**The Republic of the Union of Myanmar**

**Ministry of Agriculture, Livestock and Irrigation**

**National Community Driven Development Project**

**Contingency Emergency Response Component - CERC**

**Addendum to**

**Environmental and Social Management Framework**

**(ESMF Addendum)**

**(Final)**

(1 July 2020)

## List of Acronyms and Abbreviations

|  |  |
| --- | --- |
| AF | Additional Financing  |
| CERC | Contingency Emergency Response Component  |
| CF | Community Facilitator  |
| CfW | Cash for Work |
| CSO | Central Statistical Organization |
| DG | Director General  |
| DoADoF | Department of AgricultureDepartment of Fisheries |
| DRD | Department of Rural Development |
| EAOEAP | Ethnic Armed OrganizationsEmergency Action Plan |
| ESMF | Environmental and Social Management Framework |
| ECoPs | Environmental Codes of Practice |
| EHS | Environmental Health and Safety |
| EMP | Environmental Management Plan |
| EVRF | Emergency Village Revolving Fund |
| FY | Fiscal Year  |
| GoM | Government of Myanmar |
| GRM | Grievance Redress Mechanism |
| GRS | Grievance Redress Service  |
| IPPF | Indigenous Peoples Policy Framework |
| LBVD | Livestock Breeding and Veterinary Department |
| MDI | Multi-Dimensional Index  |
| MIS  | Management Information System  |
| MLCS | Myanmar Living Condition Survey  |
| MOALI | Ministry of Agriculture, Livestock and Irrigation |
| M&E | Monitoring and Evaluation |
| MSC | Monitoring Sub Committee |
| MSY  | Mya Sein Yaung  |
| NCDDP | National Community Driven Development Project |
| NGO | Non-governmental Organization  |
| OM | Operation Manual  |
| OP | Operational Policies |
| OHS | Occupational Health and Safety |
| PCRMP | Physical Cultural Resources Management Plan  |
| PHI  | Pre-harvest Interval  |
| PIC | Prior Inform Consent  |
| POP | Persistent Organic Pollutants  |
| PPD | Plant Protection Department |
| PRB | Pesticide Registration Board  |
| PPE | Personal Protective Equipment |
| PMP | Pest Management Plan |
| PMU | Project Management Unit |
| PPDRFP | Plant Protection Department Resettlement Policy Framework |
| TA | Technical Assistance  |
| TFToT | Technical Facilitator Training of Trainers |
| TPIC | Township Planning and Investment Committee |
| VFMC  | Village Fund Management Committee |
| VT | Village Tract  |
| VTPSC | Village Tract Project Sub Committee  |
| WB | World Bank |
| WHO | World Health Organization |

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# Introduction

1. An outbreak of the coronavirus disease (COVID-19) has been spreading rapidly across the world since December 2019, following the diagnosis of the initial cases in Wuhan, Hubei Province, China. On March 11, 2020, the World Health Organization (WHO) declared a global pandemic as the coronavirus rapidly spreads across the world. In response to this global pandemic, the Government of Myanmar (GoM) published the Myanmar Overcoming as One: COVID-19 Economic Relief Plan (CERP) on April 27, 2020, which seeks to mitigate the economic impact posed by COVID-19 while establishing foundations that will facilitate Myanmar’s rapid economic recovery, using available policy instruments and as part of a coordinated whole-of-nation response. The CERP attempts to balances the needs of all stakeholders while leaving no one behind.
2. The GoM has requested World Bank (WB) support to implement the CERP action plans 2.1.7 (b) and 2.1.7 (d) (combined with 3.1.2(a)), respectively for cash or lending support to affected smallholder farmers, and labour-intensive community infrastructure projects. This set of three CERP action plans will be supported though by the Contingency Emergency Response Component (CERC) of the National Community Driven Development Project (NCDDP).
3. The CERC will finance two sub-components: (i) Labor-Intensive Cash for Work (CfW); and (ii) Emergency Village Revolving Fund (EVRF). Both activities will be implemented by the Department of Rural Development (DRD), under the Ministry of Agriculture, Livestock, and Irrigation (MOALI), the same implementing agency as for all activities under the NCDDP.
4. In order to address the risks and potential impacts of the NCDDP project, the Department of Rural Development (DRD), the implementing agency, previously prepared an Environmental and Social Management Framework (ESMF) which include a Resettlement Policy Framework (RFP) and Indigenous Peoples Policy Framework (IPPF). The ESMF also included Environmental Codes of Practice (ECOPs) applicable to most small scale rehabilitation and construction works in subprojects.

## Objective of ESMF Addendum

1. This document is developed as an addendum to the existing ESMF of the NCDDP. The purpose of this ESMF addendum is to ensure that additional interventions to be implemented though the CERC are undertaken in a manner that avoids and/or minimizes environmental and social impacts in line with the WB’s safeguards policies and national rules and regulations.

## Scope of ESMF Addendum

1. In general, the activities under the CfW fall with the existing procedures of the ESMF, while those under the EVRF are new to the NCDDP and will require new safeguard arrangements. As such, this ESMF addendum aims to describe additional safeguards considerations and measures for the activities proposed under the CERC which are not covered in the original NCDDP’s ESMF.
2. Specifically, the addendum describes additional WB policies and regulations to be triggered, eligible and non-eligible activities to be financed under each sub-component, potential environmental and social safeguards issues, approach to address those safeguards issues, grievance redress mechanisms and consultation and disclosure requirements. Furthermore, it also offers safeguard screening forms, Environmental Code of Practices (ECOPs) and other required safeguard tools as attached in the annexes.

## Legal and Administrative framework

### Additional National Laws and Regulations

1. Relevant laws and regulations enacted by the GoM applicable to the complementary activities under the CERC are described in this section.

**Forest Management**

1. ***Forest* Law** (2018) was enacted by repealing the previous Forest Law (1992). The current Forest Law allows the establishment of plantations on a forest land or land at the disposal of the Government such as village-owned firewood plantations, commercial plantation, industrial plantation, watershed plantation, mangrove plantation, and other plantation.
2. Each State and Region except Yangon Region and Naypyidaw Union Territory has its own **Village Firewood Laws and By-laws** for their related administrative boundary.
3. ***Protection of Biodiversity and Protected Area Law*** (2018) defines the protected area categories including national park, geophysical exceptional area, natural reserves, and others.

**Pest Management**

1. For the safe use of agricultural pesticides and plant pest management, ***The Plant Pest Quarantine Law*** (1993) and ***The Pesticide Law*** (2016) were enacted to be implemented under MOALI. These laws are enforced to overcome the hazards of all living things and environment resulting from pest management within Myanmar. In 2018, Pesticide Registration Board announced the banned pesticides list which are categorized under Persistent Organic Pollutants (POP) list of Stockholm Convention and Prior Informed Consent (PIC) chemicals of the Rotterdam Convention, and the restricted pesticides list.
2. ***The Procedures Relating to Pesticide Law*** (2019) was enacted by the Department of Agriculture (DOA) in July 2019. In this procedure, the series of steps for the application of pesticide registration, licensing, instructions for the pesticide importing, instructions for pesticide license holders and disciplines which pesticide user shall follow are stated with relevant application forms and formats.

### Additional World Bank Operational Policy (OP)

1. The following WB policies are triggered in the original ESMF of NCDDP: Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Indigenous Peoples (OP 4.10), Involuntary Resettlement (OP 4.12), OP 7.50 (Projects on International Waterways) and Physical Cultural Resources (OP 4.11) –. Considering newly added activities under the CERC, Forests (OP 4.36) and Pest Management (OP 4.09) are additionally triggered. All CERC activities shall follow the requirements of all OPs triggered in both the main ESMF and the addendum.
2. **OP 4.36: Forests**. This policy is triggered because some CfW supports may potentially involve tree planting on village/community owned lands including premise of public facilities, existing village firewood plantations, and catchment areas nearby and maintenance of firebreaks around villages adjacent to the forest area. However, such sub-projects will mainly bring positive environmental impacts and negative impacts are expected to be minimal, insignificant and manageable. Activities that would cause significant conversion or degradation of critical natural forest areas will not be eligible for project support.
3. **OP 4.09: Pest Management.** The project will not promote the use of pesticides, insecticides and herbicides and other dangerous chemicals. However, this policy is triggered as the proposed works to be financed under EVRF sub-component include variety of agricultural related activities and it may lead to an increased use of pesticides or agrochemicals. Hence, this addendum attaches a guidance for Pest Management Plan (PMP) for the farmers to ensure that the pesticides used have negligible or minimal impact on environment and people.

## Institutional Roles and Responsibilities

1. The Department of Rural Development (DRD) will be responsible for implementing both components of the CERC. The Director General (DG) of the department will provide overall management oversight for the project, which will be implemented by several of the relevant technical units of DRD. This includes the Infrastructure and Monitoring and Evaluation (M&E) unit, the Mya Sein Yaung (MSY) unit, the procurement unit and the financial management division of the department. These are the same units that currently oversee the implementation of the NCDDP, with the exception of MSY.
2. The Infrastructure and M&E unit of DRD will take direct responsibility for the cash-for-work sub-component. This unit is actively involved in the implementation of the NCDDP and as such is well versed in Bank safeguards procedures and requirements. The unit will work with and through state/region DRD offices to provide direct support to the DRD township offices that would engage with communities in the design and implementation of CfW activities. The unit would draw on existing NCDDP teams at union level to support training, communications, safeguards, M&E, grievance handling and other functions required in implementing the component.
3. The Director of the Planning and International Relations division of DRD who currently oversees the MSY program will be responsible for the day-to-day management of the EVRF. The same DRD staff and structures at township, state/region and union levels that manage the MSY program will also oversee the EVRF component. In addition, DRD has appointed additional staff at union level to enhance MSY program capacities for M&E, training, grievances, safeguards, and finance. Lastly, the CERC components will include additional resources for key experts for management information systems, communications and safeguards at union level, and finance at township level.

# Descriptions of CERC Activities[[1]](#footnote-2)

### 2.1 Component 1: Labor-Intensive Cash for Work (CfW)

1. **Townships selection**. The Cash for Work component aims to support the most vulnerable households in rural areas that have been economically affected by covid-19. The two main criteria for township selection are: (i) the Multi-dimensional Disadvantage Index (MDI)[[2]](#footnote-3) rating at village tract (VT) level; and (ii) Townships with high economic out-migration. Townships where EAOs are present are fully eligible – only townships with active conflict and insecure conditions are excluded. Based on these criteria, a total of 257 townships were pre-selected by DRD. An analysis of the proposed list of 257 townships by the World Bank confirmed that above listed selection criteria were consistently applied.
2. **Village selection.** As for townships, villages will be selected basedon estimated vulnerability to the crisis, actual impact of the crisis, feasibility criteria, and the absence of other similar program support. Criteria for selection are as follows:
3. Villages selected must be within the 40% of VTs with the highest MDI[[3]](#footnote-4) in the township
4. Among these VTs, the following selection criteria will be applied to select villages (because of the lack of village level data, the selection committee will play a key role in bringing their technical knowledge of the villages under consideration to apply these criteria):
5. Villages with cases of COVID-19
6. Villages with high numbers of workers (besides returnees/migrant workers) having lost employment/income due to the crisis
7. Villages with high numbers of returnees/migrant workers
8. Villages willing to participate
9. In addition, because representative data at village level is unavailable, the process for selecting the participating villages would allow for certain variance to include villages outside of those in the group of 40% VTS with the highest MDI score in the township. If villages were selected outside this group, the townships committee would need to document the reasons why the respective village was selected.
10. With a view of spreading various aid and relief benefits across the country, and to ensure feasibility of the program, the following exclusion criteria will also apply:
11. Villages already covered by Mya Sein Yang Project,
12. Villages to be covered by the below described Emergency Village Revolving Fund
13. Villages selected for the Village Development Plan Project for FY 2019-2020
14. Villages receiving support from the Saemaul Undong Program Villages
15. NCDDP villages receiving sub-project support in the current fiscal year and all villages in 36 NCDDP townships in FY 2020-21
16. Villages with active conflict and/or a fragile security situation
17. Finally, because the cash for work activity requires villages to collaborate and come to agreements, selected villages who cannot easily come to an agreement on the types of sub-projects will be implemented and where dissension arises will be excluded and replaced by other villages.
18. Based on the above-listed criteria, township selection committees in each township will select an average of 20 villages, depending on the overall township population. It is estimated that the CfW activity will reach 8,600 villages, including 2,500 villages in round 1 and 6,100 villages in round 2. The first round of village selection for the current fiscal year will be facilitated by DRD and carried out by the members of the Township Planning and Investment Committee (TPIC). The second round of village selection for next fiscal year will similarly be facilitated by DRD with all TPIC members, plus 2 CSO representatives (to be appointed by CSOs present in the township), and in areas with EAO presence (and where EAOs have signed a cease-fire agreement), one representative of each EAO. To ensure adequate inclusion of conflict-affected areas where EAOs are present, where feasible (where access was permitted), villages in these areas would be selected for participation in proportion to the estimated percentage of villages in a given township that are in EAO areas. Government access to proposed villages would be a pre-condition of selection to ensure that all safeguard and general implementation procedures and measures could be put in place.
19. **Household selection.** The objective of the cash for work activity is to provide emergency cash to households most severely affected by the crisis. The process of household selection within a village will be a two-step process: (i) self-selection through wage rate;(ii) vulnerability assessment.
20. *Self-selection through wage rate*. The program will use a daily wage for unskilled labor that is at or near the market clearing rate, which is estimated, on average, to be MMK 5,000 (based on MLCS 2017 data converted to current prices). While this is generally below the rates used in other programs in Myanmar, it is an approximation of the minimum rate of pay in the private, casual labor, market. The wage rate will be tailored to the realities of each of the townships, based on an analysis conducted by DRD on local prices, and would range from MMK 4,800 to MMK 6,000 per day.
21. *Vulnerability assessment.* In villages where demand exceeds the offer for cash for work, a second selection step will be applied, whereby a screening scorecard will be applied to all households interested in participating in the program, with a focus on prioritizing households most directly affected by the crisis (such as household members sick with COVID19, household members who lost remittances/income), and vulnerable households (such as female headed households, households with high numbers of dependents, households with elderly or disabled members). Each household screened will receive a score, and the highest rated households will be selected to benefit from the CfW activity in such a way that each household received an average of 30 days of labor.
22. **Inclusion and equal opportunity.** The component is designed to target those most affected or vulnerable to the crisis, and ensure adequate inclusion of:
23. **Women**, through: (i) Prioritization of women headed households for access to benefits; (ii) Equal pay for equal work; (iii) Establishment of quotas for participation in labor activities (40% of women). Woman participation will be monitored and reported on, as well as gender distribution across types of labor (more or less skilled).
24. **Elderly and people with disabilities**: Prioritization of households with elderly members and people with disabilities for access to benefits.
25. **Ethno-linguistic minorities**, through: (i) Inclusion of townships in all States and Regions; (ii) Inclusion of townships with EAO presence (when security allows); and (iii) Communication strategy for the project designed to ensure messages are adequately translated and formulated to reach out to all populations in selected townships/villages. Ethno-linguistic information on laborers/households selected will be collected to monitor the project’s inclusiveness.
26. **Scale and types of works to be supported**. Each village will be allocated on average MMK 10 million for cash for work activities. The priority is to maximize the labor content of the works activities, aiming for an average of 60% labor costs, or an estimated MMK 6 million in wage transfers. As such, the program will use a positive list of works that are pre-assessed based on their relative labor inputs. As labor-intensive works cut across sectoral lines (most notably between rural development, rural roads, forestry, sanitation, etc.), implementation arrangements should be designed to allow for cross-department and ministry cooperation. The positive list of works identified is as follows:

Table 1 Positive List of Activities under CfW

| **No** | **Type of Activities** | **Current or New Activity[[4]](#footnote-5)** |
| --- | --- | --- |
| 1. | Renovation and cleaning of drainage  | Current |
| 2.  | Renovation and/or maintenance of village road or farm road (including in cases of land slide) | Current |
| 3. | New installation and/or renovation of fencing of water ponds | Current |
| 4.  | Construction and/or renovation of hand-dug wells, water tanks and water pipes and renovation of ponds  | Current |
| 5.  | Renovation and/or maintenance of jetties and small-scale bridges | Current |
| 6. | Renovation and/or maintenance of water ways to water ponds for domestic and drinking and for farm use and renovation and/or maintenance of small irrigation for farm use (< 25 hectares) | Current |
| 7. | Cleaning, maintenance, renovation of waste storage | Current |
| 8. | Renovation and construction of retaining walls and embankments | Current |
| 9. | Renovation of community playgrounds | Current |
| 10. | Renovation of schools and healthcare centers, community centers and markets | Current |
| 11. | Planting trees on village/community owned lands including premise of public facilities, existing village firewood plantations, and catchment areas nearby | New |
| 12. | Maintenance of firebreaks in villages where there is high risk for fire and adjacent to forest | New |
| 13. | Renovation of public-owned fish, prawn and crab farming ponds | New |

1. It is important to mention that the activities or subproject that will be financed by the CERC should avoid activities or subproject with complex environmental and social aspects (for example physical relocation or displacement of any villagers, changing forest land into agricultural land or logging activities in primary forests, etc.). The CERC will primarily support small scale infrastructure maintenance or renovation. New construction or expansion of existing infrastructure for fencing of water ponds and construction of water supply components (items 2 and 3 in Table 1) is only eligible under specific conditions, as described in the negative list of activities in Table 2 below. To ensure that adverse impacts will not occur given the nature of emergency, the activities identified in Table 2 below are not eligible for support.

Table 2 Negative List of Activities under CfW

| **No** | **Type of Activities** |
| --- | --- |
| 1 | Sub-projects which do not benefit to the entire village |
| 2 | Sub-projects which exclude the poor/marginalized population or otherwise vulnerable groups |
| 3 | Sub-projects which do not provide equal pay for equal work for women and men. |
| 4 | Sub-projects which require phyiscal relocation and displacement of any villagers |
| 5 | Sub-projects which involve activities that use forced labour |
| 6 | Sub-projects which finance private goods, private livelihood activities, government offices or religious buildings. |
| 7 | Any construction of infrastructure (new, expansion or renovation) on land that is privately owned or with contested ownership |
| 8 | Sub-projects which include the payment of compensation for land or asset loss from the proceeds of the World Bank financing or other government sources |
| 9 | Sub-projects which include activities where the renovation/repair works do not lead to the infrastructure meeting applicable DRD technical and quality specification (as developed and applied under NCDDP) upon completion |
| 10 | Sub-projects which 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 |
| 11 | Sub-projects which finance the construction of any new dams or the rehabilitation of existing dams including structural and or operational changes |
| 12 | Sub-projects that would last longer than 3 months for construction |
| 13 | Sub-projects which are technically complicated (new infrastcuture, >20 ft length bridges and jetties) or which community can not carry out on their own |
| 14 | Sub-projects which require excessive mechainary versus local labor  |
| 15 | Sub-projects with less than 30% labor content (of the total sub-project financing)  |
| 16 | Sub-projects which include the payment of compensation for land or assets loss |
| 17 | Sub-projects which include activities that cause or lead to child abuse, child labour exploitation or human trafficking or sub-projects that employ or engage children, over the minimum age of 15 and under the age of 18, in connection with the project in a manner that is likely to be hazardous or interfere with the child’s education or be harmful to the child’s health or physical, mental, spiritual, moral or social development |
| 18 | Sub-projects which are financed, or scheduled to be financed, by the government or other development partners. (However, if the CfW program is used to co-finance these activities, it is allowed) |
| 19 | Sub-projects which are under the management of other government or institution and are not approved by respective departments |
| 20 | Sub-projects which contain the purchase or use of drugs, military equipment or other potentially dangerous materials and equipment, including chainsaws, pesticides; insecticides; herbicides; asbestos (including asbestos-containing materials); or other investments that could significantly affect the environment and livelihoods, including cultural resources |
| 21 | 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 |
| 22 | Any new construction and/or rehabilitation in protected areas (or proposed protected areas), reserve forests or other natural habitats or areas of high national conservation level that could have the potential to cause significant conservation (loss) or degradation of such natural habitats unless specified as planned investments as part of the respective protected area management plan (where such a plan exists). *Note: rehabilitation of existing infrastructure, which has been already developed (e.g. existing paths or tracks for tourism purposes) is possible if the respective sub-project is in line with the park development management plan, and subject to agreement of Union DRD.)* |
| 23 | Sub-projects which 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* |

### 2.2 Component 2: Emergency Village Revolving Fund (EVRF)

1. **Township selection**. The EVRF aims to support vulnerable or affected small, productive farmers and rural livelihoods, all around the country. Furthermore, for logistical reasons and DRD staffing limitations at township level, it is estimated that the scheme can only cover 8 villages per township. Therefore, the EVRF will be implemented in all States and Regions, in all rural townships, targeting an overall average of 8 villages per township. Townships with EAO presence would be included. Townships would be excluded only if: (i) ongoing active conflict would make it impossible to identify villages safe enough for project implementation, or (ii) there were a lack of sufficient township-level DRD human resources to implement the activity. More remote/less accessible townships will be included in the second round. After analysis of the list of townships submitted by DRD, a total of 32 townships were excluded from this activity due to ongoing conflict, and a total of 265 were confirmed eligible.
2. **Village selection.** The number of villages selected per township will be proportional to the total number of villages in each township, with an average of 8 villages. It is estimated that the EVRF activity will reach 2,400 villages, including 1,500 villages in round 1 and 900 villages in round 2. Given the nature of the support, villages will be selected based on economic potential of the village for farming and rural livelihood activities (connectivity, presence of productive farmers), and on vulnerability or actual economic impact of the crisis on small farmers and rural livelihoods. In contrast with villages selected for the cash for work, villages selected for the revolving fund will likely be better-off villages, with better connectivity to markets, and presence of better-off productive farmers. Criteria for selection are as follows:
3. Village Tracts (VT) among 50% with highest percentage of small-scale self-employed farmers, trades-people, vendors or village service providers as per 2014 Census data
4. Among these VTs, the following selection criteria will be used by the selection committee (see below) to select villages (because of the lack of village level data available, the selection committee will play a key role in bringing their technical knowledge of the villages under consideration to apply these criteria):
5. Villages with highest connectivity to markets
6. Villages with farming and rural livelihoods most impacted or at risk of being impacted by the crisis
7. Villages with potential for agriculture, livestock, and fisheries development
8. Villages willing to participate in the program.
9. Similar to the Cash for Work component, the process for selecting the participating villages under the Emergency Village Revolving Fund component would allow for certain variance to include villages outside of those selected in the group of 50% VTs with the highest percentage of small-scale self-employed people in the township. If villages were selected from outside this group, the township committee would need to document the reasons why the respective village was selected.
10. With a view of spreading various aid and relief benefits across the country, and to ensure feasibility of the program, the following exclusion criteria will also apply:
11. Villages already covered by Mya Sein Yang Project
12. Villages to be covered by the above described cash for work
13. Villages included in the Enhancing Rural Livelihoods and Incomes Project and the Resilient Communities Development Project (for FY 2020-21)
14. Villages covered by the Saemaul Undong program
15. Villages affected by active conflict and/or fragile security situation
16. Based on the above-listed criteria, township selection committees will be provided a list of the villages located in VTs with higher proportions of farmers and best connectivity and will come together to select villages (up to the number allocated for each township). As with the CfW component, DRD will facilitate the identification of the target villages. For the first round of support DRD will do this at township level together with the members of the TPIC. For the second round of support for next fiscal year the selection committee will include two CSO members and, in the case of townships where EAOs are present (and have signed a cease-fire agreement), a representative of EAOs present in township. As with the CfW component, government access to proposed villages would be a pre-condition of selection to ensure that all safeguard and general implementation procedures and measures could be put in place.
17. **Proposal selection.** Within villages selected, all interested village households will be allowed to submit a one-page loan proposal individually or in a group of households. Loan proposals will be reviewed and selected by the emergency revolving fund township committee, based on the following criteria:
18. Past track record of applicant’s productive farming/rural livelihoods activities
19. Economic soundness of the proposal (relevance of the proposed activity in the village/townships context, potential for repayment of the loan within one year, etc.)
20. Priority will be given to:
21. Proposals by farmers/workers negatively affected by the crisis
22. Proposals led by women
23. Proposals bringing together more than one farmer/worker, for a larger scale activity, with increased economic potential
24. Inclusion **and equal opportunity**. The component is designed to target small farmers and business holders most affected or vulnerable to the crisis, and ensure adequate inclusion of:
25. **Women**, through prioritization of loan proposals led by women. The project will monitor and reported on the percentage of women accessing loans.
26. **Ethno-linguistic minorities**, through: (i) Inclusion of townships in all States and Regions; (ii) Inclusion of townships with EAO presence (when security allows); and (iii) Communication strategy for the project designed to ensure messages are adequately translated and formulated to reach out to all populations in selected townships/villages. Ethno-linguistic information on loan beneficiaries selected will be collected to monitor the project’s inclusiveness.
27. The EVRF component will provide on average MMK 25 million block grant to each village (ranging from MMK 20 million to MMK 30 million depending on the size of the village) to capitalize the revolving fund. This fund will then be used to provide revolving loans to households based on the feasibility of their loan proposals. Based on experience under the MSY program, the average size of an individual household loan is MMK 300,000 (approximately $215). As such, the scale of potentially adverse social or environmental safeguards impacts is relatively small and manageable. An indicative list of likely activities that the
28. A list of indicative activities that the EVRF could potential support are shown in Table 3 below.

Table 3 Indicative List of Activities under EVRF

| **No.** | **Livelihoods Activities** | **Categorized Sub-sector** |
| --- | --- | --- |
| 1 | Agriculture (Existing/Extension Plantation) | Rice and Cereal Crops, Oilseed Crops and Food Legumes, Industrial Crops, Vegetables and Fruits, Fiber Crops, Seasonal Crops, Perennial Crops, Sugarcane Crops,  |
| 2 | Livestock breeding and raising | Cows, Water Buffalo, Goats, Sheep, Oxen, Poultry, Pigs, Mythun, |
| 3 | Fisheries farming and capture | Freshwater fisheries and Saltwater fisheries |
| 4 | Trading goods | Grocery, Vehicle repair and spare parts shop, Vegetables shop, Small scale fish wholesale shop, fruit wholesale shop |
| 5 | Production | Small/household-scale – manufacture of plaiting materials, Food and Beverages Production, Wine Production, Textiles, Soap Production, Traditional product production, Traditional Art Production (e.g. Pan Sal Myo - Stone sculptures, Blacksmith works, etc.) |
| 6 | Services | Tailoring, Masonry, Motorbike Workshop, Mobile Phone Maintenance Shop, Battery Charging Shop, Barbershop |

1. The list of activities that would not be eligible for funding under the EVRF are presented in Table 4 below.

Table 4 Negative List of Activities under EVRF

| **No** | **Type of Activities** |
| --- | --- |
| 1 | Any Illegal livelihood activity such as the trading of wildlife, illegal exploitation of natural resources, opium poppy cultivation etc. |
| 2 | Those that involve activities of introduction of exotic or new flora and fauna species that are not permitted by responsible agency |
| 3 | Those that involve activities of changing forest land into agricultural land or logging activities in primary forests; or slash-and-burn cultivation\* on forest land |
| 4 | Those that involve electro-fishing, fishing that uses poisons, chemicals and explosives, or gear that obstruct waterways |
| 5 | Those that purchase or use banned/restricted pesticides; insecticides; herbicides for agricultural/livelihood enhancement activities |
| 6 | Sub-projects which require phyiscal relocation and displacement of any villagers |
| 7 | Sub-projects which include activities that cause or lead to child abuse, child labour exploitation or human trafficking or sub-projects that employ or engage children, over the minimum age of 15 and under the age of 18, in connection with the project in a manner that is likely to be hazardous or interfere with the child’s education or be harmful to the child’s health or physical, mental, spiritual, moral or social development |
| 8 | Sub-projects which include the purchase or use of drugs, military equipment or other potentially dangerous materials and equipment, including chainsaws, asbestos (including asbestos-containing materials); or other investments that could significantly affect the environment and livelihoods, including cultural resources. |
| 9 | Activities which involve the use forced labour |

\* For the sole purpose of the EVRF, the term “slash and burn cultivation” does not include the common practice of 5-year rotational cultivation practiced in certain areas of Myanmar.

# Sub-component 1: Labor-Intensive Cash for Work (CfW)

###  Potential Environmental and Social Impacts from CERC Activities

###  Potential Environmental Risks and Impacts from CfW

1. It is foreseen that most of sub-projects under CfW component would be similar to activities carried out under NCDDP, which would mostly involve village level infrastructure repair and maintenance (Item 1-10 of Table 1). Potential environmental impacts from these activities are assessed to be moderate and limited. The guidelines and procedures of the original project’s ESMF, including screening forms, ECOPs and other relevant safeguard instruments will also apply for these CfW CERC supported activities.
2. Additional activities under the CfW component such as tree planting on village/community owned lands, existing village firewood plantations, and catchment areas nearby, and maintenance of firebreaks are expected to result in overall positive impacts on the environment, primarily on forest and its ecosystem service and biodiversity. The potential negative environmental impacts for all activities under CERC are listed in table 5.

Table 5 Potential Negative Environmental Impacts from CfW Activities

|  |  |  |
| --- | --- | --- |
| **No.** |  **Type of Activities** | **Potential Environmental Negative Impacts** |
| 1 | Renovation or Maintenance of Infrastructures (Item 1-10 of Table 1)  | Dust dispersion, noise emission, temporary wastes and wastewater generation are anticipated to occur at the subprojects site level. The improper supervision/lack of awareness on risks in construction site would raise the impacts on health and safety of workers. |
| 2 | Planting trees on village/ community owned lands including premise of public facilities, existing village firewood plantations, and catchment areas nearby | Tree-planting is a good greening activity but depending upon environmental objectives in particular areas, the extensive tree planting may also have negative environmental impacts such as impact of forest cover on the seasonal distribution of flow, exotic plantation, etc.  |
| 3 | Maintenance of firebreaks in villages where there is high risk for fire and adjacent to forest | Maintenance of firebreaks may involve removal of invading vegetation, remove wood debris, mowing, disking, debris removal and rejuvenation of the desired vegetation perform maintenance on drainage and erosion control measures, etc. on the already existing firebreak. Firebreak maintenance disturbances can facilitate weed establishment because all competition for light, nutrients, moisture and space have been removed. Regular e.g. annual maintenance should be carried out. These activities would be mainly done by labor. Therefore, risk of machinery induced invasive weed seeds is considered low. Firebreak maintenance could also increase risk on soil erosion. Purchase and use of herbicide would not be allowed under the CERC activities.  |
| 4 | Renovation of public-owned fish, prawn and crab farming ponds | The environmental impact of aquaculture is dependent upon the species being farmed, the intensity of production and the location of the farm. The impacts such as nutrient buildup for algal blooms or dead zones, spreading of invasive species, distinct of native species, etc. are likely to be anticipated. |

### Potential Social Risk and Impacts from CfW

1. The CfW component will mostly fund activities similar as those funded under the NCDDP project but will generally be limited to renovation and maintenance of infrastructure versus new construction. In addition, there will be three new activities not currently included under NCDDP: i) planting trees in public-owned watershed/catchment areas, public facilities, or existing firewood plantations on public-owned land; ii) maintenance of existing firebreaks; and iii) renovation of public-owned fish, prawn and crab farming have been added. The CfW activities will not lead to physical or economic displacement if activities, including the disposal of excavated/left over materials, is fully implemented on publicly owned land.
2. The CfW activities will take place nationwide. It is therefore expected that ethnic communities[[5]](#footnote-6) would be present in the project areas of influence. The main social risk is the risk of exclusion of participation in, and benefitting from, project activities. This risk will be mitigated through participating in the decision of activities to implement in the community as well as participating in the work, particularly for the vulnerable and disadvantaged, including ethnic groups. This risk of exclusion is the same for the three additional activities noted above as for activities already funded under the NCDDP.
3. With construction works, there is the risk of child labor exploitation or human trafficking or sub-projects that employ or engage children, over the minimum age of 15 and under the age of 18, in connection with the project in a manner that is likely to be hazardous or interfere with the child’s education or be harmful to the child’s health or physical, mental, spiritual, moral or social development.
4. Fencing may impede access by people to for example water ponds, restricting access to certain groups.
5. Schools and healthcare centers, community centers and markets being renovated may not be accessible in accordance to the principles of universal access, thereby excluding certain vulnerable groups from benefitting equally from the project benefits.

## Approach/Procedures to Addressing Environmental and Social Safeguard Risks and Impacts

1. In the implementation of the CERC, safeguards will be managed in the same way as under the NCDDP project, through participatory establishment of village committees and screening for project activities, which will indicate required safeguard activities to be implemented and or tools (ECoPs) to be used. Since the CERC subproject cycle is reduced to eight steps, the simple screening processes and procedures for addressing the environmental and social safeguard issues are outlined in this addendum. The following steps will be incorporated into the subproject cycle to identify and address required safeguard measures. When setting up capacity development trainings, Village Committees will be informed about positive and negative lists.

**Step 1: Selection of Sub-Project with Eligibility Screening**

1. At the stage of selecting of subprojects by village committee, it will be screened out using a “Negative List” provided in Table 3 to avoid adverse environmental and social impacts which cannot be adequately mitigated or are not eligible for financing.

**Step 2: Screening of potential environmental and social impacts and determination of applicable safeguards instruments**

1. For activities which are not on the “Negative List”, safeguard screening processes by using the screening form attached in Annex – 1 will be conducted prior to project proposal approval stage at township level by the DRD township engineer. The screening will enable to identify the possible safeguard issues and decide upon subsequent safeguard measures to be implemented. In case of necessity of an Environmental Management Plan (EMP), or other safeguard measures, the EMP shall be prepared prior to sub-project implementation.

**Step 3: Development of Safeguard Instruments**

1. The Environmental Code of Practices (ECoPs) for CfW sub-component is described in Annex-3a. The ECoPs for CfW consist of two sections: Section A-- General Guidelines (applicable to most rehabilitation and renovation activities), and Section B-- Specific ECoPs/Technical guidelines for each potential activity. Small-scale infrastructure rehabilitation related activities (items 1 -10) of Table-2 will apply Section A of Annex 3a. Each project activity under CfW shall comply with the relevant specific ECoPs for each activity described in Section B of Annex-3a. Other safeguard measurers applicable under original ESMF such as EMP, physical cultural resources management plan (PCRMP), voluntary land donation, etc. will be applied in accordance with the procedures described under original ESMF using relevant forms.

### Social Mitigation Measures

1. The screening forms currently used by the NCDDP project will be modified to cover new requirements of the CfW component (such as avoiding new construction on privately owned land or to address land issues of tree planting). The updated screening forms will become an integral part of the Operations Manual used by DRD. Updated forms are in Annex 1.
2. The ESMF (December 2019) of the NCDDP has an Indigenous Peoples Policy Framework (IPPF) attached to it as Annex 8 which aims to ensure that ethnic minorities in project-covered areas would be able to:
3. Provide input to local planning processes and activities used and undertaken to determine development priorities;
4. Facilitate the choice of subprojects as coming from ethnic minority communities themselves through informed decision-making to address local development challenges;
5. Actively participate and lead in the design, development, and implementation of subprojects, and
6. Provide feedback on subproject implementation, and benefits and risks to ethnic group communities.
7. Special attention will be given to villages that are ethnically mixed to ensure that all members of a community have equal access to the project. In general, given the participatory nature of the social assessment that is conducted in each participating village, the needs and priorities of all members of the community should be identified even when they are a minority in the given village. Nonetheless, the Government and the World Bank will pay particular attention to those villages that are mixed to ensure that all vulnerable groups have been identified and heard from, and to monitor the distribution of project benefits.
8. Additional screening will be done to ensure:
9. Against the use of child labor
10. When renovating schools and healthcare centers, community centers and markets, or other infrastructure the principle of universal access will be applied where technically feasible.
11. When fencing leads to the impediments to movements of people an inclusive participatory process in the community will be required to reach an agreement on location of appropriate gates in such fencing.

##  Institutional Assessment and Capacity Building

1. The Infrastructure and M&E unit of DRD will take direct responsibility for the cash-for-work component. This unit is actively involved in the implementation of the NCDDP and as such is well versed in Bank procedures and requirements. The unit will work with and through state/region DRD offices to provide direct support to the DRD township offices that would engage with communities in the design and implementation of CfW activities. The unit would draw on existing NCDDP teams at union level to support training, communications, safeguards, M&E, grievance handling and other functions required in implementing the component. Additionally, key experts at union level and short-term technical assistants for MIS, GHM, etc. will be required for implementation of works under CERC.
2. The same persons currently functioning as focal points for Environmental and Social safeguards under NCDDP will take these responsibilities for the CfW. The Social safeguards team of NCDDP is working on training need assessment of social safeguards to identify the training need and to organize social safeguards training for capacity building of the team. Given to the additional safeguards responsibilities of CfW, this training need assessment and delivery will be prioritized in the work plan.

## Monitoring Arrangement

1. The existing NCDDP teams at each level (Union, State/Region Level, Township and community) will monitor the performance of subprojects in regard of safeguard implementation in the procedures provided in original ESMF and this ESMF Addendum as follows.
2. **Community level**: Community facilitators (CFs) and technical facilitators (TFs) to be hired under the CERC will work with members of the village committee to ensure that relevant safeguard procedures and requirements are followed. These requirements will be identified based on the subproject workplan, screening and identified safeguard instruments (as shown in the Annexes of this Addendum). Given the short-term nature of the CfW activities (not more than 3 months per subproject) only one community review will take place at the end of subproject implementation to assess all relevant technical, financial and safeguard matters and to take relevant corrective actions if needed.
3. **Township level**: The DRD township engineer will monitor subprojects regularly, including on safeguard performance, through field visits and update relevant monitoring data at township level. Field visits are scheduled taking account of the subproject implementation schedule and work plan. Visits serve to review progress in implementing the village subproject and any environmental and social mitigation measures, and to make recommendations/suggest potential solutions to problems faced.
4. **State/Regional level**: The state/regional NCDDP secretariat staff and consultants (infrastructure assistants and s/r coordinators) 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 is included as part of the current progress reporting system i.e. quarterly and annual report.
5. **Union level**: The DRD union office staff and relevant key experts at union level will continue to undertake regular supervision and monitoring visits to townships and village sub-project sites. The DRD union office will ensure that experiences from other townships are shared in order to enhance implementation quality. DRD union office staff and key experts will continue to provide technical support to the DRD township office staff and TFs/CFs, 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 safeguard related information will be monitored and reported on a quarterly basis:
6. The total number of project beneficiaries by gender and ethnicity; and
7. Number of grievances submitted and percentage resolved within 30 days.

## Grievance Redress Mechanisms (GRM)

1. Feedback and suggestions will be addressed using NCDDP GRM to ensure that the project is implemented transparently and accountably and with meaningful participation of the poor and marginalized people, and issues and concerns are resolved effectively and ethically. NCDDP GRM system will be applied to the extended geographic areas and implementation of the CERC cash-for-work activities not yet covered under the NCDDP. For this purpose, the same standards and procedures will be set up in selected townships and villages. For accessibility and understandability of GRM by ethnic groups and vulnerable people, DRD will make sure all GRM information and materials are translated into the local languages and will implement GRM in culturally appropriate manner.
2. GRM responsibilities will be shared to all levels of project management of the CfW component. The existing NCDDP GRM team of State/Regional and Union will be expanded to cover all CfW project areas while the townships where CfW projects are implemented will assign one DRD focal person and DRD officer for GRM tasks (to be shared with the EVRF where the two components overlap). GRM focal points will be deployed at village level (two GRM focal points per village – one man and one woman, who are not part of the village committee), township and district level DRD, state/regional level DRD, and union level DRD. These focal points will lead on implementation, monitoring and reporting of GRM function.
3. The original training platform of GRM from NCDDP will be used to build the capacity for expansion of the GRM. The details of the GRM can be seen in the Operational Manual of the NCDDP. Training and capacity building will be provided by existing Union DRD GRM team to DRD GRM focal person and DRD officer from the townships. Township GRM team will conduct training for village GRM focal, with the supervision of the state/regional and Union GRM team.
4. As the nature and duration of CfW are not fully identical to the NCDDP, the current GRM training materials and methods will be simplified and tailormade for the CfW. The existing union GRM team and State/Regional will receive special training on the CfW GRM from the National GRM expert with the help of the World Bank team. This training will include amongst other topics: (i) how to coordinate and how to handle GRM from the three different project components, (ii) objectives and principles of GRM, (iii) communication and way to respond to grievances, (iv) grievance handling procedures, (v) different types of grievance and (vi) documentation and reporting.
5. In addition to the project GRM, the World Bank has a grievance redress mechanism, the GRS. Communities and individuals who believe that they are adversely affected as a result of a Bank supported operation, as defined by the applicable policy and procedures, may submit complaints to the existing program grievance redress mechanism or the WB’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank’s corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

# Sub-component 2: Emergency Village Revolving Fund (EVRF)

## Potential Key Environmental and Social Risks and Impacts from EVRF Activities

### Potential Environmental Risks and Impacts from EVRF

1. Under EVRF sub-component, the provision of funds to individual or group households as a loan aims to increase household income by promoting existing or new livelihood activities such as agriculture, livestock breeding and raising, fish farming and capture, trading goods, other productive and services. The potential negative environmental impacts from EVRF activities are expected to be minimal, localized and temporary that can be mitigated though the implementation of readily available mitigation measures. These impacts may be derived from release of waste/wastewater, odor, dust from small-scale livelihood activities, increased use of pesticides or agrochemical (although the project will not promote use of such chemicals), etc. Typical potential environmental impacts from such livelihood activities are described in following Table 6.

Table 6 Potential Environmental Impacts from Livelihood Activities to be financed by EVRF

|  |  |  |
| --- | --- | --- |
| **No.** | **Livelihoods Activities****To be financed under EVRF** | **Potential Environmental Impacts**  |
| 1 | Agriculture (Existing/Extension Plantation) | Although the project will not promote the use of pesticides, insecticides and herbicides and other dangerous chemicals the EVRF support to existing/extension plantation may lead to an increased use of pesticides or agrochemicals which could affect the environment, biodiversity and human health. |
| 2 | Livestock breeding and raising | Improper manure management may cause environmental degradation, air or water pollution, and introduction of diseases to humans. |
| 3 | Fish farming and capture | The environmental impact of aquaculture is completely dependent upon the species being farmed, the intensity of production and the location of the farm. The impacts such as nutrient buildup for algal blooms or dead zones, spreading of invasive species, distinct of native species, etc. are likely to be anticipated. Fish farming methods may use chemical and cause pollution to water resources, soil and impact on health and safety. Improper fishing methods may deteriorate water sources and aquatic environments. |
| 4 | Trading goods | No significant impact is expected to increase from this activity. |
| 5 | Production | Production activities may exhaust resources such as water, firewood etc.; may use chemicals and generate waste water.  |
| 6 | Services | No significant impact is expected to increase from this activity. |

1. Given the relatively small size of the anticipated loans (on average MMK 300,000 per household, and ranging from MMK 100,000-800,000), it is expected that the resulting livelihood activities will be small-scale and mostly performed at the home or on the property of the borrower. As such, the potential negative impacts described in Table 6 are expected to be minimal, localized and temporary that those can be mitigated though the implementation of safeguard instruments added in this addendum. Livelihood activities which are illegal and might cause significant negative environmental and social impacts will not be supported and outlined in above-mentioned negative list (Table 4).

### Potential Social Risks and Impacts from EVRF

1. The ERVF activities will take place nationwide. It is therefore expected that ethnic communities[[6]](#footnote-7) would be present in the project areas of influence. The main social risk is the risk of exclusion of participation in, and benefitting from, the component activities particularly for the vulnerable and disadvantaged, including ethnic groups. The ERVF requires applications in writing. This risk puts illiterate people at a disadvantage for loan applications.
2. Activities funded by loans from the ERVF will be implemented on privately owned or rented land. No land acquisition will result from these activities. Free roaming livestock raising may result in livestock damaging crops or plantations and thereby creating social tension.

## Approach/Procedures to Addressing Additional Environmental and Social Safeguard Risks and Impacts

1. In the implementation of EVRF sub-component, a series of processes will be conducted during the project cycle starting from formation of village committees to M&E processes. Village Fund Management Committees (VFMC) will be notified necessary safeguards measures to be followed by the revolving fund recipients at the capacity development trainings.

**Step 1: Disclosing Safeguard Requirements**

1. A “Negative List” provided in Table 4 and ECoPs described in Annex-3b will be disclosed to the households at the time of publicizing EVRF loan application information with the purpose of provision of safeguards requirements to the households which are interested in loan application. This will be considered as first safeguard screening for all proposed livelihood activities under EVRF component.

**Step 2: Screening of potential environmental and social impacts and determination of applicable safeguards instruments**

1. For activities which are not on the “Negative List”, safeguard screening processes will be applied by VFMC by using the screening form attached in Annex – 2 at the stage of screening and selecting proposal. This screening form is used to identify the potential safeguard issues as well as to acquaint potential borrowers with relevant safeguard measures. Following the screening results, the necessity of safeguard measures such as a pest management plan (PMP) or requirement of awareness raising to fund recipients will be investigated.
2. All fund recipients are required to follow the Environmental Code of Practices (ECoPs) for activities under EVRF described in Annex-3b. At the time of making loan agreement with the recipient, ECoPs and, if relevant, a PMP for the proposed livelihood activities will be introduced to fund recipients to ensure clear understanding of safeguard measures. Before the recipients receive the fund, VFMC will be responsible to ensure that fund recipients shall follow required safeguard measures.

**Step 3: Development of Safeguard Instruments**

1. The ECoPs for EVRF activities consists of six sections: agriculture activities, livestock breeding and raising activities, fish farming and capture, trading goods, production and service activities. The relevant ECoPs will become part of each recipient’s loan agreement.
2. Specific guidance and training for applying a Pest Management Plan will be provided to recipients by relevant township staff of DRD’s parent ministry (of Agriculture, Livestock and Irrigation). This guideline aims to provide basic knowledge of pest management plan with adequate consideration for effectively addressing the safeguard issues in line with OP 4.09. It will be required for fund recipients who propose activities involving the use of pesticides and agrochemicals.

### Social Mitigation Measures

1. The ESMF (December 2029) of the NCDDP includes an Indigenous Peoples Policy Framework (IPPF) attached as Annex 8, which aims to ensure that ethnic minorities in project-covered areas would be able to:
2. Provide input to local planning processes and activities used and undertaken to determine development priorities;
3. Facilitate the choice of subprojects as coming from ethnic minority communities themselves through informed decision-making to address local development challenges;
4. Actively participate and lead in the design, development, and implementation of subprojects, and
5. Provide feedback on subproject implementation, and benefits and risks to ethnic group communities.
6. Special attention will be given to villages that are ethnically mixed to ensure that all members of a community have equal access to the project. In general, given the participatory nature of the social assessment that is conducted in each participating village, the needs and priorities of all members of the community should be identified even when they are a minority in the given village. Nonetheless, the Government and the World Bank will pay particular attention to those villages that are mixed to ensure that all vulnerable groups have been identified and heard from, and to monitor the distribution of project benefits.
7. This IPPF already requires consultations and disclosure, including translation of key project documents to be made available in local language.
8. When free rooming animals cause damage to crops or plantations, it is common practice in Myanmar that the animal owner will compensate for the damages. The ERVF committee at village level will make a regulation on how to deal with such instances as part of the village EVRF regulations. If such agreement or regulation already exists in the community, the recipient will be informed of such prior to disbursement of loans for livestock raising.
9. For illiterate people, DRD EVRF team will ensure that community facilitators and village level committee members provide assistance for these cases where people have difficulties in writing proposals.

## Institutional Assessment and Capacity Building

1. The Emergency Village Revolving Fund is based on DRD’s national Mya Sein Yaung (MSY) program, which is overseen by the Planning and International Relations division of the Department. The director overseeing and the team responsible for the MSY will take responsibility for the EVRF as well. Based on experience in implementing MSY (since 2014), and reflecting on the additional requirements of the World Bank, DRD has agreed to strengthen the MSY unit at union level through key experts in several areas including safeguards.
2. At union level, the MSY unit of DRD will assign 2 experienced staff to function as focal points for Environmental and Social safeguards. At state/region level, existing NCDDP support staff will take responsibility for ensuring that relevant EVRF (and CfW) safeguards are addressed. Township level DRD staff will be provided additional training for this purpose and where EVRF and CfW townships overlap, this will be the same focal person. In addition, relevant staff of the Departments of Agriculture, Fisheries, of Livestock Breeding and Veterinary services, and of Forestry will be received similar safeguards training in relation to the EVRF as these staff will be providing technical support to community beneficiaries. Lastly, village committee members and revolving fund recipients will receive relevant safeguard training in order to extend application of appropriate measures.
3. The World Bank will provide assistance in training of trainers for environmental and social safeguards to DRD’s union-level safeguard and training staff, and one participant from each DRD’s State/Region office. These trainers will provide environmental and social safeguards trainings at township level and village level. The safeguards team of NCDDP is working on training need assessment of social safeguards for originally designated safeguards staff of the NCDDP. This training assessment will also go to the MSY unit staff who will be working for social safeguards. Training plan and implementation will also cover for MSY unit staff. Besides this existing on-going social safeguard training assessment and plan, the whole safeguards training (both social and environment) to MSY unit will be conducted by DRD through the support of the Bank to make sure capacity building for MSY unit and effective implementation of safeguards instruments and monitoring.

## Monitoring Arrangement

1. The MSY program has a system of revolving fund committees at Union, State/Region and township levels that monitor the overall performance of the program. This same system of monitoring will be used for the EVRF component of the CERC. Village-level revolving fund committees will maintain records and prepare reports, with support from township-level staff, that will inform this monitoring. These revolving fund committees are made up of members of the relevant MoALI departments (of agriculture, livestock, fisheries), the General Administration Department, the Police department, the Law Office under Union Attorney General’s Office, etc.
2. At township level, specific DRD staff are trained to oversee the existing MSY villages and will do the same for the EVRF. In addition, financial management assistants will be hired under the CERC to provide additional support to the new EVRF villages. These staff will receive basic safeguard training and be responsible to monitor the application of relevant mitigation measures. The M&E system will take advantage of wide spread mobile phone penetration and use smart-phone based applications for basic data collection.

## Grievance Redress Mechanisms (GRM)

1. The existing NCDDP GRM team of State/Regional and Union will be expanded to cover all EVRF project areas. In townships where both CfW and EVRF projects are being implemented DRD will assign one DRD focal person and DRD officer for GRM tasks.
2. Training and capacity building will be provided by existing Union DRD GRM team to DRD GRM focal person and DRD officer from the townships. Township GRM teams will conduct training for village GRM focal points, with the supervision of the state/regional and Union GRM team.
3. Given differences in the nature and duration of the EVRF component, as compared with the NCDDP, the training materials and training method will be simplified and tailormade to the EVRF GRM. The existing union GRM team and State/Regional staff will receive special training on the EVRF GRM from the National GRM expert with the help of the World Bank team. This training will include amongst other topics: (i) how to coordinate and how to handle GRM from the three different project components, (ii) objectives and principles of GRM, (iii) communication and way to respond to grievances, (iv) grievance handling procedures, (v) different types of grievance and (vi) documentation and reporting.
4. Coordination among GRM units of NCDDP, CfW and EVRF: Union and State/Regional GRM team will handle three units in one registration system that DRD is going to use for all DRD NCDDP activities. However, the data entry system, data entry form, monitoring, and reporting system will be a bit different among project components, which will be developed in accordance with the type of project. In the handling process, the Union GRM team will decide what kind of grievances will be solved by which level by coordinating with the respective units, as is currently being practiced for the NCDDP.  It is expected that any core grievances will be handled by the Union GRM team, while most non-core grievances will be solved at village or township level, as is currently the case with the NCDDP GRM.
5. The EVRF GRM will draw on NCDDP GRM systems of principles, process, standard response and documentation. The core principles of GRM – fairness, objectivity and independence, simplicity and accessibility, responsiveness and efficiency, speed and proportionality, participatory and social inclusion will be applied to ERVF GRM. The process of NCDDP GRM – intake, sorting, verification, action, and follow-up will also be the same for the ERVF.
6. The channels of ERVF GRM uptake (of grievances/complaints) will also be similar to those used under the NCDDP, as outlined in the ESMF (2019). An information campaign using clear IEC materials and local language(s) will inform communities on the GRM mechanism. Contact details for GRM focal persons will also be shared at community meetings and will be clearly posted on village notice boards and advertised on local newspaper and radio.
7. In addition to the project GRM, the World Bank has a grievance redress mechanism, the GRS. Communities and individuals who believe that they are adversely affected as a result of a Bank supported operation, as defined by the applicable policy and procedures, may submit complaints to the existing program grievance redress mechanism or the WB’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank’s corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

# Consultations and Disclosure

1. This section provides a summary of the engagement activities undertaken as part of the preparation and implementation of the NCDDP and the additional engagements informing the CERC component and the ESMF addendum.
2. The ESMF of the NCDDP project that is the basis of this addendum was updated for the NCDDP Additional Financing in 2017. This ESMF was consulted with government and civil society stakeholders in Yangon, Naypyidaw and Mandalay in May 2017. The final ESMF in both English and Myanmar was disclosed on the DRD’s website on November 6 and November 9 respectively and on the World Bank‘s website on November 29, 2017. In December 2019, the ESMF was re-disclosed on DRD’s website and the World Bank’s website for minor revision required for co-financing support from the Japanese Social Development Fund.
3. Pre-COVID 19 engagement methods to date for NCDDP implementation have included: one-on-one meetings; formal and informal group presentations; focus group discussions; key informant interviews; and the sharing of information on the project and subprojects. These on-going project-level consultations under NCDDP have been wide-spread across 63 townships and more than 12,000 villages in all areas of the country. Similarly for the MSY program (the basis for the EVRF), consultations have been extensive in more than 11,000 villages and approximately 300 townships across the country. The approach and format of the consultations have taken into consideration cultural appropriateness, and barriers to language, literacy, and participation.
4. The CERC activation is currently being undertaken during a time when social distancing measures are in force. Engagement methods therefore have been limited to video conferencing and the use of mass media, including internet-based social media platforms that are widely used in Myanmar. For the CERC related activities stakeholder groups consulted to date include: township DRD staff, representatives of state and region government, union government and members of parliament. In addition, the Department has informed the public at large through print and social media channels.
5. Moreover, continued substantive consultations for the CERC will be carried out as part of the NCDDP project design, which has specific and detailed requirements for consultation and participation during the subproject cycle to define or agree upon the specific types of activities to be carried out under the CERC. These consultations are designed to ensure equitable representation of women and inclusion of ethnic and religious minorities, as applicable, and other vulnerable groups. These requirements include participatory social assessments and wealth ranking in each participating village that are used to inform selection of activities at the village level, use of local languages for communicating project information and requirements for ensuring barriers to inclusion are addressed.
6. In response to Covid-19, these CERC consultations will draw from the community engagement experiences under the NCDDP. The adaptations made in the case of the NCDDP have included: greater use of loud-speaker systems and notice-boards to make village wide announcements, using larger venues (including out-of-doors) and restricting the size of gatherings to share information that allows for better social distancing, provision of basic PPEs for staff and volunteers at village level, facilitating hand-washing stations where feasible, parallel dissemination of Ministry of Health and Sports guidelines, and sub-dividing villages into neighborhoods to allow for smaller meetings.
7. To carry out the above continued substantive consultations, one focal person will be selected at each level. In addition, the project will recruit one community facilitator and technical facilitator for the support of village committee before starting round 2 in each township. Current NCDDP CSAG counterpart of State/Regional DRD will be responsible for communication task even though one focal person will be assigned in township level.
8. This CERC ESMF addendum was disclosed publicly through the DRD’s website (<https://cdd.drdmyanmar.org/en/esmf>; and h[ttp://drdmyanmar.org/index.php?page=UERGJmlkPTky#](https://nam03.safelinks.protection.outlook.com/?url=http%3A%2F%2Fdrdmyanmar.org%2Findex.php%3Fpage%3DUERGJmlkPTky%23&data=02%7C01%7Cehtwe%40worldbank.org%7C3a01ff01aa104f659d4f08d81f21370f%7C31a2fec0266b4c67b56e2796d8f59c36%7C0%7C0%7C637293574800970546&sdata=AJpBTentaonYlLa16YByc4XSg4gYEBIA9ez3MFoXscA%3D&reserved=0)) on July 3, 2020. Consultations to inform the CERC and ESMF addendum are ongoing and will continue after the CERC activation. While respecting the social distancing measures in place the methods will ensure that the approaches are inclusive allowing for participation by those who are vulnerable, marginalized, and ensure representation of women and ethnic groups to ensure they have access to project benefits in a culturally appropriate manner. The approach to engagement will take into consideration options to address physical distance, language, literacy and other possible barriers. The final version of the CERC ESMF addendum was also publicly disclosed through the World Bank’s external website (www.worldank.org) on July 9, 2020.

# Budget for Implementing the ESMF

1. The costs associated with implementing the ESMF addendum processes and safeguards instruments have been included in the project design and budget. Adequate levels of funding have been set aside to cater for substantial training of community volunteers and township level staff, mobilization for support and monitoring, and the information systems that will capture and track compliance with relevant safeguard requirements. Estimates for these ESMF addendum implementation costs are drawn from existing NCDDP cost coefficients where ESMF implementation has been shown to be effectively supported.

# ANNEXES

Annex 1: Safeguards Screening Form for CFW Activities

Annex 2: Safeguards Screening Form for EVRF Activities

Annex 3: Environmental Codes of Practices (ECoPs)

Annex 4: Guidance for Pest Management Plan (PMP)

## Annex 1: Safeguards Screening Form for CFW Activities (PC-13)

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\_\_\_

-- Protected Areas (as this covers National parks, Wildlife Sanctuaries, Nature Reserves) : 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, wildlife sanctuary, 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; blocking of wildlife corridors) 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 wildlife 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 infra-structure (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? 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. Will trees be planted on land that is not public-owned? Yes\_\_\_ No\_\_\_

If the answer is ‘yes’, then do not proceed in this area with the subproject activity

S2. Are schools and healthcare centers, community centers and markets accessible to all, in accordance to the principle of universal access? Yes\_\_\_ No\_\_\_

If the answer is ‘No’ then the renovation should include works in accordance to the principle of universal access were technically feasible.

S3. Will villagers be employed for the implementation of works? If so, will they be paid equally for the same work? Yes\_\_\_ No\_\_\_

S4. Will people below the age of 18 be employed for the CfW? Yes/ No

* If the answer is ‘yes’, ensure that the employment or engage children, over the minimum age of 15 and under the age of 18, in connection with the project is **NOT** in a manner that is likely to be hazardous or interfere with the child’s education or be harmful to the child’s health or physical, mental, spiritual, moral or social development.

S5. Is any construction of infrastructure (new, expansion or renovation) planned to take place on land that is privately owned or with contested ownership? Yes \_\_ No\_\_\_

* If the answer is ‘yes’ do not proceed in this area with the subproject activity.

S6. Will the renovation activities result in or reignite conflicts in water supply rights and related social conflicts? Yes \_\_\_ No\_\_\_

* If the answer is ‘yes’ do not proceed in this area with the subproject activity.

S7. Will fencing lead to the impediments to movements of people? Yes \_\_\_ No\_\_\_

* If the answer is ‘yes’ do ensure that, through an inclusive participatory process the community reaches a documented agreement on location of appropriate gates in the fencing, following the principles of universal access.

S8. Will the renovation works create materials which will need to be disposed-off? Yes \_\_\_ No\_\_\_

* If the answer is ‘yes’ has an appropriate disposal site been identified on publicly owned land? Yes \_\_\_ No\_\_\_
* If the answer is “No” do not proceed with the sub activity.

S9. Are there ethnic groups other than Burmese present in the village? Yes \_\_\_ No\_\_\_

* If there are ethnic groups other than Burmese, list the number of households per ethnic group and ensure that Free Prior Informed Consultation will be conducted and documented with these households in line with the NCDDP ESMF (2019).

*S10. 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 groups: Yes\_\_\_ No\_\_\_

-- Religious minorities: Yes\_\_\_ No\_\_\_

-- Other groups (e.g. the poor, the elderly) Yes\_\_\_ No\_\_\_

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

Will villagers be employed for the implementation of works? 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 2: Safeguards Screening Form for EVRF Activities

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

**Section 1 – Information of Loan Applicant**

(If the proposed project activity is to be done by group works, please mention the information of representative one.)

|  |  |
| --- | --- |
| Name of Applicant: |  |
| Region/State: |  |
| Township: |  |
| Village Tract: |  |
| Village: |  |
| Type of Work:  | o Individual o Group Work  |

**Section 2 – Details of Project Activities**

|  |  |
| --- | --- |
| Region/State: |  |
| Township: |  |
| Village Tract: |  |
| Village: |  |
| Type of Project Activity: | o On-going activity o New Activity o Other (If other is selected, please mention here )  |
| Scope of Project Activity:  | o Agriculture o Livestock o Fisheries o Trading Goodso Productionc o Services o Other (If other is selected, please mention here )  |
| Proposed Loan Amount:  |  |
| Linkage with other assistance:  | Has the proposed project activity received any assistance (financial / non -financial) from other organization? o Yes o No  |
| Project ID: |  |

**All the project activities shall apply ECoPs. In addition, except for trading and services, the other project activities shall undergo Environmental and Social Screening as described below.**

**Q.1 Safeguard Screening for Agricultural Activities**

1. What kinds of crop do you grow?

2. Do you use pesticides or other agricultural chemicals?  Yes  No

If the answer is “Yes”, notify the fund recipient to follow relevant ECoPs and PMP.

3. Do you know you must use only the pesticide labeled with Myanmar language?  Yes  No

4. Do you know the hazards of pesticide residues?  Yes  No

5. Do you always abide by the instructions and safety precautions precisely written on the label?

 Yes  No

6. Do you discard the agricultural wastes systematically?  Yes  No

7. Do you know the pesticides and herbicides harm/deteriorate health and environment?  Yes  No

8. Do you know the signs of the poison of pesticides or herbicides?  Yes  No

9. Do you know the solutions to the poison of pesticides or herbicides?  Yes  No

10. Do you know personal hygiene measures of pesticides or herbicides?  Yes  No

11. Do you know not to assign pregnant women, lactating mother and children under 18 for handling and use of pesticides?  Yes  No

*If one of the above answers from 2 to 11 is “No”, mark the project activity as “Activity which need Awareness Raising”.*

**Q.2 Safeguard Screening for Livestock Breeding / Raising**

1. What kinds of livestock do you breed?

2. Do you know it must not pollute air, water, and cause noise?  Yes  No

3. Do you know the diseases can be transmitted from animals to humans?  Yes  No

4. Do you know that wastes from your livestock may deteriorate the water resources?

 Yes  No

5. Do you know that if your animals will cause damage to properties of other people, such as crops, plantations, that you as the animal owner will be responsible to pay compensation to cover such damages?  Yes  No

*If one of the above answers from 2 to 5 is “No”, mark the project activity as “Activity which needs Awareness Raising”.*

**Q.3 Safeguard Screening for Fisheries**

1. What kinds of works do you do?  Capturing  Culturing

2. What kinds of fishes do you capture or culture? (Freshwater Fishes, Saltwater Fishes, Specific Types, etc.)

**For Fish Capturing**

3. Do you know the regulation of Department of Fisheries?  Yes  No

4. Do you know the considerations of sustainable fisheries practices?  Yes  No what are they? ……….. ……….. ……………….

5. Do you know if there is specified close season of fish species that you capture or not?

 Yes  No

6. Do you know you must avoid disposing discarded fishery nets into the water body?

 Yes  No

7. Do you know you must reduce incident captures, particular non-target or protected species?  Yes  No

*If one of the above answers from 3 to 7 is “No”, mark the project activity as “Activity which need Awareness Raising”.*

**For Fish Culturing**

**Do you use chemical in fish culturing?**

8. Do you know the regulations of livestock Breeding and Veterinary Department?  Yes  No

9. Do you do? the flushing or exchange of pond water frequently?  Yes  No

10. Do you know the incident of fish decease?  Yes  No

11. Do you know the contamination of exogenous fish species?  Yes  No

*If one of the above answers from 8 to 11 is “No”, mark the project activity as “Activity which need Awareness Raising”.*

**Q.4 Safeguard Screening for Production**

1. What type of production do you do?

(e.g. manufacture of plaiting materials, Food and Beverages Production, Wine Production, Textiles, Soap Production, Traditional product production, Traditional Art Production (e.g. Pan Sal Myo - Stone sculptures, Blacksmith works, etc.))

2. Do you use any chemical in your production?  Yes  No

3. If yes, do you know the instructions and safety precautions in using the chemical?

 Yes  No

4. Do you know the production may pollute water resources and air and cause noise to the surrounding?  Yes  No

5. Do you know the wastewater and solid waste generated from production processes need to be discharged/disposed properly?  Yes  No

6. Do you know the regulation on child labor?  Yes  No

*If one of the above answers from 3 to 6 is “No”, mark the project activity as “Activity which need Awareness Raising”.*

Name: …………………………. Position: Head, Village Fund Management Committee

Signature: ……………………… Date: ……………………………

## Annex 3: Environmental Code of Practices (ECoPs)

***Annex 3a: ECoPs for CfW Activities***

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

| **Issue** | **Environmental Prevention/Mitigation Measure**s |
| --- | --- |
| 1. Noise
 | 1. Plan activities in consultation with communities so that noisiest activities are undertaken during periods that will result in least disturbance.
2. Use noise-control methods such as fences, barriers or deflectors (such as muffling devices for combustion engines or planting of fast-growing trees)
3. Minimize project transportation through community areas.
4. 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.
 |
| 1. Soil erosion
 | 1. Contour and minimize length and steepness of slopes.
2. Use mulch, grasses or compacted soil to stabilize exposed areas.
3. Cover with topsoil and re-vegetate (plant grass, fast-growing plants/bushes/trees) construction areas quickly once work is completed.
4. Design channels and ditches for post-construction flows and line steep channels/slopes (e.g., with palm frowns, jute mats, etc.).
 |
| 1. Air quality
 | 1. Minimize dust from exposed work sites by applying water on the ground regularly.
2. Do not burn site clearance debris (trees, undergrowth) or construction waste materials.
3. Keep stockpile of aggregate materials covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals.
 |
| 1. Water quality and availability
 | 1. Activities should not affect the availability of water for drinking and hygienic purposes.
2. No soiled materials, solid wastes, toxic or hazardous materials should be poured or thrown into water bodies for dilution or disposal.
3. 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.
4. Separate as best as possible concrete works in waterways and keep concrete mixing separate from drainage leading to waterways.
 |
| 1. Solid and hazardous waste
 | 1. Collect and transport construction waste to appropriately designated/ controlled dump sites.
2. Maintain waste (including earth dug for foundations) at least 300 metres from rivers, streams, lakes and wetlands.
3. 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.
4. 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.
5. Collect and properly dispose of small maintenance materials such as oily rags, oil filters, used oil, etc. Never dispose spent oils on the ground and in water courses as it can contaminate soil and groundwater (including drinking water aquifer). If we do have to dispose spent oil unexpectedly, we should use safe disposal method capable by rural community. For example- burning spend oil as fuel.
 |
| 1. Health and Safety
 | 1. When planning activities of each sub-project, discuss steps to avoid people getting hurt. It is useful to consider:
	1. Construction place: Are there any hazards that could be removed or should warn people about?
	2. The people who will be taking part in construction: Do the participants have adequate skill and physical fitness to perform their works safely?
	3. The equipment: Are there checks you could do to make sure that the equipment is in good working order? Do people need any particular skills or knowledge to enable them to use it safely?
2. Provide personal protective gear for workers as necessary (gloves, dust masks, hard hats, boots, goggles).
3. Follow the below measures for construction involve work at height (e.g. 2 meters above ground;
	1. Do as much work as possible from the ground;
	2. 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.;
	3. Only allow people with sufficient skills, knowledge and experience to perform the task;
	4. Check that the place (e.g. a roof) where work at height is to be undertaken is safe;
	5. Take precautions when working on or near fragile surfaces;
	6. Clean up oil, grease, paint, and dirt immediately to prevent slipping; and
	7. Where possible provide fall protection measures e.g. safety hardness, simple scaffolding/guard rail for works over 4 meters from ground;
4. Keep worksite clean and free of debris on daily basis.
5. Keep corrosive fluids and other toxic materials in properly sealed containers for collection and disposal in properly secured areas.
6. Ensure adequate toilet facilities for workers from outside of the community.
7. 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.
8. Fill in all earth borrow-pits once construction is completed to avoid standing water, water-borne diseases and possible drowning.
9. Each construction sub-project to have a basic first-aid kit with bandages, antibiotic cream, etc.
 |
| 1. Other
 | 1. No cutting of trees or destruction of vegetation other than on construction site.
2. No hunting, fishing, capture of wildlife or collection of plants.
3. No use of unapproved toxic materials including lead-based paints, un-bonded asbestos, etc.
4. No disturbance of cultural or historic sites.
5. Supervise for, 1) children not to enter the site and 2) not to have child labor
 |

***Note: These measures are the same as those applied for existing NCDDP.***

**B. *Specific ECoPs/Technical Guidelines for Each Activity***

| **No.** | **Type of Activities** | **Environmental Prevention/Mitigation Measure**s |
| --- | --- | --- |
| Activities currently included under NCDDP project |
| 1. | Renovation and cleaning of drainage | * + - * 1. Disposing the excavated soil/slurry of waste from cleaning of drain in designated place.
 |
| 2. | Renovation and/or maintenance of village road or farm road (including in cases of land slide) | 1. Prevent uncontrolled water discharge from the road surface by sufficiently large drainage ditches.
2. Re-vegetate (plant grass, fast-growing plants/bushes/trees) construction areas quickly once work is completed
3. If project take place in mountainous area, make retaining walls (steps design) or excavating the soil in steps. For steep slopes, a stepped embankment (terracing) is needed for greater stability.
4. No soiled materials should be poured or thrown into water bodies, dispose at designated area stipulated by the village
 |
| 3. | New installation and/or renovation of fencing of water ponds | 1. Dispose the used cement packs, paint containers and other construction wastes into the designated area.
 |
| 4. | Construction and/or renovation of hand-dug wells, water tanks and water pipe lines and renovation of ponds  | (a) Wells should be equipped with slab around the well for easier drainage, a crossbeam and a pulley to support the use of one rope and bucket for collecting water. One rope and bucket is more hygienic for the well and water.(b) Steel rungs should be placed inside the wall of deep wells) - for maintenance and in case of emergency(c) Groundwater wells usually have wide-open water areas. It is necessary to provide a cover/roof/wire mesh on top to protect this area from falling leaves or debris.(d) Wells should always be located upstream of the septic tank soak-away and other possible contamination sources (e.g. livestock, housing, etc). The Soak away shall be built as far as possible from the well (at least 15 m/ feet 50 feet away), as it can affect the quality of the drinking water when it is too close (health risk).Preventing contamination at water sources: (a) Build a structure with roof over the water source to pre- pipelines from vent leaves or other debris from entering into the basin. natural springs1. A fence is needed to protect the water sources (springs particularly) from public access and risk of contamination.
2. The sand/gravel filter traps sediment before the spring flow enters the collection chamber and has to be changed during periodical maintenance.

Pipe Laying: 1. 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.
2. Pipe shall be laid in a straight line, over a constantly falling slope.
3. 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.
4. 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.

Others:1. Before construction, consultation with land lord and other related departments should be carried out
2. To avoid any danger or risk regarding with excavating work, minimize steepness with having a suitable slope
 |
| 5. | Renovation and/or maintenance of jetties and small-scale bridges | Erosion protection:(a) The main method of slope and erosion protection is the construction of gabions (gravity walls that support jetties and embankment or slopes which have a potential to slip) and ordinary stone pitching. * 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.
* The filling of the gabions should be from strong and competent rock which is laid very closely packed to maximise the weight.
* Bracing wire should be used to prevent the gabion bulging out. The bracing wire should be placed at each third of the gabion height.
* The gabions should be firmly anchored into the ground by founding the gabions below the expected scour depth level.
* In cases where stone pitching is not provided, the top layer should be covered by soil to encourage the growth of grass and the stabilization of the slopes.

(b) Stone pitching may be provided as the only erosion protection measure in those cases where 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:1. 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)
2. Water flow diversion is not advisable; if it is impossible to avoid, impacts should be assessed and mitigation proposed.
3. Establish clear separation of concrete mixing and works from drainage areas and waterways

For renovation of culvert;(a) Remove all formwork from inside the culvert (after concrete has reached full strength). Formwork that is not removed will rot eventually, drop down and obstruct the free flow of water. (b) Place large stones at the outlet of the culvert to prevent erosion. (c) Keep the culvert inlets free from sand and gravel – the water must flow through the culvert(d) Build a sand trap upstream of the culvert to prevent accumulation at culvert inlets (sand traps will have to be cleaned periodically).(e) Ensure that the water of the adjacent road sections can flow freely into the roadside ditch.  |
| 6. | Renovation and/or maintenance of water ways to water ponds for domestic and drinking and for farm use and renovation and/or maintenance of small irrigation for farm use (< 25 hector) | * + - * 1. Masonry walls or stone riprap should be built to prevent erosion on a sloped bank.
1. May use bamboo as bank protection along the rice fields as the loads are low.
2. 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.
 |
| 7. | Cleaning, maintenance, renovation of waste storage | 1. Solid waste depots/disposal need to be located on hard-standing areas that prevent waste entering surface or groundwater.
2. Waste depots/storage/disposal should be contained, sealed and/or roofed/covered to prevent storm water contamination. Wastes need to be emptied regularly.
 |
| 8. | Renovation and construction of retaining walls and embankments | 1. Separate as best as possible concrete works in waterways and keep concrete mixing separate from drainage leading to waterways
2. In striking wooden pile, strike with 1-ton rammer for 10 shots till it reaches 6 inches into the ground
3. Weep holes must be contained in the cliff retaining walls
4. Retaining wall shall be constructed like staircase type
5. If use bio-engineering method, Gabion Retaining wall type shall be constructed
6. In every 20 feet of cliff retaining wall, a joint shall be provided
 |
| 9. | Renovation of community playgrounds | 1. Safe design for the playground should be adopted.
2. Contact to the related department for the construction of playground, if necessary
 |
| 10. | Renovation of schools and healthcare centers, community centers and markets | **In general**, for building renovation; (a) Provide adequate drainage in the building’s immediate surroundings to avoid standing water, insect related diseases (malaria, etc.) and unsanitary conditions(b) Include sanitary facilities such as toilets and basins for hand-washing(c) Avoid use of asbestos cement tiles as roofing(d) Tiled floors are preferred for easier cleaning and more hygienic(e) Install adequate sewage system, waste management system and fire-fighting system, as necessary.(f) To contain at least one ramp for the disabilities in the staircases(g) Before buying new stuffs, ensure the old accessories whether it can be reused, if so, reuse back and if not store it in a compile1. 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.
2. Health centres:
	* + - * Provide adequate area for treatment, waiting area and patient’s rooms, all of which should be well ventilated.
				* Include facilities for proper disposal of health and biological wastes (syringes, blood, etc.)

(c) Markets: * Tiled/paved floor is preferred for easy cleaning and maintenance. Slope floor for drainage.
* Provide garbage/waste disposal that can be emptied regularly.
* Separate the stalls/shops in the market for dry and wet produce/products.
* Ensure the stalls/shops have covers/roof to avoid standing waters during rainy seasons.
 |
| New Activities |
| 11. | Planting trees on village/ community owned lands including premise of public facilities, existing village firewood plantations, and catchment areas nearby | 1. Consult with community for the location of plantation
2. Contact with relevant department (i.e. Forest department) and collect the seedlings
3. Excavation should be carried out respectively to the certain type of tree as per recommendations of relevant department
4. Plant a tree separately at least 5 feet away
5. Organize to maintain the trees by the village community
6. Supervise for, 1) children not to enter the site and 2) not to have child labor
7. Provide personal protective gear for workers as necessary (gloves, dust masks, hard hats, boots, goggles) and First Aid Kit
 |
| 12. | Maintenance of firebreaks in villages where there is high risk for fire and adjacent to forest | 1. Minimizing use of earthmoving machinery and maximize use of labour.
2. Good environmental hygiene requires equipment and food wear to be clean on arrival at the worksite and be cleaned before leaving the site.
3. Do regular maintenance
4. Avoid burning the bush
5. Avoid using of herbicides for land clearing for firebreak
6. Maintain good drainage along the firebreak

**Others:**1. Contact the Forest Department for technical advice on regulatory requirements on maintaining firebreak
2. Follow as per the stipulations from the related departments to keep sufficient distance/design of firebreak and avoid tree cutting
3. Supervise for, 1) children not to enter the site and 2) not to have child labor
4. Provide personal protective gear for workers as necessary (gloves, dust masks, hard hats, boots, goggles) and First Aid Kit
 |
| 13. | Renovation of public-owned fish, prawn and crab farming ponds | 1. Contact to the related department for the project location to develop and maintain aquaculture
2. Disposed the excavated soils in designated area
3. Avoid renovation of fish, prawn, and crab farming ponds in raining seasons due to the potential of pollution to nearby waterway
 |

***Annex 3b: ECoPs for Activities under EVRF***

| 1. **Agriculture**
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| **Environmental Prevention/Mitigation Measure**s |
| 1. Avoid introduction of invasive species.
2. Use sustainable agricultural practices / approaches / technologies.

(e.g., Agroforestry Practices, Polycultures and Crop rotation, Integrated Pest Management (encouraging the predators of crop-eating pest insects such as birds and bats), etc.) 1. Reduce top-soil losses from erosion and the reduction in soil fertility.

(Use Cover Crops and Mulches (Establishing leguminous ground cover and applying plant residues), Grass Barriers (planting grass in strips along the contour lines), etc.)1. Induce conservation and efficient use of water.
2. Reduce misuse of agrochemicals, contributing to a reduction of toxic substances in soil and water.
3. Reduce usage of pesticides and promote integrated pest management approaches recommended by DOA.
4. Reduce, recycle and reuse the agricultural waste (natural, animal, plant waste)
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| 1. **Livestock Breeding and Raising**
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| **Environmental Prevention/Mitigation Measure**s |
| 1. Fence off water bodies from gazing animals.
2. Regular cleaning of livestock sheds and feeding pens.
3. Regularly collect and store manure for composting and later application to fields to reduce noxious odor and to limit spread of pathogens.
4. Manage for proper drainage around the livestock raising areas and keep manure and urine away from water bodies and water supply sources.
5. Avoid cattle grazing (especially Mythun) inside protected areas or private owned lands.
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| 1. **Fisheries Farming and Capture**
 |
| **Environmental Prevention/Mitigation Measure**s |
| **Capture Fish** 1. Abide by local regulations regarding fishing seasons announced by Department of Fisheries, closed fishing areas, allowable equipment or methods of capture, etc.
2. Consideration of sustainable fishery practices to reduce overfishing.
3. Avoid disposing discarded fishing nets into the waterbody.
4. Reduce incidental captures (Particularly non-target or protected species).

**Culture Fish**1. Avoid pond construction during rainy seasons.
2. Ensure proper siting, design and construction of pond to avoid failure.
3. Flushing or exchange of pond water frequently enough to prevent the deterioration of water quality in pond.
4. Prevent contamination of exogenous fish species.
5. Encourage regular dredging and proper disposal of waste material to avoid contamination of surrounding water and water way.
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| 1. **Trading Goods**
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| **Environmental Prevention/Mitigation Measure**s |
| 1. Avoid trading antiques and archeologically valuable items.
2. Avoid trading all kinds of narcotic drugs and psychotropic substances.
3. Avoid trading items prohibited in accordance with any laws and regulations in Myanmar.
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| 1. **Production**
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| **Environmental Prevention/Mitigation Measure**s |
| 1. Provide personal protective gear for workers as necessary (gloves, dust, masks, hard hats, boots, googles).
2. Do not burn debris and waste materials generated from production activities.
3. Solid Wastes, toxic or hazardous materials should not be poured or thrown into water bodies for dilution or disposal.
4. Liquid wastes generated from production processes (e.g. Wine Production, Textile, etc.) should not be disposed into waterbodies directly and should be treated with primary treatment methods.
5. Chemicals and other liquids should be stored and used undercover.
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| 1. **Services**
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| **Environmental Prevention/ Mitigation Measures** |
| 1. Avoid burning of solid wastes.
2. Keep aware on personal safety for any risk
3. Do not dispose used oil or oil containing wastewater into the water bodies.
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## Annex 4: Guidance for Pest Management Plan (PMP)

**1. Government Regulations related to Pesticides**

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

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

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

1. No one shall, import or export the pesticide and active ingredient without a permit of the Registration Board.
2. No one shall, without a license, engage in an enterprise of formulating and selling of active ingredient imported from abroad as a pesticide or of repacking and selling of pesticide imported into the country or of the retail and wholesale of the pesticide and of fumigation.
3. No one shall use the pesticide or active ingredient, apart from suppressing of outbreak of pests, in the crops or foodstuffs or beverages consumed by the public. No one shall use the pesticide or active ingredient to catch or kill any creatures.
4. No one shall employ children of 18 years and under, pregnant woman or nursing mother in handling or in use of pesticide.
5. Whoever using the pesticide shall not affect the environment or anyone by violating any condition of section 26.
6. Whoever using the pesticide shall be punished under the Penal Code when causing to occur the loss of life to anyone by violating section 26.
7. No one shall use other types of the pesticide and application methods other than types of the pesticide and application methods prescribed by the Registration Board in the storage of crops.
8. No one shall offer for sale or transport the pesticide along with foodstuffs.

In exercise of the powers and duties conferred under section (47), subsection (B) of the Pesticide Law (2016), the Pesticide Registration Board (PRB) has banned 50 types of pesticides with the Notification No (06 / 2019), dated on 16-10-2019. List of banned pesticides in Myanmar are as follows:

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

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

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

**2. Key Impacts of Pesticides and Mitigation Measures**

Pesticides benefit the farmers for the crop production, nevertheless, they also impose a series of negative impacts on the environment. Pesticides may easily contaminate the air, ground water, surface water, and soil when they run off from fields, escape storage tanks, and not discarded properly. Moreover, pesticides are hazardous to both pests and humans and they become toxic to humans and non-target animal species if suitable precautions are not undertaken during transport, storage, handling and disposal. Most pesticides will cause adverse effects if they are in contact with the skin for a long time or if intentionally or accidently ingested. Pesticides may be inhaled with the air while they are being sprayed. An additional risk is the contamination of drinking-water, food or soil.

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

| **No** | **Stage** | **Mitigation Measures[[7]](#footnote-8)** |
| --- | --- | --- |
| 1. | Before using pesticides | 1. Minimize the need for pesticides by practicing integrated management by control strategies such as cultural control, mechanical control, physical control, biological control and chemical control. 2. Receive recommendations from Plant Protection Department (PPD) section of the regional DOA for proper management method for specific crop.  |
| 2. | General precautions  | 1. The pesticide to be used must have registration number under PRB. 2. Only choose the pesticides labelled with Myanmar Language and do not use the pesticides without any label or with foreign language labels. 3. Select the pesticide which is suitable for specific pests and target plants as described on the label. 4. Do not mix any two or more pesticides at the same time. 5. Follow the instructions for use and the pre-harvest interval (PHI) as prescribed on the label.6. Use appropriate and correct application techniques to ensure safety for the health of humans, animals and the environment.  |
| 3. | Label Reading  | 1. Check the pesticide registration number on your product.2. Review the date of manufacture and date of expiry. 3.Read the active ingredient and pesticide group on your product.4. Read the target pests, dosage of product.5. Read the pre-harvest interval (PHI).6. Read the storage and disposal procedure for the product.7. Read the first aid procedure.8.Follow the instructions and safety precautions precisely written on the label.  |
| 4. | Storage and Transport | 1. Store pesticides in a certain place that can be locked and not accessible to unauthorized people or children.2. Never be kept in a place where they might be mistaken for food or drink. 3. Keep them dry but away from fires and out of direct sunlight. 4. Store away from water sources. 5. Should be transported in well-sealed and labelled containers.6. Do not carry them in a vehicle that is also used to transport food.  |
| 5. | Handling / Application  | **From Environmental Safety Aspect –**1. Application rates must not exceed the manufacturer’s recommendations.2. Avoid application of pesticides in wet and windy conditions.3. Pesticides must not be directly applied to streams, ponds, lakes, or other surface bodies.4. Maintain a buffer zone (area where pesticides will not be applied) around water bodies, residential areas, livestock housing areas and food storage areas.**From Health and Safety of User Aspect –** 1. Use suitable equipment for measuring out, mixing and transferring pesticides.2. Do not stir liquids or scoop pesticides with bare hands.3. Do not spray pesticides at the down-stream direction and during the strong wind.4. Do not spray pesticides at the high temperature of the day (noon).5. Do not suck or blow the blocked nozzle.6. Do not assign pregnant women, lactating mother and children under 18 for handling and use of pesticides. 7. Protective gloves, shoes, long-sleeved shirt and full trousers shall always be worn when mixing or applying pesticides.8. Respiratory devices (nose mask) shall be used to avoid accidental inhaling.9. In case if any exposure/body contact with the pesticide, wash-off and seek medical aid. |
| 6.  | Disposal | **From Environmental Safety Aspect –**1. Dispose any left-over pesticide by pouring it into a pit latrine. 2. It should not be disposed of where it may enter water used for dinking or washing, fish ponds, creeks or rivers. 3. Do not dispose any empty containers into river, creek, fish ponds and water way.4. Do not burn any empty containers.5. Decontaminate the pesticide containers by triple rinsing and use for next application. i.e. part-filling the empty container with water three times and emptying into a bucket or sprayer for next application. 6. All empty package and containers should be returned to the designated organization / individual for safe disposal. 7. If safe disposal is not available, bury the empty package and containers at least 50cm (20 inches) from ground level as much as possible. 8. The hole / disposal site must be at least 100 meters (~300 ft.) away from the streams, wells and houses.9. Do not reuse empty pesticide containers for any purposes.  |
| 7. | Personal Hygiene | 1. Never eat, drink or smoke while handling pesticides. 2. Change clothes immediately after spraying pesticides.3. Wash hands, face, body and clothes with plenty of water using soap after pesticides handling.  |
| 8.  | Emergency Measures  | Indications of Pesticide PoisoningGeneral: extreme weakness and fatigue.Skin: irritation, burning sensation, excessive sweating, staining.Eyes: itching, burning sensation, watering, difficult or blurred vision, narrowed or widened pupils.Digestive system: burning sensation in mouth and throat, excessive salivation, nausea, vomiting, abdominal pain, diarrhea.Nervous system: headaches, dizziness, confusion, restlessness, muscle twitching, staggering gait, slurred speech, fits, unconsciousness.Respiratory system: cough, chest pain and tightness, difficulty with breathing, wheezing.ResponsivenessGeneral: If pesticide poisoning is suspected, first aid must be given immediately and medical advice and help must be sought at the earliest opportunity. If possible, the patient should be taken to the nearest medical facility.First Aid TreatmentIf breathing has stopped: Give artificial respiration (i.e. mouth to mouth resuscitation if no pesticide has been swallowed.)If there is pesticide on the skin: Remove contaminated clothing from the patient and remove the patient from the contaminated area. Wash the body completely for at least 10 minutes, using soap if possible. If no water is available, wipe the skin gently with cloths or paper to soak up the pesticide. Avoid harsh rubbing or scrubbing. If there is pesticide in the eyes: Rinse the eyes with large quantities of clean water for at least five minutes.  If there is ingestion: Rinse mouth, give water to drink. Never induce vomiting in unconscious or confused persons, seek medical advice immediately. |

**3. Trainings**

Trainings on pesticide management should be provided to the implementers of activities related to pesticide usage as well as relevant stakeholders such as farmers for pesticide usage. The trainer (local)/service provider will deliver these trainings to the target community / groups with the technical support from relevant division with its training materials of clear diagrams or picture. The following trainings on pesticide management are recommended to be provided:

* *Training on Policy, Laws and Regulations Regarding to Pesticides Use:* To provide basic knowledge about laws, rules, regulations and notifications enacted by the Republic of the Union of Myanmar and World Bank safeguard policy OP 4.09 on pest management.
* *Trainings for Pest Management:* To provide trainings to clearly understand the technical aspect of pesticide and skill in using them such as what are the eligible and prohibited items of pesticide in Myanmar, the level of negative impact of each eligible item, how to use them, how to protect and minimize the negative impact on the environment and human while using them, how to keep them before and after used etc.
* *Storage, handling, usage and disposal of pesticide*; To provide trainings about the procedures of storage, handling, usage of pesticide and disposal of pesticides residues or empty containers without affecting the health and safety of user, nearby community and the environment.

**4. Monitoring of Pesticide Use**

Each division implementing the activity will periodically visit the target/relevant community areas and monitor the use of pesticide including –

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

The DRD will be responsible for monitoring and ensuring full compliance, including keeping proper documentation in the project file for possible review by the World Bank.

1. This section of the ESMF Addendum is drawn from the Government’s CERC Emergency Action Plan (EAP) agreed to with the World Bank. In the event of discrepancy between these two documents the CERC EAP will take precedence. [↑](#footnote-ref-2)
2. The MDI is an index composed of 14 indicators of the socio-economic status of households (e.g., housing, employment, health, access to water, and education) based on 2014 census data. The MDI was compiled by the Department of Population of the Ministry of Labor, Immigration and Population. [↑](#footnote-ref-3)
3. Because there is no available poverty or disadvantage data at village level, VT MDI data will be used for selection of villages, based on the assumption that little variation is expected between villages of the same VT. [↑](#footnote-ref-4)
4. Current or new activity to on-going NCDDP program. [↑](#footnote-ref-5)
5. Based in the Myanmar’s context, this ESMF Addendum will use the term “ethnic people” or “ethnic communities” as an equivalent to the term “indigenous people” used by the WB under OP4.10. [↑](#footnote-ref-6)
6. Based in the Myanmar’s context, this ESMF Addendum will use the term “ethnic people” or “ethnic communities” as an equivalent to the term “indigenous people” used by the WB under OP4.10. [↑](#footnote-ref-7)
7. Instructions from PPD and Safe Use of Pesticides by WHO [↑](#footnote-ref-8)