, barangay halls, municipal halls, provincial halls ☐ Assign a Grievance Point Person ☐ Construction will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Functioning GRM for workers ☐ LMP and code of conduct	Cost of mitigation measures to be shouldered by the contractor	LGU PSO/RPCO Contractor
24. Community health and safety risks and hazards ☐ Noise nuisance ☐ Airborne dust ☐ Unsecured construction site	☐ Provide fence or barricade around construction site ☐ Conduct consultations with neighboring communities and Barangay about the project and the schedule of works. ☐ Schedule noisy works during daytime in sites near sensitive receptors ☐ Watering of areas prone to airborne dust during dry season ☐ Install warning signs.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
25. Impacts of labor influx such as: ☐ Exposure of community to communicable diseases (e.g. COVID19) and sexually transmitted diseases (HIV/AIDS) ☐ Misconduct of workers causing tension and peace and order issues in the community due to differences in traditions, culture, religion, ethnicity	☐ Conduct orientation of workers on proper behavior and community values, cultural traditions and practices ☐ Orientation of workers on prevention of COVID-19, HIV/AIDS and other communicable diseases ☐ Prohibit use of dangerous drugs, smoking, and alcohol consumption ☐ Give priority to qualified local laborers in hiring construction workers	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE ☐ GRM records	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Increased criminality in the area ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive			
26. Impacts on cultural properties	☐ Implement chance find procedure in accordance with the requirements of the National Cultural Heritage Act (2009) and Cultural Properties Preservation and Protection Act ☐ Immediately suspend any activities upon discovery of chance find and report to the LGU and RPCO SES focal person	☐ Cultural Heritage Management Plan ☐ Chance Find Procedure	Cost of mitigation measures to be shouldered by the contractor	Contractor
27. Security and conflict risk	☐ Social preparation and meaningful consultations ☐ Proper coordination with relevant authorities ☐ LGUs mandated to ensure and maintain peace and order within their respective areas are to formulate and implement their POPS Plans as per DILG Memorandum Circular No. 2022-118 Guidelines on the Development and Formulation of the Peace and Order and Public Safety Plan (POPS-PLAN) 2023-2025 dated September 19, 2022. POPS Plan should be updated accordingly ☐ evacuation plan in case of insurgency or conflicts as part of POPS Plan	☐ Local Government Unit's (LGUs) Peace and Order and Public Safety Plan (POPS) Plan	Cost of mitigation measures to be shouldered by the LGU	Local Government Unit (LGU)
C. Operation Phase				

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
28. Food safety in processing, preservation, packaging, labelling, and distribution	☐ Ensure compliance with food safety and quality standards of the Bureau Of Agriculture and Fisheries Standards (BAFPS) ☐ Apply HACCP as well as standard procedures on sanitation, Good Manufacturing Practice (GMP, pest control, chemical control, allergen control ☐ Secure Food Safety Clearance ☐ FDA Clearance	☐ Food Safety Clearance	Include in overall subproject cost	FCA/FCA Cluster
29. Generation of wastewater from washing of raw materials and equipment that could cause water pollution of receiving water body.	☐ Monitoring of effluent quality to ensure compliance of wastewater discharge with the Effluent Standards. ☐ Secure Discharge Permit from DENR/MENRE ☐ Re-use of treated wastewater to applicable uses	☐ Monitoring reports indicating results of the effluent quality monitoring ☐ Discharge Permit	Include in overall subproject cost	FCA/FCA Cluster
30. Generation of air pollution ☐ from operation of generators, boilers, and other air pollution source installations ☐ Odor from processing of organic raw materials	☐ Monitoring of air emission from stationary sources of air pollution ☐ Implementation of cleaner production and good housekeeping practices to manage and minimize odor ☐ Secure Permit to Operate air pollution source installations from DENR/MENRE	☐ Monitoring reports indicating results of implementation of cleaner production, waste minimization, and air/odor pollution control measures ☐ Monitoring report of the air emission quality from stationary sources ☐ Permit to Operate for air pollution source installations issued by DENR/MENRE	Include in overall subproject cost	FCA/FCA Cluster
31. Generation of wastes from processing plant ☐ Biodegradable wastes (fruit/crop peelings, etc.) ☐ Non-biodegradable wastes (empty containers, packaging materials, etc.)	☐ Implement cleaner production approaches such as reuse of crop/fruit peelings without compromising food safety, composting, etc. ☐ Implement waste management procedure including waste minimization, segregation and proper	☐ Monitoring report indicating the implementation of waste management and resource efficiency measures ☐ Hazardous Waste Generator ID ☐ Waste Management Procedure as part of the ESA and Contractor's ESMP	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Hazardous wastes (busted lamps, waste electronic equipment, batteries, oily rags, etc.)	disposal ☐ Commission the services of third-party hazardous waste transporter and treater with licensed from DENR ☐ Secure Hazardous Waste Generator ID from DENR/MENRE ☐ Provision of secondary containment for liquid and hazardous wastes			
32. Occupational health and safety risks and hazards ☐ Noise and vibration ☐ Equipment malfunction ☐ Use of hazardous materials and chemicals ☐ Hazardous working conditions such as extreme temperature (hot/cold), slippery/wet working area ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19) ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Provision of appropriate PPE for workers ☐ Assign a Safety Officer ☐ Assign a Pollution Control Officer ☐ Provide medical services/first-aid kit at the site to ensure immediate medical attention in case of accidents. ☐ FCA/FCA clusters shall comply with government health protocols in deployment of workers and continuation of production activities ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Guidelines on Community and Occupational Health and Safety (COSH) as part of the Operations Manual ☐ Monitoring reports ☐ LMP and Code of Conduct	Include in overall subproject cost	FAC/FCA Cluster
33. Conflict between members of the FCA/FCA clusters ☐ Unclear policy on project beneficiary prioritization ☐ Unclear policy on project implementation ☐ Labor disputes over terms and	☐ Conduct consultations with members of the FCA/FCA clusters ☐ Establish the grievance redress mechanism (GRM) including GRM posters, GRM drop boxes at within subproject facilities ☐ Assign a GRM focal/point person	☐ Operation and Management Plan ☐ Appointment of LGU and PSO/RPCO Grievance Point Person/Grievance Officer ☐ Monitoring Reports/Checklist ☐ GRM for workers	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
conditions of employment	☐ Subproject will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.			

Prepared by: _____

Conforme: _____

PPMIU/MPMIU Head

Noted by the local community:

_____

Barangay Captain

ANNEX J-6: ESMP TEMPLATE FOR AQUACULTURE, MARICULTURE, HATCHERIES AND FISHPONDS

Guidance Notes:

This template is designed to manage the environmental and social risks and impacts of aquaculture, mariculture, hatcheries and fishponds. These involve the rearing of aquatic organisms such as fish, molluscs, and crustaceans or the cultivation of aquatic plants for food. The enterprise will be implemented by the proponent local government unit together with Fisherfolks Cooperatives (FCs) or clusters of Fisherfolks Cooperative Associations (FCAs) under the I-REAP component of PRDP Scale-Up. Below are characteristics of these subprojects:

Commodity	Description
Fisheries	□ Fish production facilities ○ hatcheries ○ fishponds ○ mariculture (for mussels, etc.)

The ESMP is prepared following the results of the SES screening in Annex C and the Environmental and Social Assessment (ESA) in the business plan. The ESMP sets out specific plans, including budgets, organization arrangements and responsibilities for social and environmental impact management during project implementation. The ESMP should be specific in its description of the individual mitigation and monitoring measures and the assignment responsibilities to address identified risks and impacts of the subproject. The ESMP contains subplans on resource efficiency (water and energy consumption), protection and conservation of ecosystem, waste management, pollution control, occupational safety and health, and monitoring and reporting plan.

2. **Site and Design Considerations**

[Do not proceed with the subproject preparation including this ESMP unless all items below are confirmed.]

1. The. subproject does not encroach into or traverse any declared strict protection zone of protected area or natural habitat (e.g. primary forest, critical wetlands, endangered species habitat, key biodiversity areas).
2. The subproject does not involve extracting resources such as timber and forest products, mangroves or beach forests, endangered flora and fauna.
3. The subproject will not displace, disfigure or render inoperable/inaccessible any monument or physical structure of known cultural and historical significance.
4. The subproject is not located in an area that is high to extreme risk zones around active volcanoes, fault line, flooding, tsunami, and storm surge

B. Environmental Issues and Mitigation Measures

The issues identified in the ESMP template are based on frequently associated issues in possible encroachment on areas with significant ecosystem value, alteration of natural hydrology, red tide, eutrophication of aquatic environment, sedimentation and water quality issues, transmission/spread of diseases in aquaculture, waste generation, water, air and odor, construction-related issues, worker and community health and safety. Any new environmental and social impacts that will be identified from the SES screening and environmental and social impact assessment will be added in the ESMP together with the appropriate mitigation measures, monitoring indicators, cost, and responsible unit.

Name of Subproject: _____ Location: _____

Implementing LGU: _____ FCA/FCA Cluster: _____ Contact No.:_____

Type of Commodity: _____ Type of Enterprise: (e.g., aquaculture, mariculture, hatchery, fishponds) _____

New or Expansion? ☐ New ☐ Expansion:

Production Capacity: _____

Utility Requirement: Water: _____m^3 Source of Water: _____

Electricity: _____kWH Source of Electricity: _____

Back-up Power Supply (capacity): _____

Total Land Area: _____ m^2 Building Floor Area: _____m^2

Estimated Number of Beneficiaries (gender disaggregate): _____

Estimated Number of IP Beneficiaries (gender disaggregate): _____

Estimated Total Cost: _____

Check whichever is applicable to the subproject:

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
A. Feasibility Study / Business Planning				
1. Land conversion to aquaculture ponds/ inconsistency with approved land use plan of the city/municipality Current land use within 1 km radius (as per zoning ordinance) ☐ Residential ☐ Commercial ☐ Institutional ☐ Industrial ☐ Agricultural ☐ Recreational	☐ Ensure consistency with land use plan of municipality/city ☐ Secure proof of land use compatibility from municipality/city ☐ Comply with the land use conversion process of DAR ☐ Suitability for aquaculture ponds/ fishpond development ☐ LGU Reclassification	☐ Zoning clearance ☐ Locational Clearance ☐ DAR Land Conversion Order ☐ SB Resolution on Reclassification ☐ Fishpond Lease Agreement (FLAs)	Include in overall cost of subproject	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Protected area ☐ Others: _____				
2. The subproject will encroach on buffer zone of declared protected area.	☐ Secure PAMB Resolution ☐ Secure PAMB Clearance ☐ Prepare the Comprehensive Development and Management Plan and Rehabilitation Plan as required by the Special Use Agreement in Protected Area (SAPA) application. ☐ Prepare an Ordinance on Management and Protection	☐ PAMB Resolution ☐ PAMB Clearance ☐ SAPA ☐ Biodiversity Management Plan ☐ LGU Ordinance on Protection and Management	All costs attendant to implementing the mitigation measures will be included in the overall subproject cost	LGU/FC/FCA Cluster
3. The subproject will traverse/encroach on: o mangrove forest o ecologically significant surface water, marshlands, or wetlands o DA/BFAR's marine protected area	☐ Prohibit cutting of mangrove forest ☐ Design vegetated buffer zones and habitat corridors ☐ Maintain at least 50-meter buffer between fishponds and the open sea for coastal protection ☐ Mudflats on coastal areas covered under natural resource management shall be planted with mangrove species ☐ Include in the subproject, design biodiversity restoration, offsets, or creation of ecologically comparable areas for biodiversity ☐ Secure an aquaculture, sea ranching and sea farming permit/license to operate from DA/BFAR ☐ Study on the aquatic fresh/marine environment	☐ DED/POW includes the mitigation measures ☐ Water Use Permit from DA/BFAR ☐ Design of vegetated buffer zones ☐ Design of biodiversity restoration, offsets ☐ LGU Ordinance on Protection and Management ☐ Inventory of Aquatic resources	Include in overall cost of subproject	LGU/FCA/FCA Cluster DA/BFAR
4. Salinization of agricultural land due to conversion or use for	☐ Design embankments around brackish pond as physical barrier between	☐ DED/POW includes mitigation measures	Include in overall cost of subproject	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
aquaculture	agriculture and aquaculture activities ☐ Provide treatment of saline brackish water			
5. Alteration of natural hydrology and water quality of bays/rivers or wetlands	☐ Consider flooding, rainfall data, storm surges, and high tides in the design of aquaculture ponds ☐ Seek assistance of DA/BFAR on models for potential new sites for mariculture based on carrying capacity ☐ Include in the O&M Plan the conduct of water quality monitoring (e.g. DO, turbidity, temperature, pH)	☐ DED/POW includes mitigation measures ☐ O&M Plan includes monitoring of water quality	Include in overall cost of subproject	LGU/FCA/FCA Cluster
6. Loss of genetic resources due to collection of larvae, fry, or juveniles and intensive mariculture affecting population of phytoplankton	☐ Provide barriers to prevent escape of species from pond-based systems such as screens/mesh, fish-proof strainer ☐ As part of O&M Plan, conduct breeding of stock material in captivity to manage threat to ecosystem biodiversity from practice of capturing female eggs, fry, juveniles and fingerlings.	☐ DED/POW includes mitigation measures ☐ O&M Plan includes conduct of breeding of stock material	Include in overall cost of subproject	LGU/FCA/FCA Cluster
7. Presence of natural, geologic and climate hazards in the subproject area that may affect safety and vulnerability of the enterprise and its structures.	☐ Validate information generated from CRVA, e-VSA and georisk mapping from site-specific information on occurrences of flooding, soil erosion, landslides, liquefaction, storm surge, tsunami, earthquakes, etc. ☐ Secure clearance from DENR/PHIVOLCS/PAGASA or any equivalent body if in a disaster or hazard prone area ☐ Adopt climate resilient measures:	☐ DED/POW that includes the design of climate resilient and climate adaptation/mitigation measures ☐ Clearance from DENR/PHIVOLCS/ PAGASA or any equivalent body ☐ Hazard analysis from DENR/PHIVOLCS/PAGASA or any equivalent body	Include in overall cost of subproject	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	_____ ☐ Adopt climate mitigation measures: _____			
8. Presence of IP/ICC in the influence area ☐ The site is inside an ancestral domain (AD) or will traverse an AD ☐ The site is not inside an AD nor will it traverse an AD but there are IP/ICC in the area. ☐ The site is not in an AD and that there are no IP/ICC in the area as per LGU records and onsite validation.	☐ Conduct FPIC ☐ Prepare and implement IP Plan ☐ Secure certification from the Tribal Chieftain expressing support to the subproject.	☐ Document of FPIC among IP communities ☐ Evidence of IP community support (resolution, endorsement letter, etc.) ☐ Certificate of Pre-condition from NCIP ☐ Certificate of Non-Overlap from NCIP ☐ Approved IP Plan	Include cost of FPIC, consultations, and other mitigation and monitoring parameters in overall subproject cost.	LGU/FCA/FCA Cluster
9. cutting of trees ☐ Coconut trees ☐ Fruit-bearing trees ☐ Timber trees ☐ Planted Trees ☐ Naturally growing trees	☐ Avoid tree cutting to the extent possible. ☐ Conserve affected trees through earth balling, transfer and replanting ☐ Implement tree replacement and replanting in accordance with DENR requirements ☐ Conduct consultation with PAPs and secure permission from owner ☐ Secure Tree Cutting Permit prior to start of works ☐ Secure Tree Earth balling Permit prior to start of works.	☐ Tree Cutting Permit ☐ Tree Earth balling Permit ☐ PCA Permit (for coconut trees) ☐ Signed Compensation Agreement with owner/s of tree(s) ☐ Waiver of Rights / Quit Claim (if trees in private land will be donated; refer to Form L1) ☐ Proof of Compensation (for affected trees in private land) ☐ Tree Replacement Plan	Include in overall subproject cost	LGU/FCA/FCA Cluster
10. Competition with community in use of water resources	☐ Adopt in the subproject design, water resource efficiency and conservation measures through recycling of water ☐ Avoid disruption of traditional water	☐ POW/DED incorporating water resource efficiency and conservation ☐ Operations and Maintenance Plan	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	uses in the community ☐ Identification of an alternative source of water for operations			
11. Blocking of movement of boats because of construction of ponds	☐ Consult fisherfolks and boatmen regarding the design and location of the ponds to avoid blocking of boat navigation.	☐ POW/DED incorporating concerns and suggestions from fisherfolks and boatmen	Include in overall subproject cost	FCA/FCA Cluster
B. Construction Phase				
12. Soil erosion from construction of ponds ☐ Bottom sediments from the waterbody will be disturbed causing sedimentation ☐ Stockpiles of materials may cause sediment runoff.	☐ Conduct excavation and earthmoving during dry months ☐ Locate stockpile of soil, aggregates and sand away from drainage canals and waterways ☐ Provide silt curtain during pond construction. ☐ Install silt traps, sedimentation ponds, and other sediment control measures ☐ During rain events, check the drainage system to see if these are blocked. Remove blocked materials. ☐ Hauling of excess excavated soil/incompatible soil for filling to designated disposal location in compliance to DPWH DO 168	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract	Cost of mitigation measures to be shouldered by the contractor	Contractor
13. Contamination of surface water and groundwater with oil/grease	☐ Proper handling and disposal of waste oil, grease, diesel and gasoline ☐ Preparation of hazard waste management procedure as part of the ESA and ESMP ☐ Conduct of training on oil spill response	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Waste Management Procedure as part of the ESA and ESMP ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
14. Dust from construction activities, materials stockpiles, and movement of construction vehicles	☐ Conduct watering and dust abatement measures during dry and windy conditions ☐ Require workers to wear particle mask ☐ Keep stockpile of aggregate and sand materials covered with well-fixed plastic sheeting, tarpaulins or other geotextiles to avoid suspension or dispersal of fine soil particles during dry and windy days. ☐ Equip concrete mixing equipment with dust shrouds. ☐ Periodically clean-up debris at the work site. ☐ Prohibit idling of construction vehicles while unloading materials at the site. ☐ Impose speed limit on construction vehicles particularly when passing communities, residential or commercial areas or sensitive areas	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
15. Generation of construction wastes ☐ Biodegradable wastes (e.g. food wastes) ☐ Non-biodegradable wastes (e.g. debris, concrete / soil debris, wood chips) ☐ Recyclable wastes (rebars, wires, nails, etc.) ☐ Hazardous wastes (empty containers of paints and solvents, resins, adhesives and degreasers, oily rags, busted lamps, spent welding electrode	☐ Implement waste segregation and provide separate waste bins for biodegradable and non-biodegradable wastes ☐ Designate an area for recyclable materials such as metal, wires, etc. ☐ Coordinate with the LGU on the regular collection of biodegradable and non-biodegradable wastes. ☐ Coordinate with waste recycler for the disposal of recyclable materials ☐ Commission the services of third-party hazardous waste transporter and treater with license from DENR in the	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
sticks/rods, discarded batteries, etc.)	collection and treatment of hazardous wastes. ☐ Prohibit burning of wastes. ☐ Provision of secondary containment for liquid hazardous wastes			
16. Sanitation and domestic sewage from construction camp	☐ Provide clean water and hand-washing facilities at the construction camp ☐ Provide temporary toilet facilities with septic tanks; Locate temporary septic tank more than 25 meters from an existing water supply well or surface water body ☐ Provide portable toilets (portalets); ensure contents of portalets are regularly collected by the third party portalet provider for safe offsite treatment and disposal. ☐ Ensure that the third-party portalet provider has a Discharge Permit from DENR.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
17. Traffic congestion caused by side street parking of construction vehicles	☐ Prohibit prolonged side street parking of construction vehicles ☐ Assign flag persons to direct flow of vehicles ☐ Coordinate with local government and communities about schedule of movement of construction vehicles	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH)	Cost of mitigation measures to be shouldered by the contractor	Contractor
18. Road accidents during construction	☐ Implement speed control for delivery trucks ☐ Install warning signages ☐ Provide barricades and lighting at night in construction sites ☐ Prohibit entry of unauthorized persons at the construction site	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Orient drivers on precautionary measures when passing through community areas and times of day to reduce risk of accidents ☐ Observe extra caution when passing through dangerous routes ☐ Implement limits for trip duration and arranging driver rosters to avoid overtiredness of drivers. ☐ Regular maintenance of vehicles to minimize serious accidents caused by vehicle malfunction. ☐ Provision of sufficient lighting system	Program (CSHP) by DOLE		
19. Potential damage to existing road due to hauling of materials and movement of construction vehicles	☐ Restoration and repair of existing road by the contractor	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
20. Occupational health and safety risks and hazards ☐ Hazardous working conditions such as trenches, excavations, working in water ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19)	☐ Implement an Occupational Safety and Health (OSH) Plan in compliance with the DOLE OSH guidelines. ☐ Designate an onsite Safety Officer duly accredited by DOLE. ☐ Establishment of GRM for workers ☐ Require workers to wear safety gadgets/PPEs such as hard hats, gloves, safety belts, rubber boots, and goggles, appropriate to the task. ☐ Post safety signs/reminders in strategic areas within the construction area.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Approved CHSP by DOLE ☐ LMP and Code of Conduct	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Provide sufficient lighting at night. ☐ Provide barricades / safety barriers particularly at excavations and stockpiles of aggregates. ☐ Provide first-aid kit at the construction site to ensure immediate medical attention in case of accidents. ☐ Comply with the COVID-19 health and safety guidelines of the Government.			
21. Labor disputes over terms and conditions of employment	☐ Priority hiring of qualified local residents ☐ Set-up a grievance redress mechanism for workers including GRM posters, GRM drop boxes at project site ☐ Assign a Grievance Point Person ☐ Construction will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Functioning GRM for workers ☐ LMP and code of conduct	Cost of mitigation measures to be shouldered by the contractor	LGU PSO/RPCO Contractor
22. Community health and safety risks and hazards ☐ Noise nuisance ☐ Airborne dust ☐ Unsecured construction site	☐ Provide fence or barricade around construction site ☐ Conduct consultations with neighboring communities and Barangay about the project and the schedule of works. ☐ Schedule noisy works during daytime in sites near sensitive receptors ☐ Watering of areas prone to airborne dust during dry season ☐ Install warning signs.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
23. Impacts of labor influx such as: ☐ Exposure of community to communicable diseases (e.g. COVID19) and sexually	☐ Conduct orientation of workers on proper behavior and community values, cultural traditions and practices	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
transmitted diseases (HIV/AIDS) ☐ Misconduct of workers causing tension and peace and order issues in the community due to differences in traditions, culture, religion, ethnicity ☐ Increased criminality in the area ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Orientation of workers on prevention of COVID-19, HIV/AIDS and other communicable diseases ☐ Prohibit use of dangerous drugs, smoking, and alcohol consumption ☐ Give priority to qualified local laborers in hiring construction workers ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Community and Occupational Safety and Health Plan (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE ☐ GRM records		
24. Impacts on cultural properties	☐ Implement chance find procedure in accordance with the requirements of the National Cultural Heritage Act (2009) and Cultural Properties Preservation and Protection Act ☐ Immediately suspend any activities upon discovery of chance find and report to the LGU and RPCO SES focal person	☐ Cultural Heritage Management Plan ☐ Chance Find Procedure	Cost of mitigation measures to be shouldered by the contractor	Contractor
25. Security and conflict risk	☐ Social preparation and meaningful consultations ☐ Proper coordination with relevant authorities ☐ LGUs mandated to ensure and maintain peace and order within their respective areas are to formulate and implement their POPS Plans as per DILG Memorandum Circular No. 2022-118 Guidelines on the Development and Formulation of the Peace and Order and Public Safety Plan (POPS-PLAN) 2023-2025 dated September 19,	☐ Local Government Unit's (LGUs) Peace and Order and Public Safety Plan (POPS) Plan	Cost of mitigation measures to be shouldered by the LGU	Local Government Unit (LGU)

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	2022. POPS Plan should be updated accordingly ☐ evacuation plan in case of insurgency or conflicts as part of POPS Plan			
C. Operation Phase				
26. Accumulation of bio-sediments at fishpond bed due to intensive fishery activities resulting to proliferation of new organisms and algal bloom	☐ Consider carrying capacity of the water body ☐ Provide enough distance for the installation of the water breeding spaces ☐ Conduct bio-sediments clean-up through bottom suction and treat the slurry collected sediments by drying ☐ Monitor water quality in coordination with DA/BFAR ☐ Secure Food Safety Clearance	☐ O&M Plan ☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster
27. Eutrophication due to feeding process ☐ Unconsumed aquaculture feeds, fish wastes, organic matter, and excess nutrients in the fishpond environment could result to eutrophication ☐ Fish diets, artificial feeds, may favor other bottom dwelling organism	☐ Reduction of feeds and/or use better feed alternatives ☐ Prevent discharges of feeds, fish wastes, organic matter and excess nutrients in open water using semi-confined and confined facility	☐ O&M Plan ☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster
28. Introduction of new fish and invasive marine species may cause harm to local fisheries and/or cause loss of local fish varieties.	☐ Consult DA/BFAR and LGU before introducing new species ☐ Careful section of aquaculture site by avoiding sensitive areas, i.e. coral reefs, mangrove forest, and reproductive areas for native marine species	☐ O&M Plan ☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster DA/BFAR

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
29. Use of antibiotics, pesticides and other chemical products to prevent spread of diseases/parasites may affect ecosystem	☐ Implement biological security guidelines in the aquaculture site ☐ Avoid use of chemicals that can adversely harm the marine ecosystem ☐ Conduct regular monitoring in coordination with DA/BFAR ☐ Avoid over population of aquacultures to avert depletion of dissolved oxygen (DO) ☐ Provide aerators for DO deficiencies ☐ Consider confinement or semi-confinement of the aquaculture facilities.	☐ O&M Plan ☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster
30. Degradation of water quality	☐ Monitoring of water quality in terms of DO, BOD, SS, among others, in coordination with DA/BFAR ☐ Ensure that the capacity of the ponds is within the holding capacity of water body.	☐ Monitoring reports indicating results of the water quality monitoring	Include in overall subproject cost	FCA/FCA Cluster DA/BFAR
31. Contamination of surface water and groundwater with oil/grease	☐ Inclusion of an emergency response for oil spill in the OM ☐ Conduct of training on oil spill response	☐ Operations and Maintenance Plan	Cost of mitigation measures to be shouldered by the contractor	FCA/FCA Cluster
32. Red tide infestation may affect mariculture (i.e. mussels, oysters) and endanger the health of the general public who will consume these.	☐ In coordination with DA/BFAR and LGU, report and monitor red tide infestation in the area ☐ Identify environmental factors or indicators that will activate red tide in the marine environment ☐ Immediately report to the LGU, DA/BFAR so that Early Warning and advisories are issued against	☐ O&M Plan ☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster LGU DA/BFAR

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	consumption of suspected marine products with red tide toxins.			
33. Generation of odor ☐ From discarded marine products ☐ Decomposing marine products	☐ Properly dispose the rejected yields to avoid decomposition and pungent odor and prevent proliferation of rodents, flies	☐ O&M Plan ☐ Waste Management Procedures ☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster
34. Occupational health and safety risks and hazards ☐ Hazardous working conditions such as extreme temperature (hot/cold), working in water ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19) ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Provision of appropriate PPE for workers ☐ Assign a Safety Officer ☐ Assign a Pollution Control Officer ☐ Provide medical services/first-aid kit at the site to ensure immediate medical attention in case of accidents. ☐ FCA/FCA clusters shall comply with government health protocols in deployment of workers and continuation of production activities in line with the COSH ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Monitoring reports ☐ LMP and Code of Conduct	Include in overall subproject cost	FAC/FCA Cluster
35. Conflict between members of the FCA/FCA clusters ☐ Unclear policy on project beneficiary prioritization ☐ Unclear policy on project implementation ☐ Labor disputes over terms and conditions of employment	☐ Conduct consultations with members of the FCA/FCA clusters ☐ Establish the grievance redress mechanism (GRM) including GRM posters, GRM drop boxes within subproject facilities ☐ Assign a GRM focal/point person ☐ Subproject will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Operation and Management Plan ☐ Appointment of LGU and PSO/RPCO Grievance Point Person/Grievance Officer ☐ Monitoring Reports ☐ GRM for workers	Cost of mitigation measures to be shouldered by the contractor	Contractor

Prepared by: _____

Conforme: _____

PPMIU/MPMIU Head

Noted by the local community: _____

Barangay Captain

ANNEX J-7: ESMP TEMPLATE FOR SLAUGHTERHOUSES, DRESSING. PLANTS, HATCHERIES, MEAT PROCESSING AND DAIRY PROCESSING

Guidance Notes:

This template is designed to manage the environmental and social risks and impacts of slaughterhouses, dressing plants, hatcheries, meat processing and dairy processing. Slaughterhouses and meat processing are enterprises involved reception of animals until the carcasses are ready for sale or further processing. Dressing plants and hatcheries are involved in the processing of chickens and other poultry products from reception of live birds, slaughter, evisceration, and rendering. Dairy processing enterprises are involved in the reception, storage, and commercial processing of raw milk and dairy products. These are small to large-scale facilities implemented by the proponent local government unit under I-BUILD and together with Farmers Cooperatives (FCs) or clusters of Farmers Cooperative Associations (FCAs) under the I-REAP component of PRDP Scale-Up. Below are characteristics of these subprojects:

Subproject Type	Description
Value chain rural infrastructure	Public use managed by LGUs: ● Slaughterhouses ● Dressing plants
Livestock and poultry	Managed by FCA/FCA Clusters: ● Meat processing plants ● Dairy processing plants/Centers with testing facilities

The ESMP is prepared following the results of the SES screening in Annex C and the Environmental and Social Assessment (ESA) in the business plan and feasibility study. The ESMP sets out specific plans, including budgets, organization arrangements and responsibilities for social and environmental impact management during project implementation. The ESMP should be specific in its description of the individual mitigation and monitoring measures and the assignment responsibilities to address identified risks and impacts of the subproject. The ESMP contains subplans on raw materials conservation, resource efficiency (water and energy consumption), waste management, pollution control, occupational safety and health, and monitoring and reporting plan.

2. **Site and Design Considerations**

[Do not proceed with the subproject preparation including this ESMP unless all items below are confirmed.]

1. The. subproject does not encroach into or traverse any declared strict protection zone of protected area or natural habitat (e.g. primary forest, critical wetlands, endangered species habitat, key biodiversity areas).
2. The subproject will not displace, disfigure or render inoperable/inaccessible any monument or physical structure of known cultural and historical significance.
3. The subproject is not located in an area with high to extreme risk zones around active volcanoes and fault lines

B. Environmental Issues and Mitigation Measures

The issues identified in the ESMP template are based on frequently associated issues in waste generation, water, air and odor from processing plants, possible encroachment on areas with significant ecosystem value, ancestral domains, construction-related issues, worker and community health and safety. Any new environmental and social impacts that will be identified from the SES screening and

environmental and social impact assessment will be added in the ESMP together with the appropriate mitigation measures, monitoring indicators, cost, and responsible unit.

TEMPLATE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR SLAUGHTERHOUSES, DRESSING PLANTS, HATCHERIES, MEAT PROCESSING AND DAIRY PROCESSING

Name of Subproject: _____ Location: _____

Implementing LGU: _____ FCA/FCA Cluster: _____ Contact No.:_____

Type of Commodity: _____ Type of Processing Plant: (e.g., slaughterhouse, dressing plant, hatchery, meat processing, dairy processing) _____

New or Expansion? ☐ New ☐ Expansion:

Production Capacity: _____

Utility Requirement: Water: _____m^3 Source of Water: _____

Electricity: _____kWH Source of Electricity: _____

Back-up Power Supply (capacity): _____

Total Land Area: _____ m^2 Building Floor Area: _____m^2

Other Buildings in the Plant Premises: ☐ Manufacturing plant ☐ Storage/warehouse ☐ Office Others: _____

Estimated Number of Beneficiaries (gender disaggregate): _____

Estimated Number of IP Beneficiaries (gender disaggregate): _____

Estimated Total Cost: _____

Check whichever is applicable to the subproject:

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
A. Feasibility Study / Business Planning				
1. Land ownership for the subproject location ☐ Private individuals ☐ Cooperative ☐ Government	☐ Conduct consultations with Project Affected Persons (PAPs) to determine entitlements, just compensation or voluntary donation/waiver. ☐ Submit site acquisition documents: o Deed of Donation o Deed of Sale o Deed of Usufruct Agreement with Government	☐ Land title(s) ☐ ROW acquisition documents (Forms L1 and L2) ☐ Land Title with Deed of Donation ☐ Deed of Sale ☐ Deed of Usufruct Agreement with Government ☐ Notarized duly-signed agreement	Include cost of site acquisition in overall subproject cost.	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ LGU to facilitate annotations of the land titles. ☐ For land acquisition by compensation, LGU to ensure that just compensation is agreed by both parties (LGU and PAPs). ☐ For lease of land, LGU to ensure acceptable terms as determined by the Project.	between the PAPs and LGU for compensation of their properties and proof of compensation ☐ Contract of lease with option to buy		
3. Land conversion / inconsistency with approved land use plan of the city/municipality Current land use within 1 km radius (as per zoning ordinance) ☐ Residential ☐ Commercial ☐ Institutional ☐ Industrial ☐ Agricultural ☐ Recreational ☐ Protected area ☐ Others: _____	☐ Ensure consistency with land use plan of municipality/city ☐ Secure proof of land use compatibility from municipality/city ☐ Acquisition of DAR Conversion Order ☐ LGU Reclassification	☐ Zoning Clearance ☐ Locational Clearance ☐ SB Resolution on Reclassification ☐ DAR Conversion Order	Include in overall cost of subproject	LGU/FCA/FCA Cluster
4. The subproject will encroach on buffer zone of declared protected area.	☐ Secure PAMB Resolution ☐ Secure PAMB Clearance ☐ Prepare the Comprehensive Development and Management Plan and Rehabilitation Plan as required by the Special Use Agreement in Protected Area (SAPA) application. ☐ Prepare an Ordinance on Management	☐ PAMB Resolution ☐ PAMB Clearance ☐ SAPA ☐ Biodiversity Management Plan ☐ Ordinance on Protection and Management	All costs attendant to implementing the mitigation measures will be included in the overall subproject cost	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	and Protection			
5. The subproject will traverse/encroach on: ○ mangrove forest ○ secondary forests ○ ecologically significant surface water, marshlands, or wetlands	☐ Prohibit cutting of mangrove forest ☐ Secure Forest Land Use Agreement (FLAg) from DENR for forest areas ☐ Design vegetated buffer zones and habitat corridors ☐ Study on the aquatic fresh/marine environment and geotechnical study ☐ Include in the subproject, design biodiversity restoration, offsets, or creation of ecologically comparable areas for biodiversity	☐ FLAg ☐ Design of vegetated buffer zones ☐ Design of biodiversity restoration, offsets ☐ Inventory of aquatic resources	Include in overall cost of subproject	LGU/FCA/FCA Cluster
6. Presence of natural, geologic and climate hazards in the subproject area that may affect safety and vulnerability of the enterprise and its structures.	☐ Validate information generated from CRVA, e-VSA and georisk mapping from site-specific information on occurrences of flooding, soil erosion, landslides, liquefaction, storm surge, tsunami, earthquakes, etc. ☐ Secure clearance from DENR/PHIVOLCS/PAGASA or any equivalent body if in a disaster or hazard prone area ☐ Design structures in accordance with the standards of the National Building Code and Structural Code of the Philippines ☐ Adopt climate resilient measures: _____ ☐ Adopt climate mitigation measures: _____	☐ DED/POW that includes the design of climate resilient and climate adaptation/mitigation measures ☐ Hazard analysis from DENR/PHIVOLCS/PAGASA or any equivalent body ☐ Clearance from DENR/PHIVOLCS/ PAGASA or any equivalent body	Include in overall cost of subproject	LGU/FCA/FCA Cluster
2. Presence of IP/ICC in the influence area ☐ The site is inside an ancestral	☐ Conduct FPIC ☐ Prepare and implement IP Plan	☐ Document of FPIC among IP communities ☐ Evidence of IP community support (resolution, endorsement letter, etc.)	Include cost of FPIC, consultations, and other mitigation and monitoring	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
domain (AD) or will traverse an AD ☐ The site is not inside an AD nor will it traverse an AD but there are IP/ICC in the area. ☐ The site is not in an AD and that there are no IP/ICC in the area as per LGU records and onsite validation.	☐ Secure certification from the Tribal Chieftain expressing support to the subproject.	☐ Certificate of Pre-condition from NCIP ☐ Certificate of Non-Overlap from NCIP ☐ Approved IP Plan	parameters in overall subproject cost.	
7. Disturbance to flora and fauna due to vegetation clearing and cutting of trees ☐ Coconut trees ☐ Fruit-bearing trees ☐ Timber Trees ☐ Planted Trees ☐ Naturally growing trees	☐ Avoid tree cutting to the extent possible. ☐ Conserve affected trees through earth balling, transfer and replanting ☐ Implement tree replacement and replanting in accordance with DENR requirements ☐ Conduct consultation with PAPs and secure permission from owner ☐ Secure Tree Cutting Permit prior to start of works ☐ Secure Tree Earth balling Permit prior to start of works.	☐ Tree Cutting Permit ☐ Tree Earth balling Permit ☐ PCA Permit (for coconut trees) ☐ Signed Compensation Agreement with owner/s of tree(s) ☐ Waiver of Rights / Quit Claim (if trees in private land will be donated; refer to Form L1) ☐ Proof of Compensation (for affected trees in private land) ☐ Tree Replacement Plan	Include in overall subproject cost	LGU/FCA/FCA Cluster
8. Competition with community in use of water resources	☐ Secure Water Permit from NWRB to ensure allocation of water rights ☐ Adopt in the subproject design, water resource efficiency and conservation measures through recycling of water ☐ Avoid disruption of traditional water uses in the community ☐ Identification of an alternative source of water for operations	☐ NWRB Water Permit ☐ POW/DED incorporating water resource efficiency and conservation ☐ Operations and Maintenance Plan	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
9. Competition with community in use of electricity	☐ Integrate energy efficiency measures such as utilization of renewable energy (solar, wind, etc.) Specify: _____	☐ POW/DED incorporating energy efficiency and conservation plan ☐ Operations and Maintenance Plan	Include in overall subproject cost	FCA/FCA Cluster
10. Generation of wastewater from washing of animals and equipment that could cause water pollution of receiving water body.	☐ Integrate in subproject design. the provision of wastewater treatment facility that will meet the Effluent Standards prescribed by the DENR Specify capacity: _____m^3 ☐ Include monitoring of effluent quality to ensure compliance of wastewater discharge with the Effluent Standards.	☐ POW/DED incorporating treatment of wastewater to meet the Effluent Standards ☐ Operations and Maintenance Plan incorporating monitoring of the effluent quality	Include in overall subproject cost	FCA/FCA Cluster
11. Generation of air pollution ☐ from operation of generators, boilers, and other air pollution source installations ☐ odor from processing of animals and carcasses	☐ Integrate air pollution control in pollution sources ☐ Include in the O&M Plan the monitoring of air emission from stationary sources of air pollution ☐ Integrate cleaner production and good housekeeping practices to manage and minimize odor	☐ Operations Manual incorporating cleaner production, waste minimization, and air/odor pollution control measures ☐ Operations and Maintenance Plan incorporating monitoring of the air emission quality	Include in overall subproject cost	FCA/FCA Cluster
12. Use of ozone-depleting substances (ODS) in refrigeration system	☐ Prohibit use of refrigerants subject to international bans and phaseouts consistent with the Montreal Protocol and Kigali Agreement on ODS	☐ Operations Manual	Include in overall subproject cost	LGU
13. Generation of wastes from facilities ☐ Solid organic wastes and. byproducts (animal manure, animal carcass, bedding material, feathers, bones, hair, fats, etc.) ☐ Non-biodegradable wastes (empty containers, packaging	☐ Segregate sick and diseased animals and transported in separate containers for treatment and final disposal in accordance with safety and quarantine procedures ☐ Integrate cleaner production and good housekeeping procedures ☐ Integrate waste management procedure with procedures for waste	☐ Operations Manual incorporating waste management procedure ☐ Operations and Maintenance Plan incorporating food safety procedures, veterinary inspection, HACCP, monitoring of the waste management measures ☐ Composting Site Plan and procedure ☐ DED and Site Development Plan	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
materials, etc.) ☐ Hazardous wastes (busted lamps, waste electronic equipment, batteries, oily rags, etc.) ☐ Sludge from wastewater treatment (fats, oils)	minimization, segregation and proper disposal ☐ Ensure food safety procedures are in place to prevent transmission of diseases from animal to human receptors. ☐ Apply HACCP as well as standard procedures on sanitation, Good Manufacturing Practice (GMP, pest control, chemical control, allergen control ☐ Commission the services of third-party hazardous waste transporter and treater with licensed from DENR ☐ Incorporation of biogas in the subproject facilities and design			
14. Safety and security of the subproject assets and products ☐ Trespassing of animals and intruders in the facilities	☐ Provision of biosafety and biosecurity as part of design to be included in the site development plan ☐ Disinfection of vehicles ☐ Location of Entrance and Exit	☐ Site Development Plan ☐ Subproject Operations and Maintenance Manual	Include in overall subproject cost	FCA/FCA Cluster
B. Construction Phase				
15. Soil erosion from excavation, siltation due to washing of construction equipment and stockpiles of materials ☐ Activities will necessitate earthmoving from excavation activities ☐ Washing of construction vehicles including cement mixers may occur at the site and cause soil and cement	☐ Conduct excavation and earthmoving during dry months ☐ Locate stockpile of soil, aggregates and sand away from drainage canals and waterways ☐ Install silt traps, sedimentation ponds, and other sediment control measures ☐ Prohibit washing of cement mixers and other construction vehicles at the site ☐ Conduct daily cleaning and sweeping of the construction site and	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ MOA with private landowner for the disposal of excess soil	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
runoff. ☐ Stockpiles of materials may cause sediment runoff.	periodically remove soils, stones, and wastes from gutters, drainage canals and ditches ☐ During rain events, check the drainage system to see if these are blocked. Remove blocked materials. ☐ Hauling of excess excavated soil/incompatible soil for filling to designated disposal location in compliance to DPWH DO 168			
16. Contamination of surface water and groundwater with oil/grease	☐ Proper handling and disposal of waste oil, grease, diesel and gasoline ☐ Preparation of hazard waste management procedure as part of the ESA and Contractors ESMP ☐ Conduct of training on oil spill response	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ ESA and Contractor's ESMP	Cost of mitigation measures to be shouldered by the contractor	Contractor
17. Dust from construction activities, materials stockpiles, and movement of construction vehicles	☐ Conduct watering and dust abatement measures during dry and windy conditions ☐ Require workers to wear particle mask ☐ Keep stockpile of aggregate and sand materials covered with well-fixed plastic sheeting, tarpaulins or other geotextiles to avoid suspension or dispersal of fine soil particles during dry and windy days. ☐ Equip concrete mixing equipment with dust shrouds. ☐ Periodically clean-up debris at the work site. ☐ Prohibit idling of construction vehicles while unloading materials at the site.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Impose speed limit on construction vehicles particularly when passing communities, residential or commercial areas or sensitive areas			
18. Noise and vibration from construction activities and movement of materials ☐ Subproject is located near community areas with sensitive receptors such as schools, hospitals, residential areas, and cultural heritage structures ☐ Subproject will require concrete chipping and drilling activities.	☐ Barricade the construction area and shield sensitive receptors. ☐ Strictly prohibit concrete chipping and drilling activities beyond 8:00PM particularly in areas near sensitive receptors and residential areas. ☐ Implement construction activities in consideration to time, duration, and scale to optimize the use of construction equipment, machineries, and vehicles in accordance with the noise emission standard. ☐ Deliver fabricated steel plates and cut/bend reinforcing steel to desired size to minimize cutting activities onsite. ☐ Require workers to wear ear plugs. ☐ Strictly control construction activities close to historical/archaeological sites, if any.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
19. Generation of construction wastes ☐ Biodegradable wastes (e.g. food wastes) ☐ Non-biodegradable wastes (e.g. debris, concrete / soil debris, wood chips) ☐ Recyclable wastes (rebars, wires, nails, etc.)	☐ Implement waste segregation and provide separate waste bins for biodegradable and non-biodegradable wastes ☐ Designate an area for recyclable materials such as metal, wires, etc. ☐ Coordinate with the LGU on the regular collection of biodegradable and non-biodegradable wastes.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Hazardous wastes (empty containers of paints and solvents, resins, adhesives and degreasers, oily rags, busted lamps, spent welding electrode sticks/rods, discarded batteries, etc.)	☐ Coordinate with waste recycler for the disposal of recyclable materials ☐ Commission the services of third-party hazardous waste transporter and treater with license from DENR in the collection and treatment of hazardous wastes. ☐ Prohibit burning of wastes.			
20. Sanitation and domestic sewage from construction camp	☐ Provide clean water and hand-washing facilities at the construction camp ☐ Provide temporary toilet facilities with septic tanks; Locate temporary septic tank more than 25 meters from an existing water supply well or surface water body ☐ Provide portable toilets (portalets); ensure contents of portalets are regularly collected by the third party portalet provider for safe offsite treatment and disposal. ☐ Ensure that third-party portalet provider has a Discharge Permit from DENR. ☐ Provision of secondary containment for liquid hazardous wastes	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Waste Management procedures as part of the ESA and Contractors ESMP ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
21. Traffic congestion caused by side street parking of construction vehicles	☐ Prohibit prolonged side street parking of construction vehicles ☐ Assign flag persons to direct flow of vehicles ☐ Coordinate with local government and communities about schedule of movement of construction vehicles	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH)	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
22. Road accidents during construction ☐ Movement of materials delivery trucks ☐ Open excavations and trenches	☐ Implement speed control for delivery trucks ☐ Install warning signages in open excavations and trenches ☐ Provide barricades and lighting at night in construction sites with open excavations ☐ Prohibit entry of unauthorized persons at the construction site ☐ Orient drivers on precautionary measures when passing through community areas and times of day to reduce risk of accidents ☐ Observe extra caution when passing through dangerous routes ☐ Implement limits for trip duration and arranging driver rosters to avoid overtiredness of drivers. ☐ Regular maintenance of vehicles to minimize serious accidents caused by vehicle malfunction.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
23. Potential damage to existing road due to hauling of materials and movement of construction vehicles	☐ Restoration and repair of existing road by the contractor	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
24. Occupational health and safety risks and hazards ☐ Use of hazardous materials and chemicals	☐ Implement an Occupational Safety and Health (OSH) Plan in compliance with the DOLE OSH guidelines.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Hazardous working conditions such as trenches, excavations, working in heights or in confined spaces ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19)	☐ Designate an onsite Safety Officer duly accredited by DOLE. ☐ Establishment of GRM for workers ☐ Require workers to wear safety gadgets/PPEs such as hard hats, gloves, safety belts, rubber boots, and goggles, appropriate to the task. ☐ Post safety signs/reminders in strategic areas within the construction area. ☐ Provide sufficient lighting at night. ☐ Provide barricades / safety barriers particularly at excavations and stockpiles of aggregates. ☐ Provide first-aid kit at the construction site to ensure immediate medical attention in case of accidents. ☐ Comply with the COVID-19 health and safety guidelines of the Government.	☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Approved CSHP by DOLE ☐ LMP and Code of Conduct		
25. Labor disputes over terms and conditions of employment	☐ Priority hiring of qualified local residents ☐ Set-up a grievance redress mechanism for workers including GRM posters, GRM drop boxes at project site, barangay halls, municipal halls, provincial halls ☐ Assign a Grievance Point Person ☐ Construction will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Functioning GRM for workers ☐ LMP and code of conduct ☐	Cost of mitigation measures to be shouldered by the contractor	LGU PSO/RPCO Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
26. Community health and safety risks and hazards ☐ Noise nuisance ☐ Airborne dust ☐ Unsecured construction site	☐ Provide fence or barricade around construction site ☐ Conduct consultations with neighboring communities and Barangay about the project and the schedule of works. ☐ Schedule noisy works during daytime in sites near sensitive receptors ☐ Watering of areas prone to airborne dust during dry season ☐ Install warning signs.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
27. Impacts of labor influx such as: ☐ Exposure of community to communicable diseases (e.g. COVID19) and sexually transmitted diseases (HIV/AIDS) ☐ Misconduct of workers causing tension and peace and order issues in the community due to differences in traditions, culture, religion, ethnicity ☐ Increased criminality in the area ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Conduct orientation of workers on proper behavior and community values, cultural traditions and practices ☐ Orientation of workers on prevention of COVID-19, HIV/AIDS and other communicable diseases ☐ Prohibit use of dangerous drugs, smoking, and alcohol consumption ☐ Give priority to qualified local laborers in hiring construction workers ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ GRM records ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
28. Waste generation ☐ During cultivation (e.g. empty containers of agro-chemicals) ☐ during post-harvest (e.g. decomposing plant fibers, discarded parts of plants)	☐ Composting of plant waste to produce organic fertilizers ☐ Consider use of plant fibers as animal feed ☐ Use plant fibers and wastes as soil	☐ Monitoring reports ☐ Composting Site Plan and procedure ☐ Operations Manual incorporating waste management procedure	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	additives/enhancers ☐ Prohibit burning of wastes			
29. Impacts on cultural properties	☐ Implement chance find procedure in accordance with the requirements of the National Cultural Heritage Act (2009) and Cultural Properties Preservation and Protection Act ☐ Immediately suspend any activities upon discovery of chance find and report to the LGU and RPCO SES focal person	☐ Cultural Heritage Management Plan ☐ Chance Find Procedure	Cost of mitigation measures to be shouldered by the contractor	Contractor
29. Security and conflict risk	☐ Social preparation and meaningful consultations ☐ Proper coordination with relevant authorities ☐ LGUs mandated to ensure and maintain peace and order within their respective areas are to formulate and implement their POPS Plans as per DILG Memorandum Circular No. 2022-118 Guidelines on the Development and Formulation of the Peace and Order and Public Safety Plan (POPS-PLAN) 2023-2025 dated September 19, 2022. POPS Plan should be updated accordingly ☐ evacuation plan in case of insurgency or conflicts as part of POPS Plan	☐ Local Government Units (LGUs) Peace and Order and Public Safety Plan (POPS) Plan	Cost of mitigation measures to be shouldered by the LGU	Local Government Unit (LGU)
C. Operation Phase				
30. Food safety in processing, preservation, packaging, labelling, and distribution	☐ Ensure compliance with food safety and quality standards of the Bureau. Of Agriculture and Fisheries Standards (BAFPS) ☐ Apply HACCP as well as standard procedures on sanitation, Good	☐ Food Safety Clearance ☐ License to Operate from NMIS ☐ License to transport from NMIS	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	Manufacturing Practice (GMP, pest control, chemical control, allergen control ☐ Secure Food Safety Clearance ☐ FDA Clearance ☐ NMIS Accreditation and license			
31. Generation of wastewater from washing of animals and equipment that could cause water pollution of receiving water body.	☐ Monitoring of effluent quality to ensure compliance of wastewater discharge with the Effluent Standards. ☐ Secure Discharge Permit from DENR/MENRE ☐ Re-use of treated wastewater to applicable uses	☐ Monitoring reports indicating results of the effluent quality monitoring ☐ Discharge Permit	Include in overall subproject cost	FCA/FCA Cluster
32. Generation of air pollution ☐ from operation of generators, boilers, and other air pollution source installations ☐ odor from processing of organic raw materials	☐ Monitoring of air emission from stationary sources of air pollution ☐ Implementation of cleaner production and good housekeeping practices to manage and minimize odor ☐ Secure Permit to Operate air pollution source installations from DENR/MENRE	☐ Monitoring reports indicating results of implementation of cleaner production, waste minimization, and air/odor pollution control measures ☐ Monitoring report of the air emission quality from stationary sources ☐ Permit to Operate for air pollution source installations issued by DENR/MENRE	Include in overall subproject cost	FCA/FCA Cluster
33. Generation of wastes from processing plant ☐ Solid organic wastes and. byproducts (animal manure, animal carcass, bedding material, feathers, bones, hair, fats, etc.) ☐ Non-biodegradable wastes (empty containers, packaging materials, etc.) ☐ Hazardous wastes (busted lamps, waste electronic	☐ Implement cleaner production approaches such as recovery of edible products without compromising food safety, composting, etc. ☐ Implement waste management procedure including waste minimization, segregation and proper disposal ☐ Commission the services of third-party hazardous waste transporter and treater with licensed from DENR	☐ Monitoring report indicating the implementation of waste management and resource efficiency measures ☐ Hazardous Waste Generator ID ☐ Waste Management Procedure as part of the ESA	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
equipment, batteries, oily rags, etc.) ☐ Sludge from wastewater treatment (fats, oils)	☐ Secure Hazardous Waste Generator ID from DENR/MENRE ☐ Provision of secondary containment for all hazardous wastes			
34. Occupational health and safety risks and hazards ☐ Noise and vibration ☐ Equipment malfunction ☐ Use of hazardous materials and chemicals ☐ Hazardous working conditions such as extreme temperature (hot/cold), slippery/wet working area ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19) ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Provision of appropriate PPE for workers ☐ Assign a Safety Officer ☐ Assign a Pollution Control Officer ☐ Provide medical services/first-aid kit at the site to ensure immediate medical attention in case of accidents. ☐ FCA/FCA clusters shall comply with government health protocols in deployment of workers and continuation of production activities ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Guidelines on Community and Occupational Health and Safety (COSH) as part of the Operations Manual ☐ Monitoring reports ☐ LMP and Code Conduct	Include in overall subproject cost	FAC/FCA Cluster
35. Conflict between members of the FCA/FCA clusters ☐ Unclear policy on project beneficiary prioritization ☐ Unclear policy on project implementation ☐ Labor disputes over terms and conditions of employment	☐ Conduct consultations with members of the FCA/FCA clusters ☐ Establish the grievance redress mechanism (GRM) including GRM posters, GRM drop boxes within subproject facilities ☐ Assign a GRM focal/point person ☐ Subproject will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Operation and Management Plan ☐ Appointment of LGU and PSO/RPCO Grievance Point Person/Grievance Officer ☐ Monitoring Reports	Cost of mitigation measures to be shouldered by the contractor	Contractor

Prepared by: _____

Conforme: _____
PPMIU/MPMIU Head

Noted by the local community:

_____
Barangay Captain

ANNEX J-8: ESMP TEMPLATE FOR FISH LANDING AND FEEDER PORTS

Guidance Notes:

This template is designed to manage the environmental and social risks and impacts of fish landing and feeder ports. The fish landings are areas where fish catches are put onshore from a vessel or boat. The fish landing area oftentimes have facilities for sorting/weighing, washing/chilling, and marketing center where auctioning happens. The feeder ports are small port that serve as hub ports for large vessels. These infrastructures are part of the value chain rural infrastructures under I-BUILD that is implemented by the proponent local government unit. Below are characteristics of these subprojects:

Subproject	Description
Value-chain rural infrastructures	□ Public use managed by LGUs ○ Feeder ports ○ Fish landings

The ESMP is prepared following the results of the SES screening in Annex C and the Environmental and Social Assessment (ESA) in the feasibility study. The ESMP sets out specific plans, including budgets, organization arrangements and responsibilities for social and environmental impact management during project implementation. The ESMP should be specific in its description of the individual mitigation and monitoring measures and the assignment responsibilities to address identified risks and impacts of the subproject. The ESMP contains subplans or guidelines on protection and conservation of ecosystem, waste management, pollution control, occupational safety and health, and monitoring and reporting plan.

2. **Site and Design Considerations**

[Do not proceed with the subproject preparation including this ESMP unless all items below are confirmed.]

1. The. subproject does not encroach into or traverse any declared strict protection zone of protected area or natural habitat (e.g. primary forest, critical wetlands, endangered species habitat, key biodiversity areas).
2. The subproject will not displace, disfigure or render inoperable/inaccessible any monument or physical structure of known cultural and historical significance.
3. The subproject is not located in an area that is high to extreme risk zones around active volcanoes and fault lines.

B. Environmental Issues and Mitigation Measures

The issues identified in the ESMP template are based on frequently associated issues in possible encroachment on areas with significant ecosystem value, alteration of natural hydrology, red tide, eutrophication of aquatic environment, sedimentation and water quality issues, transmission/spread of diseases in aquaculture, waste generation, water, odor, construction-related issues, worker and community health and safety. Any new environmental and social impacts that will be identified from the SES screening and environmental and social impact assessment will be added in the ESMP together with the appropriate mitigation measures, monitoring indicators, cost, and responsible unit.

TEMPLATE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR FISH LANDING AND FEEDER PORTS

Name of Subproject: _____ Location: _____

Implementing LGU: _____ Contact No.:_____

Type of Infrastructure: ☐ Fish landing ☐ Feeder port

New or Expansion? ☐ New ☐ Expansion:

Utility Requirement: Water: _____m^3 Source of Water: _____

Electricity: _____kWH Source of Electricity: _____

Back-up Power Supply (capacity): _____

Estimated Number of Beneficiaries (gender disaggregate): _____

Estimated Number of IP Beneficiaries (gender disaggregate): _____

Estimated Total Cost: _____

Check whichever is applicable to the subproject:

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
A. Feasibility Study				
1. Land conversion/reclamation to construct fish landing/feeder port ☐ inconsistency with approved land use plan of the city/municipality Current land use within 1 km radius (as per zoning ordinance) ☐ Residential ☐ Commercial ☐ Institutional ☐ Industrial ☐ Agricultural ☐ Recreational	☐ Ensure consistency with land use plan of municipality/city ☐ Secure proof of land use compatibility from municipality/city ☐ Secure permit from Philippine Ports Authority (PPA) and Philippines Reclamation Authority (PRA) ☐ Acquisition of DAR Conversion Order ☐ LGU Reclassification	☐ Zoning Clearance ☐ Locational Clearance ☐ PPA Permit ☐ Approval of PRA on the Reclamation Project/Contract with PRA ☐ SB Resolution on Reclassification ☐ DAR Conversion Order	Include in overall cost of subproject	LGU PPA PRA DAR

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Protected area ☐ Others: _____				
2. The subproject will encroach on buffer zone of declared protected area.	☐ Secure PAMB Resolution ☐ Secure PAMB Clearance ☐ Prepare the Comprehensive Development and Management Plan and Rehabilitation Plan as required by the Special Use Agreement in Protected Area (SAPA) application. ☐ Prepare an Ordinance on Management and Protection	☐ PAMB Resolution ☐ PAMB Clearance ☐ SAPA ☐ Biodiversity Management Plan ☐ Ordinance on Protection and Management	All costs attendant to implementing the mitigation measures will be included in the overall subproject cost	LGU
3. The subproject will traverse/encroach on: o mangrove forest o ecologically significant surface water, marshlands, or wetlands o DA/BFAR's marine protected area	☐ Prohibit cutting of mangrove forest ☐ Design vegetated buffer zones and habitat corridors ☐ Maintain at least 50-meter buffer between fish landing/feeder port and the open sea for coastal protection ☐ Mudflats on coastal areas covered under natural resource management shall be planted with mangrove species ☐ Include in the subproject, design biodiversity restoration, offsets, or creation of ecologically comparable areas for biodiversity ☐ Study on the aquatic fresh/marine environment and geotechnical study	☐ DED/POW includes the mitigation measures ☐ Water Use Permit from DA/BFAR ☐ Design of vegetated buffer zones ☐ Design of biodiversity restoration, offsets ☐ Ordinance on Protection and Management	Include in overall cost of subproject	LGU DA/BFAR
4. Alteration of natural hydrology and water quality of bays/rivers or wetlands	☐ Consider flooding, rainfall data, storm surges, and high tides in the design of fish landing/feeder port ☐ Seek assistance of DA/BFAR on models for potential sites based on carrying	☐ DED/POW includes mitigation measures ☐ O&M Plan includes monitoring of water quality	Include in overall cost of subproject	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	capacity ☐ Include in the O&M Plan the conduct of water quality monitoring (e.g. DO, turbidity, temperature, pH)			
5. Presence of natural, geologic and climate hazards in the subproject area that may affect safety and vulnerability of the structures.	☐ Validate information generated from CRVA, e-VSA and georisk mapping from site-specific information on occurrences of flooding, soil erosion, landslides, liquefaction, storm surge, tsunami, earthquakes, etc. ☐ Secure clearance from DENR/PHIVOLCS/PAGASA or any equivalent body if in a disaster or hazard prone area ☐ Adopt climate resilient measures: _____ ☐ Adopt climate mitigation measures: _____	☐ DED/POW that includes the design of climate resilient and climate adaptation/mitigation measures ☐ Hazard analysis from DENR/PHIVOLCS/PAGASA or any equivalent body ☐ Clearance from DENR/PHIVOLCS/ PAGASA or any equivalent body	Include in overall cost of subproject	LGU
6. Presence of IP/ICC in the influence area ☐ The site is inside an ancestral domain (AD) or will traverse an AD ☐ The site is not inside an AD nor will it traverse an AD but there are IP/ICC in the area. ☐ The site is not in an AD and that there are no IP/ICC in the area as per LGU records and onsite validation.	☐ Conduct FPIC ☐ Prepare and implement IP Plan ☐ Secure certification from the Tribal Chieftain expressing support to the subproject.	☐ Document of FPIC among IP communities ☐ Evidence of IP community support (resolution, endorsement letter, etc.) ☐ Certificate of Pre-condition from NCIP ☐ Certificate of Non-Overlap from NCIP ☐ Approved IP Plan	Include cost of FPIC, consultations, and other mitigation and monitoring parameters in overall subproject cost.	LGU
7. Disturbance to flora and fauna due to vegetation clearing and cutting of trees	☐ Avoid tree cutting to the extent possible. ☐ Conserve affected trees through earth	☐ Tree Cutting Permit ☐ Tree Earth balling Permit ☐ PCA Permit (for coconut trees)	Include in overall subproject cost	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Coconut trees ☐ Fruit-bearing trees ☐ Timber Trees ☐ Planted Trees ☐ Naturally growing trees	balling, transfer and replanting ☐ Implement tree replacement and replanting in accordance with DENR requirements ☐ Conduct consultation with PAPs and secure permission from owner ☐ Secure Tree Cutting Permit prior to start of works ☐ Secure Tree Earth balling Permit prior to start of works.	☐ Signed Compensation Agreement with owner/s of tree(s) ☐ Waiver of Rights / Quit Claim (if trees in private land will be donated; refer to Form L1) ☐ Proof of Compensation (for affected trees in private land) ☐ Tree Replacement Plan		
8. Blocking of movement of boats because of construction of feeder. port/fish landing	☐ Consult fisherfolks and boatmen regarding the design and location of facilities to avoid blocking of boat navigation.	☐ POW/DED incorporating concerns and suggestions from fisherfolks and boatmen	Include in overall subproject cost	LGU
B. Construction Phase				
9. Soil erosion from construction of ponds ☐ Bottom sediments from the waterbody will be disturbed causing sedimentation ☐ Stockpiles of materials may cause sediment runoff.	☐ Conduct excavation and earthmoving during dry months ☐ Locate stockpile of soil, aggregates and sand away from drainage canals and water bodies ☐ Provide silt curtain during construction. ☐ Install silt traps, sedimentation ponds, and other sediment control measures ☐ During rain events, check the drainage system to see if these are blocked. Remove blocked materials. ☐ Hauling of excess excavated soil/incompatible soil for filling to designated disposal location in compliance to DPWH DO 168	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ MOA with private land owner for the disposal of excess soil	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
10. Contamination of surface water and groundwater with oil/grease	☐ Proper handling and disposal of waste oil, grease, diesel and gasoline ☐ Preparation of hazardous waste management procedure ☐ Conduct of training on oil spill response	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Waste Management Procedure as part of the ESA and Contractor's ESMP ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
11. Dust from construction activities, materials stockpiles, and movement of construction vehicles	☐ Conduct watering and dust abatement measures during dry and windy conditions ☐ Require workers to wear particle mask ☐ Keep stockpile of aggregate and sand materials covered with well-fixed plastic sheeting, tarpaulins or other geotextiles to avoid suspension or dispersal of fine soil particles during dry and windy days. ☐ Equip concrete mixing equipment with dust shrouds. ☐ Periodically clean-up debris at the work site. ☐ Prohibit idling of construction vehicles while unloading materials at the site. ☐ Impose speed limit on construction vehicles particularly when passing communities, residential or commercial areas or sensitive areas	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
12. Generation of construction wastes ☐ Biodegradable wastes (e.g. food wastes) ☐ Non-biodegradable wastes	☐ Implement waste segregation and provide separate waste bins for biodegradable and non-biodegradable wastes	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
(e.g. debris, concrete / soil debris, wood chips) ☐ Recyclable wastes (rebars, wires, nails, etc.) ☐ Hazardous wastes (empty containers of paints and solvents, resins, adhesives and degreasers, oily rags, busted lamps, spent welding electrode sticks/rods, discarded batteries, etc.)	☐ Designate an area for recyclable materials such as metal, wires, etc. ☐ Coordinate with the LGU on the regular collection of biodegradable and non-biodegradable wastes. ☐ Coordinate with waste recycler for the disposal of recyclable materials ☐ Commission the services of third-party hazardous waste transporter and treater with license from DENR in the collection and treatment of hazardous wastes. ☐ Prohibit burning of wastes. ☐ Provision of secondary containment for all hazardous wastes	Program (**CSHP**) by DOLE		
13. Sanitation and domestic sewage from construction camp	☐ Provide clean water and hand-washing facilities at the construction camp ☐ Provide temporary toilet facilities with septic tanks; Locate temporary septic tank more than 25 meters from an existing water supply well or surface water body ☐ Provide portable toilets (portalets); ensure contents of portalets are regularly collected by the third party portalet provider for safe offsite treatment and disposal. ☐ Ensure that third-party portalet provider has a Discharge Permit from DENR.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
14. Traffic congestion caused by side street parking of construction vehicles	☐ Prohibit prolonged side street parking of construction vehicles ☐ Assign flag persons to direct flow of vehicles	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Coordinate with local government and communities about schedule of movement of construction vehicles	☐ Guidelines on Community and Occupational Health and Safety (COSH)		
15. Road accidents during construction	☐ Implement speed control for delivery trucks ☐ Install warning signages ☐ Provide barricades and lighting at night in construction sites ☐ Prohibit entry of unauthorized persons at the construction site ☐ Orient drivers on precautionary measures when passing through community areas and times of day to reduce risk of accidents ☐ Observe extra caution when passing through dangerous routes ☐ Implement limits for trip duration and arranging driver rosters to avoid overtiredness of drivers. ☐ Regular maintenance of vehicles to minimize serious accidents caused by vehicle malfunction. ☐ Provision of sufficient lighting system	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
16. Potential damage to existing road due to hauling of materials and movement of construction vehicles	☐ Restoration and repair of existing road by the contractor	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
17. Occupational health and safety risks and hazards ☐ Hazardous working conditions such as trenches, excavations, working in water ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19)	☐ Implement an Occupational Safety and Health (OSH) Plan in compliance with the DOLE OSH guidelines. ☐ Designate an onsite Safety Officer duly accredited by DOLE. ☐ Establishment of GRM for workers ☐ Require workers to wear safety gadgets/PPEs such as hard hats, gloves, safety belts, rubber boots, and goggles, appropriate to the task. ☐ Post safety signs/reminders in strategic areas within the construction area. ☐ Provide sufficient lighting at night. ☐ Provide barricades / safety barriers particularly at excavations and stockpiles of aggregates. ☐ Provide first-aid kit at the construction site to ensure immediate medical attention in case of accidents. ☐ Comply with the COVID-19 health and safety guidelines of the Government.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE ☐ LMP and Code of Conduct	Cost of mitigation measures to be shouldered by the contractor	Contractor
18. Labor disputes over terms and conditions of employment	☐ Priority hiring of qualified local residents ☐ Set-up a grievance redress mechanism for workers including GRM posters, GRM drop boxes at project site, barangay halls, municipal halls, provincial halls ☐ Assign a Grievance Point Person ☐ Construction will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Functioning GRM for workers ☐ LMP and code of conduct	Cost of mitigation measures to be shouldered by the contractor	LGU PSO/RPCO Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
19. Community health and safety risks and hazards ☐ Noise nuisance ☐ Airborne dust ☐ Unsecured construction site	☐ Provide fence or barricade around construction site ☐ Conduct consultations with neighboring communities and Barangay about the project and the schedule of works. ☐ Schedule noisy works during daytime in sites near sensitive receptors ☐ Watering of areas prone to airborne dust during dry season ☐ Install warning signs.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
20. Impacts of labor influx such as: ☐ Exposure of community to communicable diseases (e.g. COVID19) and sexually transmitted diseases (HIV/AIDS) ☐ Misconduct of workers causing tension and peace and order issues in the community due to differences in traditions, culture, religion, ethnicity ☐ Increased criminality in the area ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Conduct orientation of workers on proper behavior and community values, cultural traditions and practices ☐ Orientation of workers on prevention of COVID-19, HIV/AIDS and other communicable diseases ☐ Prohibit use of dangerous drugs, smoking, and alcohol consumption ☐ Give priority to qualified local laborers in hiring construction workers ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE ☐ GRM records	Cost of mitigation measures to be shouldered by the contractor	Contractor
21. Impacts on cultural properties	☐ Implement chance find procedure in accordance with the requirements of the National Cultural Heritage Act (2009) and Cultural Properties Preservation and Protection Act	☐ Cultural Heritage Management Plan ☐ Chance Find Procedure	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Immediately suspend any activities upon discovery of chance find and report to the LGU and RPCO SES focal person			
22. Security and conflict risk	☐ Social preparation and meaningful consultations ☐ Proper coordination with relevant authorities ☐ LGUs mandated to ensure and maintain peace and order within their respective areas are to formulate and implement their POPS Plans as per DILG Memorandum Circular No. 2022-118 Guidelines on the Development and Formulation of the Peace and Order and Public Safety Plan (POPS-PLAN) 2023-2025 dated September 19, 2022. POPS Plan should be updated accordingly ☐ evacuation plan in case of insurgency or conflicts as part of POPS Plan	☐ Local Government Unit's (LGUs) Peace and Order and Public Safety Plan (POPS) Plan	Cost of mitigation measures to be shouldered by the LGU	Local Government Unit (LGU)
C. Operation Phase				
23. Food safety in processing, preservation, packaging, labelling	☐ Ensure compliance with food safety and quality standards of the Bureau of Agriculture and Fisheries Standards (BAFPS) ☐ Apply HACCP as well as standard procedures on sanitation, Good Manufacturing Practice (GMP, pest control, chemical control, allergen control ☐ Secure Food Safety Clearance ☐ FDA Clearance	☐ Food Safety Clearance	Include in overall subproject cost	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
24. Generation of wastewater from washing of fish catch that could cause water pollution in the receiving water body	☐ Provision of a wastewater treatment facility that will meet the Effluent Standards of DENR ☐ Monitor quality of effluent discharge to ensure compliance with the standards ☐ Monitor water quality of water body. in coordination with DA/BFAR	☐ O&M Plan ☐ Monitoring reports	Include in overall subproject cost	LGU
25. Generation of odor ☐ From discarded marine products ☐ Decomposing marine products	☐ Properly dispose the rejected yields to avoid decomposition and pungent odor and prevent proliferation of rodents, flies	☐ O&M Plan ☐ Monitoring reports	Include in overall subproject cost	LGU
26. Generation of wastes from facilities ☐ Solid organic wastes and. by-products (discarded marine products, etc.) ☐ Non-biodegradable wastes (empty containers, plastics, packaging materials, etc.) ☐ Hazardous wastes (busted lamps, waste electronic equipment, batteries, oily rags, etc.)	☐ Integrate waste management procedure with procedures for waste minimization, segregation and proper disposal ☐ Ensure regular collection of solid wastes ☐ Prohibit open burning of waste materials ☐ Commission the services of third-party hazardous waste transporter and treater with licensed from DENR ☐ Provision of secondary containment for liquid and hazardous wastes	☐ POW/DED incorporating waste management procedure ☐ Operations and Maintenance Plan incorporating food safety procedures, veterinary inspection, HACCP, monitoring of the waste management measures	Include in overall subproject cost	LGU
27. Occupational health and safety risks and hazards ☐ Hazardous working conditions such as extreme temperature (hot/cold), working in water ☐ Extended working hours ☐ Exposure of workers to	☐ Provision of appropriate PPE for workers ☐ Assign a Safety Officer ☐ Assign a Pollution Control Officer ☐ Provide medical services/first-aid kit at the site to ensure immediate medical attention in case of accidents.	☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Monitoring reports ☐ LMP and Code of Conduct	Include in overall subproject cost	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
communicable diseases (e.g. COVID19) ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Workers shall comply with government health protocols in deployment of workers and continuation of production activities in line with the COSH ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive			

Prepared by: _____

Conforme: _____
PPMIU/MPMIU Head

Noted by the local community: _____
Barangay Captain

ANNEX J-9: ESMP TEMPLATE FOR MILLING, DRYING, AND PACKAGING FACILITIES

Guidance Notes:

This template is designed to manage the environmental and social risks and impacts of milling, drying, and packaging facilities. Milling facilities/centers are post-harvest facilities primarily for corn and rice. These facilities include bulk handling/storage (silos) and packaging equipment and sometimes with drying facilities for these crops. These are small to large-scale facilities implemented by the proponent local government unit together with Farmers Cooperatives (FCs) or clusters of Farmers Cooperative Associations (FCAs) under the I-REAP component of PRDP Scale-Up. Below are characteristics of these subprojects:

.

Commodity	Description
Corn	● Corn drying to milling centers/facilities with warehouses ● Bulk handling/storage (silos) and transportation facilities
Rice	● Rice processing centers (for drying, milling and packaging) with logistics facilities

The ESMP is prepared following the results of the SES screening in Annex C and the Environmental and Social Assessment (ESA) in the business plan. The ESMP sets out specific plans, including budgets, organization arrangements and responsibilities for social and environmental impact management during project implementation. The ESMP should be specific in its description of the individual mitigation and monitoring measures and the assignment responsibilities to address identified risks and impacts of the subproject. The ESMP contains subplans on raw materials conservation, resource efficiency (energy consumption), waste management, air pollution control, occupational safety and health, and monitoring and reporting plan.

2. **Site and Design Considerations**

[Do not proceed with the subproject preparation including this ESMP unless all items below are confirmed.]

1. The. subproject does not encroach into or traverse any declared strict protection zone of protected area or natural habitat (e.g. primary forest, critical wetlands, endangered species habitat, key biodiversity areas).
2. The subproject will not displace, disfigure or render inoperable/inaccessible any monument or physical structure of known cultural and historical significance.
3. The subproject is not located in an area that is high to extreme risk zones around active volcanoes.

B. Environmental Issues and Mitigation Measures

The issues identified in the ESMP template are based on frequently associated issues in waste generation, air pollution, possible encroachment on areas with significant ecosystem value, ancestral domains, construction-related issues, worker and community health and safety. Any new environmental and social impacts that will be identified from the SES screening and environmental and social impact assessment will be added in the ESMP together with the appropriate mitigation measures, monitoring indicators, cost, and responsible unit.

TEMPLATE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR SLAUGHTERHOUSES, DRESSING PLANTS, HATCHERIES, MEAT PROCESSING AND DAIRY PROCESSING

Name of Subproject: _____ Location: _____

Implementing LGU: _____ FCA/FCA Cluster: _____ Contact No.:_____

Type of Commodity: (rice/corn?) _____ Type of Processing Plant: (e.g., Milling, Drying, Packaging) _____

New or Expansion? ☐ New ☐ Expansion:

Production Capacity: _____

Utility Requirement: Water: _____m^3 Source of Water: _____

Electricity: _____kWH Source of Electricity: _____

Back-up Power Supply (capacity): _____

Total Land Area: _____ m^2 Building Floor Area: _____m^2

Other Buildings in the Plant Premises: ☐ Facility ☐ Storage/warehouse ☐ Office Others: _____

Estimated Number of Beneficiaries (gender disaggregate): _____

Estimated Number of IP Beneficiaries (gender disaggregate): _____

Estimated Total Cost: _____

Check whichever is applicable to the subproject:

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
A. Feasibility Study / Business Planning				
1. Land acquisition for the subproject ☐ Private individuals ☐ Cooperative ☐ Government	☐ Conduct consultations with Project Affected Persons (PAPs) to determine entitlements, just compensation or voluntary donation/waiver. ☐ Submit site acquisition documents: o Deed of Donation o Deed of Sale o o Deed of Usufruct Agreement with Government	☐ Land title(s) ☐ ROW acquisition documents (Forms L1 and L2) ☐ Land Title with Deed of Donation ☐ Deed of Sale ☐ ☐ Deed of Usufruct Agreement with Government ☐ Notarized duly-signed agreement	Include cost of site acquisition in overall subproject cost.	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ LGU to facilitate annotations of the land titles. ☐ For land acquisition by compensation, LGU to ensure that just compensation is agreed by both parties (LGU and PAPs). ☐ For lease of land, LGU/FCA to ensure acceptable terms as determined by the Project.	between the PAPs and LGU for compensation of their properties and proof of compensation ☐ Contract of lease with option to buy		
3. Land conversion / inconsistency with approved land use plan of the city/municipality Current land use within 1 km radius (as per zoning ordinance) ☐ Residential ☐ Commercial ☐ Institutional ☐ Industrial ☐ Agricultural ☐ Recreational ☐ Protected area ☐ Others: _____	☐ Ensure consistency with land use plan of municipality/city ☐ Secure proof of land use compatibility from municipality/city ☐ Acquisition of DAR Conversion Order ☐ LGU Reclassification	☐ Zoning Clearance ☐ Locational Clearance ☐ SB Resolution on Reclassification ☐ DAR Conversion Order	Include in overall cost of subproject	LGU/FCA/FCA Cluster
4. The subproject will encroach on buffer zone of declared protected area.	☐ Secure PAMB Resolution ☐ Secure PAMB Clearance ☐ Prepare the Comprehensive Development and Management Plan and Rehabilitation Plan as required by the Special Use Agreement in Protected Area (SAPA) application.	☐ PAMB Resolution ☐ PAMB Clearance ☐ SAPA ☐ Biodiversity Management Plan ☐ LGU Ordinance on Protection and Management	All costs attendant to implementing the mitigation measures will be included in the overall subproject cost	LGU/FC/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Prepare an Ordinance on Management and Protection			
5. The subproject will traverse/encroach on: o mangrove forest o secondary forests o ecologically significant surface water, marshlands, or wetlands	☐ Prohibit cutting of mangrove forest ☐ Secure Forest Land Use Agreement (FLAg) from DENR for forest areas ☐ Design vegetated buffer zones and habitat corridors ☐ Study on the aquatic fresh/marine environment and geotechnical study ☐ Include in the subproject, design biodiversity restoration, offsets, or creation of ecologically comparable areas for biodiversity	☐ FLAg ☐ Design of vegetated buffer zones ☐ Design of biodiversity restoration, offsets ☐ Biodiversity Management Plan ☐ Ordinance on Protection and Management	Include in overall cost of subproject	LGU/FCA/FCA Cluster
6. Presence of natural, geologic and climate hazards in the subproject area that may affect safety and vulnerability of the enterprise and its structures.	☐ Validate information generated from CRVA, e-VSA and georisk mapping from site-specific information on occurrences of flooding, soil erosion, landslides, liquefaction, storm surge, tsunami, earthquakes, etc. ☐ Secure clearance from DENR/PHIVOLCS/PAGASA or any equivalent body if in a disaster or hazard prone area ☐ Design structures in accordance with the standards of the National Building Code and Structural Code of the Philippines ☐ Adopt climate resilient measures: _____ ☐ Adopt climate mitigation measures: _____	☐ DED/POW that includes the design of climate resilient and climate adaptation/mitigation measures ☐ Hazard analysis from DENR/PHIVOLCS/PAGASA or any equivalent body ☐ Clearance from DENR/PHIVOLCS/ PAGASA or any equivalent body	Include in overall cost of subproject	LGU/FCA/FCA Cluster
2. Presence of IP/ICC in the influence area	☐ Conduct FPIC	☐ Document of FPIC among IP communities	Include cost of FPIC, consultations, and other	LGU/FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ The site is inside an ancestral domain (AD) or will traverse an AD ☐ The site is not inside an AD nor will it traverse an AD but there are IP/ICC in the area. ☐ The site is not in an AD and that there are no IP/ICC in the area as per LGU records and onsite validation.	☐ Prepare and implement IP Plan ☐ Secure certification from the Tribal Chieftain expressing support to the subproject.	☐ Evidence of IP community support (resolution, endorsement letter, etc.) ☐ Certificate of Pre-condition from NCIP ☐ Certificate of Non-Overlap from NCIP ☐ Approved IP Plan	mitigation and monitoring parameters in overall subproject cost.	
7. cutting of trees ☐ Coconut trees ☐ Fruit-bearing trees ☐ Timber Trees ☐ Planted Trees ☐ Naturally growing trees	☐ Avoid tree cutting to the extent possible. ☐ Conserve affected trees through earth balling, transfer and replanting ☐ Implement tree replacement and replanting in accordance with DENR requirements ☐ Conduct consultation with PAPs and secure permission from owner ☐ Secure Tree Cutting Permit prior to start of works ☐ Secure Tree Earth balling Permit prior to start of works.	☐ Tree Cutting Permit ☐ Tree Earth balling Permit ☐ PCA Permit (for coconut trees) ☐ Signed Compensation Agreement with owner/s of tree(s) ☐ Waiver of Rights / Quit Claim (if trees in private land will be donated; refer to Form L1) ☐ Proof of Compensation (for affected trees in private land) ☐ Tree Replacement Plan	Include in overall subproject cost	LGU/FCA/FCA Cluster
8. Competition with community in use of electricity	☐ Integrate energy efficiency measures such as utilization of renewable energy (solar, wind, etc.) Specify: _____ ☐ Identification of an alternative source of electricity	☐ POW/DED incorporating energy efficiency and conservation plan	Include in overall subproject cost	FCA/FCA Cluster
9. Generation of air pollution ☐ from operation of milling and drying equipment and storage facilities	☐ Integrate air pollution control in pollution sources ☐ Include in the O&M Plan the	☐ Operations Manual incorporating cleaner production, waste minimization, and air pollution control measures	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ from generators, boilers, and other air pollution source installations	monitoring of air emission from stationary sources of air pollution ☐ Integrate cleaner production and good housekeeping practices to manage particulates	☐ Operations and Maintenance Plan incorporating monitoring of the air emission quality		
10. Generation of wastes from facilities ☐ Solid organic wastes and. by-products (plant/crop residues, etc.) ☐ Non-biodegradable wastes (empty containers, packaging materials, etc.) ☐ Hazardous wastes (busted lamps, waste electronic equipment, batteries, oily rags, etc.)	☐ Integrate cleaner production and good housekeeping procedures ☐ Integrate waste management procedures for waste minimization, segregation and proper disposal ☐ Commission the services of third-party hazardous waste transporter and treater with licensed from DENR	☐ Operations Manual incorporating waste management procedure ☐ Operations and Maintenance Plan incorporating food safety procedures, veterinary inspection, monitoring of the waste management measures	Include in overall subproject cost	FCA/FCA Cluster
B. Construction Phase				
11. Soil erosion from excavation, washing of construction equipment and stockpiles of materials ☐ Activities will necessitate earthmoving from excavation activities ☐ Washing of construction vehicles including cement mixers may occur at the site and cause soil and cement runoff. ☐ Stockpiles of materials may cause sediment runoff.	☐ Conduct excavation and earthmoving during dry months ☐ Locate stockpile of soil, aggregates and sand away from drainage canals and waterways ☐ Install silt traps, sedimentation ponds, and other sediment control measures ☐ Prohibit washing of cement mixers and other construction vehicles at the site ☐ Conduct daily cleaning and sweeping of the construction site and periodically remove soils, stones, and wastes from gutters, drainage canals and ditches ☐ During rain events, check the drainage	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ MOA with private landowner for the disposal of excess soil	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	system to see if these are blocked. Remove blocked materials. ☐ Hauling of excess excavated soil/incompatible soil for filling to designated disposal location in compliance			
12. Contamination of surface water and groundwater with oil/grease	☐ Proper handling and disposal of waste oil, grease, diesel and gasoline ☐ Preparation of hazardous waste management procedure ☐ Conduct of training on oil spill response	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Waste Management Procedure as part of the ESA and Contractor's ESMP ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
13. Dust from construction activities, materials stockpiles, and movement of construction vehicles	☐ Conduct watering and dust abatement measures during dry and windy conditions ☐ Require workers to wear particle mask ☐ Keep stockpile of aggregate and sand materials covered with well-fixed plastic sheeting, tarpaulins or other geotextiles to avoid suspension or dispersal of fine soil particles during dry and windy days. ☐ Equip concrete mixing equipment with dust shrouds. ☐ Periodically clean-up debris at the work site. ☐ Prohibit idling of construction vehicles while unloading materials at the site. ☐ Impose speed limit on construction vehicles particularly when passing communities, residential or commercial areas or sensitive areas	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
14. Noise and vibration from construction activities and movement of materials ☐ Subproject is located near community areas with sensitive receptors such as schools, hospitals, and residential areas. ☐ Subproject will require concrete chipping and drilling activities.	☐ Barricade the construction area and shield sensitive receptors. ☐ Implement construction activities in consideration to time, duration, and scale to optimize the use of construction equipment, machineries, and vehicles in accordance with the noise emission standard. ☐ Strictly prohibit concrete chipping and drilling activities beyond 8:00PM particularly in areas near sensitive receptors and residential areas. ☐ Deliver fabricated steel plates and cut/bend reinforcing steel to desired size to minimize cutting activities onsite. ☐ Require workers to wear ear plugs. ☐ Strictly control construction activities close to historical/archaeological sites, if any.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
15. Generation of construction wastes ☐ Biodegradable wastes (e.g. food wastes) ☐ Non-biodegradable wastes (e.g. debris, concrete / soil debris, wood chips) ☐ Recyclable wastes (rebars, wires, nails, etc.) ☐ Hazardous wastes (empty containers of paints and solvents, resins, adhesives and degreasers, oily rags, busted lamps, spent welding electrode	☐ Implement waste segregation and provide separate waste bins for biodegradable and non-biodegradable wastes ☐ Designate an area for recyclable materials such as metal, wires, etc. ☐ Coordinate with the LGU on the regular collection of biodegradable and non-biodegradable wastes. ☐ Coordinate with waste recycler for the disposal of recyclable materials ☐ Commission the services of third-party hazardous waste transporter and treater with license from DENR in the	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
sticks/rods, discarded batteries, etc.)	collection and treatment of hazardous wastes. ☐ Prohibit burning of wastes. ☐ Provision of secondary containment for all hazardous wastes			
16. Sanitation and domestic sewage from construction camp	☐ Provide clean water and hand-washing facilities at the construction camp ☐ Provide temporary toilet facilities with septic tanks; Locate temporary septic tank more than 25 meters from an existing water supply well or surface water body ☐ Provide portable toilets (portalets); ensure contents of portalets are regularly collected by the third party portalet provider for safe offsite treatment and disposal. ☐ Ensure that the third-party portalet provider has a Discharge Permit from DENR.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
17. Traffic congestion caused by side street parking of construction vehicles	☐ Prohibit prolonged side street parking of construction vehicles ☐ Assign flag persons to direct flow of vehicles ☐ Coordinate with local government and communities about schedule of movement of construction vehicles ☐ Provision of alternate route	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH)	Cost of mitigation measures to be shouldered by the contractor	Contractor
18. Road accidents during construction ☐ Movement of materials delivery trucks ☐ Open excavations and trenches	☐ Implement speed control for delivery trucks ☐ Install warning signages in open excavations and trenches	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH)	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Provide barricades and lighting at night in construction sites with open excavations ☐ Prohibit entry of unauthorized persons at the construction site ☐ Orient drivers on precautionary measures when passing through community areas and times of day to reduce risk of accidents ☐ Observe extra caution when passing through dangerous routes ☐ Implement limits for trip duration and arranging driver rosters to avoid overtiredness of drivers. ☐ Regular maintenance of vehicles to minimize serious accidents caused by vehicle malfunction. ☐ Provision of sufficient lighting system	☐ Approved Construction Safety and Health Program (CSHP) by DOLE		
19. Potential damage to existing road due to hauling of materials and movement of construction vehicles	☐ Restoration and repair of existing road by the contractor	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
20. Occupational health and safety risks and hazards ☐ Use of hazardous materials and chemicals ☐ Hazardous working conditions such as trenches, excavations, working in heights or in confined spaces	☐ Implement an Occupational Safety and Health (OSH) Plan in compliance with the DOLE OSH guidelines. ☐ Designate an onsite Safety Officer duly accredited by DOLE. ☐ Establishment of GRM for workers	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Approved Construction Safety and Health	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19)	☐ Require workers to wear safety gadgets/PPEs such as hard hats, gloves, safety belts, rubber boots, and goggles, appropriate to the task. ☐ Post safety signs/reminders in strategic areas within the construction area. ☐ Provide sufficient lighting at night. ☐ Provide barricades / safety barriers particularly at excavations and stockpiles of aggregates. ☐ Provide first-aid kit at the construction site to ensure immediate medical attention in case of accidents. ☐ Comply with the COVID-19 health and safety guidelines of the Government.	Program (CSHP) by DOLE ☐ LMP and Code of Conduct		
21. Labor disputes over terms and conditions of employment	☐ Priority hiring of qualified local residents ☐ Set-up a grievance redress mechanism for workers including GRM posters, GRM drop boxes at project site, barangay halls, municipal halls, provincial halls ☐ Assign a Grievance Point Person ☐ Construction will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Functioning GRM for workers ☐ LMP and code of conduct	Cost of mitigation measures to be shouldered by the contractor	LGU PSO/RPCO Contractor
22. Community health and safety risks and hazards ☐ Noise nuisance ☐ Airborne dust ☐ Unsecured construction site	☐ Provide fence or barricade around construction site ☐ Conduct consultations with neighboring communities and Barangay about the project and the schedule of works.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Schedule noisy works during daytime in sites near sensitive receptors ☐ Watering of areas prone to airborne dust during dry season ☐ Install warning signs.	Program (CSHP) by DOLE		
23. Impacts of labor influx such as: ☐ Exposure of community to communicable diseases (e.g. COVID19) and sexually transmitted diseases (HIV/AIDS) ☐ Misconduct of workers causing tension and peace and order issues in the community due to differences in traditions, culture, religion, ethnicity ☐ Increased criminality in the area ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Conduct orientation of workers on proper behavior and community values, cultural traditions and practices ☐ Orientation of workers on prevention of COVID-19, HIV/AIDS and other communicable diseases ☐ Prohibit use of dangerous drugs, smoking, and alcohol consumption ☐ Give priority to qualified local laborers in hiring construction workers ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health Plans ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
24. Waste generation ☐ During cultivation (e.g. empty containers of agro-chemicals) ☐ during post-harvest (e.g. decomposing plant fibers, discarded parts of plants)	☐ Composting of plant waste to produce organic fertilizers ☐ Consider use of plant fibers as animal feed ☐ Use plant fibers and wastes as soil additives/enhancers ☐ Prohibit burning of wastes	☐ Monitoring reports	Include in overall subproject cost	FCA/FCA Cluster
25. Impacts on cultural properties	☐ Implement chance find procedure in accordance with the requirements of the National Cultural Heritage Act	☐ Cultural Heritage Management Plan	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	(2009) and Cultural Properties Preservation and Protection Act ☐ Immediately suspend any activities upon discovery of chance find and report to the LGU and RPCO SES focal person			
26. Security and conflict risk	☐ Social preparation and meaningful consultations ☐ Proper coordination with relevant authorities ☐ LGUs mandated to ensure and maintain peace and order within their respective areas are to formulate and implement their POPS Plans as per DILG Memorandum Circular No. 2022-118 Guidelines on the Development and Formulation of the Peace and Order and Public Safety Plan (POPS-PLAN) 2023-2025 dated September 19, 2022. POPS Plan should be updated accordingly ☐ evacuation plan in case of insurgency or conflicts as part of POPS Plan	☐ Local Government Unit's (LGUs) Peace and Order and Public Safety Plan (POPS) Plan	Cost of mitigation measures to be shouldered by the LGU	Local Government Unit (LGU)
C. Operation Phase				
27. Generation of air pollution ☐ From operation of milling and drying equipment ☐ from operation of generators, boilers, and other air pollution source installations	☐ Monitoring of air emission from stationary sources of air pollution ☐ Implementation of cleaner production and good housekeeping practices ☐ Secure Permit to Operate air pollution source installations from DENR/MENRE ☐ Provision of vegetation buffer areas	☐ Monitoring reports indicating results of implementation of cleaner production, waste minimization, and air pollution control measures ☐ Monitoring report of the air emission quality from stationary sources ☐ Permit to Operate for air pollution source installations issued by DENR/MENRE	Include in overall subproject cost	FCA/FCA Cluster
28. Generation of wastes from processing plant	☐ Implement waste management procedure including waste	☐ Monitoring report indicating the implementation of waste management	Include in overall subproject cost	FCA/FCA Cluster

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Solid organic wastes and. byproducts (plant/crop residues, etc.) ☐ Non-biodegradable wastes (empty containers, packaging materials, etc.) ☐ Hazardous wastes (busted lamps, waste electronic equipment, batteries, oily rags, etc.)	minimization, segregation and proper disposal ☐ Commission the services of third-party hazardous waste transporter and treater with licensed from DENR ☐ Secure Hazardous Waste Generator ID from DENR/MENRE ☐ Provision of secondary containment for liquid and hazardous wastes	and resource efficiency measures ☐ Hazardous Waste Generator ID ☐ Waste Management Procedure		
29. Occupational health and safety risks and hazards ☐ Noise ☐ Equipment malfunction ☐ Hazardous working conditions such as extreme temperature ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19) ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Provision of appropriate PPE for workers ☐ Assign a Safety Officer ☐ Assign a Pollution Control Officer ☐ Provide medical services/first-aid kit at the site to ensure immediate medical attention in case of accidents. ☐ FCA/FCA clusters shall comply with government health protocols in deployment of workers and continuation of production activities in line with the COSH ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ Monitoring reports ☐ LMP and Code of Conduct	Include in overall subproject cost	FAC/FCA Cluster
30. Conflict between members of the FCA/FCA clusters ☐ Unclear policy on project beneficiary prioritization ☐ Unclear policy on project implementation ☐ Labor disputes over terms and conditions of employment	☐ Conduct consultations with members of the FCA/FCA clusters ☐ Establish the grievance redress mechanism (GRM) including GRM posters, GRM drop boxes within subproject facilities ☐ Assign a GRM focal/point person ☐ Subproject will provide local employment opportunities with	☐ Operation and Management Plan ☐ Appointment of LGU and PSO/RPCO Grievance Point Person/Grievance Officer ☐ Monitoring Reports	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	standard salary wage based on RTWPB approved wage rates.			

Prepared by: _____

Conforme: _____
PPMIU/MPMIU Head

Noted by the local community:

_____
Barangay Captain

ANNEX J-10: ESMP TEMPLATE FOR COLD STORAGE, WAREHOUSES, GREENHOUSES, TRADING AND MARKET CENTERS

Guidance Notes:

This template is designed to manage the environmental and social risks and impacts of cold storage, warehouses, greenhouses, trading and market centers. The cold storage warehouse are designed as freezer warehouse to keep food products at constant temperature to ensure no risk of damage or alteration of integrity. Warehouses are designed as building facilities with shelving and racking systems for storage of crops and agricultural products. Greenhouses are made of transparent material wherein plants grow under regulated climatic conditions. Trading and market centers areas where agricultural products are consolidation, trading, and auctioning happens. These infrastructures are part of the value chain rural infrastructures and enterprises under I-REAP that is implemented by the proponent local government unit together with Farmer/Fisherfolks Cooperatives (FCs)/Farmer/Fisherfolk Cooperative Association (FCA) clusters. Below are characteristics of these subprojects:

Commodity	Description
Multi-commodity	□ Food supply hubs o Consolidation, trading posts/centers and food terminals with cold or dry storage facilities □ Multi-commodity cold storage/cold chain facilities
Crops	□ Trading centers/posts with climate resilient design □ Climate-smart or automated greenhouses
Fisheries	□ Fish trading centers with pre-processing and cold storage facilities

The ESMP is prepared following the results of the SES screening in Annex C and the Environmental and SocialAssessment (ESA) in the business plan. The ESMP sets out specific plans, including budgets, organization arrangements and responsibilities for social and environmental impact management during project implementation. The ESMP should be specific in its description of the individual mitigation and monitoring measures and the assignment responsibilities to address identified risks and impacts of the subproject. The ESMP contains subplans on protection and conservation of ecosystem, waste management, pollution control, occupational safety and health, and monitoring and reporting plan.

2. **Site and Design Considerations**

[Do not proceed with the subproject preparation including this ESMP unless all items below are confirmed.]

1. The. subproject does not encroach into or traverse any declared strict protection zone of protected area or natural habitat (e.g. primary forest, critical wetlands, endangered species habitat, key biodiversity areas).
2. The subproject will not displace, disfigure or render inoperable/inaccessible any monument or physical structure of known cultural and historical significance.
3. The subproject is not located in an area that is high to extreme risk zones around active volcanoes.

B. Environmental Issues and Mitigation Measures

The issues identified in the ESMP template are based on frequently associated issues in water pollution, use of ozone-repleting substances (ODS) in refrigeration systems, food safety, waste generation, water and energy resource efficiency, odor, construction-related issues, worker and community health and

safety. Any new environmental and social impacts that will be identified from the SES screening and environmental and social impact assessment will be added in the ESMP together with the appropriate mitigation measures, monitoring indicators, cost, and responsible unit.

TEMPLATE OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR COLD STORAGE, WAREHOUSES, GREENHOUSES, TRADING AND MARKET CENTERS

Name of Subproject: _____ Location: _____

Implementing LGU: _____ FCA/FCA Cluster: _____ Contact No.:_____

Type of Infrastructure/Enterprise: ☐ Cold Storage ☐ Warehouse ☐ Greenhouse ☐ Trading and Market Center

New or Expansion? ☐ New ☐ Expansion:

Utility Requirement: Water: _____m^3 Source of Water: _____

Electricity: _____kWH Source of Electricity: _____

Back-up Power Supply (capacity): _____

Estimated Number of Beneficiaries (gender disaggregate): _____

Estimated Number of IP Beneficiaries (gender disaggregate): _____

Estimated Total Cost: _____

Check whichever is applicable to the subproject:

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
A. Feasibility Study / Business Planning				
☐ Land conversion/inconsistency with approved land use plan of the city/municipality Current land use within 1 km radius (as per zoning ordinance) ☐ Residential ☐ Commercial ☐ Institutional ☐ Industrial ☐ Agricultural ☐ Recreational ☐ Protected area	☐ Ensure consistency with land use plan of municipality/city ☐ Secure proof of land use compatibility from municipality/city ☐ Acquisition of DAR Conversion Order ☐ LGU Reclassification	☐ Zoning Clearance ☐ Locational Clearance ☐ SB Resolution on Reclassification ☐ DAR Conversion Order	Include in overall cost of subproject	LGU FCA/FCA cluser

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Others: _____				
B. The subproject will encroach on buffer zone of declared protected area.	☐ Secure PAMB Resolution ☐ Secure PAMB Clearance ☐ Prepare the Comprehensive Development and Management Plan and Rehabilitation Plan as required by the Special Use Agreement in Protected Area (SAPA) application. ☐ Prepare an Ordinance on Management and Protection	☐ PAMB Resolution ☐ PAMB Clearance ☐ SAPA ☐ Biodiversity Management Plan ☐ Ordinance on Protection and Management	All costs attendant to implementing the mitigation measures will be included in the overall subproject cost	LGU
C. The subproject will traverse/encroach on: o mangrove forest o ecologically significant surface water, marshlands, or wetlands o DA/BFAR's marine protected area	☐ Prohibit cutting of mangrove forest ☐ Design vegetated buffer zones and habitat corridors ☐ Maintain at least 50-meter buffer between site and the open sea for coastal protection ☐ Study on the aquatic fresh/marine environment and geotechnical study ☐ Mudflats on coastal areas covered under natural resource management shall be planted with mangrove species ☐ Include in the subproject, design biodiversity restoration, offsets, or creation of ecologically comparable areas for biodiversity	☐ DED/POW includes the mitigation measures ☐ Water Use Permit from DA/BFAR ☐ Design of vegetated buffer zones ☐ Design of biodiversity restoration, offsets ☐ Biodiversity Management Plan ☐ Ordinance on Protection and Management	Include in overall cost of subproject	LGU DA/BFAR
D. Alteration of natural hydrology and water quality of bays/rivers or wetlands	☐ Consider flooding, rainfall data, storm surges, and high tides in the design of fish landing/feeder port ☐ Seek assistance of DA/BFAR on models for potential sites based on carrying capacity	☐ DED/POW includes mitigation measures ☐ O&M Plan includes monitoring of water quality	Include in overall cost of subproject	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Include in the O&M Plan the conduct of water quality monitoring (e.g. DO, turbidity, temperature, pH)			
E. Presence of natural, geologic and climate hazards in the subproject area that may affect safety and vulnerability of the structures.	☐ Validate information generated from CRVA, e-VSA and georisk mapping from site-specific information on occurrences of flooding, soil erosion, landslides, liquefaction, storm surge, tsunami, earthquakes, etc. ☐ Secure clearance from DENR/PHIVOLCS/PAGASA or any equivalent body if in a disaster or hazard prone area ☐ Adopt climate resilient measures: _____ ☐ Adopt climate mitigation measures: _____	☐ DED/POW that includes the design of climate resilient and climate adaptation/mitigation measures ☐ Hazard analysis from DENR/PHIVOLCS/PAGASA or any equivalent body ☐ Clearance from DENR/PHIVOLCS/ PAGASA or any equivalent body	Include in overall cost of subproject	LGU
F. Presence of IP/ICC in the influence area ☐ The site is inside an ancestral domain (AD) or will traverse an AD ☐ The site is not inside an AD nor will it traverse an AD but there are IP/ICC in the area. ☐ The site is not in an AD and that there are no IP/ICC in the area as per LGU records and onsite validation.	☐ Conduct FPIC ☐ Prepare and implement IP Plan ☐ Secure certification from the Tribal Chieftain expressing support to the subproject.	☐ Document of FPIC among IP communities ☐ Evidence of IP community support (resolution, endorsement letter, etc.) ☐ Certificate of Pre-condition from NCIP ☐ Certificate of Non-Overlap from NCIP ☐ Approved IP Plan	Include cost of FPIC, consultations, and other mitigation and monitoring parameters in overall subproject cost.	LGU
G. cutting of trees ☐ Coconut trees	☐ Avoid tree cutting to the extent possible.	☐ Tree Cutting Permit ☐ Tree Earth balling Permit	Include in overall subproject cost	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Fruit-bearing trees ☐ Timber Trees ☐ Planted Trees ☐ Naturally growing trees	☐ Conserve affected trees through earth balling, transfer and replanting ☐ Implement tree replacement and replanting in accordance with DENR requirements ☐ Conduct consultation with PAPs and secure permission from owner ☐ Secure Tree Cutting Permit prior to start of works ☐ Secure Tree Earth balling Permit prior to start of works.	☐ PCA Permit (for coconut trees) ☐ Signed Compensation Agreement with owner/s of tree(s) ☐ Waiver of Rights / Quit Claim (if trees in private land will be donated; refer to Form L1) ☐ Proof of Compensation (for affected trees in private land) ☐ Tree Replacement Plan		
H. Use of ozone-depleting substances (ODS) in refrigeration system	☐ Prohibit use of refrigerants subject to international bans and phaseouts consistent with the Montreal Protocol and Kigali Agreement on ODS	☐ Operations Manual	Include in overall subproject cost	LGU
I. Construction Phase				
J. Soil erosion from construction activities ☐ Stockpiles of materials may cause sediment runoff. ☐ Earthworks and excavation may cause soil runoff	☐ Conduct excavation and earthmoving during dry months ☐ Locate stockpile of soil, aggregates and sand away from drainage canals and waterways ☐ Install silt traps, sedimentation ponds, and other sediment control measures ☐ During rain events, check the drainage system to see if these are blocked. Remove blocked materials. ☐ Hauling of excess excavated soil/incompatible soil for filling to designated disposal location in compliance to DPWH DO 168	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ MOA with private land owner for the disposal of excess soil	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
K. Contamination of surface water and groundwater with oil/grease	☐ Proper handling and disposal of waste oil, grease, diesel and gasoline ☐ Preparation of hazardous waste management procedure ☐ Conduct of training on oil spill response	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Waste Management Procedure ☐ Approved Construction Safety and Health Program (CSHP) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
L. Dust from construction activities, materials stockpiles, and movement of construction vehicles	☐ Conduct watering and dust abatement measures during dry and windy conditions ☐ Require workers to wear particle mask ☐ Keep stockpile of aggregate and sand materials covered with well-fixed plastic sheeting, tarpaulins or other geotextiles to avoid suspension or dispersal of fine soil particles during dry and windy days. ☐ Equip concrete mixing equipment with dust shrouds. ☐ Periodically clean-up debris at the work site. ☐ Prohibit idling of construction vehicles while unloading materials at the site. ☐ Impose speed limit on construction vehicles particularly when passing communities, residential or commercial areas or sensitive areas	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
M. Generation of construction wastes ☐ Biodegradable wastes (e.g. food wastes) ☐ Non-biodegradable wastes (e.g. debris, concrete / soil debris, wood chips)	☐ Implement waste segregation and provide separate waste bins for biodegradable and non-biodegradable wastes ☐ Designate an area for recyclable materials such as metal, wires, etc.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Recyclable wastes (rebars, wires, nails, etc.) ☐ Hazardous wastes (empty containers of paints and solvents, resins, adhesives and degreasers, oily rags, busted lamps, spent welding electrode sticks/rods, discarded batteries, etc.)	☐ Coordinate with the LGU on the regular collection of biodegradable and non-biodegradable wastes. ☐ Coordinate with waste recycler for the disposal of recyclable materials ☐ Commission the services of third-party hazardous waste transporter and treater with license from DENR in the collection and treatment of hazardous wastes. ☐ Prohibit burning of wastes. ☐ Provision of secondary containment for all hazardous wastes			
N. Sanitation and domestic sewage from construction camp	☐ Provide clean water and hand-washing facilities at the construction camp ☐ Provide temporary toilet facilities with septic tanks; Locate temporary septic tank more than 25 meters from an existing water supply well or surface water body ☐ Provide portable toilets (portalets); ensure contents of portalets are regularly collected by the third party portalet provider for safe offsite treatment and disposal. ☐ Ensure that the third-party portalet provider has a Discharge Permit from DENR.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
O. Traffic congestion caused by side street parking of construction vehicles	☐ Prohibit prolonged side street parking of construction vehicles ☐ Assign flag persons to direct flow of vehicles	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Community and Occupational Health and Safety Plan (COSH)	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Coordinate with local government and communities about schedule of movement of construction vehicles ☐ Provision of alternate route			
P. Road accidents during construction	☐ Implement speed control for delivery trucks ☐ Install warning signages ☐ Provide barricades and lighting at night in construction sites ☐ Prohibit entry of unauthorized persons at the construction site ☐ Orient drivers on precautionary measures when passing through community areas and times of day to reduce risk of accidents ☐ Observe extra caution when passing through dangerous routes ☐ Implement limits for trip duration and arranging driver rosters to avoid overtiredness of drivers. ☐ Regular maintenance of vehicles to minimize serious accidents caused by vehicle malfunction. ☐ Provision of sufficient lighting system	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
Q. Potential damage to existing road due to hauling of materials and movement of construction vehicles	☐ Restoration and repair of existing road by the contractor	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
R. Occupational health and safety risks and hazards ☐ Hazardous working conditions such as trenches, excavations, electrical/mechanical works ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19)	☐ Implement an Occupational Safety and Health (OSH) Plan in compliance with the DOLE OSH guidelines. ☐ Designate an onsite Safety Officer duly accredited by DOLE. ☐ Establishment of GRM for workers ☐ Require workers to wear safety gadgets/PPEs such as hard hats, gloves, safety belts, rubber boots, and goggles, appropriate to the task. ☐ Post safety signs/reminders in strategic areas within the construction area. ☐ Provide sufficient lighting at night. ☐ Provide barricades / safety barriers particularly at excavations and stockpiles of aggregates. ☐ Provide first-aid kit at the construction site to ensure immediate medical attention in case of accidents. ☐ Comply with the COVID-19 health and safety guidelines of the Government.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Health and Safety (COSH) ☐ approved CHSP by DOLE ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE ☐ LMP and Code of Conduct	Cost of mitigation measures to be shouldered by the contractor	Contractor
S. Labor disputes over terms and conditions of employment	☐ Priority hiring of qualified local residents ☐ Set-up a grievance redress mechanism for workers including GRM posters, GRM drop boxes at project site, barangay halls, municipal halls, provincial halls ☐ Assign a Grievance Point Person ☐ Construction will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Functioning GRM for workers ☐ LMP and code of conduct	Cost of mitigation measures to be shouldered by the contractor	LGU PSO/RPCO Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
T. Community health and safety risks and hazards ☐ Noise nuisance ☐ Airborne dust ☐ Unsecured construction site	☐ Provide fence or barricade around construction site ☐ Conduct consultations with neighboring communities and Barangay about the project and the schedule of works. ☐ Schedule noisy works during daytime in sites near sensitive receptors ☐ Watering of areas prone to airborne dust during dry season ☐ Install warning signs.	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
U. Impacts of labor influx such as: ☐ Exposure of community to communicable diseases (e.g. COVID19) and sexually transmitted diseases (HIV/AIDS) ☐ Misconduct of workers causing tension and peace and order issues in the community due to differences in traditions, culture, religion, ethnicity ☐ Increased criminality in the area ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Conduct orientation of workers on proper behavior and community values, cultural traditions and practices ☐ Orientation of workers on prevention of COVID-19, HIV/AIDS and other communicable diseases ☐ Prohibit use of dangerous drugs, smoking, and alcohol consumption ☐ Give priority to qualified local laborers in hiring construction workers ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract ☐ Guidelines on Community and Occupational Safety and Health (COSH) ☐ GRM records ☐ Approved Construction Safety and Health Program (**CSHP**) by DOLE	Cost of mitigation measures to be shouldered by the contractor	Contractor
V. Impacts on cultural properties	☐ Implement chance find procedure in accordance with the requirements of the National Cultural Heritage Act (2009) and Cultural Properties Preservation and Protection Act	☐ Cultural Heritage Management Plan ☐ Chance Find Procedure	Cost of mitigation measures to be shouldered by the contractor	Contractor

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
	☐ Immediately suspend any activities upon discovery of chance find and report to the LGU and RPCO SES focal person			
1. Security and conflict risk	☐ Social preparation and meaningful consultations ☐ Proper coordination with relevant authorities ☐ LGUs mandated to ensure and maintain peace and order within their respective areas are to formulate and implement their POPS Plans as per DILG Memorandum Circular No. 2022-118 Guidelines on the Development and Formulation of the Peace and Order and Public Safety Plan (POPS-PLAN) 2023-2025 dated September 19, 2022. POPS Plan should be updated accordingly ☐ evacuation plan in case of insurgency or conflicts as part of POPS Plan	☐ Local Government Unit's (LGUs) Peace and Order and Public Safety Plan (POPS) Plan	Cost of mitigation measures to be shouldered by the LGU	Local Government Unit (LGU)
W. Operation Phase				
2. Food safety in processing, preservation, packaging, labelling	☐ Ensure compliance with food safety and quality standards of the Bureau of Agriculture and Fisheries Standards (BAFPS) ☐ Apply HACCP as well as standard procedures on sanitation, Good Manufacturing Practice (GMP, pest control, chemical control, allergen control ☐ Secure Food Safety Clearance ☐ FDA	☐ Food Safety Clearance	Include in overall subproject cost	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
3. Generation of wastewater from washing of fish and market/trading stalls that could cause water pollution in the receiving water body	☐ Provision of a wastewater treatment facility that will meet the Effluent Standards of DENR ☐ Monitor quality of effluent discharge to ensure compliance with the standards ☐ Monitor water quality of water body. in coordination with DA/BFAR ☐ Re-use of treated wastewater to applicable uses	☐ O&M Plan ☐ Monitoring reports	Include in overall subproject cost	LGU
4. Generation of odor ☐ From discarded marine products, crops, and other agri-fishery residues ☐ Decomposing marine products, crops and other agri-fishery residues	☐ Properly dispose the rejected yields to avoid decomposition and pungent odor and prevent proliferation of rodents, flies	☐ O&M Plan ☐ Monitoring reports	Include in overall subproject cost	LGU
5. Generation of wastes from facilities ☐ Solid organic wastes and. by-products (discarded marine products, crops and other agri-fishery residues) ☐ Non-biodegradable wastes (empty containers, plastics, packaging materials, etc.) ☐ Hazardous wastes (busted lamps, waste electronic equipment, batteries, oily rags, etc.)	☐ Integrate waste management procedure with procedures for waste minimization, segregation and proper disposal ☐ Ensure regular collection of solid wastes ☐ Prohibit open burning of waste materials ☐ Commission the services of third-party hazardous waste transporter and treater with licensed from DENR ☐ Provision of secondary containment for all hazardous wastes	☐ POW/DED incorporating waste management procedure ☐ Operations and Maintenance Plan incorporating food safety procedures, veterinary inspection, HACCP, monitoring of the waste management measures	Include in overall subproject cost	LGU
6. Occupational health and safety risks and hazards	☐ Provision of appropriate PPE for workers	☐ Guidelines on Community and Occupational Health and Safety (COSH)	Include in overall subproject cost	LGU

Potential Risks and Impacts	Mitigation Measures	Monitoring Parameters	Cost of Mitigation/Monitoring	Institutional Arrangement
☐ Hazardous working conditions such as extreme temperature (hot/cold), working in water ☐ Extended working hours ☐ Exposure of workers to communicable diseases (e.g. COVID19) ☐ Gender-Based Violence (GBV) Sexual Exploitation and Abuse and Sexual harassment (SEA/SH)	☐ Assign a Safety Officer ☐ Assign a Pollution Control Officer ☐ Provide medical services/first-aid kit at the site to ensure immediate medical attention in case of accidents. ☐ Workers shall comply with government health protocols in deployment of workers and continuation of production activities in line with the COSH ☐ Establishment of a GRM for workers that is GBV SEA/SH Sensitive	☐ Monitoring reports ☐ LMP and Code of Conduct		
7. Conflict between members of the FCA/FCA clusters ☐ Unclear policy on project beneficiary prioritization ☐ Unclear policy on project implementation ☐ Labor disputes over terms and conditions of employment	☐ Conduct consultations with members of the FCA/FCA clusters ☐ Establish the grievance redress mechanism (GRM) including GRM posters, GRM drop boxes at within subproject facilities ☐ Assign a GRM focal/point person ☐ Subproject will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates.	☐ Operation and Management Plan ☐ Appointment of LGU and PSO/RPCO Grievance Point Person/Grievance Officer ☐ Monitoring Reports/Checklist ☐ GRM for workers	Cost of mitigation measures to be shouldered by the contractor	

Prepared by: _____

Conforme: _____

PPMIU/MPMIU Head

Noted by the local community: _____

Barangay Captain

ANNEX J-11: SITING CRITERIA AND OPERATIONAL GUIDELINES FOR BATCHING PLANTS, SPOILS, BORROW PITS

A. Siting Criteria – Batching Plant

- ☐ Located away from wind direction and adequately buffered at a distance of 100 meters from noise- and dust-sensitive areas/establishments (e.g., residential houses, schools, daycare, hospitals) and bodies of water (i.e. rivers) –if not, provide temporary/artificial buffer such as high walls or earth mounds;
- ☐ Located in a well-drained area or where adequate drainage can be provided;
- ☐ Has enough space to process wastewater can be retained on-site and for water containment reservoir for water treatment and re-use could be done;
- ☐ Does not obstruct any natural stream flow;
- ☐ Located away from a protected and natural habitat area (forest, mangrove, coastal area and sensitive water ecosystem);
- ☐ Located away from hazard prone areas such as critical slopes, landslides, and erodible areas;
- ☐ Does not displace, alter or block access to, any cultural heritage site, monuments or structures;
- ☐ Must be covered by adequate land use rights and impacts are acceptable to adjacent properties which as much as possible considers fewer trees to be cut and less vegetation/crops to be affected;
- ☐ Located near as possible to the pouring site to meet the required elapse time for concrete hauling. The time elapsed from the time water is added to the mix until the concrete is deposited in place at the Site shall not exceed forty five (45) minutes when the concrete is hauled in non-agitating trucks, or ninety (90) minutes when hauled in truck mixers or truck agitators, except in hot weather or under other conditions contributing to quick hardening of the concrete, wherein the maximum allowable time may be reduced by the Engineer.

B. Operational Guidelines –Batching Plant

- ☐ Perimeter fence should be provided to control public access into the plant and emission of dust from the plant to nearby areas;
- ☐ Perimeter canal and drainage should be provided;
- ☐ Adequate stilling pond and silt traps for the liquid wastes/effluents;
- ☐ Storage of cement and aggregates should be screened;
- ☐ Require wearing of PPE inside the plant and other related safety measures indicated in the DOLE-OSH plan;
- ☐ Heavy machine operators should be well experienced. Weekly maintenance of equipment and clear designation of equipment yards in plant facility should be done. A routing plan (access and exit routes) for heavy equipment should be accomplished prior to operation to minimize impacts;
- ☐ Regular disposal of excess materials and other construction wastes to designated Spoil Disposal Site;
- ☐ Manage hazardous wastes (waste oil, batteries, etc.) through provision of storage in temporary containers; avoidance of contamination of soil water; and proper disposal;
- ☐ Regular control of dust by routine water sprinkling;
- ☐ Avoidance of night time operation to minimize disturbance to the community;
- ☐ Provide potable water & sanitary facilities for workers within the site;
- ☐ Maintenance during construction and, restoration upon completion, of routes to and from the site;
- ☐ Upon completion of the project, restoration of the site to a state which would afford a maximal range of land use options to the owner, or in accordance with the landowner's specification.

SITING CRITERIA AND OPERATION GUIDELINES FOR SPOIL DISPOSAL AREA

A. Siting Criteria – Soil Disposal Area

- ☐ Located away or adequately buffered at 50 meters distance from noise- and dust-sensitive areas/establishments (e.g., residential houses, schools, daycare, hospitals etc,);
- ☐ Site is sufficient to accommodate the surplus excavation and that there will be less people and vegetation that will be affected;
- ☐ Located in naturally depressed but well drained area;
- ☐ Disposal of materials does not obstruct any natural stream flow;
- ☐ Must not adversely affect or convert any natural habitat (forest, mangrove, coastal area and sensitive water ecosystem);
- ☐ Must not affect any protected areas and preservation of natural water ecosystem such as wetlands and marshlands;
- ☐ Must not affect any monuments, historical buildings and other cultural heritage structures;
- ☐ Must not be in critical slopes near ravines and cliff, high elevations, and areas prone to erosion;
- ☐ Use of the site must be covered by adequate land use rights contracts and acceptance by owners of adjacent properties for any adverse impacts;
- ☐ Must not have adverse impacts on water resources such as possible blockages of streams and springs;
- ☐ Must not disrupt or block any drainage or result in ponding;
- ☐ Must be located away from streams and naturally protected from storm water runoff.

B. Operational Guidelines – Soil Disposal Area

- ☐ Regular maintenance, repair of damage of routes to and from the disposal area;
- ☐ Undertake practical dust control when necessary;
- ☐ Materials disposed into the site must be immediately leveled and compacted or rendered according to the agreed plan with the owner;
- ☐ The boundaries of proposed dumping site must be clearly delineated;
- ☐ Sediment control measures such as perimeter canals and silt traps should be installed when necessary;
- ☐ Conduct regular water sprinkling during dry season to prevent dust re-suspension;
- ☐ Upon completion of the subproject, the area should be leveling, re-vegetated or rendered according to the contract with the owner.

SITING CRITERIA AND OPERATIONAL GUIDELINES FOR BORROW PITS

A. Siting Criteria – Borrow Pit

- ☐ Located away in terms of wind direction and or adequately buffered from dust- and noise-sensitive areas/establishments (e.g., residential houses, schools, daycare, hospitals etc,);
- ☐ Located in a naturally elevated/raised and well drained area;
- ☐ Does not obstruct any natural stream flow;
- ☐ Must not be located in an environmentally critical area as defined in the PEIS;
- ☐ Must not convert or adversely affect a natural habitat (forest, mangrove, coastal area and sensitive water ecosystem);
- ☐ Must not adversely affect any cultural heritage sites, monuments or structure;
- ☐ Use of the site must be covered by adequate land use rights contracts and acceptance by owners of adjacent properties for any adverse impacts;
- ☐ Must not have adverse impacts on water resources such as possible contamination or alteration of quality of drinking water source;
- ☐ Accessibility and strategic access tracks to the borrow area in order to minimize disturbance to the local population and environment;
- ☐ Approval of the authorized material engineer if soil resources could be used for embankment based on soil investigation prior to excavation which verify the quality of the soil, record soil profiles according to varying depth;
- ☐ Consider selecting barren land with less productive soil and less risk of environmental hazards such as erosion, landslides, and flash flood.

B. Operational Guidelines – Borrow Pit

- ☐ Placement/stockpiling of stripped topsoil and overburden away from runoff;
- ☐ Perimeter canal to protect the pit from runoff;
- ☐ Well planned excavation or according to the specification of the landowner, if any;
- ☐ Maintenance of good drainage in the area;
- ☐ Fencing and installation of off-limits signs around deep excavations and other related safety measures indicated in the DOLE-OSH plan;
- ☐ Avoid disturbance to local drainage patterns and drastic changes in the topographic profile of the pit site by Back filling of spoil;
- ☐ Observe weekly maintenance of heavy equipment to avoid water and soil contamination by fuel and oil spillage;
- ☐ Consider weather conditions, where practicable, earth stripping/moving and other activities that will generate dust particulates will be conducted not during the dry and windy season;
- ☐ Susceptibility to sub-soils erosion on borrow floor could be prevented by providing vegetation covers and slope protection;
- ☐ Regular maintenance and restoration of routes to and from the site, upon completion of works;
- ☐ Return the topsoil and re-vegetate/landscape the area upon completion or render according to specification/contract with landowner.

SITING CRITERIA AND OPERATIONAL GUIDELINES FOR QUARRY SITES

A. Siting Criteria – Quarry Site

- ☐ Located away in terms of wind direction and or adequately buffered at a distance of 100 meters from dust- and noise-sensitive areas/establishments (e.g., residential houses, schools, daycare, hospitals etc,);
- ☐ Located in a naturally elevated/raised and well drained area;
- ☐ Does not obstruct any natural stream flow;
- ☐ Must not be located in an environmentally critical area as defined in the PEIS;
- ☐ Must not convert or adversely affect a natural habitat (forest, mangrove, coastal area and sensitive water ecosystem);
- ☐ Must not adversely affect any cultural heritage sites, monuments or structure;
- ☐ Use of the site must be covered by adequate land use rights contracts and acceptance by owners of adjacent properties for any adverse impacts;
- ☐ Must not have adverse impacts on water resources such as possible contamination or alteration of quality of drinking water source;
- ☐ Natural environment state of the quarry site and its holding capacity is sufficient to supply the needed materials;
- ☐ Ensure Quarry site have updated government clearances.

B. Operational Guidelines – Quarry Site

- ☐ Crushing equipment can be enclosed or housed for acoustic/vibration attenuation;
- ☐ Advance notification to the community and workers thru written notices, early warning sirens and other agreed forms of notification for the blasting of rocks, schedule;
- ☐ Consider weather conditions, for earth stripping/moving and other activities that will generate dust particulates and avoid conduct during the dry and windy season;
- ☐ Provide natural or artificial barriers – such as trees, fences, stockpiles, and landforms to help control the emission of dust from the quarry to the sensitive land uses;
- ☐ Regular water sprinkling of roads, stockpiles, and conveyors must be implemented;
- ☐ Avoid washing of rocks, aggregates and equipment within the quarry site or the river;
- ☐ Stockpiles of loose soil should be located at least 100 meters from the river system and provided with silt screens;
- ☐ Regular maintenance and restoration of routes to and from the site, upon completion of works;
- ☐ Return the topsoil and re-vegetate/landscape the area upon completion or render according to specification/contract with landowner.

ANNEX K: GUIDELINES IN THE PREPARATION OF CONTRACTOR' ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (CESMP)

The civil works contractor will be required to prepare a Contractor's Environmental and Social Management Plan (CESMP) that reflects its understanding and commitment to address environmental and social issues of the subproject. The preparation of the CESMP and the management of likely impacts of construction works on the natural and social environment is stipulated in the Terms of Reference (TOR) of the bidding and contract document. The contractor is instructed to prepare a detailed program of works that includes the CESMP, the site-specific requirements and conditions, assessment of the risks and impacts of implementing the program of works, and the mitigation measures to address these risks and impacts. The CESMP incorporates the measures in the signed and approved Environmental and Social Management Plan (ESMP) for which the contractor is responsible for as well as standard construction industry practice on occupational health and safety.

A. Key Elements of CESMP

The CESMP will contain the following key elements:

a) Brief overview of the program of works, subproject location and vicinity
b) Planned location of construction camp, quarry, batching plant, borrow pits, and spoils disposal area
c) Anticipated environmental and social issues related to the construction activities
d) Mitigation measures to address the anticipated environmental and social risks and impacts
e) Designation of personnel to oversee implementation of the CESMP and environment, safety and health measures
f) Budget and resources allocated for the CESMP implementation.

B. Procedure of CESMP Approval

The LGU and PRDP SES shall discuss the results of the SES screening and Environmental and Social Assessment (ESA) including the approved ESMP and other related safeguards compliance of the subproject during the pre-procurement and pre-bidding conferences to provide awareness to the Contractor on their safeguards responsibilities during implementation.

During the pre-construction conference, the winning contractor should submit a draft CESMP. The CESMP shall be subject to review and approval by the PSO/NPCO SES prior to issuance of any Notice to Proceed. The approved Contractor's ESMP shall be the basis for daily and periodic compliance monitoring of contractor works by LGU and PRDP SES.

C. Steps in Formulating the CESMP

The following are the suggested steps in formulating the CESMP:

1. LGU and Contractor to discuss and review all measures in ESA and approved ESMP of the subproject if the actions are indeed handed over to the appropriate responsible person. An agreement between the LGU and Contractor shall be made.

E.g. a) Reconstruction of affected structures could either be through LGU or the Contractor depending on the agreement; b) Cut Trees will be returned by the Contractor to the Project Affected Persons instead of the LGU

2. After discussion and finalizing the approved ESMP, using the same document all measures having the contractor as a responsible person should be retained and form part as initial draft for Contractor's ESMP.
3. Once all items have been retained, the contractor will review all mitigation measures and provide specific details. Note that in preparing the CESMP the winning contractor should have started their initial survey of the area in order to provide site specific measures and/or information.

Example:

- If there reconstruction of affected structures will be made by the contractor, a list of Project Affected Persons (PAPs), their location, and items to be reconstructed should be incorporated in the measure;
- Provide how to properly handle waste oils and grease by discussing if there will be: 1) specific containers, 2) storage area; and 3) process for its disposal;
- Provision of specific locations and area size of bunk houses, quarry sites, borrow pits, batching plants and disposal sites, including surrounding areas (i.e. rivers/creeks, residential areas, etc.) that may be affected by soil runoff, dust, noise and vibration;
- Total number of laborers and their wages;
- Exact time of construction works;
- Schedule of hauling of waste materials;
- Total number of toilets with septic tanks to be set up and location, source of potable water and handwashing facilities;
- The specific speed limits and stations for detours;
- Updating of final stations for the works based on the survey;
- Creation of Contractor's Grievance Redress Mechanism (GRM) system with focal person on GBV and SEA/SH;
- Details on the Construction Safety and Health Plan (CSHP);
- Appointment of Safety Officer and/or Environment Officer/Pollution Control Officer;
- Other measures under the responsibility of the contractor that need to be provided with specific details.

4. The contractor is required to complete the PRDP guidelines for site selection for Batching Plant, Quarry Site, Borrow Pit, and Waste Dumping Site and to and attach this in the ESMP. Likewise, specific details as to the location, area, lease information, capacity of the site, and certifications for the batching plant, quarry site, borrow pit, and waste dumping site, if any, should be incorporated in the matrix of the CESMP under the assessment column.
5. For the Occupational Health and Safety Plan, the approved DOLE – CSHP Plan should be attached in CESMP. The CSHP Plan should be strictly followed by the contractor. In the matrix of the CESMP, the contractor may provide salient points to the DOLE – CSHP Plan or simply refer details to the attachment under the mitigation measure column.
6. Once all site specific details have been provided, the contractor needs to sign the document and submit to PRDP SES for review and approval.
   The approved CESMP along with other safeguards instruments such as the approved ESMP, GRM Posters, should be explained to workers and subcontractors during orientation training or construction meetings to make them aware of everyone's responsibilities in implementing the CESMP. The CESMP will be made available at the construction site and bunk houses of the contractor.

ANNEX L: BIODIVERSITY MANAGEMENT PLAN

This Biodiversity Management Plan (BMP) is prepared to guide project activities that have potential to generate environmental impacts on ecologically valuable receptors such as sensitive habitats and species, protected areas, forests, and mangrove areas. This BMP identifies potential impacts on biodiversity, defines the legal and regulatory requirements of the Government for works in the vicinity of designated protected areas and outlines the actions and measures necessary for the management of biodiversity, in line with World Bank's ESS 6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources).

A. Applicability

Subproject activities located inside declared strict protection zones of protected areas are outrightly excluded for financing under PRDP Scale-Up. The BMP applies to subprojects located in buffer zones and multiple use zones of protected areas and those located within marine and aquatic ecosystems or close to any waterbody whose activities will have effects on the overall biodiversity of the area. The BMP is supplementary to the Environmental and Social Management Plan (ESMP).

B. Key Elements of the Biodiversity Management Plan

The BMP will contain the following key elements:

a) Brief overview of the program of works, subproject location and vicinity
b) Description of ecosystem, biodiversity and affected flora/fauna in the subproject impact area.
c) Anticipated impacts of the subproject related to biodiversity and ecosystem services.
d) Mitigation measures to address the anticipated risks and impacts
e) Designation of personnel to oversee implementation of the BMP
f) Budget and resources allocated for the BMP implementation.

C. Biodiversity Management Principles

Biodiversity management should focus on identifying, evaluating, conserving and if possible enhancing the relevant aspects of biodiversity. The plan shall:

- Respect the mitigation hierarchy
- Avoid or mitigate biodiversity loss, with the objective of maintaining the diversity of species, habitats, ecosystems, and the integrity of ecological functions
- Comply with regulatory requirements and the protected area management plan based on the information available from the DENR - Protected Area Superintendent Unit (PASU) of a protected area.
- Develop measures to remediate or rehabilitate local biodiversity losses.
- Develop defined objectives and measurable targets on biodiversity mitigation and enhancement measures, e.g. number of trees to be replanted, locations, etc.
- Consider the biodiversity sensitivity at the site, i.e. ecological functions and/or species to be targeted by biodiversity management actions.

D. Potential Impacts on Biodiversity

Construction activities and operation of a subproject may have the potential to generate a wide range of environmental impacts on biodiversity and the ecosystem. Examples of such impacts include (but are not limited to):

- Vegetation loss and conversion that affects habitats supporting sensitive species

- Disruption of movement of fish and other aquatic species due to construction of dam and other river impoundment systems
- Impact to ecosystem services
- Cutting of trees that affects habitats and nesting areas of bird and bats
- Removal of mangroves for excavation of ponds and construction of fish cages that would affect fish spawning areas and flood protection service
- Salinization of agricultural land due to conversion or use for aquaculture
- Alternation of natural hydrology of bays, rivers, or wetlands due to construction of ponds and other aquaculture activities
- Loss of genetic resources due to collection of larvae, fry or juveniles or due to crop production
- Disruption of existing ecological balance from introduction of alien or genetically engineered species
- Potential release of artificially propagated seeds
- Antibiotic resistance in pathogenic bacteria that can spread farms to wild stock
- Transfer to genes to other species (weedy or invasive)
- Increased pest resistance from introduction of genetically modified organisms, pests and species
- Eutrophication of the aquatic environment from runoff and leaching of excess crop nutrients.

E. Laws and Regulations on Conservation and Protection of Biodiversity and Natural Resources

The subproject and its contractors are required to comply with the following laws and regulations on natural resources and biodiversity conservation and protection:

Law/Regulation	Requirements
National Integrated Protected Areas System Act (NIPAS) Act (RA 7586 as amended by RA 11038/2017, Expanded NIPAS Act) –	The e-NIPAS Act and its implementing rules and regulations prescribe the requirement for Comprehensive Development and Management Plan (CDMP), Rehabilitation Plan and annual operations plan and budget for projects to be located in multiple use and buffer zones of protected areas. The e-NIPAS requires projects in multiple use and buffer zones of protected areas to secure the Protected Area Management Board (PAMB) Resolution, PAMB Clearance and the Special Use Agreement in Protected Areas (SAPA) from the DENR.
Philippine Environmental Impact Statement System (PEISS) or PD 1586 and Proclamation No. 2146 (1981)	Biodiversity assessment is required in critical habitats, protected areas, marine areas, and forest lands. Projects planned to be located in the multiple use, buffer zones of protected areas are required to prepare an EIA in accordance with PEISS, apply for an Environmental Compliance Certificate (ECC) and seek approval from the Protected Area Management Board (PAMB). Development projects planned inside the core zones of national parks, forest protection areas, natural habitats for wildlife conservation, natural reserves are prohibited.
Wildlife Resources Conservation and Protection Act (RA 9147)	The law requires that no exotic species shall be introduced into the country, unless a clearance from the DENR is first obtained. In cases where introduction is allowed, it shall be subject to environmental impact study which shall focus on the bioecology, socioeconomic and related aspects of the area where the species will be introduced. The proponent shall also be required to secure the prior informed consent

Law/Regulation	Requirements
	from the local stakeholders. Exotic species are not allowed to be introduced into protected areas.
Revised Forestry Code (PD 705 as amended by PD 1559	The law established the restrictions on commercial logging or grazing operations in critical watershed, national parks, and established experimental forests. It also prohibits hunting or fishing and other activities of commercial nature in game refuges, bird sanctuaries, marine and seashore parks. Further, it requires the evaluation of numerous beneficial uses of timber, land soil, water, wildlife, grass and recreation or aesthetic value of forest lands and grazing lands before allowing their utilization, exploitation, occupation or possession, subject to a license agreement, license, lease or permit. The Forestry Code requires the replacement of trees to be cut by a proposed development.
DENR Memorandum Order 2012-02	The regulation prescribes the uniform replacement ratio for cut or relocated trees in securing tree cutting permits. In private and forest lands (except tree plantations/timber production), the replacement defined under the order of 1:50 while naturally growing trees shall have a replacement ratio of 1:100 in support of the National Greening Program (NGP) and climate change initiatives of the government.
Joint IRR of DENR-DA-PCSD Administrative Order No. 01, series 2014	The joint regulation applies for all wildlife species and unknown genera or unknown species or strains of known species that will later on be discovered or identified as occurring in the country as well as to exotic or foreign species which are subject to trade, are maintained, cultured and/or bred in captivity or propagated in the country, including those that have been illegally introduced. Domesticated or propagated species, such as, but not limited to livestock, poultry and common ornamental plants are outside its coverage. However, species listed in the CITES which may be or are being farmed or propagated shall be subject to requirements as may be imposed by the DENR. Wildlife resources found within protected areas are governed by the NIPAS law, except aquatic and marine resources when used for scientific and/or commercial purposes which will be under DA in accordance with RA 9147 and RA 8550.
DENR Administrative Order 2004-32 (Revised Guidelines on the Establishment and Management of Community-Based Program in Protected Areas)	The regulation offers tenured migrant communities and interested Indigenous Peoples within the protected areas and buffer zones, tenure over established Community-Based program area, provided that the activities to be undertaken are consistent with the Protected Area Management Plan (PAMP). Local communities in protected areas who are involved in primary production are required to secure a tenurial instrument, which includes the submission and approval of a forest land use plans or protected areas management plan. Other instruments are the Community-based forest management agreement (CBFMA), PACBARMA, and IFMA.
Executive Order 23, series of 2011	Declares a moratorium on the cutting and harvesting of timber in the natural and residual forests in the entire country.

In line with the above laws and regulations, the following are the applicable regulatory requirements:

- PRDP Scale-Up will not fund subprojects that will encroach into declared strict protection zones of protected areas such as natural parks under e-NIPAS, except for those located in buffer zones or multiple use zones as identified and approved by the Protected Area Management Board (PAMB) of the declared protected area.

- A subproject will be presented to the PAMB as part of the approval process in securing the PAMB Resolution and PAMB Clearance.
- A subproject in a declared protected area shall secure the Special Use Agreement in Protected Area (SAPA) from the DENR as required under the E-NIPAS Act.
- The PAMB Resolution, PAMB Clearance, SAPA, and Comprehensive Development and Management Plan (CDMP) shall be presented together with the subproject proposal/business plan.
- Tree Cutting/Earth balling Permit shall be secured in case there are trees that will be affected. The permit shall be presented together with the subproject proposal/business plan.

F. Procedures in Biodiversity Management Planning

a) Biodiversity Identification

As part of the subproject proposal preparation, the site will be investigated with regards habitat types and species to establish a biodiversity baseline. This information will be referred from the results of the ESIA, community consultations on local knowledge of habitats, species behavior, ecosystem, and priority species and habitats. Any ecosystem services that may be affected by the project such as for water supply, water recharge, protection from flooding, cultural services (sacred sites, burial sites, and monuments), and medicinal species will be identified during the subproject preparation and ESIA.

b) Biodiversity Mapping with DENR-PASU

The biodiversity mapping can be verified from the SES screening by RPCO and mapping of the subproject against the protected area boundaries, in coordination with the GGU. Once screened as within the buffer zone or multiple use zone of a protected area, the proponent group/enterprise is required to coordinate with the DENR-PASU to validate the information from the maps and allowable based on the protected area management plan (PAMP) of the DENR-PASU and to ensure consistency of the subproject with the PAMP.

c) Procedures in Formulating the BMP

The following are the suggested steps in formulating the BMP:

1. The proponent LGU/enterprise will assess the biodiversity values of the site. Basic information to consider in biodiversity screening and development of the BMP are:
    (i) How important is biodiversity at the site, i.e. how much protection does the site require?
    (ii) What is the status of biodiversity e.g. species/habitat richness, species endemism, rarity, size of habitat, population size, fragility, ecosystem service provision?
    (iii) Are there any threatened species?
    (iv) Are there any important ecosystems or threatened species?
    (v) Is there specific management requirements of the site's habitat type?
    (vi) How will the subproject activities affect biodiversity?
    (vii) What are the biodiversity risks and opportunities?
    (viii) What are the priority actions to address threats posed to biodiversity?
    (ix) Will biodiversity management enhance ecosystem services?

The plan will define the biodiversity targets and related actions such as capacity building, maintenance of tree plantation, monitoring and reporting. The plan will also identify the needed resources.

Minimum biodiversity management measures include:

a) Minimizing or avoiding habitat damage and fragmentation
b) Minimizing or avoiding species mortality and stress
c) Avoiding and control of introduction of invasive exotic species
d) Revegetation using non-invasive alien species or native species with specified number of trees to be replanted every year
e) Active control of invasive alien species
f) Monitoring of tree planting and biodiversity.

The following are examples of mitigation measures in the BMP.

Impacts	Mitigation Measures
Loss of habitat due to clearing of vegetation and fauna habitats	Conduct progressive land clearing to allow wildlife to move to adjacent sites Clearing activities will be limited to identified areas based on the construction plan Revegetation activity will be conducted consistent with DENR Order 2012-02 Conduct enrichment planting in each second growth vegetation and disturbed areas nearby and adjacent to the project site Establish and maintain corridor or buffer zones within the project area for species refuge and food source Retain and enhance unaffected vegetation and habitat/ecosystem, which can serve as natural acoustic protection and habitat of displaced/disturbed wildlife species. Develop a conservation plan or adopt biodiversity offsets that may be established outside of the project area to compensate for the cleared vegetation.
Threat to abundance, frequency, and distribution of important species	Limit clearing activities to designated construction area as specified in the development plan Establish and maintain corridor or buffer zones within the project area for species' refuge and food source. Retain and enhance unaffected vegetation and habitat/ecosystem, which can serve as natural acoustic protection and habitat of displaced/disturbed wildlife species Develop a conservation plan or adopt biodiversity offsets Formulate and conduct regular monitoring activities Prohibit workers from hunting in accordance with the Philippine Wildlife Resources Conservation and Protection Act of 2001 (RA9147) Conduct information, education and communication programs on wildlife conservation and protection

Hindrance to wildlife access	Retain and enhance unaffected vegetation and habitat/ecosystem which can serve as natural acoustic protection and habitat of displaced/disturbed wildlife species. Limit clearing to designated area based on the development plan. Establish and maintain corridor or buffer zones within the project area for species' refuge and food source.
Runoff of sediments from construction activities may cause sedimentation of river	Set-up temporary silt traps/ponds to minimize soil runoff. Proper stockpiling of spoils away from canals and river. Maintain vegetation where applicable and practicable to prevent erosion. Conduct progressive ground preparation and clearing to minimize total area of land that will be disturbed at any one time, where practical. Restore disturbed areas immediately after construction
Domestic wastewater generated from the construction workers	Provide adequate temporary toilets. Strictly require workers to observe proper waste disposal and sanitation
Workers may be engaged in harvesting of resources in the protected	Strictly prohibit workers from hunting, fishing, and illegally taking resources from the protected area in accordance with the prohibitions of the PAMB and the protected area management plan

ANNEX M: INTEGRATED PEST MANAGEMENT PLAN

The Integrated Pest Management Plan (IPMP) provides guidance to project activities involved in the use and handling of pesticides or agrochemicals. Pest control measures are acknowledged as part of the activities for crop production as well as in the treatment of commodities before these are processed into food or feeds. The IPMP promotes pest control measures and procedures that can avoid impacts on humans or the environment. This guideline aims to provide guidance for preparation of a pest management plan aligned with World Bank ESS3 (Resource Efficiency and Pollution Prevention and Management) and ESS6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources).

A. Applicability

This guideline shall be applied to any project activity which is likely to use pesticides and other agro-chemicals.

B. Key Elements of the IPMP

The IPMP comprises of the following key elements:

a) Government regulations on pesticide use
b) Identified impacts of pesticides and agrochemicals
c) Mitigation measures
d) Training on safe use of chemicals
e) Monitoring.

C. Government Regulations Related to Pesticides

The Philippines implements the National Integrated Pest Management (IPM) program through the Bureau of Plant Industry (BPI) and Fertilizer and Pesticide Authority (FPA) under the Department of Agriculture.

Presidential Decree 1144 or the Fertilizer and Pesticide Act is the governing law that covers the entire cycle of pesticides and fertilizers from importation to use. Under this law, no pesticide shall be imported, exported, manufactured, formulated, repacked, distributed, delivered, sold or offered for sale, transported, delivered for transportation, or used unless it has been duly registered with the FPA. The FPA has issued several circulars and resolutions on banned and restricted pesticides in the Philippines as outlined in Tables 1 and 2.

Department of Agriculture Order No. 09-2020 also provides the policies and requirements on cost-efficient, effective, healthy, ecologically sound, and smart crop pest management measures. Functions included in the order are on plant pest surveillance, monitoring and forecasting, plant pest diagnostics, plant pest management, biological control agents mass production, training, biosecurity and quarantine measures, applied and adaptive crop pest management research and public advocacy on crop pest management.

Organic Agriculture Act (RA 10068) promotes the practice of organic agriculture in order to enrich the fertility of the soil, increase farm productivity, reduce pollution and destruction of the environment, and prevent depletion of natural resources.

The Philippines is also a signatory to the following international conventions related to pesticides:

- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- Stockholm Convention on Persistent Organic Pollutants (2004)

Table 1: List of Banned Pesticides in the Philippines

Name of Banned Pesticide	Details of Ban
1-Naphthylthiourea (ANTU)	Banned as per FPA Circular No. 04, series of 1989
1,4,5-T	Banned as per FPA Circular No. 04, series of 1989
Aldrin	Banned as per FPA Circular No. 4, series of 1989. Aldrin is a persistent organic pollutant under the Stockholm Convention on Persistent Organic Pollutants (POPs).
Azinphos Ethyl	Banned as per FPA Resolution No. 01, series of 1983
Chlordane	Banned as per FPA Circular No. 4, series of 1989. Chlordane is a persistent organic pollutant under the Stockholm Convention on Persistent Organic Pollutants (POPs).
Chlordimeform	Banned as per FPA Circular No. 04, series of 1989
Copper(III) Acetoarsenite (Paris Green)	Banned as per FPA Circular No. 04, series of 1989
DBCP	Banned as per FPA Circular No. 4, series of 1989
DDT	Banned as per FPA Circular No. 4, series of 1989. DDT is a persistent organic pollutant under the Stockholm Convention on Persistent Organic Pollutants (POPs).
Dieldrin	Banned as per FPA Circular No. 4, series of 1989. Dieldrin is a persistent organic pollutant (POP) under the Stockholm Convention on Persistent Organic Pollutants (POPs).
Elemental Phosphorus (White & Yellow)	Banned as per FPA Circular No. 4, series of 1989
Endosulfan	Banned as per FPA Circular No. 01, series of 2015. Endosulfan is a persistent organic pollutant (POP) under the Stockholm Convention on Persistent Organic Pollutants (POPs).
Endrin	Banned as per FPA Circular No. 4, series of 1989. Endrin is a persistent organic pollutant under the Stockholm Convention on Persistent Organic Pollutants (POPs).
EPN	Banned as per FPA Circular No. 4, series of 1989
Ehtylene Dibromide (EDB)	Banned as per FPA Circular No. 4, series of 1989
Gophacide	Banned as per FPA Circular No. 4, series of 1989
HCH/BHC	Banned as per FPA Circular No. 4, series of 1989
Heptachlor	Banned as per FPA Circular No. 4, series of 1989. Heptachlor is a persistent organic pollutant under the Stockholm Convention on Persistent Organic Pollutants (POPs).
Leptophos	Banned as per FPA Circular No. 4, series of 1989
Mercuric Fungicides	Banned as per FPA Circular No. 4, series of 1989
Nitrofen	Banned as per FPA Circular No. 4, series of 1989
Organotin Compounds	Banned as per FPA Circular No. 4, series of 1993
Parathion-ethyl	Banned as per FPA Circular No. 4, series of 1989

Name of Banned Pesticide	Details of Ban
Parathion-methyl	Banned as per FPA Circular No. 01, series of 1993
2-Fluoroacetamide (1081)	Banned as per FPA Circular No. 4, series of 1989
Sodium Fluoroacetate	Banned as per FPA Circular No. 4, series of 1989
Strychnine	Banned as per FPA Circular No. 4, series of 1989
Thallium Sulfate	Banned as per FPA Circular No. 4, series of 1989
Toxaphene/Camphechlor	Banned as per FPA Circular No. 4, series of 1989. Toxaphene is a persistent organic pollutant under the Stockholm Convention on Persistent Organic Pollutants (POPs).
Triphenyltin	Banned as per FPA Circular No. 4, series of 1989
Deltamethrin	Banned as per FPA Memorandum Circular No. 01, series of 2019
Fipronil	Banned as per FPA Memorandum Circular No. 29, series of 2018 – Banning use of Fipronil in banana through bud injection

Source: Fertilizer and Pesticide Authority. http://fpa.da.gov.ph. January 20, 2023

Table 2: List of Restricted Pesticides in the Philippines

Name of Restricted Pesticide	Details of Restriction	Remarks
Pentachlorophenol (PCP)	Restricted as per FPA Circular No. 4, series of 1989	Severely Restricted For use in wood treatment only by FPA accredited wood treatment plants and institutions.
Aldicarb	Restricted as per FPA Circular No. 4, series of 1989	Importation not allowed except in cases of emergency as determined by the authority
Carbon disulfide	Restricted as per FPA Circular No. 4, series of 1989	Adequate time for aeration is required after treatment before commodities are processed into food or feed.
Carbon Tetrachloride	Restricted as per FPA Circular No. 4, series of 1989	Adequate time for aeration is required after treatment before commodities are processed into food or feed.
Chlorobenzilate	Restricted as per FPA Circular No. 4, series of 1989	Importation not allowed except in cases of emergency as determined by the authority
Chloroform	Restricted as per FPA Circular No. 4, series of 1989	Adequate time for aeration is required after treatment before commodities are processed into food or feed.
Entropop	Restricted as per FPA Circular No. 4, series of 1989	For use in banana plantations only
Ehtyl formate	Restricted as per FPA Circular No. 4, series of 1989	Adequate time for aeration is required after treatment before commodities are processed into food or feed.
HCN Generating Materials	Restricted as per FPA Circular No. 4, series of 1989	Adequate time for aeration is required after treatment before commodities are processed into food or feed.
Inorganic Arsenicals (Arsenic Trioxide)	Restricted as per FPA Circular No. 4, series of 1989	For use by FPA accredited wood treatment and wood preserving plants only
Lindane (Gamma-BHC)	Restricted as per FPA Circular No. 4, series of 1989	The only allowed use to date is on pineapple plantations by soil pre-plant application.
Methidathion	Restricted as per FPA Circular No. 4, series of 1989	For use in banana plantations only

Name of Restricted Pesticide	Details of Restriction	Remarks
Methyl bromide	Restricted as per FPA Circular No. 4, series of 1989	Adequate time for aeration is required after treatment before commodities are processed into food or feed.
Monocrotophos	Restricted as per FPA Circular No. 01, series of 1993	Allowed for bean fly control on legumes only
Paraquat	Restricted as per FPA Circular No. 4, series of 1989	Restricted for institutional use only. Approval of use will be based on strict compliance by the importer/end-user of the requirements for its use.
Phenamiphos	Restricted as per FPA Circular No. 4, series of 1989	For use in banana and pineapple plantations
Phosphine generating compounds	Restricted as per FPA Circular No. 4, series of 1989	Adequate time for aeration is required after treatment before commodities are processed into food or feed

Source: Fertilizer and Pesticide Authority. http://fpa.da.gov.ph. January 20, 2023

D. Identified Potential Environmental and Health Risks Associated with Pesticides

Pesticides benefit farmers for crop production but they also pose serious negative impacts on the environment through contamination of air, groundwater, surface water, and soil from runoff from the fields, leak from storage containers and inappropriate disposal of expired chemicals and spent containers. Spent agro-chemical containers are considered hazardous materials. Moreover, pesticides can become hazardous to pests and health of humans if suitable precautions are not observed during transport, storage, handling, and disposal. Unintentional release through air, ingestion, or skin contact can pose risks to health of people. Improper use of pesticides can also induce resistance in pests. On large plantations, pesticides are applied through aerial spraying, often endangering not only plantation workers but also surrounding communities. Some farmers apply pesticides using spray cans mounted on their backs, with minimal use of personal protective equipment.

The following are identified environmental impacts related to the use of pesticides:

Media	Potential Issues
Surface and groundwater	Pesticides may pollute surface water through runoff which transports pesticides to streams, rivers, and other surface water bodies. Groundwater contamination may occur from chemical residues in land and in surface water.
Soil contamination	Chemical pesticides residues may be retained in soil during application; long-term excessive use will cause higher residues retained in soil which will cause soil contamination.
Air pollution	Vapor from sprayed pesticides will be released into the air; Some chemicals are very stable and vapor may travel beyond the application location.
Flora and fauna	Application of chemicals may cause harm to non-target species because of aerosol. Runoff into water bodies may potentially affect aquatic species.

Media	Potential Issues
People	Consumption of crops and plants where chemical was applied could cause health hazards.
Worker health and safety	Long term inhalation and exposure of farmers to toxic pesticides could eventually result in respiratory illnesses or other disease conditions.

E. Guidelines for the Preparation of IPM

The Integrated Pest Management (IPM) is an aspect of sustainable agriculture that is based on planned and strategic use of pest control methods. For each subproject there must be prepared and submitted detailed pest management plan in accordance to requirements of FPA. The plan will adopt the National IPM Program of the *Kasaganaan ng Sakahan at Kalikasan* or KASAKALIKASAN that aims to promote sustainable agriculture and rural development.

The following are procedures in the preparation of the subproject-specific IPMP:

1. Specific IPMP shall be prepared for subprojects that have been identified based on the SES screening and ESA to be involved in the application/ use of pesticides. As part of subproject proposal preparation, the pesticides to be used will be screened by the proponent LGU/enterprise against the list of banned or restricted by the FPA. (Refer to Tables 1 and 2). Any agro-chemical in the banned category will not be included agro-chemicals to be used by the subproject.

2. The proponent LGU/enterprise will prepare the IPMP as part of the ESMP. Recommended mitigation measures to avoid adverse impacts on both human and the environment due to pesticide handling are:

Activity	Mitigation Measures
Before using pesticides	☐ Minimize the need for pesticides by practicing integrated management by control strategies such as cultural control, mechanical control, physical control, biological control and chemical control. ☐ Receive recommendations from Municipal Agricultural Office (MAO) for proper management method for specific crop. ☐ Ensure that the pesticides to be used is registered with the FPA.
Purchase and Storage of Pesticides	☐ Do not purchase pesticides without any label or with unreadable foreign language labels. ☐ Review the product label and check the following: a. Date of manufacture and date of expiry b. Active ingredient and pesticide group c. Target pests, dosage d. Pre-harvest interval e. Storage and disposal procedure f. First-aid procedure. ☐ Select the pesticides which is suitable for specific pests and target plants as described in the label. ☐ Do not mix any two or more pesticides at the same time. ☐ Follow the instructions for use and the pre-harvest interval as prescribed in the label. ☐ Do not store the agro-chemicals in unlocked cabinets that are within reach of children.

Activity	Mitigation Measures
	☐ Do not transfer pesticides into containers that could be associated with food. ☐ Do not apply insect repellants over cuts, irritated skin, eyes, mouth, hands, or directly over the face. ☐ Do not store unnecessary amounts of pesticides. Purchase only what is needed at the time. ☐ Apply an appropriate level of caution to those who might come intact and become exposed.
Application of pesticides	☐ Application rates must not exceed the manufacturer's recommendations ☐ Avoid application of pesticides in wet and windy conditions. ☐ Pesticides must not be directly applied to streams, ponds, lakes, or other surface water bodies. ☐ Maintain a buffer zone (area where pesticides will not be applied), i.e. around water bodies, residential areas, livestock housing areas, and food storage areas. ☐ Use suitable equipment for measuring, mixing, and transferring pesticides. ☐ Do not stir liquids or scoop pesticides with bare hands ☐ Do not spray pesticides at the downstream direction and during windy conditions. ☐ Do not spray pesticides at high temperature of the day (i.e. noon time). ☐ Do not suck or blow blocked nozzle of the pesticide container. ☐ Do not assign pregnant women, lactating mothers, and children to handle pesticides. ☐ Wear protective clothing including gloves, shoes, long-sleeved shirt and full trousers when mixing or applying pesticides. ☐ Respiratory devices (mask) shall be used to avoid inhalation. ☐ In case of body or skin contact with the pesticide, wash off and seek medical aid.
Disposal of Spent Agro-Chemical Containers	☐ Use water soluble containers to avoid generating contaminated containers. Do not dispose spent containers in the open field. ☐ Collect spent containers and separate these from the non-hazardous wastes. ☐ Rinse the containers to minimize risks of contamination of soil, surface water and groundwater. ☐ One-way pesticide containers should not be reused or refilled once the contents have been deployed to avoid potential contamination. ☐ Reuse closed-loop refillable container many times. ☐ Do not recycle spent container to store food products. ☐ Do not burn plastics and pesticides because these may generate environmentally persistent toxic emissions. ☐ Do not bury pesticide containers at the place of use. ☐ Where recycling is not possible, containers will have to be disposed in a secured landfill.
Safety	☐ Farmers will be required to wear and use appropriate personal protected gears in the course of the activities to reduce the potential for dermal, inhalation, eye and oral contact of the chemicals, thereby reducing the chances of poisoning.

Activity	Mitigation Measures
	☐ The personal protective gears that should be used include chemical goggles, gloves, hat, boots, masks, and long sleeved shirt or full trousers. ☐ It is mandatory for the pesticide contaminated clothing to be kept from other fabric or clothes and cleaned and dried in a well-ventilated place before storage.
Personal hygiene	☐ Never eat, drink or smoke while handling pesticides. ☐ Change clothes immediately after spraying pesticides. ☐ Wash hands, face, body, and clothes with plenty of water using soap after pesticides handling.
Emergency measures	Indications of Pesticide Poisoning - General: extreme weakness and fatigue. - Skin: irritation, burning sensation, excessive sweating, staining. - Eyes: itching, burning sensation, watering, difficult or blurred vision, narrowed or widened pupils. - Digestive system: burning sensation in mouth and throat, excessive salivation, nausea, vomiting, abdominal pain, diarrhea. - Nervous system: headaches, dizziness, confusion, restlessness, muscle twitching, staggering gait, slurred speech, fits, unconsciousness. - Respiratory system: cough, chest pain and tightness, difficulty with breathing, wheezing. ☐ If pesticide poisoning is suspected, first aid must be given immediately, and medical advice and help must be sought at the earliest opportunity. If possible, the patient should be taken to the nearest medical facility. ☐ First Aid Treatment - If breathing has stopped: Give artificial respiration (i.e. mouth to mouth resuscitation if no pesticide has been swallowed.) - If there is pesticide on the skin: Remove contaminated clothing from the patient and remove the patient from the contaminated area. Wash the body completely for at least 10 minutes, using soap if possible. If no water is available, wipe the skin gently with cloths or paper to soak up the pesticide. Avoid harsh rubbing or scrubbing. - If there is pesticide in the eyes: Rinse the eyes with large quantities of clean water for at least five minutes. - If there is ingestion: Rinse mouth, give water to drink. Never induce vomiting in unconscious or confused persons, seek medical advice immediately.
Training and Capacity Building	☐ Orientation of farmers will be undertaken to adopt to farmer's experiences, culture and capabilities. ☐ The use of appropriate varieties and the practice of sound cultural management during land preparation, water and nutrient management, and control of insect pests and weeds will be discussed to respect farmers' cultural practices and enhance their ecological knowledge and skills in growing health crops.

ANNEX N: CULTURAL HERITAGE MANAGEMENT PLAN

The Cultural Heritage Management Plan (CHMP) aims to preserve, protect and avoid impacts to physical cultural resources (PCRs) in line with ESS8 (Cultural Heritage). The CHMP provides guidance in addressing cultural heritage as an integral aspect of sustainable development and promotes consultation with stakeholders regarding cultural heritage and equitable sharing of benefits from the use of cultural heritage.

A. Applicability

PCRs include cultural heritage sites, historical sites, remains, and objects including structures or groups of structures having archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. The CHMP also applies to chance finds procedure relating to the construction of subprojects including requirements to notify relevant authorities of found objects or sites of cultural heritage consistent with the requirements of national laws and regulations. It also applies to intangible cultural heritage if a physical component of a project will have a material impact on such cultural heritage or if a project intends to use such cultural heritage for commercial purposes.

B. Key Elements of the Cultural Heritage Management Plan

The CHMP contains the following elements:

a) Assessment of activities likely to affect cultural heritage through the SES screening and ESA
b) Consultation with experts, relevant Government agencies, and communities
c) Implementation of chance finds procedure
d) Mitigation to avoid impacts on cultural heritage.

C. Legal and Regulatory Requirements

The **National Cultural Heritage Act of 2009 (Republic Act 10066)** and its implementing rules and regulations stipulates that all intervention works and measures on conservation of National Cultural Treasures, Important Cultural Property, as well as National Historical Landmarks, sites, monuments, and structures previously marked by the National Museum (NM) and/or the National Historical Commission of the Philippines (NHCP) shall be undertaken only upon prior approval of the Commission. The Commission shall approve only those methods and materials that strictly adhere to the accepted international standards of conservation (Section 18. Conservation of Cultural Property).

The Commission shall coordinate the conduct of inspection by experts from the NM and/or the NHCP on buildings and built environment declared as National Cultural Treasures and Important Cultural Properties (Section 30.1. Coordination by the Commission). Third party documentation and monitoring is practiced through the commission of experts and consultants by the project proponent and the coordination, consultation with the National Commission on Culture and Arts (NCCA) and other concerned cultural agency and national government agency. Local government units, having the responsibility of maintaining and conserving historic centers/ heritage zones, are mandated to maintain an inventory of cultural property under its jurisdiction and furnishes the NCCA a copy of the same based on RA 10066

In circumstances of chance finds, the discoverer is required to report the said cultural or historical property to the NHCP or to the concerned authorities. Activities leading to the non-reporting of sites shall be considered physical interventions on archaeological or historical site and shall be penalized accordingly.

The NCCA shall immediately issue cease and desist on all activities that will affect the site and shall immediately notify the local government unit having jurisdiction of the place where the discovery was made. The local government shall promptly adopt measures to protect and safeguard the integrity of the cultural property so discovered and, within five (5) days from the discovery, shall report the same to the appropriate agency. The suspension of these activities shall be lifted only upon the written authority of the NCCA and only after the systematic recovery of the archaeological materials.

Cultural heritages as defined by RA 10066 are considered as Environmentally Critical Areas (ECA) under DENR's classification that would require an Environmental Compliance Certificate (ECC) from DENR for projects to proceed to the next stage of project planning and implementation. Any government or non-government infrastructure project or architectural site development shall include anthropological, archaeological, historical and heritage site conservation concerns in their EIA. Prior to the issuance of ECC, Archaeological Impact Assessment is a requirement in areas declared as Heritage Zones and in known or newly discovered archaeological sites. In the event that an archaeological site is discovered on a project which had received a clearance, all earth moving activities shall cease immediately, subject to an assessment by the National Museum (Section 33.5).

D. Guidelines for the Preparation of the CHMP

1. CHMP shall be prepared for subprojects that have been identified based on the SES screening and ESA to be located in an area with potential PCRs. The plan must be prepared in accordance with the requirements of the National Cultural Heritage Act and its implementing rules and regulations.
2. In preparing the CHMP for a proposed activity/subproject, the following criteria should be considered:
    a. Determine whether the site is within an established Cultural Heritage area.
    b. Determine whether the site is outside an established Cultural Heritage area but is in proximity to the Cultural Heritage area.
    c. Determine if the project site has undergone significant ground disturbance in the past.

3. If the site is within an established Cultural Heritage Area, the subproject will be ineligble for PRDP Scale-Up funding.
4. If the site is outside of the established Cultural Heritage Area but has undergone no significant ground disturbance in the past, the proponent group is required to coordinate with the National Museum (NM) and/or the National Historical Commission of the Philippines (NHCP) to check the clearance/permit requirements for the project. The CHMP shall include the relevant requirements of the NM/NHCP including but not limited to Archaeological Impact Assessment (AIA).
5. If the site is outside of the established Cultural Heritage Area and has undergone significant ground disturbance in the past, a Chance Find Procedures is required.

E. Chance Find Procedure

If Cultural heritage resources can be avoided through the following methods:

a. Realignment or relocating of subproject components to avoid the identified PCR.
b. Reduction in horizontal or vertical extent of work areas to minimize impacts to avoid the PCR
c. Engineering controls during construction to avoid and/or minimize impacts, such as the use of mats or directional drilling underneath resources.

For those PCRs that cannot be avoided and are determined to be high to very high significance, mitigation measures will be developed in coordination with the NHCP

6. The CHMP shall be made known to the Local Government Unit (LGU) Contract Administrator, the Contractor, the Site Engineer, all Construction Foremen and all on-site Supervisors. A copy of the CHMP shall be made available at the construction site at all times.
7. Upon discovery of artefacts, bones or other objects of interests, all digging, drilling and other earthmoving activities within the radius of 10 meters from the discovery point shall be immediately suspended. The highest-ranking officer of the Contractor present at the site must impose the suspension of activities and immediately inform the LGU Contract Administrator or if not available, the highest ranking LGU officer available.
8. The highest-ranking officer of the Contractor at the construction site with or without the LGU Contract Administrator or LGU representative shall immediately take photographs of the artefacts, bones or other objects of interest. The photographs must be taken at close-up and at distant range or at wide-shots placing the objects at approximately the same point and position where they were found and showing other markers. Photographs of the chance finds and the site shall be sent to the RPCO SES Officer and to the National Museum, preferably through email. Upon knowledge of the discovery and prior to validation, the RPCO Head shall also inform the PSO Head and NPCO Head who shall coordinate with the NM/NHCP/NCCA on further actions or evaluations.
9. The LGU Contract Administrator and/or highest-ranking Officer from the LGU shall immediately report the discovery simultaneously to: (a) the Regional Project Coordination Office (RPCO) Social and Environmental Safeguards (SES) Officer and Engineer or if not available, the highest available ranking Officer of the RPCO. The chance find shall also be immediately reported to the local police and civil authorities to preserve and protect the site from illegal exploitation until such time that the NM/NHCP/NCCA shall have established control over the PCRs.
10. The highest-ranking officer of the Contractor at the site must ensure that the site is secured and that any artefacts, bones or objects of interest are removed only after NM/NHCP/NCCA has undertaken its assessment of the chance find and has issued site clearance for the contractor to continue works at the site.
11. The NM/NHCP/NCCA Representative will be responsible for the safe handling and transport of the artefacts to Contractor's temporary facility, as well as the costs for the preparation of materials for long term storage as appropriate (appropriate processing, cleaning, packaging, labelling, and preventive conservation when appropriate, and cataloguing in an inventory/catalogue). The artefacts shall be maintained together with the investigation records generated during the evaluation and/or salvage excavations.

Any delay due to suspension or discontinuation/termination of works as a result of the application of the chance find procedure shall be considered “force majeure” and hence the applicable provisions of the contractor’s contract shall be applied.

Annex O: Guidelines on Community and Occupational Safety and Health (COSH) during Implementation of PRDP Scale-Up subprojects amidst the COVID-19 Public Health Crisis

I. Background

The coronavirus disease (COVID-19) is an infectious disease caused by a new strain of coronavirus and was unknown before the outbreak began in Wuhan, China, in December 2019. On January 30, 2020, the Department of Health (DOH) reported the first case of COVID-19 in the Philippines and on March 07, the first local transmission of COVID-19 was confirmed. Proclamation No. 922, s. 2020 declaring a *"State of Public Health Emergency throughout the Philippines"* was issued and signed on March 8, 2020.

The World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020 since the virus had inflicted more than 150,000 people including 6,000 deaths all over the world. Following the declaration of COVID-19 as a pandemic, President Rodrigo Duterte announced on March 12, 2020 the "community quarantine" in Metro Manila but on March 16, 2020 President Duterte declared a Luzon-wide "enhanced community quarantine" (ECQ) through Presidential Proclamation No. 929, s. 2020 *"Declaring a State of calamity throughout the Philippines due to Corona Virus Disease 2019".*

Pursuant to the above Presidential Declaration and the Inter-agency Task Force (IATF) for the Management of Emerging Infectious Diseases Omnibus Guidelines on the Implementation of the Community Quarantine in the Philippines, this Guidelines on Community and Occupational Safety and Health (COSH) is issued adhering to the Environmental and Social Standards of the World Bank as well as the new policy issuances, protocols and standards of the Philippine Government in ensuring public safety and health amidst COVID-19.

II. Objectives of the Guidelines

This guideline shall facilitate the implementation of PRDP Scale-Up amidst the COVID-19 Public health crisis, in line with the existing COSH guidelines under the *PRDP Integrated Environmental and Social Safeguards Framework (IESSF)* and the policy objectives of the *RA 11058 An Act Strengthening Compliance with Occupational Safety and Health Standards and providing penalties for violations thereof* of August 17, 2018. It strengthens the protection of the rights of workers to a safe and healthy working environment as well as the protection of the community especially the vulnerable population, ensuring non-discrimination and social inclusion during the time of the COVID-19 pandemic.

III. General Guidelines

The COSH Guidelines shall primarily adopt and harmonize the following issuances of the Philippine Government in the implementation of PRDP Scale-Up covering the Infrastructures and Enterprises subprojects and all other Project activities.

1. Department of Public Works and Highways (DPWH) Revised Construction Safety Guidelines for the Implementation Infrastructure Projects during COVID-19 Public health crisis, repealing Department Order No. 35 Series of 2020 issued per Department Order No. 39 Series of 2020;
2. Construction Guidelines for the Project Implementation during the period of Public Health Emergency issued by the Department of Trade and Industry (DTI) - Construction Industry Authority of the Philippines (CIAP) dated June 2020;
3. Joint Department of Trade and Industry (DTI) and Department of Labor and Employment (DOLE) Interim Guidelines on Workplace Prevention and Control of COVID-19 issued April 30, 2020;

4. Department of Health (DOH) Interim Guidelines on the Return-to-Work issued per Memorandum No. 2020-0220 dated May 11, 2020;
5. Department of Interior and Local Government (DILG) Amended Guide to Action Against the 2019 Novel Coronavirus Acute Respiratory Diseases issued per Memorandum Circular No. 2020-023 dated 06 February 2020;
6. Department of Agriculture (DA) Guidelines on Food Safety for the Philippine Agricultural and Fishery Sectors during COVID-19 Pandemic issued per Memorandum Circular No. 15 Series of 2020 dated May 13, 2020.
7. Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF) for the Management of Emerging Infectious Diseases "GUIDELINES ON THE NATIONWIDE IMPLEMENTATION OF ALERT LEVEL SYSTEM FOR COVID-19 RESPONSE as of February 27, 2022".
8. As the subprojects are implemented in various localities, the Project shall observe as well the local ordinances issued by the LGUs pertaining to health protocols against COVID-19.

Under the "new normal", the following *Minimum Health Protocols and Standards set by the Department of Health should be observed:*

1. Proper wearing and removal of face masks, face shields and other PPE:
    a. Masks
        i. Medical grade masks are highly encouraged and should be properly disposed of after use.
        ii. Masks with vents should not be used.
        iii. Cloth masks, with additional filter such as tissue paper or similar material, may be used as long as they are clean and washed daily. The filter should be changed daily or after every sneezing or coughing episode, and should be properly disposed of after use. Hands should be washed/disinfected before replacing the filters.
        iv. Frequent mask handling and manipulation should be avoided.

    b. Face shields
        i. Face shields shall cover the entire face (completely cover the sides and length of the face). If possible, face shields should extend to the ears and below the chin.
        ii. Visor-type face shields shall not be allowed.
        iii. Face shields and masks should always be worn together;

2. Reducing contact and physical distancing of at least one (1) meter, or two (2) meters when possible, shall be observed at all times. This must be practiced in combination with the wearing of masks and face shields;
3. Frequent handwashing with soap and water or the application of alcohol-based disinfectants which is also encouraged to be practiced at home;
4. Avoiding frequent contact with own eyes, nose, and mouth;
5. Prohibit spitting;
6. Observing cough etiquette;
7. Taking of body temperature;
8. Regular disinfection;
9. Non-sharing of personal belongings.

These *Minimum Health Protocols and Standards* shall be applicable to all PRDP funded Infrastructure and Enterprise subprojects, and other relevant PRDP activities. Such activities are, but not limited to, consultations, trainings, technical coaching, meetings, technical reviews, procurement activities, validations, appraisal reviews, monitoring, supervision, grievance investigation & resolution, and all

other activities that involve interaction. PRDP shall adopt mixed or blended methodologies in the conduct of such activities that conform to health and safety policies, protocols and procedures stipulated in the above-mentioned issuances and guidelines.

As stakeholder engagement is important and critical in all project implementation phases, the Project has crafted a separate Consultation Guideline amidst the COVID-19 Public health crisis to ensure the continuous meaningful consultations despite the community quarantine limitations. This will serve as reference into transitioning to the "new normal" for the implementation of PRDP subprojects.

As measures in the prevention and control of COVID-19 incur costs, the PRDP recommends to adhere with DOLE Labor Guidelines on the cost of COVID-19 prevention and control measures issued per Labor Advisory No. 18 series of 2020. As stipulated in Section 2 of the Labor Advisory, the costs associated to COVID-19 measures shall be charged to the employers and principals of the service contract and no direct or indirect costs shall be charged to the workers. Consequently, the Project issued a memorandum dated 14 August 2020 on the guidelines to address the additional costs to be incurred due to COVID-19 control and prevention measures:

a. For under implementation or ongoing subprojects, as these costs have not been part of the PRDP subprojects' feasibility study and business plan, the cost associated to the implementation of the required mitigation and control measures shall be shouldered by the:
   i. Proponent LGU, as principal of the service contract for I-BUILD Infrastructure subprojects through a variation order;
   ii. Enterprise Proponent Groups, as business owner and employer of the workers in I-REAP Enterprise subprojects. However, due to funding limitations of the LGUs brought about by the pandemic and of the Proponent Groups, cost-sharing is advised;
   iii. LGUs may work out cost-sharing with the winning Contractors for the I-BUILD subprojects and with the Proponent Groups for the I-REAP subprojects to ensure that all subprojects are compliant to the health protocols and standards required for the resumption of operations of both the infrastructures and enterprise subprojects.

b. For proposed subprojects, costs may be incorporated in the feasibility study/program of work and business plan, subject to the usual review and approval of the Project.

As we are continually learning from this unprecedented pandemic crisis, subproject proponents are reminded to regularly check recent issuances of the National government (DOH, DPWH, DOLE, DTI, DILG, etc.) and consult with/seek further advice from the concerned PRDP offices (RPCO, PSO and NPCO) for any further developments that may arise.

IV. Specific Guidelines for Construction of I–BUILD and I-REAP Infrastructure subprojects

In ensuring community, occupational safety and health during construction amidst the COVID-19 Public health crisis, supplemental guidelines on ***a) Prior deployment for construction; and b) During construction*** were harmonized in reference with the PRDP ESMF based on the following international and local guidelines:

a. DPWH Department Order No. 39 Series of 2020 on Revised Construction Safety Guidelines for the Implementation Infrastructure Projects during COVID-19 Public health crisis, repealing Department Order No. 35 Series of 2020;
b. Construction Guidelines for the Project Implementation during the period of Public Health Emergency issued by the Department of Trade and Industry (DTI) - Construction Industry Authority of the Philippines (CIAP) dated June 2020;
c. Joint DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19 issued April 30, 2020;

d. DOH Memorandum No. 2020-0220 dated May 11, 2020 on Interim Guidelines on the Return-to-Work;
e. DILG Memorandum Circular No. 2020-023 dated 06 February 2020 on Amended Guide to Action Against the 2019 Novel Coronavirus Acute Respiratory Diseases;
f. International Labour Organization's (ILO) on Prevention and Mitigation of COVID-19 at Work: Action Checklist
g. World Bank's Covid-19 Considerations in Construction/Civil Works.

A. Prior deployment for construction

A.1. The LGU, and Contractor/Sub–Contractor/Suppliers shall:

a) Establish regular communication and coordination among each other for any relevant COVID-19 information;
b) Strengthen the Grievance Redress Mechanism to ensure that there is an open, active, and easily accessible communication platform for workers to channel their questions and concerns especially regarding COVID-19;
c) Incorporate in the Environmental and Social Management Plan (ESMP) the management's commitment and responsibilities on the reduction and risk of exposure to the virus and transmission of COVID-19 at the workplace through prioritizing safety and health of workers and their surrounding communities;
d) Assess and review occupational safety and health hazards of all construction works and develop strategic measures and possible changes in the construction methodologies (i.e. manpower and equipment, materials and delivery, etc.) on managing the potential risks and its impacts through incorporation of DOH minimum health protocols and standards, and other relevant guidelines.

A.2. The LGU shall:

a) Screen and issue construction quarantine pass (QP) to the individual qualified personnel of the contractors clearly stating the identification, designation, nature of work, validity and destination, if necessary;
b) Advise the Barangay Council of the start/resumption of construction works with adherence to DOH and IATF guidelines;
c) Facilitate the inclusion of necessary information on the impacts and mitigation measures of the construction in the IEC campaigns through Barangay Council.

A.3. The Barangay Council through its Barangay Health Emergency Response Team (BHERT) shall:

a) Include in the IEC campaign for the community the necessary information on the impacts and mitigation measures relevant to the construction;
b) Inform the Contractor on the existing ordinances or plans of the Barangay on containment and control and prevention measures especially in terms of public health and sanitation through its waste management, cleaning and disinfection, isolation procedures, among others;
c) Inform the community on the start/resumption of the construction with special considerations on vulnerable groups such as women, children, elderly, Indigenous Peoples/Indigenous Cultural Communities (IP/ICCs), People with Disabilities (PWD), and immuno-compromised people through several mechanisms. Refer to Annex I of the IESSF.

A.4. The Contractor/Sub – Contractor/Suppliers shall:

a) Not allow any person below twenty-one (21) years old, those who are sixty (60) years old and above, those with immune deficiencies, comorbidities, or other health risks, and pregnant women, including those who reside with the aforementioned, to be part of the workforce for

construction projects except as may be allowed under the Revised Omnibus Guidelines issued by the IATF;

b) Undergo its employees fourteen (14) days quarantine prior to deployment, especially for the migrant workers coming from another barangay/municipality:
    i. Returning workers without a negative PCR test that do not show any symptoms will be quarantined for 14 days within the jobsite and will be allowed to work under a zoned or grouped area;
    ii. While, those who have been living/confined in the barracks during ECQ/GCQ period for at least 14 days and with no symptoms, will be allowed to work immediately;
c) In the alternative, the employee may undergo any available Food and Drug Administration (FDA) - approved COVID-19 test, as may be prescribed by the DOH, and be retested as the need arises. In this regard, consultation with medical doctors (duly accredited by DOH, if possible) prior to the conduct of COVID-19 test shall be made. Further, COVID-19 test procedures and return-to-work policies of the contractors should comply with DOH Circular No. 2020-0160 dated 31 March 2020, Department Memorandum No. 2020-0220 dated 11 May 2020, and other pertinent issuances of the DOH on the matter;
d) Ensure that the subproject is in compliance with DOLE DO. NO. 13 series of 1998, and the DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19. Provide personnel and workers face mask, face shield, soap, sanitizer, disinfectant, and continuous supply of vitamins particularly vitamin C, other over – the counter medicines, quarantine facilities, and oxygen tanks for emergency purposes;
e) Provide for the personnel/workers the necessary welfare facilities and amenities (i.e. employees' quarters board and lodging, adequate toilet and baths for both men and women, communal kitchens, etc.) while ensuring compliance to DOH Minimum health standards and to the following:
    i. Enough space should be provided for every employee/worker staying in the barracks to ensure that physical distancing (at least 50% reduction in density of people) are adequately implemented. This can be achieved either by providing additional space/facilities or by having occupants work (and sleep) in shifts.
    ii. Segregate employees/workers who are coming back to work from those who originally stayed in the barracks during the ECQ period.
    iii. Barracks should have at least one (1) meter of physical distance from each occupant and/or provision of a physical barrier in between occupants.
    iv. Should be well ventilated / windows opened to allow fresh air circulation.
f) Provide disinfection facilities in the respective project sites in compliance with pertinent DOH and IATF Guidelines, to be place at strategic locations to ensure the safety and welfare of all personnel;
g) Conduct proper information dissemination through the Safety Officer to increase awareness and knowledge of the workforce regarding COVID-19 construction protocols, guidelines, and management/mitigation measures on top of the existing construction safety practices through orientation, training, and installation of IEC materials and other notices for workers' safety;
h) Submit personal records of all personnel, especially for those migrant workers who would be coming from different barangay/municipalities, to proponent LGU and Barangay Council through its BHERT for necessary for contact tracing, assistance and monitoring. It shall be resubmitted and updated monthly, or as the need arises (Attachment 1 – PRDP Worker's Log Format);
i) Prioritize engaging workers coming from the community or close proximity of the construction site. Should there be workers coming from another barangay/municipality, adhere with the proponent PLGU/MLGU and BHERT on the relevant guidelines for migrating workers;
j) Ensure non-discrimination of workers through developing and communicating a clear policy of non-discrimination to reduce stigma so that employees feel safe reporting illness of themselves or within their families;
k) Maintain and disclose rights and workers benefits, such as the following:

i. Access to essential health care and other basic social services;
ii. All workers shall be appropriately informed by the employer about all types of hazards in the workplace and be provided access to training, education, and orientation on chemical safety, electrical safety, mechanical safety, ergonomics and other hazards and risks (DOLE - DO. 198 series of 2018, Section 5);
iii. Worker has the right of refusal to work without threat or reprisal from the employer if, as determined by DOLE, an imminent danger situation exists. (DOLE - DO. 198 series of 2018, Section 6);
iv. No cost related or incidental to COVID-19 prevention and control measures shall be charged directly or indirectly to the workers (Labor Advisory No.18 series of 2020, Section 2);
v. Health hospital benefits, sickness benefits under the SSS and employee's compensation benefits under PD 626 (EC Law). In the event that the worker is not qualified to avail of the benefits under SSS or Phil Health due to the employer, the employer will shoulder all the medical expenses until full recovery (Labor Advisory No. 04 series of 2020);

l) Incorporate COVID-19 Health and Emergency Response Protocols and COVID-19 hotlines of designated hospitals and emergency medical centers in the existing Emergency response procedures or contingency plans established and Hotlines posted.

B. During Construction

B.1. The LGU shall:

a) Assist to the Barangay Council and Contractors in the management of COVID-19 concerns that may arise during construction and potentially impact the community;
b) Monitor and enforce the implementation of the supplemental guidelines through the Project's regular monitoring procedures and activities with the proponent LGU SES Focal Person as lead in support to the LGU Resident Engineer through the use of PRDP Supplemental Community, Occupational Safety and Health (COSH) Compliance Monitoring Checklist. The report on monitoring of compliance to these guidelines shall be submitted monthly to the PPMIU/MPMIU Head.

B.2. The Barangay Council through its Barangay Health Emergency Response Team (BHERT) shall:

a) Inform the Contractors on the status of the daily health monitoring in the community;
b) Remind the community and workers to reduce direct contact and adhere to physical distancing during construction;
c) Encourage other modes of uptake such as text messaging, call, e-mail, and social media in lodging community concerns and feedback through Grievance Redress Mechanism

B.3. The Contractor/Sub – Contractor/Suppliers shall:

a) Conduct an inventory of works for the construction sequencing to be followed and undertake to uphold the required physical distancing. Barangay Council shall be informed of the revised construction sequencing or daily construction works;
b) Reduce direct personnel contact to adhere with physical distancing through clustered and staggered deployment of employees within the construction sites for easier contact tracing;
c) Make work breaks staggered; and during breaks, workers shall stay in the quarters or established welfare facilities rather than along the streets or nearby public space;
d) Ensure the following during meal breaks:
   i. Eating in communal areas is discouraged. It is best to eat in individual work area and all wastes shall be disposed properly.

ii. If eating in individual work areas is not possible, ensure that physical distancing is maintained in dining areas with one worker per table and 1-meter distance per worker.
iii. It is discouraged that workers engage in conversation with masks off during meal times.
iv. Individuals are expected to clean up their own areas after eating with proper disinfectants.
v. Tables and chairs shall be cleaned or disinfected after every use of the area, and before as well as at the end of the workday.

e) Prohibit smoking in public spaces especially while construction is on-going. Smokers/vapers must use designated area or do so off-site and cigarette butts are to be placed in the designated receptacle. Hands must be washed before and after smoking. In addition, smokers/vapers should stand while maintaining physical distancing so that smoke/vapor produced is not going into another person's breathing zone
f) House all employees in their respective quarters for the entire duration of the project covered by the Community Quarantine. In case there is a need to leave the said quarters during the project duration, "Prior to Deployment" procedures shall be conducted at every instance of re-entry;
g) Ensure availability of adequate food, potable drinking water, disinfectants, and hand soaps to its in-house personnel;
h) Manage emerging psychosocial risks for workers needing counseling or presenting mental health concerns by providing referral to mental health specialists or establishing a network with an accredited health facility, through telemedicine services, or the National Center for Mental Health Crisis Hotline at 0917-899-8727 (0917-899-USAP) and (02) 7-989-8727 ((02)-7-989-USAP). In addition, ensure new forms of work arrangements, promotion and maintenance of healthy lifestyles including diet, rest and sleep, exercise, and continued workers' social contacts with family and friends.
i) Designate workers in charge of the regular cleaning and disinfection of the premises and construction materials;
j) Regularly maintain good housekeeping which includes daily cleaning and disinfection of all construction facilities such as Field Office, employees' quarters, other common areas, and common touch points such as door handles, railings, ladders, switches, controls, etc.
k) Promote culture of regular cleaning and disinfection among workers and within the premises of construction through reminders in tool box meeting and posting of relevant IEC materials;
l) Observe proper disposal of COVID-19 related PPE (e.g. face masks) by setting up a distinct bin labelled as special wastes and adhering to BHERT waste management collection protocols. Any face masks that could potentially be reused should be cut into pieces as a safety measure to avoid reuse;
m) In the conduct of site meetings, the following should be done:
    i. Only absolutely necessary meeting participants should attend.
    ii. Attendees should be one (1) meter apart from each other.
    iii. Rooms should be well ventilated / windows opened to allow fresh air circulation meetings in open areas where possible.
    iv. Conduct toolbox meetings in wide open spaces to enable workers to keep the required physical distance of at least one (1) meter.
    v. Meetings are to be held through teleconferencing or videoconferencing, where possible.
n) Remind workers, during the conduct of regular tool box meetings, on the relevant construction protocols and prevention measures on the specific daily or weekly work tasks;
o) Conduct daily monitoring of the pre-and post-work health conditions of workers, including, but not limited to, temperature, health, and exposure monitoring, as preventive measures. Personnel with manifestation or symptoms relative to COVID-19 shall be immediately isolated and quarantined for fourteen (14) days and if necessary, brought to the nearest DOH COVID-19 treatment facility under strict confidentiality and privacy. Proper protocols in accordance with DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19 shall likewise be strictly observed. Daily health monitoring report shall be endorsed to the proponent

PLGU/MLGU and BHERT (Attachment 2 - PRDP Daily COVID -19 Surveillance Fill-Up/Checklist Form);

p) Ensure that Project Engineers and Safety Officer assigned at the site shall strictly monitor work activities. Said Safety Officer shall conduct daily monitoring in strict compliance with DOLE Occupational Safety and Health Standards (as amended, 1989) especially D.O. No. 13, Series of 1998 and the DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19 with regard to the wearing of additional Personal Protective Equipment (PPE) required such as, but not limited to, face masks, safety glasses/goggles, face shields, and long sleeve T-shirts, and other measures to contain the spread of COVID-19 in the workplace, as provided in these guidelines;

q) Discourage sharing of construction and office equipment. However, if necessary, the shared equipment must be disinfected in between transfers amongst personnel;

r) Ensure that all materials and equipment delivery and disposal shall be conducted by a specific team of personnel on an isolated loading/unloading zone while limiting contact with the delivery/disposal personnel. All materials and/or equipment entering the construction site shall be duly disinfected, as possible. Materials exposed to sun, such as concrete and gravel, need not be disinfected;

s) Restrict the entrance/visit of non-essential personnel, visitors, and the general public in the construction site, employees' quarters, and field offices. Otherwise, all personnel entering the construction site premises on a temporary basis (e.g. delivery truck drivers, inspectors, etc.) shall be properly logged and checked for symptoms using Attachment 2 - PRDP Daily COVID -19 Surveillance Fill-Up/Checklist Form;

t) Strictly prohibit gatherings, liquors, and/or merry – making within the construction site premises;

u) Provide point-to-point transport service (residence-workplace- residence) for off-site employees' quarters. The opening of windows, with at least three (3) inches of opening, while in transit should be practiced whenever possible. The transport service shall be disinfected before and after use, physical distancing, and wearing of face masks and face shields shall be observed at all times in accordance with DOTr guidelines;

v) Regularly clean and disinfect the vehicles and materials. During construction transport and delivery services, workers' shall reduce direct contact with clients. If contact with clients are necessary, drivers should ensure minimum safety protocols. All records on transport and delivery services (i.e. location of delivery, driver in charge, and client contact information) shall be submitted to the proponent PLGU/MLGU and BHERT as reference for contract tracing and other necessary assistance;

w) Keep errands to be conducted outside the construction site premises at a minimum. Number of personnel running errands shall be limited and shall properly be disinfected and closely monitored for symptoms within fourteen (14) days upon re-entry.

x) In the event that a worker is suspected as having COVID-19:

   i. Worker or any individual exhibiting flu-like symptoms should not be allowed to work and shall immediately proceed to the in-site isolation area (a holding area situated near the entrance of an establishment/or an open tents) and never remove his/her mask. The isolation area shall have adequate ventilation, available PPEs for the health personnel and symptomatic patients, chairs and dedicated restroom.

   ii. If unable to establish an isolation area, Contractor to make arrangements with LGU for a temporary treatment and monitoring facility nearby;

   iii. Employees/workers, who had the COVID-19 virus, should do the following before reporting to work:

   - Fulfill the adequate time for self-quarantining as recommended by the DOH.
   - Test negative for COVID-19.
   - Receive proper medical clearance, before reporting to work.

iv. In the event of a worker contracting COVID-19 while working, the management should do the following:

- Isolate the worker immediately in a separate well-ventilated holding area (or in site isolation room/area) in the workplace, away from other workers or immediately transfer worker to a nearby government temporary treatment and monitoring facility for faster referral of employees;
- Contact local government and health authorities. Employers may contact DOH through its hotline 1555 for guidance on the handling and referring symptomatic employees.
- Conduct contact tracing by gathering records of all people who have worked with the infected worker; who tested positive within the past four weeks; and information on those who have been in location or shared equipment with the person. Refer to DTI and DOLE Supplemental Guidelines on Workplace Prevention and Control of COVID-19 for guidance.
- Provide COVID-19 testing to all workers, who have been working closely with the infected individual.
- Be ready to present the information to the appropriate authorities.
- Inform the wider workforce of the situation while protecting the privacy of the individual.
- Clean and disinfect all site surfaces and equipment.
    - Field Office shall be decontaminated with appropriate disinfectant (e.g. chlorine bleaching solution and 1:100 phenol-based disinfectant);
    - After decontamination of the work area, work can resume after twenty-four (24) hours;
    - Contractor shall ensure that the temporary closure of field office for disinfection purposes be done in accordance with the National Task Force Against COVID-19 Memorandum Circular No. 2 dated 15 June 2020 on the Operational Guidelines on the Application of Zoning Containment Strategy in the Localization of the National Action Plan against COVID-19 Response.
- Follow any additional directions from local government units and health authorities.
    - For senior personnel, who are working in multiple jobsites, they are expected to self-quarantine for at least 14 days, if there has been a breach in one of their jobsites.

V. Specific Guidelines for I-REAP Enterprise and I-BUILD Other infrastructure Operations

This guideline primarily used as references the ***Joint DTI and DOLE interim guidelines on workplace prevention and control of COVID-19 issued April 30, 2020 and the Department of Health Memorandum No. 2020-0220 dated May 11, 2020 with subject Interim Guidelines on the Return-to-Work.*** These issuances were harmonized with PRDP's Integrated Environmental and Social Safeguards Framework (as of October 25, 2018) to come up with the COSH guidelines as follows:

Workplace Safety and Health

A.1. Increase physical and mental resilience

The Enterprise Management with the assistance from the proponent PLGU/MLGU shall assist workers in maintaining and increasing their physical and mental resilience such as:

1. Emphasize to workers everyday actions to stay healthy such as eating nutritious food and observing a healthy diet, drinking plenty of fluids, having adequate rest and at least eight (8) hours sleep, exercising regularly;
2. Provide free medicine and vitamins, if feasible;

3. Explore new forms of work arrangement beneficial to the health of the workers; and
4. Manage emerging psychosocial risks for workers needing counselling or presenting mental health concerns by providing referral to mental health specialists or establishing a network with an accredited health facility, through telemedicine services, or the National Center for Mental Health Crisis Hotline at 0917-899-8727 (0917-899-USAP) and (02) 7-989-8727 ((02)-7-989-USAP). In addition, ensure workers' continued social contacts with family and friends.

A.2.Reducing transmission of COVID-19

1. *The Enterprise Management shall assign a "Workplace Coordinator for COVID-19 concerns*".
   1.1. He/She may also be the existing Safety Officer if applicable to the Enterprise;
   1.2. The Workplace Coordinator for COVID-19 shall be in-charge of ensuring the guidelines stated herein are implemented accordingly together with the supervision of the Enterprise Management;
   1.3. The proponent PLGU/MLGU shall provide assistance to ensure that the assigned Coordinator for COVID-19 receives the proper training.
2. *Prior Entrance in buildings and workplaces*

   2.1. All employers and workers shall:
      i. Wear face masks and shields at all times and remove the same only when eating/drinking. Employers shall provide the appropriate face masks and shields for workers. Should cloth masks be used, the washable type shall be worn but additional filter material such as tissue papers inside the masks may be added;
      ii. Accomplish daily the health symptoms questionnaire and submit to the guard or designated safety officer prior to entry;
      iii. Have their temperature checked and recorded in the health symptoms questionnaire. (Attachment 3 – Health Checklist) For any personnel with temperature > 37.50 degree Celsius, even after a 5-minute rest, or if their response in the questionnaire needs further evaluation by the Workplace Coordinator, the person shall be isolated in an area identified by the Enterprise and not allowed to enter the premises. The isolation area should be well ventilated and must be disinfected frequently. Workplace Coordinator assigned to assess the workers held in the isolation area shall be provided the appropriate medical grade PPE by the establishment which shall include but not limited to, face masks, goggles/face shields, and/or gloves; and
      iv. Spray alcohol/sanitizers to both hands; and provide disinfectant foot baths at the entrance if practicable.
   2.2. Equipment or vehicle entering the hub operational area must go through a disinfection process; and
   2.3. If there will be a long queue outside the office or store premises, roving officers should instill physical distancing of one meter.
3. *Inside the workplace*

   3.1. All work areas and frequently handled objects such as door knobs and handles, shall be cleaned and disinfected regularly, at least once every two (2) hours;
   3.2. All washrooms and toilets shall have sufficient clean water and soap, workers are encouraged to wash their hands frequently and avoid touching their eyes, nose and mouth;
   3.3. Sanitizers shall be made available in corridors, conference areas, elevators, stairways and areas where workers pass;

3.4. Workers, whether in office workstations or in operations area, shall always practice physical distancing meaning at the minimum one (1) meter radius space (side, back and front) between workers;

3.5. Discourage eating in communal areas and adopt staggered meal schedules to further restrict contact among employees. It is best to eat in individual work area and all wastes shall be disposed properly. If eating in individual work areas is not possible, the employer shall ensure that physical distancing is maintained in dining areas with one worker per table and 1-meter distance per worker. It is discouraged that workers engage in conversation with masks off during meal times. Tables and chairs shall be cleaned or disinfected after every use of the area, and before as well as at the end of the work day; and

3.6. Canteens and kitchens should be cleaned and disinfected regularly.

A.3. Minimize contact rate

1. Alternative work arrangements, such as working-hour shifts, work from home (WFH), where feasible and on rotation basis;
2. Prolonged face-to-face interaction between workers and with clients are discouraged and masks shall be worn at all times and not removed. Meetings needing physical presence shall be kept to a minimum number of participants and with short duration. Videoconferencing shall be utilized for lengthy discussions among workers;
3. Office tables should be arranged in order to maintain proper physical distancing. Barriers may be provided between tables;
4. Workstation layout should be designed to allow for unidirectional movement in aisles, corridors or walkways;
5. To maintain physical distancing, number of people inside an enclosed space such as a room, store or hall shall be limited;
6. Use of stairs should be encouraged subject to physical distancing requirements. If more than 2 stairways are accessible, one stairway may be used exclusively for going up and another for going down;
7. Online system shall be highly encouraged to be utilized for clients needing assistance from offices including the use of videoconferencing; and
8. Roving officers (i.e. Manager, Supervisor, and Workplace Coordinator) shall always ensure physical distancing and observance of minimum health protocols.

A.4. On Reducing the risk of infection from COVID-19

1. In the event that a worker is suspected as having COVID-19:

1.1. The worker shall immediately proceed to the isolation area (an holding area situated near the entrance of an establishment/or an open tents) designated in the workplace and never remove his/her mask. The designated isolation area shall have adequate ventilation, available PPEs for the health personnel and symptomatic patients, chairs and dedicated restroom. It shall be disinfected once every two (2) hours and/or immediately after any infected or confirmed COVID-19 employee leaves the area.

1.2. If unable to establish an isolation area, Enterprise Management to make arrangements with LGU for use of temporary treatment and monitoring facility nearby;

1.3. Contact local government and health authorities. Employers may contact DOH through its hotline 1555 for guidance on the handling and referring symptomatic employees.

1.4. Workplace Coordinator attending to the workers should wear appropriate PPE and if needed should require the transport of the affected worker to the nearest hospital.

Company protocols for transport for suspect COVID-19 cases and for PCR testing, should be in place including providing for ambulance conduction. For the micro and small enterprises, they may seek help from the Barangay or the Municipal Government. Hospitals will report to the DOH for COVID-19 suspect;

1.5. Conduct contact tracing by gathering records of all people who have worked with the infected worker; who tested positive within the past four weeks; and information on those who have been in location or shared equipment with the person. Refer to DTI and DOLE Supplemental Guidelines on Workplace Prevention and Control of COVID-19 for guidance.

1.6. Provide COVID-19 testing to all workers, who have been working closely with the infected individual.

1.7. Be ready to present the information to the appropriate authorities.

1.8. Inform the wider workforce of the situation while protecting the privacy of the individual.

1.9. Decontamination of workplace

i. Workplace shall be decontaminated with appropriate disinfectant (e.g. chlorine bleaching solution and 1:100 phenol-based disinfectant);

ii. After decontamination of the work area, work can resume after twenty-four (24) hours; and

iii. Workers present in the work area with the suspect COVID-19 worker shall go on fourteen (14) days home quarantine with specific instructions from the Workplace Coordinator on monitoring of symptoms and possible next steps. If suspect COVID-19 worker has negative result, co-workers may be allowed to report back to work.

iv. Employers shall ensure that the temporary closure of their establishments for disinfection purposes be done in accordance with the National Task Force Against COVID-19 Memorandum Circular No. 2 dated 15 June 2020 on the Operational Guidelines on the Application of Zoning Containment Strategy in the Localization of the National Action Plan against COVID-19 Response.

v. Individual businesses and offices, regardless of the community quarantine status in their respective areas, must abide by the directives/advice of their LGU/CESU/RESU on building closure due to case clustering.

2. In the event that a worker is sick or has fever but is not suspected to have COVID-19 (ex., urinary infection, wound infection or any diseases not related to lungs or respiratory tract) the employer must advise the worker to take prudent measures to limit the spread of communicable diseases, as follows:

2.1. Stay at home and keep away from work or crowds;

2.2. Take adequate rest and take plenty of fluids;

2.3. Practice personal hygiene to prevent spread of disease; and

2.4. Seek appropriate medical care if there is persistent fever, when difficulty of breathing has started, or when he/she becomes weak.

Duties of Employer and LGU

B.1. Employer (Enterprise Management) shall:

1. Provide the necessary Enterprise policies/operating manuals to adapt to the “new normal” brought about by the COVID-19 pandemic in consultation with workers. Advocacy and IEC

programs should be taken from DOH, WHO and reliable sources of information on COVID-19. Polices may be informed by the risk identification and mitigation process and can include the following (as adopted from COVID-19 Info-Sheet on Preventing and Managing related Environmental, Social, Health and Safety (ESHS) risks):

i. Prevention procedures covering basic hygiene, cleaning and disinfection, PPE, customer engagement, supplier management, and visitor management;
ii. Policies and procedures on how to determine and manage suspected and identified cases;
iii. Updated working condition policies as appropriate;
iv. Stakeholder engagement procedures where operations or changes to operations might impact the community.

2. Conduct training to guide workers for the transition to the "new normal" and provide proper visual reminders/IEC materials for safety policies posted strategically around the workplace to ensure workers are well informed and improve compliance. Refer to DTI and DOLE Supplemental Guidelines on Workplace Prevention and Control of COVID-19 on the usual reminders for workers;
3. Coordinate with concerned LGU and government agencies to provide the necessary capacity building activities relevant to COVID-19 health protocols, guidelines, and management/mitigation measures to prepare and equip farmers, fisherfolks, farmworkers and other units who will operate and maintain the facilities;
4. Ensure non-discrimination of workers: It is recommended to develop and communicate a clear policy of non-discrimination to reduce stigma so that employees feel safe reporting illness of themselves or within their families. All policies and procedures should be clearly communicated alongside contact information and access to a grievance mechanism should employees have questions or concerns;
5. Strengthen the Grievance Redress Mechanism to ensure that there is an open, active, and easily accessible communication platform for workers to channel their questions and concerns especially regarding COVID-19;
6. Establish clear and regular communication about preventive measures and precautions to workers and, where applicable, contractors, the supply chain, customers, and the wider community;
7. Adhere to the following provisions stated in RA 11058 Sections 5 & 6; Workers' Right to Know and Workers' Right to Refuse Unsafe Work:

    i. All workers shall be appropriately informed by the employer about all types of hazards in the workplace and be provided access to training, education, and orientation on chemical safety, electrical safety, mechanical safety, ergonomics and other hazards and risks;
    ii. The worker has the right of refusal to work without threat or reprisal from the employer if, as determined by DOLE, an imminent danger situation exists.

8. Put in place policies and mechanisms in particular for the inclusion and protection of the vulnerable population such as women, older persons, those with underlying health conditions, persons with disabilities and Indigenous Peoples;
9. Provide resources and materials needed to keep the workers healthy and the workplace safe, e.g., masks, shields, soap, sanitizer, disinfectant, PPE, including COVID-19 testing kits. For micro and small enterprises that proponent LGU shall provide assistance to the PG especially in accessing COVID-19 testing kits;
10. Observe proper disposal of COVID-19 related PPE (e.g. face masks, face shields, gloves, etc.) by setting up a distinct bin labelled as special wastes and adhering to BHERT waste

management collection protocols. Any face masks that could potentially be reused should be cut into pieces as a safety measure to avoid reuse;

11. Enhance health insurance provision for workers, aside from the mandatory Philhealth, and establish appropriate sick leave policies to accommodate the COVID-19 situation;
12. Establish referral network for employees who will develop symptoms;
13. If feasible, provide point-to-point shuttle service (residence-workplace- residence) and/or decent accommodation on near-site location to lessen travel and people movement. The opening of windows, with at least three (3) inches of opening, while in transit should be practiced whenever possible. The transport service shall be disinfected before and after use, physical distancing, and wearing of face masks and face shields shall be observed at all times in accordance with DOTr guidelines;
14. Adhere to and regularly check recent issuances of the National government and consult with/seek further advice from the concerned PRDP offices (RPCO, PSO and NPCO) for any further developments that may arise. It is to be recognized that certain enterprises, depending on the nature of the enterprise (i.e. food processing, non-food processing, crop production, animal raising, aquaculture), may require other additional mitigation measures. For Food processing and production related enterprises, we may refer to:
    i. COVID-19 and Food Safety: Guidance for food businesses: Food and Agriculture Organization (FAO) and World Health Organization (WHO) dated April 7, 2020; and
    ii. Department of Agriculture (DA) Guidelines on Food Safety for the Philippine Agricultural and Fishery Sectors during COVID-19 Pandemic issued per Memorandum Circular No. 15 Series of 2020 dated May 13, 2020.
15. Provide the DOLE through its Regional Office and/or Barangay Council through its BERTH, copy furnished DOH, the LGU and PRDP, monthly reporting of illness, diseases and injuries utilizing the DOLE Work Accident/Illness Report Form (WAIR), attached as Attachment 4;
16. Incorporate COVID-19 Health and Emergency Response Protocols and COVID-19 hotlines of designated hospitals and emergency medical centers in the existing Emergency response procedures or contingency plans established and Hotlines posted;
17. Ensure that Enterprise Manager and Workplace Coordinator shall strictly monitor operation activities. Said Workplace Coordinator shall conduct daily monitoring in strict compliance with DOLE Occupational Safety and Health Standards (as amended, 1989), the DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19 and other supplemental measures, as provided in these guidelines.

B.2. LGU shall:

1. Extend technical and financial support to the enterprise operations in complying with the implementation of these guidelines;
2. Monitor the implementation of the supplemental guidelines through the Project's regular monitoring procedures and activities. The report on monitoring of compliance to these guidelines shall be submitted monthly to the PPMIU/MPMIU Head.

VI. Monitoring, Enforcement, Reporting, and Penalties and Sanctions

Monitoring of the implementation of and enforcement of compliance to the COSH Guidelines shall primarily be done by the Proponent LGUs, Enterprise Proponent Groups, and Contractors. A mechanism for self-monitoring by the Contractors and Enterprise Proponent Groups can be done using the Compliance Monitoring Checklists for I-BUILD/I-REAP infrastructure subprojects and I-REAP Enterprise operations, respectively. The Proponent LGUs shall likewise utilize the same Compliance Monitoring Checklists during their regular monitoring and field visits/inspections. The PRDP I-BUILD Component, I-REAP Component and SES Unit shall oversee the compliance in all PRDP Scale-Up

subprojects using the same monitoring checklist. The accomplished monitoring checklist shall be submitted monthly to DA-PRDP NPCO SES Unit through PSO and RPCO SES Unit.

All implementers of subprojects should comply with the guidelines set by the national agencies (DOH, DPWH, DTI, DOLE and DA) in line with the Philippine Government's policies and programs against COVI-19 pandemic. The Project encourages all Contractors and Enterprise Proponent Groups their full support and compliance to the issued national guidelines adopted in this Guidelines to avoid the corresponding penalties and sanctions that the issuing national agency/ies impose.

VII. Effect of Future Guidelines

These supplemental guidelines may be amended or superseded by later guidelines.

VIII. Effectivity

These supplemental guidelines shall take effect immediately.

IX. List of Attachments

- Attachment 1. I-BUILD Worker's Records Log Format
- Attachment 2. I-BUILD Daily COVID-19 Surveillance Fill-Up Checklist Form
- Attachment 3. I-REAP Enterprise Subproject Employees and Visitors Checklist
- Attachment 4. DOLE Employers Work/Accident Illness report

X. List of References

1. PRDP Integrated Environmental and Social Safeguards Framework (as of October 25, 2018)
2. RA 11058 An Act Strengthening Compliance with Occupational Safety and Health Standards and providing penalties for violations thereof (approved August 17, 2018)
3. DPWH Department Order No. 39 Series of 2020 "Revised Construction Safety Guidelines for the Implementation Infrastructure Projects during COVID-19 Public health crisis, repealing Department Order No. 35 Series of 2020" issued May 4, 2020
4. Joint DTI and DOLE interim guidelines on workplace prevention and control of COVID-19 issued April 30, 2020
5. Joint DTI and DOLE Supplemental Guidelines on Workplace Prevention and Control of COVID-19 issued August 14, 2020
6. FAQs on Joint DTI and DOLE interim guidelines on workplace prevention and control of COVID-19 published on May 06 2020
7. Department of Health (DOH) Memorandum No. 2020-0220 with subject Interim Guidelines on the Return-to-work dated May 11, 2020
8. DOLE Labor Advisory No. 04 series of 2020 Guidelines on 2019 Novel Coronavirus (2019-nCoV) prevention and control at the workplace issued January 31, 2020
9. DOLE Labor Advisory No. 18 series of 2020 Guidelines on the cost of COVID-19 prevention and control measures issued May 16, 2020
10. DILG Memorandum Circular No. 2020-023 "Amended Guide to Action Against the 2019 Novel Coronavirus Acute Respiratory Disease" issued 06 February 2020
11. International Labour Organization Prevention and Mitigation of COVID-19 at Work: Action Checklist dated 09 April 2020
12. COVID-19 Info-Sheet on Preventing and Managing related Environmental, Social, Health and Safety (ESHS) risks Competence Center for Environmental and Social Sustainability KfW Development Bank Germany dated April 2020
13. COVID-19 and Food Safety: Guidance for food businesses: Interim Guidance Food and Agriculture Organization (FAO) and World Health Organization (WHO) dated April 7, 2020

14. Department of Agriculture (DA) Guidelines on Food Safety for the Philippine Agricultural and Fishery Sectors during COVID-19 Pandemic issued per Memorandum Circular No. 15 Series of 2020 dated May 13, 2020
15. Construction Guidelines for the Project Implementation during the period of Public Health Emergency issued by the DTI - Construction Industry Authority of the Philippines (CIAP) dated June 2020
16. DA-PRDP Memorandum dated 14 August 2020 on "Guidelines to Address Additional Costs In Compliance With DPWH Department Order No. 39 On The Revised Construction Safety During The Covid-19 Public Health Crisis"

Attachment 1. I-BUILD Worker's Records Log Format

DEPARTMENT OF AGRICULTURE
PHILIPPINE RURAL DEVELOPMENT PROJECT
<IMPLEMENTING OFFICE>
<ADDRESS>
Worker's Records Log Format

Name of Project: _____
Location: _____
Contractor: _____
Sub-Contractor:_____
Date Accomplished: _____

No.	Name	Age	Sex	Address	Location of Origin Prior to Site Deployment	Mode of Transportation	Contact No.	Had any COVID-19 Symptoms (Y/N)	Signature

Note: This form was based on the issued DPWH DO 39 Annex B format.

Attachment 2. I-BUILD Daily COVID-19 Surveillance Fill-Up Checklist Form

DEPARTMENT OF AGRICULTURE
PHILIPPINE RURAL DEVELOPMENT PROJECT
<IMPLEMENTING OFFICE>
<ADDRESS>
DAILY COVID-19 SURVEILLANCE FILL-UP / CHECKLIST FORM

<table>
<tr><td colspan="2">Pangalan:</td><td>Petsa:</td></tr>
<tr><td>Edad:</td><td>Kasarian:</td><td>Telepono:</td></tr>
<tr><td colspan="2">Lugar ng Tirahan:</td><td>Trabaho:</td></tr>
<tr><td colspan="2">Lugar ng Trabaho:</td><td>Temperatura:</td></tr>
<tr><td colspan="3">Kontraktor</td></tr>
<tr><td>FEVER</td><td colspan="2">RESPIRATORY INFECTION</td></tr>
<tr><td>Kapag ang temperature ay
≥ 38˚C

_____ Oo (Yes)

_____ Hindi (No)</td><td colspan="2">Presensya ng mga sumusunod (Presence of the following)

_____ Ubo (Cough) (productive or non-productive cough)
_____ Igsi ng paghinga (shortness of breath)
_____ Sipon (Colds)
_____ Namamagang lalamunan (Sore throat)
_____ Tumutulong sipon (Runny Nose)
_____ Naninikip na ilong (Nasal Congestion)
_____ Nananakit na kalamnan (Muscle Pains)
_____ Sakit ng ulo (Headache)
_____ Hirap sa paghinga (Difficulty of Breathing)
_____ Pagtatae (Diarrhea)
_____ Pagkawala ng pang-amoy (Loss of sense of Smell)
_____ Pagkawala ng panlasa (Loss of Sense of Taste)

_____ WALA (NONE)

Kung mayrrong presensya ng mga nasa taas, simula kalian. (If identified with presence of the above, since when)?

_____</td></tr>
</table>

Pagpapahayag: Ang mga impormasyon na aking ibinigay dito ay totoo, tama at kumpleto. Aking na-iintindihan na ang hindi pagsagot sa mga katanungan o mga maling sagot ay maaaring may seryosong kinahihinatnan. (Article 171, & 172 of the Revised Penal Code of the Philippines and Republic Act No. 11332.)

_____

PIRMA SA TAAS NG NAKALIMBAG NA PANGALAN

Note: This form was based on the issued DPWH DO 39 Annex C format.

Attachment 3. I-REAP Enterprise Subproject Employees and Visitors Checklist

Department of Agriculture
Philippine Rural Development Project
National Project Coordination Office

I-REAP Enterprise Subproject
Employees and Visitors Checklist

Temperature:

Name: _____ Sex: _____ Age: _____

Residence:

_____

_____

Nature of Visit: *Please check one*, Official: ☐ Personal: ☐

If official, fill-in company details below

Company Name:

_____

___

Company Address:

_____

_

QUESTIONS	YES	NO
1. Are you experiencing: (nakakaranas ka ba ng:)		
a. Sore throat (*pananakit ng lalamunan / masakit lumunok*)		
b. Body pains (pananakit ng katawan)		
c. Headache (pananakit ng ulo)		
d. Fever for the past few days (Lagnat sa nakalipas na mga araw)		
2. Have you worked together or stayed in the same close environment of a confirmed COVID-19 case? (May nakasama ka ba o nakatrabahong tao na kumpirmadong may COVID-19 / may impeksyon ng coronavirus?)		
3. Have you had any contact with anyone with fever, cough, colds, and sore throat in the past 2 weeks? (Mayroon ka bang nakasama na may lagnat, ubo, sipon o sakit ng lalamunan sa nakalipas ng dalawang (2) lingo?)		
4. Have you travelled outside of the Philippines in the last 14 days? (Ikaw ba ay nagbyahe sa labas ng Pilipinas sa nakalipas na 14 na araw?)		
5. Have you travelled to any area in NCR aside from your home? (Ikaw ba ay nagpunta sa iba pang parte ng NCR o Metro Manila bukod sa iyong bahay?) Specify(Sabihin kung saan): _____		

I hereby authorize [name of establishment], to collect and process the data indicated herein for the purpose of effecting control of the COVID-19 infection. I understand that my personal information is

protected by RA 10173, Data Privacy Act of 2012, and that I am required by RA 11469, Bayanihan to Heal as One Act, to provide truthful information.

Signature: _____ Date: _____

_____

As Based from Joint DTI and DOLE interim guidelines on workplace prevention and control of COVID-19 issued April 30, 2020

Attachment 4. DOLE Employers Work/Accident Illness report

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF LABOR AND EMPLOYMENT
BUREAU OF WORKING CONDITIONS
MANILA

EMPLOYER'S WORK/ACCIDENT ILLNESS REPORT

(This report shall be submitted by the employer for every accident or illness to the Regional Office having jurisdiction on or before the 20th day of the month following the date of the accident) For the month of _____.

EMPLOYER

1. ESTABLISHMENT: _____
2. ADDRESS: _____
3. NAME OF EMPLOYER_____ NATURE OF BUSINESS: _____
4. NO. OF EMPLOYEES: ___ MALE: ___ FEMALE: ___ TOTAL: _____

INJURED OR ILL PERSON

5. NAME: _____ AGE: ___ SEX: ___ CIVIL STATUS: _____
6. ADDRESS: _____
7. AVE. WEEKLY WAGE: _____
8. LENGTH OF SERVICE PRIOR TO ACCIDENT OR ILLNESS: _____
9. OCCUPATION: _____ EXPERIENCE AT OCCUPATION: _____
10. WORK SHIFT: ____ 1ST: ____ 2ND: ____ 3RD HOURS OF WORK/DAY: ____ WEEK: ____

ACCIDENT OR ILLNESS

11. DATE OF ACCIDENT/ILLNESS: _____ TIME: _____
12. THE ACCIDENT INVOLVED: _____ PERSONAL INJURY: _____
    PROPERTY DAMAGE: _____
13. DESCRIPTION OF ACCIDENT/ILLNESS. GIVE FULL DETAILS ON HOW ACCIDENT/ILLNESS OCCURRED: _____
14. WAS INJURED DOING REGULAR PART OF JOB AT THE TIME OF ACCIDENT/ILLNESS? IF NOT? WHY? _____

NATURE AND EXTENT OF INJURY OR ILLNESS

15. EXTENT OF DISABILITY: _____ FATAL: _____ PERMANENT TOTAL: _____
    PERMANENT PARTIAL: _____ TEMPORARY TOTAL: _____
    MEDICAL TREATMENT: _____
16. NATURE OF INJURY/ILLNESS: _____ PART OF THE BODY AFFECTED: _____
17. DATE OF DIABILITY BEGAN: _____ DATE RETURNED TO WORK: _____
18. DAYS LOST: _____ OR DAYS CHARGED: _____

CAUSE OF ACCIDENT OR ILLNESS

19. THE AGENCY INVOLVED: _____
20. THE AGENCY PART INVOLVED: _____
21. ACCIDENT TYPE: _____
22. UNSAFE MECHANICAL OR PHYSICAL CONDITION: _____
23. UNSAFE ACT: _____
24. CONTRIBUTION FACTOR: _____
25. PREVENTIVE MEASURE (TAKEN OR RECOMMENDED): _____

PREVENTIVE MEASURE

26. MECHANICAL PERSONAL PROTECTIVEEQUIPMENT AND OTHER SAFEGUARD: _____
27. WERE ALL SAFEGUARD IN USE? _____ IF NOT? WHY? _____
28. COMPENSATION: _____ P _____
29. &30. MEDICAL AND HOSPITALIZATION..... _____
    BURIAL..... _____

MANPOWERED

31. TIME LOST ON DAY OF INJURY...HOURS: _____ MINUTES: _____
32. TIME LOST ON SUBSEQUENT DAYS, HOURS: _____ MINUTES: _____
    (LOST TREATMENT OR OTHER REASON)
33. TIME OR LIGHTWORK OR REDUCED OUTPUT DAY: _____ PERCENT OUTPUT: _____

MACHINERY AND TOOLS

34. DAMAGE OF MACHINERY AND TOOLS (DESCRIBED): _____
35. COST OF REPAIR OR REPLACEMENT ..... P _____
36. LOST OF PRODUCTION TIME: _____ COST: P _____

MATERIALS

37. DAMAGE TO MATERIALS (DESCRIBED): _____
38. COST OF REPAIR OR REPLACEMENT ..... P _____
39. LOST OF PRODUCTION TIME: _____ COST: P _____

EQUIPMENT

40. DAMAGE TO EQUIPMENT (DESCRIBED): _____
41. COST OF REPAIR OR REPLACEMENT ..... P _____
42. LOST PRODUCTION ON TIME: _____ COST: P _____

I HEREBY CERTIFY on my honor to the accuracy of the foregoing information.

_____
DATE

_____
Investigating Officer & Position

_____
VP-FINANCE

Republic of the Philippines
DEPARTMENT OF LABOR AND EMPLOYMENT
National Capital Region

Republic of the Philippines
Department of Labor & Employment
National Capital Region
Manila

_____
Date

ANNUAL WORK ACCIDENT/ILLNESS EXPOSURE DATA REPORT

Name of establishment: _____
Nature of Business: _____
Address: _____

Exposure of Data	**January to December 200____**
Number of Employees	
Total Hours Worked by all Employees during the Year	
Injury Summary	
Total – all Disabling injuries/illness	
Total – Non-Disabling	
Frequency Rate	
Severity Rate	

_____
General Manager

1. This report shall be accomplished whether or not there were accident/illness occurrence during the period covered and submitted to the Regional Labor Office or Local Government having jurisdiction not later than the 30th day of the month following the end of each calendar year.

2. Frequency rate is the total number of disabling injuries per million employee hours of exposure.

$$\text{Frequency Rate} = \frac{\text{Number of disabling injuries x 1,000,000}}{\text{Empoyee-hour of Exposure}}$$

3. Severity Rate is the total number of days lost or charged per million employee hours of exposure.

$$\text{Severity Rate} = \frac{\text{Number of days lost or charged x 1,000,000}}{\text{Empoyee-hour of Exposure}}$$

4. Exposure is the total number of hours worked by all employees in each establishment including employees or operating production, maintenance, transportation, clerical, administrative, sales and other departments.

5. Disabling injuries – work injuries which result to death, permanent total disability, permanent partial disability or temporary total disability.

6. Non-Disabling injuries (Medical Treatment) – injuries which do not result into disabling injuries but require first aid or medical attention of any kind.

ANNEX P-1: ENVIRONMENTAL AND SOCIAL SAFEGUARDS COMPLIANCE MONITORING CHECKLIST

INSTRUCTIONS: The SES personnel shall accomplish the FORM. Check (√)the appropriate column to indicate level of compliance with the environmental management measures listed below. If compliance could not be determined for a particular environmental management measure, marked the column as "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this form for additional space to write on. Accomplished Form should be signed by the SES personnel and should be posted in the field office.

Subproject Name: _____
Subproject Location: _____
Name of Contractor: _____
Subproject Duration: _____
Subproject Cost: _____
Date Monitor/Inspection: _____
Subproject Activities: _____

Certain	5	10	15	20	25
Highly	4	8	12	16	20
Likely	3	6	9	12	15
possible	2	4	6	8	10
unlikely	1	2	3	4	5
	Neg	Minor	Mod	Severe	Catas

		Compliant?			Risk Assessment				Additional Information/ Remarks
	Mitigation Measures	**YES**	**NO**	**NA**	**Impact**	**Likelihood**	**I x L**	**Result**	(i.e. if not compliant, state reason why; please also include here if there are good practices observed i.e. employment of women; for risk assessment, indicate the impacts assessed for High and Extreme)
A. Field Office Requirement									
1	ESMP/CESMP properly posted								
2	Archaeological/Paleontological Chance Finds Procedures posted								
3	GRM Tarpaulin (with GRM Process flow poster) and feedback box installed								

4	SES Monitoring Checklist posted								
5	ECC, Cutting Permits and other related permits posted								
6	GRM records are at the field office.								
7	Site Acquisition Agreement signed (i.e. RROW, Bunk house, Batching Plant, Dumping Site for surplus excavations)								
8	Approved DOLE OSH Plan posted								
TOTALS									
B. Environmental Safeguards									
1	Exposed excavated areas are properly mitigated to minimize erosion.								
2	Dust control measures are in place.								
3	Proper waste management is performed onsite. (i.e. waste segregations, house keeping)								
4	The river banks and riverbed within and adjacent to site is protected from oil/grease, and other wastes.								
5	Stilling ponds or catchment basin installed at the end of miter drains or turn outs to minimize siltation in creeks/rivers								
6	Surface drainage flow unobstructed by construction activities.								
7	The river flow is not affected by the works within and adjacent to sites.								
8	No spill or contamination with oil and grease, diesel and gasoline was noted								
9	Batching Plant [Selection Operation Abandonment] guidelines complied								
10	Dumping/Disposal Site [Selection Operation Abandonment] guidelines complied								

11	Excess construction materials, debris, waste and refuse are sorted or disposed of properly and safely.								
12	Quarry Site [Selection Operation Abandonment] guidelines complied								
13	Gravel, sand and backfill materials are obtained only from approved quarry sites								
14	Borrow Pit [Selection Operation Abandonment] guidelines complied								
TOTALS									
C. Social Safeguards									
c.1 Right of Way Acquisition									
1	Right-of-Way Acquisition cleared is consistent or compliant to Right-of-Way acquired.								
2	Damage during construction justly compensated/properly rehabilitated.								
3	Existing structures of IP, cultural and heritage landmarks with community importance are preserved or protected within allocated project area								
4	Workers are aware of Archaeological/Paleontological Chance Finds Procedures								
c.2 Community Health and Safety									
5	Road kept open to traffic flow and minimized disruptions along the access road and/or construction area								
6	Access ramps provided for safe accessibility and mobility of the community								
7	Construction materials not encroaching on road and posing a hazard to motorists.								
8	Construction aggregates and excavated materials are transported properly (i.e. trucks are covered).								

9	Adequate traffic safety and warning signs and devices installed and maintained (i.e. barricades, detour signages, bollards, delineator posts, lighting)								
10	Traffic personnel provided (i.e. Flag person)								
11	Construction routes/roads damaged during construction maintained and repaired								
12	Alternate route or detour provided, as required								
13	Dust control such as water spraying is regularly performed as needed.								
14	The community did not observe any cases of abuse, harassment, crime, cultural conflict, spread of communicable diseases since the construction started								
15	Feedbacks and complaints documented, properly addressed, and resolved								
TOTALS									
D. Occupational Safety and Health									
1	Workers are provided with a temporary house/bunk house in base camp with electricity, potable water and proper ventilation with separate kitchen								
2	Workers have access to adequate and prescribed pit latrines or toilet facility.								
3	Good housekeeping is observed at the workers base camp/bunk house (i.e. bunkhouse is clean, walking surfaces are clear of debris)								
4	Safety and warning signages installed to inform and make the workers aware of possible danger								
5	Emergency Hotlines [RHU PNP BFP LGU] posted								
6	Emergency response procedures or contingency plans established. (i.e. Traffic and Safety Plan)								

7	Safety Officer available on-site								
8	Adequate First aid materials (kit and medicine supplies) provided								
9	Nurse onsite (50 to 200 workers)/ First aider onsite (50 or less workers)								
10	Fire hydrant/extinguishers properly displayed, available, functional and regularly monitored (by safety officer)								
11	Hazardous waste materials are properly handled/stored and labelled								
12	Tool Box Meeting is conducted and documented								
13	Workers are properly compensated based on the approved wage rate in the area.								
14	Qualified local residents are given priority for employment opportunities of the project (place under additional information number of local residents hired against total number of workers)								
15	No children/minor are employed by the Contractor								
16	"Lost Time Accidents" is displayed.								
17	Accident /incident report is documented.								
18	Construction aggregates is properly stockpiled.								
19	Construction materials and other supplies are properly stored and labeled.								
20	Workers' PPE provided: Reflectorized Vest								
21	Workers' PPE provided: Hard hat								
22	Workers' PPE provided: protective shoes / boots								
23	Workers' PPE provided: gloves								
24	Workers' PPE provided: mask								
25	Workers' PPE provided: eye protection (i.e. for welding)								
26	Workers' PPE provided: others, please specify _____								
27	Proper noise and vibration control is employed on site.								

28	No adverse impact due to labor influx of migrant workers (i.e. no harassment, no discrimination, no bullying)								
29	No adverse impact to the migrant workers made by the community (i.e. no harassment, no discrimination, no bullying)								
30	Conducted awareness campaign on healthy and safe work place against transmittable diseases and displayed posters at field office and bunkhouse (e.g. HIV, vector-borne diseases, and other communicable/transmissible diseases, anti-smoking campaign, drug- free working environment)								
TOTALS									
E. Local Government Unit									
1	Vulnerable PAPs are given additional assistance								
2	Damage during construction justly compensated/properly rehabilitated or reconstructed								
3	Protection of the remaining forests within or near project influence area is implemented								
4	Indigenous Peoples Plan (IP Plan) implemented								
5	Replacement of cut trees implemented								
6	Functional GRM Hotline								
7	Community is aware of the GRM								
8	Feedbacks and complaints documented, properly addressed, and resolved by the LGU (Brgy, MLGU, PLGU)								
9	GRM Tarpaulin (with GRM Process flow poster) installed at the Barangay and at start and end of project (and other strategic locations) and feedback box available at the Barangay Hall.								
10	Deduction of donated lands in the taxable properties (tax declaration) is done								

11	Conducted awareness campaigns and implemented local ordinances on healthy and safe work place against transmittable diseases and displayed posters in strategic locations (e.g. HIV, vector-borne diseases, and other communicable/transmissible diseases, anti-smoking campaign, drug- free working environment)								
12	Awareness on cultural preservation and archaeological chance finds								
13	Awareness campaigns on environmental ordinances (i.e. solid waste management, watershed protection, forest protection, etc.)								
14	Affected utilities (i.e. electric posts and water supply system) are transferred								
TOTALS									

Monitored / Inspected by:	**Noted By:**
_____ **MLGU/PLGU-SES** _____ **RPCO - SES** _____ **PSO - SES** _____ **NPCO - SES**	_____ **Contractor**

Annex P-2: ENVIRONMENTAL AND SOCIAL SAFEGUARDS COMPLIANCE MONITORING CHECKLIST

INSTRUCTIONS: The SES personnel shall accomplish the FORM. Check (✔)the appropriate column to indicate level of compliance with the environmental management measures listed below. If compliance could not be determined for a particular environmental management measure, marked the column as "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this FORM for additional space to write on. Accomplished Form should be signed by the SES personnel and should be posted in the field office.

Certain	5	10	15	20	25
Highly	4	8	12	16	20
Likely	3	6	9	12	15
possible	2	4	6	8	10
unlikely	1	2	3	4	5
	Neg	Minor	Mod	Severe	Catas

Subproject Name:
Subproject Location: _____
Name of Contractor: _____
Subproject Duration: _____
Subproject Cost: _____
Date Monitor/Inspection: _____
Subproject Activities: _____

		Compliant?			Risk Assessment				Additional Information/ Remarks
	Mitigation Measures	**YES**	**NO**	**NA**	**Impact**	**Likelihood**	**I x L**	**Result**	(i.e. if not compliant, state reason why; please also include here if there are good practices observed i.e. employment of women; for risk assessment, indicate the impacts assessed for High and Extreme)
A. Field Office Requirement									
1	ESMP/CESMP properly posted								

2	Archaeological/Paleontological Chance Finds Procedures posted								
3	GRM Tarpaulin (with GRM Process flow poster) and feedback box installed								
4	SES Monitoring Checklist posted								
5	ECC, Cutting Permits and other related permits posted								
6	GRM records are at the field office.								
7	Site Acquisition Agreement signed (i.e. RROW, Bunk house, Batching Plant, Dumping Site for surplus excavations)								
8	Approved DOLE OSH Plan posted								
TOTALS									
B. Environmental Safeguards									
1	Exposed excavated areas are properly mitigated to minimize erosion.								
2	Dust control measures are in place.								
3	Proper waste management is performed onsite. (i.e. waste segregations, house keeping)								
4	The river banks and riverbed within and adjacent to site is protected from oil/grease, and other wastes.								
5	Stilling ponds or catchment basin installed at the end of miter drains or turn outs to minimize siltation in creeks/rivers								
6	Surface drainage flow unobstructed by construction activities.								
7	The river flow is not affected by the works within and adjacent to sites.								
8	No spill or contamination with oil and grease, diesel and gasoline was noted								

9	Batching Plant [Selection Operation Abandonment] guidelines complied								
10	Dumping/Disposal Site [Selection Operation Abandonment] guidelines complied								
11	Excess construction materials, debris, waste and refuse are sorted or disposed of properly and safely.								
12	Quarry Site [Selection Operation Abandonment] guidelines complied								
13	Gravel, sand and backfill materials are obtained only from approved quarry sites								
14	Borrow Pit [Selection Operation Abandonment] guidelines complied								
TOTALS									
C. Social Safeguards									
c.1 Right of Way Acquisition									
1	Right-of-Way Acquisition cleared is consistent or compliant to Right-of-Way acquired.								
2	Damage during construction justly compensated/properly rehabilitated.								
3	Existing structures of IP, cultural and heritage landmarks with community importance are preserved or protected within allocated project area								
4	Workers are aware of Archaeological/Paleontological Chance Finds Procedures								
c.2 Community Health and Safety									
5	Road kept open to traffic flow and minimized disruptions along the access road and/or construction area								
6	Access ramps provided for safe accessibility and mobility of the community								

7	Construction materials not encroaching on road and posing a hazard to motorists.								
8	Construction aggregates and excavated materials are transported properly (i.e. trucks are covered).								
9	Adequate traffic safety and warning signs and devices installed and maintained (i.e. barricades, detour signages, bollards, delineator posts, lighting)								
10	Traffic personnel provided (i.e. Flag person)								
11	Construction routes/roads damaged during construction maintained and repaired								
12	Alternate route or detour provided, as required								
13	Dust control such as water spraying is regularly performed as needed.								
14	The community did not observe any cases of abuse, harassment, crime, cultural conflict, spread of communicable diseases since the construction started								
15	Feedbacks and complaints documented, properly addressed, and resolved								
TOTALS									
D. Occupational Safety and Health									
1	Workers are provided with a temporary house/bunk house in base camp with electricity, potable water and proper ventilation with separate kitchen								
2	Workers have access to adequate and prescribed pit latrines or toilet facility.								
3	Good housekeeping is observed at the workers base camp/bunk house (i.e. bunkhouse is clean, walking surfaces are clear of debris)								

4	Safety and warning signages installed to inform and make the workers aware of possible danger								
5	Emergency Hotlines [RHU PNP BFP LGU] posted								
6	Emergency response procedures or contingency plans established. (i.e. Traffic and Safety Plan)								
7	Safety Officer available on-site								
8	Adequate First aid materials (kit and medicine supplies) provided								
9	Nurse onsite (50 to 200 workers)/ First aider onsite (50 or less workers)								
10	Fire hydrant/extinguishers properly displayed, available, functional and regularly monitored (by safety officer)								
11	Hazardous waste materials are properly handled/stored and labelled								
12	Tool Box Meeting is conducted and documented								
13	Workers are properly compensated based on the approved wage rate in the area.								
14	Qualified local residents are given priority for employment opportunities of the project (place under additional information number of local residents hired against total number of workers)								
15	No children/minor are employed by the Contractor								
16	"Lost Time Accidents" is displayed.								
17	Accident /incident report is documented.								
18	Construction aggregates is properly stockpiled.								
19	Construction materials and other supplies are properly stored and labeled.								
20	Workers' PPE provided: Reflectorized Vest								
21	Workers' PPE provided: Hard hat								
22	Workers' PPE provided: protective shoes / boots								
23	Workers' PPE provided: gloves								
24	Workers' PPE provided: mask								

25	Workers' PPE provided: eye protection (i.e. for welding)								
26	Workers' PPE provided: others, please specify _____								
27	Proper noise and vibration control is employed on site.								
28	No adverse impact due to labor influx of migrant workers (i.e. no harassment, no discrimination, no bullying)								
29	No adverse impact to the migrant workers made by the community (i.e. no harassment, no discrimination, no bullying)								
30	Conducted awareness campaign on healthy and safe work place against transmittable diseases and displayed posters at field office and bunkhouse (e.g. HIV, vector-borne diseases, and other communicable/transmissible diseases, anti-smoking campaign, drug- free working environment)								
TOTALS									
E. Local Government Unit									
1	Vulnerable PAPs are given additional assistance								
2	Damage during construction justly compensated/properly rehabilitated or reconstructed								
3	Protection of the remaining forests within or near project influence area is implemented								
4	Indigenous Peoples Plan (IP Plan) implemented								
5	Replacement of cut trees implemented								
6	Functional GRM Hotline								
7	Community is aware of the GRM								
8	Feedbacks and complaints documented, properly addressed, and resolved by the LGU (Brgy, MLGU, PLGU)								

9	GRM Tarpaulin (with GRM Process flow poster) installed at the Barangay and at start and end of project (and other strategic locations) and feedback box available at the Barangay Hall.								
10	Deduction of donated lands in the taxable properties (tax declaration) is done								
11	Conducted awareness campaigns and implemented local ordinances on healthy and safe work place against transmittable diseases and displayed posters in strategic locations (e.g. HIV, vector-borne diseases, and other communicable/transmissible diseases, anti-smoking campaign, drug- free working environment)								
12	Awareness on cultural preservation and archaeological chance finds								
13	Awareness campaigns on environmental ordinances (i.e. solid waste management, watershed protection, forest protection, etc.)								
14	Affected utilities (i.e. electric posts and water supply system) are transferred								
TOTALS									

Monitored / Inspected by:	**Noted By:**
_____ **MLGU/PLGU-SES** _____ **RPCO - SES** _____ **PSO - SES** _____ **NPCO - SES**	_____ **Contractor**

Annex P-3: ENVIRONMENTAL AND SOCIAL SAFEGUARDS COMPLIANCE MONITORING CHECKLIST (IRRIGATION SYSTEM/SMALL WATER IMPOUNDMENT)

INSTRUCTIONS: The SES personnel shall accomplish the FORM. Check (✔)the appropriate column to indicate level of compliance with the environmental management measures listed below. If compliance could not be determined for a particular environmental management measure, marked the column as "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this FORM for additional space to write on. Accomplished Form should be signed by the SES personnel and should be posted in the field office.

Subproject Name: _____
Subproject Location: _____
Name of Contractor: _____
Subproject Duration: _____
Subproject Cost: _____
Date Monitor/Inspection: _____
Subproject Activities: _____

Certain	5	10	15	20	25
Highly	4	8	12	16	20
Likely	3	6	9	12	15
possible	2	4	6	8	10
unlikely	1	2	3	4	5
	Neg	Minor	Mod	Severe	Catas

	Mitigation Measures	COMPLIANT			Risk Assessment				Additional Information/ Remarks
		YES	NO	NA	Impact	Likelihood	I x L	Result	
A.	Field Office Requirement								
1	ESMP/CEMP properly posted								
2	Archaeological/Paleontological Chance Finds Procedures posted								
3	GRM Tarpaulin (with GRM Process flow poster) and feedback box installed								
4	SES Monitoring Checklist posted								

5	ECC, Cutting Permits, NWRB, CP and other related permits posted								
6	Site Acquisition Agreement signed (i.*e. RROW, Bunk house, Batching Plant, Dumping Site for surplus excavations, Parcellary Map of PAPs)*								
7	Approved DOLE OSH Plan posted								
TOTALS									
B. Environmental Safeguards									
1	Proper waste management is performed onsite. (i.e. waste segregations, housekeeping)								
2	The riverbanks, riverbed, and waterways within and adjacent to site is protected from oil/grease, and other wastes.								
3	Stilling ponds or catchment basin installed at the end of miter drains or turn outs to minimize siltation in creeks/rivers								
4	Surface drainage flow unobstructed by construction activities.								
5	The river flow/tidal flow is not affected by the construction works within and adjacent to sites.								
6	On geo-hazard prone areas, buffer zones and other relevant mitigation measures were applied								
7	The diverted water flow is free from constructions and other debris								
8	Excess construction materials, debris, waste and refuse are sorted or disposed of properly and safely.								
9	Cut trees and coconuts are consistent and compliant to the approved cutting permit (DENR/PCA).								
10	Quarry Site [Selection Operation Abandonment] guidelines complied								
11	Gravel, sand and backfill materials are obtained only from approved quarry sites								

12	Mangrove, coral, seaweed and marine life within and adjacent to site is protected.								
13	The impounded water is protected from pollutants (i.e. domestic wastes, dust, hazardous chemicals, and other waste materials)								
14	Minimal or no obstruction of natural water flow from the water source during construction and water harvesting								
15	Impounded water/water source is properly/regularly maintained for public safety.								
16	Low lying/ adjacent areas are protected from flooding due to water flow diversion								
C. Social Safeguards									
C.1 Right of Way									
1	Right-of-Way Acquisition cleared is consistent or compliant to Right-of-Way acquired.								
2	Damage during construction justly compensated/properly rehabilitated.								
3	Existing structures of IP, cultural and heritage landmarks with community importance are preserved or protected within allocated project area								
4	Workers are aware of Archaeological/Paleontological Chance Finds Procedures								
C.2 Community health and Safety									
5	Feedbacks and complaints documented, properly addressed, and resolved								
6	Access ramps provided for safe accessibility and mobility of the community (including farm animals and equipment)								
7	Provision of cover canals along the residentials area.								

8	Construction materials not encroaching on access road to avoid hazard to motorists.								
9	Construction aggregates and excavated materials are transported properly (i.e. trucks are covered).								
10	Adequate traffic and relevant construction safety and warning signs and devices installed and maintained (i.e. barricades, detour signages, bollards, delineator posts, lighting)								
11	Construction routes/roads damaged during construction maintained and repaired								
12	The community did not observe any cases of abuse, harassment, crime, cultural conflict, spread of communicable diseases since the construction started								
TOTALS									
D. Occupational Safety and Health									
1	Workers are provided with a temporary house/bunk house in base camp with electricity, potable water and proper ventilation with separate kitchen								
2	Workers have access to adequate and prescribed pit latrines or toilet facility.								
3	Good housekeeping is observed at the workers base camp/bunk house (i.e. bunkhouse is clean, walking surfaces are clear of debris)								
4	Safety and warning signages to inform and make the workers aware of possible danger installed								
5	Emergency Hotlines [RHU PNP BFP LGU] and Emergency response procedures or contingency plans established. (i.e. Traffic and Safety Plan) and posted								
6	Emergency response procedures or contingency plans established. (i.e. Traffic and Safety Plan)								
7	Safety Officer available on-site								
8	Adequate First aid materials (kit and medicine supplies) provided								

9	Nurse onsite (50 to 200 workers)/ First aider onsite (50 or less workers)								
10	Fire hydrant/extinguishers properly displayed, available, functional and regularly monitored (by safety officer)								
11	Hazardous waste materials are properly handled/stored and labelled								
12	Tool Box Meeting is conducted and documented								
13	Workers are properly compensated based on the approved wage rate in the area.								
14	Qualified local residents are given priority for employment opportunities of the project (place under additional information number of local residents hired against total number of workers)								
15	No children/minor are employed by the Contractor								
16	"Lost Time Accidents" is displayed.								
17	Accident /incident report is documented.								
18	Construction aggregates is properly stockpiled.								
19	Construction materials and other supplies are properly stored and labeled.								
20	Workers' PPE provided: Reflectorized Vest								
21	Workers' PPE provided: Hard hat								
22	Workers' PPE provided: protective shoes / boots								
23	Workers' PPE provided: gloves								
24	Workers' PPE provided: mask								
25	Workers' PPE provided: eye protection (i.e. for welding)								
26	Workers' PPE provided: others, please specify _____								
27	Proper noise and vibration control is employed on site.								
28	No adverse impact due to labor influx of migrant workers (i.e. no harassment, no discrimination, no bullying)								
29	No adverse impact to the migrant workers made by the community (i.e. no harassment, no discrimination, no bullying)								
30	Conducted awareness campaign on healthy and safe work place against transmittable diseases and displayed posters at field office and bunkhouse (e.g. HIV, vector-borne diseases, and other								

	communicable/transmissible diseases, anti-smoking campaign, drug- free working environment)								
TOTALS									
E. Local Government Unit									
1	Vulnerable PAPs are given additional assistance								
2	Damage during construction justly compensated/properly rehabilitated.								
3	Protection of the remaining forests within or near project influence area is implemented								
4	Indigenous Peoples Plan (IP Plan) implemented								
5	Replacement of cut trees implemented								
6	Functional GRM Hotline								
7	Community is aware of the GRM								
8	Feedbacks and complaints documented, properly addressed, and resolved								
9	GRM Tarpaulin (with GRM Process flow poster) installed at the Barangay and at start and end of project (and other strategic locations) and feedback box available at the Barangay Hall.								
10	Deduction of donated lands in the taxable properties (tax declaration) is done								
11	Conducted awareness campaigns and implemented local ordinances on healthy and safe work place against transmittable diseases and displayed posters in strategic locations (e.g. HIV, vector-borne diseases, and other communicable/transmissible diseases, anti-smoking campaign, drug- free working environment)								
12	Awareness on cultural preservation and archaeological chance finds								
13	Awareness campaigns on environmental ordinances (i.e. solid waste management, watershed protection, forest protection, etc.)								
TOTALS									
Monitored / Inspected by:		**Noted By:**							
_____									

MLGU/PLGU-SES **_____** **RPCO - SES** **_____** **PSO - SES** **_____** **NPCO - SES**	**_____** **Contractor**

Annex P-4: ENVIRONMENTAL AND SOCIAL SAFEGUARDS COMPLIANCE MONITORING CHECKLIST (Other Infrastructure)

INSTRUCTIONS: The SES personnel shall accomplish the FORM. Check (✔)the appropriate column to indicate level of compliance with the environmental management measures listed below. If compliance could not be determined for a particular environmental management measure, marked the column as "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this FORM for additional space to write on. Accomplished Form should be signed by the SES personnel and should be posted in the field office.

Subproject Name: _____
Subproject Location: _____
Name of Contractor: _____
Subproject Duration: _____
Subproject Cost: _____
Date Monitor/Inspection: _____
Subproject Activities: _____

Certain	5	10	15	20	25
Highly	4	8	12	16	20
Likely	3	6	9	12	15
possible	2	4	6	8	10
unlikely	1	2	3	4	5
	Neg	Minor	Mod	Severe	Catas

Mitigation Measures		Compliant?			Risk Assessment				Additional Information/ Remarks
		YES	NO	N/A	Impact	Likelihood	I x L	Result	(i.e. if not compliant, state reason why; please also include here if there are good practices observed i.e. employment of women; for risk assessment, indicate the impacts assessed for High and Extreme)
A. Field Office Requirement									
1	ESMP/CEMP properly posted								
2	Archaeological/Paleontological Chance Finds Procedures posted								

3	GRM Tarpaulin (with GRM Process flow poster) and feedback box installed								
4	SES Monitoring Checklist posted								
5	ECC/CNC, Cutting Permits and other related permits posted (i.e. FDA, NMIS, etc.)								
6	Site Acquisition Agreement signed (i.e. RROW, Bunk house, Batching Plant, Dumping Site for surplus excavations)								
7	Approved DOLE OSH Plan posted								
8	Training Certificates of Safety Personnel (i.e. Safety Officer, First Aider, etc.)								
9	Site Plan with Geotagged Photos								
TOTALS									
B. Environmental Safeguards									
1	Exposed excavated areas are properly mitigated to minimize erosion.								
2	Proper solid waste management is performed onsite. (i.e. waste segregations, house keeping)								
3	Proper liquid waste management (i.e. waste water treatment, water impoundment) is performed on-site								
4	The river banks and riverbed within and adjacent to site is protected from oil/grease, and other wastes.								
5	Catchment basin installed at the end of miter drains or turn outs to minimize siltation in creeks/rivers								
6	Surface drainage flow unobstructed by construction activities.								
7	The river flow is not affected by the works within and adjacent to sites.								
8	On geo-hazard prone areas, buffer zones and other relevant mitigation measures were applied								

9	Drainage canals (i.e. side ditch/line canals, RCPCs, etc.) were constructed/installed in flood prone areas								
10	Slope protection works (i.e. grouted rip-rap, stone masonry gabions, etc.) were constructed/installed along areas prone to landslides								
11	Dumping/Disposal Site [Selection Operation Abandonment] guidelines complied								
12	Excess construction materials, debris, waste and refuse are sorted or disposed of properly and safely.								
13	Quarry Site [Selection Operation Abandonment] guidelines complied								
14	Gravel, sand and backfill materials are obtained only from approved quarry sites								
15	Borrow Pit [Selection Operation Abandonment] guidelines complied								
TOTALS									
C. Social Safeguards									
c.1 Right of Way Acquisition									
1	Site and Right-of-Way Acquisition cleared is consistent or compliant to Right-of-Way acquired.								
2	Damage during construction justly compensated/properly rehabilitated.								
3	Existing structures of IP, cultural and heritage landmarks with community importance are preserved or protected within allocated project area								
4	Workers are aware of Archaeological/Paleontological Chance Finds Procedures								
c.2 Community Health and Safety									
5	Road kept open to traffic flow and minimized disruptions along the access road and/or construction area								
6	Access ramps provided for safe accessibility and mobility of the community								

7	Construction materials not encroaching on road and posing a hazard to motorists.								
8	Construction aggregates and excavated materials are transported properly (i.e. trucks are covered).								
9	Adequate traffic safety and warning signs and devices installed and maintained (i.e. barricades, detour signages, bollards, delineator posts, lighting)								
10	Construction routes/roads damaged during construction maintained and repaired								
11	Dust control such as water spraying is regularly performed as needed.								
12	The community did not observe any cases of abuse, harassment, crime, cultural conflict, spread of communicable diseases since the construction started								
13	Feedbacks and complaints documented, properly addressed, and resolved								
TOTALS									
D. Occupational Safety and Health									
1	Workers are provided with a temporary house/bunk house in base camp with electricity, potable water and proper ventilation with separate kitchen								
2	Workers have access to adequate and prescribed pit latrines or toilet facility.								
3	Good housekeeping is observed at the workers base camp/bunk house (i.e. bunkhouse is clean, walking surfaces are clear of debris)								
4	Safety and warning signages to inform and make the workers aware of possible danger installed								
5	Emergency Hotlines [RHU PNP BFP LGU] posted								
6	Emergency response procedures or contingency plans established. (i.e. Traffic and Safety Plan)								
7	Safety Officer available on-site								

8	Adequate First aid materials (kit and medicine supplies) provided								
9	Nurse onsite (50 to 200 workers)/ First aider onsite (50 or less workers)								
10	Fire hydrant/extinguishers properly displayed, available, functional and regularly monitored (by safety officer)								
11	Hazardous waste materials are properly handled/stored and labelled								
12	Tool Box Meeting is conducted and documented								
13	Workers are properly compensated based on the approved wage rate in the area.								
14	Qualified local residents are given priority for employment opportunities of the project (place under additional information number of local residents hired against total number of workers)								
15	No children/minor are employed by the Contractor								
16	"Lost Time Accidents" is displayed.								
17	Accident /incident report is documented.								
18	Construction aggregates is properly stockpiled.								
19	Construction materials and other supplies are properly stored and labeled.								
20	Workers' PPE provided: Reflectorized Vest								
21	Workers' PPE provided: Hard hat								
22	Workers' PPE provided: protective shoes / boots								
23	Workers' PPE provided: gloves								
24	Workers' PPE provided: mask								
25	Workers' PPE provided: eye protection (i.e. for welding)								
26	Workers' PPE provided: others, please specify _____								
27	Proper noise and vibration control is employed on site.								
28	No adverse impact due to labor influx of migrant workers								
29	No adverse impact to the migrant workers made by the community								

30	Conducted awareness campaign on healthy and safe workplace against transmittable diseases and displayed posters at field office and bunkhouse (e.g. HIV, vector-borne diseases, and other communicable/transmissible diseases, anti-smoking campaign, drug- free working environment)								
TOTALS									
E. Local Government Unit									
1	Vulnerable PAPs are given additional assistance								
2	Damaged structures are restored as per agreement								
3	Established infrastructure consistent and compatible with land use plan								
4	Protection of the remaining forests within or near project influence area is implemented								
5	Indigenous Peoples Plan (IP Plan) implemented								
6	Replacement of cut trees implemented								
7	Functional GRM Hotline								
8	Community is aware of the GRM								
9	Feedbacks and complaints documented, properly addressed, and resolved by the LGU (Brgy, MLGU, PLGU)								
10	GRM Tarpaulin (with GRM Process flow poster) installed at the Barangay and at start and end of project (and other strategic locations) and feedback box available at the Barangay Hall.								
11	Deduction of donated lands in the taxable properties (tax declaration) is done								
12	Conducted awareness campaigns and implemented local ordinances on healthy and safe work place against transmittable diseases and displayed posters in strategic locations (e.g. HIV, vector-borne diseases, and other communicable/transmissible diseases, anti-smoking campaign, drug- free working environment).								

13	Awareness on cultural preservation and archaeological chance finds								
14	Awareness campaigns on environmental ordinances (i.e. solid waste management, watershed protection, forest protection, etc.)								
15	Availability of Utility Source (Power and Water line)								
16	Adequate road access to the infrastructure								
TOTALS									

Monitored / Inspected by:	**Noted By:**
_____ **MLGU/PLGU-SES** _____ **RPCO - SES** _____ **PSO - SES** _____ **NPCO - SES**	_____ **Contractor**

Annex P-5: NVIRONMENTAL AND SOCIAL SAFEGUARDS COMPLIANCE MONITORING CHECKLIST

INSTRUCTIONS: The SES personnel shall accomplish the FORM. Check (✔)the appropriate column to indicate level of compliance with the environmental management measures listed below. If compliance could not be determined for a particular environmental management measure, marked the column as "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this FORM for additional space to write on. Accomplished Form should be signed by the SES personnel and should be posted in the field office.

Subproject Name: _____
Subproject Location: _____
Name of Proponent Group: _____
Name of Contractor: _____
Subproject Duration: _____
Subproject Cost: _____
Date Monitor/Inspection: _____
Subproject Activities: _____

Certain	5	10	15	20	25
Highly	4	8	12	16	20
Likely	3	6	9	12	15
possible	2	4	6	8	10
unlikely	1	2	3	4	5
	Neg	Minor	Mod	Severe	Catas

SES ITEM	Compliant			Risk Assessment				Additional Information/ Remarks
	YES	NO	N/A	Impact	Likelihood	I x L	Result	(i.e. if not compliant, state reason why; please also include here if there are good practices observed i.e. employment of women; for risk assessment, indicate the impacts assessed for High and Extreme)
A. Enterprise Office Requirements								

1	Site Acquisition documents properly filed (i.e. Land Title; Usufruct; Lease Contract; Deed of Sale/Deed of Donation; Certification of Municipal Waters, Zoning Certification/Ordinance)								
2	Standard (Sanitation) Operating Procedures prepared and posted								
3	SES Monitoring Checklist on Enterprise Operations posted								
4	Approved written policies, systems and procedures of the PG are in place								
5	Transparency mechanism in place (i.e. full disclosure bulletin board)								
6	Conducted regular/periodic monitoring and maintenance of the building and equipment based on the O&M plan								
7	ESMP (with Chance Finds Procedure) and approved DOLE-OSH plan properly posted								
8	GRM Tarpaulin (with GRM Process flow poster) installed and feedback box available at the PG Offices and other strategic areas								
9	Copy of DENR and other partner agencies related clearances/permits properly posted (i.e. sanitary permit, BFAD etc.)								
TOTALS									
B. Social Safeguards (Social Inclusiveness and equitable benefit-sharing and GRM)									
1	Meaningful participation of members in decision-making processes of the Cooperative/Association								
	1.a) PG members (non-officers)								
	1.b) Women								
	1.c) Indigenous Peoples								
	1.d) Other vulnerable groups (i.e. PWDs, elderly)								
2	Open membership and fair stockholder policy implemented								

3	Target increase in membership implemented and with plan for expansion of membership tied up to the grant								
4	Equal (income of enterprise equally distributed) and equitable sharing (patronage refund) implemented among members of the PG/s								
5	Tangible benefits to the workers of the enterprise, including any plan to increase wage, fringe benefits and any plan to increase the number of workers implemented								
6	No economic displacement of existing similar or exactly the same enterprise/business in the area								
7	Increase in member-farmers and/or fishers incomes *to be monitored according to business cycle when increase in income will happen								
8	Non-members benefitted from the enterprise								
9	Target beneficiaries received the farm interventions as per Business Plan (i.e. farm, livestock, poultry inputs; machineries/equipment and enterprise activities)								
10	Measures to detect and address crop/animal/fisheries diseases are in place (i.e. detecting red tide infestation in the area) to address threat to production and impacts to community safety and health								
11	Functional GRM Hotline								
12	Complaints and feedback documented, properly addressed, and resolved								
13	SES findings and observations disseminated to all PG members								
14	Land donated or sold is in the name and actual possession of the PG								
TOTALS									
C. Generic ESMP items									
C.1 Environmental Safeguards									

1	PG and LGU and DENR closely monitored land boundaries and immediately act on any encroachment to existing forests/natural habitat								
2	Strictly complied with land conversion policies/designation of areas for mariculture/aquaculture/for water-based enterprise taking into consideration carrying capacity of the area								
	2.a) Proliferation of insects, flies, rodents and other pests properly addressed								
	2.b) Land pollution due to excessive/abuse use of fertilizers and pesticides avoided/mitigated								
	2.c) Air pollution/air quality degradation (i.e. manure odor; dust/dirt/suspended particulates; use of bagasse as fuel for cooking muscovado) controlled/mitigated								
	2.d) Noise pollution (i.e. noise from equipment and machine during operation) regulated								
3	Observed water conservation measures to mitigate competition in water use and water resources								
4	Proper waste water management observed (i.e. waste treatment facility)								
5	Proper solid waste/animal waste management (i.e. regular disposal, segregation and composting)								
6	Farmers adopted/applied the following:								
	6.1) DA-KASAKALIKASAN - Integrated Pest Management (IPM)								
	6.2) Good Agricultural Practices (GAP)								
	6.3) Good Manufacturing Practices (GMP)								
	6.4) Good Animal Husbandry Practices (GAHP)								
	6.5) Good Aquaculture Practices (GAqP)								
	6.6) Hazard Analysis Critical Control Point (HACCP)								
	6.7) Organic Agriculture (OA)								
TOTALS									

C.2 Occupational Safety and Health									
1	Emergency response procedures established and emergency hotlines [RHU PNP BFP LGU] posted								
2	Personnel trained on first aid and adequate first aid kit and medicine provided								
3	Accident/Incident Report documented								
4	Workers are properly wearing appropriate PPE								
5	Workers provided with potable water								
6	Workers have access to adequate and prescribed pit latrines, toilet and sanitary facility.								
7	Regular Potability Test Conducted								
8	Work place is well ventilated with adequate lighting								
9	Workers are properly compensated based on the approved wage rate in the area.								
10	Safety and warning signages to inform and make the workers aware of possible danger installed								
11	Fire hydrant/extinguishers properly displayed, available, functional and regularly monitored								
12	No children/minor are employed								
13	Conducted awareness campaign on healthy and safe work place against transmittable diseases and displayed posters at Enterprise office (e.g. HIV, vector-borne diseases, and other communicable/transmissible diseases, anti-smoking campaign, drug- free working environment)								
TOTALS									
C.3. Local Government Unit									
1	Complaints and feedback documented, properly addressed, and resolved								
2	Farmers trained on the following programs depending on the enterprise:								
	2.1) DA-KASAKALIKASAN - Integrated Pest Management (IPM)								
	2.2) Good Agricultural Practices (GAP)								

	2.3) Good Manufacturing Practices (GMP)								
	2.4) Good Animal Husbandry Practices (GAHP)								
	2.5) Good Aquaculture Practices (GAqP)								
	2.6) Hazard Analysis Critical Control Point (HACCP)								
	2.7) Organic Agriculture (OA)								
3	Provided personnel/staff/members with the necessary training (i.e. management, financial, organizational, first aid, anti-discrimination, DRRM and other related training activities) and technical assistance from LGU, line government agencies and non-government organizations								
4	Functional GRM Hotline								
5	GRM Tarpaulin (with GRM Process flow poster) installed and feedback box available at all levels								
6	Indigenous Peoples Plan (IP Plan) implemented								
TOTALS									
D. Subproject specific ESMP items (list down specific ESMP items to be monitored especially on community safety) based on the filled-up per subproject visited									
1									
2									
3									
4									
5									
TOTALS									
Monitored / Inspected by:		**Noted By:**							

_____ **MLGU/PLGU-SES** _____ **RPCO - SES** _____ **PSO - SES** _____ **NPCO - SES**	_____ **Proponent Group**

Annex Q: An Outline for CERC ESMF

This document is prepared as the Contingent Emergency Response Component (CERC) section in the ESMF of the Philippine Rural Development Project Scale-Up. It describes the information on the environment and social safeguard (ESS) requirements for the implementation of the proposed activities to be carried out under Component 5 of the Project. The Department of Agriculture (DA), as the Implementing Agency of PRDP Scale-Up, shall be the Implementing Agency of CERC responsible for guiding and coordinating all its activities.

The guidance and procedures included in this ESMF-CERC shall be integrated in the Emergency Response Manual (ERM) that will be prepared during the project implementation and shall contain environmental and social requirements once CERC is activated. The guidelines and procedures in this ESMF-CERC are prepared in accordance with the Bank's safeguards requirements for CERC (Bank's Guidance on CERC, October 2017).

CERC is limited to the minor restoration and repair of ongoing and completed subproject investments that have been or is currently financed by PRDP Scale-Up, including structures that would facilitate access to economic and social services of proponent groups/FCAs.

Refurbishment of infrastructure including, but not limited to water supply, transportation systems, energy and power supply, telecommunication in response to the pandemic.

1. Refurbishment of public buildings, including schools, hospitals and administrative buildings in response to the pandemic.
2. Once CERC is activated, the necessary environmental and social (E&S) instruments shall be prepared, disclosed and adopted in accordance with the CERC-Operations Manual (OM) and the Environmental and Social Commitment Plan (ESCP), and in form and substance acceptable to the World Bank.
3. An eligible crisis or emergency is defined under the Loan Agreement as an event that has caused or is likely to imminently cause a major adverse economic and/or social impact associated with natural or human-made crises or disasters, including health crisis and outbreaks.
4. The CERC will be prepared in accordance with the format prescribed below, in accordance with the ESMF, as well as relevant aspects in the SEP, to include:
    a. Description of the potential emergencies and the types of activities likely to be financed by the Bank
    b. Potential risks and general mitigation measures associated with the activities proposed for potential emergencies
    c. Identification of vulnerable locations and/or groups
    d. Environmental and Social Assessment/Screening and ESMF requirements such as, but not limited to, the Environmental and Social Management Plan (ESMP), Labor Management Procedures (LMP), and Contractor's Grievance Redress Mechanism (GRM), and overall CERC GRM to comply with the Bank's requirements and the national laws.
    e. An Environment, Social, Health and Safety (ESHS) plan for preventing, controlling, and managing risks and impacts associated with activities financed under the CERC.
    f. Assessment of the local context to guide emergency responses; and
    g. Institutional arrangements for environmental and social due diligence and monitoring.

Activities financed under the CERC will be limited to provision of critical goods and services, minor civil works outlined in the positive list in this CERC-OM. Activities that might result in land reclamation, land acquisition and resettlement will not be eligible for support. In the event that CERC activities do lead to land acquisition or resettlement impacts, the provisions of the project ESMF, updated to include CERC activities, will apply. It is further not anticipated to support activities which might have adverse impacts. In the event that adverse impacts do occur, the provisions of the Project's SEP, updated to include CERC activities, will apply. It is unlikely that changes to the existing E&S instruments of the project will be required. However, if necessary, the E&S instruments will be updated if the activities proposed in the Emergency Action Plan (EAP) do not fall within the scope of the existing instruments. In case emergency works trigger additional E&S standards; the conditions meriting such change will be studied and new instruments will be prepared, consulted upon and disclosed per the requirements of the Bank's Investment Financing Policy. A restructuring of the Project will take place once new activities outside of the Project scope will be proposed in the EAP.

For the implementation of the CERC activities in the Project sites, the NPCO, concerned PSO, RPCO, and PMIUs will oversee and provide technical assistance on the E&S requirements, in coordination with the concerned LGUs.

The Implementing Agency will identify, based on the activities and works proposed in the EAP, the potential environmental and social risks and impacts, and the studies and/or the plans required for environmental and social management.

In case the procurement of civil works will require the mobilization of contractors, the bidding documents shall include the Labor Management Plan (LMP) and the Codes of Conduct for workers and supervisors, specifying appropriate provisions and sanctions related to community relations, gender-based violence, child protection, human trafficking, and sexual harassment/ sexual exploitation and abuse (SH/ SEA).

The key instruments of CERC comprise a Rapid Needs Assessment (RNA) and the preparation of an Emergency Action Plan (EAP), the general aspects of which are provided below:

a. Rapid Needs Assessment (RNA)

The DA and PRDP-Scale-Up NPCO will lead the conduct of a preliminary assessment and/ or estimation of the damages and/ or risks, needs, and impacts associated with the nature and characteristics of the emergency/ disaster event. The RNA shall provide information and content about the emergency/ disaster event and the scale and extent of damage and adverse impacts beginning with PRDP Scale-Up infrastructure and services, and the likely scope of activities for rehabilitation/ reconstruction.

The RNA will serve as the basis for preparing the EAP. The assessment and/or estimation can be carried out by modelling and other analytical tools/ methodologies.

b. Emergency Action Plan (EAP)

The EAP is the most critical instrument for Bank support under the CERC. In a manner that applies to communities assisted under PRDP Scale-Up, the EAP, at a minimum, will include the following:

1. List of possible/ likely disasters and emergency situations, e.g., disease outbreak/ pandemic, flooding, earthquakes/ tsunamis, landslides, volcanic eruption, peace and order breakdown related to the disaster, among others. The preliminary assessment/ estimation shall be expressed in terms of number of affected peoples, livelihood, and socioeconomic impact.
2. Summary of the type of crisis and likely impacts and the identification/ estimation of the type of response commensurate to the crisis and impact.
3. Geographical location and size of the area served by potential CERC activities
4. Institutional arrangements for implementation
5. List of emergency activities including goods, works, services, and/or emergency operating costs to be financed, including itemized costs
6. Summary of the potential environmental and social impacts of proposed activities and, if needed, the environmental and social instruments that are available or are to be prepared to comply with national laws and regulations, and the Bank's E&S policies.
7. Action plan for the completion of E&S instruments and activities in the event of deferral upon CERC activation
8. Simplified and fast-tracked procurement plan outlining the contracts, selection methods, cost estimates, and schedules
9. Setting of the target completion date upon which all activities financed under the EAP shall have been completed
10. Utilization of funds would be in accordance with the eligible list of items, goods and civil works required to support the immediate response and recovery interventions, under various emergency response and contingency plans. The template for the EAP is provided in the table below.

PRDP Scale-Up Subproject:	*PRDP Scale-Up project affected by the emergency/disaster, including description of location, communities affected*
Emergency / Disaster Event:	*Description of emergency/disaster event and basis for triggering CERC.*
E&S Impacts and Instruments	*Summary of potential environmental and social impacts of the proposed activities including E&S instruments available or to be prepared.*
Institutional Arrangements	*Description of institutional arrangements for implementation*

Phase/Activity	**Activity Description**	**Resources Needed**	**Responsible Office(s)**	**Timeline**
Phase 1 – Preparedness, Mitigation and Prevention				
Phase 2 – Emergency Disaster/Response				
Phase 3 – Post Event (Recovery and Reconstruction)				

Annex R

ANNEX R: CLIMATE CO-BENEFITS AND GHG ACCOUNTING OF PRDP SCALE-UP[2]

1. The project development objective of PRDP is "to improve famers' and fisherfolk access to markets and profitability in selected value chains". The project is national in scope and has 4 components: (a) Local and National Level Planning (I-PLAN); (b) Rural Infrastructure Market Linkage (I-BUILD); (c) Enterprise Development (I-REAP); and (d) Project Management (I-SUPPORT).

2. **EX-ACT.** The Ex-Ante quantification of GHG emission reductions is an important step in managing and ultimately reducing GHG emissions. To estimate the impact of agricultural investment on GHG emissions and carbon sequestration, the World Bank has adopted the Ex-Ante Carbon-balance tool (EX-ACT), developed by the FAO since 2014. EX-ACT allows the assessment of the project's net carbon balance, defined as the net balance of CO_2 equivalent GHG emitted or sequestered because of project implementation compared to a without-project scenario, assumed to be the adoption of conventional technologies. EX-ACT estimates the carbon stock changes (emissions or sinks), expressed in equivalent tons of CO_2 per hectare and year. Three gases are considered in the calculations: carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). The latest available global warming potential is used to convert all emissions into CO_2 equivalent: 273 for N_2O and 27.2 for CH_4.

3. The project would be implemented over 5 years (2024-2028). Analysis is run over a total 20 years, hence with a capitalization phase of 15 years. Tropical wet climate and high activity clay (HAC) soils were assumed to be representative of Philippines.

4. The project interventions and the with-and-without scenarios developed for the Economic and Financial Analysis (EFA) were used for the GHG accounting. Several of the assumptions and figures from the EFA were also inputs to this GHG analysis and come from updated data from the Department of Agriculture's experiences in implementing the ongoing PRDP. The results from this analysis should be considered strictly as ex-ante outcomes. The lack of details for many of the proposed interventions led to taking assumptions that may not be accurate once each subproject is projected. Hence it is suggested to update the GHG accounting once the feasibility studies for all interventions are available to reflect the actual emissions and/or conduct an ex-post quantification during project review. The without-project scenario for the analysis corresponds to the current baseline situation.

5. **Individual interventions.** The GHG analysis was carried out for every single intervention and then aggregated. The analysis focuses on the Infrastructure and Enterprise Development investments of PRDP Scale-Up, as modelled in the EFA. The assumptions for the individual interventions are described below:

I. Infrastructure

I.A. Farm to Market Roads (FMR): The project would construct 1,174 km of concrete roads: 822 km new FMRs and 352 km rehabilitated. It is assumed that these FMRs are secondary roads, bendy and gently undulating, and their overall road conditions would be upgraded from poor to good quality. Using HDM-4 road model, an average reduction of 11 percent in fuel use is expected with project. Without the project, more fuel would be consumed for transportation. However, there is also an anticipated 15 percent increase in traffic. All of this would result in an extra consumption of 1 m^3 of fuel per year in total while reducing hauling costs, travel

[2] Based on the World Bank assessment in the Project Appraisal Document (PAD).

time, and vehicle maintenance. For the road constructions, a total of 442,814 tCO_2eq would be emitted for the construction itself and 48 tCO_2eq/year emitted from the extra fuel. Reduction in transport losses is among the benefits but not counted in EX-ACT.

I.B. Bridges: It is assumed that a total of 1,962 m of reinforced concrete bridges would be constructed. A total of 1,012 tCO_2eq are expected to be emitted during their construction.

I.C. Irrigation systems: A total of 2,518 ha would be equipped with small scale irrigation systems. It would allow to irrigate carrots, potato, and cabbage fields through the installation of a gravity-fed (1,778 ha) and a solar-powered (740 ha) irrigation systems. Assuming a surface irrigation without a runoff return system, it would result in 87 tCO_2eq emitted for its construction. We assume no emissions coming from its operation since they don't rely on fossil fuel. In addition, for the irrigated farms, improvements in farming practices are expected because of the trainings that the project would bring. Water, soil (reduced tillage), and residue management practices would improve soil carbon and could sequester an estimated *-67,809* tCO_2eq per year.

I.D. Potable water systems: A total of 64,512 households are expected to benefit from this intervention. Based on MIADP data, we calculated the emissions from the construction of the water tanks, done in steel with an average 42 m^3 capacity per 300 households. This means an emission of 710 tCO_2eq.

I.E. Slaughterhouses: A total of 40 subprojects are expected, which would be built on 58,318 m2 of land in total. Emissions would come mainly from the construction. Generally, post-farm emissions for meat are negligible[3] and not counted. The building would be made of concrete which means that a total of 38,257 tCO_2eq would be emitted from its construction. This intervention is not expected to change livestock farming in the region.

I.F. Agriculture Tramline System: A total of 930 m of ATS would be built. From PRDP experience, each tramline is about 125 m, hence this implies around 07 subprojects. Previous studies cite an average consumption of 610 liters of diesel per year and subproject, which means a total consumption of 4.3 m^3 per year. This translates into total emissions of 202 tCO_2eq emitted per year. The introduction of ATS would likely decrease hauling costs, but no change in the farming systems is expected.

I.G. Fish Landing: A total of 07 subprojects are expected, which would be built on 2,436 m2 of land in total. An estimated 1,598 tCO_2eq would be emitted from the construction of these agricultural buildings which would be made of concrete.

I.H. Feeder Port: Only 01 subprojects are expected, which would be built on 5,534 m2 of land in total. An estimated 3,630 tCO_2eq would be emitted from the construction of this agricultural buildings which would be made of concrete.

I.I. Watch Tower: Only 01 subproject is expected, which would be built on 520 m2 of land in total. An estimated 341 tCO_2eq would be emitted from the construction of this agricultural building which would be made of concrete.

I.J. Composting facility: Only 01 subproject is expected, which would be built on 500 m2 of land in total. An estimated 328 tCO_2eq would be emitted from the construction of this agricultural building which would be made of concrete.

II. Enterprises

II.A. Small Enterprise

II.A.i. Seaweeds Production, Processing, and Trading: This intervention would support the production, processing/post-harvest, and marketing activities of seaweeds. Under the processing component, a consolidated center with a floor area of 200 m2 would be constructed would be built for each enterprise. This construction would result in 3,936 tCO_2eq emitted for the 30 enterprises. Additional emissions are considered during its operational phase because of the use of fossil fuel. Based on the EFA model, it is estimated that 10 liters of fuel are needed per enterprise per cycle (pump boats and delivery trucks).

[3] https://www.fao.org/3/i3461e/i3461e.pdf

Assuming 5 cycles per year, this yields a total of 1.5 m3 of fuel per year, which translates into 71 tCO_2eq emitted per year. Emissions from the production and processing are assumed to be negligible.

II.B. Medium Enterprises

II.B.i. Native Chicken Breeding, Production, and Marketing: 9 enterprises would be supported. They would engage in breeding, fattening, and marketing activities of native chicken. A 395 m2 building would be constructed for each enterprise so that they can produce 60,000 chicken per year (30 percent to be sold live and 70 percent as dressed chicken). Feeding was not considered for the GHG calculations since we assumed that it would be locally sourced. Furthermore, GHG emissions from fattening are almost negligible, adding a total of 13 tCO2eq per year. This is a result of the low carbon footprint of its manure and enteric fermentation. However, a total of 2,332 tCO2eq would be emitted from the construction activities, 2,354 tCO2eq per year from electricity consumption, and 185 tCO2eq per year from transportation. The emission from electricity is reduced by 1 MWh per year which are expected to come from solar panel lighting per subproject requirement. Emissions from the breeding and fattening are also considered since this is a high productivity system.

II.B.ii. Bangus Hatchery and Nursery Enterprise: A total of 8 bangus enterprises would be supported. The enterprises would operate using three major facilities: broodstock, hatchery, and nursery. Only emissions from the construction of the broodstock, Hatchery, which would be 1,155 tCO_2eq per year. On the other hand, the nursery facility would operate in a 5-hectare pond, using semi-intensive culture. With 6,000,000 fry per year, 70 percent is expected to survive as fingerling. This nursery operation would result in 266 tCO_2eq emissions per year. The production inputs would cause 462 tCO_2eq annual emission because of the use of urea and ammonium phosphate. In addition, 3,903 tCO_2eq would be emitted from electricity consumption. The emission from electricity is reduced by 0.5 MWh per year which are expected to come from solar panel lighting per subproject requirement.

II.B.iii. Highland Vegetables Consolidation and Marketing: This intervention would fund 8 subprojects. Vegetables to be consolidated and marketed are cabbage, carrots, potatoes, broccoli, Chinese cabbage, bell pepper, baguio beans, cauliflower, and lettuce. This is a consolidation activity so no change in the farming systems is expected with the project. However, the project would produce emissions from the construction and hauling activities. The enterprise would operate a consolidation center in a 415 m2 land area. A total of 2,178 tCO_2eq would be emitted from the construction of the 415 m2 consolidation center and another 119 tCO_2eq from hauling activities.

II.B.iv. Corn Grains Terminal and Trading Enterprise: This intervention would fund 8 subprojects. The enterprise would process corn to produce feeds for hog and poultry. Sources of corn are assumed to be coming from different provinces, where the members of the cooperative would get premium price. It is expected to consolidate 2.09M kg of corn, of which, 1.2M kg would be processed into feeds, while the rest would be sold to other feed miller. So, this intervention would focus mainly on feed production, and no change in farming systems are expected with the project. However, the project would produce emissions from the construction of the metal silo with concrete flooring (669 tCO_2eq), transportation activities (853 tCO_2eq), and intense electricity use (3,738 tCO_2eq). The emission from electricity is reduced by 0.8 MWh per year which are expected to come from solar panel lighting per subproject requirement.

II.B.v. Cacao Processing and Marketing Enterprise: A total of 8 projected cacao processing enterprises would be supported through this intervention. Each enterprise requires the construction of a 250 m2 processing building. The enterprise would buy dried fermented cacao beans from its partner groups then process it into Tablea, its main product. Fuel consumption from these activities would result in 2,629 tCO_2eq emitted annually from equipment, and another 427 tCO_2eq from hauling, and delivery). Another 2,221 tCO_2eq would be emitted from electricity use during roasting, griding, packaging, etc. The emission from electricity is reduced by 0.6 MWh per year which are expected to come from solar panel lighting per subproject requirement. This intervention would focus on cacao processing, hence no change in farming systems is expected with the project.

II.B.vi. Swine Production, Processing, and Marketing Enterprise: The proposed enterprise would engage in swine breeding, hog fattening, and meat processing activities. 8 enterprises would be supported, each one assumed to build a 384 m^2 concrete building for the fattening of around 850 pigs per year, with 3 fattening cycles per year and a final weight of 90 kg per fattened pig. This operation would emit approximately 4,570 tCO_2eq annually. GHG emissions from swine fattening production come from: (a) CH_4 emissions from enteric fermentation; (b) CH_4 emissions from manure management; and (c) N_2O emissions from manure management. In addition, electricity use and hauling would annually produce 1,069 tCO_2eq and 34 tCO_2eq respectively. The emission from electricity is reduced by 0.9 MWh per year which are expected to come from solar panel lighting per subproject requirement. Finally, another 2,015 tCO_2eq would come from the

construction of the buildings. Feeding was not considered for the GHG calculations since we assumed that it would be locally sourced.

II.B.vii. Green Coffee Beans Production and Marketing Enterprise: A total of 8 coffee processing enterprises would benefit from this intervention, each one with a facility of 792 m2. The enterprise would buy the green coffee beans from the farmers through contract farming. Hence this intervention would significantly impact the coffee production systems and we assume that the current farming practices of the beneficiaries would be more climate-smart with the project. Around *-32,838* tCO_2eq could be sequestered on 6,032 ha of farms because of regenerative agriculture practices combined with a reduced tillage that would improve soil carbon. On the other hand, annual emissions are expected from fuel consumption during hauling and delivery (1,062 tCO_2eq) as well as from the processing (1,840 tCO_2eq). Each enterprise is also expected to 146 tCO_2eq per year from electricity use, which is reduced by 1.8 MWh per year because of use of solar panel lighting per subproject requirement. Finally, the construction of the facility would produce 4,156 tCO_2eq.

II.B.viii. Banana Trading, Processing, and Marketing Enterprise: 7 enterprises would be supported. The enterprise would address post-harvest and marketing constraint in the value-chain, hence no change in farming systems is expected with the project. An establishment of a 200 m2 processing facility is anticipated for each enterprise, which would produce 918 tCO_2eq. No emission is expected from the production whereas hauling would consume 15 m3 of fuel annually, resulting in 716 tCO_2eq emissions. The processing center would also require 101.9 MWhr of electricity annually i.e., 1,317 tCO_2eq in emissions. This electricity consumption is reduced by 0.4 MWh per year which are expected to come from solar panel lighting per subproject requirement.

II.B.ix. Rice processing and Marketing Enterprise: A total of 3 rice processing enterprises would benefit from this intervention, each one with a 608 m2 warehouse. The enterprise would buy the aromatic rice from farmers and no change in the current production systems is expected. Annual emissions are expected from fuel consumption during hauling, delivery, and the service provision of land preparation using the four-wheeled drive tractor (1,840 tCO_2eq). Milling and drying activities are also expected to consume 358 MWhr of electricity annually where 0.5 MWhr would be from solar panel lighting, i.e., 4,632 tCO_2eq emissions per year. In addition, the construction of the facility would produce 1,197 tCO_2eq.

II.B.x. Coconut VCO Processing and Marketing Enterprise: A total of 3 coconut processing enterprises would benefit from this intervention, each one with a 600 m2 processing plant. The enterprise would buy the coconut from the farmers to produce cocowater and VCO. No change in the farming systems is expected from the subproject. GHG emissions would come from fuel consumption during hauling and delivery (280 tCO_2eq per year). Following the EFA cost tables, an average consumption of 9,114 KWh/year of electricity is envisaged for each enterprise i.e., 346 tCO_2eq in annual emissions because 0.5 MWhr would come from solar panel lighting. On the other hand, the construction of the facility would produce 1,181 tCO_2eq.

II.C. Large Enterprise

II.C.i. Onion Consolidation and Trading with Cold Storage Facility Enterprise: There would be 8 enterprises that would be funded. Each would support the post-harvest, consolidation, and marketing segments of the value chain of Onion by providing interventions such as the construction of cold storage facility (1,912 m2) with an estimated capacity of 60,000 bags of onions. The construction would emit 10,034 tCO_2eq. The enterprise would simply procure onion and no change in the farming systems is expected from the subproject. Then each cold storage facility is expected to consume a significant amount of electricity – around 573 MWhr/year (4.3 MWhr to come from solar panel lighting) – which would produce 59,201 tCO_2eq emissions. Fuel consumption from hauling and delivery would also emit 33 tCO_2eq.

6. As can be seen, most of the interventions emit CO_2eq, compared to the without-project scenario. This is a direct consequence of the PRDP's goal to increase profitability by promoting the construction and operation of processing facilities as well as the construction of new roads and rural infrastructure. The only activities with carbon sequestration are the coffee agroforestry and the irrigated vegetables which have water, soil, and residue management that improve carbon stock. However, the project is also expected to address climate vulnerabilities and bring innovation (techniques and new technologies) in the region, which would improve efficiency and reduce post-harvest wastage. Such mitigation benefits are not counted by the EX-ACT but would significantly offset the emissions by the project.

7. Following the 2017 guidance note from the World Bank "Shadow price of Carbon in economic analysis", two carbon prices are considered in the analysis as low and high estimates. The low and high estimate of the carbon price equal US$44 and US$87, respectively, in 2024, and thereafter the values increase with a growth rate of 2.25 percent per year. The annual shadow price of carbon (US$/t CO_2eq) is then multiplied by the yearly GHG emissions (tCO_2eq) to get the economic value for every year of the project.

8. **Total GHG emissions and economic costs**. If the project invests in the interventions described in the EFA, the **total Net Carbon Balance** would reach an estimated average of +25,710 tons of CO_2eq emissions per year of the project, corresponding to an estimated total of **+514,193 tons CO_2eq emitted over the entire project life**. In economic terms, the project would generate a negative Net Present Value (NPV) of **US$9.51 million or US$19.01 million** (for a 12 percent discount rate) during the whole project life for the **low and high Carbon price scenarios**, respectively.

9. Table 1. Net Carbon Balance for each of the Ex-Act components.

Components		Net Carbon Balance	
		tCO_2eq over the whole period analysis	**tCO_2eq/year annual average**
Land use changes	Deforestation	0	0
	Afforestation	0	0
	Other land-use	0	0
Cropland	Annual	-67,809	-3,390
	Perennial	-32,838	-1,642
	Flooded rice	0	0
Grasslands and Livestock	Grasslands	0	0
	Livestock	+4,582	+229
	Forest mngt.	0	0
	Inland wetlands	0	0
	Coastal wetlands	0	0
	Fisheries and aquaculture	+266	+13
	Inputs and Investments	+609,991	+30,500
Total emissions, tCO_2eq		**+514,193**	**+25,710**
+ = Source / - = Sink			

Figure 1. Annual carbon balance, in tCO2eq (20 years project lifetime)

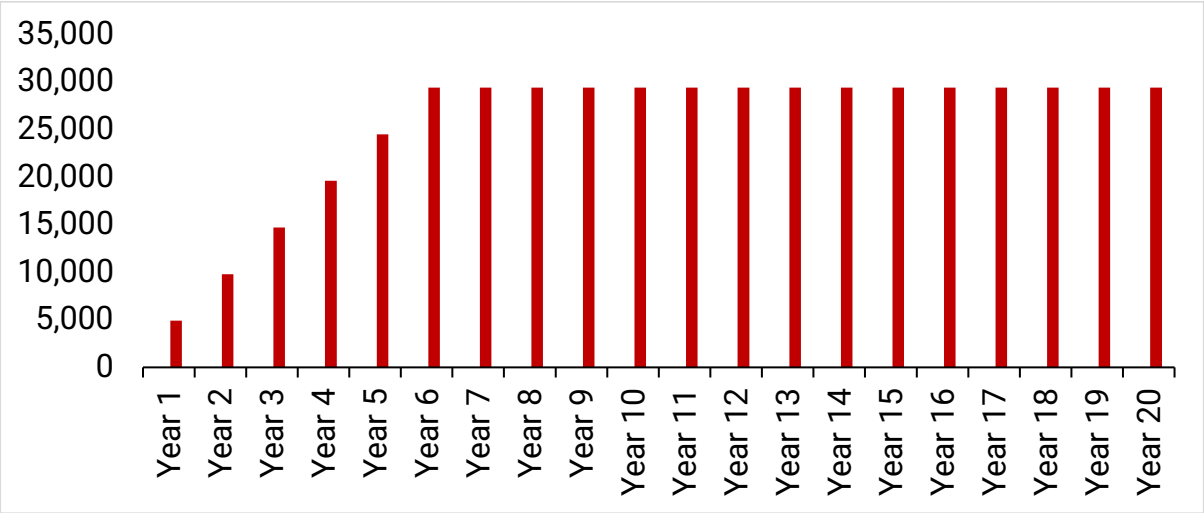
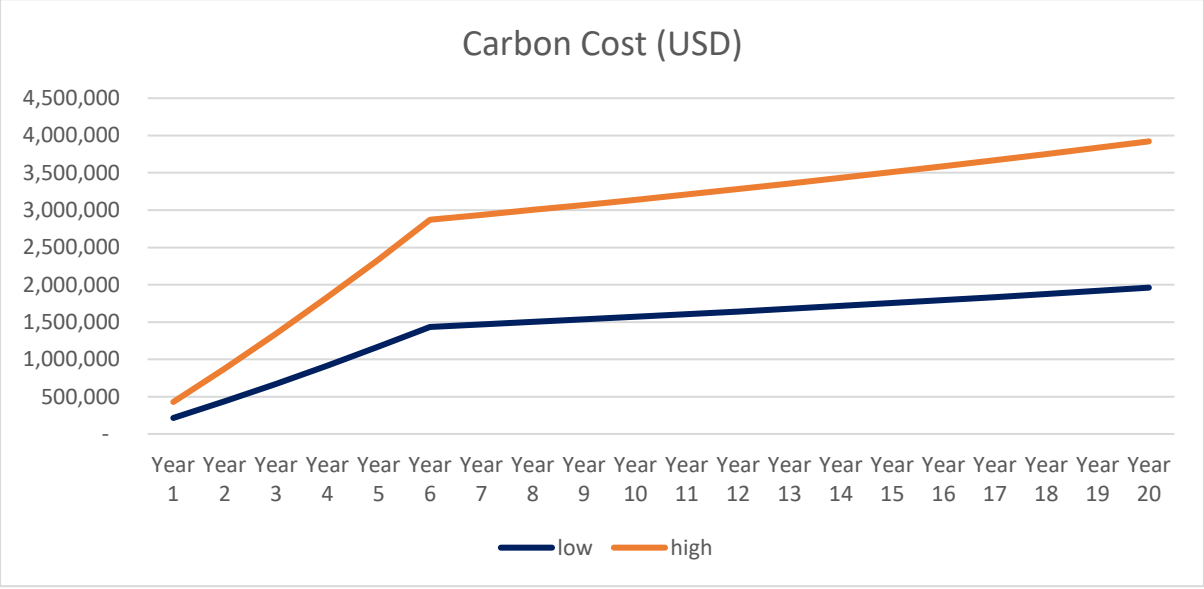


Figure 2. Yearly economic Carbon costs during the project lifetime, for a low and high estimates of Carbon shadow price



9. **Climate change is expected to exacerbate the country's vulnerability to extreme weather events**. Philippines is already among the world's most disaster-prone countries, from both natural and climate-related hazards. Typhoons, floods, volcanic eruptions, landslides, droughts, and earthquakes are the most common disasters affecting the country for the past 30 years. Under a changing climate, typhoons, floods, landslides, and droughts are expected to be more damaging, especially in the agricultural sector. Spatial analysis of how forecasted climate change impacts could affect agricultural land show that up to 85 percent of the country's strategically important agricultural land could be affected from typhoons, floods, and droughts. According to the National Climate Change Action Plan of the Climate Change Commission, from 1990 to 2006, losses and damages to agricultural production were notably due to typhoons (about 70 percent), drought (18 percent) and floods (5 percent). Some models indicate that while the overall frequency of typhoons may not significantly change the frequency intense ones may increase. This would bring increased potential damages through direct wind impacts as well as flooding through associated

severe precipitation events. In addition, increases in water and heat stress caused by climate variability is expected to increase the incidence of pests and diseases, which could potentially contribute to declines in crop yields and shifts in crop production suitability. Furthermore, because 60 percent of municipalities in the Philippines and 10 of its largest cities are located along the coast, the risk of storm surge is high. Assets and economic activities near slopes are also vulnerable to landslides. Hence, without proper climate considerations, projects in the country could become ineffectual and unsustainable. Landslides and floods could routinely damage roads. Same for buildings and warehouses that are not flood-proofed or built to withstand typhoons.

10. **The proposed PRDP Scale-Up would address the potential climate risks to infrastructure and agricultural activities by prioritizing and supporting investment and activities that would foster the climate resilience of the agri-fisheries value chain**. All investments under Components 2 (I-BUILD) and 3 (I-REAP) would feature climate change adaptation/mitigation into their design and construction. The project would continue to integrate the existing climate-resilient infrastructure mainstreaming frameworks. Under Component 1, I-PLAN would update PCIPs so they incorporate risks and climate resilience information, criteria and standards, for efficient subproject design, site selection, and decision making. Additional research and technical assistances would also be provided to ensure quality information on climate data and adaptation measures are available in the long run. Climate risk and resiliency assessments currently used in designing subprojects include: (a) a hazard assessment, which captures the frequency, magnitude, and location of the climate risk; (b) a vulnerability assessment, which considers the population and assets potentially exposed to the climate risk; and (c) a risk assessment, which focuses on potential climate impacts on subproject infrastructure. Together, the technical planning framework and risk and resiliency assessments represent a more comprehensive approach to building resilient infrastructure by eliminating or mitigating the climate hazard and reducing the vulnerability (enhancing the adaptation) of persons, assets, and systems to climate risk. This approach is expected to increase the capacity to manage climate risks that threaten persons, assets, and systems throughout the subproject development cycle.

11. **Climate co-benefits from planning.** Component 1 (I-PLAN) would support the development of a new generation of VCAs and PCIPs that would integrate an assessment of risks associated with climate and natural hazards and would recommend adequate adaptation and mitigation measures to guide the investment selection and design. To support climate risk assessment, planning teams would have access to two important tools. The Climate Risk Vulnerability Assessment (CRVA) database, initiated under PRDP, provides datasets relative to exposure and sensitivity to climate risks, as well as to adaptive capacity. The CRVA datasets provide information on climate variations and climate-related hazards (typhoons, floods, droughts, soil erosion, landslides, saltwater intrusion, storm surges and sea level rise), and would gradually cover all provinces and crops. The Fisheries Vulnerability Assessment Tool (FishVool) was developed by the National Fisheries Research and Development Institute to assess the vulnerability of the fishery sector. Similar to CRVA, it provides datasets relative to exposure, sensitivity and adaptive capacity to climate risks. CRVA and FishVool data sets as well as planning tools to reflect climate resiliency in the VCAs and PCIPs would be available through the Planners' Portal. Further, for example, an up-to-date operations manual warrant that all-weather FMRs would remain operational under current and projected heavy rain seasons. Research and capacity building would be conducted to ensure that there is adequate data and tools that would guide I-BUILD and I-REAP activities.

12. **Climate co-benefits from infrastructure**. Four main types of infrastructure investments in Components 2 (I-BUILD) and 3 (I-REAP) would address the potential effects of climate vulnerability

in the agricultural sector and rural infrastructure. These can be considered to provide climate co-benefits (adaptation and mitigation). The first type of investment is FMRs and bridges. The design standards for PRDP-financed roads, bridges, and roads with bridges require infrastructure to be climate-resilient and to permit all-weather access, considering the potential impacts of increasingly extreme, frequent, and severe weather events. The I-BUILD Operations Manual provides climate-proofed technical planning parameters for rural infrastructure aligned with the 2015 Department of Public Works and Highways (DPWH) Design Guidelines, Criteria and Standards. Because roads can be inaccessible for extended periods due to flooding and landslides, the design of PRDP roads and bridges gives careful attention to slope protection, drainage and cross-drainage, flood levels, and flood forecasts. Better all-weather connectivity of PRDP roads and bridges would promote adaptation to extreme weather events and thus provide adaptation co-benefits. The second type of investment is small scale irrigation systems which promote adaptation by alleviating heat and water stress to crops and reducing the risk of crop loss from recurrent drought in selected areas. Third, investments in PWS provide clean drinking water and mitigate health risks, especially in times of drought or flooding, and can be considered to yield adaptation co-benefits through improved construction designs, but also to communities to continue being healthy and so productive. The fourth type of investments consists of value chain rural infrastructures (pre- and post-harvest facilities), which would be built with careful considerations of climate risks and energy usage. Hence, they would not only improve the competitiveness of the VC commodities but would remain operational in times of extreme weather events and should be considered when assessing adaptation and mitigation co-benefits. These would also help reduce waste and loss of agriculture products, which enhances efficiency and thus unnecessary GHG emissions.

13. **Climate co-benefits from enterprise development activities**. Enterprises developed under Component 2 (I-REAP) would also provide climate co-benefits. First, the consideration of climate change adaptation/mitigation would be reflected in the design and appraisal of subprojects. At the design stage while enterprise capacity assessment and capacity development plans would ensure enterprise subprojects would be climate screened based on value chain analysis and PCIPs. In addition to PCIPs and hazard maps, a multi-criteria decision analysis with a score of the environmental impacts of the project would be performed when ranking and prioritizing the pipeline subprojects. For example, projects with climate-friendly inputs and renewable energy use would be given a high score. This climate criterion would represent at least 10 percent of the final weighted score, along with other variables (inclusion, market potential, etc.). Business plans, cluster development plans and asset management plans would describe and budget specific adaptation and mitigation measures. Once ready, subprojects would be appraised by the Technical Review Committee of the PRDP Regional Project Coordination Office (RPCO) against an appraisal matrix that would similarly give climate criteria at least 10 percent of the final weighted score. Second, climate co-benefits would derive from the acquisition, through the approved subprojects, of renewable energy equipment, as well as pre- and post-harvesting machinery for using alternative fuel and/or ensuring energy efficiency for reduced CO2 emissions. Third, all subprojects would include the purchasing of an insurance through the Philippine Crop Insurance Corporation, so enterprises are protected against threats posed by weather, geological events and occurrence of pests and diseases. Fourth, at the operational stage, research and capacity building would be conducted to advise and empower the FCAs to practice climate-smart agriculture in pre- and post-harvest activities, such as crop diversification, integrated practices, sustainable fisheries, manure management, etc., and to integrate climate resilience considerations into their operational and management processes. This technical assistance would promote adaptation and would be done in coordination with DA Regional Field Offices.

Indicative list of activities with climate co-benefits for further discussion:

Activities	Financial allocation (PhP in Million)	Adaptation measures	Mitigation measures	CCB A (est.)	CCB M (est.)	Comments
I-PLAN						
Capacity development	149	The project staff would be equipped with climate risk assessment and management skills, which ensures that adaptation would be mainstreamed in current and future projects. The project team would have the ability to create, update, process, and integrate climate information into project documents.		37%		
Value chain analysis and PCIP/CCIP development and updating	93	Current VCA and PCIP documents would be updated with the projected climate risk in the project intervention areas. Critical information on physical climate hazards and adequate adaptation measure would be made available in these documents (for example, the extent of 1% and 0.2% floodplains, the projected		37%		

		heavy rain amount, etc.). VCA would also continue to adopt the Department of Agriculture's framework for Climate-Risk Vulnerability Assessment (CRVA).				
I-PLAN tools development (including operations manual)		The digital platform to be developed is aimed specifically at making climate risk information available and usable to decision-makers. The project team would make sure that enough services/tools that would facilitate decision-making related to climate change adaptation exist within the platform.		25%		
I-PLAN coordination and support activities		I-PLAN team would disseminate climate risk and hazard maps for I-BUILD and I-REAP activities. This would warrant adequate adaptation measures for subproject facing flood, storm, storm surges, droughts, or landslide risks. This information would be tailored to the specific location or value chain.		25%		

I-BUILD						
FMRs and bridges (climate-proofed)		The design of FMRs and bridges would give careful attention to slope protection, drainage and cross-drainage, flood levels, and flood forecasts, all aimed at ensuring an all-weather connectivity. This climate risk information (including risk level and location) is tied to activities and documents developed in I-PLAN.		37%		Information that would help increase co-benefits: current secondary roads would be considered as baseline, type of FMR by location/topography (floodplains, hills, coastal, etc.), share of FMR with climate proofing, etc.
Irrigation system (climate-friendly)		Irrigation systems would alleviate heat and water stress to crops and reducing the risk of crop loss from recurrent drought in selected areas. Location and extent of future droughts would be made available from I-PLAN documents and activities. Additional measures would be taken for the system to sustainably extract groundwater when relevant.	Irrigation systems powered by renewable energy would be prioritized.	37%	10%	
PWS (climate-proofed/friendly)		PWS with climate resilient design would provide clean drinking water even in	PWS powered by renewable	20%	10%	

		times of flooding and drought. Where these hazards are projected to become more frequent in the future would be made available from I-PLAN documents and activities. Additional measures would be taken for the system to sustainably extract groundwater when relevant.	energy would be prioritized.			
VC facilities (climate-proofed/friendly) Slaughterhouse Dressing Plant Fish Landing Feeder Port Tramlines Watch Tower Composting Facility		Using hazard maps from I-PLAN, VC facilities would be built with careful considerations of climate risks so that they can withstand storms, floods, etc.	VC facilities would be built with careful considerations of energy usage so that they can contribute to CC mitigation.	25%	10%	List of subprojects by category would help estimate costs, type of costs/inputs/equipment/assets and their potential contribution to CC adaptation/mitigation.
I-REAP						
VC facilities (climate-proofed/friendly)				25%	10%	

Capacity building for Enterprise development		Equipping FCAs with climate-smart knowledge would ensure adaptation would be mainstreamed in their current and future projects. Trainings would be by value chain and climate hazards. As part of this, early-warning bulletins would also developed with and for FCAs. They can use this knowledge to develop and operationalize climate-smart business plans.		25%		
Enterprise development - Selection		The environmental impacts of the project would be one of the criteria used in the selection process. Business plans must show how they would address climate risk and reduce emissions.	Projects with climate-friendly inputs and renewable energy use would be prioritized.	25%	10%	
Enterprise development - Production		Because of the selection process and capacity building, enterprises financed by the PRDP Scale-Up would be climate-smart in the production process, and would include for example one of the following measures: use of resistant crop varieties, sustainable fisheries,	Because of the selection process and capacity building, enterprises financed by the PRDP Scale-Up would be climate-friendly in the production process, and	30%	15%	Estimate of surface area to be built and equipment per type of facilities could help identify which input/equipment could be made climate friendly.

		improved water management, etc.	would include for example one of the following measures: use of renewable energy, use of energy efficient equipment, etc.			
Enterprise development – Post-harvest		Facilities would be equipped with technologies that would not compromise produces during extreme weathers such hot days, increase in humidity, etc.	Because of the selection process and capacity building, enterprises financed by the PRDP Scale-Up would be climate-friendly in the post-harvest processing, and would include for example one of the following measures: use of renewable energy, use of energy efficient equipment, etc.	15%	15%	

Indicative list of CC indicators

Indicator Name	Definition/ Description	Frequency	Data Source	Methodology for Data Collection	Responsibility for Data Collection
Number of key entities strengthened with technical assistance					
Number of VCAs/PCIPs developed or updated to reflect climate resiliency					
Number of decision-making tools within the digital platform					
Share of data from digital platform used in subproject					
Length of improved FMRs and bridges					
Hectares of farms services by new irrigation system					
Number of households serviced by new PWS					
Number of beneficiaries serviced by new VC infrastructure					
Farmers adopting improved agricultural technology					

Indicative Cost of Subprojects with climate co-benefits

Subproject	Unit	Unit Cost (US$ M)	WB financing (US$ M)
I-PLAN capacity development			
I-PLAN tools development			
FMR	Per km		463.8
Bridge	Per m		41.6
Irrigation system	Per ha covered		14.6
PWS	Per household		44.7
VC facilities	Per subproject		58.6
Climate-smart enterprises	Per enterprise		**91.2**
	Small (50)	0.05 - 0.27	13.7
	Medium (50)	0.28- 1.81	45.6
	Large (10)	Over 1.81	31.9
Climate-smart capacity development			

Annex S

Basic Safeguards Requirements for the Issuance of NOL 1 and NOL 2

Prior NOL 1	Prior NOL 2
1. Duly signed SES Screening Form (Annex C) 2. Environmental and Social Impact Assessment write-up as part of the Feasibility Study (as per Annex E of the ESMF) 3. Consultation documents: Minutes, attendance and photos during all consultations (project beneficiaries meeting, PAPs consultation, FPIC or broad-based consultation, Tribal Chieftain Certification) 4. Executive Order with GRM Point Person or Committee and discussion in the SA of the FS 5. Duly signed ESMP attached with Cultural Heritage Management Plan (Annex N) and Siting Criteria and Operational Guidelines for Batching Plants, Spoil Disposal Area, Borrow Pits and Quarry Sites (Annex J-11) 6. Site/RROW Acquisition Documents: ● Form 1 – Entitlement Survey of Affected Persons ● Form 2 – Inventory of Entitlement Survey of Affected Persons ● Proof of ownership (Cadastral survey with Municipal Assessors Certification, Title or Deed of Sale of the site, Deed of Sale or Transfer Certificate Title/TCT) ● Notarized Waiver/Quit Claims and/or Deed of Donations ● For Public Lands (Special land Use permit and/or FLAg from DENR) ● Parcellary map ● Rehabilitation/Relocation/Resettlement Action Plan (RAP) with agreement between Proponent LGU and PAPs for Resettlement and appropriation of funds ● Proof of Compensation and/or agreement between the PAPs and LGU for the Compensation ● Reconstruction Agreement/Plan for between the LGU and PAPs for affected structures for reconstruction ● Ordinance on the Tax Exemption/Credit/Holiday to the Project Affected Persons 7. Indigenous Peoples Plan 8. IEE Checklist, ECC/CNC issued by DENR 9. Tree Cutting Permit issued by DENR and/or CENRO Inventory of Trees 10. Coconut cutting permit issued by PCA and/or PCA inventory 11. Certificate of Precondition or Certificate of Non – Overlap issued by NCIP *Note: Source of data from LGU should be from NCIP with citation. If uncertain of the data, RPCO will verify it to the nearest NCIP Office. If NCIP is sure that there's none, provide a certification that there's none. If NCIP is uncertain, then request for an FBI and/or CNO.* 12. Response letter from Electric Cooperative/Company for transfer of electric posts and appropriation of funds 13. Waste Disposal/Dumping Site Certification for surplus excavation 14. DPWH Accreditation for the Quarry Materials and Pictures of Quarry sites 15. NWRB Water Permit Application with complete requirements and approved for table review for PWS, CIS, and SWIP	1. Proof of Compensation *(Disbursement Voucher/Deed of Sale)* 2. Implementation of Resettlement Action Plan (RAP)[4] 3. Tree Cutting Permit – *only if with issues on the duration of the validity of the permit vis-à-vis actual start of construction* 4. NWRB Water Permit 5. Proof of electric post transfer plan implementation 6. Disclosure of SES Documents at the PRDP website (c/o RPCO and PSO) 7. Uploaded Social Database in the PRDP MIS (c/o RPCO and PSO) 8. Contractor's Occupational Safety and Health (OSH) Plan Approved by DOLE (Procurement) 9. Contractor's ESMP (Procurement)

[4] Full Resettlement of the physically displaced PAPs should be completed prior start of construction

Prior NOL 1	Prior NOL 2
16. Potability Test for PWS and Water quality test for CIS 17. Ordinance on Forest/Watershed Management for PWS and FMRs near forests 18. If inside Multiple Use Zone or Buffer Zone of Protected Areas, PAMB Clearance, Special Use Agreement in Protected Areas (SAPA) 19. Setting up of GRM and submission of GRM Directory	