

**Government of the Republic of the Union of Myanmar**

**National Community Driven Development Project**

**Environmental and Social Management Framework**

(March 30, 2017)

## Table of Contents

<b>A.</b>	<b>Introduction</b> .....	1
<b>B.</b>	<b>Project Development Objective</b> .....	2
<b>C.</b>	<b>Project Components</b> .....	2
	Selection of Project Locations .....	3
	Planning Cycle.....	3
	Sub-project Eligibility.....	5
<b>D.</b>	<b>Project Implementation Arrangements</b> .....	7
<b>E.</b>	<b>Applicable National Laws of Myanmar</b> .....	11
<b>F.</b>	<b>World Bank Operational Policies</b> .....	14
<b>G.</b>	<b>Safeguard implementation experience and lessons learned</b> .....	16
<b>H.</b>	<b>Approach/Procedures to Addressing Environmental and Social Safeguard Issues</b> .....	23
<b>I.</b>	<b>Institutional Assessment and Capacity Building</b> .....	33
<b>J.</b>	<b>Monitoring Arrangements</b> .....	35
<b>K.</b>	<b>Grievance Handling Mechanisms (GHM)</b> .....	36
<b>L.</b>	<b>Consultations and Disclosure</b> .....	38
<b>M.</b>	<b>Budget for Implementing the ESMF</b> .....	39
	<b>LIST OF ANNEXES</b> .....	41
	<b>Annex 1: Project Area Map and List of Participating Townships in Year 1 to Year 4</b> .....	42
	<b>Annex 2: FORM PC 13: SAFEGUARDS SCREENING FORM</b> .....	43
	<b>Annex 3: Environmental Codes of Practice</b> .....	47
	<b>Annex 4: Chance Find Procedure</b> .....	62
	<b>Annex 5: ENVIRONMENTAL MANAGEMENT PLAN</b> .....	66
	<b>Annex 6: FORM PC 14: VOLUNTARY DONATION</b> .....	74
	<b>Annex 7: Resettlement Policy Framework</b> .....	75
	<b>Annex 8: Indigenous Peoples Policy Framework</b> .....	85
	<b>Annex 9: FORM PC 6: FINAL SUB-PROJECT INSPECTION</b> .....	91
	<b>Annex 10 List of 47 Registered Cultural Heritage Zones in Myanmar</b> .....	94

<b>Annex 11: List of Activities/Projects Require IEE/EIA (Annex 1 to the Ministerial Notification No. 616/2015 – EIA Procedures .....</b>	<b>102</b>
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## List of Acronyms

AF	Additional Financing
CDD	Community-Driven Development
CF	Community Facilitator
DRD	Department of Rural Development
ECOP	Environmental Code of Practice
EMP	Environmental Management Plan
ESMF	Environmental and Social Management Framework
ESSAF	Environmental and Social Screening and Assessment Framework
GHM	Grievance Handling Mechanism
GoM	Government of Myanmar
JSDF	Japan Social Development Fund
IDA	International Development Association
IP	Indigenous People
IPF	Investment Project Financing
IPP	Indigenous Peoples Plan
NCDDP	National Community Driven Development Project
OP	Operational Policy
PCR	Physical Cultural Resources
PCRMP	Physical Cultural Resources Management Plan
RAP	Resettlement Action Plan
SA	Social Assessment
TA	Technical Assistance
TF	Technical Facilitator
TPIC	Township Planning and Implementation Committee
TTA	Township Technical Assistance
VPSC	Village Project Support Committee
VTPSC	Village Tract Project Support Committee
VTDP	Village Tract Development Plan

## A. Introduction

1. A core part of the reforms launched by the Government since 2011 has been an effort to move from top down to “people-centered” development. To put this approach into practice in Myanmar’s rural areas, the Government in 2012 requested the World Bank’s technical and financial support in order to assist in the design and implementation of a National Community Driven Development Project (NCDDP) that would empower communities to determine their own development path, emphasizing transparency and accountability in the use of funds.
2. Prepared in the initial stages of the World Bank Group’s re-engagement with Myanmar, the original NCDDP was prepared according to the World Bank Operational Policy (OP) 8.00 (Rapid Response to Crises and Emergencies). Following OP 8.00, the Government developed and adopted an Environmental and Social Screening and Assessment Framework (ESSAF) as the main safeguard document to be followed for specific project investments during implementation. Since sub-projects to be financed under the NCDDP are identified by communities during implementation, the ESSAF established a mechanism to 1) determine and assess potential environmental and social impacts of sub-projects at the time of their planning, and 2) set out mitigation, monitoring and institutional measures to be taken during the implementation and operation of the sub-projects to eliminate potential adverse environmental and social impacts, offset them, or reduce them to acceptable levels. More detailed information, including standard forms to be used to monitor and record environmental and social impacts during subprojects implementation are included in the project Operations Manual.
3. The original NCDDP, financed out of a \$80m IDA grant and comprising the same five components outlined in section C below, was designed to provide village tract grants to all village tracts in one township in each of the 15 states and regions of Myanmar (including the Nay Pyi Taw Union Territory). To facilitate adaptive learning, the Project adopted a gradual rollout strategy
4. In June 2015, the World Bank approved an IDA credit of \$400 million under OP10.00 (Investment Project Financing, IPF) requested by the GoM to build on the Project’s achievements and allow it to benefit a larger number of communities by expanding its geographical coverage and increasing the number of grant cycles available to beneficiary communities in a total of 63 townships across Myanmar. As part of the AF, the project’s original closing date was extended by two years to 31 January 2021. In the context of the additional financing, and in accordance with OP10.00<sup>1</sup> on IPF, the ESSAF was updated and amended in line with applicable safeguard policies (namely, OP 4.01, 4.04, 4.10 and 4.12), as an Environmental and Social Management Framework (ESMF), which was subject to public consultations in February 2015 and disclosed on 19 March 2015. The ESMF serves as the sole safeguard instrument for all activities financed under the NCDDP, including the original IDA grant, the additional IDA credit financing, parallel co-financing and complementary financing provided by other financing partners and sources, and Government parallel co-financing of sub-projects.
5. NCDDP adopted a gradual rollout strategy, beginning with three townships in year 1 and expanding to the new townships in the latter years. The current project area map and list of participating townships in year 1 to year 4 is presented in Annex 1. In the year 5, about 16 additional townships will be added, depending on availability of resources and the outcomes of the project selection process. Since becoming effective in January 2013, the NCDDP has delivered substantial results in a short period of time. Over the course of three community cycles (e.g. between 2013 and early 2017), the project financed 6,702 subprojects in 27 townships, home to 3.5 million people across over 5,400 villages. Subprojects included rehabilitation of 2340km of roads, extensions and renovations of 1,400 schools, and investments in new water supplies, electrification, jetties, libraries, health centers amid a broad range of community level

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<sup>1</sup> OP 10.00 on Investment Project Financing has replaced the old OP 8.00.

infrastructure. To date, the project has created over 1 million days of paid labor. An independent technical audit commissioned by DRD in 2016 found that 92 percent of subprojects met or exceeded technical specifications, and that subprojects were cost effective when compared to the construction of similar infrastructure through other programs, in particular once voluntary community contributions mobilized under the project were taken into account. .

6. New townships are identified during project implementation and were not known at the time the ESMF was prepared. During year 3, the project had included Nyaung-U township in Mandalay region which cover Cultural Heritage Zones listed under Myanmar Cultural Heritage Laws (Bagan area). Bagan Archaeological area and monuments is also one of cultural properties that was submitted on Myanmar UNESCO's tentative list. In year 4, two additional townships covering the protected cultural heritage zones are included in the project support (namely Natogyi township in Mandalay region and Kyauktan township in Yangon region). Since the project will be implemented in all villages in the participating townships area, which some villages are located inside or in vicinity of National Cultural Heritage Zones, the World bank safeguard policy OP 4.11 – Physical Cultural Heritages (PCR) is triggered.

7. As the project continues its strong delivery for poor and remote communities across Myanmar, additional development partners have begun to contribute to or expressed an interest in supporting the project. This includes a concessional loan from the Italian Agency of Development Cooperation (AICS), a grant from the Department for International Development of the UK government, and a grant from the Japanese Social Development Fund (JSDF) These contributions follow all project implementation arrangements and procedures as specified in the Operational Manual, including on the safeguards measures outlined in this updated ESMF.

8. Given the triggering of the PCR policy, *the ESMF has been updated to include guidance for PCR impacts screening, impacts assessment, preparation of mitigation measures and monitoring arrangement. This updated ESMF will remain the sole safeguards instrument for all activities financed under the NCDDP, including the original IDA grant, the additional IDA credit financing, parallel co-financing provided by other donors, such as a concessional loan from the Italian Agency of Development Cooperation (AICS), a grant from the Department for International Development of the UK government, a grant from the Japanese Social Development Fund (JSDF) and Government parallel co-financing of sub-projects.*

## **B. Project Development Objective**

9. The project development objective is: to enable poor rural communities to benefit from improved access to and use of basic infrastructure and services through a people-centered approach and to enhance the Government's capacity to respond promptly and effectively to an eligible crises or emergency. The objective will be achieved through: (i) financing community-identified rural infrastructure investments; (ii) strengthening the capacity of communities in partnership with local authorities to effectively identify, plan and implement their development priorities; and (iii) facilitating the participation of the poor and vulnerable, both women and men, throughout the project cycle at the community level.

## **C. Project Components**

10. Except for a geographic expansion to additional townships, the scope of the JSDF and DFID funding will remain the same as the original NCDDP and the AF and continue to support the same five

components, as elaborated below. Each component includes specific activities that seek a gender balance as well as to empower women.

11. **COMPONENT 1: COMMUNITY BLOCK GRANTS:** The NCDDP finances at least four annual cycles of annual block grant to all village tracts of at least 63 townships for priority community level infrastructure. Block grant allocations are based on the population of village tracts ranging from MMK 22,000,000 – MMK 200,000,000 per village tract. There is no minimum size for a village sub-project in the first cycle in any township. In the second and subsequent cycles, the minimum amount for a village sub-project is MMK 2,000,000. No sub-project can cost more than MMK 110,000,000, including the funds from the village tract block grant, voluntary community contributions and/or any other sources. Any sub-project that is estimated to cost MMK 40,000,000 or more must be approved by the DRD union office and receive a no objection from the World Bank prior to implementation. An exception of the maximum size of sub-projects can be sought from DRD with no objection from the World Bank in cases where two village tracts wish to work jointly on one sub-project.

12. The infrastructure to be financed is based on an open menu (with a list of non-eligible activities for community investments [negative list]) and typically include small feeder roads, foot-paths and bridges, small jetties, water supply systems, rehabilitation of class rooms and health centers, community halls and small-scale rural electrification such as micro hydro or solar panels. Considering the lack of familiarity of local authorities and communities with the concept of community empowerment, the first annual cycle in each township is limited to a positive list of sub-projects that are easier to implement (using simple standardized designs) focused on rehabilitation and minor extension works. Block grants are allocated through a participatory planning process covering all villages within a village tract, and all village tracts in selected townships are covered for equity purposes. Planning and prioritization of sub-projects will be undertaken by villagers and representative village tract subcommittees in line with guidelines outlined in the Operations Manual.<sup>2</sup>

### Selection of Project Locations

13. The primary criterion for selecting the participating townships is poverty; additional criteria are (i) absence of external funding for similar activities, and (ii) willingness and capability of township authorities to implement the project. Beneficiary townships are selected through a multi-stakeholder township selection consultation held at the Capital of the Region/State. Following these consultations, the Region/State Chief Minister reports to the Ministry of Agriculture, Livestock, and Irrigation (MoALI) the townships ranked as highest priority for the Project. Thereafter, MoALI will submit the result to the Project's Steering Committee to select one or several Project townships. These selections are then sent to the World Bank for its No-Objection.

### Planning Cycle

14. The project is implemented in Cycles. Each Cycle follows 14 steps, shown in the figure 1.

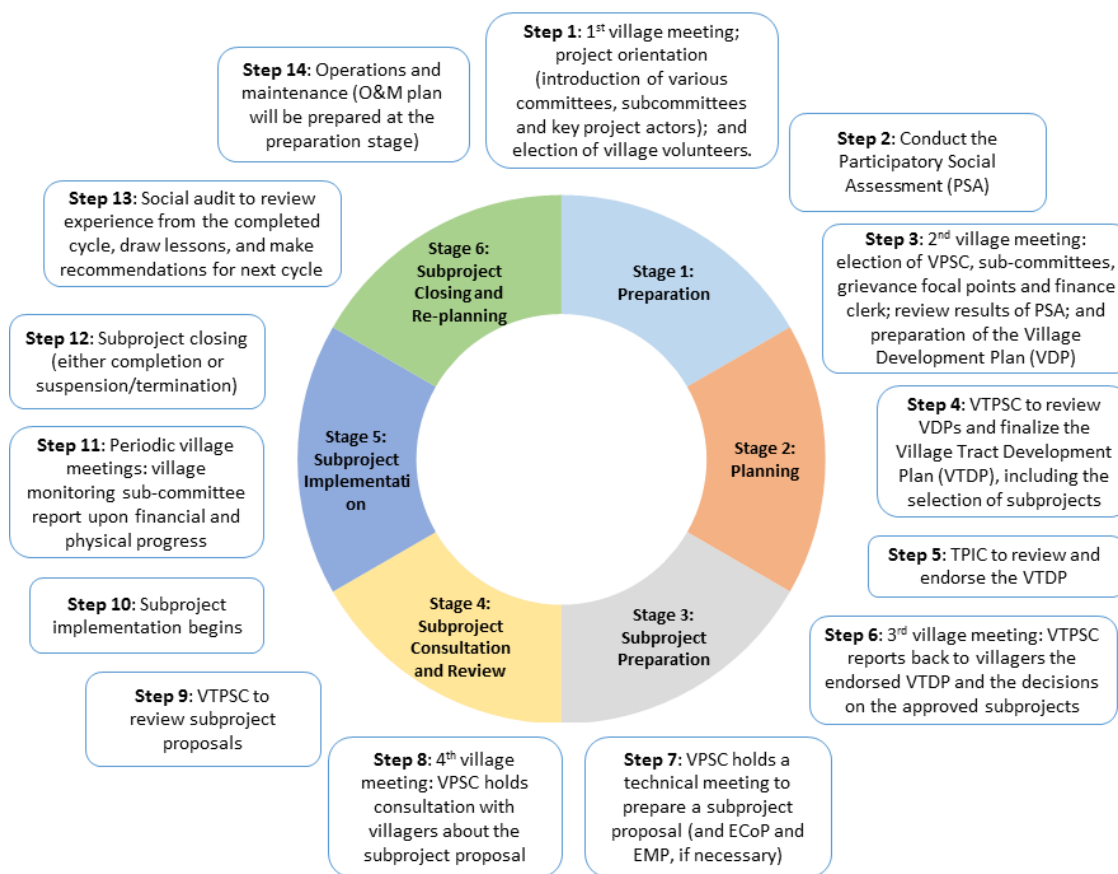
15. Community facilitators supported by village volunteers use a range of participatory methods to help villagers identify their priority needs, the priority interventions to meet these needs (captured in a village development plan), and the priority groups that benefit from these interventions, including the poor and marginalized groups. The village tract project sub-committee (VTPSC) reviews the respective village development plans and prioritize the interventions against the needs of the tract and the available funding envelope in a 3-year village tract development plan, updated annually.

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<sup>2</sup> The Operations Manual is available on the NCDDP website at: <http://cdd.drdmyanmar.org/eng/project-manuals/>

16. The Township Project Implementation Committee (TPIC) reviews the village tract development plans against existing sector plans and other known assistance to the township and endorses activities proposed for the coming year in each village tract. If there is a difference of view with regard to the priorities presented in a village tract development plan (for example, if the village tract plan proposes the construction of a school, but such construction is already foreseen by the Ministry of Education), the VTPSC will be asked to re-assess the priorities based on this information and submit a revised plan to the township level for endorsement.

**Figure 1: Project Cycle at the Community Level**



17. Community facilitators, technical facilitators and village volunteers assist the villagers and VTPSC in the preparation of their plans. They also ensure that separate consultations are held with women and men in the villages so as to identify their respective needs and priorities. They are in turn assisted by and accountable to the DRD township offices and the township technical assistance team.

18. The village and village tract development plans are updated annually in advance of the next allocation cycle. The villagers and VTPSC re-evaluate their needs and adjust the priority interventions as necessary. The Township Project Implementation Committee (TPIC) endorses significant deviations from a previous tract development plan (as detailed in the project Operations Manual) but otherwise receives the updated plans for information only. In case of any differences about the updated village tract development plan, the VTPSC are asked to re-assess the priorities and submit a revised plan.

19. The DRD engineers and technical facilitators at the township level will prepare the technical design of sub-projects with technical support from infrastructure team of the state/regional NCDDP secretariats and are responsible for ensuring compliance with all applicable safeguards during sub-project implementation. The village monitoring sub-committees supervise the day-to-day implementation of the



sub-projects and authorize payments to the contractors and laborers. The village procurement sub-committee is responsible for the procurement of goods, works and services, assisted by the DRD engineer. Financial management and contracting is undertaken by the village tract finance sub-committee. The state/regional NCDDP secretariats are also act as a cooperation body with state/region level departments, and provide other technical support to township offices including on safeguards, monitoring and evaluation, and other issues. The region/state governments and line ministries monitor the implementation of the sub-projects in participating townships and support TPICs to resolve any implementation issues that cannot be addressed at the township level.

20. Sub-projects may cover more than one village within a tract. A VTPSC may select a sub-project from within its annual allocation that directly benefits more than one of its villages. In this case, the DRD engineer prepares the sub-project in consultation with the committee members, community facilitators and village volunteers. The VTPSC reviews and approves the sub-project. The monitoring sub-committees of the benefiting villages jointly supervise the implementation of the sub-project and authorize payments to the contractors and laborers.

21. There is no community counterpart contribution required in cash or in kind for any of the sub-projects, although communities are allowed to contribute if they wish to. No one should be forced to contribute any assets against their will, and principles of voluntary donations apply. Labor services rendered by community members are remunerated based on the going village wage rate for day labor, with equal pay for equal work by men and women. The rates are reviewed on a regular basis by the township DRD office.

### Sub-project Eligibility

22. To allow a learning-by-doing approach, a positive list is used for the first community cycle in each township, consisting of sub-projects which are simple to design and implement. These include small-scale works for the rehabilitation or minor extension of community infrastructure that use a standardized design, and for which procurement needs from outside the tract are minimal. The first year positive list is presented in Table 1 and is included in the project Operations Manual.

**Table 1: Positive List of Sub-Projects under Cycle 1**

	<b>Eligible Sub-Project categories</b>	<b>Clarifications and Limitations on Eligible Categories</b>
1	Rural health centers	Rehabilitation or minor extension of existing facilities.
2	School buildings	Rehabilitation or minor extension of existing facilities.
3	Rural roads (roads connecting villages, and between villages and township)	Rehabilitation or maintenance of existing footpaths and roads within existing alignment. Rehabilitation or maintenance of small bridges and culverts.
4	Rural water supply systems	Rehabilitation or minor extension of wells; rainwater harvesting; installation of minor pipelines from natural springs or surface water sources, which are not located on the mainstream of the Ayeyarwady River or on or along the Maykha and Malikha tributaries.
5	Rural electrification investments	Solar panel and charge station, pico hydro (<30kW), solar street lighting, bio gas charge station, diesel generator (<20 kilovolt-amps), biomass generator (<15 kilovolt-amps).
6	Community recreation centers	Rehabilitation or minor extension of existing facilities, including for child care and telecommunications.

	<b>Eligible Sub-Project categories</b>	<b>Clarifications and Limitations on Eligible Categories</b>
7	Rural markets	Rehabilitation or minor extension of existing facilities.
8	Small scale irrigation	Rehabilitation (<25 hectares).
9	Sanitation facility	Rehabilitation, minor extension or construction of public latrines, small scale wastewater treatment and waste disposal facilities.
10	Jetty	Rehabilitation or minor extension of existing public facilities.

23. During the second and later years of operation in each village tract, all types of sub-projects are eligible for funding, including small new construction activities, except those included in a list of non-eligible activities for community investments (negative list, see Table 2 below). Items are included in the negative list either because (i) they are not consistent with the project development objective; (ii) they would contravene the laws of Myanmar, or (iii) costs of offsetting associated negative impacts would exceed benefits, taking into account the size of the investment.

**Table 2: List of Non-eligible Activities for Community Investments for NCDDP Sub-Projects (Year 2 and Beyond)**

<b>Sub-Projects not Eligible for Funding in NCDDP</b>	
1	are not included in the village tract development plan endorsed by the TPIC;
2	exclude the poor/marginalized population or otherwise vulnerable groups;
3	do not provide equal pay for equal work for women and men;
4	require physical relocation or displacement of any villagers
5	include the payment of compensation for land or asset loss from the proceeds of the World Bank financing or other government sources;
6	finance private goods, private livelihood activities, government offices or religious buildings;
7	do not meet the required technical and quality specifications;
8	have negative environmental or social impacts that are irreversible, create cumulative impacts and/or cannot be adequately mitigated; or require Initial Environmental Evaluation (IEE)/ Environmental Impact Assessment (EIA) according to Myanmar EIA Procedure.
9	are financed, or scheduled to be financed, by the government or other development partners;
10	contain the purchase or use of drugs, military equipment or other potentially dangerous materials and equipment, including chain saws, pesticides; insecticides; herbicides; asbestos (including asbestos-containing materials); or other investments detrimental to the environment and livelihoods including cultural resources;
11	involve activities that cause or lead to child abuse, child labor exploitation or human trafficking; No child under the age of 15 should work on the construction, rehabilitation or maintenance of a sub-project.
12	Involve activities that use forced labor
13	finance the construction of any new dams or the rehabilitation of existing dams including structural and or operational changes;
14	sub-projects that may use water from international waterways including activities such as community water supply, small scale irrigation or pico-hydropower generations facilities on the mainstream of the Ayeyarwaddy River. The Project also will not finance community water supply and small scale irrigation on or along the the Maykha and Malikha tributaries of the Ayeyarwaddy River;
15	any new construction and/or rehabilitation in protected areas, 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 conversion (loss) or degradation of such natural habitats unless specified as planned investments as part of the respective PA management plan (where such a plan exists). <i>Note: rehabilitation of existing infrastructure which has been already developed (e.g., existing paths or tracks for tourism purposes) is possible if the respective subproject is in line with the park development/management plan, and subject to agreement of Union DRD.</i>

### **Sub-Projects not Eligible for Funding in NCDDP**

16	involve development of new settlements or expansion of existing settlements in critical habitats, protected areas or areas proposed for certain levels of national protection (e.g., reserved forests). 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.
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24. The list of non-eligible activities for community investments (negative list) is also specified in the project Operations Manual. DRD and the World Bank review the positive list and the list of non-eligible activities for community investments (negative list) periodically and update them, as needed, based on the experiences gained during implementation and consultations with community facilitators and DRD staff.

25. **COMPONENT 2: FACILITATION AND CAPACITY DEVELOPMENT:** The project invests heavily in local facilitation and capacity development to finance technical assistance and institutional support at the union and township levels, including the hiring of community and technical facilitators for the purpose of supporting the implementation of community driven activities under component 1 and a grievance redress mechanism. In this context, the project will support capacity development in areas such as participatory processes, project management, gender equality and inclusion, environmental management and social accountability for local committee members as well as government staff at the township, region/state and union levels.

26. **COMPONENT 3: KNOWLEDGE AND LEARNING:** This component supports government staff and community and civil society representatives through learning from community based approaches implemented within and beyond Myanmar. This will build on successful south-south learning exchanges undertaken during implementation to date to expose government counterparts to successful community driven development approaches in ASEAN countries and other regions. The project will also continue organizing annual multi-stakeholder reviews to share experiences from the previous cycle and discuss ways to improve the project's design and implementation for the next cycle. These reviews will include lessons learned with regard to governance and anti-corruption measures. Finally, a CDD gender network will be established for the project to improve gender equality and women's empowerment.

27. **COMPONENT 4: IMPLEMENTATION SUPPORT:** The project finances the cost associated with DRD project management at the union and township levels, including monitoring and evaluation, reporting and communications as well as administration and logistical support for project implementation. Furthermore, this component will include third-party financial and technical audits. This component also includes financing for minor civil works for the rehabilitation and/or construction of office facilities.

28. **COMPONENT 5: EMERGENCY CONTINGENCY RESPONSE.** This provisional zero component is added to allow for the rapid reallocation of Project financing from other components in order to provide preparedness and rapid response support to disaster, emergency and/or catastrophic events, as needed.

## **D. Project Implementation Arrangements**

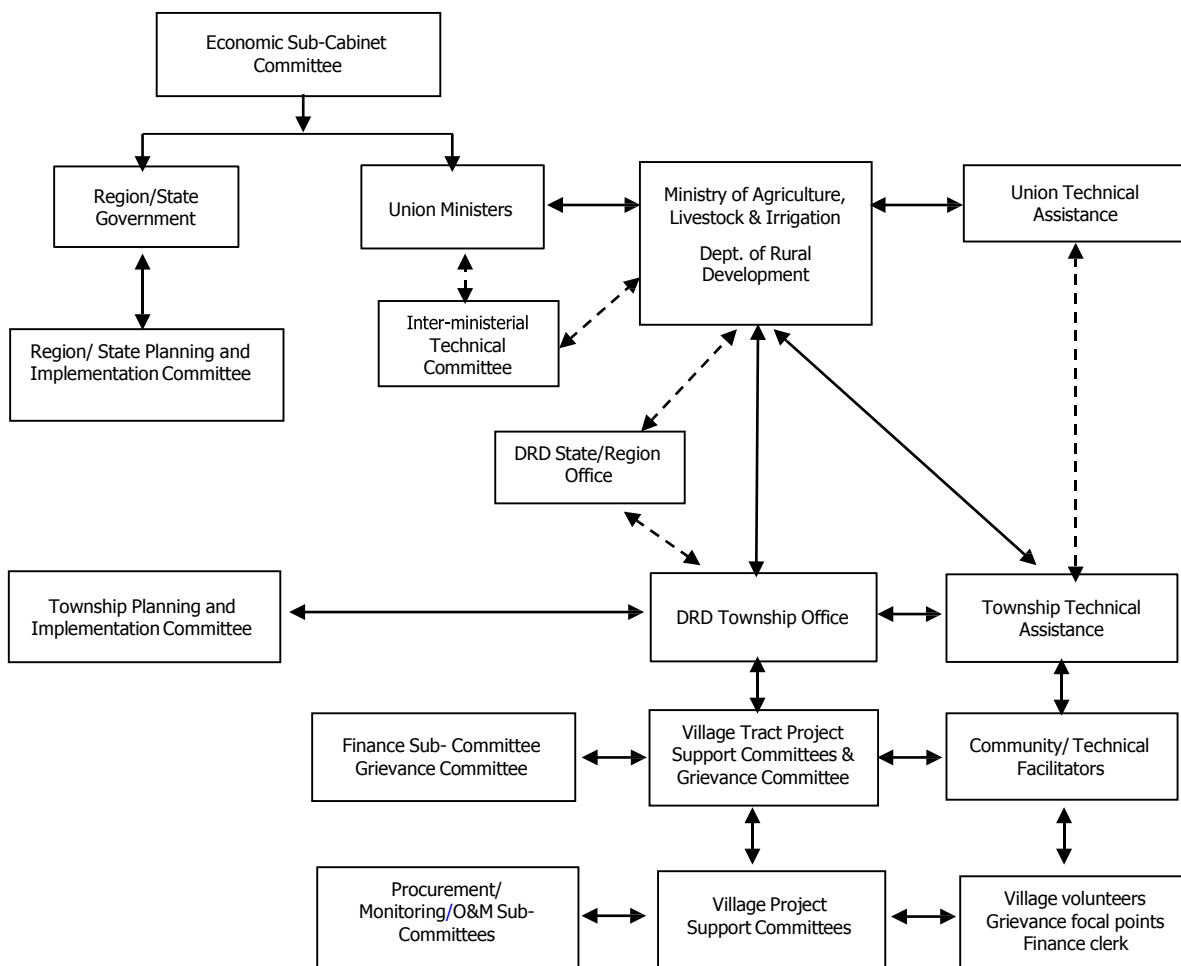
29. The NCDDP is implemented at four levels: the Union, Region/State level, Township level, and Village Tract and Village level. A schematic illustration of the implementation arrangements is provided in the figure below.

30. *At the Union level*, the Department of Rural Development (DRD) under the Ministry of Agriculture, Livestock, and Irrigation implements the NCDDP on behalf of the GoM. DRD, through the CDD Secretariat established in it, is responsible for: (i) helping to set the overall strategic direction of the project; (ii) ensuring overall compliance with the provisions of the OM; (iii) the procurement of consultancy services for technical assistance and institutional support; (iv) communications and outreach; (v) training/capacity development of all project stakeholders; and (vi) monitoring and evaluation,

including consolidated reporting. DRD will also make regular monitoring and supervision visits to project locations, review township monthly reports, resolve management and implementation issues as they arise, and provide a learning feedback loop with the townships and state/regional level office. DRD will provide quarterly progress reports to its management and the World Bank.

31. DRD at the Union level is supported by the Union Technical Assistance (TA) Team. The Union TA team is led by Team Leader (Lead CDD Specialist) and supported by team members including specialists in the areas of procurement, financial management, grievance handling, training and monitoring and evaluation. Responsibility for implementing and ensuring adherence to the ESMF rests with DRD at the union level, supported by the state/regional office and through the day-to-day operations and supervision of DRD at the township level supported by the township TA teams.

**Figure 2: Institutional Structure**



32. *An inter-ministerial technical committee* may be established at the union level to review project implementation progress, discuss and resolve technical issues raised at the township and union levels, and coordinate the support of the various government departments to the project. The Economic Sub-Cabinet *Committee* will serve as the project's steering committee and provides general oversight over the project.

33. *The region/state level authorities* play a coordination and oversight role. The respective Region/State Government have selected three to five townships by holding a multi-stakeholder meeting at the Capital of the Region/State, and sent the selected list of townships during the meeting with comments to the Ministry of Planning and Finance (MoPF) and Ministry of Agriculture, Livestock, and Irrigation for review and endorsement by the Union level agencies. Additional township selection meetings may be held upon Project scale up. The state/regional NCDDP secretariats were established in the fourth cycle. The offices will act as a cooperation body with state/region level departments, and provide technical support to township offices including on infrastructure, safeguards, monitoring and evaluation, and other issues. They will also facilitate aggregated reporting to the union level. The region/state governments and line ministries monitor the implementation of the sub-projects in participating townships and support TPICs to resolve any implementation issues that cannot be addressed at the township level.

34. At the township level, the Township Planning and Implementation Committee (TPIC) and township DRD office (through the township CDD secretariat) assume primary responsibilities for project implementation.

35. The township CDD secretariat, which consists of the head of office, M&E and MIS officer, Communication, Social Accountability and Gender Specialist, and infrastructure specialist, among other staff, is responsible for project implementation at the township level through its existing offices. Dedicated project and administrative staff are assigned to each township CDD secretariat and provide continuous technical support to community facilitators and village tract committees. They are also responsible for coordinating with government departments and other development partners, as well as monitoring and reporting project activities in the townships.

36. The Township Planning and Implementing Committee (TPIC) is the extension of the existing township aid management sub-committee which is the node where the state and community levels interact both administratively and substantively. This committee and sub-committee bring together a broad range of ministries present at the township level. The TPIC includes line ministry representatives (health, education, agriculture, planning, etc.) and oversees project implementation in the township. The TPIC reviews and endorses the first development plan of each village tract (following confirmation that all project requirements have been met). Subsequent annual revisions will be sent to the TPIC but will require TPIC endorsement only in cases of significant deviations from original plans.

37. Each Township DRD (township CDD Secretariat) will receive technical support from the State/Region DRD office and the union technical assistance teams and the union DRD office, on issues including financial management, procurement, MIS, grievance handling and others.

38. At the village tract/village level, the Village Tract Project Support Committee (VTPSC) and village project support committees are responsible for ensuring that the community planning process and sub-project 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 and ESMF.

39. The VTPSC will review the respective village development plans and prioritize the interventions against the needs of the tract and the available funding envelope in a 3-year village tract development plan. In each Village Tract, the village tract grievance sub-committee is established under the VTSPC, 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. The grievance sub-committee is composed of one to two representatives from each village who are not members of the village tract project support committee.

40. At the village level, the Village Project Support Committee (VPSC) is formed and assumes primary responsibility in project implementation at the village level, including the preparation and implementation of sub-projects in line with ESMF. The VPSC is responsible for planning, prioritizing and implementing community infrastructure sub-projects. Project staff, notably the Community Facilitators, ensure that the VPSC is formed in accordance with the provisions of the project Operations Manual, including ensuring that 50 percent of members are women.

41. The village monitoring sub-committees are established under the Village Project Support Committee (VPSC) and report regularly to the villagers about progress in sub-project implementation. This sub-committee will supervise the implementation of the sub-projects.

42. Village Volunteers will assist the community facilitator throughout project implementation. Among other tasks, they will help enhance the involvement of ethnic minorities in the decision-making process in the village tract project support committees; participation of ethnic minority representatives in village implementation committees and monitoring sub-committees; and the use of local languages in the dissemination of project-related information.

43. 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.

**Table 3: Entities Involved in Project Implementation at Village Level**

<b>Name</b>	<b>Membership</b>	<b>Main Functions</b>	<b>Status</b>
<u>Village</u>			
Village Project Support Committee	Elected by groups living in the village with 50 percent of the committee composed of women; supported by village volunteer and community facilitator	Identifying priority needs, participating in sub-project design and screening	Established in villages in the three year 1 townships, about to be established in the six year 2 townships, to be established in subsequent townships
Monitoring and Evaluation sub-committee	2-persons selected from Village Project Support Committee members	Monitoring implementation of sub-projects including safeguards; providing periodic reports to village	Established in villages in the three year 1 townships, about to be established in the six year 2 townships, to be established in subsequent townships
Grievance focal persons	2 persons selected by villages	Resolving community level grievances where possible, providing information about project grievance resolution mechanisms	Selected in villages in the three year 1 townships, about to be established in the six year 2 townships, to be established in subsequent townships

## E. Applicable National Laws of Myanmar

### *Land Laws*

44. Myanmar does not have a unitary land law but has several laws for different categories of land. All land belongs to the state under the current legal system, and land users receive certificates from the Settlement Land Records Department. The Land Acquisition Act (1894) provides certificates. When private land is acquired or private assets such as trees and standing crops are lost under public or private projects, compensation is paid at market value. The Act also provides that affected people with complaints can bring the case to court.

45. A new Farmland Law was adopted in March 2012 which introduced various reforms such as the recognition that farmland owners are able to sell, mortgage, lease, exchange, inherit or donate all or part of their farmland. There is also the requirement that compensation be paid for both land and buildings attached to it. The Vacant, Fallow and Virgin Land Management Law, which was also adopted in March 2012, defines legal provisions on unused land. The Draft Land Use Policy (on its 6th version of May 2015) is being drafted with the objectives to promote sustainable land use management and protection of cultural areas, protection of the environment and natural resources; and to ensure land tenure and food security

### *Ethnic Minorities*

46. According to the 2014 census, Myanmar has a population of 51.4 million. While ethnically disaggregated data from the census are not yet available, estimates suggest that the Bamar are the largest ethnic group, comprising around two-thirds of the population, with a large number of ethnic minorities accounting for about one-third. The majority Bamar population mainly lives in the central and delta parts of the country (divided into seven administrative Regions) while the ethnic minorities live mainly, though not exclusively, in the mountainous border areas (roughly corresponding to the country's seven States: Kayah, Kayin, Kachin, Chin, Mon, Rakhine, and Shan). Main minority groups include Shan, Kayin, Rakhine, Chin, Mon, Kachin, and Kayah. These eight "ethnic races," including the majority Bamar, are subdivided into 135 officially recognized ethnic groups and belong to five linguistic families (Tibeto-Burman, Mon-Khmer, Tai-Kadai, Hmong-Mien, and Malayo-Polynesian); there are no population figures for ethnic minority sub-groups.

47. According to Chapter 1, clause 22 of the 2008 Constitution of Myanmar, the Union Government of Myanmar is committed to assisting in developing and improving the education, health, language, literature, arts, and culture of Myanmar's "national races." It is stated, that the "Union shall assist:

- To develop language, literature, fine arts and culture of the National races;
- To promote solidarity, mutual amity and respect and mutual assistance among the National races; and
- To promote socio-economic development including education, health, economy, transport and communication, [and] so forth, of less-developed National races."

48. The constitution provides equal rights to the various ethnic groups included in the national races and a number of laws and regulations aim to preserve their cultures and traditions. This includes the establishment of the University for the Development of the National Races of the Union which was promulgated in 1991 to, among other things, preserve and understand the culture, customs and traditions of the national races of the Union, and strengthen the Union spirit in the national races of the Union while residing in a friendly atmosphere and pursuing education at the University. However, the list of recognized ethnic groups has not been updated since 1982.

49. Since independence, there have been recurring conflicts between the Government and a number



of ethnic armed groups over a range of issues, including relating to greater autonomy, recognition of cultural rights, and governance of natural resources. The Government's peace initiative, launched in 2011, has seen the conclusion or renewal of a number of ceasefire agreements with some ethnic armed groups, although conflict continues in several areas, including in Kachin State, northern Shan State, and Rakhine State. Following a number of bilateral ceasefire agreements between the Government and ethnic armed groups, some ethnic minority groups have been granted authority over political and economic affairs in their areas, which in some cases are sizeable. Social and other public services were developed by ethnic authorities, often with support from NGOs, and are still operating in several areas. There have also been incidents of communal violence related to religious affiliation, especially in Rakhine State.

Under the current government, a free media is developing and ethnic parties and associations are politically active. Civil society organizations also play an active role.

### ***Environmental Protection***

50. The Government of Myanmar (GoM) is currently in the process of carrying out various reforms that include political, economic, and environmental reforms consequently updating and developing its Environmental legal and institutional framework. However, numerous challenges remain. Myanmar Environmental policies and laws are mostly sectoral and are gradually transitioning from a nature conservation focus to environmental mainstreaming into the economic and social development of the country. Myanmar is party to several international treaties, however the incorporation of those provisions into domestic law has been somewhat fragmented.

51. The legal and institutional gap also extends into administrative and procedural structures, and capacity and resources to enforce such provisions. There is also a need for better coordination between sectoral ministries and between union and local government. Some members of Myanmar Civil Society have argued that the lack of environmental protection legislation and enforcement capacity has left room for unabated ecological degradation.

52. Myanmar's environmental and social legislation includes the Environmental Conservation Law 2012; Environmental Conservation Rules 2014; the Environmental Impact Assessment Procedures and guidelines. 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, to implement environmental conservation policies, prescribe environmental quality standards, hazardous waste and waste management and pollution control produce an Environmental Assessment System. The 2012 Conservation Law also gives MOECAF the mandate to protect cultural resources. The EIA rules and procedures were approved in December 29th, 2015. The EIA procedures specifically stipulate type and size of activities requiring environmental assessment (EA) (EIA/IEE/EMP), content of the EA, review and approval process, monitoring, etc. List of activities require IEE/EIA (Annex 1 to the Ministerial Notification No.616/2015 – EIA Procedures) is presented in Annex 12 of this ESMF. Given a small scale rural infrastructure to be supported under the project, it is unlikely that sub-project will require IEE/EIA under this notification. There are also other laws with environmental policy implications such as the 1992 Forest Law and a number of international laws and conventions that Myanmar has ratified.

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 (1992), Forest Rules (1995), Protection of Wildlife and Wild Plants and Conservation of Natural Areas Law (1994), Community Forestry Instructions (1995), 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, National Framework for Environmental Law, and National Forest Master Plan. Some of these tools/rules are currently under revision.

54. Current baseline data on the biodiversity inventories in 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.

55. The Protection of Wildlife and Wild Plants and Conservation of Natural Areas Law (1994) contain 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 CITIES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). There is also no provision for protected fish species.

### ***Cultural Heritage***

56. The Ministry of Culture (MOC) is the main authority dealing with physical and cultural resources. The Environmental Conservation Law provides the MONREC with the mandate to “cooperate with the relevant Government departments and Government organizations in the matters of environmental conservation for perpetual existence of cultural heritage sites and natural heritage sites, cultural monuments and natural areas stipulated under any existing law.” The key laws and regulations concerning Physical Cultural Resources protections in Myanmar are described the following section:

- *The Protection and Preservation of Cultural Heritage Regions Law (1998) (Amended in 2009)*; 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.

The Act provides legal backing to the MOC through restrictions on construction and extension as well as types of buildings allowed in the zones. The law specifically states that the Ministry of Culture 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 MOC. The law was amended in 2011 to state that the expression “existed before 1886” should be changed to “that have existed since 100 years before the date on which the Department made enquiries as an ancient monument”.<sup>3</sup>

- *Instruction to the 1998 law (2014)*: Additional detailed requirements (Disciplines) have been created under the *Protection and Preservation of Cultural Heritage Regions Law* to provide updated rules and regulations for controlling and ensuring acceptability of development within the

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<sup>3</sup> Department of Archaeology and National Museum, Myanmar and UNESCO, Heritage Impact Assessment Report on Hotel Development in Bagan, February 2015.

existing and planned heritage zones. Each new set of regulations will supersede earlier versions and the Instruction Order No. 2/2014 and 3/2014 (Annex 12) 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”.

Other laws on PCR protection and preservation include:

- *The Protection and Preservation of Ancient Monuments Law (The House of Representatives (Pyithu Hluttaw) Law No.51, 2015), 26<sup>th</sup> August 2015 and the Protection and Preservation of Ancient Monuments Rules and Regulation Order (No.15, 2016), 31<sup>st</sup> May 2016.* This law provides definitions of Ancient Monument, roles and responsibilities of the MOC in protecting, preserving, returning and accepting of ancient monument. The law also stipulates chance find procedures in case of ancient monument is found, prior permission requirements and penalties for violating the provisions of this law.
- *The Protection and Preservation of Antiquities Law (The House of Representatives (Pyithu Hluttaw) Law No. 43, 2015), 22<sup>nd</sup> July 2015 and the Protection and Preservation of Antiquities Rules and Regulation Order No. 14, 2016), 31<sup>st</sup> May 2016.* This law provides definitions of Antique objects, roles and responsibilities of the MOC in protecting, preserving, returning and accepting of Antique objects. The law also stipulates chance find procedures in case of Antique object is found, prior permission requirements and penalties for violating the provisions of this law.

#### *Regional Level Laws and Regulations*

- *The Township Law and Order Restoration Council for Pagan Nyaung-U Township Local Regional Order No. 1/94 (1994):* The order became law in 1994 and in it three heritage zones for were assigned to Bagan: the Archaeological Zone, the Monument Zone and the Protected Zone. It also provided rules and regulations for the three assigned heritage zones in Bagan. The Instruction Order of August 2014 updates and strengthens some of the 1994 parameters of rules and regulations. The Instruction Order of August 2014 supersedes the 1994 order.
- *Management Plan: Protection Status and Zoning (2013):* These rules and regulations were issued in 2013 and 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.

57. *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.

## **F. World Bank Operational Policies**

The NCDDP triggers the following World Bank Operational Policies: Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Indigenous Peoples (OP 4.10), Involuntary Resettlement (OP 4.12), and OP 7.50 (Projects on International Waterways). The environmental and social impacts stem from the investments (sub-projects) financed under component 1 (Community Block Grants). During the implementation of the current Additional Financing, it has been determined that the Project should additionally trigger Operational Policy 4.11 (OP 4.11) – Physical Cultural Resources, which requires an

update to the ESMF and a project re-structuring. All Project activities will follow the requirements of OP 4.01 and other applicable World Bank Safeguards policies, particularly in the screening and preparation of EA instruments (EMPs and ECoPs) for subprojects under component 1 and any eventual civil works under component 4, including with regard to disclosure and consultation.

**58. OP4.01: Environmental Assessment.** This policy requires the environmental assessment of investments proposed for World Bank financing to help ensure that they are environmentally sound and sustainable. The depth and type of analysis depends on the nature, scale, and potential environmental impact of the proposed activities. The environmental assessment process takes into account the natural environment (air, water, and land), human health and safety, social aspects (involuntary resettlement, indigenous peoples, and cultural property), and trans-boundary and global environmental aspects. The project is category B in line with OP 4.01. Given that sub-projects will be identified by communities during implementation, the environmental assessment will follow a framework approach outlined in this ESMF.

**59. OP 4.04: Natural Habitats.** This policy has been triggered because of the potential negative impacts that subproject activities might have on natural habitats, for example the construction of new access roads in a known reserved forest or established protected area. While these activities are expected to be small-scale, typical for CDD operation, 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 lead to degradation of critical or other natural habitats. The ESMF provides for the screening of potential project impacts in more detail and how safeguard issues under 4.04 should be addressed during project implementation.

**60. OP 4.11 – Physical Cultural Heritage.** This policy was not triggered by the original project. Implementation of the AF in year 3 and 4 triggers this policy because it included three townships that cover the nationally registered Cultural Heritage Zones, namely Nyaung-U township (year 3), and Natogyi township (year 4) in Mandalay region and Kyauktan township (year 4) in Yangon region. Since NCDDP is implemented in all villages and village tracts in each participating township, some villages of these three townships are located inside or near the nationally listed cultural heritage zones. This trigger the World bank safeguard policy OP 4.11 – Physical Cultural Heritages (PCR). Overall, impacts on PCR from sub-projects activities are likely to be limited, site-specific and manageable because: (i) infrastructure works that the project will support are small-scale demand-driven community infrastructure; and (ii) investments detrimental to cultural resources is not-eligible under project. The ESMF has been updated to include guidance on screening, assessing and identifying measures to avoid or mitigate and monitor impacts on PCR. The impacts on physical cultural resources resulting from project activities, including mitigating measures, may not contravene either the borrower's national legislation, or its obligations under relevant international environmental treaties and agreements.

**61. OP 4.10: Indigenous Peoples.** The policy was triggered for the original project and the AF since it was expected that ethnic minority communities would be present in the project areas of influence. The policy will be applied for other financing including the Italian loan, JSDF grant and DFID funding since the expanded geographical coverage under these other financing will likely include areas where ethnic minorities are present, although the exact list of townships where these parallel financing would be implemented will be determined during implementation. The project will continue participatory social assessments (SA) in all project villages. With the support of community facilitators, ethnic screening and free, prior and informed consultations will be conducted with villagers, including ethnic minorities, leading to broad community support for proposed sub-projects. The key principles, processes and procedures for the participatory SA, including the participation of ethnic minorities, are described in more detail in the project Operations Manual.

**62. OP 4.12: Involuntary Resettlement.** Most sub-projects financed under the project support small scale civil works to rehabilitate, improve or construct small-scale rural infrastructure, and are unlikely to require acquisition of private land or loss of private assets. However, since sub-projects are developed on a demand driven basis, minor land acquisition or loss of assets cannot be fully ruled out. For this reason, OP 4.12 is triggered. Sub-projects that will require the physical relocation of households are not allowed and included in the list of non-eligible activities for community investments (negative list). Sub-projects are screened for land-related impacts with a view to minimizing such impacts. If land acquisition or asset loss is found to be unavoidable, measures to mitigate such impacts are developed and implemented, including adjustment of designs and siting. Where a minor loss of private land or assets is unavoidable, impacts will likely be addressed through voluntary donations. If this is not possible, an abbreviated Resettlement Action Plan (RAP) will be developed to compensate affected households at replacement value as per the policies and procedures laid out in the ESMF. In exceptional cases where the project impact is significant, a full RAP is developed.

**63. OP 7.50 (Projects on International Waterways):** The Ayeyarwady is an “international waterway” which rises in the Himalayas, bisects Myanmar from north to south and empties through a nine-armed delta into the Bay of Bengal. A portion of the catchment areas that feed two of the tributaries of the River (the Maykha<sup>4</sup> and the Malikha<sup>5</sup>) are located in China. The Malikha tributary in turn is fed by a sub-tributary originating within India. The combined flow outside of Myanmar is estimated to be less than 1%. The remaining 99% of the flow is accumulated within Myanmar which is the river’s most downstream riparian. The NCDDP will not finance sub-projects which use water from international waterways, including activities, such as community water supply, small-scale irrigation or pico-hydropower generation facilities, on the mainstream of the Ayeyarwaddy River. The project also will not finance community water supply and small-scale irrigation on or along the Maykha and Malikha tributaries of the Ayeyarwaddy River.

64. The Project will however finance community water supply systems and small scale irrigation investments that would draw water from tributaries of the Ayeyarwady which run exclusively within the territory of Myanmar. These tributaries include the following: the Chindwin, the Mu, the Chaungmagyi Chaung, the Myitnge, the Mon Chaung and the Nawin Chaung. Taking into account the fact that water supply schemes in particular are in high demand in communities across the country the Project will finance activities in these areas focused primarily on rehabilitation and improvements to already existing schemes although there will also be new schemes.

## **G. Safeguard implementation experience and lessons learned**

65. Since the original NCDDP became effective in January 2013, the project Operations Manual was developed to provide details about the application of policies and principles on social and environmental management outlined in the ESSAF. The Operations Manual was reviewed and cleared by the Bank. It was updated in the fall of 2014 following the first community cycle and in December 2016 drawing on lessons learned during the project’s implementation, following the union-level multi-stakeholder reviews in August 2014, August 2015, and September 2016. This section describes the experience of safeguard implementation under the original NCDDP and AF to date.

### **Environmental Assessment (OP 4.01)**

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<sup>4</sup> Referred to as the Daying in China.

<sup>5</sup> Referred to as the Jiang in China.

66. The Environmental and Social Management Framework (ESMF) and Environmental Codes of Practice (ECoPs) are the main environmental safeguards documents used to assess and mitigate impacts for subprojects. In addition, national design standards and design codes used by the Department of Rural Development (DRD) for small scale infrastructure are applied for subprojects.

67. Over time, the ESMF has been strengthened to include the following: ,

68. Three additional points have been included in the list of non-eligible activities for community investments (negative list), namely 1) finance the construction of any new dams or the rehabilitation of existing dams including structural and or operational changes; 2) road construction or rehabilitation of any kind inside critical habitats and existing or proposed protected areas; 3) development of new settlements or expansion of existing settlements in critical habitats, special forest reserve; protected areas or areas proposed for protection. The list of non-eligible activities for community investments (negative list) also continues to specify that hazardous materials and equipment is not to be used in the project. This includes chain saws, pesticides; insecticides; herbicides; asbestos (including asbestos-containing materials); or other investments detrimental to the environment and livelihoods including cultural resources property (national level historical or religious objects). New forms reflecting these points are attached in the annexes. In addition, the final sub-project inspection form (Annex 9) added a section to describe environmental impact of each subproject.

69. A first technical review<sup>6</sup> conducted by the NCDDP in August 2014 found that over 90 percent of the inspected subprojects adequately complied with the ESSAF then in use and/or ECoP. It also confirmed that EMPs were not needed for these sub-projects given the limited scale of the associated environmental impacts. However, three subprojects were rated “poor” in terms of technical quality and were found to be non-compliant with ESSAF. These were subsequently addressed. The most recent technical audit conducted in March 2016 found that 96% of environmental considerations had been appropriately handled on the ground, during and after construction. For the most part, SP implementation teams are maintaining properly organized documentation – ECoP and Safeguard forms have been completed in 96% and 99% of SP sites, respectively. The technical audit also found that EMPs were not needed for most of these sub-projects evaluated given the limited scale of the associated environmental impacts.

70. Before start of each new cycle, DRD’s international technical consultant and the union DRD engineers conducted a series of safeguard training for township DRD engineers, TA infrastructure specialists and TFs on 1) safeguards policies; 2) technical learning (findings from the technical audit; case studies of community constructions/designs from neighboring countries; community training); and 3) the updated operations manual.

### **Forests (OP 4.36)**

71. The Project does not anticipate it will have and will not consider eligible for financing any activities that: (a) have impacts on the health and quality of forests; (b) affect the rights and welfare of people and their level of dependence upon or interaction with forests; and (c) aim to bring about changes in the management, protection, or utilization of natural forests or plantations, whether they are publicly, privately, or communally owned. All sub-projects will be screened accordingly.

### **Physical Cultural Resources (OP 4.11)**

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<sup>6</sup> The technical review was conducted by an individual consultant hired by DRD who audited the technical quality of a small sample of sub-projects implemented under the first cycle. Nine percent of the cycle 1 subprojects in Kanpetlet, Namhsan and Kyunsu were inspected including subprojects of each major subproject types. A technical audit of a larger sample of subprojects was conducted in March 2016.

72. This policy was not triggered by the original project and the AF. During implementation of the AF in year 3 and 4, the project had identified and included, through participatory processes, three townships that cover the nationally registered Cultural Heritage Zones, namely Nyaung-U township (year 3), and Natogyi township (year 4) in Mandalay region and Kyauktan township (year 4) in Yangon region.

73. The cycle 1 sub-projects in Nyaung-U were prepared and implemented during 2015 – 2016. Totally 16 villages in Nyaung-U are located inside Bagan protected zones consisting; 3 villages in Ancient Monumental Zone (Monument Zone, MZ); 6 villages in Ancient Site zone (Ancient Zone, AZ) (1 village is in both MZ and AZ); and 9 villages in Protected and Preserved Zone (Protected Zone, PZ) (1 village is in both AZ and PZ). List of these villages is attached in the *Table A 11.2 of Annex 11*. These villages implemented 20 sub-projects all of which are small-scale infrastructure renovation sub-projects in line with the project guideline for cycle 1 sub-project types. During the preparation and implementation of sub-projects in these villages, DRD identified and collected relevant laws, regulations and procedures regarding PCR in close consultations with the Department of Archaeology, National Museum and Library in Bagan. Training on regulatory requirements and the ESMF requirements were provided to TFs, CFs and relevant DRD officers twice during sub-project preparations. The Department of Archaeology, National Museum and Library was also invited to provide training on Cultural Heritage conservations and regulatory requirements. Safeguards screening including on PCR aspect were conducted and EMPs prepared for all these sub-projects. Written permits from the Department of Archaeology, National Museum and Library were obtained prior to construction, as required by regulations. The DRD invited the Department of Archaeology, National Museum and Library to visit sub-project sites before, during and after completion of construction. A joint monitoring by the Union DRD infrastructure team, the Department of Archaeology, National Museum and Library, township DRD, TTA, and respective CFs/TFs were also conducted to 10 villages. No major impacts on PCR was encountered during the cycle 1 implementation in Bagan cultural heritage zones.

74. This ESMF update, built up on the afore mentioned approach, includes guidance for PCR impacts screening, impacts assessment, preparation of mitigation measures and monitoring arrangement as an integral part of the project safeguards approach. Clear examples of Physical Cultural Resources Management Plan have been added to facilitate preparation of sub-project specific management plan. The updated ESMF will be used for sub-projects implemented inside or in vicinity of the protected cultural heritage sites or areas of PCR significance in year 4 and beyond.

75. Implementations of sub-projects in Natogyi township and Kyauktan township, which are included in year 4, will start in 2017. In Natogyi township which is located in Mandalay Region, Wadee Ancient city is located near by Phayargyi Village. No villages located inside the Wadee Ancient city area but 5 villages are located in its vicinity. (See *Figure 11.2 of Annex 11.2: Map of Wadee Ancient city in Natogyi Township and villages nearby*). In Kyauktan township, which is located in Yangon Region, only the compound of Kyaik-hmaw-wun Pagoda in the Pa-Da-Gyi (model village) was identified as the Precinct of Ancient Monument. The area of this precinct is the whole compound of the Kyaik- Pa-Da-Gyi Pagoda. No village located inside the Ancient Monument area.

76. As the Project continues to expand to new townships over time, DRD will screen for PCR considerations in newly joining townships.

#### **Indigenous people (OP 4.10)**

77. The ESMF outlines the procedures used to ensure that ethnic minorities are consulted with and have the opportunity to participate in the planning and implementation of sub-projects, and that any negative impacts are adequately addressed. Specifically, a participatory Social Assessment (SA) is conducted as part of the village planning processes, including an ethnic screening. In year 3 (2015/2016), the Project

operated in 27 townships. Approximately 32 percent of the Project beneficiaries in that year were from ethnic groups, with over 50 ethnic groups represented.

**Table 4: Distribution of Ethnic Groups in Cycle 3 (27 townships)**

<b>Ethnic Group</b>	<b>Percentage of HHs</b>
Kayin (Karen)	30%
Mon	11%
Rakhine (Arakanese)	10%
Chin	8%
Shan	7%
Palaung	6%
Khami (Chin, Khumi)	5%
Sgaw (Karen, S'gaw)	3%
Ka-Yun (Kayan; Padaung)	3%
Kayah (Karenni)	3%
Kadu (Kado)	1%
Bre (Ka-Yaw; Kayaw)	1%
Shu (Pwo Kayin)	1%
Ganan	1%
Pa-O (Taungthu)	1%
Asho	1%
Others ( Dai, Yindu, Mro, Wakim, Manu Manaw, Miram, Mara, Shendu Lakher, Oo-pu, Yinbaw, Mgan, Dawai, Kaungso, Laymyo, Lisu, Khami, Intha, Matu, Daingnet, Mon Kayin, Khamu, Awa Khami, Bwe Karen, Kachin, Anu, Slone, e, Ka-yu, Shan Gale, Panun, Rongtu, Lushei, Kayinpyu, Anun, Ngron, Kebar, Yaw)	8%

78. The result of participatory SA indicates that ethnic minorities participate in and receive benefits from NCDDP. Ethnic screening is conducted with the participation of almost all village households, and no discriminatory treatment of ethnic minorities has been reported.

79. The summary of the original project Operations Manual was translated into Shan language, and project posters and the Operations Manual were translated into Palaung, Hakha, and Chin languages. Since diverse ethnic groups are present in project townships and many of them do not have their own writing systems, translation of all relevant project documents has been found to be challenging. Also, many local people are not literate in their own writing systems even where they exist (since government schools offer instruction in Burmese only), and those who are literate in ethnic writing systems tend to be literate in Burmese too. Properly translating project documents into ethnic languages is also found to be challenging as many ethnic languages do not have equivalent vocabularies or expressions for many of the new concepts and terminologies provided in project documents.

80. In order to address the issue with regard to the translation of project documents into ethnic languages, the DRD is developing the guidelines on consultations and disclosure in ethnic languages. The guidelines will include the list of key project documents that are to be translated into local languages, the ethnic minorities present in the township, and local languages in use and appropriateness/ feasibility of translation, based on the inputs from respective township TA and participants of safeguard consultation

meetings. Key project documents to be translated include this ESMF, and may include the approved Village Tract Development Plans (VTDP)<sup>7</sup> in addition to voluntary donation forms as well as abbreviated or full Resettlement Action Plan (RAP) in exceptional cases where RAPs are needed. It was agreed that such lists should be developed in consultation with key stakeholders. DRD sought inputs from participants at the safeguard consultation meetings held for the AF and share the draft guidelines with stakeholders for further inputs.

81. Continued emphasis will be placed on ensuring that ethnic beneficiaries/affected people understand the project concept and approach including on environmental and social safeguards, which was also emphasized by participants of safeguard consultation meetings. The experience under the original NCDDP indicates that it is most meaningful and practical that project approaches including safeguard provisions are explained to ethnic people orally and with visual materials. Community Facilitators and Technical Facilitators in all project townships included those who could speak major ethnic languages of those townships, which was found to be useful to ensure that those who directly benefit from/are affected by the project understand safeguard provisions. Going forward, continued efforts will be made to develop more visual materials in all major ethnic languages to help ensure ethnic minorities understand the project safeguard provisions. Participants of safeguard consultation meetings concurred to the approach.

### **Involuntary Resettlement (OP 4.12)**

82. The ESMF provides measures to comply with the Bank’s OP 4.12, including the prohibition of any sub-project that requires involuntary land acquisition (including involuntary asset loss) during the first community cycle in each township.

83. As can be seen in the table below, no involuntary land or asset acquisition occurred under the original project in the first community cycle. Some sub-projects have required minor land acquisition, which were addressed through voluntary land donations. The technical audit carried out in August 2014 and the social audits carried out between May 2016 and February 2017 confirmed that all affected households willingly and knowingly donated land or assets, except one grievance in Kawhmu Township that was settled and the abbreviated land requisition plan received at the Bank. Overall, voluntary donation forms were properly prepared and signed by the affected people, although in some instances both voluntary donation forms and involuntary donation forms were prepared (even though assets were donated voluntarily). The Project has provided training to Technical Facilitators (TF) and Community Facilitators (CF) on safeguard documentation and on overall safeguard processes. To limit potential safeguards risks associated with sub-projects, the revised Operations Manual includes a budget ceiling of 110 million kyats (ca. \$900,000) for sub-projects, and specifies that sub-projects exceeding 40 million kyats (ca. \$35,000) receive a prior approval from the union DRD and no objection from the World Bank, allowing for upstream monitoring of higher risk sub-projects.

**Table 5.1: Number of Cases of Voluntary Land Contribution by Township in the First Cycle**

<b>Township</b>	<b>Number of subprojects with land contribution</b>	<b>Number of affected HHs</b>	<b>Number of HHs requested for compensation</b>
<b>Kyunsu</b>	6	6	0
<b>Namhsan</b>	11	22	0
<b>Kanpetlet</b>	7	41	0

<sup>7</sup> The translation of the village tract development plans into ethnic languages is required under the original ESSAF, however, it was not fully complied with in Cycle 1.



**Table 5.2: Number of Cases of Voluntary Land Contribution by Township in the Second Cycle**

Township	Number of subprojects with land contribution	Number of affected HHs	Number of HHs requested for compensation
Kyunsu	9	16	0
Namhsan	11	24	0
Kanpetlet	13	43	0
Pinlelbu	4	13	0
Ann	11	27	0
Tetkone	10	86	0
Laymyat hnar	75	269	0
Saytoakta yar	17	17	0
Htantapin	15	87	0

**Table 5.3: Number of Cases of Voluntary Land Contribution by Township in the Third Cycle**

Township	Number of subprojects with land contribution	Number of affected HHs	Number of HHs requested for compensation
Kyunsu	28	59	0
Namhsan	7	23	0
Kanpetlet	7	19	0
Pinlelbu	19	94	0
Ann	22	114	0
Tetkone	27	1147	0
Laymyat hnar	23	27	0
Saytoakta yar	11	31	0
Htantapin	46	235	0
Kawhmuee	18	158	0
Nyaung U	47	574	0
Myaung	8	51	0
Chaug Zone	4	4	0
Demawso	18	40	0
Phruso	9	30	0
Lewe	17	365	0
Bamauk	9	66	0
Ngazon	21	236	0
Kyangin	88	116	0
Beelin	15	80	0
TharPaung	298	389	0
Kyaukkyi	12	92	0
Mindone	47	91	0
KyarInn SakeKye	19	2466	0

<b>Township</b>	<b>Number of subprojects with land contribution</b>	<b>Number of affected HHs</b>	<b>Number of HHs requested for compensation</b>
<b>Moenyo</b>	6	46	0
<b>Taninthary</b>	8	24	0
<b>Palawa</b>	0	0	0

The following are being carried out under the Project:

84. **Safeguard training is being provided to key township DRD staff as well as all Community Facilitators and Technical Facilitators.** This will help strengthen their knowledge of both safeguard documentation and safeguard measures for involuntary land acquisition. In particular, knowledge and skills on the estimation of project impacts as well as the determination of replacement values for any land or asset acquisition will be strengthened.

85. Technical audits and social audits are being further strengthened to ensure any social impacts that remain to be addressed during implementation of sub-projects will be swiftly identified and duly addressed. The knowledge of potentially affected people in safeguard provisions will be strengthened as more visual materials (including in major ethnic languages) are introduced and used as part of the participatory SA.

#### **Experience with regard to the project Grievance Handling Mechanisms (GHM) and the findings of Social Audits**

86. The NCDDP established a project Grievance Handling Mechanism (GHM) in line with the provisions in the ESSAF and ESMF. Details of the GHM are provided in the project Operations Manual, and a summary is provided in Section K of this ESMF.

87. From start of the project implementation 6,945 grievances were received. Forty percent of grievances received were from women as per received data. Of the grievances received, 6,090 were found to be relevant to the project, and 99.9 percent of relevant grievances were addressed. Grievances received included complaints regarding to doubts about the VPSC's project management, financial and procurement issues, land issues and complaints about village committee member's integrity. 80% of the grievances were handled at the township level and one fifth at the union level. 85 percent of grievances were reported in written forms through letters, using forms and pre-addressed envelopes and drop boxes installed in every project village.

88. Since the basic institutional infrastructure of the project GHM has been established by now, continued efforts are being made to strengthen the capacity of DRD at the township and union level to properly address grievances. Also, CF will follow up with those whose grievances are not found to be relevant to determine if they are content with the explanation given or have additional information to strengthen their cases.

89. Social audits are carried out annually as part of the Project cycle. Between May 2016 and February 2017 a total of 4,570 social audit meetings were carried out in 1,210 village tracts in all 27 Cycle 3 townships, with the participation of over 3 million villagers. A Social Audit Kit has been developed by the Union DRD and CFs received training prior to the social audit.

90. Overall, the social audit found that the overwhelming majority of community members affected by the NCDDP positively evaluated the processes used under the project as well as the results achieved. No major environmental or social issues were identified in the social audit. Typical comments received are:

- (i) Block Grant size should be increased and allocated early to avoid construction in rainy season;
- (ii) Greater support is necessary from the village administration,
- (iii) The frequency of meetings should be reduced or the timing be better coordinated with the daily schedule of villagers;
- (iv) Knowledge of villagers on social and environmental issues should be strengthened;
- (v) Villagers should receive more training in the O&M and how to establish O&M fund, technical skills on carpentry, masonry and GHM;
- (vi) Grievance processing time should be more expedited; and
- (vii) Participation of village elders in the GHM should be strengthened.

91. The social audits will be repeated on an annual basis in all project townships, taking into account the lessons learned from previous years. In particular, the social audits will be strengthened to address the following issues more clearly:

- (a) The performance of the GHM and the grievances that remain to be addressed, if any, should be more explicitly explored.
- (b) The social audits should address compliance with ESMF more directly.

## **H. Approach/Procedures to Addressing Environmental and Social Safeguard Issues**

92. This ESMF provides general policies, guidelines and procedures to ensure that the NCDDP will continue to 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 at the first day of community meetings, 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. Anyone residing in, gaining income from or having tenure rights over, land that will be affected by sub-projects financed under the project is entitled to compensation at replacement value which is sufficient to improve or at least maintain their pre-Project living standards, income earning capacity and production levels, without regard to their tenure status or ethnic background.
- e. Economic and physical displacement should be avoided, minimized and fully mitigated. Physical relocation of households is not allowed under the project;
- f. 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.
- g. Environmental and social benefits should be enhanced wherever possible;
- h. Ethnic minorities should be meaningfully consulted and that they receive project benefits in a culturally appropriate manner;
- i. Implementation of subprojects will commence only after compensation is fully paid or voluntary donation processes described in this section below is fully completed; and
- j. The capacity of DRD to manage environmental and social impacts should be strengthened.

93. All elements of the social assessment required under OP 4.10 and the approaches to ensure free, prior and informed consultations with ethnic minorities are part of the participatory social assessment (SA) and described in this ESMF. The policies and procedures to mitigate social impacts due to loss of private assets are developed in this ESMF in line with OP 4.12. A separate Indigenous Peoples Plan or Resettlement Policy Framework will not be developed, consistent with the approach taken by the original NCDDP.

## **Key Steps**

### ***Step 1 – Identification of Sub-projects***

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

95. The participatory SA will also include the screening for the presence of ethnic groups in the project area. If ethnic minority 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 SA. Free, prior and informed consultations will also be conducted as part of the SA, in a language understandable to ethnic minorities, using visual/ audio tools wherever possible. Villagers will be notified of the participatory SA meetings sufficiently early enough, and small group meetings will be conducted to facilitate free discussions to the extent possible.

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

- (a) Baseline information on the demographic, socioeconomic, cultural, and political characteristics of project beneficiaries including but not limited to ethnic minorities, 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 minorities;
- (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 SA, 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 SA, the subproject will not be implemented.

97. *Consolidation of village priorities in Village Tract Development Plans (VTDP).* The VTPSC will consolidate the village development plans into Village Tract Development Plans (VTDP) which include and prioritize the list of sub-projects 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 (see para 99 below for details on the contents of VTDP).

98. *Endorsement of village tract development plans.* The township planning and implementation committees (TPIC) will review the village tract development plans against existing sector plans and other known assistance, and endorse them. If the project operates in the village located inside the protected cultural heritage zones, township CDD office submit list of proposed sub-projects including site plan to the Department of Archeological, National Museum and Library for review and approval. The Department of Archeological, National Museum and Library would review site plan, conduct field visits and provide recommendation and approval. Township CDD office will then submit sub-projects list to the TPIC for review and endorsement. Copies of approved plans are made available in the local language(s) at the village tract office and in places convenient to the local population in all villages that constitute the village tract. Where translation into local languages is difficult because relevant ethnic groups in the village tracts do not have writing systems or due to other technically valid reasons, at least the summary of the approved village tract development plans, including the list of approved sub-projects, should be described in a short brochure, posters or other information materials and displayed on notice boards in all villages as well as the village tract offices.

99. *Amendment of village and village tract development plans.* Villagers and the respective VTPSC will re-evaluate the development plans annually and adjust them as needed. The adjusted plans will be endorsed by the TPIC 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 minorities to ensure their broad community support to the updated plans, in a manner described in para 97 above.

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

100. *Safeguard screening.* The DRD engineers, in partnership with the VTPSC, VPSC, community facilitators and technical facilitators, will carry out the environmental and social screening, using the screening sheet that is included in Annex 2 as part of the preparation of detailed designs. DRD engineers have received training and guidance on how to screen subprojects for environment and social impacts and have learned “on the job” as subprojects have been requested, prepared and implemented.

101. Given the different type of rural infrastructure works that will be financed such as for small roads, small bridges (<10 m long), small-scale rural water supply systems and sanitation facilities (public latrines); small scale irrigation schemes (<25 ha), and rural electrification (solar panel, pico hydro < 20kV, solar street lightening, diesel and biomass generator < 15 kV amps), selected subprojects may have different types of impacts (e.g., noise, dust, soil erosion, waste management, water quality, health and safety, etc). Cumulative impacts for the project as a whole at sub-project sites and regionally are expected to be insignificant given the small-size of the grants and the dispersion of resources across village tracts. Myanmar Environmental Impact Assessment Procedures had become effective under the Ministry of Environmental Conservation and Forestry Notification No. 616/2015 on 29 December, 2015, after preparation of the ESMF. The notification prescribes type and size of activities requiring an Initial Environmental Evaluation (IEE) and Environmental Impact Assessment (EIA). Given the project will only support a small size rural infrastructure, it is unlikely that sub-projects would require IEE/EIA. No sub-projects implemented in year 1 to year 3 falls into IEE/EIA type activities under this notification. However, screening for IEE/EIA requirements has been included in the safeguards screening form (Annex 2) of this updated version of ESMF.

During the first year of project implementation in each township, using the year 1 positive list, the screening focuses only on confirming the eligibility of the proposed sub-project activities. For those sub-project activities that are eligible for financing in year 1, only the Environmental Code of Practice (ECOP)

no. 1 (Annex 3a) is used to mitigate the potential impacts of these sub-projects (Table 6). Chance Find Procedure (Annex 4) will be followed in case physical cultural resources (PCR) are unexpectedly encountered. For sub-projects located inside or adjacent to the registered Cultural Heritage Zones or areas known as PCR significance, in addition to the ECoP, PCR Management Plan (PCRMP) including chance find procedure is used to avoid/mitigate the potential impacts on PCR.

102. *For those activities eligible for financing in year 2 and beyond*, the environmental screening focuses on four areas: (i) based on the open menu, confirming whether the proposed sub-project is eligible for financing; (ii) using the screening form to determine potential impacts from the sub-projects; (iii) determining whether or not ECoP no. 1 or no. 2 (Annex 3b) and chance find procedure suffices to mitigate these potential impacts; and (iv) identifying what additional mitigation measures, if any, beyond those contained in the ECoP may be needed to manage the impacts.

103. The ECoPs contains specific, detailed and tangible measures that would mitigate the potential impacts of each type of eligible sub-project 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.

104. A general ECOP applicable to most small scale rehabilitation and construction works in selected villages is presented in Annex 3b. Similarly, specific environmental codes of practices have been prepared for various eligible subprojects' activities such as construction/rehabilitation of small scale buildings (Annex 3b.1); village rural roads (culverts), small bridges (less than 10 m) and jetties (Annex 3b.2); village rural water supply (wells; rainwater collection; and installation/rehabilitation of pipelines from natural springs) (Annex 3b.3); rural electrification (solar panel; pico hydro < 20kV; solar street lightening; diesel and biomass generator (< 15 kV amps); biogas charge station) (Annex 3b.4); small scale irrigation (Annex 3b.5) and sanitation facilities (small latrines and village scale waste treatment facilities) (Annex 3b.6).

**Table 6: Environmental Codes of Practice**

No.	Description <sup>8</sup>
1.	Environmental management measures for activities in Year 1 focusing on eligible rehabilitation and minor extension works only (eligibility based on the Positive Lists)
2.	Environmental management measures for activities in Year 2 and beyond focusing on eligible small new construction works (eligibility based on an open menu, within the restrictions of the list of non-eligible activities for community investments (negative list) outlined in table 2 above)

105. *Environmental Management Plan.* The ECoPs are utilized for all sub-projects with the exception of the below, which require preparation of a simple Environmental Management Plan (EMP).

- (a) Any sub-projects that trigger the need for an EMP in the safeguards screening form (see PC13, Chapter 3);
- (b) Any bridges longer than ten (10) meters;
- (c) Any new construction of a deep well,<sup>9</sup> irrigation, water supply network, small-scale wastewater treatment facility or small scale solid waste management (including health waste) facility;
- (d) Any rehabilitation of historical buildings or infrastructure with cultural property;
- (e) Any sub-projects in protected areas;
- (f) Any sub-projects greater in value than MMK40,000,000 (including community contribution and/or other sources of financing).

<sup>8</sup> The Environmental Codes of Practice are specified in detail in the project Operations Manual.

<sup>9</sup> Deep wells are located at minimum 200 ft

106. An EMP, prepared with the assistance of TTA and/or DRD township CDD offices, will identify potential site specific impacts that cannot be adequately addressed through the application of the ECoPs and indicate when, by whom, and how the mitigation measure(s) will be applied. The EMP will also specify required monitoring. An EMP form and a sample of EMP for wooden bridge renovation are presented in Annex 5 and 5.1, respectively.

107. The community facilitators (CF) and technical facilitators (TFs) will provide the necessary technical guidance so that VTPSC members can review the safeguard screening sheet in line with the project Operations Manual and this ESMF. The approved safeguard screening sheet in the local language will be available with the detailed project designs in the beneficiary village(s). Furthermore, villagers will be given the opportunity to address questions and concerns to members of the village implementation committees.

108. If the safeguard screening finds that some minor impacts cannot be avoided, the VTPSCs will develop measures to address such impacts. Special attention should be given to screening for subprojects proposed in parks, a protected cultural heritage area, a protected archeological area or area of historical significance, reserved forests and/or areas of national conservation level to determine if the investment is in a critical or non-critical area in order to be able to propose, if necessary, adequate mitigation measures to avoid significant conversion and/or degradation to a natural habitat/area and to avoid and mitigate impact to physical cultural resources. No major impact beyond the loss of small numbers of trees, fences or other non-residential structures or the acquisition of small strips of private land is anticipated. Impact on Physical Cultural Resources will be avoided through screening against the negative list. Sub-project detrimental to cultural resources is ineligible for the project support. A simple Physical Cultural Resources Management Plan (PCRMP) will be prepared for sub-project located inside or adjacent to the protected cultural heritage zones or in an area of PCR significance. Impact on private asset may be addressed either through: (i) voluntary donation or (ii) compensation at replacement cost. It is expected that the majority of social impacts will continue to be addressed in the form of voluntary donations. The Community Facilitator and the Technical Facilitator, under the guidance of T-TA, will verify if all conditions of voluntary donations described in para 113 below are met based on face-to-face meeting with affected people. Where it is not verified that all conditions of voluntary donations are met, impacts will be addressed as involuntary land or asset acquisition and an abbreviated or full Resettlement Action Plan (RAP), as applicable, will be developed.

109. Proceeds from the World Bank financing cannot be used for compensation.

110. *Voluntary donation.* The NCDDP will continue to allow community members who benefit from a sub-project to donate land and other private assets to the sub-project 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 sub-project can technically be implemented in another location than where it is planned – if a sub-project is location-specific by nature, land acquisition associated with such a sub-project cannot be considered as voluntary; rather, it is an act of eminent domain. In such cases, an abbreviated RAP or a full RAP, as applicable, will be developed.

- 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 sub-project;
  - The total size of productive land owned by the affected household is more than 300m<sup>2</sup>;
  - The impact is less than 5 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 VTPSC and the VPSC 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 in this ESMF 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 VTPSC will develop a voluntary donation form.<sup>10</sup> 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 VTPSC 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 sub-projects involving voluntary donations starts only once the VTPSC has approved the signed voluntary donation forms.
- Annual social audits carried out by the DRD township offices verify the informed agreement of affected people.

111. *Compensation at replacement cost.* If affected people are unwilling to donate assets without compensation, or if impacts that go beyond the threshold for voluntary donations occur, the VTPSC, with the support of the CF, will develop an abbreviated RAP. In an exceptional case where more than 200 people are affected by a sub-project, a full RAP will be developed. The following principles will apply for the land or asset loss against compensations:

- (a) Land acquisition should be avoided or minimized if unavoidable, and should not result in persons losing their home or suffering any decline in income, livelihood, or living standards. No physical relocation of households is allowed under the project.

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<sup>10</sup> The project operations manual contains a format for a voluntary donation form.



(b) If private land needs to be acquired permanently and/ or private assets such as fences, structures, barns, standing crops would be lost, and if conditions for voluntary donations are not met, it will be furnished through in-kind compensation. The VPSC, VTPSC and affected households, under the guidance of the Community Facilitator and the Technical Facilitator, will jointly assess the scale of impact and identify in-kind compensation that is at least sufficient to restore pre-project level livelihoods and income streams. In-kind compensation should be provided by beneficiary communities themselves from their own assets, or if communities have difficulties identifying sufficient assets that can be made available to affected people to fully restore their livelihood.

(c) No one should lose more than 10 percent of their productive assets as a result of subproject implementation. If, based on the survey conducted by Technical Facilitator with the participation of affected people find that more than 10 percent of productive assets would likely be affected, designs should be adjusted and/ or alternative locations be sought so that impact would be reduced to below 10 percent.

(d) Community infrastructure, if affected by subproject, must be restored or replaced.

(e) Subprojects involving land acquisition based on eminent domain are on the list of non-eligible activities for community investments (negative list) and are not eligible for funding (see para 93 for more information on eminent domain). Under the Project, only beneficiary communities themselves are able to acquire land or assets of other community members based on mutual agreements and consent on terms of compensation.

(f) An abbreviated RAP and a full RAP will be prepared by VTPSC under the support of the Community Facilitator and Technical Facilitator (see below for the contents of the RAP).

(g) Implementation of civil works will commence only after all entitlements are delivered to affected households.

112. The processes and procedures for voluntary donation and involuntary land acquisition including grievance redress are summarized in a pamphlet in all applicable local languages and distributed in all participating villages.

***Step 3 – Development of Safeguard Instruments (abbreviated RAP or full RAP; ECOP, EMP or PCRMP<sup>11</sup>)***

113. If the safeguard screening finds that land acquisition or loss of private assets is unavoidable and if voluntary donation does not apply, the VTPSC, with technical inputs from the DRD engineer and the support of the TF, will prepare a resettlement instrument (an abbreviated RAP or a full RAP). All village representatives will receive safeguards training. Also, basic processes and procedures with regard to social and environmental safeguards will be displayed at a notice board in all project villages.

(a) The abbreviated RAP will be developed which should include, at minimum, (i) the names of affected people, (ii) baseline census and socioeconomic data of affected people; (iii) the inventory of impacts, (iv) mitigation measures including the types and the scale of in-kind compensation, (v) implementation arrangements including participatory processes to ensure participation of affected people in the RAP implementation; (vi) implementation schedule to ensure that in-kind compensation will be provided before civil works start, and (vii) the estimated cost of compensation and the sources of funds where compensation is provided in

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<sup>11</sup> Under this project, a VTDP is developed as an IPP

cash. The VPSC, under the oversight of VTPSC and with the support of the Community Facilitators and the Technical Facilitators, will be assisted to identify in-kind compensation including the provision of alternative land if feasible that is sufficient to restore the income streams of the affected people. The sample template of RAP is attached to Annex 7.

114. If Community Facilitator and Technical Facilitator find that more than 200 villagers will lose part of their land and/ or private assets under respective subprojects, the Bank task team will be immediately consulted for guidance. In such a highly unlikely case, a full RAP will be developed under direct guidance of the Bank task team.

115. When sub-project documents<sup>12</sup> and applicable resettlement instruments are drafted, members of the VTPSC including the representatives from the beneficiary village, the DRD engineer and the technical facilitator will visit the sub-project site and carry out a half-day consultation with the village implementation committee. During the consultation meeting, the final sub-project documentation is presented together with the draft detailed design, and the draft abbreviated RAP (abbreviated or full) and voluntary donation forms, as applicable. Inputs from the village implementation committee will be sought regarding whether or not all potential impacts are adequately covered and mitigated, and whether adequate measures are incorporated in the design to meet the special needs of affected people and disadvantaged groups, including in particular ethnic minorities. The final sub-project documentation that is submitted to the VTPSC for approval incorporates the inputs from villagers, and the result of the meeting is documented and kept in the project file.

116. The resettlement instruments developed for a sub-project are reviewed against the provisions of this ESMF and approved by the VTPSC and endorsed by the Settlement and Land Record Department under the Ministry of Agriculture and Irrigation prior to its implementation.<sup>13</sup> In particular, whether potential adverse impacts are clearly identified, mitigation measures proposed are sufficient to fully restore income streams of affected people, all conditions of voluntary donations are met, implementation arrangements and grievance mechanisms are adequate, and the budget estimated is sufficient, will be reviewed. Copies of approved abbreviated RAP or a full RAP will be made available at the village tract office and in easily accessible places in the villages where the sub-project is implemented, with a summary translated into the local language(s).

117. For this project, the Village Tract Development Plan (VTDP) will serve as the Indigenous Peoples Plan (IPP) where ethnic minorities are affected within the Village Tract. The VTDP will include the following, as minimum:

- (a) *Affected ethnic minorities.* The ethnic minorities present in the VT, identified based on the participatory Social Assessment (SA) conducted at the village level using the criteria described in para 79 of this ESMF, will be described.
- (b) Summary of the findings of the participatory SA including the results of the free, prior, and informed consultation conducted with the affected ethnic minorities, and the evidence of broad community support to the priority sub-projects.
- (c) A framework for ensuring free, prior, and informed consultation with affected ethnic minorities during subproject implementation.

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<sup>12</sup> The final sub-project documentation includes the detailed engineering design, cost estimates, civil works documents (bill of quantities (BoQ), draft civil works contract, etc.), screening forms, the ECoP (and EMP if required), operations and maintenance requirements and plans, minutes and record of attendance of consultations, and applicable the resettlement instruments.

<sup>13</sup> The Settlement and Land Record Department is responsible for compensation under national legislation.

- (d) Measures to ensure that ethnic minorities 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 minorities and the source of fund to implement such measures.
- (f) Grievance and monitoring mechanisms.

118. 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 meeting and their broad community support would be sought and documented in the updated VTDP.

119. The main environmental safeguards instruments used for subproject implementation and monitoring are the ECoPs. If additional impacts are envisaged for which specific mitigation measures are required beyond what is included in the ECoPs, a simple EMP will be prepared. The EMP will also provide monitoring indicators and activities of the proposed mitigation measures as well as estimated costs to implement such activities (see Annex 5 for EMP format and Annex 5.1 for an example of EMP).

120. If sub-project screening finds that sub-project is located inside or adjacent to protected cultural heritage zones or area of PCR significance, a site-specific simple Physical Cultural Resources Management Plan (PCRMP) will be prepared with the assistance of TFs, TTA and/or DRD township CDD offices. 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 Department of Archaeological National Museum and Library will be contacted to provide recommendations on the PCRMP before construction commence. EMP form (Form PC 15) will be used to prepare PCRMP. An example of PCRMP including Chance Find Procedures is included in Annex 5 (Table 5.3).

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

121. Each VTPSC is responsible for the implementation of the sub-project safeguards instruments including the ECoP (and EMP, PCRMP if required), voluntary donation forms, abbreviated or full RAPs, as applicable, according to the policies and procedures laid out in this ESMF. The VTPSC will ensure that no physical land acquisition commences before an abbreviated RAP or RAP has been implemented and all entitlements have been fully delivered, or before the voluntary donation form is signed by the affected household(s) and reviewed and approved by the VTPSC. For sub-projects located inside the protected cultural heritage zones, the VTPSC will also ensure that prior permission from the Department of Archaeological, National Museum and Library is obtained before endorse VTDP and before sub-project construction.

122. Village monitoring sub-committees, in collaboration with CF and village volunteers, monitor the implementation of the safeguards instruments, including the ECoP (and EMP, PCRMP if required), voluntary donation forms, and/ or abbreviated or full RAPs. The village monitoring sub-committees confirm the proper application of the instruments and notify the VTPSC that a sub-project is ready for implementation. The implementation of sub-projects involving voluntary land donation, involuntary land acquisition or asset loss start only once this confirmation is given.

123. Throughout the implementation of a sub-project, the village monitoring sub-committees and CF/TFs monitor any negative impacts that may arise. CF 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 through the project's grievance handling mechanism. The Department of Archaeological, National Museum and Library will be selectively invited to visit sub-project located inside the protected cultural heritage zones to monitor and provide advice to sub-project both during and after construction completion.

124. Social audits will be conducted on an annual basis and facilitated by the township DRD and TA team. For the social audits, CFs 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. The purpose of the social audit is to report back to the population living in the village tract on past year's progress, the expenditures under the village tract development plan, and any financial and technical audit findings, and to hear reflections from community members on lessons learned and things that could be done differently in future cycles. The meeting is attended by the village volunteers, CF, DRD staff and VTPSC members. It provides a public forum to present problems, and any grievances or other issues people may have with the project. The CF 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 village tract development plan, submission of which to the DRD township office is a condition for the transfer of the next annual block grant allocation.

125. The VTPSC will summarize environmental and social safeguard related activities in their monthly reports to the township DRD office. These reports will also include a short report on any environmental mitigation plan, voluntary donation, and abbreviated or full RAP (if relevant) that have been completed during the reporting period.

126. The World Bank reviews the use of safeguards screening forms, environmental management plans, voluntary donations, abbreviated RAPs 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.

### **Special Measures to Ensure Full Participation of Ethnic Minorities**

127. In order to mitigate the risk that ethnic minorities are not able to fully participate in project implementation and receive project benefits, the following special measures will continue to be employed by the NCDDP:

- Recruitment of village volunteers elected from among ethnic groups who assist the community facilitator throughout project implementation;
- Training of CF/TF to increase cultural awareness of issues related to ethnicity, religion and marginalization;
- Free, prior and informed consultations with ethnic minorities of the village and village tract development plans;
- Involvement of ethnic minorities in the decision-making process in the VTPSC;
- 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;
- Use of local languages in the dissemination of project related information.

128. These special measures are spelled out in the project Operations Manual.

129. The DRD is developing the guidelines on consultations and disclosure in ethnic languages as part of the Communication Strategy. In doing so, the DRD takes into account the comments provided at the

safeguard consultation meetings where participants emphasized the importance of using audio-visual materials to ensure that ethnic minorities clearly understand the project and the protections provided under the ESMF. The guidelines will establish principles with regard to the translation of project documents into ethnic languages including steps to be taken where no writing systems exist for a given ethnic group. It is expected that the guidelines will be developed by June 30, 2015.

### Special Measures to Ensure Full Participation of Women

130. The NCDDP will continue the practice of having trained CF and village volunteers 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 sub-projects, there will be equal pay for equal work for women and men. Furthermore, the environmental and social safeguards screening for each sub-project will include gender aspects. Safeguards plans prepared for the sub-projects 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 50 percent of committee members.

## I. Institutional Assessment and Capacity Building

131. A capacity development needs assessment was conducted during preparation of the initial IDA grant and updated as presented in Table 7.

**Table 7: Institutional Capacity Assessment and Training Needs for Sub-Projects**

Institution		Sub-project panning	Design	Review, appraisal and approval	Implementation	Operations and maintenance
DRD (union level)	Responsibility		Master/schematic designs and documents, including ECoPs	-	-	-
	Staff Assessment	Engineers available including 3 newly hired infrastructure engineers				
	Technical Assistance	Technical capacity adequate, additional engineers not required. Support from Township Archeological Department and Regional/state technical assistants on PCR training to CFs/TFs will be provided.				
	Training needs	Training on ESMF, ECoPs, EMP, PCR, RAP, voluntary donations, IPP, consultations, and documentation, etc.				
DRD state/regional secretariats (established in 15 state/regional offices)	Responsibility	<ul style="list-style-type: none"> <li>Act as cooperation body with state/region level departments, and provide technical support to township offices including on infrastructure, monitoring and evaluation, safeguards and other issues.</li> <li>facilitate aggregated reporting to the union level.</li> <li>monitor the implementation of the sub-projects including safeguards in participating townships and support TPICs to resolve any implementation issues that cannot be addressed at the township level.</li> </ul>				
	Staff Assessment	Approximately 5 technical staff in each of the 15 state/regional offices secretariat established. including 2 DRD staff (one senior engineer and 1 junior engineer) and 3 consultants. More than 50% of the state/regional consultants had gone through NCDDP trainings including safeguards from their previous roles as TFs..				

Institution		Sub-project planning	Design	Review, appraisal and approval	Implementation	Operations and maintenance
	Technical Assistance	Requires training in specific requirements of Operations Manual, including applicable safeguards procedures.				
	Training needs	Training on ESMF, ECoPs, EMP, PCR*, RAP, voluntary donations, IPP, consultations, documentation, etc				
DRD (township level)	Responsibility	Technical review of sub-project proposals	Revising standard documents, screening, use/referencing of ECoPs, EMPs, PCR*, measurement of impact, production of detailed designs in consultation with villagers	Yes	Yes – oversight monitoring	Yes – oversight, periodic monitoring
	Staff Assessment	DRD is hiring new staff at the township level who need additional training in safeguard policies. In addition, the number of staff not sufficient to supervise implementation of all sub-projects in a township. Additional support being provided under NCDDP by technical facilitators.				
	Technical Assistance	Capacity adequate but requires training in specific requirements of Operations Manual, including applicable safeguards procedures. Community facilitators and technical facilitators support DRD engineers and lead engagement with villages, including on applicable safeguard policies such as minor repair and operational guidance during sub-project implementation.				
	Training needs	Training of township engineers and community and technical facilitators on ESMF, ECoPs, EMP, PCR*, RAP, voluntary donations, IPP, consultations, documentation, etc. Training of and facilitation for township engineers and community facilitators on continuous engagement with villagers on O&M.				
Village Tract Project Subcommittee	Responsibility	Development of village tract development plan (VTDP) as IPP, selection of sub-projects, review and approval of sub-project proposals, safeguards screening, voluntary donation form, abbreviated or full RAP, as applicable.				
	Staff Assessment	No technical staff or capacity and a significant gap in knowledge of applicable safeguard policies. Low literacy levels.				
	Technical Assistance	Community facilitators/Technical Facilitators provide continuous support throughout implementation, including on applicable safeguard policies.				
	Training needs	All members of the VTPSC on all aspects of the ESMF, ECoPs, PCR*, RAP, voluntary donations, IP P, consultations, documentation, etc.				
Village Project subcommittee	Responsibility	Decision-making authority for all aspects of sub-project planning including participatory SA, review and oversight.				
	Staff Assessment	No technical staff or capacity and a significant gap in knowledge of applicable safeguard policies. Low literacy levels.				
	Technical Assistance	Community facilitators/Technical Facilitators provide continuous support throughout implementation. DRD township engineers provide continuous support for the design, operations and maintenance of sub-projects				
	Training needs	Key members of the village implementation committees on all aspects of the ESMF, ECoPs, PCR*, RAP, voluntary donations, IPP, consultations, documentation, etc.				

\* Training on PCR will be provided to State/Regionals, Townships, village tracts, villages cover /located inside or in vicinity of the protected cultural heritage zones or areas of PCR significance.

132. To address the capacity constraints identified above, the NCDDP invests heavily in capacity development at all levels to ensure that sub-projects 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 sub-project 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) and translated into all applicable local languages.

133. In each of the participating townships, the initial months of operation are devoted to capacity development. The DRD secretariat supported by the TA at the union level trains the DRD and TA staff at the township level. The township DRD offices and TA thereafter train the community and technical facilitators in all relevant areas of the project Operations Manual. Only at this stage does the project cycle at the community level begin, starting with the first village meeting. The township DRD offices, the TA and the CFs provide specific training for those villagers taking an active role in implementation, including the village volunteers and the members of the VTPSC, village implementation committee and various sub-committees. Capacity development activities for community members and DRD staff are undertaken regularly and as needed, including refresher training and township cross-visits prior to each new annual block grant cycle.

134. Training materials continue to be updated based on lessons learned in project implementation. This includes an update following the first cycle taking into account insights gained from the social audits and multi-stakeholder reviews, as well as findings of the financial audit and the independent technical review commissioned by DRD. As a result of these lessons, training materials were updated and time dedicated to training expanded, including for community and technical facilitators, township level DRD and TA staff, and training provided at the community level.

## **J. Monitoring Arrangements**

135. Community level: Based on the village sub-project work plan outlined at the initial technical meeting, the village monitoring sub-committee (MSC) monitors progress in implementing the village sub-project. If a village sub-project benefits directly more than one village or covers more than one village tract within a township, MSCs of the benefiting villages will jointly monitor implementation progress. During construction, normally on a monthly basis, the MSC will review actual vs. planned activities using a village sub-project monitoring form and submit the form to the VTPSC. The MSC also monitors progress in implementing any environmental and social mitigation measures. Monitoring reports will be publicly displayed on the village notice board. Village sub-project monitoring forms will capture information that is consistent with the project results framework.

136. The VTPSC will prepare a monthly consolidated report for all village sub-projects under implementation including safeguard aspects and submits it to the DRD township M&E officer. With the assistance of the village volunteers, the MSC organizes 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 (procurement activities, percent of works undertaken, number of person days of work and wages paid, expenses to date and cash on hand, women's involvement, safeguards and mitigation measures, etc.). Villagers will be given opportunities to discuss progress and raise any concerns they may have regarding village sub-project implementation. The VTPSC will file all safeguard instruments including voluntary donation forms, monitor their successful implementation through field visits and regular meetings with MSCs and record the current status of safeguard implementation including outstanding issues and grievances collected.

137. Township level: Township Engineer, Township TA, CF and TF will monitor subprojects regularly, including on safeguard performance. The township engineer and DRD township office M&E officer will undertake regular supervision visits to the village sub-project sites. They will prepare and

post a brief note to the file after completion of every visit, using a standard table/matrix format. Visits are scheduled taking account of the village sub-project implementation schedule and work plan. Visits serve to review progress in implementing the village sub-project and any environmental and social mitigation measures, and to make recommendations/suggest potential solutions to problems faced. The DRD township M&E officer will incorporate key findings from the supervision visits into the quarterly township progress report. The township engineer will undertake additional visits to advise the VPSCs on technical issues, as requested.

138. State/Regional level: The state/regional NCDDP secretariat staff and consultants will undertake regular safeguards supervision and monitoring visits to participating townships, as part of infrastructure supervision, and assist with problem solving. The state/regional office will ensure that safeguards implementation status are included as part of the current progress reporting system i.e. quarterly and annual report.

139. Union level: The DRD union office staff and relevant union TA consultants will continue to undertake regular supervision and monitoring visits to townships, village tracts and village sub-project sites. Visits will serve to assess project implementation progress across the village tracts in a township. The DRD union office will ensure that experiences from other townships are shared in order to enhance implementation quality. DRD union office staff and union TA consultants will continue to provide technical support to the DRD township office staff and VTPSCs, as needed. The DRD union M&E officer will incorporate the findings from the supervision visits as well as the data provided in the quarterly township progress report into the quarterly project progress report. The following performance indicators will be monitored and presented in the quarterly progress report:

- (a) The number of voluntary donation cases;
- (b) The number of cases of involuntary land or asset acquisition;
- (c) The number of abbreviated or full RAP developed;
- (d) The amount of compensation paid for involuntary land or asset acquisition;
- (e) The total number of project beneficiaries/ affected people, broken down to ethnicity; and
- (f) Grievances submitted through various channels described below, and the current status.

140. Villagers will be invited to attend social audits at the end of each annual cycle to review the expenditures made and progress achieved, discuss the findings of any financial and technical audit findings, and suggest local adaptations to the project cycle or community implementation structure. As long as the project is active in a township, villagers will have the opportunity to provide feedback or express complaints through a grievance handling mechanism. The summary of the social audit conducted between May 2016 to February 2017 is provided in Section G of this ESMF.

## **K. Grievance Handling Mechanisms (GHM)**

141. Complaints and grievances are dealt with using the NCDDP 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. Details of the grievance handling mechanism are described in the project Operations Manual, and are made publicly available at the village level, including through posters and visual materials.



142. 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; that inappropriate intervention by an outside party is found; that fraud and corruption have 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.

143. Grievance focal points are selected by villagers themselves at the village level who serve as the first tier of the conflict/ grievance mediation mechanism. They may request the Village Project Support Committee (VPSC) to meet and discuss matters raised by aggrieved persons, or mediate between parties to the conflict for mutually agreeable resolutions. They may also provide assistance to aggrieved persons to formally file grievances to the GHM. They receive training in the provisions of this ESMF, and keep records of grievances they received by them.

144. Grievances will be disclosed publicly, but anonymously unless the aggrieved person 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.

145. The grievance handling system is divided into five steps 1) intake, 2) sorting, 3) verification, 4) action, and 5) follow-up.

146. 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, facilitator, VPSC member, or VTPSC member or township engineer. Aggrieved persons can also file grievances using the following channels: 1) verbal communication to the Village Tract administrator/ Facilitator/ Township Grievance Handling Officer; 2) feedback boxes placed in each village (a box to be opened at least every two weeks by the village grievance focal point and CF); 3) a letter to Village Tract Level, DRD township office, Union Level (DRD union office), Union level NGO/firm, township level NGO/firm; 4) e-mails to dedicated e-mail addresses of the DRD union office and union level NGO/firm; 5) the dedicated phone line for the DRD union office; or 6) DRD project website or DRD social media site. If aggrieved persons so decide, grievances can be addressed during community meetings.

147. Grievances can be expressed at any time to any level (e.g. grievances can be directed to the village, village tract, township, or union level). If a grievance is related to village and/or village tract, the aggrieved person is encouraged to report to the township level, if the grievance is related to a village or village tract issue. If a grievance is related to township or union, it is suggested to report to the union level (specifically, the grievance handling officer of the union TA team) for review, verification and decision on how to address the grievance.

148. Township or union DRD staff, as appropriate, together with relevant TA members, will verify if grievances submitted are valid, and identify solutions if grievances are found to be valid. Verification normally includes 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).

149. The village project support committee (VPSC) 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 level. In principle, a

final decision will be made by the Union Feedback Committee which includes DRD senior officials, the union TA team leader and the union TA grievance officer. All grievances received through the grievance handling mechanism will be recorded in the project management information system (MIS).

150. The GHM is supported by an information campaign and training programs. Community members in all project villages will be informed of the grievance handling mechanism and contact details will be shared at public meetings on multiple occasions. Brochures/ pamphlets and posters that describe the project and the grievance procedures have been developed and are 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 grievance handling mechanism. To ensure transparency and provide a point of contact for community members with concerns about the project, each village elects two grievance focal points, one man and one woman. Village grievance focal points must be independent from the VTPSC, and must be fair, respectful and able to keep confidentiality. Grievance focal points will be part of the Village Tract Grievance Committee. DRD staff responsible for handling grievances are appointed at the township, region/state and union levels. Township and community level parties involved in the implementation will receive training on how to receive and handle grievances with confidentiality.

151. At the end of the project cycle, the VTPSC will report on all the grievances received and resolved during the annual social audit meeting at community level. During the social audit meetings, villagers will discuss the effectiveness of the grievance handling system and gather suggestions on how to improve it. Aggrieved persons who are not satisfied with the resolutions made will also be encouraged to air their grievances at the meeting. In its regular supervision visits, the DRD union office and union level TA, and the state/regional level DRD office assess the functioning of the grievance handling system and undertake spot checks.

152. The DRD union office uses the MIS to provide a monthly snapshot of the GHM (the number and category of grievances received and grievances resolved), including any suggestions received and acted on. A summary of grievances will also be reported on in the quarterly implementation progress reports and annual reports prepared by union DRD. Reports include information on grievance resolution and trends (the number of grievances received, cause of grievance, number of grievances resolved, average time taken to resolve a grievance, percentage of individuals having filed a grievance who are satisfied with the action taken, the number of grievances resolved at the lowest applicable level, etc.).

153. 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.

## **L. Consultations and Disclosure**

154. The ESMF contains specific guidance and requirements for consultations with potentially affected people, consistent with the bottom-up approach and planning cycle of the project. The sub-projects are identified and proposed by the villagers and reviewed and approved by the VTPSC. The project design has specific requirements, including for representation of women and inclusion of ethnic and religious minorities, as applicable, and other vulnerable groups in the project cycle. Furthermore, as part of the technical design and safeguards planning, VTPSC and village implementation committees consult with the households potentially affected by a sub-project before the VTPSC approves it. These consultations are done in a culturally appropriate manner, documented and included in the sub-project documentation, and disclosed locally. Training to ensure these measures are properly understood and effectively implemented is provided to all relevant members of the VTPSC, village implementation committees and monitoring sub-committees, and DRD township staff.

155. The original ESSAF was disclosed as a stand-alone document by DRD in Myanmar language and at the World Bank’s Infoshop in English on October 1, 2012. Consultations on this document were conducted in August and September 2012. In addition, under the first cycle of project implementation at community level, key requirements, entitlements and procedures of ESSAF were explained to project beneficiaries/ potential project affected people at the onset of community meetings in local languages. Questions raised by villagers about safeguard requirements were answered by the Community Facilitators and Technical Facilitators present at the community meeting, and the representatives of township DRD provided additional explanations where necessary. Throughout the local consultation processes, the township TA provided assistance and guidance to the Community Facilitator and the Technical Facilitator. During the AF, the DRD will strengthen such documentation through continuous training and capacity development of the CF and the TF as well as by raising the awareness of community members.

156. The current ESMF (March, 2015 version) was the subject of consultations during safeguard consultation meetings held on 9 February 2015 in Yangon, 11 February 2015 in Mandalay and 16 February 2015 in Naypyitaw, including with civil society and other project stakeholders. Comments received during these consultations were taken into account in finalizing the ESMF. The final ESMF was disclosed by DRD in Myanmar language and at the World Bank’s Infoshop in English on March 19, 2015.

157. Consultations for the updated ESMF will be conducted with key stakeholders including with civil society and the concerned authorities in Yangon and Mandalay. The revised ESMF following the consultations will be disclosed in accordance with the World Bank’s Access to Information Policy.

158. During implementation, the VTDP that serves as the IPP for this project and includes the summary of participatory SA, and the abbreviated or full Resettlement Action Plan (RAP), as relevant, will be disclosed in local languages at places accessible to affected people. Copies of VTDPs and RAPs will be made available at DRD Township office.

The DRD is developing the guidelines on consultations and disclosure in ethnic languages. In doing so, the DRD takes into account the comments provided at the safeguard consultation meetings of the current ESMF where participants emphasized the importance of using audio-visual materials to ensure that ethnic minorities clearly understand the project and the protections provided under the ESMF. The guidelines will establish principles with regard to the translation of project documents into ethnic languages including steps to be taken where no writing systems exist for a given ethnic group. It is expected that the guidelines will be developed by July 30, 2017.

## **M. Budget for Implementing the ESMF**

159. The costs associated with implementing the ESMF processes and safeguards instruments are included in component 2 (Facilitation and Capacity Development) and 4 (Implementation Support), and the costs of implementing the measures in the ECoPs and the benefits in any abbreviated or full RAP are included in the cost of each sub-project under component 1 (Community Block Grants).

### **A. Entitlement Matrix**

<b>Type of Losses</b>	<b>Entitled Persons</b>	<b>Entitlements</b>	<b>Implementation Issues</b>
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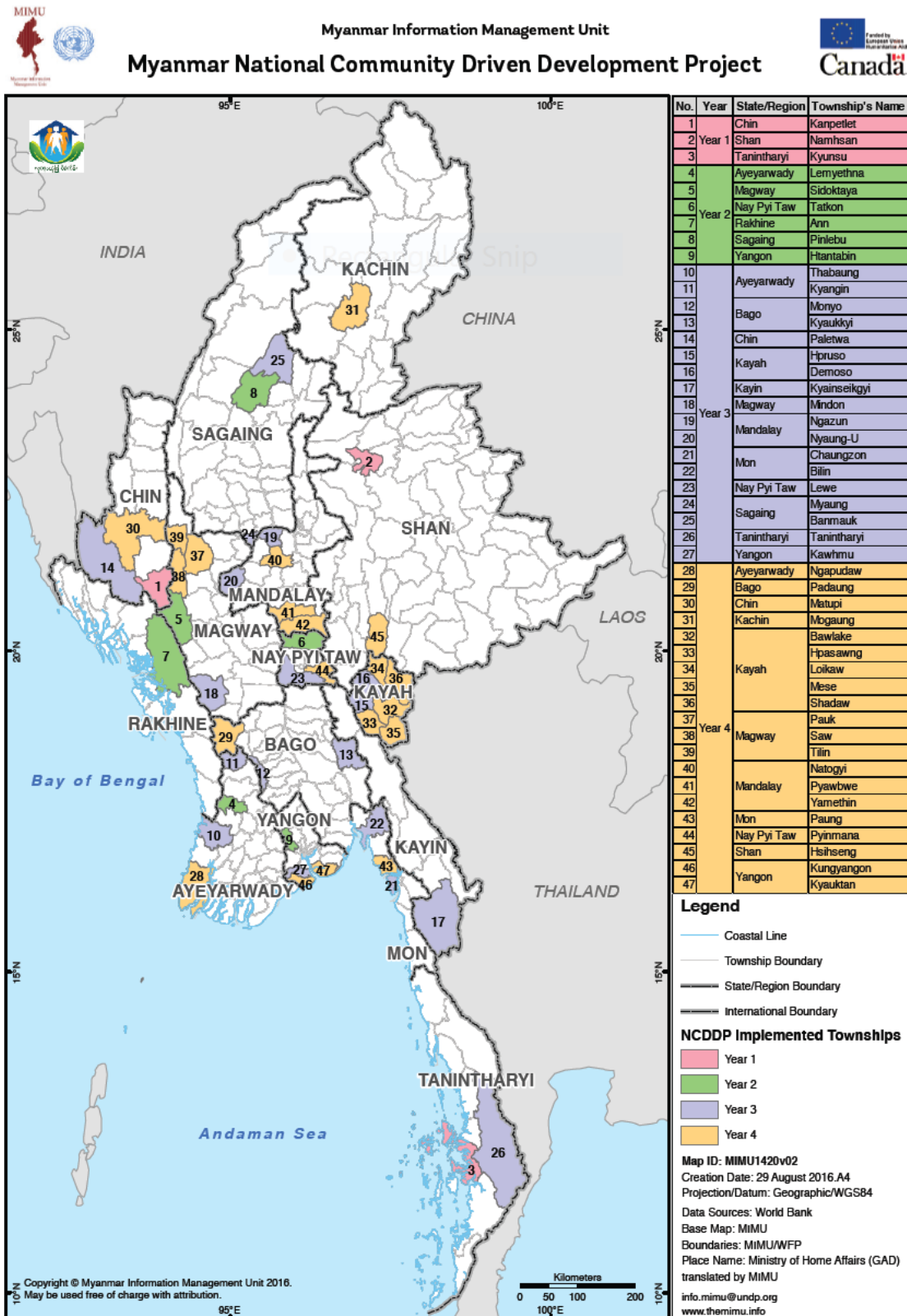
Loss of private land	Legal owners or occupants	Replacement land of similar type, category and productive capacity, free from transaction costs (taxes, administration fees)	No land loss >10% of total productive land holding allowed
	Affected persons without a legally recognizable right or claim to the land they are occupying	At minimum, rehabilitation assistance to restore the livelihoods and standards of living, in real terms, to pre-project levels or to levels prevailing prior to the beginning of subproject implementation, whichever is higher	No land loss >10% of total productive land holding allowed
Loss of trees, structures and other private assets	All affected persons regardless of tenure status	Cash or in-kind compensation at replacement cost  Salvage materials will be handed over to affected people	If remaining parts of the structures are not sufficient for use, compensation will be provided for the entire affected buildings  The project will help salvage material transportation
Loss of income and standing crops	All affected persons regardless of tenure status	Civil works will be adjusted to avoid loss of income/ standing crops	
Temporary land occupation	Legal owners or occupants	In-kind compensation for loss of income or assets on a net basis  Reinstitute land to the original state after the completion of civil works	PIC, under the support of third party service provider, will monitor implementation

## **LIST OF ANNEXES**

- Annex 1: Project Area Map and List of Participating Townships in Year 1 to Year 4
- Annex 2: Subproject Safeguards Screening Form
- Annex 3: Environmental Codes of Practice
- Annex 4: Chance Find Procedure
- Annex 5: Environmental Management Plan
- Annex 6: Voluntary Donation Form
- Annex 7: Resettlement Policy Framework
- Annex 8: Indigenous Peoples Policy Framework
- Annex 9: Final Subproject Inspection Form
- Annex 10: The List of 47 Registered Cultural Heritage Zones in Myanmar
- Annex 11: The list of Activities/Projects Require IEE/EIA (Annex 1 to the Ministerial Notification No. 616/2015 – EIA Procedure)

# Annex 1: Project Area Map and List of Participating Townships in Year 1 to Year 4

## Map of NCDDP Project Areas



## Annex 2: FORM PC 13: SAFEGUARDS SCREENING FORM

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

Region / State :	
Township:	
Village Tract:	
Village:	
Sub-project:	
Sub-project ID:	

### Sub-project description

Type (see eligible category)

Category (check one):  Rehab       Extension       New work       other

Scope:

Building     road/bridge/jetty     water supply     rural electrification     irrigation  
 Sanitation

Cost estimate

Location (with GPS longitudes and latitudes, if available)

Beneficiaries

Number of villages served

Linked to sector plan? (Check one)       Yes     No

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

### Environmental screening

Apply ECoP to all village sub-projects (VSP)

#### *E1. Natural environment*

(a) Briefly describe the vegetation/trees in/adjacent to the sub-project 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) that could be adversely affected by the sub-project?

-- Natural forests: Yes\_\_ No\_\_

-- National parks: Yes\_\_ No\_\_

-- Rivers: Yes\_\_ No\_\_

-- Lakes: Yes\_\_ No\_\_

-- Wetlands (swamps, polder areas, seasonally inundated areas): Yes\_\_ No\_\_

-- Natural habitats of endangered species for which protection is required under Myanmar laws and/or international agreements: Yes\_\_ No\_\_

-- Others (describe): Yes\_\_ No\_\_

If answer to any of above questions is 'yes', 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\_\_

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 sub-project area (or components of the sub-project) occur within/adjacent to any protected areas designated by government (national park, national reserve, world heritage site, etc.) Yes\_\_ No\_\_

If the sub-project is outside of, but close to, any protected area, is it likely to adversely affect the ecology within the protected area 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\_\_

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*

Will the sub-project lead to ground, water or air pollution? Yes\_\_ No\_\_

Will lead batteries be used? Yes\_ No\_

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

- Has an impact                       No impact

*E6. Invasive plant species along feeder road routes*

Is the sub-project likely to result in the spread of invasive plant species (along feeder road routes)? Yes\_\_ No\_\_

*E7. Endangered species along feeder road routes*



Is the sub-project 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 sub-project 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 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 sub-project alter any historical, archaeological or cultural heritage site (pagodas, memorials and graves) or require excavation near same? Yes\_\_ No\_\_

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 sub-project 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. Adverse impacts on natural habitats*

Will the sub-project have adverse impacts on Natural Habitats that will not have acceptable mitigation measures according to OP 4.04 Natural Habitats? 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

*E11. Solid or liquid waste*

Will the sub-project generate solid or liquid wastes? Yes\_\_ No\_\_

If "Yes", does the sub-project include a plan for their adequate collection and disposal? Yes\_\_ No\_\_

If answer to any of above questions is 'yes', mark VSP as generating solid or liquid waste:

- Has an impact                       No impact

- ***If the answer to any of the above questions is 'yes', prepare an Environmental Management Plan that contains suitable mitigation measures***

**Social screening**

*S1. Resettlement and/or land acquisition*

Will land that is privately used for farming, residence, grazing or other purposes be permanently acquired or temporarily occupied by sub-project implementation? Yes\_\_ No\_\_

- If the answer is 'yes', proceed to the guidance on land acquisition (voluntary donation or resettlement action plan, as appropriate)

*S2. Accessing sub-project benefits*

Will the following groups in the village have access to and benefit from the sub-project?

- Women: Yes\_\_ No\_\_
- Youth groups: Yes\_\_ No\_\_
- Ethnic minorities: 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? Yes\_\_ No\_\_

- If the answer is 'yes', → Part I, Block Grants to determine the daily wage

Name: _____	Position:	Head, Village Project Support Committee _____
Signature: _____	Date:	_____

## **Annex 3: Environmental Codes of Practice**

### **1. INTRODUCTION**

160. The World Bank is financing a Community Development Driven Project in Myanmar. The Project Development Objective is to enable poor rural communities to benefit from improved access to and use of basic infrastructure and services through a people-centered approach and to enhance the Government's capacity to respond promptly and effectively to an eligible crisis or emergency. The project will finance rural infrastructure identified by participating communities. These community investments will be conducted throughout three project cycles. The first cycle will focus on rehabilitation and minor extension works, based on positive list of subprojects that are easier to implement by using standardized designs. Beyond the first cycle, the project will also finance small scale new constructions based on an open menu and financial envelope; typically including small feeder roads, foot-paths and bridges, small dykes, drinking water systems, rehabilitation of class rooms and health centres, and small-scale rural electrification.

161. To manage and mitigate potential negative environmental impacts, the project applies Environmental Codes of Practice (ECoPs); outlined in this document. The ECoPs contains specific, detailed and tangible measures that would mitigate the potential impacts of each type of eligible sub-project 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.

162. The preparation of these ECoPs has benefited from practical examples of other World Bank-financed community driven development (CDD) operations, or other projects with similar, small-scale rural infrastructures (e.g. Indonesia's PNPM Rural).

### **2. THE PROCESS: WHO, WHEN & HOW**

163. The ECoPs are to be implemented by villages and/or contractors, with the support of village community and technical facilitators and engineers of the Department of Rural Development (DRD) at township level. While community facilitators will focus on the socialisation of the relevant Code and its adoption into community proposals, the technical facilitators and DRD township engineers will be responsible for the adoption of the codes into their technical design for the sub-projects. The adoption of these codes will be closely supervised and supported by the state/regional NCDDP infrastructure team and DRD engineers at the union level.

164. The adoption of ECoPs will be monitored through the Project's 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 undertook in solving the problem(s).

165. The ECoPs will be adopted throughout the project cycle, as described in the following table:

## **Project Cycle**

## **ECoP Adoption**

### ***Preparation and Planning Phase:***

Step 3. Second village meeting: three year village development plan, prioritising proposals, election of representatives for village tract forum

Community facilitators/Technical Facilitators introduce briefly the main objective of ECoP as a mitigation tool to prevent negative environmental impact. The inclusion of the relevant codes will strengthen the design of community investments/sub-projects when properly adopted.

### ***Decision Making Phase:***

Step 4. Village tract forum discusses tract development plan, and select sub-projects, selects finance sub-committee

During sub-projects selection, facilitators (assisted by the DRD township engineers) will make sure that ECoPs are adopted in the sub-project technical design.

Step 5. Village tract development plan endorsed by township aid management sub-committee

Each sub-project proposal will adopt the specific section of the relevant ECoPs.

### ***Implementation Phase:***

Step 7. Implementation of sub-projects

Facilitators (assisted by the DRD township engineers, if needed) will ensure relevant ECoPs are adequately implemented.

## **Project Cycle**

## **ECoP Adoption**

### ***Operation & Maintenance Phase:***

Step 10. Operation and maintenance (O&M)

As part of sub-project's O&M, facilitators will provide support to village operation and maintenance committee in regard to the implementation of the relevant ECoP

166. ECoPs applies to all type of investments financed during the first cycle of project implementation, based on a positive list of subprojects that are easier to implement using standardised designs. Standard designs will be modified and/or alternative designs prepared to suit local conditions. Standard designs are available for rural roads, rural water supply, rural bridges, rural electrification, jetties and rural housing. In addition to the ECOPs, Chance Find Procedure will be followed in case physical cultural resources (PCR) are unexpectedly encountered.

167. ECoPs applies to all type of eligible investments (open menu) financed during the second cycle of project implementation and beyond; these comprise small-scale 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. The list of sub-projects in this ECoP will be updated annually to cover more activities that are devolved in each project cycle. If subproject impacts are considered to be higher (e.g., water/air/soil pollution), an Environmental Management Plan (EMP) should be prepared before the subproject works may commence. Sub-projects located inside or nearby protected cultural heritage zones or areas of cultural heritage significance should prepare Physical Cultural Resources Management Plan which include chance find procedures.

168. These ECoPs are designed in a way to allow easy adoption during proposal development and sub-project implementation. Each sub-project proposal will adopt a relevant section of the ECoP. Technical facilitators are responsible to ensure the adoption of this specific code into the proposal.

## ***Annex 3a General ECoP***

### **3. Environmental Codes of Practice**

#### ***A. General Guidelines (applicable to most rehabilitation and construction activities)***

<b>Issue</b>	<b>Environmental Prevention/Mitigation Measures</b>
1. Noise during construction	<ul style="list-style-type: none"><li>(a) Plan activities in consultation with communities so that noisiest activities are undertaken during periods that will result in least disturbance.</li><li>(b) Use noise-control methods such as fences, barriers or deflectors (such as muffling devices for combustion engines or planting of fast-growing trees)</li><li>(c) Minimize project transportation through community areas</li><li>(d) 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</li></ul>
2. Soil erosion	<ul style="list-style-type: none"><li>(a) Schedule construction during dry season</li><li>(b) Contour and minimize length and steepness of slopes</li><li>(c) Use mulch, grasses or compacted soil to stabilize exposed areas</li><li>(d) Cover with topsoil and re-vegetate (plant grass, fast-growing plants/bushes/trees) construction areas quickly once work is completed</li><li>(e) Design channels and ditches for post-construction flows and line steep channels/slopes (e.g., with palm frowns, jute mats, etc.)</li></ul>
3. Air quality	<ul style="list-style-type: none"><li>(a) Minimize dust from exposed work sites by applying water on the ground regularly</li><li>(b) Do not burn site clearance debris (trees, undergrowth) or construction waste materials</li><li>(c) Keep stockpile of aggregate materials covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals</li></ul>
4. Water quality and availability	<ul style="list-style-type: none"><li>(a) Activities should not affect the availability of water for drinking and hygienic purposes</li><li>(b) No soiled materials, solid wastes, toxic or hazardous materials should be poured or thrown into water bodies for dilution or disposal</li></ul>

## Issue

## Environmental Prevention/Mitigation Measures

- (c) 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
  - (d) Separate as best as possible concrete works in waterways and keep concrete mixing separate from drainage leading to waterways
5. Solid and hazardous waste
- (a) Collect and transport construction waste to appropriately designated/ controlled dump sites
  - (b) Maintain waste (including earth dug for foundations) at least 300 metres from rivers, streams, lakes and wetlands
  - (c) 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
  - (d) 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
  - (e) Collect and properly dispose of small maintenance materials such as oily rags, oil filters, used oil, etc.
6. Health and Safety
- (a) Provide personal protective gear for workers as necessary (gloves, dust masks, hard hats, boots, goggles)
  - (b) Follow the below measures for construction involve work at height (e.g. 2 meters above ground;
    - a. Do as much work as possible from the ground;
    - b. 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, tranquillisers, blood pressure medication or antidepressants; recent history of falls – having had a fall within the last 12 months, etc;
    - c. Only allow people with sufficient skills, knowledge and experience to perform the task;
    - d. Check that the place (eg a roof) where work at height is to be undertaken is safe;
    - e. Take precautions when working on or near fragile surfaces;
    - f. Clean up oil, grease, paint, and dirt immediately to prevent slipping; and

- g. Where possible provide fall protection measures e.g. safety harness, simple scaffolding/guard rail for works over 4 meters from ground;

**Issue**

**Environmental Prevention/Mitigation Measures**

- (c) Keep worksite clean and free of debris on daily basis
- (d) Keep corrosive fluids and other toxic materials in properly sealed containers for collection and disposal in properly secured areas
- (l) Ensure adequate toilet facilities for workers from outside of the community
- (m) 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.
- (n) Fill in all earth borrow-pits once construction is completed to avoid standing water, water-borne diseases and possible drowning
- (o) Each construction sub-project to have a basic first-aid kit with bandages, antibiotic cream, etc.

7. Other

- (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 3b . ECoPs for specific activities/subprojects*

### **B. Specific Environmental Codes of Practice/Technical Guidelines for Construction and/or Rehabilitation**

#### **1. Buildings**

<b>Sub-Project Type</b>	<b>Environmental Prevention/Mitigation Measures</b>
In general	<ul style="list-style-type: none"><li>(a) Provide adequate drainage in the building's immediate surroundings to avoid standing water, insect related diseases (malaria, etc.) and unsanitary conditions</li><li>(b) Include sanitary facilities such as toilets and basins for hand-washing</li><li>(c) Avoid use of asbestos cement tiles as roofing</li><li>(d) Tiled floors are preferred for easier cleaning and more hygienic</li></ul>
Schools, community recreation centres (including: child care centres, telecommunication centres), rural health centres and markets	<ul style="list-style-type: none"><li>(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. <i>[Attachment point #12]</i></li><li>(b) Health centres:<ul style="list-style-type: none"><li>○ Provide adequate area for treatment, waiting area and patient's rooms, all of which should be well ventilated.</li><li>○ Include facilities for proper disposal of health and biological wastes (syringes, blood, etc.)</li></ul></li><li>(c) Markets:<ul style="list-style-type: none"><li>○ Tiled/paved floor is preferred for easy cleaning and maintenance. Slope floor for drainage.</li><li>○ Provide garbage/waste disposal that can be emptied regularly.</li><li>○ Separate the stalls/shops in the market for dry and wet produce/products.</li><li>○ Ensure the stalls/shops have covers/roof to avoid standing waters during rainy seasons.</li></ul></li></ul>

#### **2. Rural Roads, Bridges and Jetties**

<b>Sub-project Type</b>	<b>Environmental Prevention/Mitigation Measures</b>
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1. Roads connecting villages, between villages and township

General Considerations:

- (a) Control placement of all construction waste (including earth cuts) to approved disposal sites (at >300 m from rivers, streams, lakes, or wetlands). Dispose in authorised areas all of garbage, metals, and excess materials (fuels, oil, grease) generated during construction. Never dispose spent oils on the ground and in water courses as it can contaminate soil and groundwater.
- (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) Spray water on dirt roads, cuts, fill materials and stockpiled soil to reduce wind-induced erosion, as needed.
- (e) Avoid road construction through primary forests as it gives access to illegal logging.
- (f) 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.

Protect slopes from erosion and landslides by the following measures:

- (a) Plant locally available, 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. *[Attachment point #1]*
- (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. *[Attachment point #2]*
- (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. *[Attachment point #3]*
- (e) Rocks (riprap) can be used in addition to protect the slope. *[Attachment point #4]*

- (f) Prevent uncontrolled water discharge from the road surface by sufficiently large drainage ditches and to drain water away from the down slope.

2. Small bridges  
(less than  
10 meters) and  
jetties

Erosion protection:

- (a) The main method of slope and erosion protection is the construction of gabions (gravity walls that support embankments or slopes which have a potential to slip) and ordinary stone pitching. *[Attachment point #5]:*
  - (1) The slope of gabions should be in the ratio of at least 1 vertical: 2 horizontal. Flatter slopes may be adopted depending on the site terrain.
  - (2) The filling of the gabions should be from strong and competent rock which is laid very closely packed to maximise the weight.
  - (3) Bracing wire should be used to prevent the gabion bulging out. The bracing wire should be placed at each third of the gabion height.
  - (4) The gabions should be firmly anchored into the ground by founding the gabions below the expected scour depth level.
  - (5) In cases where stone pitching is not provided, the top layer should be covered by soil to encourage the growth of grass and the stabilisation of the slopes.
- (b) Stone pitching may be provided as the only erosion protection measure in those cases where 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.

Water Quality and Fauna:

- (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 is not advisable; 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

3. Culverts

- (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. *[Attachment point #13]*
- (b) Place large stones at the outlet of the culvert to prevent erosion. *[Attachment point #8]*

- (c) Keep the culvert inlets free from sand and gravel – the water must flow through the culvert. *[Attachment point #8]*
- (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. *[Attachment point #8&14]*

<b>Sub-Project Type</b>	<b>Environmental Prevention/Mitigation Measures</b>
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### 3. Rural Water Supply

- |                      |   |
|----------------------|---|
| Wells (deep/shallow) | <ul style="list-style-type: none"> <li>(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. <i>[Attachment point #16]</i></li> <li>(b) Steel rungs (placed inside wall of a deep well) are essential for maintenance of a well or in case of an emergency. <i>[Attachment point #16]</i></li> <li>(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. <i>[Attachment point #16]</i></li> <li>(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 (health risk). <i>[Attachment point #6]</i></li> <li>(e) Before using a new water source, take samples for testing; minimum key parameters for water testing: total coliform, pH, Arsenic, Nitrate, colour, turbidity, and temperature. Water quality should also be monitored in the case of all wells rehabilitations as part of the project.</li> </ul> |
| Spring               | <ul style="list-style-type: none"> <li>(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&amp;M).</li> <li>(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.</li> <li>(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.</li> </ul>  |

- Rainwater harvesting
- (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 faeces 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 build up of floating sediment on the top of the stored water and maintain good water quality.

Installation/  
Rehabilitation of  
pipelines from  
natural springs

Preventing contamination at water sources:

- (a) Build a structure with roof over the water source to prevent leaves or other debris from entering into the basin.
- (b) A fence is needed to protect the water sources (springs particularly) from public access and risk of contamination.
- (c) The sand/gravel filter traps sediment before the spring flow enters the collection chamber and has to be changed during periodical maintenance.

Pipe Laying: [Attachment point #17]:

- (a) 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.
- (b) Pipe shall be laid in a straight line, over a constantly falling slope.
- (c) 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.

- (d) 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.

#### 4. Rural Electrification

Sub-Project Type	Environmental Prevention/Mitigation Measures
1. Solar panel and charge station	(a) Provide a shed for genset (distributed electrical generator system) or pumps that are accessible for easy maintenance. Regular maintenance is important to avoid spillage/contamination (diesel/petrol/oil).
2. Pico hydro (<30kw)	(b) 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.
3. Solar street lighting	(c) Tidy wiring for easy maintenance and reduces the risk of accidents. <i>[Attachment point #10]</i>
4. Diesel generator (<20kilovolt-amperes)	<p>(d) Electrical cabling connections for street lighting need to be protected against rain to prevent short circuits.</p> <p>(e) 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.<i>[Attachment point #10]</i></p> <p>(f) A concrete/ steel pole foundation (min 80 x 80 x 100 cm) is essential for safe lighting and power distribution. Foundation for other types of pole should be suitable for its function and sufficient for safe installation and use (minimum depth = 60 cm).</p> <p>(g) Location of Generator:            1. 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.            2. Give priority to locations that are not prone to flooding.</p>
5. Biogas charge station	<p>(a) Adequate level of maintenance is needed to prevent pipes getting blocked and leaking.</p> <p>(b) No open flames should ever be used near a digester, and adequate ventilation is needed.</p>

- (c) 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 particularly recommended to wash hands before eating and drinking and before touching the eyes or other mucous membranes.
- (d) Keeping the digester facility clean will reduce disease hazards as well as the spread of odours and fly and mosquito populations in the digester facility.

6. Biomass generator (<15 kilovolt-amps)

- (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.
- (b) Ash content from combustion of biomass generator needs to be buried or used as fertiliser.
- (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.
- (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.
- (e) Surface run-off from the surrounding area should be directed away from the storage waste pile.

**5. Small-scale Irrigation**

**Sub-Project Type**

**Environmental Prevention/Mitigation Measures**

Small-scale irrigation

- (a) Masonry walls (along the road) or stone riprap should be built to prevent erosion on a sloped bank. *[Attachment point #4]*
- (b) May use bamboo as bank protection along the rice fields as the loads are low. *[Attachment point #8]*
- (c) A bar screen (vertical bars; about 20mm diameter with an approximate 10 cm clear distance for easy maintenance) is essential in front of any inlet structure (upstream) to prevent large objects and debris blocking the irrigation canal. The angle between the bottom of the canal and the screen shall be between 45 to 80 degrees.

**6. Sanitation Facilities**

<b>Sub-Project Type</b>	<b>Environmental Prevention/Mitigation Measures</b>
1. Public latrines/toilets	<ul style="list-style-type: none"> <li>(a) All toilets must have a septic tank to provide primary treatment of faecal waste. [Attachment point #7]</li> <li>(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.</li> <li>(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.</li> <li>(d) 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. [Attachment point #7]</li> <li>(e) A toilet should be at least 20 metres from water sources (well, spring, river). [Attachment point #6]</li> </ul>
2. Small-scale waste treatment facilities	<p><u>Septic tanks:</u></p> <ul style="list-style-type: none"> <li>(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. [Attachment point #7]</li> <li>(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. [Attachment point #7]</li> <li>(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 leachfield, (ii) a vegetated leachfield, or (iii) a pit for soaking away.</li> <li>(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. [Attachment point #7]</li> </ul> <p><u>Solid waste disposal (wastes from rural market):</u></p> <ul style="list-style-type: none"> <li>(a) Solid waste depots/disposal need to be located on hard-standing areas that prevent waste entering surface or groundwater.</li> <li>(b) Waste depots/storage/disposal should be contained, sealed and/or roofed/covered to prevent stormwater contamination. Wastes need to be emptied regularly.</li> </ul>





## Annex 4: Chance Find Procedure

### 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 include 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)*<sup>14</sup>

*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 subsection (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 their high cultural, historical, architectural and artistic value;
- (h) other buildings stipulated as listed ancient monuments by the Ministry by notification.

*Definitions of “Antique Objects” defined by the Protection and Preservation of Antique Objects Law (22*

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<sup>14</sup> Source: UNESCO Cultural Heritage Laws Database

July 2015)<sup>15</sup>

*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;
- (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;

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<sup>15</sup> Source: UNESCO Cultural Heritage Laws Database

- (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 stone sherd;
- (bb) other objects recorded as antique objects after field inspection of the Ministry.

### **Chance Find Procedures**

In case Physical Cultural Resources (PCR) are unexpectedly encountered during sub-project 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 and library take over.
- (3) Notify the relevant CFs/TFs who in turn will inform township DRD and the relevant Village Tract Administrative Office immediately and within 3 days. 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 within 14 days.
- (5) The relevant township administrator shall promptly carry out the necessities and inform the Department of Archaeology, National Museum and Library within 7 days from the date on which the information is received.
- (6) The Department of Archaeology, National Museum and Library 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, National Museum and Library will communicate in writing to the township DRD of findings/ Chance Find report.
- (8) If the Department of Archaeology, National Museum and Library determines that Chance Find is a non-cultural heritage chance Find, the relevant person will resume construction process.
- (8) If the Archaeological Department determines Chance Find is an isolated Chance Find, The Department of Archaeology, National Museum and Library 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: ENVIRONMENTAL MANAGEMENT PLAN**

**Table A5.1: FORM PC 15: ENVIRONMENTAL MANAGEMENT PLAN**

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

Region / State :	
Township:	
Village tract:	
Village:	
Sub-project ID:	
Technical Facilitator:	

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

Name: \_\_\_\_\_ Position: Head, Village Project Support Committee

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Table A5.2 An example of EMP for Renovation of Wooden Bridge**

This table presents examples of typical impacts, mitigation measures and monitoring indicators for renovation of wooden bridge sub-project. Site-specific impacts and measures to mitigate and monitor them should be included, if required, when prepare sub-project specific EMP.

<b>Activities</b>	<b>Potential Adverse Impacts</b>	<b>Mitigation Measures</b>	<b>Monitoring Indicators</b>	<b>Responsibilities</b>	<b>Implementation Schedule</b>	<b>Cost Estimate</b>
<b>Pre-Construction Phase</b>						
Bridge Design	Safety risks to users from improper design	<ul style="list-style-type: none"> <li>- Township and state/regional DRD Engineers to provide supports to TFs in bridge design to ensure quality;</li> <li>- Applicable permit will be obtained, if required, before construction.</li> </ul>	<ul style="list-style-type: none"> <li>- Bridge design approved or certified by qualified engineer (if required)</li> <li>- EMP Report</li> <li>- M&amp;E Report</li> </ul>	VPSC with support from TF	During sub-project design	-
Removing the Old Bridge	Exposure of construction workers to hazards in removing or dismantling construction	<ul style="list-style-type: none"> <li>- Train workers on construction safety measures, how to use safety equipment; masks, gloves, shoes and ladder.</li> <li>- Provide first aid kit</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Daily site inspection;</li> <li>- Record injury/accident case.</li> <li>- EMP Report</li> <li>- M&amp;E Report</li> </ul>	M&E Sub-Committee Foreman,	During Site Preparation	Construction Cost
Site Clearing	River Pollution	Designate place to dispose construction waste	<ul style="list-style-type: none"> <li>- Daily site inspection;</li> <li>- EMP Report</li> </ul>	M&E Sub-Committee Foreman	During Site Preparation	Nil

<b>Activities</b>	<b>Potential Adverse Impacts</b>	<b>Mitigation Measures</b>	<b>Monitoring Indicators</b>	<b>Responsibilities</b>	<b>Implementation Schedule</b>	<b>Cost Estimate</b>
			M&E Report			
Land Preparation	Clogging of natural drainage & waterways due to soil overburden	Designate place to deposit surplus soil	- Daily site inspection; - EMP Report M&E Report	M&E Sub-Committee Foreman	During Site Preparation	Nil
<b>Construction Phase</b>						
Disposal of Construction Waste	River Pollution	Designate place to dispose construction waste	- Daily site inspection; - EMP Report M&E Report	M&E Sub-Committee Foreman	During Construction	Nil
Concrete & Grouting	River Pollution	Mix concrete away from the river	- Daily site inspection; - EMP Report M&E Report	M&E Sub-Committee Foreman	During Construction	Nil
Bridge construction	Lack of appropriate health and safety, emergency measures causing health and safety risk to workers	- Train workers to use safety equipment; masks, gloves, shoes and ladder. - Provide first aid kit	EMP Report M&E Report	M&E Sub-Committee Foreman CFs,TFs	During Construction	Construction Cost



<b>Activities</b>	<b>Potential Adverse Impacts</b>	<b>Mitigation Measures</b>	<b>Monitoring Indicators</b>	<b>Responsibilities</b>	<b>Implementation Schedule</b>	<b>Cost Estimate</b>
	Safety risks to users from improper construction	<ul style="list-style-type: none"> <li>- Install safety signs e.g. only pedestrians and motor-bikes, don't play on bridge, don't throw rubbish in the river.</li> <li>- Construction to be carried out by skill technician/labor and supervised by qualified engineer /technician.</li> </ul>	<ul style="list-style-type: none"> <li>- Routine Site inspection to ensure quality of construction and safety sign installation.</li> <li>- EMP Report M&amp;E Report</li> </ul>	M&E Sub-Committee Foreman	During Construction	Construction Cost
<b>Post Construction Phase</b>						
Flooding & Heavy Raining	Erosion & Landslide	Bank Protection & Erosion Control Measures.	EMP Report O&M Plan	VPSC,O&M Sub Committee	After Implementation	O&M Cost
Environmental Waste	Changing of the effective waterway, Dumping sediments	Interdiction of throwing rubbishes in the stream.	EMP Report O&M Plan	VPSC,O&M Sub Committee	After Implementation	O&M Cost
Bridge services	Safety risks to users from improper use of bridge.	- As indicated in pre-construction and during construction phase	-	VPSC,O&M Sub Committee	After Implementation	O&M Cost

**Table A5.3 An example of Physical Cultural Resources (PCR) Management Plan for Tube Well, Elevated tank and Water distribution pipe line**

Activities	Potential Adverse Impacts	Mitigation Measures	Monitoring Indicators	Responsibilities	Implementation	Cost
<b>Pre-Construction Phase</b>						
Preliminary Site investigation	Affecting to protected PCR region	Checking site location together with Department of Archaeology and DRD for Sub-project approval	Approved letter from DoA in MOC.	TFs; DoA in MOC; DRD township; Villagers;	Before Construction	None
Site Clearing	Affecting to environment and climate by cutting trees; land losing in farm areas	-Consultation with villagers, TF about PCR laws, By laws and chance/find procedure - agreement with land owners -avoid or minimize tree removal and replanting to compensate if unavoidable. -Follow Chance Find Procedures <sup>16</sup> (Annex 4 of the ESMF) in case PCR unexpectedly discovered.	PCR Management Plan report;  PC (14) Donation form  Chance finding report from the DoA	TFs; Regional TA; DRD (region); Village Project Sub Committee(VPSC); villagers; contractor, foreman, workers	Before Construction	None

<sup>16</sup> Attach Chance Find Procedure with all PCRMP. Chance Find Procedure apply to both pre-construction and construction phase.

Activities	Potential Adverse Impacts	Mitigation Measures	Monitoring Indicators	Responsibilities	Implementation	Cost
<b>Construction Phase</b>						
Construction material transport	- Vibration Impact -Carrying overload of the construction material	- For transportation on existing roads located very close to ancient monument follow the below: - No vehicles over 3 tons are allowed; - Speed limit at not more 20 miles per hour; - Marking of Vulnerable Cultural Heritage Sites	- Site inspection/observation - PCR Management Plan report; - M&E report -Procurement plan -Supervision checklist	Village Project Sub Committee(VPSC); procurement committee, villagers; contractor, foreman,	During Construction material transport	None
Soil excavation	-Impact to PCR due to soil excavation -Natural topography will be changed -Vibration Impact	- Follow advice from the DOA regard soil excavation level. - Provide instruction on Chance find procedure to foreman and workers. -Not allow driving above (3) tons vehicles -Not more than (20) mph	-Regular site inspection. - PCR Management Plan report - M&E report -Supervision checklist	TF, Village Project Sub Committee (VPSC), M&E Sub-Committee, Contractor, foreman, workers	During construction	Construction cost
Digging tube well	-Affecting archaeological heritage due to vibration	-the location of the clay pond have to identify systematically -not less than 120 ft from ancient monument zone	- PCR Management Plan report - M&E report -Supervision checklist	Tf, Village Project Sub Committee (VPSC), M&E Sub-Committee, Contractor, foreman, workers	During construction	Construction cost

Activities	Potential Adverse Impacts	Mitigation Measures	Monitoring Indicators	Responsibilities	Implementation	Cost
Laying pipe line; Jointing Pipes and dumping construction waste not properly	- Soil settlement by water leakage at piping joint that will be gradually affected to nearby PCR or underground PCR - impacts of environment	- Making sure proper connection process to joint pipes - doing earth refilling work after water test of distribution pipe lines - store waste in proper waste bins/containers and dispose waste designate location	- Regular site inspection - PCR Management Plan report - M&E report -Supervision checklist	Contractor, foreman, workers	During construction	Construction cost
Construction of Elevated Water tank	- Visual impacts to cultural heritage	-Height should not more than 30 ft - should be appropriate with the colour of ancient monument	- Regular site inspection - PCR Management Plan report - M&E report -Supervision checklist	Contractor, foreman, workers	During construction	Construction cost
<b>Post Construction Phase</b>						
Using Water distribution system	-Water leakage -Reduce underground aquifer level -decrease machine capacity	- Using necessary pipe design and proper connection joints -Replantation of the community forest	- PCR Management Plan report -O&M plan	Operation and Maintenance Sub Committee	After Construction	O&M Cost

	-noise by operating machines	- proper maintaining schedule				
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## Annex 6: FORM PC 14: VOLUNTARY DONATION

Region / State:	
Township:	
Village tract:	
Village:	
Sub-project ID:	
Technical Facilitator:	

Name of land owner:	NRC Number:	Beneficiary of the sub-project: Y/N		
Sex:	Age:	Occupation:		
Address:				
Description of land that will be taken by the sub-project:	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 Project Support Committee  
representative's signature

Affected persons signature  
(both husband and wife)

## Annex 7: Resettlement Policy Framework

### I. The Policy Framework

169. The original scope and Additional Financing (AF) to the Myanmar National Community Driven Development (CDD) Project would finance the improvement or new construction of rural infrastructure such as schools, dispensaries, small rural tracks and footpaths, water supply systems. Such subprojects may, under certain circumstances, result in loss of private land or assets. The impact will likely be minor, given the size of subprojects, and all affected people would directly benefit from the investments that would lead to such an asset loss. Physical relocation of households is not allowed. This Resettlement Policy Framework (RPF) provides the summary of policies, processes, procedures and implementation arrangements with regard to land acquisition described in the Environmental and Social Management Framework (ESMF).

170. **This RPF aims to ensure that any negative impacts are avoided, minimized and properly managed.** This framework and guidelines are fully consistent with and responsive to the Banks' relevant involuntary resettlement policies (WB OP 4.12). This RPF was developed based on the Environmental and Social Screening and Assessment Framework (ESSAF) which was developed when the original project was prepared, taking into account the experience gained during implementation of the original project.

171. This RPF lays down the principles and objectives, eligibility criteria, legal and institutional framework, protocols and procedures for voluntary donation and for compensation, participation of affected people and grievance procedures, which will guide how asset loss that may result from the implementation of the project would be avoided, minimized and mitigated under the project.

### II. Objective, Principles and Eligibility Criteria

172. The principles outlined in the World Bank Policy on Involuntary Resettlement have been adopted in preparing this document. Overall, This RPF aims to ensure that this NCDDP will be implemented in an environmentally and socially sustainable manner and in line with the Bank's OP 4.12. Specifically, the following principles will govern NCDDP with regard to the loss in private land or assets:

- All people who reside in the township at the first day of community meetings, without regard to legal status of their land ownership or ethnic background, are eligible for the protections provided in this ESMF;
- Potential negative environmental and social impacts should be avoided, minimized and mitigated;
- Loss in livelihoods associated with or caused by the project should be prevented and, where unavoidable, minimized and fully compensated;
- Anyone residing in, gaining income from or having tenure rights over, land that will be affected by sub-projects financed under the project is entitled to compensation at

replacement value which is sufficient to improve or at least maintain their pre-Project living standards, income earning capacity and production levels, without regard to their tenure status or ethnic background.

- Economic and physical displacement should be avoided, minimized and fully mitigated. Physical relocation of households is not allowed under the project;
- No one should lose more than 10 percent of the productive assets under the project. Sub-project designs will be adjusted or alternative locations will be sought if any household may lose more than 10 percent of the productive assets.
- Environmental and social benefits should be enhanced wherever possible;
- Implementation of subprojects will commence only after compensation is fully paid or voluntary donation processes is fully completed;
- The processes and procedures for voluntary donation and involuntary land acquisition including grievance redress should be summarized in a pamphlet in all applicable local languages and distributed in all participating villages; and
- The capacity of DRD to manage environmental and social impacts should be strengthened.

### **III. Implementation arrangements**

173. At the township level, the Township Planning and Implementation Committee (TPIC) and township DRD office (through the township CDD secretariat) assume primary responsibilities for project implementation. Each Township DRD (township CDD 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.

174. At the village tract/village level, the Village Tract Project Support Committee (VTPSC) and village project support committees are responsible for ensuring that the community planning process and sub-project 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 RPF and the ESMF. In each Village Tract, the village tract grievance sub-committee is established under the VTSPC, 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.

175. At the village level, the Village Project Support Committees (VPSC) assume responsibility for planning, prioritizing and implementing community infrastructure sub-projects. The village monitoring sub-committees are established under the Village Project Support Committee (VPSC) and report regularly to the villagers about progress in sub-project implementation. This sub-committee will supervise the implementation of the sub-projects. Village Volunteers will assist the Community Facilitator (CF) throughout project implementation. The grievance focal point is selected through participatory community meetings and is responsible for handling grievances at the village level and is the primary contact point for anyone wishing to file a grievance.



#### IV. Protocols and Procedures of Voluntary Donations

176. The NCDDP will continue to allow community members who benefit from a sub-project to donate land and other private assets to the sub-project without compensation. It is expected that, as under the original NCDDP, 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 sub-project can technically be implemented in another location than where it is planned – if a sub-project is location-specific by nature, land acquisition associated with such a sub-project cannot be considered as voluntary; rather, it is an act of eminent domain. In such cases, an abbreviated RAP or a full RAP, as applicable, will be developed.
- 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 sub-project;
  - The total size of productive land owned by the affected household is more than 300m<sup>2</sup>;
  - The impact is less than 5 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 VTPSC and the VPSC 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 in this RPF 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 VTPSC will develop a voluntary donation form (see Annex 6 of the ESMF). 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 VTPSC 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 sub-projects involving voluntary donations starts only once the VTPSC has approved the signed voluntary donation forms.
- Annual social audits carried out by the DRD township offices verify the informed agreement of affected people.

## V. Principles and Procedures for Compensation

177. If affected people are unwilling to donate assets without compensation, or if a condition of voluntary donations mentioned above cannot be met, the VTPSC will, with the support of the CF, develop an abbreviated RAP. In an exceptional case where more than 200 people are affected by a sub-project, a full RAP will be developed. The following principles will apply for the land or asset loss against compensations:

(cc) Land acquisition should be avoided or minimized if unavoidable, and should not result in persons losing their home or suffering any decline in income, livelihood, or living standards. No physical relocation of households is allowed under the project.

(dd) No one should lose more than 10 percent of their productive assets as a result of subproject implementation. If, based on the survey conducted by Technical Facilitator (TF) with the participation of affected people find that more than 10 percent of productive assets would likely be affected, designs should be adjusted and/or alternative locations be sought so that impact would be reduced to below 10 percent.

(ee) Subprojects involving land acquisition based on eminent domain are on the list of non-eligible activities for community investments (negative list). Under the Project, only beneficiary communities themselves are able to acquire land or assets of other community members based on mutual agreements and consent on terms of compensation.

(ff) Affected people are eligible for in-kind compensation that is sufficient to restore pre-project income streams. The VPSC, VTPSC and affected households, under the guidance of the CF and the TF, will jointly assess the scale of impact and identify in-kind compensation that is at least sufficient to restore pre-project level livelihoods and income streams. In-kind compensation should be provided by beneficiary communities themselves from their own assets, or if communities have difficulties identifying sufficient assets that can be made available to affected people to fully restore their livelihood, the VTPSC will allocate resources from its own budget. Proceeds from the World Bank financing cannot be used for compensation.

- (i) Loss of agricultural land: replacement land of similar type, category and productive capacity, free from transaction costs, which is acceptable to the affected people; or full compensation at replacement value if land is not available.
- (ii) Loss of residential land: replacement land of similar type, category and quality, free from transaction costs, which is acceptable to the affected people; or full compensation at replacement value if land is not available.
- (iii) Loss of trees, structures and other private assets: cash or in-kind compensation at replacement cost. Salvage materials will be handed over to affected people.
- (iv) Loss of income and standing crops: civil works will be adjusted to avoid loss of income/ standing crops.
- (gg) An abbreviated RAP and a full RAP will be prepared by VTPSC under the support of the Community Facilitator and Technical Facilitator (see below for the contents of the RAP).
- (hh) Community infrastructure, if affected by subproject, must be restored or replaced.
- (ii) Implementation of civil works will commence only after all entitlements are delivered to affected households.

## **VI. Preparation of the abbreviated Resettlement Action Plan (RAP)**

178. If the safeguard screening finds that land acquisition or loss of private assets is unavoidable and if voluntary donation does not apply, the VTPSC, with technical inputs from the DRD engineer and the support of the TF, will prepare a resettlement instrument (an abbreviated RAP or a full RAP). All village representatives will receive safeguards training. Also, basic processes and procedures with regard to social and environmental safeguards will be displayed at a notice board in all project villages

179. The abbreviated RAP will be developed which should include, at minimum, (i) the names of affected people, (ii) baseline census and socioeconomic data of affected people; (iii) the inventory of impacts, (iv) mitigation measures including the types and the scale of in-kind compensation, (v) implementation arrangements including participatory processes to ensure participation of affected people in the RAP implementation; (vi) implementation schedule to ensure that in-kind compensation will be provided before civil works start, and (vii) the estimated cost of compensation and the sources of funds where compensation is provided in cash. The VPSC, under the oversight of VTPSC and with the support of the Community Facilitators and the Technical Facilitators, will be assisted to identify in-kind compensation including the provision of alternative land that is sufficient to restore the income streams of the affected people.

180. The abbreviated RAP should address the following at minimum.

<p><b>Introduction</b></p> <ul style="list-style-type: none"> <li>- General description of subprojects including type of infrastructure, scale and scope of civil works.</li> <li>- Name of the village and township, location, major ethnic background, number of population, etc</li> </ul>
<p><b>Baseline census and socioeconomic data of affected people</b></p> <ul style="list-style-type: none"> <li>- The number and names of affected households</li> <li>- General description of livelihoods, economic conditions and vulnerability of affected households</li> </ul>
<p><b>Detailed inventory of loss</b></p> <ul style="list-style-type: none"> <li>- Types of impact (loss of land, fences, barns, etc)</li> <li>- Level of severity (% of loss)</li> <li>- Number of affected households for each type</li> <li>- Rough valuation of impact (measured by scale of loss in livelihood, which may or may not be expressed in monetary terms)</li> </ul>
<p><b>Detailed plan for impact mitigation</b></p> <ul style="list-style-type: none"> <li>- In-kind compensation to be provided and valuation methodology used</li> <li>- Other support to fully restore livelihood</li> </ul>
<p><b>Policy entitlements related to any additional impacts identified under census or survey</b></p> <ul style="list-style-type: none"> <li>- Steps to identify any unidentified impacts</li> <li>- Provisions to address such unintended impacts</li> </ul>
<p><b>Implementation Procedure</b></p> <ul style="list-style-type: none"> <li>- Subproject implementation schedule</li> <li>- Provision of entitlement (which should precede the start of civil works)</li> </ul>
<p><b>Detailed cost estimate and source of resources</b></p> <ul style="list-style-type: none"> <li>- Costs for provision of each entitlement types</li> <li>- Community resources used to provide such entitlements</li> <li>- Village tract resources to be used, if any</li> </ul>

181. If the Community Facilitator and the Technical Facilitator find that more than 200 villagers will lose part of their land and/ or private assets under respective subprojects, the Bank task team will be immediately consulted for guidance. In such a highly unlikely case, a full RAP will be developed under direct guidance of the Bank task team in consultation with the EAP Safeguard Secretariat.

182. **When sub-project documents and applicable resettlement instruments are drafted, members of the VTPSC including the representatives from the beneficiary village, the DRD engineer and the TF will carry out a half-day consultation with the village implementation committee and affected people.** During the consultation meeting, the final sub-project documentation is presented together with the draft detailed design, and the draft RAP (abbreviated or full) and voluntary donation forms, as applicable. Inputs from the village implementation committee and affected people will be sought regarding whether or not all potential impacts are adequately covered and mitigated, and whether adequate measures are incorporated in the design to meet the special needs of affected people and disadvantaged groups. The final sub-project documentation that is submitted to the VTPSC for

approval should incorporate the inputs from affected people, and the result of the meeting is documented and kept in the project file.

183. The resettlement instruments developed for a sub-project will be reviewed against the provisions of this RPF and the ESMF and, if they are found to have addressed all requirements, will be approved by the VTPSC prior to its implementation. In particular, the following will be assessed:

- (jj) Are potential adverse impacts clearly identified?
- (kk) Are mitigation measures proposed sufficient to fully restore income streams of affected people?
- (ll) Are all conditions of voluntary donations met?
- (mm) Are implementation arrangements and grievance mechanisms adequate?
- (nn) Is the budget estimated sufficient?

184. Copies of approved abbreviated RAP or a full RAP will be made available at the village tract office and in easily accessible places in the villages where the sub-project is implemented, with a summary translated into the local language(s).

## **VII. Implementation Procedure**

185. Each VTPSC is responsible for the implementation of the voluntary donations, and abbreviated or full RAPs, as applicable, according to the policies and procedures laid out in this RPF. The VTPSC will ensure that no physical land acquisition would occur:

- (oo) Before an abbreviated RAP or RAP has been implemented and all entitlements have been fully delivered; or
- (pp) Before the voluntary donation form is signed by the affected household(s) and reviewed and approved by the VTPSC

186. Village monitoring sub-committees, in collaboration with CF and village volunteers, monitor the implementation of the donation forms, and/ or abbreviated or full RAPs. The village monitoring sub-committees confirm the proper application of the instruments and notify the VTPSC that a sub-project is ready for implementation. The implementation of sub-projects involving voluntary land donation, involuntary land acquisition or asset loss start only once this confirmation is given.

## **VIII. Monitoring**

187. Throughout the implementation of the sub-project, the village monitoring sub-committees and CF/TFs will monitor any negative impacts that may arise. CF 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 through the project's grievance handling mechanism.

160. Social audits will be conducted on an annual basis and facilitated by the township DRD and TA team. For the social audits, CFs 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 CF 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 Village Tract Development Plan (VTDP), submission of which to the DRD township office is a condition for the transfer of the next annual block grant allocation.

188. The VTPSC will prepare a monthly progress report for all subprojects under implementation including safeguard aspects and submits it to the DRD township M&E officer. These reports will also include a short report on voluntary donations, and abbreviated or full RAP (if relevant), that have been completed during the reporting period. 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 VTPSC will file the status of the implementation of this RPF based on the report received from the VPSC 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 of this RPF. They will incorporate key findings from the supervision visits into the quarterly township progress report.

189. The DRD union office staff and relevant union TA 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. DRD union office staff and union TA consultants will continue to provide technical support to the DRD township office staff and VTPSCs, including on safeguard issues, as needed. 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 number of cases of involuntary land or asset acquisition;
- (c) The number of abbreviated or full RAP developed;
- (d) The amount of compensation paid for involuntary land or asset acquisition;
- (e) The total number of project beneficiaries/ affected people, broken down to ethnicity; and
- (f) Grievances submitted through various channels described below, and the current status.

190. The World Bank reviews the use of safeguards screening forms, voluntary donations, abbreviated RAPs on a random basis and carries out field trips as part of supervision missions to verify safeguard compliance in line with this RPF and ESMF and other relevant project documents.

## IX. Grievance redress mechanisms

191. Complaints and grievances are dealt with using the NCDDP 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 GRM are described in the Section K 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.

## X. VIX. Entitlement Matrix

Type of Losses	Entitled Persons	Entitlements	Implementation Issues
Loss of private land	Legal owners or occupants	Replacement land of similar type, category and productive capacity, free from transaction costs (taxes, administration fees)	No land loss >10% of total productive land holding allowed
	Affected persons without a legally recognizable right or claim to the land they are occupying	At minimum, rehabilitation assistance to restore the livelihoods and standards of living, in real terms, to pre-project levels or to levels prevailing prior to the beginning of subproject implementation, whichever is higher	No land loss >10% of total productive land holding allowed
Loss of trees, structures and other private assets	All affected persons regardless of tenure status	Cash or in-kind compensation at replacement cost  Salvage materials will be handed over to affected people	If remaining parts of the structures are not sufficient for use, compensation will be provided for the entire affected buildings  The project will help salvage material transportation
Loss of income and standing crops	All affected persons regardless of tenure status	Civil works will be adjusted to avoid loss of income/ standing crops	

<b>Type of Losses</b>	<b>Entitled Persons</b>	<b>Entitlements</b>	<b>Implementation Issues</b>
Temporary land occupation	Legal owners or occupants	<p>In-kind compensation for loss of income or assets on a net basis</p> <p>Reinstitute land to the original state after the completion of civil works</p>	PIC, under the support of third party service provider, will monitor implementation



## **Annex 8: Indigenous Peoples Policy Framework**

### **I. The Policy Framework**

191. The original scope and Additional Financing (AF) to the Myanmar National Community Driven Development (CDD) Project would 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 minority communities would be present in the project areas of influence. This Indigenous Peoples Policy Framework (IPPF) aims to ensure that ethnic minorities in project-covered areas would be able to:

- (g) Provide input to local planning processes and activities used and undertaken to determine development priorities;
- (h) Facilitate the choice of subprojects as coming from ethnic minority communities themselves through informed decision-making to address local development challenges;
- (i) Actively participate and lead in the design, development, and implementation of subprojects, and
- (j) Provide feedback on subproject implementation, and benefits and risks to ethnic minority communities.

192. This Indigenous Peoples Policy Framework (IPPF) is developed to ensure that the AF would continue to be implemented in line with the Bank's OP 4.10 *Indigenous Peoples*.

### **II. Guidelines for Engaging with Ethnic Minority Communities**

193. The project would place a continued emphasis on ensuring that ethnic minority 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 AF implementation would be avoided, minimized or avoided. With the support of Community Facilitators (CF), villagers themselves will conduct the participatory Social Assessment (SA) in all project villages including where ethnic minorities are present. The ethnic screening will be conducted as part of the Participatory SA in all project villages, and free, prior and informed consultations will be conducted with ethnic minorities leading to broad community support for proposed sub-projects, if ethnic screening finds that they are present. Details about processes and procedures for the participatory SA are described in the project Operations Manual.

194. In order to mitigate the risk that ethnic minorities 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 the NCDDP:

- (k) Recruitment of village volunteers elected from among ethnic groups who assist the community facilitator throughout project implementation;
- (l) Training of CF/TF to increase cultural awareness of issues related to ethnicity, religion and marginalization;

- (m) Free, prior and informed consultations with ethnic minorities of the Village and Village Tract Development Plans leading to their broad community support;
- (n) Involvement of ethnic minorities in the decision-making process in the VTPSC
- (o) 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
- (p) Use of local languages in the dissemination of project related information.

### **III. Implementation arrangements**

195. At the township level, the Township Planning and Implementation Committee (TPIC) and township DRD office (through the township CDD secretariat) assume primary responsibilities for project implementation. Each Township DRD (township CDD 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.

196. At the village tract/village level, the Village Tract Project Support Committee (VTPSC) and village project support committees are responsible for ensuring that the community planning process and sub-project 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 VTPSC will develop, based on the village development plans, 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 VTPSC, 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.

197. At the village level, the Village Project Support Committees (VPSC) assume responsibility for planning, prioritizing and implementing community infrastructure sub-projects. The village monitoring sub-committees are established under the Village Project Support Committee (VPSC) and report regularly to the villagers about progress in sub-project implementation. This sub-committee will supervise the implementation of the sub-projects. Village Volunteers will assist the community facilitator throughout project implementation. Among other tasks, they will help enhance the involvement of ethnic minorities in the decision-making process in the village tract project support committees; participation of ethnic minority 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 Minority Communities and the Plan to Carry Out Social Assessment**

198. This section provides step by step procedures to ensure that ethnic minority 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 Social Assessment (SA) in line with the provisions of the OP 4.10.

## **Key Steps**

### *Step 1 – Identification of Sub-projects*

199. *Participatory social assessments (SA) 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 SA is conducted and villagers identify priority needs, develop village development plans and elect village volunteers and their representatives to the VTPSC.

200. The participatory SA will also include the screening for the presence of ethnic groups in the project area. If ethnic minority 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 SA. Free, prior and informed consultations will also be conducted as part of the SA, in a language understandable to ethnic minorities, using visual/ audio tools wherever possible. Villagers will be notified of the participatory SA meetings sufficiently early enough, and small group meetings will be conducted to facilitate free discussions to the extent possible.

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

- (q) Baseline information on the demographic, socioeconomic, cultural, and political characteristics of project beneficiaries including but not limited to ethnic minorities, 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.
- (r) The consultative and participatory processes during subproject implementation to allow an active and meaningful participation of project beneficiaries including but not limited to ethnic minorities;
- (s) The list of subprojects identified by beneficiary villagers themselves in a participatory manner and address their priority needs;
- (t) Potential adverse and positive effects of subprojects identified as part of the participatory SA, and measures to avoid, minimize or mitigate negative impacts and enhance positive benefits;
- (u) Evidence of broad community support to the subprojects identified by beneficiary community members themselves. Where broad community support is not ascertained under the participatory SA, the subproject will not be implemented.

*202. Consolidation of village priorities in Village Tract Development Plans (VTDP).* The Village Tract Project Support Committees (VTPSC) will consolidate the village development plans into Village Tract Development Plans (VTDP) which include and prioritize the list of sub-projects 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 minorities are affected within the Village Tract. The VTDP will include the following, as minimum:

- (v) Affected ethnic minorities. The ethnic minorities present in the VT, identified under ethnic screening as part of the participatory Social Assessment (SA), will be described.
- (w) Summary of the findings of the participatory SA including the results of the free, prior, and informed consultation conducted with the affected ethnic minorities, and the evidence of broad community support to the priority sub-projects.
- (x) A framework for ensuring free, prior, and informed consultation with affected ethnic minorities during subproject implementation.
- (y) Measures to ensure that ethnic minorities will receive social and economic benefits that are culturally appropriate and that adverse effects on them will be avoided, minimized or mitigated.
- (z) Estimation of costs to implement the VTDP including measures to mitigate negative impacts on ethnic minorities and the source of fund to implement such measures.
- (aa) Grievance and monitoring mechanisms.

*203. Endorsement of village tract development plans.* The township planning and implementation committees (TPIC) will review the village tract development plans against existing sector plans and other known assistance, and endorse them. Copies of approved plans are made available in the local language(s) at the village tract office and in places convenient to the local population in all villages that constitute the village tract. Where translation into local languages is difficult because relevant ethnic groups in the village tracts do not have writing systems or due to other technically valid reasons, at least the summary of the approved village tract development plans, including the list of approved sub-projects, should be described in a short brochure, posters or other information materials and displayed on notice boards in all villages as well as the village tract offices.

*204. Amendment of village and village tract development plans.* Villagers and the respective VTPSC will re-evaluate the development plans annually and adjust them as needed. The adjusted plans will be endorsed by the TPIC 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 minorities to ensure their broad community support to the updated plans.

*205. 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 meeting and their broad community support would be sought and documented in the updated VTDP.

206. Each VTPSC is responsible for the implementation of the sub-project safeguards instruments including the VTDP, according to the policies and procedures laid out in this IPPF and the ESMF in general. The VTPSC will ensure that the implementation of subprojects would not commence before the updated VTDP with the description of impacts is consulted with affected ethnic minority communities and their broad community support ascertained.

207. Village monitoring sub-committees, in collaboration with the Community Facilitator and village volunteers, monitor subproject implementation. The village monitoring sub-committees will confirm that negative impacts do not occur to ethnic minority communities or have been adequately addressed if they do occur. The implementation of sub-projects involving voluntary land donation, involuntary land acquisition or asset loss start only after this confirmation is given.

## **V. Unanticipated Impact**

208. Indirect, and/or unanticipated impacts may become apparent during subproject implementation. Should this be noted, the VTPSC ensure that a participatory rapid Social Assessment (SA) will be conducted and that the VTDP would be updated to address such unanticipated impacts in line with this IPPF.

## **VI. Monitoring**

209. Throughout the implementation of the sub-project, the village monitoring sub-committees, the Community Facilitator and the Technical 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 through the project's grievance handling mechanism.

210. Social audits will be conducted on an annual basis and facilitated by the township DRD and TA 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 Village Tract Development Plan (VTDP), submission of which to the DRD township office is a condition for the transfer of the next annual block grant allocation.

211. The VTPSC 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 VTPSC will file the status of the implementation of this VTDP based on the report received from the VPSC 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 of this RPF. They will incorporate key findings from the supervision visits into the quarterly township progress report.

212. The DRD union office staff and relevant union TA 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:

- (bb) The number of voluntary donation cases;
- (cc) The number of cases of involuntary land or asset acquisition;
- (dd) The number of abbreviated or full RAP developed;
- (ee) The amount of compensation paid for involuntary land or asset acquisition;
- (ff) The total number of project beneficiaries/ affected people, broken down to ethnicity; and
- (gg) Grievances submitted through various channels described below, and the current status.

213. 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 sub-project. 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**

214. 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. In Cycle 1, the CF and Technical Facilitators in all project townships included those who could speak at least one ethnic languages, which was found to be useful to ensure that those who directly benefit from/are affected by the project understand safeguard provisions. Going forward, continued efforts will be made to develop more visual materials in all major ethnic languages to help ensure ethnic minorities clearly understand the project safeguard provisions.

215. The DRD is developing the guidelines on consultations and disclosure using ethnic languages as part of the Communication Strategy. In doing so, the DRD takes into account the comments provided at the safeguard consultation meetings held during the preparation of the AF where participants emphasized the importance of using audio-visual materials to ensure that ethnic minorities clearly understand the project and the protections provided under the ESMF. The guidelines will include the list of key project documents that are to be translated into local

languages, the ethnic minorities present in the township, and local languages in use and appropriateness/ feasibility of translation, based on the inputs from respective township TA and participants of safeguard consultation meetings. Key project documents to be translated will include this IPPF and the entire ESMF, and may include the approved Village Tract Development Plans (VTDP) in addition to voluntary donation forms as well as abbreviated Resettlement Action Plan (RAP) (or a full RAP in exceptional cases where it is required). It was agreed that such lists should be developed in consultation with key stakeholders. DRD sought inputs from participants at the safeguard consultation meetings held for the AF and share the draft guidelines with stakeholders for further inputs.

### VIII. Grievance Redress Mechanisms

216. Complaints and grievances are dealt with using the NCDDP 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 GRM are described in the Section K 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 9: FORM PC 6: FINAL SUB-PROJECT INSPECTION

<i>Instructions:</i>			
Name of Facilitator/Staff:			
Date:		Cycle (✓): <input type="checkbox"/> Cycle 1 <input type="checkbox"/> Cycle 2 <input type="checkbox"/> Cycle 3 <input type="checkbox"/> Cycle 4	
State/Region:	Township:	Village Tract:	Village:

#### Sub-project Description

	Sub-project Activity	Sector	Size/Scope		Direct Beneficiaries	
			Planned	Final Actual	# Planned	# Actual

#### Sub-project Financial information

CDD Project Contribution		Community Contribution		Other	
Planned	Actual	Planned	Actual	Planned	Actual

#### Status of Sub-project Construction:

Is the sub-project fully completed?  No  Yes, describe below

#### Procurement:

Are there any remaining problems related to procurement of goods, supplies, or contractors?  
 No  Yes, describe below

<b>Use of community labor (CFA):</b>	
Total # persons involved:	men ..... women .....
Total # labor days:	men ..... women .....
<b>Safeguards/ ECOPs:</b>	
(a) Are there any problems related to land acquisition?	<input type="checkbox"/> No <input type="checkbox"/> Yes, describe below
(b) Are there any problems related to environmental impact from sub-project?	<input type="checkbox"/> No <input type="checkbox"/> Yes, describe below
<b>Village Operations and Maintenance Committees formed:</b>	
Are Village O&M Committees formed and functioning? <input type="checkbox"/> No, describe issues below <input type="checkbox"/> Yes	
<b>Overall Technical Quality of Sub-project</b>	
In general, the overall sub-project is functional and technical quality is:	
<input type="checkbox"/> Poor	<input type="checkbox"/> Average <input type="checkbox"/> Good <input type="checkbox"/> Very Good
<b>Photographic documentation:</b> Insert 2 photos of the project after construction/renovation. (Angles 1 and 2 should be taken from the same position as you selected in PC 5 for the “before” photos)	
<b>Angle 1</b>	<div style="border: 2px solid orange; width: 450px; height: 20px; margin: 0 auto;"></div>
<b>Angle 2</b>	<div style="border: 2px solid orange; width: 450px; height: 20px; margin: 0 auto;"></div>
Other Comments for attention:	

We certify that sub-project described above is completed and functional and the above information is correct.

Date:

Head of the VPSC:

Signature:

Head Procurement Sub-committee:

Signature:

Finance Clerk

Signature:



Acknowledged by  
Technical Specialist:

Signature:

Date:

**Annex 10 List of 47 Registered Cultural Heritage Zones in Myanmar**  
**Ministry of Culture**

**Department of Archaeology, National Museum and Library**

**Table A11.1 Cultural heritage regions and monument zones nominated zone area**

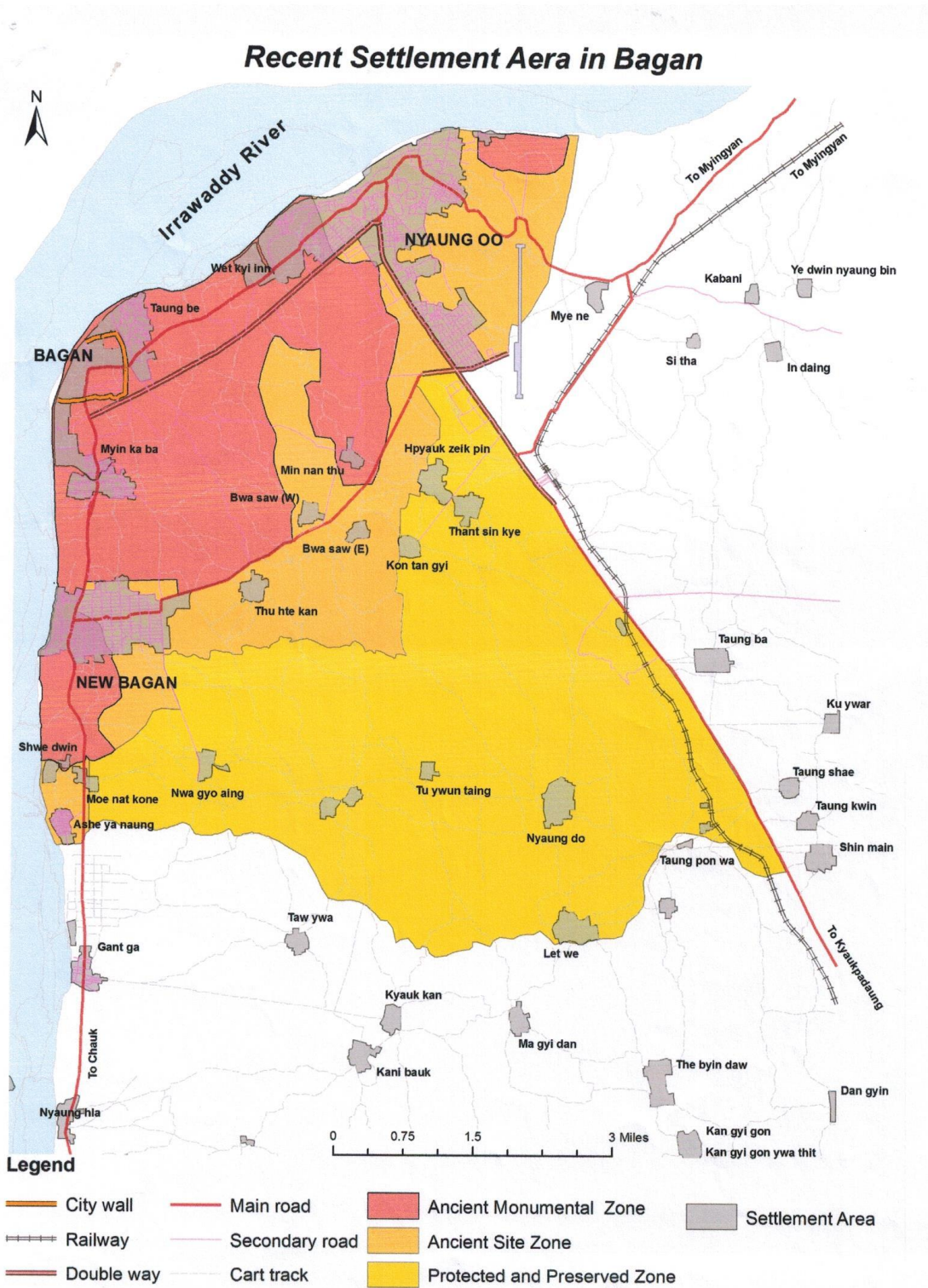
<b>No</b>	<b>Nominated Region</b>	<b>Type of Zone</b>	<b>Order No</b>	<b>Date of issue</b>
1	Mandalay Region, Bagan Nyaung Oo Township	Archaeological Monument Zone Archaeological Zone Protection Zone	1/99	11.2.99
2	Bago Region, Bago Township, Kan Baw Za Thadi Palace	Archaeological Monument Zone Protection Zone	2/99	11.2.99
3	Archaeological Monuments in Mandalay Region ( Amarapura Township) <ul style="list-style-type: none"> <li>• Mahar Wai Yan Bon Thar Bagayar Monastery (Aung Myay Tharzan Township)</li> <li>• Mahar Ahtula Wai Yan Monastery</li> <li>• Golden Palace Monastery</li> <li>• Nan Myay Bone Thar San Palace , Sandar Muni Pagoda</li> <li>• Mahar Law Ka Marazein , Kuthotaw Pagoda</li> </ul>	Archaeological Monument Zone Protection Zone	3/99	6.8.99
4	Kyaik Htiyo Pagoda & Mountain Top area in Kyaik Hto Township, Mon State	Protection Zone	4/99	11.10.99
5	Archaeological Monuments in Pyay township, Bago Region <ul style="list-style-type: none"> <li>• <i>Tharay-khit-tara ancient city &amp; surrounding</i></li> </ul>	Archaeological Monument Zone Archaeological Zone	1/01	31.1.01
6	Archaeological Monuments in Sagaing Township, Sagaing Region <ul style="list-style-type: none"> <li>• Mya Thein Tan Pagoda</li> <li>• Min Kun Bell Monument</li> <li>• Pa Hto Taw Gyi</li> <li>• Two Big Lions ( Near Pa Hto Taw Gyi)</li> <li>• Sat Taw Yar Pagoda</li> <li>• Pone Taw Pagoda (Min Kun)</li> </ul>	Archaeological Monument Zone	2/01	18.5.01
7	Taung Twin Gyi Township, Magway Region <ul style="list-style-type: none"> <li>• Beik-tha-noe ancient city</li> </ul>	Archaeological Monument Zone	1/02	29.5.02
8	Tha Peit Kyin Township, Mandalay Region	Archaeological Monument Zone	1/07	5.6.07

	<ul style="list-style-type: none"> <li>• Ta Gaung ancient region</li> </ul>	Archaeological Zone Protection Zone		
9	<p>Khaik Ma Yaw Township, Maw La Myaing District, Mon State</p> <ul style="list-style-type: none"> <li>• Kha Yone Gu</li> </ul>	Archaeological Monument Zone Protection Zone	1/08	13.6.08
10	<p>Walat Township, Shwe Bo District, Sagaing Region</p> <ul style="list-style-type: none"> <li>• Han Lin ancient city</li> </ul>	Archaeological Monument Zone Archaeological Zone Protection Zone	1/08	13.6.08
11	<p>Tadar Oo Township, Kyauk Se District, Mandalay Region</p> <ul style="list-style-type: none"> <li>• Innwa ancient region</li> </ul>	Archaeological Monument Zone Archaeological Zone Protection Zone	1/08	13.6.08
12	<p>Hpa-an Township, Kayin State</p> <ul style="list-style-type: none"> <li>• Ya Thaey Pyan Gu</li> </ul>	Archaeological Monument Zone Protection Zone	2/08	16.6.08
13	<p>Hpa-an Township, Kayin State</p> <ul style="list-style-type: none"> <li>• Kawt Gun Gu region</li> </ul>	Archaeological Monument Zone Protection Zone	2/08	16.6.08
14	<p>Kyauk Tada Township, Western District, Yangon Region</p> <ul style="list-style-type: none"> <li>• Sule Pagoda (Kyaik-Ah- Thoat Pagoda)</li> </ul>	Archaeological Monument Zone	3/08	4.7.08
15	<p>Yangon Region, Southern District, Twantay Township, Sam Village</p> <ul style="list-style-type: none"> <li>• Maung Tee Pagoda</li> </ul>	Archaeological Monument Zone	4/08	4.7.08
16	<p>Yangon Region, Western District, Seikkan Township</p> <ul style="list-style-type: none"> <li>• Bo-ta-htaung Kyaik-dey- att Pagoda</li> </ul>	Archaeological Monument Zone	5/08	4.7.08
17	<p>Yangon Region, Eastern District, Pazuntaung Township</p> <ul style="list-style-type: none"> <li>• Shwe Phone Pwint Pagoda</li> </ul>	Archaeological Monument Zone	6/08	4.7.08
18	<p>Yangon Region, Western District, San Chaung Township</p> <ul style="list-style-type: none"> <li>• Ah-tu-lar-dipati Mahar- muni-tha-kya Koe Htet Kyi Pagoda</li> </ul>	Archaeological Monument Zone	7/08	4.7.08
19	<p>Yangon Region, Northern District, Mingaladon Township</p> <ul style="list-style-type: none"> <li>• Kyaik-ka-lol Pagoda</li> </ul>	Archaeological Monument Zone	8/08	4.7.08
20	<p>Mandalay Region, Kyauk Se District, Kyauk Se Township</p> <ul style="list-style-type: none"> <li>• Myin Sei ancient region</li> </ul>	Archaeological Monument Zone Archaeological Zone Protection Zone	9/08	25.8.08
21	<p>Mandalay Region, Kyauk Se District, Tada Oo Township</p>	Archaeological Monument Zone	10/08	25.8.08

	<ul style="list-style-type: none"> <li>• Pin Ya region</li> </ul>	Archaeological Zone Protection Zone		
22	Mandalay Region, Kyauk Se District, Sint Kine Township <ul style="list-style-type: none"> <li>• Pa-leit region</li> <li>• Yadanar-Lar-Ba-Muni Su-Taung-Pyae (Mway) Pagoda</li> <li>• Bamaw Monastery</li> <li>• Kyeit-Kone Monastery</li> <li>• Pali Monastery</li> <li>• Bawdi Monastery</li> <li>• Lay-Htet Monastery</li> <li>• Nout-Taw-Par Monastery</li> </ul>	Archaeological Monument Zone Archaeological Zone Protection Zone	11/08	25.8.08
23	Mrauk-U Township, Archaeological building in Mrauk-U ancient city	Archaeological Monument Zone Archaeological Zone Protection Zone	1/09	5.11.09
24	Magway Region, Chauk Township (c) Salay Region	Archaeological Monument Zone	2/09	5.11.09
25	Yangon Region, Dagon Township (d) Shwedagon Pagoda	Archaeological Monument Zone Protection Zone	3/09	5.11.09
26	Yangon Region, Kyauk-tan Township (e) Kyaik-hmaw-wun Pagoda	Archaeological Monument Zone	4/09	5.11.09
27	Yangon Region, Bahan Township (f) Ngar-htat-gyi Buddha Image	Archaeological Monument Zone	5/09	5.11.09
28	Yangon Region, Bahan Township (g) Chauk-htat-gyi Buddha Image	Archaeological Monument Zone	6/09	5.11.09
29	Yangon Region, Mingaladon Township (h) Kyaik-ka-le Pagoda	Archaeological Monument Zone	7/09	5.11.09
30	Yangon Region, Mayangone Township (i) Kyaik-wine Pagoda	Archaeological Monument Zone	8/09	5.11.09
31	Yangon Region, Thingankyun Township (j) Kyaik-ka-san Pagoda	Archaeological Monument Zone	9/09	5.11.09
32	Yangon Region, Twante Township (k) Shwe-san-taw Pagoda	Archaeological Monument Zone	10/09	5.11.09
33	Yangon Region, Kyauk Tan Township, Par-da-gyi Sanpya Village (l) Kyaik-par-da-gyi San-taw-shin Pagoda	Archaeological Monument Zone	11/09	5.11.09
34	Yangon Region, Thanlyin Township, Phayargyi village	Archaeological Monument Zone	12/09	5.11.09

	tract (m) Kyaik-khout Pagoda			
35	Sagaing Region, Monywa District (n) Pale Township ( Kyit-chaung 7 places )	Protection Zone	1/10	24.3.10
36	Magway Region, Pakokku District, Myaing Township (o) Primate ancient regions (Kyit-chaung 25 places)	Protection Zone	2/10	24.3.10
37	Kachin State, Myitkyina District, Wine-maw Township (p) Minemaw-Waeinkywam ancient city	Archaeological Zone	3/10	5.4.10
38	Tanintharyi Region, Dawei District, Long-lone Township, Myo-haung village tract (q) Thargaya ancient city	Archaeological Zone Protection Zone	1/2012	2.2.2012
39	Ayeyawady Region, Myaungmya District, Myaungmya Township (r) Myaungmya ancient city	Archaeological Zone Protection Zone	1/2012	2.2.2012
40	Rakhine State (s) Waitharli ancient city	Archaeological Zone Protection Zone	3/2012	9.3.2012
41	Rakhine State (t) Danyawadi ancient city	Archaeological Zone Protection Zone	4/2012	9.3.2012
42	Sagaing Region, Chaung Oo Township (u) High village region & Thone-pan-hla (Low) village region	Protection Zone	5/2012	2.4.2012
43	Shan State, Taunggyi District, Ywar-ngan Township (v) Pya-da-lin cave region	Archaeological Monument Zone Protection Zone	6/2012	3.9.2012
44	Sagaing Region, Shwe-bo District, Kant-balu Township (w) Myay-htoo ancient city	Protection Zone	7/2012	3.9.2012
45	Mandalay Region, Nwar-htogyi Township, Near Paya Gyi village (x) Wa-tee ancient city	Archaeological Monument Zone Protection Zone	8/2012	3.9.2012
46	Mandalay Region, Myittha Township, Mine-maw village tract (y) Pin-lel (Mine-maw) ancient city	Archaeological Monument Zone Protection Zone	9/2012	3.9.2012
47	Mandalay Region, Kyauk-se Township, Kyaung-pan-kone village tract (z) Ta-moakh Shwe-gu-gyi Pagoda	Archaeological Monument Zone		

**Figure A10.1 Map of Bagan Cultural Heritage Zones**



Sources; Regional Department of Archaeology, National Museum and Library in Ministry of Religious affairs and Culture.

**Table A10.2 List of 16 villages located inside Bagan Cultural Heritage Zones**

**Monument Zone**

No.	Village	Zone
1	Min Nan Thu Village	Monument Zone
2	Taung Bi Village	Monument Zone
3	Myin Ka Par Village	Monument Zone

**Ancient Zone**

No.	Village	Zone	Remark
1	Hpyuk Seit Pin Village	Ancient Zone	
2	Kon Tan Gyi Village	Ancient Zone	
3	West Pwa Saw Village	Ancient Zone	
4	East Pwa Saw Village	Ancient Zone	
5	Thu Htay Kan Village	Ancient Zone	
6	Min Nan Thu Village	Ancient Zone	Monument Zone

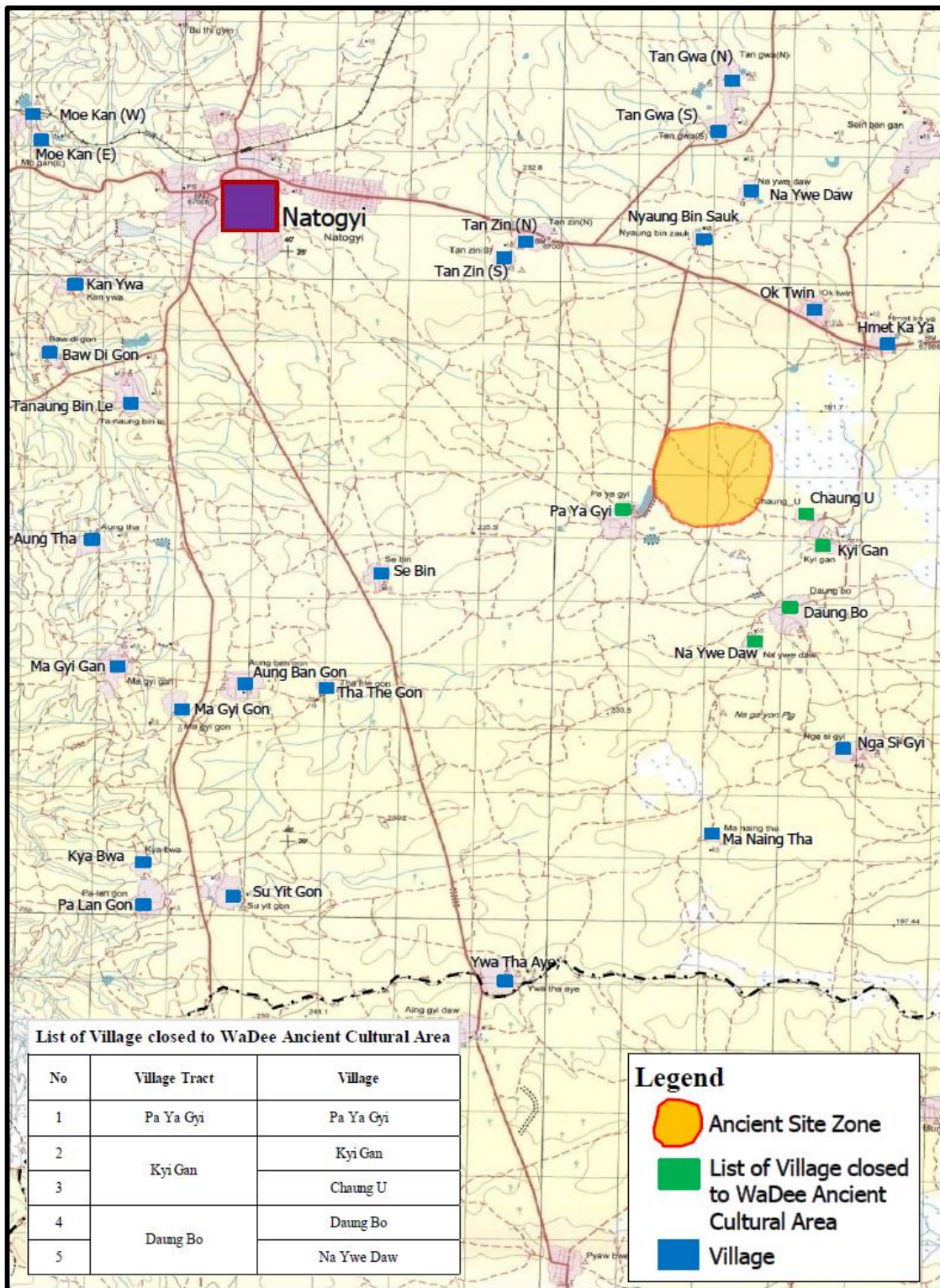
Protected Zone

No.	Village	Zone	Remark
1	East Kan Pauk Village	Protected Zone	
2	West Kan Pauk Village	Protected Zone	
3	Thant Sin Kyal Village	Protected Zone	
4	Let Wai Village	Protected Zone	
5	Tayown Taing Village	Protected Zone	
6	Phoe Ne Kan Village	Protected Zone	
7	Nyaung To Village	Protected Zone	
8	Nat Kyowet Ai Village	Protected Zone	
9	Hpyuk Seit Pin Village	Protected Zone	Ancient Zone



Figure A10.2: Map of WaDee Ancient Site Zones in Natogyi Township and villages located in its vicinity

WaDee Ancient Site Zone in Natogyi Township



## **Annex 11: List of Activities/Projects Require IEE/EIA (Annex 1 to the Ministerial Notification No. 616/ 2015 – EIA Procedures**

### **ANNEX 1**

#### **Categorization of Economic Activities for Assessment Purposes**

- a. This Annex provides guidance as to whether an IEE or EIA is required for any proposed project or activity. If, as a result of that determination, an IEE or an EIA is determined to be required, then the proponent of the project or activity will be obliged to prepare, obtain approval for, and implement an appropriate EMP in respect of the proposed project or activity. Any appeal from such determination must be made in accordance with the EIA Procedure.
- b. If a Project Proponent of an existing project or activity intends to expand that project or activity, then the Department shall consider and use the type and size thresholds specified in the categorization below as the basis for determining whether such expanded project or activity will be required to conduct any additional assessment, either in the form of an IEE, an EIA or an EMP.
- c. If a production capacity included in the categorization below has not been explicitly expressed as a total production capacity (e.g. installed capacity for energy production), then the applicable production capacity threshold shall be the total production output under normal operations.
- d. The Ministry reserves the right to interpret, clarify and amend this Annex from time to time as and when it deems necessary in accordance with the Article 30 of the Procedure.

No.	Type of Economic Activity	Criteria for IEE Type Economic Activities	Criteria for EIA Type Economic Activities
<b>SPECIAL INVESTMENT PROJECTS</b>			
1.	Projects in which investment is decided by the Parliament or the government cabinet or the President	-	All sizes
<b>ENERGY SECTOR DEVELOPMENT</b>			
2.	Hydro Power Plants	Installed capacity $\geq$ 1 MW but $<$ 15 MW and Reservoir volume (full supply level) $<$ 20,000,000 m <sup>3</sup> and Reservoir area (full supply level) $<$ 400 ha	Installed capacity $\geq$ 15 MW or Reservoir volume (full supply level) $\geq$ 20,000,000 m <sup>3</sup> or Reservoir area (full supply level) $\geq$ 400 ha
3.	Nuclear Power Plants	-	All sizes
4.	Natural Gas or Bio Gas Power Plants	Installed capacity $\geq$ 5 MW but $<$ 50 MW	Installed capacity $\geq$ 50 MW
5.	Coal-fired Power Plants	Installed capacity $\geq$ 1 MW but $<$ 10 MW	Installed capacity $\geq$ 10 MW
6.	Power Plants from Waste Products	Installed capacity $\geq$ 50 MW	All activities where the Ministry requires that the Project shall undergo EIA
7.	Geothermal Facilities	Installed capacity $\geq$ 5 MW but $<$ 50 MW	Installed capacity $\geq$ 50 MW
8.	Combined Cycle Power Plants (gas & thermal)	Installed capacity $\geq$ 5 MW but $<$ 50 MW	Installed capacity $\geq$ 50 MW
9.	Thermal Power Plants (other than the types in items 4, 5, 6, 7 and 8)	Installed capacity $\geq$ 5 MW but $<$ 50 MW	Installed capacity $\geq$ 50 MW
10.	Wind Power Plants	Installed capacity $\geq$ 5 MW but $<$ 50 MW	Installed capacity $\geq$ 50 MW
11.	Solar Power Plants	Installed capacity $\geq$ 50 MW	All activities where the Ministry requires that the Project shall undergo EIA
12.	Onshore Oil and Gas Seismic Surveys	All sizes	
13.	Onshore Oil and Gas Exploration Drillings	-	All sizes
14.	Onshore Oil and Gas Production drilling and production activities; transportation activities including pipelines; pump stations, compressor stations and storage facilities; ancillary and support operations;	-	All sizes

	and decommissioning		
15.	Offshore Oil and Gas Seismic Surveys	All sizes	-
16.	Offshore Oil and Gas Exploration Drillings	-	All sizes
17.	Offshore Oil and Gas Production drilling and production activities; offshore pipeline operations, offshore transportation, compressor stations and storage facilities; ancillary and support operations; and decommissioning	-	All sizes
18.	Petroleum Refineries or Natural Gas Refineries (including manufacturing of liquefied petroleum gas, motor gasoline, kerosene, diesel oil, heating oil, fuel oil, bitumen, asphalt, sulphur, and intermediate products e.g. propane/propylene mixtures, virgin naphtha, middle distillate and vacuum distillate for the petrochemical industry)	-	All sizes
19.	Natural Gas Processing Plants; Production of liquid products from natural gas (this may include methanol and petroleum liquid products such as naphtha, gasoline, kerosene, diesel fuel, waxes, and lubes)	-	All sizes
20.	Natural Gas Liquefaction Plants	-	All sizes
21.	Oil or Natural Gas Terminals	-	All sizes
22.	Petroleum Depots or Liquid Gas Depots	Storage capacity Petroleum < 10,000 t; Liquid gas < 2,500 t	Storage capacity Petroleum ≥ 10,000 t; Liquid gas ≥ 2,500 t
23.	Oil or Gas Transmission or Distribution Systems	< 10 km	≥ 10 km
24.	Filling Stations (including liquefied petroleum gas and compressed natural gas)	≥ 10 m <sup>3</sup> (10,000 l) fuel storage capacity	All activities where the Ministry requires that the Project shall undergo EIA
25.	Petroleum-based Organic Chemicals Manufacturing	-	All sizes
26.	Electrical Power Transmission Lines ≥ 115 kV but < 230 kV	≥ 50 km	All activities where the Ministry requires that the Project shall undergo EIA
27.	Electrical Power Transmission Lines ≥ 230 kV	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
28.	High Voltage (230 kV and 500 kV) Transformer Substations	≥ 4 ha	All activities where the Ministry requires that the Project shall undergo EIA

<b>AGRICULTURE, LIVESTOCK AND FORESTRY DEVELOPMENT</b>			
29.	Plantation Industrial/Crop Production (e.g. rubber, palm oil, cocoa, coffee, tea, bananas, sugar cane)	≥ 200 ha but < 500 ha	≥ 500 ha
30.	Annual Crop Production (e.g. cereals, pulses, roots, tubers, oil-bearing crops, fibre crops, vegetables, and fodder crops)	≥ 500 ha but < 3,000 ha	≥ 3,000 ha
31.	Livestock Farms (e.g. cows, buffaloes, horses, goats, sheep and others)	≥ 500 livestock units but < 3,000 livestock units	≥ 3,000 livestock units
32.	Farms for Poultry and Other Commercially Raised Fowl	Fowl (poultry, ducks, turkeys) ≥ 5,000 but < 20,000 Ostriches ≥ 50 but < 200 Quail ≥ 25,000 but < 100,000	Fowl ≥ 20,000 Ostriches ≥ 200 Quail ≥ 100,000
33.	Pig Farms	≥ 2,000 pigs but < 5,000 pigs	≥ 5,000 pigs
34.	Inland Fish Raising and Aquaculture (in rivers, lakes, ponds; including shrimp raising)	Total water surface ≥ 1 ha but < 25 ha	Total water surface ≥ 25 ha
35.	Marine and Coastal Fish Raising and Aquaculture	Total water surface ≥ 1 ha but < 100 ha	Total water surface ≥ 100 ha
36.	Oyster Raising and Pearl Production	≥ 50 ha but < 200 ha	≥ 200 ha
37.	Raising and Caring for Wild Animals	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
38.	Reptile Farms	Alligators, monitor lizards or pythons < 1,000 reptiles other reptiles < 5,000 reptiles	≥ 1,000 alligators, monitor lizards or pythons ≥ 5,000 snakes or other reptiles
39.	Clear-cut Logging	< 500 ha	≥ 500 ha
40.	Concession Forest	< 10,000 ha	≥ 10,000 ha
41.	Irrigation Systems	≥ 100 ha but < 5,000 ha	≥ 5,000 ha
<b>Manufacturing</b>			
<b><i>Food and Beverage Manufacturing</i></b>			
42.	Meat Processing Plants (slaughter of cattle, pigs, sheep and other livestock)	≥ 15 t/d but < 50 t/d carcass production	≥ 50 t/d carcass production
43.	Poultry Processing Plants (slaughter of poultry and other commercially raised fowl)	≥ 15 t/d but < 50 t/d carcass production	≥ 50 t/d carcass production
44.	Fish Processing Plants	≥ 15 t/d but < 75 t/d	≥ 75 t/d

	(fish, crustaceans, gastropods, cephalopods, and bivalves; includes by-products such as fish oil and fish meals)		
45.	Food and Beverage Processing Facilities (processing of beef, pork, mutton and poultry meats, vegetable, and fruit raw materials into value-added food and non-fermented beverage products for human consumption)	$\geq 10$ t/d but $< 20$ t/d	$\geq 20$ t/d
46.	Dairy Processing Plants (reception, storage, and industrial processing of raw milk and the handling and storage of processed milk and dairy products)	$\geq 200$ t/d raw milk on annual average basis	All activities where the Ministry requires that the Project shall undergo EIA
47.	Manufacture of Animal Feeds	$\geq 100$ t/d but $< 300$ t/d product and $< 600$ t/d if production is operating a maximum of 90 d/a	$\geq 300$ t/d product or $\geq 600$ t/d if production is operating a maximum of 90 d/a
48.	Vegetable Oil Production and Processing Facilities	$\geq 100$ t/d but $< 300$ t/d product and $< 600$ t/d if production is operating a maximum of 90 d/a	$\geq 300$ t/d product or $\geq 600$ t/d if production is operating a maximum of 90 d/a
49.	Manufacture of Starches and Starch Products	$\geq 100$ t/d but $< 300$ t/d product and $< 600$ t/d if production is operating a maximum of 90 d/a	$\geq 300$ t/d product or $\geq 600$ t/d if production is operating a maximum of 90 d/a
50.	Manufacture of Grain Mill Products (grain milling, rice milling, production of rice flour, vegetable milling, coffee and cocoa milling, manufacture of flour)	$\geq 100$ t/d but $< 300$ t/d product and $< 600$ t/d if production is operating a maximum of 90 d/a	$\geq 300$ t/d product or $\geq 600$ t/d if production is operating a maximum of 90 d/a
51.	Monosodium Glutamate (seasoning powder) Factories	$\geq 50$ t/d but $< 100$ t/d	$\geq 100$ t/d
52.	Sugar Manufacturing Plants	$\geq 50$ t/d but $< 300$ t/d and $< 600$ t/d if production is operating a maximum of 90 d/a	$\geq 300$ t/d refined sugar or $\geq 600$ t/d if production is operating a maximum of 90 d/a
53.	Alcohol, Wine and Beer Production Factories	$\geq 50,000$ l/d but $< 300,000$ l/d product and	$\geq 300,000$ l/d product or

		< 600,000 l/d if production is operating a maximum of 90 d/a	≥ 600,000 l/d if production is operating a maximum of 90 d/a
54.	Non-Alcohol Factories (soda, soft drink, mineral water production)	≥ 20,000 l/d	All activities where the Ministry requires that the Project shall undergo EIA
55.	Ice Factories	≥ 500 t/d but < 2,000 t/d	≥ 2,000 t/d
56.	Drinking Water Factories (for bottled refined water)	≥ 100,000 l/d	All activities where the Ministry requires that the Project shall undergo EIA
57.	Tobacco Processing Plants	≥ 1 t/d but < 15 t/d product	≥ 15 t/d product
<b>Garments, Textiles and Leather Products</b>			
58.	Textile Manufacturing Facilities (production of yarn, fabric, garments and finished goods based on natural fibres, synthetic fibres and/or regenerated fibres)	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
59.	Pre-treatment (washing, bleaching, mercerisation) or Dyeing of Textiles or Fibres	≥ 1 t/d but < 10 t/d	≥ 10 t/d
60.	Leather Products Manufacturing (includes synthetic leather, handbags, luggage, saddle, footwear)	≥ 1,000 t/a	All activities where the Ministry requires that the Project shall undergo EIA
61.	Tanning and Leather Finishing	< 12 t/d finished products	≥ 12 t/d finished products
<b>Wood Manufacturing</b>			
62.	Sawmilling and Manufactured Wood Products	Sawmills: input ≥ 3,000 m <sup>3</sup> /a but < 50,000 m <sup>3</sup> /a Wood products: input ≥ 1,000 m <sup>3</sup> /a but < 15,000 m <sup>3</sup> /a	Sawmills: input ≥ 50,000 m <sup>3</sup> /a Wood products: input ≥ 15,000 m <sup>3</sup> /a
63.	Board and Particle-based Products Manufacturing (board and particle-based products, plywood and glued and laminated products, board from other raw materials such as sugar cane bagasse, straw, and linen)	< 600 m <sup>3</sup> /d or < 420 t/d	≥ 600 m <sup>3</sup> /d or ≥ 420 t/d
64.	Pulp and/or Paper Mills	≥ 20 t/d but < 50 t/d	≥ 50 t/d
65.	Printing or Other Surface Treatment Facilities (using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating)	≥ 6 kg/h but < 150 kg/h consumption of organic solvents	≥ 150 kg/h or ≥ 200 t/a consumption of organic solvents

<b>Chemicals Manufacturing</b>			
66.	Large Volume Inorganic Compounds Manufacturing and Coal Tar Distillation (includes ammonia, acids [nitric, hydrochloric, sulphuric, hydrofluoric, phosphoric acid], chlor-alkali [e.g. chlorine, caustic soda, soda ash], carbon black, and coal tar distillation [naphthalene, phenanthrene, anthracene])	-	All sizes
67.	Petroleum-based Polymers Manufacturing Plants	-	All sizes
68.	Coal Processing Plants (processing of coal into gaseous or liquid chemicals including fuels)		All sizes
69.	Chemical Fertilizer Manufacturing Plants	-	All sizes
70.	Pesticide Manufacturing, Formulation, and Packaging Plants	-	All sizes
71.	Oleochemicals Manufacturing Plants (production of fatty acids, glycerine, and biodiesel using fats and oils from vegetable or animal sources)		All sizes
72.	Pharmaceuticals and Biotechnology Manufacturing Plants	< 50 t/a	≥ 50 t/a
73.	Other Basic Organic Chemicals Manufacturing Plants	-	All sizes
74.	Other Basic Inorganic Chemicals Manufacturing Plants	-	All sizes
75.	Other Chemical Products Manufacturing Plants (e.g. paints, inks, varnishes, soap, detergents, perfumes, pyrotechnic products, photographic chemicals)	≥ 5 t/d but < 10 t/d	≥ 10 t/d
76.	Explosives Manufacturing Plants	-	All sizes
77.	Manufacturing of Extinguishers and Other Firefighting Products	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
78.	Manufacturing of CO <sub>2</sub> Gas and Filling and Liquefying Industrial Gas	≥ 1,000 t/a but < 3,000 t/a	≥ 3,000 t/a
<b>Manufacture of Glass and Ceramics</b>			
79.	Glass, Glass Fibre or Mineral Fibre Manufacturing Plants	All sizes	All activities where the Ministry requires that the Project shall undergo EIA



80.	Ceramic Tile and Sanitary Ware Manufacturing Plants	≥ 1,000 t/a fine ceramics ≥ 10,000 t/a ceramic tiles	All activities where the Ministry requires that the Project shall undergo EIA
<b><i>Manufacture of Construction Materials</i></b>			
81.	Cement and Lime Manufacturing Plants	Cement ≥ 10 t/h but < 30 t/h Lime ≥ 20 t/d but < 50 t/d	Cement ≥ 30 t/h Lime ≥ 50 t/d
82.	Clinker Plants	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
83.	Other Construction Supplies and Materials Production	≥ 30,000 t/a but < 50,000 t/a	≥ 50,000 t/a
84.	Asphalt Production Plants	< 100 t/d	≥ 100 t/d
<b><i>Metal, Machinery and Electronics</i></b>			
85.	Base Metal Smelting and Refining Plants (base metal smelting and refining of lead, zinc, copper, nickel, and aluminium)	Non-ferrous metal < 20 t/d melting capacity, except for lead and cadmium < 4 t/d melting capacity	Non-ferrous metal ≥ 20 t/d melting capacity, except for lead and cadmium ≥ 4 t/d melting capacity
86.	Manufacture of Pig Iron, Raw and Low Alloy Steel from Iron Ore or Scrap Metal	< 2.5 t/h	≥ 2.5 t/h
87.	Foundries (casting ferrous [iron and steel] and nonferrous [primarily aluminium, copper, zinc, lead, tin, nickel, magnesium, and titanium] metals)	Ferrous metal < 20 t/d production capacity Non-ferrous metal < 20 t/d production capacity except for lead and cadmium < 4 t/d production capacity	Ferrous metal ≥ 20 t/d production capacity Non-ferrous metal ≥ 20 t/d production capacity except for lead and cadmium ≥ 4 t/d production capacity
88.	Non-ferrous Metal Melting, Smithy and Filigree	Production capacity ≥ 5 t/d but < 20 t/d	Production capacity ≥ 20 t/d
89.	Shipyards and Ship Building Enterprises	< 1 ha and < 20,000 t lifting capacity	≥ 1 ha or ≥ 20,000 t lifting capacity
90.	Locomotives and Other Railway Rolling Material Manufacturing, Repairing and Assembling	-	≥ 100 vehicles/a
91.	Metal, Plastic, Fibre and Rubber Products Manufacturing Plants (material processing operations common to multiple industries engaged in the manufacture of metal, plastic, fibre, and rubber products)	≥ 5,000 m <sup>2</sup> production area, or ≥ 6 kg/h consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
92.	Rubber and Latex Processing Plants	≥ 2,000 t/a	All activities where the Ministry requires that the Project shall undergo EIA

93.	Vehicle Tire Manufacturing Plants	$\geq 5,000 \text{ m}^2$ production area, or	All activities where the Ministry requires that
		$\geq 6 \text{ kg/h}$ consumption of organic solvents	the Project shall undergo EIA
94.	Semiconductors and Other Electronics Manufacturing Plants (manufacturing of semiconductors, printed circuit boards, printed wiring assemblies, screens, passive components, and magnetic devices)	$\geq 5,000 \text{ m}^2$ production area, or $\geq 6 \text{ kg/h}$ consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
95.	Electronic and Electric Equipment Manufacturing Plants (computers, communication equipment, consumer electronics (cooking, washing, food, warm and cooling domestic and public electronic, laboratory equipment, electric motors, electric lightning etc.)	$\geq 5,000 \text{ m}^2$ production area, or $\geq 6 \text{ kg/h}$ consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
96.	Batteries and Accumulators Manufacturing Plants	$< 3,000 \text{ t/a}$	$\geq 3,000 \text{ t/a}$
97.	Machinery, Vehicles and Equipment Manufacturing Plants	$\geq 5,000 \text{ m}^2$ production area, or $\geq 6 \text{ kg/h}$ consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
98.	Motor Vehicle and Motor Bike Assembly Plants	$\geq 5,000 \text{ m}^2$ production area, or $\geq 6 \text{ kg/h}$ consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
99.	Motor Vehicle Accessories, Related Equipment and Engine Manufacturing Factories	$\geq 5,000 \text{ m}^2$ production area, or $\geq 6 \text{ kg/h}$ consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
100.	Motor Vehicle Maintenance Workshops	Utilization area $\geq 5,000 \text{ m}^2$	All activities where the Ministry requires that the Project shall undergo EIA
101.	Car Breaking	$< 10$ vehicles/d, $< 50$ motorbikes/d	$\geq 10$ vehicles/d $\geq 50$ motorbikes/d
102.	Weapons and Ammunition Manufacturing Plants	-	All sizes
<b>Waste Management</b>			
103.	Non-Hazardous Waste Disposal Facilities	Landfills $< 10 \text{ t/d}$ and total capacity $< 25,000 \text{ t}$ Others $< 50 \text{ t/d}$	Landfills $\geq 10 \text{ t/d}$ or total capacity $\geq 25,000 \text{ t}$ Others $\geq 50 \text{ t/d}$
104.	Non-Hazardous Waste Incinerators	$< 3 \text{ t/h}$	$\geq 3 \text{ t/h}$
105.	Non-Hazardous Waste Recycling, Recovery or Reuse Facilities	$< 50 \text{ t/d}$	$\geq 50 \text{ t/d}$

106.	Hazardous Waste Disposal Facilities	-	All sizes
107.	Hazardous Waste Recycling, Recovery or Reuse Facilities	< 10 t/d	≥ 10 t/d
108.	Wastewater Treatment Plants (centralized systems)	-	All sizes
109.	Wastewater and Storm Water Collection Systems	Length ≥ 1 km but < 10 km	≥ 10 km
<b>Water Supply</b>			
110.	Groundwater Development for Industrial, Agricultural or Urban Water Supply	< 4,500 m <sup>3</sup> /d	≥ 4,500 m <sup>3</sup> /d
<b>Infrastructure and Service Development</b>			
111.	Dams and Reservoirs	Dam height < 15 m and Reservoir area < 400 ha	Dam height ≥ 15 m or Reservoir area ≥ 400 ha
112.	Lake, River and Channel Land Filling which Impacts on the Public	Area < 50 ha	Area ≥ 50 ha
113.	Other Large Civil Works Construction (embankments, seawalls, offshore breakwater)	Length < 2 km and Area < 25 ha	Length ≥ 2 km or Area ≥ 25 ha
114.	Dredging	Total < 500,000 t	Total ≥ 500,000 t
115.	River Channel Conservation (surface water & water volume control)		All sizes
116.	Shipping (operation and maintenance of ships used for the transport of bulk cargo, and goods, and ship breaking)	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
117.	Ports, Harbours, and Terminals (ports, harbours, and terminals for cargo and passengers transfer)	Area < 25 ha	Area ≥ 25 ha
118.	Industrial Zone Construction and Development	-	All sizes
119.	Hospitals	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
120.	Cemeteries and Crematoria (for burial, incineration and other forms)	All sizes	

121.	Tourism and Hospitality Development	≥ 80 rooms but < 200 rooms or	≥ 200 rooms or
		total utilization area ≥ 200,000 m <sup>2</sup> but < 500,000 m <sup>2</sup>	total utilization area is ≥ 500,000 m <sup>2</sup>
122.	Golf courses	9 holes	18 holes
<b>Transportation</b>			
123.	Railways and Tramways (construction and maintenance of rail infrastructure and operation of rolling stock)	Length < 5 km	Length ≥ 5 km
124.	Cable Cars	Length < 0.5 km	Length ≥ 0.5 km
125.	Airports and Runway Construction	Runway length < 2,100 m	Runway length ≥ 2,100 m
126.	Bridges, River Bridges and Viaducts (new construction)	Length ≥ 200 m but < 2 km	Length ≥ 2 km
127.	Bridges, River Bridges and Viaducts (upgrading)	Length ≥ 300 m	All activities where the Ministry requires that the Project shall undergo EIA
128.	Tunnels	Length < 1 km	Length ≥ 1 km
129.	Expressways and Highways (ASEAN Highway Standard; new construction or widening)	Length ≥ 2 km but < 50 km	Length ≥ 50 km
130.	Other Roads (state, region, urban; new construction or widening)	Length ≥ 50 km but < 100 km	Length ≥ 100 km
131.	Road Improvement (upgrading from seasonal to all weather surface, widening of shoulders)	Length ≥ 50 km	All activities where the Ministry requires that the Project shall undergo EIA
<b>Mining</b>			
132.	Extraction of Rock, Gravel or Sand from a River or Marine Waters	≥ 1,000 m <sup>3</sup> /a but < 50,000 m <sup>3</sup> /a	≥ 50,000 m <sup>3</sup> /a
133.	Construction, Building and Ceramic Minerals Extraction (aggregates, limestone, slates, clay, gypsum, feldspar, silica sands, granite, kaolin, bentonite, marble, and quartzite)	< 200 acre and < 100,000 t/a	≥ 200 acre or ≥ 100,000 t/a
134.	Extraction and Refining of Industrial Minerals (barite, fluorite, phosphate, potash, salt, soda ash, asbestos)	< 200 acre and < 100,000 t/a ore	≥ 200 acre or ≥ 100,000 t/a ore

135.	Extraction of Ferrous, Non-Ferrous Metal and Precious Metal Ore Except Gold (iron, manganese, silver, copper, tin, antimony, lead, nickel, zinc, chromium, bauxite), and Precious Stone	< 50 acre and < 50,000 t/a	≥ 200 acre or ≥ 50,000 t/a
136.	Refining of Metal Mineral Ore (without using hazardous chemicals)	< 50,000 t/a	≥ 50,000 t/a
137.	Refining of Metal Mineral Ore (using hazardous chemicals)	< 25,000 t/a	≥ 25,000 t/a
138.	Extraction and Refining of Gold Ore (without using hazardous chemicals)	< 20 acre	≥ 20 acre
139.	Extraction and Refining of Gold Ore (using hazardous chemicals)	< 20 acre and < 25,000 t/a	≥ 20 acre or ≥ 25,000 t/a
140.	Coal Mining (underground and surface)	< 100,000 t/a coal	≥ 100,000 t/a coal
141.	Mining, including Dredging of Heavy Mineral Sands (tungsten, ilmenite, rutile, zircon, titanium, monazite)	≥ 1,000 m <sup>3</sup> /a but < 50,000 m <sup>3</sup> /a	≥ 50,000 m <sup>3</sup> /a