

Government of the Republic of the Union of Myanmar

Peaceful and Prosperous Communities Project

Environmental and Social Management Framework

(DRAFT)

(September 5, 2019)

Executive Summary

Environmental and Social Management Framework for Peaceful and Prosperous Communities Project

Summary Description of Project

The Peaceful and Prosperous Communities Project (PPCP) would support increased quality of services and economic opportunities for vulnerable rural communities in conflict-affected areas of Myanmar, including by building mechanisms to foster engagement and trust between communities, ethnic armed organizations (EAOs), and governments at the township, state and union levels. During project design stage, multiple stakeholder consultations with different engagement methods were conducted in states and townships to identify overall needs and project design options. The project proposes to start in two townships in each of three conflict affected states in the Southeast of Myanmar – Kayin, Kayah, and Mon- and ultimately aims to expand to a total of 20 conflict-affected townships in several states and regions.

The project has four components: Component 1: Mechanisms for building trust (US\$10 million); Component 2: Improving basic infrastructure and services (US\$130 million); Component 3: Enhancing rural livelihoods (US\$90 million); and Component 4: Implementation Support (US\$20 million). The proposed project will support basic infrastructure investments at village and village tract levels, joint government-EAO service delivery, particularly in the areas of health and education, and rural productive activities at community level. These areas of project support would be the main focus of the environmental and social safeguard procedures that are outlined in this Environmental and Social Management Framework (ESMF). The project will also support technical assistance, training, and capacity building of Government and ethnic service providers, as well as incidental operating costs that are not the main focus of the ESMF.

The Department of Rural Development (DRD) of the Ministry of Agriculture, Livestock and Irrigation (MOALI), will lead project implementation at union level. At the state/region level, Chief Ministers will play a leading role, together with relevant EAO representatives, in ensuring that project implementation is feasible and effective at sub-national level. In addition, at sub-national levels (states/regions and townships), the General Administration Department (GAD) of the Ministry of Office of the Union Government (MOUG) would support implementation specifically for components 2.2 (medium-size infrastructure) and 2.3 (service support grants). At township level, project implementation will be led by DRD for component 2.1 (village level infrastructure) and all of component 3 (rural livelihoods) and by GAD for component 2.2 (village-tract infrastructure). Other technical departments would be engaged depending on the nature of locally prioritized investments.

Representatives of EAOs will participate in township and state/region level decision-making bodies that ensure that investments identified under the project meet the needs and priorities of these groups and the communities that they support. A Union-level steering committee made up of senior officials from key technical ministries and policy institutions of Government (including the State Counsellors Office and the National Reconciliation and Peace Center) will be constituted to provide strategic leadership and overall project guidance.

Purpose of the ESMF

This ESMF provides the appropriate methods and tools to support PPCP project implementing agencies and staff in identifying and managing potential environmental and social risks and impacts to the project. The document aims to assist Government to avoid, minimize and mitigate any negative impacts that the project might otherwise cause. The ESMF also identifies a “negative list” of activities that would be ineligible for financing under the PPCP for those instances where negative impacts cannot be mitigated. Lastly, the document outlines the general policies, guidelines and procedures to ensure that the PPCP will be implemented in line with the applicable World Bank safeguard policies and Government of Myanmar national laws.

Relevant National Laws and World Bank Safeguards Policies Triggered

The key national environmental related laws such as Environmental Conservation Law and Rules, EIA Procedure, Protection of Biodiversity and Protected Area Law, Forest Law and Rules, Pesticide Law, etc. and the key national social related laws such as Ethnic Rights Protection Law, Constitution of Myanmar, Protection and Preservation of Cultural Heritage Regions Law, etc. are fully considered for the PPCP.

The proposed project also triggers the following World Bank Operational Policies (OP) relating to environment and social safeguards: Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Pest Management (OP 4.09), Indigenous Peoples (OP 4.10), Physical Cultural Heritage (OP 4.11), Forest (OP 4.36) and Projects on International Waterways (OP 7.50). This ESMF is formulated to prevent execution of subprojects with significant adverse environmental or social impacts in particular directly from the investments (subprojects) financed under component 2 as well as indirectly from the activities supported under component 3.

Management of Environmental and Social Risks

The PPCP ESMF will be applied to the PPCP bearing in mind the following principles:

- a. All people who reside in a township, without regard to legal status of their land ownership or ethnic background, are eligible for the protections provided in this ESMF;
- b. Potential negative environmental and social impacts should be avoided, minimized and mitigated;
- c. Loss in livelihoods associated with or caused by the project should be prevented and, where unavoidable, minimized and fully compensated;
- d. Potential risks to communities/contractors/project staff and consultants due to project activities from possible landmine contamination shall avoided, minimized and mitigated;
- e. Avoid, minimized and mitigated the indirect negative impacts resulting from livelihood support activities (e.g. use of pesticides);

- f. Economic and physical displacement will be avoided. Involuntary land acquisition or physical relocation of households is not allowed under the project;
- g. No one should lose more than 10 percent of the productive assets under the project. Designs will be adjusted, or alternative locations will be sought, if any household may lose more than 10 percent of the productive assets under the original design.
- h. Implementation of subprojects will commence only once voluntary donation procedures are fully completed.
- i. Ethnic groups should be meaningfully consulted and have access to project benefits in a culturally appropriate manner; and
- j. The capacity of DRD and GAD to manage environmental and social impacts should be strengthened.

The ESMF would be operationalized through the following four steps: (i) identification of subprojects, (ii) screening of potential impacts and determination of applicable safeguard instruments, (iii) developing of safeguard instruments, and (iv) implementation of safeguard instruments, and supervising, monitoring and evaluating their application.

Sup-project identification for all components begins with the Participatory Social Assessment (PSA) that provides the key socio-economic information on each village and supports the consultative and prioritization process that will lead to approved subprojects. It is at this stage of the subproject cycle that the “negative list” of the PPCP is applied to ensure that no ineligible project activities are considered. As part of this process, communities develop a Village Development Plan and a Village Tract Development Plan (VTDP), which is reviewed and endorsed by township authorities and EAO representatives. This VTDP serves as the Indigenous People Plan (IPP) for those villages where ethnic groups are present.

At the screening stage, the identified subprojects are subject to a review based on a safeguard screening form attached to this document. Based on this screening, the most relevant safeguard instruments (formats for which are also attached to this ESMF) are identified and prepared for each subproject. These instruments include: Environmental Code of Practices (ECoPs), Pest Management Plan (PMP), Environmental Management Plan (EMP), Physical Cultural Resources Management Plan (PCRMP), Chance Find Procedures (for physical cultural resources and landmines), and a Voluntary Land Donation form.

The implementation of safeguard instruments is primarily the responsibility of the relevant community groups (e.g., Village committees for infrastructure subprojects at community level, the executing agency for infrastructure subprojects at village tract level, and the management committee/group for livelihood related subprojects). The supervision, monitoring and evaluation of safeguard instruments would be performed by the Village Tract Project Sub-Committee and Village Monitoring Sub-Committee for community level infrastructure subprojects, a Technical Supervision and Safeguards Consultant for village tract level infrastructure subprojects, and management committees of the livelihoods group for livelihood related subprojects with the support of PPCP project staff-- Community Facilitators, Infrastructure Facilitators, Livelihood Facilitators, and village volunteers. Lastly, the World Bank reviews the use of safeguards screening forms, environmental management plans, voluntary donations and the use of the ECoPs on a random basis and carries out field trips as

part of supervision missions to verify safeguard compliance in line with ESMF and other relevant project documents. The Bank also oversees independent technical evaluations of subproject implementation that reviews the application of safeguard measures.

Grievance Redress

The project will establish a grievance handling mechanism (GHM) that will allow beneficiaries and stakeholders at all levels of project implementation to lodge complaints or provide recommendations or suggestions regarding all aspects of the project to project management for subsequent action. The PPCP GHM will build on the successful system that has been established under the National Community Driven Development Project (NCDDP).

Structure of ESMF

This document is structured as follows: Section 1 provides an overview of the PPCP including project components, and the project's institutional and implementation arrangements; Section 2 outlines the project's stakeholder engagement process and grievance handling mechanisms; Section 3 summarizes the relevant national laws and World Bank safeguard policies that apply to the PPCP; and Section 4 outlines the principles and approaches for applying the relevant safeguard policies to the PPCP. In addition, this ESMF includes a number of annexes that guide and inform the application of the various safeguard policies and procedures for the project.

List of Acronyms and Abbreviations

Term	Explanation	Term	Explanation
ACW	ASEAN Committee on Women	FPS	Facilitating Partners
ACWC	ASEAN Commission on Protection and Promotion of the Rights of Women and Children	FPTT	Facilitating Partner Township Team
ASEAN	Association of South East Asian Nations	GAD	General Administration Department
AZ	Archaeological Zone	GHM	Grievance Handling Mechanism
BHC	Beta Hexachlorocyclohexane	GoM	Government of Myanmar
BPfA	Bejing Declaration and Platform for Action	HCB	Hexachlorobenzene
CBOs	Community-Based Organizations	ICPD	International Conference on Population and Development
CDD	Community Driven Development	IED	Improvised Explosive Devices
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women	IEE	Initial Environmental Evaluation
CF	Community Facilitator	IMAS	International Mine Action Standard
CHDN	Community and Health Development Network	INGOs	International Non-Governmental Organizations
CITIES	Convention on International Trade in Endangered Species of Wild Fauna and Flora	IPP	Indigenous People Plan
CNA	Chinn National Army	IPPF	Indigenous Peoples Policy Framework
CSOs	Civil Society Organizations	KDHW	Karen Department of Health and Welfare
D.D.T	Dichloro diphenyl-trichloroethane	KNLA-PC	Karen National Liberation Army-Peace Council
DANM	Department of Archaeology and National Museum	KNPP	Karenni National Progressive Party
DDG	Danish Demining Group	KNU	Karen National Union
DFAT	Department of Foreign Affairs and Trade	LBVD	Livestock Breeding and Veterinary Department
DFID	Department for International Development, Australia	LDF	Lahu Democratic Front
DKBA	Democratic Karen Buddhist Army	LFs	Livelihood Facilitators
DOA	Department of Agriculture	M&E	Monitoring and Evaluation
DOF	Department of Fisheries	MAG	Mines Advisory Group
DPS	Development Partners	MIFER	Ministry of Investment and Foreign Economic Relation
DRD	Department of Rural Development	MIS	Management Information System
EA	Environmental Assessment	MNCWA	Myanmar National Committee for Women's Affairs
EAOs	Ethnic Armed Organizations	MOALI	Ministry of Agriculture, Livestock and Irrigation
ECOPs	Environmental Code of Practices	MOE	Ministry of Education
EDB	Ethylene Dibromide	MOECAF	Ministry of Forestry and Environmental Conservation
EIA	Environmental Impact Assessment	MOEE	Ministry of Electricity and Energy
EMP	Environmental Management Plan	MOHS	Ministry of Health and Sports
ESMF	Environmental and Social Management Framework	MONREC	Ministry of Natural Resources and Environmental Conservation
EU	European Union	MPs	Members of Parliament
FD	Forest Department	MSC	Monitoring sub-committee
FERD	Department of Foreign Economic and Department	MSDP	Myanmar Sustainable Development Plan
		MZ	Monument Zone

Term	Explanation
NCDDP	National Community Driven Development Project
NDF	National Democratic Front
NGO	National Governmental Organization
NRPC	National Reconciliation and Peace Center
O&M	Operations and Maintenance
OP	Operational Policy
PCP	Pentachlorophenol
PCR	Physical Cultural Resources
PCRMP	Physical Cultural Resources Management Plan
PDO	Project's Development Objective
PHI	Pre-harvest Interval
PIC	Prior Informed Consent
PMP	Pest Management Plan
POM	Project Operation Manual
POP	Persistent Organic Pollutants
POPLA	Pa' O People Liberation Army
PPCP	Peaceful and Prosperous Communities Project
PPD	Plant Protection Division
PRB	Pesticide Registration Board
PSA	Participatory Social Assessment
PSLF	Palaung State Liberation Front
PVC	Polyvinyl chloride
PZ	Protected and Preserved Zone

Term	Explanation
SCO	State Counsellor's Office
SHAs	Suspected Hazardous Areas
SSDF	Shan State Development Foundation
TDLG	Township Democracy and Local Governance
IFs	Infrastructure Facilitators
TIG	Township Implementation Group
TSSC	Technical Supervision and Safeguards Consultant
UACD	Uppsala Armed Conflict Dataset
UNDP	United Nations Development Programme
UNESCO	United Nations Education, Scientific and Cultural Organization
USAID	United States Agency for International Development
USC	Union Steering Committee
UV	Ultra Violet
UXO	Unexploded Ordnance
VDP	Village Development Plan
VLD	Voluntary Land Donation
VMSC	Village Monitoring Sub-Committee
VC	Village Committee
VSP	Village Subproject
VTDP	Village Tract Development Plan
VTC	Village Tract Committee
WB	World Bank

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1. Background and Scope of ESMF

1.1. Project Overview¹

1.1.1. Project Description

1. The Peaceful and Prosperous Communities Project (PPCP) seeks to address the significant and historical underinvestment in public infrastructure, services, and support for market-oriented activities in areas of Myanmar that have suffered from long-running conflicts. In so doing, the project directly contributes to the first pillar of the Myanmar Sustainable Development Plan (MSDP) on peace and stability, including by securing and further fostering Union-wide peace (strategy 1.1); promoting equitable and conflict-sensitive socio-economic development across all regions and states (strategy 1.2); enhancing good governance and institutional performance (strategy 1.4); and promoting increased engagement of all people and open communication with government (strategy 1.5). The proposed project would support increased quality of services and economic opportunities for vulnerable rural communities in conflict-affected areas of Myanmar, including by building mechanisms to foster engagement and trust between communities, ethnic armed organizations (EAOs), and governments at the township, state and union levels.

1.1.2. Project Development Objective

2. **The project's development objective (PDO)** is to improve access to basic infrastructure, services and economic opportunities for vulnerable communities in selected conflict-affected areas of Myanmar in a conflict-sensitive manner. The indicators used to measure progress toward achieving the PDO are:
 - increased access to services by conflict-affected communities (%of male and female sampled respondents who report that they have access to improved infrastructure due to the project);
 - increased household economic opportunities;
 - improved satisfaction of communities with interactions with project-supported services;
 - increased involvement by communities and ethnic organizations in local development planning.

1.1.3. Project Components

3. The project has four components as follows:
 - a) **Component 1: Mechanisms for building trust (US\$10 million).** This component would seek to establish mechanisms for building trust and collaboration between

¹ This section of the ESMF draws from the World Bank Project Appraisal Document (PAD). In the event of any differences or discrepancies between these two documents, the PAD would take precedence.

government, EAOs and communities to facilitate collaboration on components 2 and 3 and allow the PPCP to achieve scale and sustainability. Activities under this component are grouped under three sub-components. The first would focus on the establishment of joint planning and decision-making bodies at union, state and township levels, including a union-level multi-stakeholder steering group that includes representatives of the union government, chief ministers of participating states, and EAO leadership. This body would meet annually to review results under the PPCP, identify lessons learned, and provide policy directions. Structures for joint EAO-Government engagement at technical/sectoral levels, and for planning and decision making under the project will be strengthened or created at State/Region and township levels, building on existing models where relevant. The second sub-component would support on-going and enhanced stakeholder communications, consultations and engagement with a particular focus on local civil society groups, including youth and faith groups, to stay abreast of local context and perceptions, the establishment of effective feedback loops and joint accountability mechanisms, including through a grievance handling mechanism. The third sub-component would establish mechanisms for regular monitoring, reflection and adaptive learning, including near real-time monitoring procedures, a project management information system that allows for public access to project data, social audits and other feedback mechanisms, third-party monitoring and annual multi-stakeholder reviews. The component would finance training, consultant services, equipment, and incidental operating costs associated with meetings, materials, learning events, and information systems, etc.

- b) **Component 2: Improving basic infrastructure and services (US\$130 million).** This component would support community-centered, demand-driven processes of identifying and implementing basic infrastructure investments at village and village tract levels, and joint government-EAO service delivery particularly in the areas of health and education. Specifically, the component envisions three sub-components, the first focusing on community-level infrastructure (including small roads, bridges, water systems, off-grid electrification or grid extension support, rehabilitation and expansion of schools, health clinics or other community buildings, etc.); the second on medium-sized inter-village or village tract-level infrastructure and services; and the third focused on supporting initiatives that would improve service delivery, especially for health and education, that are jointly agreed between relevant service departments of government and EAOs. The component would finance block grants for subprojects executed by villages (four rounds of block grants per village tract are planned), consultant services for larger works or service delivery initiatives, training costs, and incidental operating costs. The joint decision-making mechanisms to be established under component 1 would support the approval and oversight of these sub-components, and would seek to foster linkages with other government programs to ensure sustainability in basic service delivery as well as in delivering high quality complex infrastructure such as electrification (see below, “lessons learned”).
- c) **Component 3: Enhancing rural livelihoods (US\$90 million).** This component would support rural productive activities that increase economic opportunities for conflict-affected communities, with activities grouped into two sub-components. The first would focus on on-farm technical training, and provision of extension services, inputs

and information. It would also improve off-farm economic opportunities through market-driven vocational training, entrepreneurial support, and information regarding migration services and opportunities. The second sub-component would aim to increase access to finance that could support the financial needs of agricultural production groups, or for off-farm entrepreneurial activities. Once community production groups have been established and/or strengthened through these first two sub-components, project support will expand to build linkages between production groups, markets and value-added processes where appropriate. The component would finance block grants for producer groups involved in livelihood activities, consultant services (for training and extension support), other training costs, and incidental operating costs.

- d) **Component 4: Implementation Support (US\$20 million).** Activities under this component will support effective project management systems, including on financial management, procurement, and social and environmental safeguards management at the union, state and township levels, as well as supervision and coordination between implementing agencies, and regular reporting on project implementation. This component would also include a robust project evaluation system to measure overall project impact, and to support specialized studies to inform project management and the World Bank on specific issues that are fundamental to the project's performance (for example, trust building). The component would finance small civil works, goods (office equipment and furniture), consultant services, training costs, and incidental operating costs.

1.1.4. Project Target Areas and Selection Process

4. **The project would initially focus on the Southeast region of the country where political dialogue between government and EAOs is well-established, ceasefire agreements have generally held, and recovery and development activities have been expanding and delivering on results.** Overall, it is estimated that the PPCP would cover 20 conflict-affected townships. The project proposes to start in two townships in each of three conflict affected states in the Southeast – Kayin, Kayah, and Mon. While incidents of violence have reduced over time in these states, large segments of the population, and the economic and social dynamics in this area of the country, remain conflict-affected and vulnerable to relapsing back into violent conflict. After two years of project implementation, it is proposed that the project take stock of progress and experiences, as well as reviewing the state of the peace process, to determine the next phase of project expansion, including potentially to other states/regions. It is expected that an additional six townships would be added by the third year, and the remaining eight townships covered under the project by no later than the fourth year of implementation. This approach implies that the project would have a duration of eight years. The specific conflict-related needs in Rakhine State are being addressed through a separate World Bank supported project, given the different nature of the conflict and the scope of challenges there.
5. **The project will support conflict-affected communities in Myanmar, focusing on those communities where ceasefires have brought a sufficient level of security to allow communities to move from a focus on survival to accessing services and**

rebuilding livelihoods, with activities taking place at the State/Region, township and community level. An estimated two million people in approximately 20 townships are ultimately expected to directly benefit from project investments and support. Within a township, the project will cover all villages (both registered and unregistered) for equity purposes and operational efficiency. Returnees would also be eligible for support under the project per normal operational procedures. It is projected that the infrastructure and processes supported under component 2 will benefit all residents of the estimated 20 townships, while the livelihoods support under component 3 will directly benefit at least 50 percent of households in the target townships, with an additional 15 percent of households benefitting indirectly.

6. **Within conflict affected States and Regions, townships will be selected on the basis of poverty, impact of conflict, and operational accessibility.** The selection criteria – including State/Region government commitment as reflected in willingness to co-manage and cost-share activities, openness of EAOs to facilitate implementation, clustering of townships to improve efficiencies, among others – and processes will be agreed at project appraisal. The targeting process will draw on data from the multi-dimensional disadvantage index developed jointly by the Department of Labor and the World Bank, as well as the Uppsala Armed Conflict Dataset (UACD) related to conflict. A shortlist of qualified townships would be reviewed, and final selection confirmed by government and local stakeholders.

1.2. Institutional and Implementation Arrangements

7. **As a multi-sectoral and multi-leveled project, the institutional and implementation arrangements of the PPCP are inherently complex.** The complexity of the project reflects the wide-range of development needs that face the communities affected by conflict in Myanmar, and the need to engage at all levels of government and EAO authority to ensure effective implementation. Nonetheless, the project design has sought to concentrate responsibilities for key project functions in a lead ministry department and areas of investment at the level of township and below. This concentration of implementation responsibility and project investments reflects the predominantly rural nature of the challenges facing conflict affected communities and will improve the likelihood of successful implementation. Table 1 below presents the project by components, key activities, estimated costs and implementation departments.

Table 1 Overview of PPCP Components and Implementing Departments

Component/Sub-component	Key Activity	Financing	Implementing Agency
Component 1: Mechanisms for Building Trust (\$10m, of which \$8m IDA, \$2m co-financing)			
1.1 Joint planning and decision-making bodies	<ul style="list-style-type: none"> • Joint Gov-EAO bodies at union, state and township level 	\$3m	DRD

Component/Sub-component	Key Activity	Financing	Implementing Agency
1.2 Accountability and learning mechanisms	<ul style="list-style-type: none"> • Civil society engagement • Grievance handling mechanism • Real-time monitoring & project data access • Annual multi-stakeholder reviews 	\$6m	DRD
1.3 Trust-building activities	<ul style="list-style-type: none"> • Knowledge exchanges • Study tours 	\$1m	DRD
Component 2: Improving Basic Infrastructure and Services (\$130m, of which \$110m IDA, \$20m counterpart)			
2.1. Community-level infrastructure	<ul style="list-style-type: none"> • Four annual rounds of community prosperity grants 	\$80m	DRD
2.2. Connective infrastructure	<ul style="list-style-type: none"> • Medium size infrastructure grants (\$50-\$100k) 	\$40m	GAD
2.3. Inclusive service grants	<ul style="list-style-type: none"> • Managed at state level to foster joint Gov-EAO service delivery 	\$10m	GAD
Component 3: Improving Rural Livelihoods (\$90m, of which \$85m IDA, \$5m co-financing)			
3.1. On and off farm technical training, extension services, inputs	<ul style="list-style-type: none"> • Extension services and inputs for farmers • Market information and training for value-added processing • Skills training and labor migration information 	\$60m	DRD
3.2. Access to finance	<ul style="list-style-type: none"> • Including start-up capital and training 	\$30m	DRD
Component 4: Implementation Support (\$20m, of which \$17m IDA, \$3m co-financing)			
	<ul style="list-style-type: none"> • Operating costs • Strengthen systems and capacities of implementing departments, including safeguards, fiduciary and supervision capacity • Specialized studies, impact evaluation, audits 	\$20m	DRD & GAD

8. **The Department of Rural Development of the Ministry of Agriculture, Livestock and Irrigation (MOALI), will lead project implementation at union level.** MOALI is currently successfully implementing a number of World Bank-financed projects, and both the rural development and agricultural services departments have a staffing presence in all of Myanmar’s townships. Moreover, the Department of Rural Development (DRD) has established a unique track record in leading government engagement with EAOs during its implementation of the national community-driven development project (NCDDP). Building on this implementation capacity and existing relationships with EAOs will allow the project to begin implementation quickly, and

provide a useful point of reference for other involved government ministries, including the Ministry of Health and Sports (MOHS), the Ministry of Education (MOE), the Ministry of Construction (MOC), the Ministry of Electricity and Energy(MOEE), etc.

9. **At the state/region level, Chief Ministers will play a leading role, together with relevant EAO representatives, in ensuring that project implementation is feasible and effective at sub-national level.** This would include approving annual township-level investments and service support grants (components 2.2 and 2.3), facilitating dialogue with EAOs, and ensuring engagement with line departments for other services to be supported under the project—including health, education (social affairs), energy, forestry, etc. Two types of structures are envisioned at this level to support implementation: a state/region policy and coordination body (the State Steering Committee) and specific sectoral sub-committees or working groups, which would be supported under component 1 of the project. This builds on the experience of Chief Ministers in facilitating such dialogues on development matters with EAOs, for example by the Chief Minister in Kayin State with the Karen National Union (KNU), or the “3+3” arrangement established in Mon State with the New Mon State Party (NMSP) in support of the Nippon Foundation financing, and similar experiences in the health sector or on community forestry. The service support grants (component 2.3) would be utilized to support these joint sectoral activities. It is proposed that activities at the state level would be supported by the state offices of the General Administration Department (GAD), with support from the Facilitating Partner (FP), discussed below.
10. **In addition, at sub-national levels (states/regions and townships), GAD of the Ministry of the Union Government would support implementation specifically for components 2.2 (medium-size infrastructure) and 2.3 (service support grants).** GAD oversees public sector administration at township level and provides direct support to the offices of the Chief Ministers in all States and Regions. GAD currently implements the United Nations Development Projects (UNDP) “Township Democracy and Local Governance” (TDLG) Project that seeks to strengthen township and state/region level planning and budgeting procedures and invests in medium size infrastructure at village tract to township levels. The TDLG is currently implemented in several conflict-affected states and townships including some that the PPCP is targeting. While GAD has limited experience with World Bank operations, these key roles and their potential link to discussions around decentralization (an important element in EAO political platforms) puts them in a potentially catalytic position under the project.
11. **At township level, project implementation will be led by DRD (for component 2.1 and all of component 3) and GAD (for component 2.2) and will involve other relevant departments depending on the nature of locally prioritized investments.** In addition, facilitating partners (FPs) would be contracted by DRD to provide assistance to help initiate project implementation and build capacity of government counterparts during the initial project period. This will help to accelerate start up, augment technical capacities of implementing departments, and would also help mitigate potential concerns on the part of EAOs regarding Government extension

into areas under mixed or EAO control. In certain instances, FPs might work with and through local Community-Based Organizations (CBOs) with local knowledge, networks, and trust to facilitate access and operations in communities in such areas.

12. Finally, given the close link between the project and the ongoing peace process, strategic leadership and guidance for the project will be provided at the union level by a steering body consisting of key policy and technical ministries. The Union Steering Committee (USC) would include representatives of the National Reconciliation and Peace Center (NRPC), State Counselor’s Office (SCO), the Ministry of Investment and Foreign Economic Relations (MIFER), Ministry of Union Government, MOALI, MoHS, other line ministries involved in project implementation, and representatives of state/region governments participating in the project. This steering committee would help ensure continued consistency between the peace process and the project’s efforts, approve the PPCP’s overall operational procedures, ensure appropriate coordination across sectors and between levels of government, review annual project progress, and advise on opportunities for enhanced support of the peace process and for possible project expansion. Two broad stakeholder platforms would be supported under the project to facilitate feedback. These are (i) an annual EAO Forum to facilitate discussion of experiences and lessons learned both within and outside of the project, and (ii) an annual multi-stakeholder review that would specifically review project implementation process and results to inform any changes or adaptations for future implementation.

13. Multiple structures would be created or enhanced at state/region and township levels to support coordination, governance and feedback. As noted above, a state/region steering committee would be established at state/region level to support continuous dialogue with EAO representatives and facilitate project implementation. At township level, the project would seek to enhance the existing TIG structure to formally involve EAOs in local level planning discussions. Consultation and stakeholder review structures would also be put in place to support feedback and transparency under the project. These structures include township stakeholder consultation meetings and annual multi-stakeholder reviews, and state/region sectoral sub-committees or working groups. Table 2 below present the various structures proposed to support the project.

Table 2 PPCP Coordination and Oversight Structures

Body	Membership	Purpose	Frequency
UNION			
Government Steering Committee	NRPC, SCO, President’s Office, MIFER, MOALI, MOHS, MOE, etc.	Set strategic direction of project Ensure consistency with peace process Approve expansion into new states Approve overall operational procedures to be applied under project Ensure coordination across Ministries Mobilize additional financing if project is extended beyond original scope	Annually*
Multi-Stakeholder Steering Group	Union representatives, Chief Ministers, EAO representatives,	Review annual results of project Recommend changes to operational procedures for subsequent approval	Annually

Body	Membership	Purpose	Frequency
	Members of Parliament (MPs), CSOs, other stakeholders (DPs, etc.)	Identify and share lessons across townships and states, and with other potential stakeholders	
EAO Coordination Forum	EAO representatives	Exchange experiences and learn lessons Identify common needs or issues to be addressed by project Produce recommendations to be advanced through Multi-Stakeholder Steering Group	Annually or every six months
STATE			
State Steering Committee	Chief Minister, state government, EAO representatives	Agree on strategic objectives in State Approve service grant application for joint Gov-EAO service activities Approve list of endorsed medium size township grant investments Management review of project progress Resolve questions of access or other issues that might hinder implementation	Every six months and as needed
State Multi-Stakeholder Group	Gov, EAOs, CSOs, community reps., MPs	Review annual results of project Review and provide feedback on implementation experiences Recommend changes to operational procedures for subsequent approval Identify and share lessons across townships and with other potential stakeholders	Annually
Sectoral coordination groups	Gov and EAO sectoral reps	Sectoral groups formed based on EAO service provider representation at State Level Exchange experiences and enhance coordination Identify specific areas for support and resolve issues that constrain service delivery Propose applications to the service grants window	As needed
TOWNSHIP			
Township Implementation group	Gov, EAO reps	Review and approve community investment plans (and use of prosperity grants) Recommend for approval to State Steering Committee township investment plans for medium-size investment grants Management review of project progress Seek to address issues regarding access Review core grievances received at township level	Every six months and as needed
Township consultation forum	Gov, EAO reps, CSOs	Review results of project Identify any issues or concerns affecting implementation Recommend to Township Implementation Group actions to enhance implementation	Quarterly
Township Multi-Stakeholder Group	Gov, EAO, CSO and community reps	Review annual results of project Share implementation experiences across villages and with other potential stakeholders Recommend changes to operational procedures for subsequent approval	Annually

* Recommended initial frequency for first two years of project implementation; frequency may be reduced thereafter.

1.3. Scope of the ESMF

14. As the specific locations of subprojects are not known at this stage, a framework approach has been adopted to assess the potential environmental and social impacts and risks of the activities resulted from the subprojects. This Environmental and Social Management Framework (ESMF) outlines policies and provides procedures to prevent or minimize environmental and social impacts as a result of project activities.
15. A separate social assessment for the project has been undertaken to understand the potential for risk and impacts as a result of project. The assessment also addresses the need to ensure benefits reach all groups including ethnic groups when they are present in the project area. As part of the subproject, identification process and participatory social assessments will be undertaken both to inform screening and understand activity related social risks. With the support of community facilitators (CFs), free, prior and informed consultations will be conducted with villagers, including ethnic groups, leading to broad community support for the proposed subprojects.
16. This ESMF is structured as follows: Section 1 provides an overview of the PPCP including project components, and the project's institutional and implementation arrangements; Section 2 outlines the project's stakeholder engagement process and grievance handling mechanisms; Section 3 summarizes the relevant national laws and World Bank safeguard policies that apply to the PPCP; and Section 4 outlines the principles and approaches for applying the relevant safeguard policies to the PPCP. In addition, this ESMF includes a number of annexes that guide and inform the application of the various safeguard policies and procedures for the project.

2. Stakeholder Engagement

2.1. Consultation and Disclosure

17. This section provides a summary of the engagement activities undertaken as part of the preparation of the project and specifically for the ESMF as well as outlining the principles for engagement for managing environmental and social risks as part of implementation.
18. Overall, through August 2019, the PPCP task team and consultants have conducted approximately 100 separate consultations on overall needs and project design options and elements with over 800 individuals representing approximately 70 groups.² These consultations have been conducted in six central locations (Yangon, Nay Pyi Taw, Hpa-an, Mawlamyine, Loikaw, Taungoo,), seven townships (Bilin, Thandaunggyi, Thandaung, Leiktho, Hlaingbwe, Kyainseikiyi, Hpasauing and Hpruso) and related communities where the project is likely to be implemented, and in three cities in Thailand (Chiang Mai, Mae Hong Son and Mae Sot).
19. Engagement methods to date have included: one-on-one meetings; formal and informal group presentations; focus group discussions; key informant interviews; and the sharing of information on the project. The approach and format of the consultations took into consideration cultural appropriateness, and barriers to language, literacy, and participation.
20. Stakeholder groups consulted with include:
 - **Potentially affected and beneficiary communities and their representatives:** More specifically, this group consists of women, men, youth and elders from different ethnic groups (Kayin, Mon, Pa-O, Shan and Kayah/Karenni). Most villages are predominantly of one ethnic group but a few visited are composed of two or more groups. In addition, some villages visited include specific ethnic groups who are living outside of their main state (e.g., a Mon village in Kayin State, Kayin village in Mon State, Shan village in Kayah State, etc.) These consultations involved approximately 500-550 community members from eighteen villages from eight townships of Mon, Kayin and Kayah States.
 - **Village/Township government:** Representatives from GAD at different levels such as village administrator and/or village tract administrator and/or township administrator and members from TIG, officials from DRD, GAD, Livestock, Agriculture, and Members of Parliament. A total of 10 meetings were conducted in eight townships in Mon, Kayin and Kayah States.
 - **State government:** Chief Minister, cabinet members, sectoral department directors that include Social Welfare, Energy, Finance, Budget, GAD, DRD, and Energy. Six state-

² These groups include approximately 500 community members (beneficiaries), 90 facilitators (project staff working on rural development), 40 members of Ethnic Armed organizations and their service provision groups, and over 200 government staff members, UN and other development partner staff, members of INGOs and CSOs, etc.

level consultations took place in the capitals of the three initial target States for the PPCP-- Hpa-An, Mawlamyine and Loikaw.

- **Union government:** Consultations have been carried out with representatives of the ministries of Planning and Finance, of Home Affairs, of Security and Border Affairs, of theDRD, Department of Agriculture (DOA), Department of Foreign Economic and Development (FERD), (SCO), the upper and lower houses of Parliament (Amyotha HluFPw and Pyithu HluFPw), and the NRPC. A series of consultation (3-5 times) meetings were conducted with FERD, SCO, NRPC and DRD for implementation arrangements and other project details. A multi-ministerial consultation workshop was also conducted with 20 senior level government representatives (Director to Director General) in Nay Pyi Taw.
- **Civil society:** Civil society organizations and networks, youth organizations, women organizations, and human rights organizations were consulted in Yangon, Mon, Kayin and Kayah States. At least two large group consultation meetings (15-30 people) were carried out in Hpa-An and Loikaw, one large group meeting in Mawlamyine and Yangon and about 10-15 bilateral meetings in Mawlamyine, Hpa-an and Loikaw.
- **Representatives from several EAOs:** About 40 in all from the NMSP, KNU, Karen National Liberation Army- Peace Council (KNLA-PC), Democratic Karen Buddhist Army (DKBA), Karenni National Progressive Party(KNPP)³ at district, state and higher levels, and their “ethnic service providers” (Karen Department of Health and Welfare--KDHW), Coomunity and Health Development Network (CHDN), Shan State Development Foundation (SSDF) based in potential project townships and along Myanmar-Thailand border have been consulted.
- **Extension staff of the NCDDP working in likely project areas:** About 90 facilitators including CFs and IFs working in NCDDP project areas of conflict-affected townships in Mon, Kayin and Kayah States.
- **Development partners:** Representatives of several development partners at national level who make up the Southeast Myanmar Working Group and the Development, Humanitarian and Peace Support Group (EU, USAID, DFID, Swiss, New Zealand, DFAT, Sweden, etc.), and members of UN-INGO coordination groups in Mawlamyine, Hpa-An, and Loikaw have been consulted.

A more detailed summary of these consultations carried out to date are found in the Annex of the Social Assessment of the PPCP.

21. The project design also has specific and detailed requirements for consultation and participation during the project cycle, including for representation of women and inclusion of ethnic and religious minorities, as applicable, and other vulnerable groups. These include participatory social assessments and wealth ranking in each participating village that are used to inform subproject designs, use of local languages for communicating project information, and requirements for minimum levels of

³ These are the five key EAOs operating in the initial area of project focus in the Southeast of the country.

community and female participation.

22. *[This para to be updated once final ESMF consultations are carried out] Specific consultations were also undertaken to inform the final design of the ESMF. The draft ESMF was disclosed by the Government on [dates—and include web link] and consulted on [dates] with representatives from [stakeholder groups] in [locations]. To enable informed consultation, the draft ESMF, together with a translated summary and PowerPoint presentation in Burmese were shared prior to these consultations. Observations have been incorporated into the revised ESMF and records of the consultations are provided in Annex 10 The final version of the ESMF will be disclosed publicly through the DRD's website and World Bank external website.*

2.2. Grievance Mechanism

23. The project will establish a grievance handling mechanism (GHM) that will allow beneficiaries and stakeholders at all levels of project implementation to lodge complaints or provide recommendations or suggestions to project management for subsequent action. The PPCP GHM will build on the successful system that has been established under the NCDDP. Detailed guidelines and procedures for the establishment and implementation of the GHM will be described in the project Operations Manual (OM) and will be made publicly available at the village level, including through posters (in major ethnic languages) and visual materials.

24. Any stakeholders including villagers, contractors, project staff, authorities, and other involved parties may file a grievance if they consider that their right to information is interfered with; that inappropriate intervention by an outside party is found; that fraud or corruption has taken place; that the rights and entitlements granted in this ESMF are violated; or that any of the project's principles and procedures have been violated.

25. Each village participating in the project will select two grievance focal points (a man and a woman) that serve as the first tier of the conflict/ grievance handling process. These focal points will be trained by the project and clear guidelines and procedures will be developed to support the processing of complaints locally and upwards through the levels of project management.

26. Grievances will be disclosed publicly, but anonymously, at village level unless the complainant self-identifies him/herself. There is no charge for filing a grievance. If the person filing the grievance is known, the grievance focal point will communicate the timeframe and the course of action to her/ him within 2 weeks of receipt of the grievance. All grievances, including anonymous cases, shall be responded to within 30 days and resolved within 90 days from the time the grievance was originally received.

27. Following best-practice, the grievance handling system follows a 5-stage process: 1) intake, 2) sorting, 3) verification, 4) action, and 5) follow-up.

28. **Intake.** At the community level, the grievance focal points are usually the primary

contact point for anyone wishing to file a grievance. If an individual prefers, grievances can be addressed to others involved in project implementation such as a village volunteer, Village or Village tract administrator, project facilitators (CFs, IFs, or LFs), village or village tract project committee members, staff of DRD, GAD or other township, state or Union officials. Grievances may be lodged using the following channels: 1) publicly during a project-related community meeting (to be captured by relevant facilitator); 2) verbal communication to the Village or Village Tract administrator/ Facilitator/ Township Grievance Handling Officer; 3) feedback boxes placed in each village; 4) a letter to Village Tract Level, DRD or GAD township office, Union Level (DRD or GAD), State-level facilitating partners, CSOs or NGOs at local, state or Union level; 5) e-mails to dedicated e-mail addresses for the project GHM; 6) a dedicated GHM phone line; or 7) to the dedicated project website or related Department or State government social media sites.

29. **Sorting and verification.** Sorting involves classifying grievances into their relevant categories, broadly separated into “core” and “non-core” grievances⁴ and identifying the most appropriate manner of resolution. Verification involves following up on the core grievances in particular to confirm the complaint and to identify the most suitable resolution. Township or state/region DRD or GAD staff will have the first-level responsibility for sorting complaints or submissions to the GHM. In the event the submission is made to a higher level, then either State or Union staff, as appropriate, together with relevant State facilitating partners, would verify if grievances submitted are valid, and identify solutions. Verification would normally include site visits, a review of documents, a meeting with the complainant (if known and willing to engage), and a meeting with those who could resolve the issue (including formal and informal village leaders).

30. **Action and Follow-up.** The village committee (VC) will communicate the decision made and the actions to be taken to address the grievance at the next village meeting. If the aggrieved person is known, the grievance focal point (or person with whom the grievance was filed) will communicate the action to her/him. The grievance focal point will seek feedback from the aggrieved person as to whether or not they deem the action proposed as satisfactory. If the action proposed is considered unsatisfactory, the aggrieved person may file a new grievance, which will be handled at the next higher project level. In principle, a final decision will be made by a Union Feedback Committee which includes DRD or GAD senior officials responsible for the project, with support from a specialized union-level grievance consultant. All grievances received through the GHM will be recorded in the project management information system (MIS).

31. The GHM is supported by an information campaign and training programs. Community members in all project villages will be informed of the GHM and contact details will be shared at public meetings on multiple occasions. Brochures/ pamphlets and posters that describe the project and the grievance procedures will

⁴ Core grievances refer to those types of complaints that are considered serious by the project and cover accusations of fraud, corruption, abuse of power, failure to follow project guidelines or contracts, etc. Non-core grievances take the form of inquiries, suggestions and letters of appreciation.

be adapted from those already in use under the NCDDP and will be made available to local communities and are posted on village notice boards and advertised on local radio/TV. Local languages will be used to the extent possible to ensure that all stakeholders including ethnic language speakers have access to the information.

32. The project's management information system (MIS) will collect and aggregate information on the number and types of grievances received, and the amount of time for resolution of each grievance. A summary of grievances will be reported on the publicly accessible project MIS and in the project's quarterly implementation progress reports and annual reports. An independent audit of the grievance handling system will also be undertaken during the life of the project to assess the efficacy of the mechanism and introduce improvements.

3. Policy and Regulatory Frameworks

3.1. Applicable National Laws of Myanmar

Environmental Protection

33. Myanmar's environmental and social legislation includes the *Environmental Conservation Law* 2012; *Environmental Conservation Rules* 2014; *the Environmental Impact Assessment Procedures* (2015) and *National Environmental Quality (Emission) Guidelines* (2015). The 2012 Conservation Law provides a general mandate for the former Ministry of Forestry and Environmental Conservation (MOECAF), the actual Ministry of Natural Resources and the Environmental Conservation (MONREC), to implement environmental conservation policies, to prescribe environmental quality standards, hazardous waste and waste management and pollution control, and to produce an Environmental Assessment System. The 2012 Conservation Law also gives MOECAF the mandate to protect cultural resources. The Environmental Conservation Rules and EIA Procedures were approved in 2014 and 2015, respectively. The EIA Procedures stipulate the procedures for performing Environmental Assessment (EA) such as Environmental Impact Assessment (EIA), Initial Environmental Examination (IEE), and Environmental Management Plan (EMP), content of the EA, review and approval process, monitoring, etc. The Annex-A of EIA Procedures specifically defines type and size of activities requiring either IEE or EIA. Given the small-scale nature of the rural infrastructure to be supported under the project, it is unlikely that subprojects will require IEE/EIA under this notification.
34. There are also other laws with environmental policy implications and a number of international laws and conventions that Myanmar has ratified.

Natural Habitats

35. Current baseline data on the biodiversity inventories in national parks or protected areas (PAs) nationwide is poor. Some of the PAs have an operational or management plan including actions (as required by law), which needs to be implemented despite inadequate human, technical and financial resources. Human encroachment in PAs is common and requires intervention to limit it, but there is not yet a consistent conservation level followed or imposed in the entire country. *Protection of Biodiversity and Protected Area Law* (2018) defines the protected area categories including national park, geophysical exceptional area, natural reserves, and others. See Annex 9 for list of protected areas in targeted states.
36. *The Protection of Wildlife and Wild Plants and Conservation of Natural Areas Law* (1994) contains the legal provision for protecting rare and endangered flora and fauna species in Myanmar. It requires updating the list of permanently and temporarily protected species in accordance with the list of species identified by Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). There is also no provision for protected fish species.

Pest Management

37. For the safe use of agricultural pesticides and plant pest management, *The Pesticide Law* (2016), *The Procedure Relating to Pesticide Law* (2016) and *the Plant Pest Quarantine Law* (1993) were enacted to be implemented under MOALI. The laws are enforcing to overcome the hazards of all living things and environment resulting from pest management within Myanmar. In 2018, Pesticide Registration Board announced the banned pesticides list which are categorized under Persistent Organic Pollutants (POP) list of Stockholm Convention and Prior Informed Consent (PIC) chemicals of the Rotterdam Convention, and the restricted pesticides list.

Ethnic Minorities

38. The Government recognises 135 separate ethnic groups referred to within the Constitution as “national races.” Major groups include Burman/Bamar, Shan, Karen/Kayin, Kachin, Chin, Rakhine, Mon and Kayah. The largest ethnic group is the Bamar (Burmese) people comprising about two-thirds of the population and who reside predominantly in the central and delta (seven) regions. Other national races or ethnic minorities account for about one third of the population and live mainly within the seven states. Aside from the 14 States and Regions, there are five self-administered zones: Naga (Sagaing Region); Danu (Shan State); Pa-O (Shan State); Pa Laung (Shan State); and Kokang (Shan State). There is also one self-administered division: Wa (Shan State). These six self-administered sub-national units are recognised in the 2008 Constitution (section 56) and are the result of earlier ceasefire agreements. Myanmar’s ethnic states occupy around 57 per cent of the total land area along most of the country’s international borders.⁵

39. *The 2008 Constitution* provides equal rights to the various ethnic groups included in the term national races and a number of laws and regulations aim to preserve their cultures and traditions.⁶ Myanmar national law sets out rights of ethnic races or nationalities to representation in State parliament.⁷ *The Ethnic Rights Protection Law*, of February 2015, contains sections guaranteeing minorities the right to study their language and literature, practice other elements of their culture and maintain their traditions.⁸ The National Land Use Policy recommends the recognition of traditional land use systems of ethnic minorities be provided in the new land law, with a suggested process of determining the type and area of those traditional lands; though as of mid-2018 the new law that would formally recognize these traditional rights has not been passed.

40. The Government of Myanmar (GoM) generally uses terms other than ‘indigenous peoples.’ In September 2007, Myanmar endorsed the United Nations Declaration on

⁵<http://www.tni.org/sites/www.tni.org/files/download/accesdenied-briefing11.pdf>, accessed 09 March 2015

⁶Republic of the Union of Myanmar, Ministry of Health, *Myanmar Essential Health Services Access Project Community Engagement Planning Framework*

⁷<http://www.myanmar-responsiblebusiness.org/pdf/SWIA/Oil-Gas/11-Ethnic-Minorities-Indigenous-Peoples.pdf>, accessed 09 March 2015

⁸ Myanmar Times, 23 January 2015, MPs prepare to debate proposed law on ethnic rights

the Rights of Indigenous Peoples, which among other things provides indigenous peoples the right to free and prior informed consent and notes that “*States shall consult and co-operate in good faith with the Indigenous Peoples concerned through their own representative institutions in order to obtain Free and Prior Informed Consent prior to approval of any project affecting their land or territories.*”

Gender

41. Key clauses within the **Constitution of Myanmar** that relate to women include: (i) Clause 348: “The Union shall not discriminate any citizen of the Republic of the Union of Myanmar, based on race, religion, official position, status, culture, sex and wealth”; (ii) Clause 349: Citizens shall enjoy equal opportunity in carrying out the following functions:(a) public employment; (b) occupation; (c) trade; (d) business; (e) technical know-how and vocation; (f) exploration of art, science and technology; and (iii) Clause 350: Women shall be entitled to the same rights and salaries as that received by men in respect of similar work.
42. Myanmar is a signatory to **the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)** (1997) and is committed to international policy initiatives to improve the situation of women, including the Millennium Declaration, the Beijing Declaration and Platform for Action (BPfA), and the International Conference on Population and Development (ICPD). The Association of South East Asian Nations (ASEAN) has established the ASEAN Commission on Protection and Promotion of the Rights of Women and Children (ACWC), and the ASEAN Committee on Women (ACW), of which Myanmar is a member.
43. The Ministry of Social Welfare, Relief and Resettlement, through the Department of Social Welfare, carries out social welfare services through preventative, protective and rehabilitative measures, with special attention to children, youth, women, persons with disabilities, and elderly persons. The Department of Social Welfare provides welfare services to vulnerable groups on the basis of social integration strategies.
44. The Myanmar National Committee for Women’s Affairs (MNCWA) has prepared **a National Strategic Plan for the Advancement of Women** (2013-2022), whose objective is that, “All women in Myanmar are empowered and able to fully enjoy their rights with the support of the Government of the Republic of the Union of Myanmar. Enabling systems, structures and practices are created for the advancement of women, gender equality, and the realization of women’s rights”. Of relevance, the 12 Priority Areas for the Plan include: women and livelihoods; women education and training; women and health; women and the economy; and women and the environment.

Cultural Heritage

45. The Ministry of Religious Affairs and Culture (MORAC) is the main authority dealing with physical and cultural resources in Myanmar.
46. **The Protection and Preservation of Cultural Heritage Regions Law** (2019) The law

provides definitions of cultural heritage resources to be protected or preserved under this law. The law provides definitions of; Ancient Monuments; Ancient Sites; Precinct of Ancient Monument; Ancient Monumental Zone; Ancient Site Zone; Protected and Preserved Zone; and Cultural Heritage Region. Also, the definition of cultural heritage resource levels to be protected under this law such as National Cultural Heritage, Cultural Heritage Region, Region where Cultural Heritage located, Ancient Monument and Ancient Monument Threatened Area are included.

47. The Act provides legal backing to the MORAC through restrictions on construction and extension as well as types of buildings allowed in the zones. The law specifically states that the MORAC must provide permission prior to the construction, renovation or extension of any building in Ancient Site and Ancient Monument Zones. The Protected and Preserved Zone will allow more types of development but these must also receive permission from the MORAC. The law was amended in 2011 to state that the expression “existed before 1886” should be changed to “that have existed for 100 years before the date on which the Department made enquiries as an ancient monument”.⁹
48. Additional detailed requirements (Disciplines) have been created under the 2019 Law to provide updated rules and regulations for controlling and ensuring acceptability of development within the existing and planned heritage zones. Each new set of regulations will supersede earlier versions and the Instruction Order No. 2/2014 and 3/2014 should be used as the current reference point for development controls in the Heritage Zones. The regulations prescribe rules to be abided by in the Monument Zone (MZ) and Ancient Site Zone, also known as the Archaeological Zone (AZ)/Protected and Preserved Zone (PZ), also known as Buffer Zone referring to Article 30 (b) of “The Protection and Preservation of Cultural Heritage Regions Law”.
49. Other laws on physical culture resources (PCR) protection and preservation include: ***The Protection and Preservation of Ancient Monuments Law*** (2015) and ***The Protection and Preservation of Antiquities Law*** (2015) as well as the ***Protection and Preservation of Antiquities Rules and Regulation*** (2016) and the ***Protection and Preservation of Ancient Monuments Rules and Regulation*** (2016) were stipulated simultaneously. Those laws provide definitions of Ancient Monument and Antiquities, roles and responsibilities of the MORAC in protecting, preserving, returning and accepting of ancient monument and antiquities. The chance find procedures are described in case of ancient monument and antiquities are found, prior permission requirements and penalties for violating the provisions of those laws.
50. ***Regional Cultural Heritage Conservation Laws*** were enacted with the purpose of protecting cultural heritage things, monuments, places within states and regions under the authority of State/Regional Governments. The respective regional/state laws were established in 2014 for Kayin State and 2013 for Mon State, with the purpose of preserving the national heritage from damages of disasters and human

⁹ Department of Archaeology and National Museum, Myanmar and UNESCO, Heritage Impact Assessment Report on Hotel Development in Bagan, February 2015.

actions, making citizens understand the value of preserving the heritage to preserve the heritage region, monuments and places by complying with the international commitment.

51. In target regions/states of the PPCP project, Table 3 below indicates the registered culture heritage zones.

**Table 3 List of Cultural Heritage Regions and Monument Zones,
Nominated Zone in Target Areas**

No	Nominated Region	Type of Zone	Order No	Date of issue
1	Kyaik Htiyo Pagoda & Mountain Top area in Kyaik Hto Township, Mon State	PZ	4/99	11.10.99
2	Khaik Ma Yaw Township, Maw La Myaing District, Mon State Kha Yone Gu	Archaeological MZ, PZ	1/08	13.6.08
3	Hpa-an Township, Kayin State Ya Thaey Pyan Gu	Archaeological MZ, PZ	2/08	16.6.08
4	Hpa-an Township, Kayin State Kawt Gun Gu region	Archaeological MZ, PZ	2/08	16.6.08

52. **Management Plan: Protection Status and Zoning (2013):** These rules and regulations apply to the Monument Zone only. The rules expanded on those of the 1994 Order described above and are the foundation for the 2014 Instruction Order. *International Conventions* Myanmar had ratified the following international conventions: (i) the Convention for the Protection of Cultural Property in the Event of Armed Conflict (also known as The Hague Convention); (ii) Protocols to the Convention in 1956 and the Convention on the Protection of the World Cultural and Natural Heritage of 1972; (iii) the 1970 Convention on the Means of Prohibiting and Preventing Illicit Import, Export and Transfer of Ownership of Cultural Property; and (iv) the 2003 Convention on the Safeguarding of the Intangible Cultural Heritage.

Forests

53. **The Myanmar National Forest Policy (1995)** focuses on six priority areas: (i) Protection of soil, water, wildlife, biodiversity and environment; (ii) Sustainability of forest resources to ensure a perpetual supply of benefits from forests for present and future generations; (iii) Basic needs of the people for fuel, shelter, food and recreation; (iv) Efficient use, in a socially and environmentally friendly manner, of the full economic potential of forest resources; (v) Participation of people in the conservation and use of forests; and (vi) Public awareness of the vital role of forests in the well-being and socio-economic development of the nation. Important tools in implementing the policy include the following: **Forest Law (2018)**, **Forest Rules (1995)**, **Protection of Wildlife and Wild Plants and Conservation of Natural Areas**

Law (1994), Community Forestry Instructions (2019), National Forestry Action Plan (1995), Criteria and Indicators for Sustainable Forest Management (1999), Format and Guidelines for District Forest Management Plans (1996), National Code of Practice for Forest Harvesting (2000), National Framework for Environmental Law, Standard Operation Procedure for Boundaries and Forest Road Repair, Regional/State Laws for Village Firewood Plantations, and National Forest Master Plan (2001-2030). Some of these tools/rules are currently under revision. Forest Law (2018) was enacted by repealing the previous Forest Law (1992). The current Forest Law additionally considers about the recognition of forest and mangrove reservation by the Indigenous people and considers more environmental conservations aspects in forest management. The penalties are updated again to enforce the action. Community Forestry Instructions (2019) was updated aiming to support the nearby community with sustainably in ecology, environmental and social aspects.

UXO/Landmines

54. Myanmar is neither a signatory to the anti-personnel mine-ban treaty nor to the Convention on Certain Conventional Weapons yet. Myanmar does not have any law and regulation related to landmine management as well as the national mine action legislation or standards. Hence, the operators for landmine clearance have followed International Mine Action Standard (IMAS) and their own standard operating procedures. However, the Myanmar Mine Action Standard was still under the drafting stage. The EAOs (KNPP, NDF, LDF, POPLA, CNA, PSLF) signed the Deed of Commitment under Geneva Call for Adherence to a Total Ban on Anti-Personnel Mines and for Cooperation in Mine Action.

3.2. World Bank Operational Policies

55. The proposed project triggers the following World Bank Operational Policies (OP): Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Pest Management (OP 4.09), Indigenous Peoples (OP 4.10), Physical Cultural Heritage (OP 4.11), Forest (OP 4.36), and Projects on International Waterways (OP 7.50) . The environmental and social impacts stem directly from the investments (subprojects) financed under component 2 of the PPCP as well as indirectly from the activities supported under component 3. The World Bank has categorised the project as Category B as per OP 4.01 as the environmental and social impacts are site specific, few are irreversible, and measures can be designed to mitigate impacts during project implementation. The ESMF includes a screening process to prevent execution of subprojects with significant adverse environmental or social impacts.

Table 4 Applicability of World Bank Safeguard Policies

WB Safeguard Policy	Triggered?	Explanation
OP 4.01 Environmental Assessment	YES	This policy is triggered since the small to medium scale infrastructure and livelihood interventions in rural communities are intended to be financed without causing any significant adverse impacts such as degradation of natural habitats, protected forests or cultural resources, etc. Potential adverse impacts from project activities are

WB Safeguard Policy	Triggered?	Explanation
		expected to be site-specific with limited and manageable footprint. The subprojects will be identified by communities under component 2.1 and by village-tract representatives, with CSO and EAO input, under component 2.2 during implementation. Livelihood groups at village level would identify livelihood subprojects under component 3. This ESMF framework will apply to all subprojects at each stage of project implementation.
OP 4.04 Natural Habitats	YES	This policy is triggered because of the potential negative impacts that subproject activities might have on natural habitats. While these activities are expected to be small scale and with overall limited impacts manageable through application of mitigation measures, the policy is triggered for precautionary reasons to ensure that any physical interventions (including those proposed in known reserved or declared national forests zones) will not adversely impact or lead to the degradation of critical or other natural habitats. The ESMF will provide for the screening of potential project impacts and how safeguard issues under this policy should be addressed during project implementation.
OP 4.09 Pest Management	YES	The project will not promote the use of pesticides, insecticides and herbicides and other dangerous chemicals. However, the project's possible support of irrigation infrastructure and for rural livelihoods support might lead to an increased use of pesticides. The ESMF includes a procedure for screening/assessing potential use of pesticide and a simple pest management plan, as well as mandating training for integrated pest management, to ensure that the pesticides used have negligible or minimal impact on environment and people.
OP 4.10 Indigenous Peoples	YES	The policy is triggered since ethnic group communities are present in the project areas of influence. A project level social assessment has been undertaken. During implementation, participatory social assessments will be undertaken in all project villages. With the support of CFs, free, prior and informed consultations will be conducted with villagers, including ethnic groups, leading to broad community support for proposed subprojects. The key principles, processes and procedures for the participatory social assessments, including the participation of ethnic groups, are described in more detail in the IPPF and the Project Operations Manual
OP 4.11 Physical Cultural Heritage	YES	This policy is triggered due to the possibility of subprojects implementation in, or in the vicinity of, a physical cultural heritage site. It is anticipated that impacts on PCR from subprojects activities are likely to be minimal/limited, site specific and manageable because: (i) infrastructure works that the project will support are small-scale; and (ii) investments detrimental to cultural resources will not be eligible under the PPCP project. The ESMF will include guidance on screening, assessing and identifying measures to avoid or mitigate and monitor impacts on physical cultural resources, and on chance-find procedures.

WB Safeguard Policy	Triggered?	Explanation
OP 4.12 Involuntary Resettlement	NO	<p>OP 4.12 has not been triggered as (i) majority of the infrastructure that will be constructed/upgraded will be on existing footprints and therefore none or very little land would be required, (ii) if land is required this will be through voluntary land donation (VLD), and (iii) where assets may be present, those that can be moved or harvested will be, and those that can't be would be treated under as per the voluntary donation procedures.</p> <p>Managing similar small land impacts through VLD or adjusting the site of project activities has been possible under the NCDDP. DRD has successfully applied the VLD procedures, resolved grievances as they arise, and changes project site locations and has systems in place to document and report on this. Furthermore, if VLD and procedures are not acceptable to any affected households then the subproject would be re-sited or considered ineligible.</p>
OP 4.36 Forests	YES	<p>This policy is triggered because of the possibility that some villages to be supported under the project are within classified forests and implementation of project livelihood activities in such villages may involve utilization of natural forests or plantations. Environmental impacts of such subprojects are expected to be minimal, site-specific and manageable. Procedures for screening and managing potential impacts on forest and for promoting sustainable use of forests will be included in the ESMF. Activities that would cause significant conversion or degradation of critical natural forest areas will not be eligible for the project support.</p>
OP 4.37 on Safety of Dams	NO	<p>The project will not finance the construction of any new dams or the rehabilitation of existing dams including structural and or operational changes. The project will also not finance irrigation or water supply subprojects that will depend on the storage and operation of an existing dam or a dam under construction for their supply of water and could not function if the dam failed.</p>
OP 7.50 Projects on International Waterways	YES	<p>This policy is triggered because the project areas may include townships located along Thanlwin/Salween river which rises on the Tibetan Plateau, and then flows for about 2,400 km to its mouth on the Gulf of Martaban. The project will not finance new construction of sub-projects that may use water from Thanlwin river such as small scale water supply or irrigation schemes or pico-hydropower. However, there is a possibility that project supports may involve: i) minor modifications/rehabilitation or expansion of existing schemes (i.e. small scale water supply or irrigation schemes or pico-hydropower) that might draw on the Thanlwin river; and ii) new construction or rehabilitation/expansion of existing schemes on Thanlwin tributaries that run exclusively in Myanmar.</p>
OP 7.60 Projects in Disputed Areas	NO	<p>The project interventions are not in disputed areas and will be wholly within the borders of Myanmar.</p>

4. Guiding Principles and Approach for Addressing Environmental and Social Risks and Impacts

4.1. Guiding Principles

56. This ESMF provides general policies, guidelines and procedures to ensure that the PPCP will be implemented in an environmentally and socially sustainable manner and in line with the applicable World Bank safeguard policies. Specifically, the ESMF aims to achieve the following:

- a) All people who reside in the township, without regard to legal status of their land ownership or ethnic background, are eligible for the protections provided in this ESMF;
- b) Potential negative environmental and social impacts should be avoided, minimized and mitigated;
- c) Loss in livelihoods associated with or caused by the project should be prevented and, where unavoidable, minimized and fully compensated;
- d) Potential risks to communities/contractors/project staff and consultants due to project activities from possible landmine contamination avoided, minimized and mitigated;
- e) Avoid, minimized and mitigated the indirect negative impacts resulting from livelihood support activities (e.g. use of pesticides).
- f) Economic and physical displacement will be avoided. Involuntary land acquisition or physical relocation of households is not allowed under the project;
- g) No one should lose more than 10 percent of the productive assets under the project. Designs will be adjusted or alternative locations will be sought if any household may lose more than 10 percent of the productive assets under the original design.
- h) Implementation of subprojects will commence once voluntary donation procedures are fully completed.
- i) Ethnic groups should be meaningfully consulted and have access to project benefits in a culturally appropriate manner; and
- j) The capacity of DRD and GAD to manage environmental and social impacts should be strengthened.

Special Measures to Ensure Full Participation of Marginalized Groups

57. **Ethnic groups.** In addition to the broad principles outlined above, in order to mitigate the risk that ethnic minority groups are not able to fully participate in project implementation and receive project benefits, the following special measures will continue to be employed by the PPCP:

- Recruitment of village volunteers elected from among ethnic groups who assist the community facilitator throughout project implementation;

- Training of CF/IF to increase cultural awareness of issues related to ethnicity, religion and marginalization;
- Free, prior and informed consultations with ethnic groups of the village and village tract development plans;
- Involvement of ethnic groups in the decision-making process in the Village Tract Committee (VTC);
- Qualitative monitoring and beneficiary assessments focusing primarily upon societal dynamics and ethnic groups, women, and the most vulnerable, using focus group discussions and key informant interviews;
- Any engagement requirements including in information sharing will ensure that participation is inclusive and adopts approaches to address physical distance, language, literacy and other possible barriers;

58. These special measures are spelled out in the **Indigenous Peoples Policy Framework (IPPF)** of this project, shown in Annex 7. The IPPF has been prepared as part of the ESMF to provide guidance on the screening and planning process for subprojects, including requirements for site-specific social assessment and consultations and whether site-specific Indigenous Peoples Plans are required to address particular issues concerning ethnic minorities in the project area.

59. Guidelines on consultations and disclosure in ethnic languages will be developed as part of the PPCP's communications and outreach activities. In doing so, the project will take into account comments provided at safeguard consultation meetings under the NCDDP where participants emphasized the importance of using audio-visual materials to ensure that ethnic groups clearly understand the project and the protections provided under the ESMF.

60. **Women.** The PPCP will continue the practice of trained CF and village volunteers to organize separate meetings with women and men to identify their respective needs and priorities for the village development plan and document these in the project's management information system. For works performed for subprojects, there will be equal pay for equal work for women and men. Furthermore, the environmental and social safeguards screening for each subproject will include gender aspects. Safeguards plans prepared for the subprojects will include a review of gender aspects, and propose specific actions related to gender issues when warranted. The CF and village volunteers will also ensure that there are no restrictions on women's participation and that women are represented in the village implementation committee and various sub-committees, with women accounting for at least 50 percent of committee members.

4.1.1. Eligible Activities

61. The PPCP supports demand-driven, village-level, village-tract or intra-township level infrastructure, and community-based livelihoods activities. This means that activities

supported by the project will be identified and proposed based on the perspectives and priorities of beneficiaries and communities, taking into consideration technical feasibility and budget resources. Options for possible support, based on experiences from similar community-based projects in Myanmar, include the repair or construction of rural roads, bridges, jetties, water systems, sanitation facilities, schools, health posts, electrification, community centers, and other village, inter-village, or village-tract level public infrastructure. Eligible livelihood support includes financing of technical training and inputs for agriculture activities, marketing analysis and business training for rural enterprises, vocational training and basic inputs supporting off-farm economic activities, and information and support relating to migration opportunities, etc. **These indicated areas of potential support are not exclusive, and the project may finance other types of activities and investments that have been identified and prioritized by local communities.**

4.1.2. Ineligible Activities

62. While villagers and communities are open to select the project activities and investments that they believe can best address their priority needs, the PPCP includes some activities and subprojects that are considered ineligible and would not be financed under the project. These activities and subprojects shown in the table below primarily relate to investments that either go against the principles of the PPCP, Government of Myanmar national laws, or which are contrary to the World Bank’s environmental and social safeguard policies. The list of PPCP non-eligible activities for infrastructures and livelihood activities (referred to as the PPCP “negative list”) is also specified in the project Operations Manual. The World Bank will review this negative list with the PPCP project implementing agencies (DRD and GAD) periodically and update them, as needed, based on the experiences gained during implementation and consultations with beneficiaries, project staff and government representatives.

Table 5 Negative List of Activities for Infrastructure and Livelihood Subprojects

Subprojects Ineligible for Funding in PPCP	
1	are not included in the village tract development plan endorsed by the TIG;
2	are financed, or scheduled to be financed, by the government or other development partners;
3	finance government offices or religious buildings;
4	finance the construction/rehabilitation of any water catchment structure above 1.5m in height;
5	exclude the poor/marginalized population or otherwise vulnerable groups;
6	do not provide equal pay for equal work for women and men;
7	require physical relocation or displacement of any villagers;
8	include the payment of compensation for land or asset loss from the proceeds of the World Bank financing or other government sources;
9	That include activities that cause or lead to child abuse, child labour exploitation or human trafficking or sub-projects that employ or engage children, over the minimum age of 15 and under the age of 18, in connection with the project in a manner that is likely to be hazardous or interfere with the child’s education or be harmful to the child’s health or physical, mental, spiritual, moral or social development;
10	involve activities that use forced labour;

Subprojects Ineligible for Funding in PPCP	
11	have negative environmental or social impacts that are irreversible, create cumulative impacts and/or cannot be adequately mitigated;
12	involves activities affecting physical cultural resources such as graves, temples, pagodas, churches, historical relics, archeological sites, and other cultural structures;
13	new construction of subprojects that may use water from Thanlwin River including activities such as small scale water supply or small scale irrigation or pico-hydropower generations facilities
14	any new construction and/or rehabilitation in protected areas (PA), reserved forests (or proposed protected areas) or other natural habitats or areas of high national conservation level that could have the potential to cause significant loss or degradation of such natural habitats, unless specified as planned investments as part of the respective PA management plan. <i>Note: rehabilitation of existing infrastructure which has already been developed (e.g., existing paths or tracks for tourism purposes) is allowable if the respective subproject investment is in line with the park development/management plan, and subject to agreement of Union authorities.</i>
15	involve development of new settlements or expansion of existing settlements in critical habitats, PAs or areas proposed for certain levels of national protection (e.g., reserved forests). <i>Note: Where settlements already exist, proposals for funding should be in compliance with any local regulations on land management and other provisions of the protected area management plan.</i>
16	involve the purchase or use of drugs other than vaccines for animals, military equipment or other potentially dangerous materials and equipment, including chain saws; asbestos (including asbestos-containing materials), etc.;
17	Illegal livelihood activities such as the trading of wildlife, illegal activities of natural resources exploitation, etc.
18	involves activities of introduction of exotic or new flora and fauna species that are not permitted by responsible agency;
19	involves activities of changing forest land into agricultural land or logging activities in primary forests;
20	involves electro-fishing, fishing that uses poisons, chemicals and explosives, or gear that obstruct waterways;
21	purchase or use of banned/restricted pesticides; insecticides; herbicides for agricultural/livelihood enhancement activities
22	subprojects activities in specific areas of known or suspected landmine contamination after risk screening process in Annex-5;
23	Pico hydro subprojects (>30kW) and bridge subprojects (> 10 meters) during the first year of subproject implementation in any township except the townships where the NCDDP was implemented.

4.2. Approach for Addressing Environmental and Social Risks

63. This section outlines the key steps to be followed under the project to ensure the proper application of the environmental and social safeguards policies and procedures. These steps follow the implementation cycle of the two project components—component 2 for infrastructure and component 3 for livelihoods—that are outlined below.

4.2.1. Subproject Cycles

64. The overall process and the specific steps, or activities, applied to identify and implement the project’s components are outlined in the diagrams below. The first diagram covers component 2 for infrastructure and the second diagram refers to component 3 for livelihoods.

65. The Department of Rural Development and the General Administration Department are responsible for overseeing the implementation of the subproject cycle for Component 2. DRD is responsible for component 2.1 and GAD is responsible for

component 2.2 (component 2.3, which GAD will also oversee, will finance activities such as training, systems development, and other “soft” investments that do not trigger any of the World Bank’s safeguard policies).

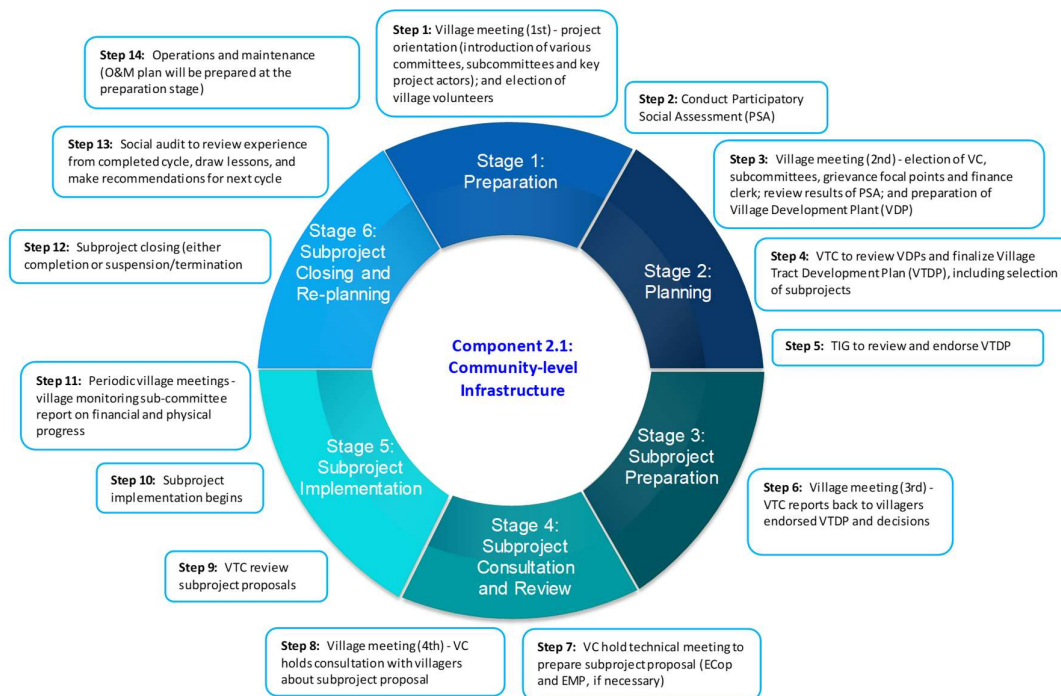


Figure 1 Subproject Cycle for Infrastructure Activities (Component 2.1)

66. Component 2.1 community level infrastructure subproject cycle is composed of six stages with fourteen steps. **Stage 1-- village preparation** orients and organizes the community about the project and conducts the participatory social assessment to gather basic socio-economic data for subsequent planning. **Stage 2 -- village development planning** supports the formulation of village committee (VC) and preparation of the village development plans (VDPs), consolidation of the village tract development plan (VTDP), and the review and endorsement of VTDP by the Township committee. **Stage 3 -- subproject preparation** involves the detailed subproject design, costing, and development of relevant safeguard instruments, as necessary, are prepared. **Stage 4 -- subproject consultation and review** involves follow-up consultations with villagers on the final subproject design and implementation plans, and the review of subproject proposal by VTC prior to fund release. **Stage 5 -- subproject implementation**, the commencement of subproject implementation and the periodic village meetings for reviewing of financial and physical progress are included. **Stage 6 -- subproject closing and re-planning**, the closing (completion or suspension or termination) of subproject, the social auditing for the review on past experiences, and operation and maintenance for completed subproject are carried out.

67. Component 2.2 village-tract level connective infrastructure subproject cycle will be similar to component 2.1 cycle with some minor, but important differences. Steps 1

to 6 are identical with the exception that the designated Township committee will also be tasked with final approval of component 2.2 investments.

68. At this point, the roles and responsibilities for subproject design, implementation, and supervision are different, as follows. Subproject preparation (step 7) would be the responsibility of the relevant technical department at township level (e.g., a rural road or bridge would be designed by the Department of Rural Roads Development) that would be delegated responsibility to implement these works. A contracted Technical Supervision and Safeguards Consultant (TSSC) would ensure that the plans and cost-estimates met standards (step 8) prior to the relevant department seeking bids for the specific works (step 9). Bids would be evaluated by a committee of the technical department, with at least 2 community representatives (step 10) prior to final authorization to contract by GAD (step 11). In general, given the size of the works (possibly ranging from \$25,000 to \$75,000 for each subproject), it is assumed that they would be implemented by private contractors (step 12), that would be supervised and monitored by the TSSC and village committee monitoring teams (step 13) from the beneficiary villages. The final four subproject cycle steps for Component 2.1, regarding community reporting, monitoring, social audits and operation and maintenance arrangements, would similarly apply under Component 2.2.
69. DRD will also take the lead in overseeing the implementation of component 3, with the support of relevant technical departments including Agriculture (DOA), Fisheries (DOF) and Livestock (LBVD), Forestry (Forest Department (FD)), etc. LFs are the key persons who will support the implementation of the livelihoods subprojects and will ensure that communities and livelihood groups comply with relevant environmental and social safeguards. Component 3 will follow a similar cycle and steps for the identification, planning, approval and implementation of subproject activities as with component 2, and where feasible will apply the same process and community structures. The subproject cycle for component 3.1 is shown in Figure 2.
70. The application of safeguard procedures for these two components are described in greater detail in the following sub-section of the ESMF.

4.2.2. Environmental and Social Safeguards Procedures and Responsibilities

71. From the perspective of the environmental and social safeguard requirements of the PPCP there are four key steps to be undertaken: (i) identification of subprojects (including confirming eligibility based on the PPCP negative list), (ii) screening of potential impacts and determination of applicable safeguard instruments, (iii) developing of safeguard instruments, and (iv) implementation of safeguard instruments, and supervising, monitoring and evaluating their application. The specific activities and responsibilities for these key steps are detailed below. The environmental and social safeguard instruments that are referenced below-- Environmental Codes of Practice (ECoPs), Environmental Management Plan (EMP), Pest Management Plan (PMP), Chance Find Procedures, etc.-- are shown in the Annexes to this ESMF.

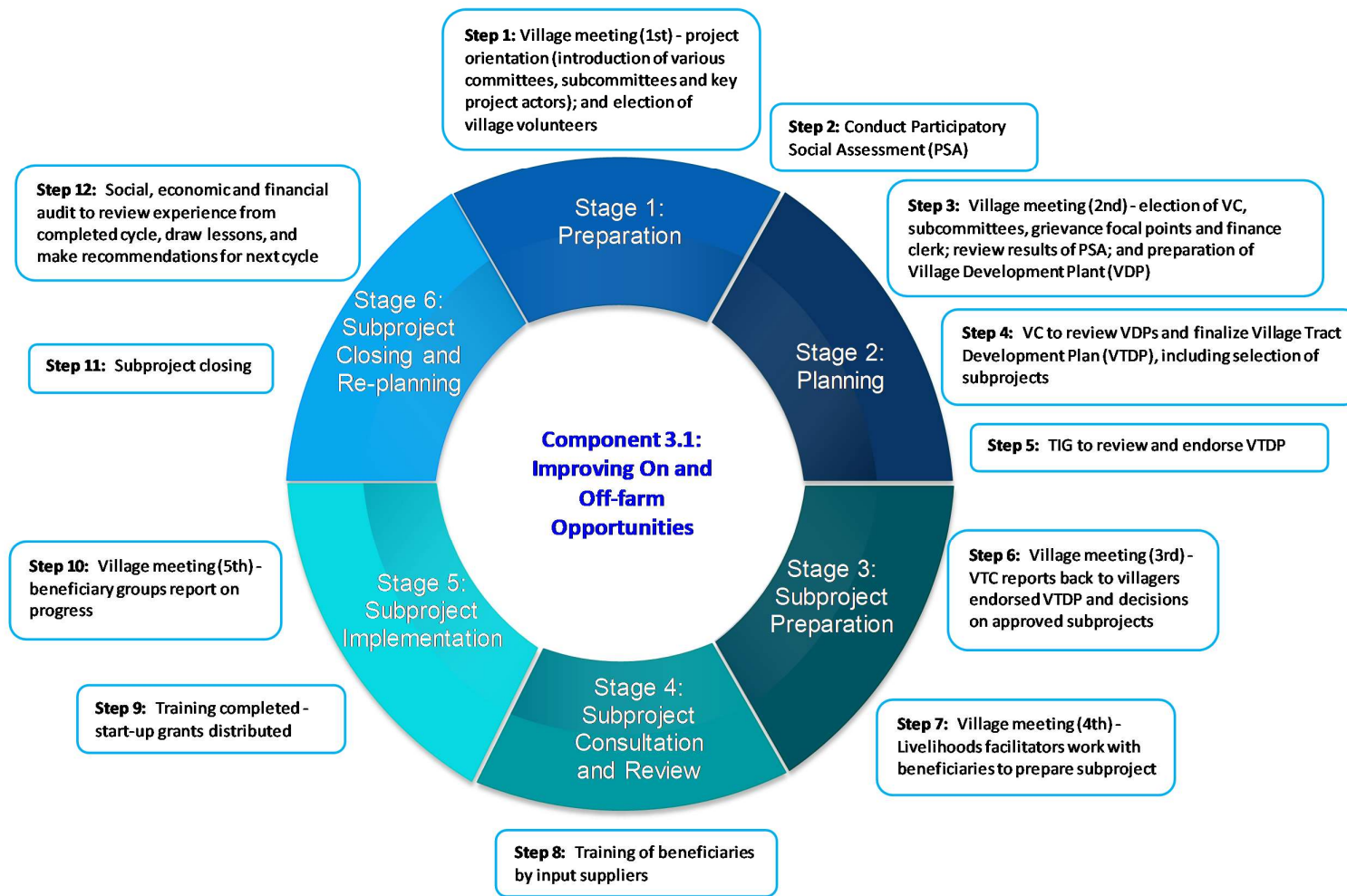


Figure 2 Subproject Cycle for Livelihood activities (Component 3.1)

Step 1 – Identification of Subprojects

Infrastructure Activities (Component 2)

72. The process of identifying infrastructure subprojects happens in stages 1 and 2 of the subproject cycle. The following steps and activities are critical in the process and include specific actions relating to the implementation of the ESMF.
73. **Participatory Social Assessment (PSA)** is conducted by the CFs and informs the screening for social aspects of the project, with specific reference to the presence of and consultations with ethnic groups. Guidelines for the conduct and details of the PSA process are found in Annex 7. The PSA will inform further discussions and consultations at village level (including separate male and female prioritization groups) to determine the priority infrastructure activities for the village. This list of priority activities will become the Village Development Plan (VDP).
74. **Preparation of Village Tract Development Plans (VTDPs)**. At village tract level, all VDPs are consolidated and reviewed to ensure that agreed upon project operational procedures have been followed. Part of the review by the Village Tract Committee (VTC) will be to apply the negative list of ineligible subprojects (indicated above) to ensure that all subprojects are allowed. This VTC also identifies which of the village subprojects (for both components 2.1 and 2.2) will be submitted to the Township Implementation Group (TIG) for financing by the PPCP. This consolidated, reviewed and prioritized list of local infrastructure investments becomes the Village Tract Development Plan (VTDP). Because these plans reflect a process of free, prior, and informed consultation of any ethnic groups at village level they each represent the required **Indigenous Peoples Plans (IPP)** [cross reference to section on IPP] as required by the World Bank Policy (OP 4.10) on Indigenous Peoples.
75. **Endorsement of VTDPs**. TIG will review the VTDPs against existing sector plans and other known township level assistance (NGOs, etc.) and endorse them accordingly. The TIG includes representatives from all technical departments present at township level and is therefore able to draw on relevant technical expertise as necessary. Prior to submission to the TIG, DRD and the Facilitating Partner Township Team (FPTT) will review the VTDPs to ensure that no ineligible subprojects are being proposed for support under the PPCP, and to identify any subprojects that may require special technical review (e.g., subprojects in protected natural or cultural heritage areas, etc.). If the project operates in the village located inside the protected cultural heritage zones, township PPCP office submit list of proposed subprojects including site plan to the Department of Archaeology and National Museum (DANM) for review and approval. The DANM would review site plan, conduct field visits and provide recommendation and approval. If subprojects would locate or pass through forest land area, it is required to obtain the prior agreement with MONREC and subprojects shall comply with provisions of Environmental Conservation Law. If subprojects would involve change of land use such as new road alignment on farm land areas, township PPCP office submit list of proposed subprojects including necessary documents and site plan to Department of Agricultural Land Management and Statics (DALMS) for review and approval. Township PPCP office will then submit subprojects list to the TIG for review and endorsement. Copies of approved VTDPs in Myanmar language, and summaries of plans in main local language(s) are displayed at the village tract offices and on notice boards in all villages.

76. **Amendment of village and village tract development plans (VTDPs).** Villagers and the respective VTC will re-evaluate the development plans annually and adjust them as needed. The adjusted plans will be endorsed by the TIG if there are major changes. Each time the village and village tract development plans are updated, free, prior and informed consultations will be carried out with beneficiary communities and with ethnic groups to ensure their broad community support to the updated plans, in a manner described above.
77. The identification of subprojects under component 2.2 (inter-village and village-tract level infrastructure) will happen through the same processes at village, village tract and township levels, involving the same project staff and committees as with component 2.1. In addition to this, at township level, a special forum (that includes CSOs and EAO representatives) would be called to review and identify the recommended priority investments for support under sub-component 2.2. The township administrator and relevant technical department heads would participate in the forum and provide inputs on existing Government plans and technical feasibility of proposed subprojects. Based on the discussions and inputs, the representatives of the village tracts and EAOs would vote for their top priorities, based on estimated available budget. The final list of recommended sub-component 2.2 investments would require the approval of the State/Region Steering Committee. The timing of the township forum would be scheduled so as to feed into the State/Region Steering Committee meetings, or else, an ad hoc State/Region meeting would be arranged.

Livelihood Activities (Component 3)

78. The initial identification of livelihoods subprojects would draw on the PSA, as well as market analyses and skills needs assessments at township level to identify the most feasible livelihood options. These analyses would be carried out by the livelihood facilitators (LFs) and the Facilitating Partner (FP). The identified community livelihoods subprojects would be reviewed and endorsed by the community. VCs would review and endorse livelihood subprojects to (i) ensure that suitable and reputable input dealers were identified to support local groups, and (ii) seek synergies or opportunities for economies with related livelihood activities within connected geographic areas. Given the technical and economic nature of the livelihood subprojects, final review, assessment, and endorsement would be carried out by the FP, with final approval resting with DRD (with technical input from relevant departments such as DOA, LBVD, etc).

Step 2 Screening of Potential Environmental and Social Impacts and Determination of applicable Safeguards Instruments

Infrastructure Activities (Component 2)

79. **Safeguard Screening.** Once the TIG has endorsed the VTDPs, DRD engineers, in partnership with the VTC, VC, CFs and IFs, will carry out the environmental and social screening of proposed subprojects as part of the detailed subproject design process. This screening is focused on three areas: (i) using the screening form, that is included in Annex 1 as part of the preparation of detailed designs, to determine potential impacts from the subprojects; (ii) determining whether and how infrastructure ECoPs (Annex 2), and/or chance find procedure (Annex 3) suffices to mitigate these potential impacts; and (iii) identifying what additional mitigation measures, if any, beyond those contained in the ECoP may be needed to manage the impacts.

80. Special attention would be given to screening for subprojects proposed in national parks, a protected cultural heritage area, a protected archaeological area or area of historical significance, reserved forests and/or areas of national conservation.
81. The negative impacts of the project's small to medium sized subprojects will tend to be site specific and occurring only during implementation (e.g., noise, dust, soil erosion, waste management, water quality, health and safety, loss of trees, small land donations). These impacts can generally be avoided, managed or mitigated during subproject planning and construction. In addition, the cumulative impacts for the project as a whole at subproject sites and regionally are expected to be insignificant given their small size and the dispersion of resources across village tracts, townships and States/Regions. Moreover, it is unlikely that the small size rural infrastructure would require Initial Environmental Examination (IEE)/ Environmental Impact Assessment (EIA) under Myanmar regulations. However, screening for IEE/EIA requirements has been included in the safeguards screening form (Annex 1). In case that an IEE, at most, is required, the additional procedure and process for IEE preparation and obtaining of environmental compliance certificate will be guided by procedures outlined in the Project Operation Manual (POM).
82. For component 2.1, the CFs and IFs will provide the necessary technical guidance so that VTC members can review the safeguard screening sheet in line with this ESMF. The approved safeguard screening sheet in the local language will be available with the detailed project designs in the beneficiary village(s).
83. For component 2.2, relevant technical departments are responsible for designing, ensuring technical specifications and implementing infrastructure subprojects, rather than IFs and communities (e.g., the Rural Roads Department would be responsible for an inter-village or village tract road or bridge prioritized under component 2.2). Therefore, in this case a TSSC would be hired at township level by GAD to both supervise implementation of component 2.2 works, and to ensure that relative safeguard procedures are applied by works contractors. Thus, the TSSC will be responsible for screening subproject proposals and identifying relevant safeguard measures, applying the same screening and safeguard instruments presented in the annexes to this ESMF.

Livelihood Activities (Component 3)

84. For component 3, livelihoods screening using Form 1, would be done by LFs with the backstopping of DRD and the FPTT, and relevant technical departments of MOALI and others as needed.

Voluntary Land Donation (VLD)

85. Impact on private assets may be addressed only through voluntary donation. The Community Facilitator and the IFs, under the guidance of FPTT, will verify if all conditions of voluntary donations described below are met based on face-to-face meeting with affected people. **Proceeds from the World Bank financing cannot be used for compensation, and compensation from Government sources would render the sub-project ineligible.**
86. VLD can be used only to support small scale community subprojects (infrastructure or livelihoods) where impacts are minor (in general, 10 percent or less of the asset in question). The relevant

screening process will be undertaken by CFs, IFs and LFs (in the case of livelihoods activities). CFs would be required to ensure the “voluntary” nature of the donation, IFs (or LFs) would ensure that the level of donation does not exceed the 10 percent threshold. Other principles and procedures outline in Annex 8 would also be adhered to for this purpose.

87. To assess whether a potential donation is voluntary, it is necessary to ensure the owner(s) or user(s) of the land understand:

- What the land is going to be used for, by whom and for how long;
- That they will be deprived of the ownership or right to use the land, and what this really means;
- That they have a right to refuse to donate the land;
- Whether there are proposals which would allow other land to be used;
- What they will need to do to donate the land, and what costs are involved;
- The effect of the donation on their family, what they can do if they (or their family or heirs) want the land back.

88. Annex 8 provides details to follow on the process for VLD, namely on how to:

- Determine and document the appropriateness of VLD in the project context;
- Verify the requirements of the donation and the formalization of the donation;
- Carry out due diligence on the owners and users of land donated;
- Ensure appropriate consultation and disclosure;
- Establish informed consent of the person donating the land;
- Document the legal transfer of land donated; and
- Establish grievance redress mechanism.

Step 3 – Development of Safeguard Instruments

i) Infrastructure Activities (Component 2)

89. The following environmental and social safeguard instruments have been designed based on experiences implementing a World Bank supported community-based program similar to the PPCP. These instruments seek to avoid, minimize, and mitigate the potential negative environmental and social impacts likely caused by PPCP subprojects. These instruments, the formats and detailed guidelines for which are presented in the annexes to this ESMF, are summarized below.

90. **Indigenous Peoples Plan (IPP).** As stated above, for the purpose of this project, the VTDP will serve as the IPP where ethnic groups are affected by the project within the village tract. Annex 7 presents the IPPF that, together with the annex on the participatory social assessment, further details how the VTDP will meet the requirements for an IPP. For the VTDP to serve as an IPP it would include the following information:

- a. *Affected ethnic groups*. The ethnic groups present in the VT, identified based on the Participatory Social Assessment conducted at the village level using the criteria described in this ESMF, will be described.
 - b. Summary of the findings of the Participatory Social Assessment including the results of the free, prior, and informed consultation conducted with the affected ethnic groups, and the evidence of broad community support of the priority subprojects.
 - c. A framework for ensuring free, prior, and informed consultation with affected ethnic groups during subproject implementation.
 - d. Measures to ensure that ethnic groups will receive social and economic benefits that are culturally appropriate and that adverse effects on them will be avoided, minimized or mitigated.
 - e. Estimation of costs to implement the VTDP including measures to mitigate negative impacts on ethnic groups and the source of fund to implement such measures.
 - f. Grievance and monitoring mechanisms that apply to the overall VTDP.
91. The VTDP will be updated and the scope and the scale of impacts will be described for respective subprojects when designs are ready. The scale and scope of benefits, risks and impacts associated with subprojects will be explained to beneficiary communities at the community wide meetings at which broad community support would be sought and documented in the updated VTDP
92. **Environmental Codes of Practice (ECoPs)**. The main environmental safeguards instruments used for infrastructure subproject implementation and monitoring are ECoPs. These are basic technical guidelines that inform communities and contractors of practical actions and steps to be used during subproject implementation to avoid, minimize and mitigate negative environmental and social impacts. A general ECoPs applicable to most small- to medium-scale infrastructure rehabilitation and construction is presented in Annex 2a. ECoPs that are specific to different types of infrastructure (roads, water systems, buildings, etc.) are shown in Annex 2b.
93. **Environmental Management Plan (EMP)**. If additional impacts are envisaged for which specific mitigation measures are required beyond what is included in the ECoPs, a simple EMP should be prepared using Form 2 (see Annex 3). Subprojects that require EMPs include:
- a) Any bridges longer than ten (10) meters;
 - b) Any new construction of a deep well (≥ 200 feet), irrigation, water supply network, small-scale wastewater treatment facility or small-scale solid waste management (including health waste) facility;
 - c) Any rehabilitation of historical buildings or infrastructure with cultural property;
 - d) Any subprojects in protected areas;
 - e) Any subprojects greater in value than MMK 60,000,000 (including community contribution and/or other sources of financing).
 - f) Any other subprojects that triggers the need for an EMP per the safeguards screening form (see PC 13, Annex 1);
94. In the case of Component 2.1, the EMP is prepared with the assistance of facilitating partners and/or DRD township PPCP offices, while under Component 2.2 the EMP is to be prepared by the

TSSC. The EMP will identify potential site specific impacts that cannot be adequately addressed through the application of the ECoPs . The EMP will also specify required monitoring, monitoring indicators and activities of the proposed mitigation measures as well as estimated costs to implement such activities.

95. **Physical Cultural Resources Management Plan (PCRMP).** If subproject screening finds that subproject is located inside or adjacent to protected cultural heritage zones or area of PCR significance, a simple, site-specific PCRMP will be prepared with the assistance of IFs, FPTT and/or DRD township PPCP offices, for component 2.1, and with the assistance of the TSSC for component 2.2. The PCRMP will include measures for avoiding or mitigating any adverse impacts on PCR, provisions for the management of chance finds and monitoring indicators, and take into account the country's overall policy framework and regulations in regard to PCR. The DANM will be contacted to review and provide recommendations on the PCRMP before construction commences. EMP form (Form 2: Annex-3) will be used to prepare PCRMP. In any subprojects the Chance Fine Procedures described in Annex-4b shall be followed when culturally valuable materials are uncovered during excavation.
96. **Risk Management and Chance Find Procedure for UXO/Landmine.** Sub-project activities in specific areas of known or suspected landmine contamination are not eligible for support under the PPCP. For subprojects under component 2.1, 2.2 and component 3 that involve civil/physical works, suspected UXO/landmine prone areas, including those with histories of previous military use, will be screened by communities during subproject safeguards screening (see Form 1: Annex 1). If the screening identifies potential risks, community will consider alternative sites or change subproject. More details of UXO/landmines screening and mitigation measures including "Chance Find Procedure for UXO/Landmine" are presented in Annex 5.

Livelihood activities (Component 3)

97. **LFs will work with** community groups to prepare required safeguards instruments, which for the most part will be ECoPs. Annex 2c presents a general set of ECoPs applicable to any type of livelihood activity, while Annex 2d presents ECoPs specific to particular types of livelihood activities (e.g., animal husbandry, community forests, etc.). DRD, with the support of the FP and relevant technical departments, will review these instruments to ensure that they meet technical standards.
98. **Pest Management Plan (PMP).** The preparation and application of a PMP is required in the event of any subproject supported under component 2 that would potentially increase the use of pesticides (such as with the rehabilitation or development of irrigation system) or under component 3 that would support agricultural productive activities that could also lead to an increased use of pesticides or agrochemicals. A sample PMP is attached in Annex 6. A PMP comprises the following four aspects: (i) application of government regulations on pesticide control, (ii) key impacts of pesticides and mitigation measures, (iii) training on safe use of chemicals and (iv) monitoring.

Step 4 – Implementation of Safeguard Instruments, Supervision, Monitoring and Evaluation

99. **Implementation** of all relevant safeguard instruments for community-level (village) activities (under components 2.1 and 3) would be the responsibility of the relevant group implementing the

subproject (i.e., either the Village committee, or the management committee of the livelihoods group). These groups would be guided by the subproject agreement that will include the relevant safeguard instruments (depending on the nature of the subproject). For component 2.2, responsibility for implementing relevant safeguards instrument will rest with the executing agency that is responsible for the given subproject. The executing agency would, in general, hire contractors to carry out the works activities, and these works contractors would be responsible to ensure that the subproject safeguard measures are implemented.

100. **Supervision, Monitoring and Evaluation.** Supervision of the implementation of safeguards under components 2.1 and 3 would rest with the VTC and VC particularly the Village monitoring sub-committee or the management committee of the livelihoods group, in collaboration with CFs, IFs/LFs and village volunteers. During construction, normally on a monthly basis, the monitoring sub-committee will review actual versus planned activities (including safeguard related actions) using a village subproject monitoring form and submit the form to the VTC. Monitoring reports will be publicly displayed on the village notice board. Village subproject monitoring forms will capture information that is consistent with the project results framework the Village Monitoring Sub-Committee (VMSC) organizes a village monitoring meeting about every two months or when major milestones have been achieved

101. **For component 2.2, the TSSC would supervise the works contractors to ensure that safeguard measures are being applied and followed.** The TSSC will report the review and record on the progress of implementation and any issues to the Township GAD. Along with the TSSC, representatives of village monitoring sub-committees would also participate in supervising the work of component 2.2 contractors, and would provide inputs to the monitoring efforts of township DRD and GAD personnel. Township DRD engineers, GAD and the FPTT staff would monitor the quality of this implementation under all components and report to the TIPC at least on a bi-monthly basis during subproject implementation periods. In the case of specialized situations or requirements (such as with Physical Cultural Resources), DRD would facilitate the support and supervision of specialized agencies (e.g., DANM) to review safeguard instruments and monitor field-level implementation. The annual social audit that takes place in each village would also assess the outcomes of project activities and specifically review if the community or population has suffered any lasting negative impacts. The state/regional PPCP secretariat staff will ensure that safeguards implementation status is included as part of the state/region progress reports, i.e. quarterly and annual report. The following performance indicators will be monitored and presented in the quarterly progress report:
 - a. The number of voluntary donation cases;
 - b. The total number of project beneficiaries/ affected people, broken down to ethnicity; and
 - c. Grievances submitted through various channels described below, and the current status.

102. **The World Bank reviews the use of safeguards screening forms, environmental management plans, voluntary donations and the use of the ECoPs on a random basis and carries out field trips as part of supervision missions** to verify safeguard compliance in line with ESMF and other relevant project documents. The Bank also oversees independent technical evaluations of subproject implementation that reviews the application of safeguard measures.

5. Safeguards Capacity Assessment and Capacity Building

103. An initial capacity development needs assessment for understanding and managing social and environmental risk and impact has been undertaken as part of the project preparation. Support has been identified at different institutional levels.
- At the Union level DRD will focus on ensuring the systems for managing environmental and social risk are in place and functioning including trainings. This includes the need to have sufficient and experience social and environmental specialists to support the implementation of the ESMF. The specialists may require specific training on key social and environmental safeguards instruments.
 - At the State and Regional level DRD Secretariat act as the cooperation body with state/region level departments, and provide technical support to township offices including on infrastructure, monitoring and evaluation, safeguards and other issues. They further facilitate aggregated reporting to the union level and monitor the implementation of the subprojects including safeguards in participating townships and support TIGs to resolve any implementation issues that cannot be addressed at the township level. As such capacity may need to be developed for the implementation of the requirements under the ESMF.
 - The Township DRD undertakes technical review of sub- project proposals. Their roles also include revising standard documents, screening, use/referencing of safeguards instruments (ECoPs, EMPs, PCRMP, PMP, Landmine risk management) measurement of impact and production of detailed designs in consultation with villagers. They further monitor the quality of safeguards implementation under component 2.1 and 3 and report to the TIG at least on a monthly basis during subproject implementation periods. There is capacity to implement, however specific training may be required for implementation of Operations Manual, including applicable safeguards procedures. Those personnel who undertake engagement with villages, including on applicable safeguard policies such as minor repair and operational guidance during subproject implementation may need training on inclusive engagement. For component 2.2, the GAD contracts out a supervision of safeguards to a technical consultant, TSSC, for each township. The contracted TSSC undertakes the initial environmental and social impact screening and propose mitigation measures, and they will later do the monitoring.
 - At the Village Tract capacity building may be required for the VTC for: development of village tract development plan (VTDP) as IPP, selection of subprojects, apply the negative list of ineligible subprojects to ensure that all subprojects are allowed, review and approval of subproject proposals, safeguards screening, voluntary donation form, as applicable, safeguards monitoring.
 - At the Village level the VC has decision-making authority for all aspects of subproject planning including participatory social assessment, review and oversight including safeguards monitoring. There is limited technical capacity and a significant gap in knowledge of applicable safeguard policies. The low literacy levels mean that training and capacity building will need to ensure that needs of the different groups in the community are able to participate in an informed way.
104. During the first year of implementation, the DRD will develop the detailed training capacity building plan to address the capacity constraints identified above. The PPCP will invest heavily in capacity development at all levels to ensure that subprojects are implemented in an

environmental and socially sustainable manner and in line with ESMF requirements. The materials for training at the community level are simple (including simplified sections of the project operations manual kept at the community level for reference during subproject implementation), illustrated to be accessible also to community members who are illiterate (comics, illustrations and photos on grievance handling, fraud and corruption issues, and safeguard requirements).

6. Budget for Implementing the ESMF

105. The costs associated with implementing the ESMF processes and safeguards instruments are included in component 4 (Implementation Support), and the costs of implementing the measures in the ECoPs are included in the cost of each subproject under component 2 and 3.

ANNEXES

Annex 1: Form 1: Safeguards Screening Form

Annex 2: Environmental Codes of Practices (ECoPs)

Annex 3: Form 2: Environmental Management Plan (EMP)

Annex 4: Chance Find Procedure for Physical Cultural Resources

Annex 5: Risk Management and Chance Find Procedure for UXO/Landmines

Annex 6: Pest Management Plan (PMP)

Annex 7: Indigenous Peoples Policy Framework

Annex 8: Protocols and Procedures of Voluntary Donations

Annex 9: Protected Areas and Key Biodiversity Areas in Myanmar

Annex 10: Meeting of Public Consultations – input after consultations

Annex 1: Form 1: Safeguards Screening Form

The completed form (one is required for each subproject) is to be attached to the subproject proposal.

Region / State :	
Township:	
Village Tract:	
Village:	
Subproject:	
Subproject ID:	

Subproject description

Type (see eligible category)

Category (check one): Rehab Extension New work other

Scope:

Building road/bridge/jetty water supply rural electrification irrigation
 Sanitation other livelihood activities (Agricultural/Livestock/Household Manufacturing/ Other Services)

Cost estimate

Location (with GPS longitudes and latitudes, if available)

Beneficiaries

Number of villages served

Any other similar subproject/assistance in the same village? (Check one) Yes No

Environmental screening

Apply ECoPs to all village subprojects (VSP)

E0. Requirement of IEE or EIA

Is the proposed subproject (type, size/scale) entitled to perform IEE or EIA Study in accordance with Annex A of EIA procedure (2015)?

Yes No

If answer to any of above questions is 'yes', proposed subproject will require to conduct the determined IEE (or) EIA separate study prior to the commencement of the construction of subproject.

E1. Natural environment

(a) Briefly describe the vegetation/trees in/adjacent (within 0.5 km) to the subproject area

(b) Estimate and indicate where vegetation/trees might need to be cleared

(c) Are there any environmentally sensitive areas or threatened species (specify below) in/adjacent to the subproject?

-- Natural forests: Yes ___ No ___; if yes, ___ km from the subproject

-- National parks: Yes ___ No ___; if yes, ___ km from the subproject

-- Rivers: Yes ___ No ___; if yes, ___ km from the subproject

-- Lakes: Yes ___ No ___; if yes, ___ km from the subproject

-- Wetlands (swamps, seasonally inundated areas): Yes ___ No ___; if yes, ___ km from the subproject

-- Natural habitats of endangered species for which protection is required under Myanmar laws and/or international agreements: Yes ___ No ___; if yes, ___ km from the subproject

-- Others (describe): Yes ___ No ___; if yes, ___ km from the subproject

Will the subproject adversely affect the above specified area? Yes _____ No _____

Is there any possibility of the use of forest land/area for subproject: Yes ___ No ___

If answer to any of above questions is 'yes' and within 5 km distance from the subproject, mark VSP as having an impact on the natural environment:

Has an impact No impact

E2. River ecology

Is there a possibility that, due to installation of structures, such as weirs and other irrigation structures, the river ecology will be adversely affected? Attention should be paid to water quality and quantity; the nature, productivity and use of aquatic habitats, and variations of these over time. Yes ___ No ___

Is there a possibility that, the quality of nearby river water will be adversely affected due to the agro-chemicals (e.g., pesticides) used in farmlands? Yes ___ No ___

If answer to any of above questions is 'yes', mark VSP as having an impact on river ecology:

Has an impact No impact

E3. Protected areas

Does the subproject area (or components of the subproject) occur within/adjacent to any protected areas designated by government (national park, national reserve, ancient city, world heritage site, etc.)? Yes___ No___

If the subproject is outside of, but close to, any protected area, is it likely to adversely affect the ecology within the protected areas (e.g., interference with the migration routes of mammals or birds) Yes___ No___

If answer to any of above questions is 'yes', mark VSP as having an impact on the protected areas:

Has an impact No impact

E4. Geology and soils

Based upon visual inspection or available literature, are there areas of possible geologic or soil instability (erosion prone, landslide prone, subsidence-prone)? Yes___ No___

Based upon visual inspection or available literature, are there areas that have risks of large scale increase in soil leaching and/or erosion? Yes___ No___

Is there any potential to have impact on soil due to agro-chemicals (e.g., pesticides) used in farmlands due to the consequences of subproject (e.g., development of irrigation system, agriculture related activities)?
Yes___ No___

If answer to any of above questions is 'yes', mark VSP as having an impact on geology and soils:

Has an impact No impact

E5. Pollution during construction and operation

Will the subproject have potential to generate polluted wastewater? Yes ___ No_____

Will the subproject have potential to emit particulate matters, and emission gases? Yes ___ No _____

Will the subproject have potential to spill/infiltrate of materials (fuel, hazardous materials) into the ground? Yes ___ No _____

Will the consequences from subproject (e.g., increase in agro-chemical usage) cause contamination of air, groundwater or drinking water? Yes___ No___

If answer to any of above questions is 'yes' and additional mitigation measures other than those included in the ECOPs are required, mark VSP as having an impact on ground, water or air pollution:

- Has an impact No impact

E6. Invasive plant species along feeder road routes

Is the subproject likely to result in the spread of invasive plant species (along feeder road routes)?

Yes___ No___

If answer to any of above questions is 'yes', mark VSP as having an impact on invasive plant species:

- Has an impact No impact

E7. Endangered species along feeder road routes

Is the subproject likely to result in an increased threat to endangered animal species (along feeder road routes)? Yes___ No___

If answer to any of above questions is 'yes', mark VSP as having an impact on invasive plant species

- Has an impact No impact

E8. Historical, archaeological or cultural heritage site

Does the subproject area occur within or in vicinity of the areas designated by the government as cultural heritage zones (Archaeological Zone(AZ), Monument Zone(MZ) or Protected and Preserved Zone(PZ)) or areas of physical cultural resources significance?

- Yes No

Based on available sources, consultation with local authorities, local knowledge and/or observations, could the subproject alter any historical, archaeological or cultural heritage site (pagodas, memorials and graves) or require excavation near same? Yes___ No___

If the answer to the any of above questions is 'yes', proceed to follow the chance find procedure for physical cultural resources.

If answer to any of above questions is 'yes', mark VSP as having an impact on historical, archaeological or cultural heritage site:

- Has an impact No impact

E9. Loss of crops, fruit trees and household infrastructure

Will the subproject result in the permanent or temporary loss of crops, fruit trees and household infrastructure (such as granaries, outside toilets and kitchens, etc)? Yes ___ No ___

If answer to any of above questions is 'yes', mark VSP as having an impact on crops, fruit trees and household infrastructure:

- Has an impact No impact

E10. Risk from existence of UXO/Landmines

Are there any areas with history of previous military use including old battle fields in the village areas
Yes ___ No ___

Does the proposed subproject potentially locate in landmine contaminated area? Yes ___ No ___

If the answer to the any of above questions is 'yes', proceed to follow the UXO/landmine risk management and chance find procedure. All subprojects to follow UXO/landmines chance find procedure in case UXO/Landmines are unexpectedly uncovered during subproject implementation.

If answer to any of above questions is 'yes', mark VSP as having an impact on UXO/Landmine risk.:

- Has an impact No impact

E11. Adverse impacts on natural habitats

Will the subproject have adverse impacts on Natural Habitats that will not have acceptable mitigation measures? Yes ___ No ___

If answer to any of above questions is 'yes', mark VSP as having an impact on natural habitats:

- Has an impact No impact

E12. Solid or liquid waste

Will the subproject generate hazardous solid waste or contaminated liquid wastes that requires additional mitigation measures other than ECoPs? Yes ___ No ___

If "Yes", does the subproject include a plan for their adequate collection, storage and disposal?
Yes ___ No ___

If answer to first question is 'yes' and to second question is 'no', mark VSP as generating hazardous solid or contaminated liquid waste without proper waste handling system/plan:

- Has an impact No impact

- **If the answer to any of the above questions is 'Has an impact', prepare an Environmental Management Plan (EMP) that contains suitable mitigation measures. The EMP should refer to the Environmental Codes of Practice (ECoPs) to identify suitable mitigation measures.**

Social screening

S1. Land requirements

Will the subproject cause:

Temporary loss of land or resources for any families? Yes ___ No ___

Permanent loss of land or resources for any families? Yes ___ No ___

- If the answer is 'yes', will the land requirements cause?

Conflicts in water supply rights and related social conflicts? Yes ___ No ___

Impediments to movements of people and animals? Yes ___ No ___

Dislocation or involuntary resettlement of people? Yes ___ No ___

Potential social conflicts arising from land tenure and land use issues? Yes ___ No ___

Deterioration of livelihoods or living conditions of women or the poorest families in the subproject service area? Yes ___ No ___

Other:

subproject

- If the answer is 'yes' to any of the above do not proceed in this area with the subproject activity.
- If the answers are NO to all then proceed to the guidance on Voluntary Land Donation.

S2. Accessing subproject benefits

Will the following groups in the village have access to and benefit from the subproject?

- Women: Yes ___ No ___
- Youth groups: Yes ___ No ___
- Ethnic minority groups: Yes ___ No ___
- Religious minorities: Yes ___ No ___
- Other groups (e.g. the poor, the elderly) Yes ___ No ___

- For each group: if the answer is 'yes', specify how it will benefit, and if it is 'no', explain why they will not benefit.

Will villagers be employed for the implementation of works? If so, will they be paid equally for the same work?

Yes___ No___

Name: _____

Position: Head, Village committee

Signature: _____

Date: _____

Annex 2: Environmental Codes of Practices (ECoPs)

1. INTRODUCTION

To manage and mitigate potential negative environmental impacts, the project applies Environmental Codes of Practice (ECoPs); outlined in this document. The ECoPs contain specific, detailed and tangible measures that would mitigate the potential impacts of each type of eligible subproject activity under the project. They are designed appropriately for the local conditions in Myanmar, simple, and readily useable by the local communities who are the main beneficiaries of the project.

The preparation of these ECoPs has benefited from practical examples of other World Bank-financed operations, including the National Community Driven Development Program (NCDDP).

The overall structure of ECoPs is described in the following Table.

Annex No.	Description
	Component 2: Infrastructure Subprojects*
2a	General ECoPs (or) General Guidelines applicable to most rehabilitation and construction activities
2b	Specific ECoPs (or) Technical Guidelines for infrastructure subprojects
	Component 3: Livelihood Support Subprojects
2c	General ECoPs (or) General Principles for any off-farm and household/livelihood activities
2d	Specific ECoPs (or) Technical Guidelines for common livelihood activities

* ECoPs for infrastructure are also applied for small civil works to be financed under component 4 (Implementation Support).

2. THE PROCESS: WHO, WHEN & HOW

The ECoPs are to be implemented by villages and/or contractors, with the support of village CFs/IFs/LFs and engineers of the Department of Rural Development (DRD) (or) with the support of technical/safeguards supervision firm and responsible staff of GAD at township level. While CFs will focus on the socialisation of the relevant Code and its adoption into community proposals, the technical or livelihood facilitators and DRD township engineers will be responsible for the adoption of the codes into their technical design for the subprojects. The adoption of these codes will be closely supervised and supported by the state/regional PPCP infrastructure team and DRD engineers at the union level.

The ECoPs will be adopted throughout the project cycle, mainly in step 3, 4, 5, 10 and 14 of project cycle (during proposal development stage and subproject implementation stage of subprojects). The adoption of ECoPs will be monitored through the Project's quarterly and annual progress report submitted by the DRD at the Union level. One section of the report should be made available for assessing the application of this environmental management tool; this may include issue(s) or problem(s) in the field and measures or actions undertaken in solving the problem(s).

All subprojects under the Project shall apply this ECoPs. Specifically, this ECoP applies to all type of eligible investments and livelihoods activities (open menu) financed; these comprise small and medium -scale infrastructure rehabilitations/ new constructions based on an open menu, and typically include small feeder roads, foot-paths and bridges, small jetty, small dykes, water supply systems, rehabilitation of class rooms and health centres, and small-scale rural electrification. Each subproject proposal will adopt a relevant section of the ECoP. The list of subprojects in this ECoP will be updated as needed to cover additional activities as needed. Facilitation Partners (CFs, IFs, LFs, TSSCs) are responsible to ensure the adoption of this specific code into the proposal.

3. Environmental Codes of Practice

Annex 2a General ECoPs for Infrastructure Subprojects

A. General Guidelines (applicable to most rehabilitation and construction activities)	
Issue	Environmental Prevention/Mitigation Measures
1. Noise during construction	<ul style="list-style-type: none"> a) Plan activities in consultation with communities so that noisiest activities are undertaken during periods that will result in least disturbance. b) Use noise-control methods such as fences, barriers or deflectors (such as muffling devices for combustion engines or planting of fast-growing trees). c) Minimize project transportation through community areas where possible. Maintain a buffer zone (such as open spaces, row of trees or vegetated areas) between the project site and residential areas to lessen the impact of noise to the living quarters.
2. Soil erosion	<ul style="list-style-type: none"> a) Schedule construction during dry season. b) Contour and minimize length and steepness of slopes. c) Use mulch, grasses or compacted soil to stabilize exposed areas. d) Cover with topsoil and re-vegetate (plant grass, fast-growing plants/bushes/trees) construction areas quickly once work is completed. e) Design channels and ditches for post-construction flows and line steep channels/slopes (e.g., with palm frowns, jute mats, etc.).
3. Air quality	<ul style="list-style-type: none"> a) Minimize dust from exposed work sites by applying water on the ground regularly during dry season. b) Avoid burn site clearance debris (trees, undergrowth) or construction waste materials. c) Keep stockpile of aggregate materials covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals. d) Reduce the operation hours of generators /machines /equipment /vehicles as much as possible. e) Regular maintenance of generators/machines/equipment/vehicles. f) Control vehicle speed when driving through community areas is unavoidable so that dust dispersion from vehicle transport is minimized.
4. Water quality and availability	<ul style="list-style-type: none"> a) Activities should not affect the availability of water for drinking and hygienic purposes. b) No soiled materials, solid wastes, toxic or hazardous materials should be poured or thrown into water bodies for dilution or disposal. c) Avoid the use of waste water pools particularly without impermeable liners.

A. General Guidelines (applicable to most rehabilitation and construction activities)	
	<p>d) Provision of toilets with temporary septic tank.</p> <p>e) The flow of natural waters should not be obstructed or diverted to another direction, which may lead to drying up of river beds or flooding of settlements.</p> <p>f) Separate as best as possible concrete works in waterways and keep concrete mixing separate from drainage leading to waterways.</p>
5. Solid and hazardous waste	<p>a) Segregate construction waste as recyclable, hazardous and non-hazardous waste.</p> <p>b) Collect, store and transport construction waste to appropriately designated/ controlled dump sites.</p> <p>c) Maintain waste (including earth dug for foundations) at least 300 metres from rivers, streams, lakes and wetlands.</p> <p>d) Use secured area for refuelling and transfer of other toxic fluids distant from settlement area (and at least 50 metres from drainage structures and 100 metres from important water bodies); ideally on a hard/non-porous surface.</p> <p>e) Train workers on correct transfer and handling of fuels and other substances and require the use of gloves, boots, aprons, eyewear and other protective equipment for protection in handling highly hazardous materials.</p> <p>f) Collect and properly dispose of small maintenance materials such as oily rags, oil filters, used oil, etc. Never dispose spent oils on the ground and in water courses as it can contaminate soil and groundwater (including drinking water aquifer). If we do have to dispose spent oil unexpectedly, we should use safe disposal method capable by rural community. For example- burning spend oil as fuel.</p> <p>g) After each construction site is decommissioned, all debris and waste shall be cleared.</p>
6. Health and Safety	<p>a) When planning activities of each subproject, discuss steps to avoid people getting hurt. It is useful to consider:</p> <ul style="list-style-type: none"> • Construction place: Are there any hazards that could be removed or should warn people about? • The people who will be taking part in construction: Do the participants have adequate skill and physical fitness to perform their works safely? • The equipment: Are there checks you could do to make sure that the equipment is in good working order? Do people need any particular skills or knowledge to enable them to use it safely? • Electricity Safety: Do any electricity good practices such as use of safe extension cords, voltage regulators and circuit breakers, labels on electrical wiring for safety measure, aware on identifying burning smell from wires, etc. apply at site? Is the worksite stocked with voltage detectors, clamp meters and receptacle testers? <p>b) Mandate the use of personal protective equipment for workers as necessary (gloves, dust masks, hard hats, boots, goggles).</p> <p>c) Follow the below measures for construction involve work at height (e.g. 2 meters above ground);</p> <ul style="list-style-type: none"> • Do as much work as possible from the ground. • Do not allow people with the following personal risks to perform work at height tasks: eyesight/balance problem; certain chronic diseases – such as osteoporosis, diabetes, arthritis or Parkinson’s disease; certain medications – sleeping pills, tranquilisers, blood pressure medication or antidepressants; recent history of falls – having had a fall within the last 12 months, etc. • Only allow people with sufficient skills, knowledge and experience to perform the task.

A. General Guidelines (applicable to most rehabilitation and construction activities)	
	<ul style="list-style-type: none"> • Check that the place (eg a roof) where work at height is to be undertaken is safe. • Take precautions when working on or near fragile surfaces. • Clean up oil, grease, paint, and dirt immediately to prevent slipping; and • Where possible provide fall protection measures e.g. safety harness, simple scaffolding/guard rail for works over 4 meters from ground. • Keep worksite clean and free of debris on daily basis. • Provision of first aid kit with bandages, antibiotic cream, etc. or health care facilities and enough drinking water. • Keep corrosive fluids and other toxic materials in properly sealed containers for collection and disposal in properly secured areas. • Ensure adequate toilet facilities for workers from outside of the community. • Rope off construction area and secure materials stockpiles/ storage areas from the public and display warning signs. Do not allow children to play in construction areas. • Fill in all earth borrow-pits once construction is completed to avoid standing water, water-borne diseases and possible drowning.
7. Other	<ol style="list-style-type: none"> a) No cutting of trees or destruction of vegetation other than on construction site. b) No hunting, fishing, capture of wildlife or collection of plants. c) No use of unapproved toxic materials including lead-based paints, un-bonded asbestos, etc. d) No disturbance of cultural or historic sites.

Annex 2b. Specific ECoPs for Infrastructure Subprojects

Subproject Type	Environmental Prevention/Mitigation Measures
Buildings	
In general,	<ol style="list-style-type: none"> a) Provide adequate drainage in the building's immediate surroundings to avoid standing water, insect related diseases (malaria, etc.) and unsanitary conditions. b) Include sanitary facilities such as toilets and basins for hand-washing. c) Restrict use of asbestos cement tiles as roofing. d) Tiled floors are preferred for easier cleaning and more hygienic.
Schools, community recreation centres (including: child care centres, telecommunication centres), rural health centres and markets.	<ol style="list-style-type: none"> a) Schools/health centres: Maximise natural light and ventilation systems to minimise needs for artificial light and air conditioning; use large windows for bright and well ventilated rooms. b) Health centres: <ul style="list-style-type: none"> • Provide adequate area for treatment, waiting area and patient's rooms, all of which should be well ventilated. • Include facilities for proper disposal of health and biological wastes (syringes, blood, etc.) • Install sufficient toilets and fire-fighting system c) Markets: <ul style="list-style-type: none"> • Tiled/paved floor is preferred for easy cleaning and maintenance. Slope floor for drainage. • Provide garbage/waste disposal that can be emptied regularly. • Separate the stalls/shops in the market for dry and wet produce/products. • Ensure the stalls/shops have covers/roof to avoid standing waters during rainy seasons.

Subproject Type	Environmental Prevention/Mitigation Measures
	<ul style="list-style-type: none"> • Install sufficient toilets and fire-fighting system
Rural Roads, Bridges and Jetties	
Roads connecting villages, between villages and townships.	<p>General Considerations:</p> <ol style="list-style-type: none"> a) Control placement of all construction waste (including earth cuts) to approved disposal sites (at >300 m from rivers, streams, lakes, or wetlands). If we do have to dispose spent oil unexpectedly, we should use safe disposal method capable by rural community. For example- burning spend oil as fuel. b) Erosion control measures should be applied before the rainy season begins, preferably immediately following construction. Maintain, and reapply the measures until vegetation is successfully established. c) Sediment control structures should be applied where needed to slow or redirect runoff and trap sediment until vegetation is established. d) Avoid road construction in unstable soils, steep slopes and nearby river banks. Additional measures (see the section below) need to be applied should there be no alternatives for road alignments. <p>Protect slopes from erosion and landslides by the following measures:</p> <ol style="list-style-type: none"> a) Indigenous Species, fast-growing grass on slopes prone to erosion. These grasses help stabilise the slope and protect soil from erosion by rain and runoff. Locally available species possessing the properties of good growth, dense ground cover and deep root shall be used for stabilisation. b) Provide interceptor ditch, particularly effective in the areas of high intensity rainfall and where slopes are exposed. This type of ditch intercepts and carries surface run-off away from erodible areas and slopes before reaching the steeper slopes, thus reducing the potential surface erosion. c) For steep slopes, a stepped embankment (terracing) is needed for greater stability. d) Place a retaining wall at the lower part of the unstable slope. The wall needs to have weeping holes for drainage of the road sub-base, thus reducing pressure on the wall. e) Rocks (riprap) can be used in addition to protect the slope. f) Prevent uncontrolled water discharge from the road surface by sufficiently large drainage ditches and to drain water away from the down slope.
Small bridges (less than 10 meters) and Jetty	<p>Erosion protection:</p> <ol style="list-style-type: none"> a) The main method of slope and erosion protection is the construction of gabions (gravity walls that support jetties bankment or slopes which have a potential to slip) and ordinary stone pitching. <ul style="list-style-type: none"> • The slope of gabions should be in the ratio of at least 1 vertical: 2 horizontals. Flatter slopes may be adopted depending on the site terrain. • The filling of the gabions should be from strong and competent rock which is laid very closely packed to maximize the weight. • Bracing wire should be used to prevent the gabion bulging out. The bracing wire should be placed at each third of the gabion height. • The gabions should be firmly anchored into the ground by founding the gabions below the expected scour depth level. • In cases where stone pitching is not provided, the top layer should be covered by soil to encourage the growth of grass and the stabilization of the slopes. b) Stone pitching may be provided as the only erosion protection measure in those cases where

Subproject Type	Environmental Prevention/Mitigation Measures
	<p>the erosion potential is deemed minimal. Stone pitching is not very resistant to strong water current and is mainly used as the top finish on gabion walls.</p> <p>Water Quality and Fauna:</p> <ul style="list-style-type: none"> a) Restrict duration and timing of in-stream activities to lower flow periods (dry season) and avoid periods critical to biological cycles of valued flora and fauna (e.g., spawning) b) Water flow diversion should be avoided; if it is impossible to avoid, impacts should be assessed and mitigation proposed. c) Establish clear separation of concrete mixing and works from drainage areas and waterways
Culverts	<ul style="list-style-type: none"> a) Remove all formwork from inside the culvert (after concrete has reached full strength). Formwork that is not removed will rot eventually, drop down and obstruct the free flow of water. b) Place large stones at the outlet of the culvert to prevent erosion. c) Keep the culvert inlets free from sand and gravel – the water must flow through the culvert. d) Build a sand trap upstream of the culvert to prevent accumulation at culvert inlets (sand traps will have to be cleaned periodically). e) Ensure that the water of the adjacent road sections can flow freely into the roadside ditch.
Rural Water Supply	
Wells (deep/shallow)	<ul style="list-style-type: none"> a) Should be equipped with slab around the well for easier drainage, a crossbeam and a pulley to support the use of only one rope and bucket for collecting water. One rope and bucket is more hygienic for the well and water b) Steel rungs (placed inside wall of a deep well) are essential for maintenance of a well or in case of an emergency. c) A groundwater well usually has a wide open water area. It is necessary to provide a cover/roof/wire mesh on top to protect this area from falling leaves or debris. d) Wells should always be located upstream of the septic tank soak-away. Build the soak-away as far away as possible from the well (minimum 15 m/50 feet) as it can influence the quality of the drinking water when it is too close. e) Before using a new water source, take samples for testing; minimum key parameters for water testing: total coliform, pH, Arsenic, Nitrate, color, turbidity, and temperature. Water quality should also be monitored in the case of all wells rehabilitations as part of the project.
Spring	<ul style="list-style-type: none"> a) Every spring capture should be equipped with a filter and a sand trap. Add a wall between the inflow and the outlet pipe to create chamber for settling out sand; build the wall with a notch (lowered section) for controlled flow. Sand must be cleaned out periodically (O&M). b) Collection basin for spring capture needs to have a perforated PVC pipe (holes diameter 2mm) to be used as a screen for the water intake. Alternatively, a short pipe with wire mesh (screen) around the open end should be provided. c) Collection basin needs to have a fence to protect the spring from public access and risk of contamination; and a roof/cover over the spring to prevent leaves or other debris from entering the basin.
Rainwater harvesting	<ul style="list-style-type: none"> a) Rainwater storage reservoir should be intact, connected to roof gutter system, with all faucets and piping intact. b) If distribution pipes are attached into the storage reservoir, install the distribution pipes 10cm above the storage/tank bottom for better use of the storage capacity. c) Cover must be fitted tightly onto the top of the storage reservoir to avoid overheating and growth of algae (from direct sunlight), and to prevent insects, solid debris and leaves from entering the storage tank. d) A ventilation pipe with fly screen should be placed in the cover to help aerate the tank/reservoir which is necessary for good water quality. e) Roof gutters need to be cleared regularly, as bird and animal feces and leaf litter on roofs or guttering can pose a health risk if they are washed into the reservoir tank. f) Reservoir tanks need an overflow so that in time of really heavy rain, the excess water can drain away. The overflow should be designed to prevent backflow and stop vermin/rodents/insects entering the system. A good design will allow the main storage tank to overflow at least twice a year to remove built up of floating sediment on the top of the stored water and maintain good water quality.

Subproject Type	Environmental Prevention/Mitigation Measures
Installation / Rehabilitation of pipelines from Natural Springs	<p>Preventing contamination at water sources:</p> <ol style="list-style-type: none"> Build a structure with roof over the water source to prevent leaves or other debris from entering into the basin. A fence is needed to protect the water sources (springs particularly) from public access and risk of contamination. The sand/gravel filter traps sediment before the spring flow enters the collection chamber and has to be changed during periodical maintenance. <p>Pipe Laying:</p> <ol style="list-style-type: none"> PVC water transmission and distribution piping need to be buried underground (coverage 50cm minimum) to prevent pipe against external damage (e.g. passing vehicles, solar UV radiation, etc). Exposing PVC pipe to UV radiation causes the plasticiser in the PVC pipe to evaporate causing loss of integrity and brittleness. Pipe shall be laid in a straight line, over a constantly falling slope. When conditions do not allow piping to be buried (i.e. pipe is used above ground), then metal pipe must be used, and supported/braced as excessive movement may lead to leaks and breaks. Outlet pipes and fittings from water storage/basin shall not be PVC pipe due to exposure to solar UV/sunlight. Metal piping and fittings are preferred. When the distribution pipes are laying via forest area, the following considerations are needed: <ul style="list-style-type: none"> The route must be considered with minimum effects of changing the existing situations of the forest as well as the least habitats area of the animals Setbacks distances from important natural features (e.g. mineral licks, wildlife features such as nest, leks, dens, staging areas, lambing areas, calving areas) to conserve wildlife values should be kept, if necessary.
Rural Electrification	
Pico hydro (<30kw)	<ol style="list-style-type: none"> At genset installation, make sure that exhaust pipe ends at the wall side of shed, as the fumes in the shed are unhealthy for the operators. Avoid pointing exhaust pipe end toward nearby house or building to avoid air pollution impact to nearby resident.
Solar street lighting	<ol style="list-style-type: none"> Tidy wiring for easy maintenance and reduces the risk of accidents.
Diesel generator (<20kilovolt-amps)	<ol style="list-style-type: none"> Electrical cabling connections for street lighting need to be protected against rain to prevent short circuits. A concrete/steel pole foundation (min 80 x 80 x 100 cm) is essential for safe lighting and power distribution and a suitable size (minimum depth = 60cm) can be used for other pole foundation. Location of Generator: <ul style="list-style-type: none"> Where possible consider a location that has less noise impact to nearby areas. Maintain a buffer zone, such as open spaces, row of trees or vegetated areas, between the generator set and residential areas to lessen the impact of noise to the living quarters. Give priority to locations that are not prone to flooding. Grease traps or containers should be used to capture potential oil spillage from the diesel engine. The exhaust pipe from the diesel engine should be checked for its height according to relevant technical specifications.
Biogas charge station	<ol style="list-style-type: none"> Adequate level of maintenance is needed to prevent pipes getting blocked and leaking. No open flames should ever be used near a digester, and adequate ventilation is needed. When handling waste material, exercise appropriate precautions by using personal protective equipment to avoid contact with manure. Washing after working around the digester is recommended. It is particular recommended to wash hands before eating and drinking and before touching the eyes or other mucous membranes. Keeping the digester facility clean will reduce disease hazards as well as the spread of odors

Subproject Type	Environmental Prevention/Mitigation Measures
	<p>and fly and mosquito populations in the digester facility.</p> <p>e) Proper handling and disposal of spent waste material.</p>
Biomass generator (<15 kilovolt-amps)	<p>a) Biomass fuel storage should be located close to the boiler. Extended conveyance and elevation changes lead to increased technical complexity (with health and safety implications) and higher capital investment and maintenance costs.</p> <p>b) Ash content from combustion of biomass generator needs to be buried.</p> <p>c) A storage facility for agricultural wastes must be located at least 15 m from any watercourse and 30 m from any source of water for domestic purposes. If this recommended setback distance is not feasible, additional steps should be taken to ensure impacts from the storage waste pile are mitigated.</p> <p>d) Storage sites should be located at a level area and well drained. Low lying, poorly drained areas should be avoided to ensure there is no standing water.</p> <p>e) Surface run-off from the surrounding area should be directed away from the storage waste pile.</p> <p>f) If ash can be used as fertilizer, it should be given to community with the best method to mix the ash with other compost.</p>
Small-scale Irrigation	
Small-scale irrigation	<p>a) Masonry walls (along the road) or stone riprap should be built to prevent erosion on a sloped bank.</p> <p>b) May use bamboo as bank protection along the rice fields as the loads are low.</p> <p>c) A screen bar is essential in front of any inlet structure (upstream) to prevent large objects and debris blocking the irrigation canal.</p>
Sanitation Facilities	
Public latrines/toilets	<p>a) All toilets must have a septic tank made from non-permeable material such as concrete, plastic or fiberglass to provide primary treatment of fecal waste.</p> <p>b) PVC pipe used to connect pour-flush toilet to a septic tank must be buried underground or covered over (with cement) for protection and to prevent exposure to sunlight.</p> <p>c) Metal pipe is a preferred choice to be used as the gas vent pipe on septic tanks. Never use PVC pipe as it is unable to withstand long-term exposure to sunlight.</p> <p>d) A toilet should be at least 20 meters from water sources (well, spring, river).</p>
Small-scale waste treatment facilities	<p>Septic tanks:</p> <p>a) Septic tanks must have a vent pipe to prevent the build-up of gas inside the chamber and shall have a 'manhole' that provides access inside the tank if needed.</p> <p>b) Ensure that the septic tanks have two chambers: first chamber is for settling of sludge, and the second chamber is for aerobic treatment. These chambers will generally treat wastewater better. Partially treated septic tank effluent can pollute groundwater and surface water.</p> <p>c) Do not discharge septic tank effluent to an open drain or other surface water. The effluents need to be treated before final disposal. This may be achieved through: (i) an underground leach field, (ii) a vegetated leach field, or (iii) a pit for soaking away.</p> <p>d) Septic tanks must be inspected periodically and the accumulated sludge must be emptied (by pumped out) every few years for the tank to continue to function properly.</p> <p>Solid waste disposal (wastes from rural market):</p> <p>a) Solid waste depots/disposal need to be located on hard-standing areas that prevent waste entering surface or groundwater.</p> <p>b) Waste depots/storage/disposal should be contained, sealed and/or roofed/covered to prevent storm water contamination. Wastes need to be emptied regularly.</p>

Annex 2c. General ECoPs for Livelihood Support Subprojects

Subproject Type	Environmental Prevention/Mitigation Measures
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<i>In general,</i>	
To minimize water pollution	<ul style="list-style-type: none"> a) Avoid any activity causing excessive erosion and turbidity. b) Keep waste and hazardous materials (e.g. used batteries, used oils, etc.) away from surface water bodies, drinking water sources and do not dispose of waste in creeks or rivers. c) Properly dispose contaminated wastewater and hazardous materials, if any, passing through conventional treatment process such as screening, settling, oil-water separation, etc. d) Avoid contamination of drinking water source (e.g. well) from inflow of waste materials and pollutants. e) Avoid large-scale animal farming and aquaculture activities in water catchment area.
To minimize air pollution	<ul style="list-style-type: none"> a) Limit burning post-harvest waste material in close proximity to village b) Reduce dust generation through application of water where practical. c) Limit idling of vehicles, machineries equipment.
To minimize noise disturbance	<ul style="list-style-type: none"> a) Repair and maintain machineries for safe and quiet operation. b) Avoid emission of continuous/noisy sounds during working.
To minimize soil pollution	<ul style="list-style-type: none"> a) Store petrol / diesel on impermeable floor (e.g. compacted clay, concrete floor) and surrounded by an embankment or berm. b) Storage for hazardous materials including petroleum should be above ground and isolated. c) Establishing an appropriate disposal area for hazardous materials and waste where prevents hazardous material from leaching into the soil and surface water.
To minimize impact from non-agricultural waste generation	<ul style="list-style-type: none"> a) Collect waste systematically, store and dispose at appropriately designated dump sites, far away from households. b) Reuse and recycle appropriate and viable materials. c) Segregate hazardous and non-hazardous wastes.
To minimize emergency risks	<ul style="list-style-type: none"> a) Build appropriately designed infrastructure safe from natural hazards. b) Avoid areas prone to natural hazard events (flooding, spring tides, etc.), steep slopes and vulnerable to erosion and landslides, etc.
To secure the safety	<ul style="list-style-type: none"> a) Proper use and management of hazardous materials and waste. b) Awareness of dangers on working area, occupation, health and safety equipment through signage where applicable. c) Lock storage of fuels, paints, and chemicals.

Annex 2d. Specific ECOPs for Livelihood Support Subprojects

Subproject Type	Environmental Prevention/Mitigation Measures
<i>Training Activities</i>	<ul style="list-style-type: none"> a) Select suitable location for holding training activities where disturbance to nearby residents are limited. b) Minimize activities that generate excessive noise. c) Limit garbage to a minimum, store and dispose properly in designated area.
<i>Agriculture Related Livelihood Activities</i>	
Agriculture	<ul style="list-style-type: none"> a) Use sustainable agricultural practices / approaches / technologies. (e.g., Agroforestry Practices, Polycultures and Crop rotation, Integrated Pest Management (encouraging the predators of crop-eating pest insects such as birds and bats), etc.) b) Reduce top-soil losses from erosion and the reduction in soil fertility. (Cover Crops and Mulches (Establishing leguminous ground cover and applying plant residues), Grass Barriers (planting grass in strips along the contour lines), etc.) c) Induce conservation and efficient use of water. d) Reduce misuse of agrochemicals, contributing to a reduction of toxic substances in soil and water. e) Reduce usage of pesticides and promote integrated pest management approaches recommended by DOA. f) Reduce, recycle and reuse the agricultural waste (natural, animal, plant waste)

Community Forest	<ul style="list-style-type: none"> a) Community Forest establishment shall comply with Myanmar regulatory requirements. b) Avoid infringing on: <ul style="list-style-type: none"> • Protected natural sites, watersheds and wilderness areas. • Critical wildlife habitats or areas with significant biodiversity (e.g. wetlands). c) Select sites where the benefits from the new community forest can help reduce illegal or unsustainable uses of nearby forest. d) Use low impact equipment and methods for forest management and harvesting. e) Avoid overusing fertilizers, herbicides and pesticides and avoid any use of those near water bodies. f) Restrict introduction of non-native invasive species.
Livestock Related Livelihood Activities	
Capture Fish	<ul style="list-style-type: none"> a) Abide by local regulations regarding fishing seasons announced by Department of Fisheries, closed fishing areas, allowable equipment or methods of capture, etc. b) Consideration of sustainable fishery practices to reduce overfishing. c) Avoid disposing discarded fishing nets into the waterbody. d) Reduce incidental captures (Particularly non-target or protected species)
Culture Fish	<ul style="list-style-type: none"> a) Avoid pond construction during rainy seasons. b) Ensure proper siting, design and construction of pond to avoid failure. c) Flushing or exchange of pond water frequently enough to prevent the deterioration of water quality in pond. d) Monitor incidence of fish diseases. e) Prevent contamination of exogenous fish species. f) Encourage regular dredging and proper disposal of waste material to avoid contamination of surrounding water and water way.
Animal Husbandry	<ul style="list-style-type: none"> a) Fence off water bodies from grazing animals. b) Regularly collect and store manure for composting and later application to fields to reduce noxious odor and to limit spread of pathogens. c) Keep manure and urine away from the household areas and water bodies. d) Regular cleaning of livestock sheds and feeding pens. e) Identify and contain sick animals and develop containment and cull procedures for adequate removal and disposal of dead animals. f) Define communications protocol to notify village veterinary volunteer or local veterinary authority of the incident

Annex 3: FORM 2: ENVIRONMENTAL MANAGEMENT PLAN

The completed form will be attached to the subproject proposal. The EMP will be approved by the DRD township engineer.

Region / State :	
Township:	
Village tract:	
Village:	
Subproject ID:	
Infrastructure Facilitator :	

Activities	Project Type	Potential adverse impact(s)	Mitigation measure(s)	Monitoring indicators	Responsibilities	Implementation schedule	Cost estimates

Name:

Position:

Chairperson, Village committee

Signature:

Date:

Annex 4: Chance Find Procedure for Physical Cultural Resources

Annex 4a: Physical Cultural Heritage

Definition of PCRs

PCRs include cultural heritages sites, historical sites, remains and objects including structures or groups of structures having archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. This includes Ancient Monument and Ancient Objects defined by Myanmar legislation as described below.

Definitions of “Ancient Monuments” under the Protection and Preservation of Ancient Monuments Law (26 August 2015)¹⁰

Chapter I Section 2(a): “Ancient Monument” means building sites lived, made, used and built by human beings including geological environments where fossils of over one hundred years old are found above or under the ground or above or under the water.

Chapter III Section 4: The following buildings which are consistent with the definitions in sub- section (a) of Section 2 are specified as ancient monuments:

- a. religious buildings including zedi, stupa, temple, monastery, brick monastery, rest house, buddhist ordination hall, worship monument, brick mounds and collapsed damages;
- b. ancient city, palace, city wall, moat, earth bunker, gate, archway, gateway, forts, residential buildings, residential site, garden, working site, and ancient mounds dwelt by ancient people and their remains;
- c. natural or man-made cave where human beings had dwelt, natural cave, ancient rock cave, other residential place and geological environments including mound, brook, depression, hole, ravine, and river terrace where ancient people had dwelt and the places where primates and other fossils are found;
- d. place where objects of ancient people were made, pottery kiln, glazed kiln, iron furnace, glass furnace and other metal furnace and places related to them;
- e. ancient monument, road, bridge, excavations, well, lake, pond and, gravel stone made as monumental structure, stone pillar, heaped stone, cemetery, burial site, burial building, cave and pavilion;
- f. epigraphy, archive and the building where they are placed or epigraph cave, monumental structure, pillars and stone slabs;
- g. the buildings that should be protected and preserved by the State because of

¹⁰Source: UNESCO Cultural Heritage Laws Database

their high cultural, historical, architectural and artistic value;

h. other buildings stipulated as listed ancient monuments by the Ministry of Religious Affairs, and Culture (MoRAC) by notification.

Definitions of “Antique Objects” defined by the Protection and Preservation of Antique Objects Law (22 July 2015)¹¹

Chapter I Section 2(a): “Antique Object” means objects which are used by human beings including fossils over one hundred years old in above or under the ground or in above or under the water.

Chapter III Section 4: The following objects which are consistent with the definitions contained in sub-section (a) of section 2 are specified as antique objects:

- i. tangible and intangible cultural heritage including fossil, corpse and bones of human beings and various types of animals;
- j. Buddha image, votive tablet, mural painting, cloth painting, figurine, collapsed damages and religious objects;
- k. work of arts including stucco curving made on reliable religious buildings of the public;
- l. tools made of stone, bronze, iron or any metal or bone, tusk, horn of animal or wood or bamboo;
- m. silver casting objects including coin made of gold, silver, bronze, iron or any metal, earthened coin or terracotta coin and pieces of gold, pieces of silver used as currency, gold bowl and silver bowl;
- n. carved objects including statute, image and relief made of gold, silver, stone, bronze, iron or any metal or earth, terracotta, cement, brick, stone, wood or bone, tusk, horn of animal;
- o. royal regalia and royal objects;
- p. vehicle including palanquin, coach and cart;
- q. epigraphical evidences including stone inscription, inscribed brick, bell inscription, ink writing, gold inscription, silver inscription, copper inscription, glazed plaque script, votive tablet script, manuscript, leather script, print, palm-leaf manuscript, folding parchment, alphabet, seal and logo;
- r. handicrafts pertaining to ten kinds of Myanmar traditional art and crafts;

¹¹Source: UNESCO Cultural Heritage Laws Database

- s. relief and other wood carving made decorations in residential building including public rest house, metal carving, work of arts including stone engraving, petroglyph and earthen ware;
- t. clothing including Myanmar turban, supreme head, head plate and clothes;
- u. ornaments;
- v. measuring tools including weight, measurement basket for grain and scale;
- w. utensils including harrow, plough, pottery hammer and weaving instruments;
- x. pottery, glazed ware, stone pot, stone bowl, porcelain and utensils including pot, bowl, plate, spoon and lacquer-ware made of gold, silver, bronze or any metal;
- y. musical instruments including drum, gong, flute, oboe, cymbal(lingwin), brass gong and Myanmar orchestra (saing waing);
- z. ornaments worn on animals including elephant, horse and cattle;
- aa. Myanmar traditional playthings including earthen sherd and stonesherd;
- bb. other objects recorded as antique objects after field inspection of the Ministry.

Annex 4b: Chance Find Procedures

In case Physical Cultural Resources (PCR) are unexpectedly encountered during subproject implementation this chance find procedures shall be followed. This procedure taken into account requirements related to Chance Finding under the country legislation including the Protection and Preservation of Ancient Monuments Law (26 August 2015) and the Protection and Preservation of Antique Objects Law (22 July 2015).

- (1) Stop the construction activities in the area of chance find temporarily.
- (2) Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities i.e. Village Tract Administrative Office or the Department of Archaeology and National Museum take over.
- (3) Notify the relevant CFs/IFs who in turn will inform township DRD and the relevant Village Tract Administrative Office immediately. Township DRD will inform regional/state DRD and union DRD.
- (4) If notification is received under item (3), the Village Tract Administrator shall keep the said chance find as necessary and shall forward the information and notify

the relevant Township Administrative Office immediately.

- (5) The relevant township administrator shall promptly carry out the necessities and inform the Department of Archaeology and National Museum immediately from the date on which the information is received.
- (6) The Department of Archaeology and National Museum would be in charge of evaluation /inspection of the significance or importance of the chance finds and advise on appropriate subsequent procedures.
- (7) The Department of Archaeology and National Museum will communicate in writing to the township DRD of findings/ Chance Find report.
- (8) If the Department of Archaeology and National Museum determines that Chance Find is a non-cultural heritage chance Find, the relevant person will resume construction process.
- (9) If the Archaeological Department determines Chance Find is an isolated Chance Find, The Department of Archaeology and National Museum would provide technical supports/advice on chance find treatment with related expenditure on the treatment provided by the entity report the chance find.

Annex 5: Risk Management and Chance Find Procedures for UXO/Landmines

Definition of UXO/Landmines

Unexploded Ordnance (UXO) - refers to munitions (bombs, rockets, artillery shells, mortars, grenades and the like) that were used but failed to detonate as intended. UXO include artillery and tank rounds, mortar rounds, fuses, grenades, and large and small bombs including cluster munitions, sub-munitions, rockets and missiles. UXOs are usually found in areas where conflict has taken place or at military firing ranges. They are often extremely unstable and can detonate at the slightest touch. Injuries can often occur when people are farming or undertaking construction work in a contaminated area and touch, move or tamper with them. UXO accidents are often more lethal than landmines due to their higher explosive and fragmentation content.

Landmines - are victim-activated explosive traps. It can target a person and/or a vehicle. A mine comprises a quantity of explosive, normally contained within some form of casing (typically in metal, plastic or wood), and a fusing mechanism to detonate the main explosive charge. Land mines are difficult to be detected with natural eyes as they are mostly covered with vegetation and soil over time or intentionally covered to hide their tracks. Some mines are placed deep in ground for specific purposes with their own methods of detonation and the land mines are created and planted by many categories according to their targeted person or things or number of casualties. They can be activated by a range of mechanisms including pressure, trip wire, electrical command or magnetic influence. Some modern mines can be initiated using other forms such as electronic sensor.

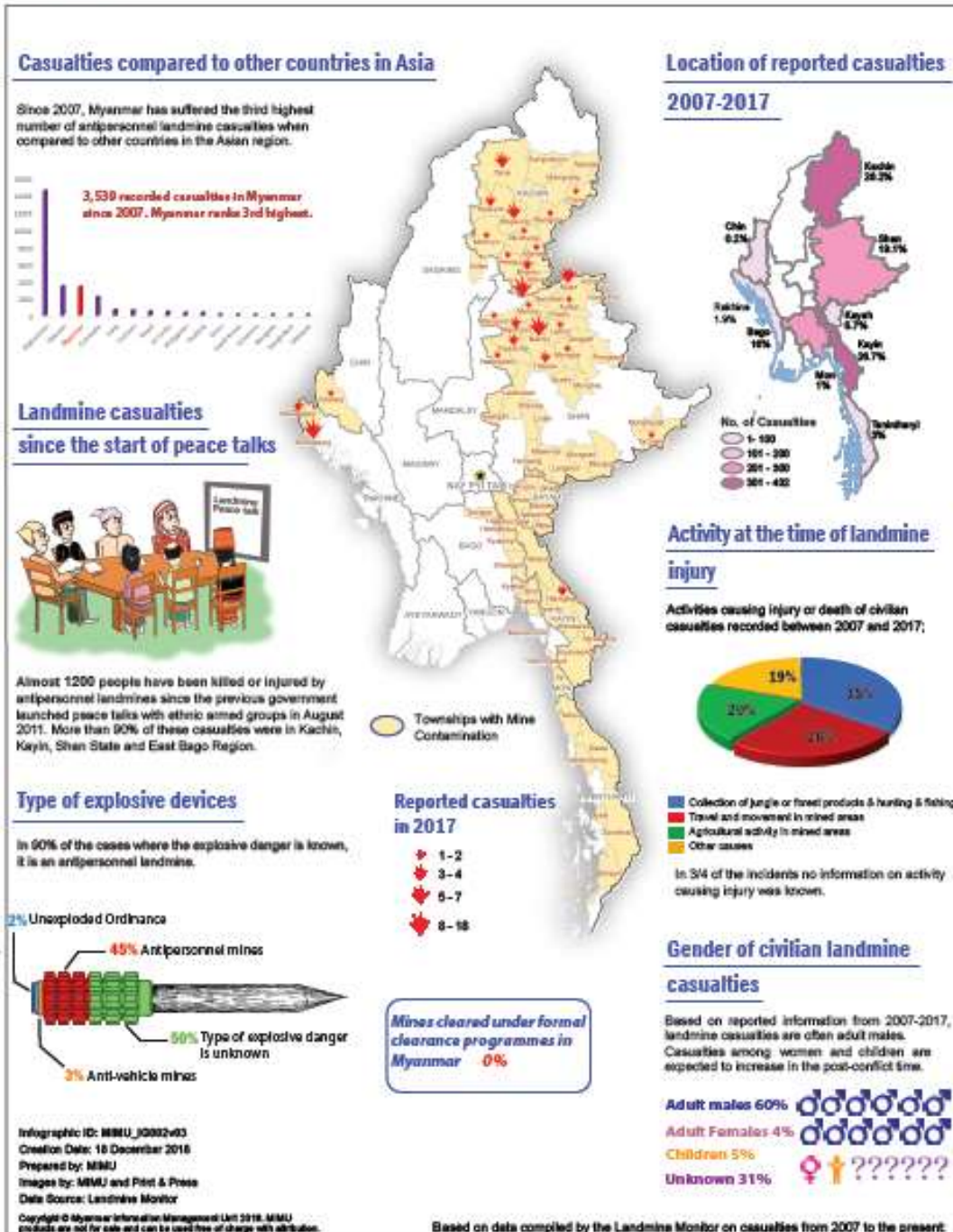
Landmines are generally classified into two types: anti-tank (or anti-vehicle) and anti-personnel. Anti-personnel mines are also commonly further divided into four categories based on their primary method of causing injury: blast; fragmentation; bounding fragmentation; and directional fragmentation.

There are many types of landmines used in Myanmar that include improvised explosive devices (IED) other than the conventional military use types that include copies of Russian PMNs (locally designated MM-2), POMZ fragmentation mines (designated MM-1), and United States' M14s. LTM-76 bounding fragmentation mines based on British or Indian designs have been found around electrical pylons according to research.

UXO/Landmine Contamination in Myanmar

In general, the Union of the Republic of Myanmar is heavily contaminated with mines resulting from the conflicts between the Tatmadaw (Government Forces) and numerous non-state armed groups affiliated with ethnic minorities. The mine-affected areas are mainly the border areas of Myanmar adjacent to Bangladesh, China, Lao, and Thailand, and pose a particular threat in northern and eastern parts of the country.

Among the States and Regions, Kachin, Kayah, Mon, Rakhine, and Shan States, as well as in Bago and Tanintharyi Regions suffer from some degree of mine contamination, primarily



Source: MIMU. (2018). Townships with known landmine contamination and Casualties in Myanmar (2017)

from antipersonnel mines. Kayin State and Bago Region are suspected to have the heaviest mine contamination and reach the highest number of recorded victims. It has also received reports of previously unknown suspect hazardous areas (SHAs) in townships on the Indian border of Chin State. Based on the data compiled by the Landmine Monitor for the period (2007-2017), the six states/regions of Kayin (26.7%), Kachin (26.2%), Shan (19.1%), Bago (16%) and Kayah (5.7%) account for almost all of the country's landmine related casualties (percentages per state/region indicated in parentheses). Mon had merely 1% in total of casualties. Non-technical survey conducted by international NGOs¹² have identified the following townships in the PPCP target states of having "suspected hazardous areas" (SHA).

- *Kayah state: all seven townships;*
- *Kayin state: all seven townships;*
- *Mon state: Bilin, Kyaikto, Mawlamyine, Thanbyuzayat, Thaton, and Ye;*

Status of Landmine Clearance in Myanmar

Myanmar is neither a signatory to the anti-personnel mine-ban treaty nor to the Convention on Certain Conventional Weapons. Land Release, a process that includes non-technical survey, technical survey and clearance activities, has not occurred in Myanmar yet as NGO mine action operators are not permitted to conduct clearance by either the government or ethnic minority authorities. Myanmar does not have national mine action legislation or standards. Mine survey and clearance operators of the Government (Tatmadaw Engineers) follow International Mine Action Standard (IMAS) and their own standard operating procedures.

Risk Management and Chance Find Procedures

(i) UXO/Landmine Risk Screening

Sub-project activities in specific areas of known or suspected landmine contamination are not eligible for support under PPCP. For subprojects under component 2.1, 2.2 and component 3 that involve civil/physical works, the suspected UXO/landmine prone areas with history of previous military use including old battle fields will be screened by community during subproject safeguards screening (see Form 1: Annex 1). If the screening identifies potential risk, community will consider alternative site or change subproject.

(ii) Mitigation Measures

Even after going through the risk screening and avoiding the landmine contaminated areas during screening process, there is a possibility of "chance finds" of suspected ordinance during project implementation in the sub-project areas. In order to minimize the risk of such encounters, the following measures should be followed in project implementation.

Selection of routes

¹² Mine Action Review, <http://www.mineactionreview.org/>: (Clearing the Mines 2018 Report for Myanmar)

- To select the common and safe routes used by many local people; avoid using routes not commonly traveled at early morning and night when visibility is poor; don't use highly vegetated roads or trails
- Don't go to unknown places, abandoned areas where troops previously sheltered or where battles have occurred, or where landmine explosion have occurred
- To inquire the local signs of landmines and strictly follow the rules
- To select another route in case of uncertain information of landmines on the selected route
- Do not touch objects that are not familiar or appear out of place in a given environment

Information Gathering and Sharing

- CFs/IFs/LFs should always inquiry the information of landmine prone places/dangerous places from the local villagers and always avoid these places/routes
- Awareness raising to the all personnel working or visiting the site as well as nearby community by the project IFs

Signs of landmines

- The international sign for the existence of landmine in a specific area is a skull with two crossed bones beneath it.
- Locals also warn about the landmines by using branches/sticks to form crosses, piling some stones and paint red, marking some crosses on the tree trunks, and erecting a stick in the ground and tie a cloth at the top

Preparedness

- Communities in UXO/Landmine risk areas should have information on location and contact details of nearby clinics or health facilities that can treat serious laceration and avulsion. This information should also be maintained by contractors and be notified to all workers;

Mitigation actions

- Implement a 'Chance Find' procedures (see below) which clearly defines safe actions to be taken in the event that mines or any other suspected ordnances are encountered during project implementation
- Arrange and coordinate immediate landmine disposal to minimize work stoppages when suspected objects are encountered.

(iii) Chance Find Procedure

In case of finding the suspected objects during works,

- Immediately stop all works and move out using the same path use
- Immediately restrict the entry of all the persons including the workers, in any case
- Immediately inform about the existence of landmine in a specific area to the community nearby and have to make sure no one enter those areas until the authorities arrive and the landmines are cleared
- Set the signs and markings with the use of yellow, red and blue ropes in the landmine existence area to warn the public
- After that the information about the landmine occurrence must be informed to the township DRD by the committee members and the project IFs as well as to the village tract GAD
- Then the information is step by step reported via township committee to the regional DRD, Tatmadaw, ethnic minority authorities and then to the mine clearance operators (like Tatmadaw engineers) or Non-technical survey groups (Danish Demining Group (DDG); Mines Advisory Group (MAG); The HALO Trust) while the area is still under control by the local committee.
- Clear the suspected objects with the support of relevant operators (like Tatmadaw engineers) safely

The chance find should be ultimately reported to the Union DRD (for component 2.1 and 3) and State GAD (for component 2.2) who will then report to the World Bank.

Annex 6: Pest Management Plan (PMP)

1. Introduction

The project (PPCP) is not intended to promote the use or finance procurement of chemical fertilizers or pesticides. However, increase in the production of agricultural crops is likely to increase the pest incidence and also rise in use of pesticides or agrochemicals and thus, pest control measures without having any impact on human and the environment become necessary for this project. This PMP aims to provide basic knowledge to the State/Regional government, relevant project implementing divisions such as DRD, GAD, DOA and etc., VTCs, VCs, IFs, village officials, private and public sector agencies with adequate guidance for effectively addressing the safeguard issues in line with OP 4.09.

PMP will be applicable for subproject such as rehabilitation or development of irrigation system under the Component 2 and rural livelihood improvement activities under Component 3 of PPCP project. The plan comprises the following 4 aspects: (i) application of government regulations on pesticide control, (ii) key impacts of pesticides and mitigation measures, (iii) training on safe use of chemicals and (iv) monitoring.

2. Application of Government Regulations related to Pesticides

Pesticide Law in Myanmar was firstly enacted in 1990 and has been amended in 2016. The law prescribes the principles, powers and duties of governing authority, rules and measures to be complied by the pesticide users. In accordance with the chapter (11), section (26) of the pesticide law (2016), the user of pesticide shall:

- a) comply with the instruction for use of pesticide;
- b) comply with pesticide safety guidelines published by DOA from time to time;
- c) neither keep pesticides in close proximity to foodstuffs, nor within easy reach of children;
- d) comply with the methods of disposal and destruction of the used empty container and packaging materials of the pesticide in accord with the directive of DOA;
- e) comply with the educational directives published from time to time by DOA concerning use of pesticides in the cultivated fields and the storage of harvested crops.

In line with the Chapter (14), the following prohibitions are described in section (31) to section (38) of the pesticide law (2016).

31. No one shall, import or export the pesticide and active ingredient without a permit of the Registration Board.
32. No one shall, without a license, engage in an enterprise of formulating and selling of active ingredient imported from abroad as a pesticide or of repacking and selling of pesticide imported into the country or of the retail and wholesale of the pesticide and of fumigation.

33. No one shall use the pesticide or active ingredient, apart from suppressing of outbreak of pests, in the crops or foodstuffs or beverages consumed by the public. No one shall use the pesticide or active ingredient to catch or kill any creatures.
34. No one shall employ children of 18 years and under, pregnant woman or nursing mother in handling or in use of pesticide.
35. Whoever using the pesticide shall not affect the environment or anyone by violating any condition of section 26.
36. Whoever using the pesticide shall be punished under the Penal Code when causing to occur the loss of life to anyone by violating section 26.
37. No one shall use other types of the pesticide and application methods other than types of the pesticide and application methods prescribed by the Registration Board in the storage of crops.
38. No one shall offer for sale or transport the pesticide along with foodstuffs.

In exercise of the powers and duties conferred under section (8) of the pesticide law, the Pesticide Registration Board (PRB) has banned pesticides with the Notification No (06 / 2018), dated on 9-08-2018. List of banned pesticides in Myanmar are as follows:

- ***Insecticides:*** Aldrin, Aldicarb, Alpha Hexachlorocyclohexane, Beta Hexachlorocyclohexane (BHC), Chlordimeform, Chlordane, Chlordecone, Chlorobenzilate, Dieldrin, DNOC, Ethylene Dibromide (EDB), Ethylene Dichloride, Endosulfan, Endrin, EPN, Heptachlor, Lindane (Gama Hexachlorocyclohexane), Methomyl, Methamidophos, Methyl Parathion, Monocrotophos, Mirex, Parathion Ethyl, Pentachlorophenol (PCP), Phosphamidon, Strobane (Polychloroterpenes), Toxaphene, Trichlorfon, D.D.T (Dichloro diphenyl-trichloroethane)
- ***Herbicides:*** Alachlor, Dinoseb, 2,4,5 – T and 2,4,5-TP,
- ***Rodenticides:*** Arsenic Compound, Fluoroacetamide
- ***Fungicides:*** Binapacryl, Captafol, Hexachlorobenzene (HCB), Mercury Compounds, Tributyltin,
- ***Acaricides:*** Cyhexatin
- ***Co Formulant:*** Ethylene Oxide

List of restricted pesticides in Myanmar in accordance with the Notification No (05 / 2018) of Pesticide Registration Board dated on 9-08-2018 are as follows:

- ***Fumigants:*** Methyl Bromide, Phosphine, Magnesium Phosphide
- ***Rodenticides:*** Bromadiolone, Zinc Phosphide, Brodifacoum
- ***Malarial Control:*** Fenthion

3. Key Impacts of Pesticides and Mitigation Measures

Pesticides benefit the farmers for the crop production, nevertheless, they also impose a series of negative impacts on the environment. Pesticides may easily contaminate the air, ground water, surface water, and soil when they run off from fields, escape storage tanks, and not discarded properly.

Moreover, pesticides are hazardous to both pests and humans and they become toxic to humans and non-target animal species if suitable precautions are not undertaken during transport, storage, handling and disposal. Most pesticides will cause adverse effects if they are in contact with the skin for a long time or if intentionally or accidentally ingested. Pesticides may be inhaled with the air while they are being sprayed. An additional risk is the contamination of drinking-water, food or soil.

The following mitigation measures are recommended from different aspects at every stage in order to avoid the adverse impacts on both human and the environment due to pesticides.

	Stage	Mitigation Measures¹³
1.	Before using pesticides	<ol style="list-style-type: none"> 1. 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. 2. Receive recommendations from Plant Protection Department (PPD) section of the regional DOA for proper management method for specific crop.
2.	General precautions	<ol style="list-style-type: none"> 1. The pesticide to be used must have registration number under PRB. 2. Only choose the pesticides labelled with Myanmar Language and do not use the pesticides without any label or with foreign language labels. 3. Select the pesticide which is suitable for specific pests and target plants as described on the label. 4. Do not mix any two or more pesticides at the same time. 5. Follow the instructions for use and the pre-harvest interval (PHI) as prescribed on the label. 6. Use appropriate and correct application techniques to ensure safety for the health of humans, animals and the environment.
3.	Label Reading	<ol style="list-style-type: none"> 1. Check the pesticide registration number on your product. 2. Review the date of manufacture and date of expiry. 3. Read the active ingredient and pesticide group on your product. 4. Read the target pests, dosage of product. 5. Read the pre-harvest interval (PHI). 6. Read the storage and disposal procedure for the product. 7. Read the first aid procedure. 8. Follow the instructions and safety precautions precisely written on the label.
4.	Storage and Transport	<ol style="list-style-type: none"> 1. Store pesticides in a certain place that can be locked and not accessible to unauthorized people or children. 2. Never be kept in a place where they might be mistaken for food or drink. 3. Keep them dry but away from fires and out of direct sunlight. 4. Store away from water sources. 5. Should be transported in well-sealed and labelled containers. 6. Do not carry them in a vehicle that is also used to transport food.

¹³ Instructions from PPD and Safe Use of Pesticides by WHO

	Stage	Mitigation Measures ¹³
5.	Handling / Application	<p>From Environmental Safety Aspect –</p> <ol style="list-style-type: none"> 1. Application rates must not exceed the manufacturer’s recommendations. 2. Avoid application of pesticides in wet and windy conditions. 3. Pesticides must not be directly applied to streams, ponds, lakes, or other surface bodies. 4. Maintain a buffer zone (area where pesticides will not be applied) around water bodies, residential areas, livestock housing areas and food storage areas. <p>From Health and Safety of User Aspect –</p> <ol style="list-style-type: none"> 1. Use suitable equipment for measuring out, mixing and transferring pesticides. 2. Do not stir liquids or scoop pesticides with bare hands. 3. Do not spray pesticides at the down-stream direction and during the strong wind. 4. Do not spray pesticides at the high temperature of the day (noon). 5. Do not suck or blow the blocked nozzle. 6. Do not assign pregnant women, lactating mother and children under 18 for handling and use of pesticides. 7. Protective gloves, shoes, long-sleeved shirt and full trousers shall always be worn when mixing or applying pesticides. 8. Respiratory devices (nose mask) shall be used to avoid accidental inhaling. 9. In case if any exposure/body contact with the pesticide, wash-off and seek medical aid.
6.	Disposal	<p>From Environmental Safety Aspect –</p> <ol style="list-style-type: none"> 1. Dispose any left-over pesticide by pouring it into a pit latrine. 2. It should not be disposed of where it may enter water used for dinking or washing, fish ponds, creeks or rivers. 3. Do not dispose any empty containers into river, creek, fish ponds and water way. 4. Do not burn any empty containers. 5. Decontaminate the pesticide containers by triple rinsing and use for next application. i.e. part-filling the empty container with water three times and emptying into a bucket or sprayer for next application. 6. All empty package and containers should be returned to the designated organization / individual for safe disposal. 7. If safe disposal is not available, bury the empty package and containers at least 50cm (20 inches) from ground level as much as possible. 8. The hole / disposal site must be at least 100 meters (~300 ft) away from the streams, wells and houses. 9. Do not reuse empty pesticide containers for any purposes.
7.	Personal Hygiene	<ol style="list-style-type: none"> 1. Never eat, drink or smoke while handling pesticides. 2. Change clothes immediately after spraying pesticides. 3. Wash hands, face, body and clothes with plenty of water using soap after pesticides handling.
8.	Emergency Measures	<p>Indications of Pesticide Poisoning</p> <p>General: extreme weakness and fatigue.</p> <p>Skin: irritation, burning sensation, excessive sweating, staining.</p> <p>Eyes: itching, burning sensation, watering, difficult or blurred vision, narrowed or widened pupils.</p> <p>Digestive system: burning sensation in mouth and throat, excessive salivation, nausea, vomiting, abdominal pain, diarrhea.</p> <p>Nervous system: headaches, dizziness, confusion, restlessness, muscle twitching, staggering gait, slurred speech, fits, unconsciousness.</p>

	Stage	Mitigation Measures ¹³
		<p>Respiratory system: cough, chest pain and tightness, difficulty with breathing, wheezing.</p> <p>Responsiveness General: 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.</p> <p>First Aid Treatment If breathing has stopped: Give artificial respiration (i.e. mouth to mouth resuscitation if no pesticide has been swallowed.)</p> <p>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.</p> <p>If there is pesticide in the eyes: Rinse the eyes with large quantities of clean water for at least five minutes.</p> <p>If there is ingestion: Rinse mouth, give water to drink. Never induce vomiting in unconscious or confused persons, seek medical advice immediately.</p>

4. Trainings

Trainings on pesticide management should be provided to the farmers in the areas where new or rehabilitated irrigation system would be developed with the support of Component 2 of PPCP project. Moreover, PMP training will be involved as one of the technical trainings for on-farm activities which would be conducted under the sub-component 3.1. The trainer (Burmese)/service provider hired by the facilitation partner will deliver these trainings to the target community / groups with the technical support from relevant department like PPD by using MOALI training materials. The following trainings on pesticide management are recommended to be provided:

- ❖ *Training on Policy, Laws and Regulations Regarding to Pesticides Use:* To provide basic knowledge about laws, rules, regulations and notifications enacted by the Republic of the Union of Myanmar and World Bank safeguard policy OP 4.09 on pest management.
- ❖ *Trainings for Pest Management:* To provide trainings to clearly understand the technical aspect of pesticide and skill in using them such as what are the eligible and prohibited items of pesticide in Myanmar, the level of negative impact of each eligible item, how to use them, how to protect and minimize the negative impact on the environment and human while using them, how to keep them before and after used etc.
- ❖ *Storage, handling, usage and disposal of pesticide;* To provide trainings about the

procedures of storage, handling, usage of pesticide and disposal of pesticides residues or empty containers without affecting the health and safety of user, nearby community and the environment.

5. Monitoring of Pesticide Use

Village committees (VC) in close consultation with relevant department PPD will periodically visit the target community areas and monitor the use of pesticide including –

- ❖ Ensure the pesticides used in target areas are not in the banned (or) restricted list.
- ❖ Ensure the pesticides used in target areas are properly kept and transported.
- ❖ Ensure training delivery to the farmers/ pesticide users' groups and
- ❖ Monitor compliance usage of chemical according to the Pesticide Law (2016) and related procedures.

The project implementation units of the Component 2 and 3 at union and local levels will be responsible for implementation of the PMP and ensuring full compliance, including keeping proper documentation in the project file for possible review by the World Bank. This document is considered a living document and could be modified and changed as it is appropriated. Close consultation with the World Bank and clearance of the revised PMP will be necessary.

Annex 7: Indigenous Peoples Policy Framework

I. The Policy Framework

PPCP will finance the improvement or new construction of rural infrastructure such as schools, dispensaries, small rural tracks and footpaths, water supply systems. It is expected that ethnic group communities would be present in the project areas of influence. This Indigenous Peoples Policy Framework (IPPF) aims to ensure that ethnic groups in project-covered areas would be able to:

- a. Provide input to local planning processes and activities used and undertaken to determine development priorities;
- b. Facilitate the choice of subprojects as coming from ethnic group communities themselves through informed decision-making to address local development challenges;
- c. Actively participate and lead in the design, development, and implementation of subprojects, and
- d. Provide feedback on subproject implementation, and benefits and risks to ethnic group communities.

This IPPF is developed to ensure that PPCP will be implemented in line with the Bank's OP 4.10 *Indigenous Peoples*.

II. Guidelines for Engaging with Ethnic Group Communities

The project would place a continued emphasis on ensuring that ethnic group communities understand the project concept and approach including on environmental and social safeguards, fully participate in the project processes and receive project benefits. Negative impacts that may occur to them as a result of the PPCP implementation would be avoided, minimized or avoided. With the support of CFs (CF), villagers themselves will conduct the participatory social assessment in all project villages including where ethnic groups are present. The ethnic screening will be conducted as part of the participatory social assessment in all project villages, and free, prior and informed consultations will be conducted with ethnic groups leading to broad community support for proposed subprojects, if ethnic screening finds that they are present. Details about processes and procedures for the participatory social assessment will be described in the project Operations Manual.

In order to mitigate the risk that ethnic groups are not able to fully participate in project implementation and receive project benefits, and that negative impacts may occur to them, the following measures will be employed by PPCP:

- a. Recruitment of village volunteers elected from among ethnic groups who assist the community facilitator throughout project implementation;

- b. Training of CF/IF to increase cultural awareness of issues related to ethnicity, religion and marginalization;
- c. Free, prior and informed consultations with ethnic groups of the Village and Village Tract Development Plans leading to their broad community support;
- d. Involvement of ethnic groups in the decision-making process in the VTC
- e. Qualitative monitoring and beneficiary assessments focusing primarily upon societal dynamics and ethnic groups, women, and the most vulnerable, using focus group discussions and key informant interviews; and
- f. Use of local languages in the dissemination of project related information.

III. **Implementation arrangements**

At the township level, the Township Implementation Group (TIG) and township DRD office (through the township PPCP secretariat) assume primary responsibilities for project implementation. Each Township DRD (township PPCP Secretariat) will receive technical support from technical assistance teams and the union DRD office, on issues including financial management, procurement, MIS, grievance handling and others.

At the village tract/village level, the Village Tract Committee (VTC) and village committees (VC) are responsible for ensuring that the community planning process and subproject implementation cycle at the village tract and village levels, respectively, are carried out with due diligence and efficiency and in accordance with the project Operations Manual, this IPPF and the ESMF. The VTC will develop, based on the village development plans (VDP), the Village Tract Development Plans (VTDP) which will serve as the Indigenous Peoples Plan (IPP) for this project. In each Village Tract, the village tract grievance sub-committee is established under the VC, whose tasks include supporting the grievance information campaign, monitoring progress of grievance handling activities, and collecting/receiving and responding to complaints/grievances and where necessary, referring such to the township level.

At the village level, the Village committees (VC) assume responsibility for planning, prioritizing and implementing community infrastructure subprojects. The village monitoring sub-committees are established under the Village committee (VC) and report regularly to the villagers about progress in subproject implementation. This sub-committee will supervise the implementation of the subprojects. Village Volunteers will assist the community facilitator throughout project implementation. Among other tasks, they will help enhance the involvement of ethnic groups in the decision-making process in the Village Tract Committees (VTC); participation of ethnic group representatives in village implementation committees and monitoring sub-committees; and the use of local languages in the dissemination of project-related information. The grievance focal point is selected through participatory

community meetings. The grievance focal point is responsible for handling grievances at the village level and is the primary contact point for anyone wishing to file a grievance.

IV. Framework for Free, Prior and Informed Consultations with Ethnic group Communities and the Plan to Carry Out Social Assessment

This section provides step by step procedures to ensure that ethnic group communities are adequately consulted with and participate in project activities, leading to their broad community support and their receiving project benefits in a culturally appropriate manner. It also provides guidelines how to carry out participatory social assessment in line with the provisions of the OP 4.10.

Participatory social assessments including free, prior and informed consultations, ethnic screening and identification of priorities at the village level. A series of village meetings will be held in all beneficiary villages with the support of the Community Facilitator (CF) where a participatory social assessment is conducted and villagers identify priority needs, develop village development plans and elect village volunteers and their representatives to the VTC.

The participatory social assessment will also include the screening for the presence of ethnic groups in the project area. If ethnic group communities are found to be present, their socioeconomic conditions and participation in community decision making processes as well as their perspectives on the overall project approach will be assessed as part of assessment. Free, prior and informed consultations will also be conducted as part of the assessment, in a language understandable to ethnic groups, using visual/ audio tools wherever possible. Villagers will be notified of the participatory social assessment meetings sufficiently early enough, and small group meetings will be conducted to facilitate free discussions to the extent possible.

Besides the results of ethnic screening and free, prior and informed consultations, the participatory social assessment will also address the following in order to fully meet the requirement under the OP 4.10 as the Social Assessment.

- a. Baseline information on the demographic, socioeconomic, cultural, and political characteristics of project beneficiaries including but not limited to ethnic groups, including with regard to the land and territories that they have traditionally owned or customarily used or occupied, and the natural resources on which they depend.
- b. The consultative and participatory processes during subproject implementation to allow an active and meaningful participation of project beneficiaries including but not limited to ethnic groups;
- c. The list of subprojects identified by beneficiary villagers themselves in a participatory manner and address their priority needs;
- d. Potential adverse and positive effects of subprojects identified as part of the participatory social assessment, and measures to avoid, minimize or mitigate negative

impacts and enhance positive benefits;

- e. Evidence of broad community support to the subprojects identified by beneficiary community members themselves. Where broad community support is not ascertained under the participatory social assessment, the subproject will not be implemented.

Consolidation of village priorities in Village Tract Development Plans (VTDP). The Village Tract Committees (VTC) will consolidate the village development plans into Village Tract Development Plans (VTDP) which include and prioritize the list of subprojects identified by villages that constitute the village tract. Under this Project, the VTDP will serve as the Indigenous Peoples Plan (IPP) under OP 4.10 where ethnic groups are affected within the Village Tract. The VTDP will include the following, as minimum:

- a. Affected ethnic groups. The ethnic groups present in the VT, identified under ethnic screening as part of the assessment, will be described.
- b. Summary of the findings of the participatory social assessment including the results of the free, prior, and informed consultation conducted with the affected ethnic groups, and the evidence of broad community support to the priority subprojects.
- c. A framework for ensuring free, prior, and informed consultation with affected ethnic groups during subproject implementation.
- d. Measures to ensure that ethnic groups will receive social and economic benefits that are culturally appropriate and that adverse effects on them will be avoided, minimized or mitigated.
- e. Estimation of costs to implement the VTDP including measures to mitigate negative impacts on ethnic groups and the source of fund to implement such measures.
- f. Grievance and monitoring mechanisms.

The processes for *Endorsement and Amendment of the VTDPs* are in the main body of the ESMF (section 4.2.2).

V. **Unanticipated Impact**

Indirect, and/or unanticipated impacts may become apparent during subproject implementation. Should this be noted, the VTC ensure that a participatory social assessment will be conducted, as per the above guidelines, and that the VTDP would be updated to address such unanticipated impacts in line with this IPPF.

VI. **Monitoring**

Throughout the implementation of the subproject, the village monitoring sub-committees, the Community Facilitator and the Infrastructure Facilitator will monitor any negative impacts that may arise. The Community Facilitator will regularly visit villages and receive feedback. If villagers have any questions or grievances that cannot be addressed at the community level, they will be encouraged to seek clarifications and solutions step by step reporting as of the project's grievance handling mechanism.

Social audits will be conducted on an annual basis and facilitated by the township DRD and FP team. For the social audits, the Community Facilitator will organize an open public meeting at villages (in remote areas, several villages may meet together for a social audit where convenient). Information on the meeting is posted in advance and meetings are held at such a time and place as to maximize community participation. It will provide a public forum to present problems, and air any grievances or other issues people may have with the project. The Community Facilitator will prepare minutes of the meeting that record the issues raised and how they will be addressed in the subsequent annual cycle. This information will be included in the updated VTDP, submission of which to the DRD township office is a condition for the transfer of the next annual block grant allocation.

The VTC will prepare a monthly progress report for all subprojects under implementation including on the implementation of the VTDP and any other safeguard related aspects and submits it to the DRD township M&E officer. With the assistance of the village volunteers, the monitoring sub-committee (MSC) will organize a village monitoring meeting about every two months or when major milestones have been achieved. Every effort will be made to ensure that as many villagers as possible will attend the meeting. The MSC will update villagers on all aspects of implementation progress including voluntary donations and mitigation of negative impacts, and receive feedback on the progress of the VTDP implementation and concerns they may have. The VTC will file the status of the implementation of this VTDP based on the report received from the VC and MSC and record outstanding issues and grievances collected. The township engineer and DRD township M&E officers will undertake regular supervision visits to subproject sites and review progress in implementation. They will incorporate key findings from the supervision visits into the quarterly township progress report.

The DRD union office staff and relevant union consultants will undertake regular supervision and monitoring visits to townships, village tracts and village subproject sites in order to assess project performance including on safeguards. The DRD union M&E officer will develop the quarterly project progress report which will include the following performance indicators:

- a. The number of voluntary donation cases;
- b. The total number of project beneficiaries/ affected people, broken down to ethnicity; and
- c. Grievances submitted through various channels described below, and the current

status.

All data will be disaggregated for ethnicity if more than one ethnic group reside in the beneficiary community and/ or are affected by the respective subproject. The World Bank reviews the use of safeguards screening forms and the implementation of VTDP on a random basis and carries out field trips as part of supervision missions to verify safeguard compliance in line with this IPPF, the ESMF and other relevant project documents.

VII. Information disclosure during implementation

The experience under the original NCDDP indicates that it is most meaningful and practical to explain project approaches including safeguard provisions to ethnic people orally and with visual materials. The CF and IFs in all project townships will include those who could speak at least one ethnic language, which was found to be useful to ensure that those who directly benefit from/are affected by the project understand safeguard provisions. Continued efforts will be made to develop more visual materials in all major ethnic languages to help ensure ethnic groups clearly understand the project safeguard provisions.

VIII. Grievance Redress Mechanisms

Complaints and grievances will be dealt with using the grievance handling mechanism (GHM) to ensure that the project is implemented transparently and accountably, that voices of poor and marginalized groups are heard, and that issues and grievances raised are resolved effectively and expeditiously. The key principles of the GHM are described in the Section 2.2 of the main body of the ESMF. Detailed processes and procedures are described in the project Operations Manual, and are made publicly available at the village level, including through posters and visual materials.

Annex 8: Protocols and Procedures of Voluntary Donations

PPCP will allow community members who benefit from a subproject to donate land and other private assets to the subproject without compensation. It is expected that most project impacts will be addressed through voluntary donation without any significant or long-term impact on livelihoods. **The following protocol will govern voluntary donations of private assets.**

- Voluntary donations are an act of informed consent and affected people are not forced to donate land or other assets with coercion or under duress, or misled to believe that they are obliged to do so, without regard to the ethnic background or legal status of their land occupancy.
- Voluntary donations are allowed only if a subproject can technically be implemented in another location than where it is planned – if a subproject is location-specific by nature, land acquisition associated with such a subproject cannot be considered as voluntary; rather, it is an act of eminent domain.
- Voluntary donations are allowed only for very minor impacts that meet the following criteria:
 - The households contributing land or other assets are direct beneficiaries of the subproject;
 - The total size of productive land owned by the affected household is more than 300m²;
 - The impact is less than 10 percent of the total productive assets owned by said household; and
 - No one has to be physically relocated.
- The affected people are fully informed that they have the right to refuse to donate land or other private assets, and instead receive compensation at replacement cost, and that a grievance handling mechanism is available to them through which they can express their unwillingness to donate. People are encouraged to use the grievance handling mechanism if they have questions or inquiries, either in writing or verbally. Adequate measures will be in place to protect complainants.
- The community facilitator (CF), village representatives of VTC and the VC will confirm through a face-to-face meeting that the affected people are indeed aware that they are entitled to compensation and knowingly and freely agree to donate land or other assets without compensation. The minutes of this meeting, including the confirmation that all conditions for voluntary donations are met, will be attached to the signed voluntary donation form.

- Once the informed consent of the affected people has been confirmed in writing, the VTC will develop a voluntary donation form (see Form 3 below). Both the husband and the wife of the affected household will sign two copies of the form in the presence of the CF and the village implementation committee.
- The VTC reviews and approves the signed voluntary donation form, and keeps one original signed voluntary donation form for review by DRD and the World Bank. The affected household keeps another original signed form.
- Implementation of subprojects involving voluntary donations starts only once the VTC has approved the signed voluntary donation forms.
- Annual social audits carried out by the DRD township offices verify the informed agreement of affected people.

Form 3: Voluntary Donation

Region / State:	
Township:	
Village tract:	
Village:	
Subproject ID:	
Infrastructure Facilitator :	

Name of land owner:	NRC Number:	Beneficiary of the subproject: Y/N
Sex:	Age:	Occupation:

Address:				
Description of land that will be taken by the subproject:	Area affected (sq ft):	Total landholding area (sq ft)	Ratio of land affected to total land held:	Map code, if available:
	Length (ft)			
	Width (ft)			

Description of annual crops growing on the land now and project impact:		
	Type of tree/crop	Number of trees/Area of crops
- Trees that will be destroyed		
- Fruit trees		
- Trees used for other economic or household purposes		
- Mature forest trees		
- Other significant crops grown in donated land.		
- Total: trees (#)		
- crops (area)		

Describe any other assets that will be lost or must be moved to implement the project:

Value of donated assets:

Will affected people need to be physically relocated?

By signing or providing thumb-print on this form, the land user or owner agrees to contribute assets to the project. The contribution is voluntary. If the land user or owner does not want to contribute his/ her assets to the project, he or she should refuse to sign or provide thumb print, and ask for compensation instead.

Date:	Date:
Village committee representative's signature	Affected person's signature (both husband and wife)

Annex 9: Protected Areas and Key Biodiversity Areas in Myanmar

List of Protected Area in Target States

No.	Year	Notification Number by MONREC	Name	Area (km ²)	Location
1	1928		Kahilu Wildlife Sanctuary	160.55	Kayin State, Hpa-Pu and Hpa-An Townships
2	1939		Mulayit Wildlife Sanctuary	138.54	Kayin State, Dawna Range
3	2018	151/2018	Htaung Wi Taung Geophysical Significant Reserves	0.67	Kayin State, Hpa-An Township
4	2019	02/2019	Aeit Sar Thaya Cave Geophysical Significant Reserves	0.303	Kayin State, Hpa-An Township
5	2001		Kyaikhtiyo Wildlife Sanctuary	156.23	Mon State, Kyaikhto
6	2016	013/2016	Kelatha Wildlife Sanctuary	22.45	Mon State, Bilin Township
7	2018	138/2018	Phar Baung Natural Reserves	1.80	Mon State, Kyaikmaraw Township

Annex 10: Meeting of Public Consultations (Input after Consultations)

Annex 10.1: Meeting Minutes of Public Consultations in Yangon

Minutes of Draft ESMF Public Consultation Meeting –

Annex 10.2: Meeting Minutes of Public Consultations in Naypyidaw

Minutes of Final ESMF Public Consultation Meeting

Annex 10.3: Meeting Minutes of Public Consultations in Mon, Kayah, and Kayin

Minutes of Draft ESMF Public Consultation Meetings

