# ESDO-Environment Management Framework Policy

Revised on 1st July 2025


**Eco-Social Development Organization (ESDO)**

**Head Office**

Collegepara (Gobindanagar)

Thakurgaon-5100

Bangladesh

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# List of Acronyms

| | |
|---|---|
| Project | Project Name |
| DoE | Department of Environment |
| ECA | Environmental Conservation Act |
| ECR | Environmental Conservation Rules |
| EMF | Environmental Management Framework |
| EMP | Environmental Management Plan |
| ES | Environmental Screening |
| FGD | Focus Group Discussion |
| IEE | Initial Environmental Examination |
| IGA | Income Generating Activities |
| KII | Key Informant Interview |
| PO | Project Implementing Partner |
| ESDO | Eco Social Development Organization |
| PMU | Project Management Unit |
| SGP | Sub-Grant Proposal |
| WASH | Water, Sanitation & Hygiene |
| WHO | World Health Organization |

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# Background of ESDO

Eco-Social Development Organization (ESDO) started its journey in 1988 with a noble vision to stand in solidarity with the poor and marginalized. Being a peoples' centered organization, ESDO envisioned for a society which will be free from inequality and injustice, a society where no child will cry from hunger and no life will be ruined by poverty. Near about three decades of relentless efforts to make this happen, ESDO has embraced new grounds and opened up new horizons to help the disadvantaged and vulnerable people to bring meaningful and lasting changes in their lives. During this long span, ESDO has adapted with the changing situation and provided the most time-bound services especially for the poor and disadvantaged. A community focused and people centered approach has been adapted by ESDO while consideration was given to the national policy and Sustainable Development Goals (SDGs) as its guiding principle.

ESDO is one of the most dynamic organizations expanding its development interventions across 316 upazilas under 54 districts of Bangladesh covering over 15 million poor and vulnerable people.

**Vision**
We seek an equitable society free from all discriminations.

**Mission**
Reduction in income poverty and human poverty of the people in ESDOs working area through undertaking massive integrated development program for the poor and marginalized community through service delivery and rights based approach. Income generation literacy programme nutrition and health programme human rights and good governance programme giving proper importance to environmental protection and regeneration. ESDO firmly believes and is actively involved in promoting human rights, dignity and gender equality through people's social, economic, political and human capacity building. Women in general and children are the core and central focus of its activities. Strengthening the organizational capacity carries importance to ensure quality of its services. Extending its services to the ultra-poor is its main manifesto.

**Establishment:** 3rd April 1988

**Legal Status**

- Registered with the Department of Social Service in 1988, Registration No. DSS/440/88
- Registered with the NGO Affairs Bureau in 1993, Registration No. 694/93 (Renewed-2012)
- Registered with the Micro-credit Regulatory Authority, No: MRA-0000204
- Registered with the BETB, Registration No. 12121
- Registered with the Department of Family Planning in 2000, Registration No. 32
- Licensed with Directorate of Health Services (for Hospital), License No. 1983
- Tax Identification Number TIN)-597328140198/Circle-90(Companies)

**Networking**
National: Child Labour Elimination Action Network (CLEAN), Networking for Inclusion and Empowerment of Dalits and Adibashis in North-West of Bangladesh (NNMC), Campaign for Popular Education (CAMPE), Early Childhoods Development network (ECDN), Association of Development Agencies in Bangladesh (ADAB) Credit Development Forum (CDF), Food Security Cluster-Bangladesh, CSA for SUN- BD, Market Development Forum (MDF)., Center for Women and Children Studies(CWCS), Mass Campaign for Good Governance(SUPRO), Educate the Children International,

Global: Educate the Children International, Global Microcredit Summit-USA. The World's Children's Prize-Sweden

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# *SECTION ONE*

## 1. Introduction to Environmental Management

### 1.2 Environmental Management

Environmental management is not easy to define. As Barrow (2005) has acknowledged, it can refer to a goal or vision, to attempts to steer a process, to the application of a set of tools, to a philosophical exercise seeking to establish new perspectives towards the environment and human societies, and to much more besides. Environmental managers are a diverse group of people including academics, policy-makers, non-governmental organization (NGO) workers, company employees, civil servants and a wide range of individuals or groups who make decisions about the use of natural resources (such as fishers, farmers and pastoralists). Indeed, environmental management involves all people to some extent because all human activities ultimately have some sort of environmental impact. However, some individuals are more directly involved with resource use, and some special interest groups are particularly concerned with resource exploitation and with issues related to pollution. Environmental management therefore involves many stakeholders and requires a multidisciplinary perspective. It involves many spatial scales, ranging from the local to the global. It also involves many, diverse goals, including the desires to control the direction and pace of development, to optimize resource use, to minimize environmental degradation and to avoid environmental disaster. Environmental management may be practiced by individuals and groups holding conflicting - and even directly opposing - views, as may be the case when environmental managers employed by large multinational corporations come into conflict with environmental managers representing voluntary organizations.

***A focus on decision-making***

In general, however, environmental management is concerned with the understanding of the structure and function of the earth system, as well as of the ways in which humans relate to their environment. Environmental management is therefore concerned with the description and monitoring of environmental changes, with predicting future changes and with attempts to maximize human benefit and to minimize environmental degradation due to human activities. Yet, characteristically, environmental management is about decision-making - and it is especially concerned with the process of decision-making in relation to the use of natural resources, the pollution of habitats and the modification of ecosystems. Fundamentally, then, environmental management is a political activity because those decisions - about resources, pollution and ecosystems - are never neutral or objective; on the contrary, they are value laden and they reflect the exercise of power by particular groups over others. Moreover, in general, it is naïve to conceive of environmental management as being about simply 'the management of the environment' in the sense of humans manipulating and controlling the components and processes of the earth system. Of course, humans do exert such influences on the earth system; but it is a fallacy to think that humans 'manage', for instance, populations of humpback whales. Instead, it is more accurate to suggest that humans may be able to make some progress towards managing human impacts on humpback whales. Ultimately, then, environmental management is more concerned with the management of human activities and their impacts than with the management of the natural environment *per se*.

The objective of Environmental Management is to formulate measures which will:

1. Mitigate adverse impacts on various environmental components, which have been identified during the rapid environmental impact assessment study.
2. Protect environmental resources where possible.
3. Enhance the value of environmental components where possible.

**What is an Environmental Management System**

An Environmental Management System (EMS) is a continual business cycle of planning; implementing, reviewing and improving the processes and actions that your company



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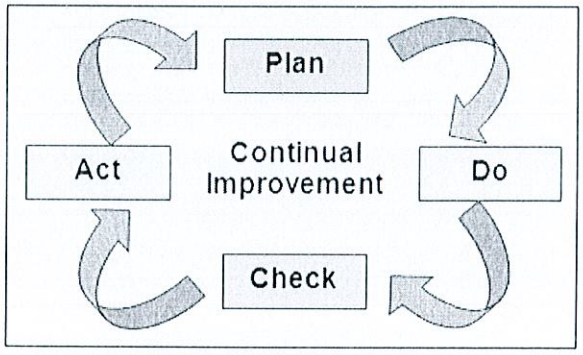
undertakes to meet its environmental obligations and continually improve its environmental performance. An effective EMS is developed on "***Plan, Do, Check, Act***" (PDCA) model which embodies the concept of continual improvement.

**Figure 1.** "Plan, Do, Check, Act" model.




## 1.2 Key Principles of Environmental Management of ESDO

The key principles of the environmental management of ESDO are:

(i) Projects and programs when finalized for implementation will be subject to an environmental screening and initial environmental examination (IEE) in order to prevent execution of sub- projects with significant long-term negative environmental impacts and also to plan and implement mitigation measures for less significant environmental impacts,

(ii) ESDO will ensure due diligence to the related government regulations (ordinance, acts, rules etc.) related to environment

(iii) ESDO will be ensuring clearance required from local government agencies as necessary,

(iv) ESDO will promote environmental sound design and environmental capacity building of community.

(v) Climate resilient considerations will be integrated in designing relevant projects.

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# *SECTION TWO*

## 2. Environmental Management

### 2.1 Environmental Assessment

Environmental assessment is a procedure to ensure that the environmental implications of decisions are taken into account before the decisions are made. Environmental assessment can be undertaken for individual projects. The common principle is to ensure that plans, programmers and projects likely to have significant effects on the environment are made subject to an environmental assessment, prior to their approval or authorization. Consultation with the community is a key feature of environmental assessment procedures. ESDO aims to provide a high level protection of the environment and to contribute to the integration of environmental considerations into the preparation of projects, plans and programmers with a view to reduce their environmental impact.

Two types of tools will be used in ESDO considering nature of interventions and magnitude of impacts. The following environmental assessment tools to be used by the ESDO:

1. Environmental Screening
2. Initial Environmental Examination (IEE)

### 2.2 Category of interventions for environmental assessment

A number of activities are being implemented by ESDO. Some activities have a minor and some have major impacts on environment. Generally, small infrastructures (designed for individual household) and IGAs require environmental screening as they have minor impact on health and social life. On the other handsome interventions may have relatively greater impact on the physical, social and biological environment? These interventions will require Initial Environmental Examination (IEE).

### 2.3 Environmental Screening

The 'environmental screening' is a mandatory requirement for the design of a project or sub-project. The purpose of the environmental screening is to address environmental concern before further decision and/or design of a sub-project and to ensure that actions to mitigate environmental impacts. It is the first step to understand the possible environmental impacts and also to identify the environmental categorization of the project or sub-project. The participation and consultation with local communities are important to identify the potential impacts of the project interventions. The screening format for the sub grant projects under Project is provided in Annex- B. The proposed screening criteria have been selected from the experience of other projects and typical environmental impacts of the proposed project interventions. Using the screening form, proposed sub projects will be screened by respective Project office of ESDO, to identify any potential adverse impacts/effects from the sub project activities.

#### 2.3.1 Steps for Environmental Screening:

1. Review the list of negative attributes (Annex A)
2. Review the design of interventions (if applicable)
3. Review whole process of implementation.
4. Review the list of environmental code of practice.
5. Review the Screening Format (Annex-B) before going to field.
6. Fill the screening format in the field.



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7. Prepare an environmental mitigation and management plan following prescribed format
8. Prepare a monitoring plan as per attached format

## 2.4 Initial Environmental Examination (IEE)

The IEE is a review of the reasonably foreseeable effects on the environment of a proposed development intervention/activity. The IEE is conducted if the project is likely to have minor or limited impacts, which can easily be predicted and evaluated, and mitigation measures could be prescribed easily. However, the IEE is also important to confirm whether the specific activity requires an EIA or not.

## 2.5 Steps for IEE

### 2.5.1 Step-1: Describing Environmental Condition of the Project Area

This is the first step of the initial environmental examination (IEE). This includes collection of baseline information on biophysical, social and economic aspects of the project area. The description of environmental settings includes the characteristics of the area on which the activity of proposed project would occur. IEE should cover area affected by all impacts including potential area to address and potential area affected by its alternatives. Normally, information generated from secondary sources or from other existing documents and through field sampling.

### 2.5.2 Step-2: Assessing the potential impact

Prediction and quantification of the potential impact is the technical heart of the environmental examination process. The process involves the prediction of changes over time in various environmental aspects as a result of a proposed project. The impacts of the pre-construction, construction and post-construction operation & maintenance activities will be separately identified. The prediction of the nature, extent, and magnitude of environmental changes likely to result from a proposed project is aided by various tools and techniques.

### 2.5.3 Step-3: Formulating Mitigation Measures

Once the impacts have been identified, then analysis of the impacts is crucial i.e., whether they are acceptable, require mitigation measures, or are unacceptable. The scale Environmental Impact is to be considered depending upon time, place and condition. Afterward, measures will be devising to mitigate the anticipated environmental changes and consequential impacts during project implementation and operation, or further reduce the residual environmental changes inherent in the selected project design with a sustainable and low-cost method. It normally includes technical, social, and institutional measures to be implemented as integral elements of the project. During the development paradox, some of the decisions may cost the environment. For an example, in cases, where mitigation measures not directly possible in the saline prone area, potable water is one of the major concern. To setup a rain-water-harvesting tank, somewhere cutting of tree/s may be important, compensation measures i.e., plantation of more trees of similar species should be considered.

### 2.5.4 Step-4: Environmental Management Plan (EMP)

An EMP is a plan of scheduled actions that follows directly from a completed environmental assessment of a project. An EMP is the organized expression of the environmental safeguards for the project. EMP has 2parts: I) Environmental Mitigation Plan; ii) Environmental Monitoring Plan. The mitigation plan is a major sub-plan of the EMP. The mitigation plan manages the potential negative



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impacts of the project. Mitigation measure is a modification of a proposed project activity using different types of actions, which can be applied individually or collectively like deletion of activity; change in location of activity; change in timing of activity; change in intensity of activity; isolation of activity and social or environmental compensation.

All the steps are compiled in the prescribed format of IEE in *Annex C*. The Project office of ESDO will follow the following steps to accomplish the IEE.

1. Review the list of negative attributes (Annex A)
2. Review the design of interventions (if applicable)
3. Review whole process of implementation.
4. Review the list of environmental code of practice.
5. Review carefully the IEE Format (Annex-C) before going to field.
6. Fill the IEE format in field.
7. Prepare an environmental mitigation and management plan following prescribed format
8. Prepare a monitoring plan as per attached format.

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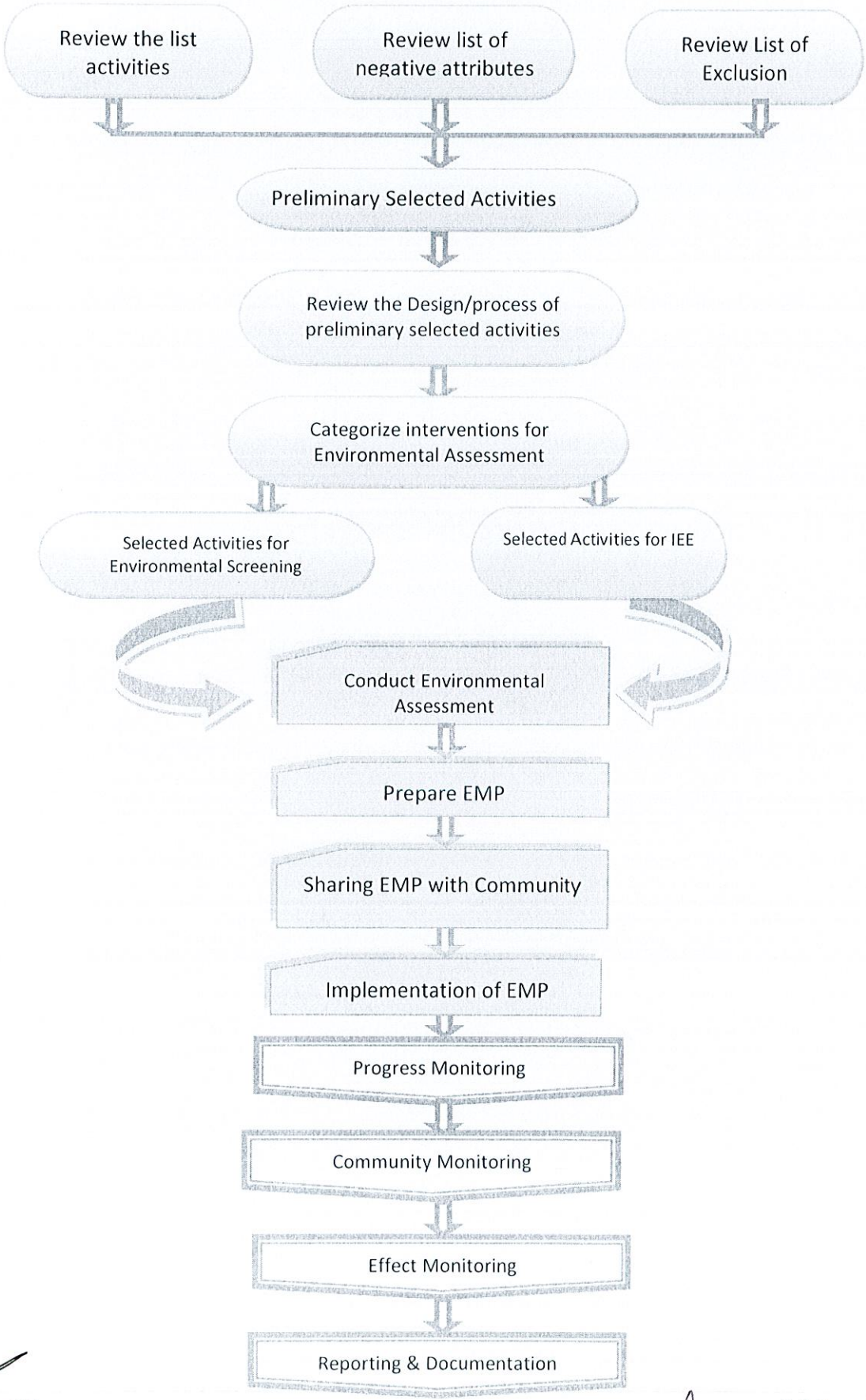
## 2.6 Environmental Assessment and Monitoring Flow Chart

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## 2.7 Inclusion of people's participation in assessment:

People's participation is an integral part of the environmental assessment. Throughout the whole assessment process, local people including men, women and elderly will be asked for gathering information regarding the environmental issue. Individual/KII/FGD should be carried out in this process.

## 2.8 Suggested mitigation measures

During the assessment, mitigation measures will be suggested to eliminate/minimize the problem when the proposed interventions will create any adverse environmental impact in moderate or major magnitude. Most of the suggestive measures of ESDO will be simple and cost effective. A list of suggested mitigation measures and suggested environmental code of practices has been attached in Annex G for designing and implementation of ESDO interventions.

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# *SECTION THREE*

## 3. Environmental Monitoring and Training

### 3.1 Environmental monitoring

Environmental monitoring is an integral part of an effective environmental management system. It provides scope to revise the interventions or mitigation measures to make them more sustainable or environmentally compatible. Environmental monitoring is necessary to improve the project's environmental implementation and performance.

The major objectives of monitoring are

- To monitor the implementation quality/appropriateness of selected mitigation measures.
- To monitor the effectiveness of mitigation measures.

Three types of monitoring involved in ESDO interventions which are

1. Performance/Progress Monitoring- will be conducted during implementation or construction.
2. Effect Monitoring-will is conducted after implementation of the action to determine the effectiveness of the mitigation measures.
3. Community Monitoring- will be conducted in both stage (during & post) by the community.

### 3.2 Time of Monitoring

ESDO should conduct environmental monitoring in 2 states for better performance of the interventions or mitigation measures:

***Stage 1: During implementation or construction***

During implementation of the interventions, progress monitoring will be conduction to check the progress of implementation of environmental mitigation measures and adversely affected parameters. Environmental progress monitoring should be conducted at least once for the whole implementation period, particularly, in peak time of the construction work/process by using the 'progress monitoring format (See annex D for progress monitoring format).

***Stage 2: Post implementation***

Monitoring of environmental effect is to determine the effectiveness of the mitigation measures and detect the changes in the environmental parameters due to the interventions. For measuring 'Post intervention effect monitoring' will be conducted after construction of activities or complete setup of IGA interventions. It will be carried out two times in a year i.e. interval period is six months. Seasonal variation is important to find out the actual effectiveness of the interventions and mitigation measures (See annex E for effect monitoring format).

### 3.3 Responsibility of Monitoring

The environmental focal person of ESDO who carried out the environmental assessment is responsible for monitoring as well. The environmental focal person will review and compile the monitoring report for sharing the findings to the project management.

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### 3.4 Community Monitoring

Community monitoring is another approach for environmental monitoring where people of the community will independently monitor the effect and function of the interventions/mitigation measures. Community monitoring will give early indication of the environmental problems or hazards which can be manageable during the project tenure and before the problems become unmanageable. Community monitoring will be done by the leader of the respective community with the help of ESDO's representative. Environmental focal person may help to understand the issue prescribed in the format which is attached in Annex-F. Community monitoring will be done during implementation of interventions and after end of interventions.

### 3.5 Training/Capacity building

Environmental focal person of ESDO along with project head will receive necessary training for conduction of environmental assessment and monitoring of the infrastructure and IGA interventions. ESDO will organize the training sessions for the capacity building of the concern staffs regarding the environmental issues and assessment.

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# Annex: A

## List of Negative Attributes

The proposed sub project in the environmentally sensitive areas or proposed subproject with significant and long-term environmental impacts will not be implemented. Approval will not be given to the beneficiary who will deals with unauthorized and excessive pesticides, toxic chemicals, polythene, narcotics or any unlawful/environmentally unacceptable interventions. The following activities will not be supported under any project:

| Sl # | Intervention/ Attributes/ | Brief Description |
|---|---|---|
| 1 | Protected areas/Archaeological Historical Sites declared by the Government of Bangladesh | Activities within or adjacent to the protected areas or archaeological historical sites identified by DoE or other Government agencies<br><br>(Attach a list of protected areas & archaeological historical sites) |
| 2 | Natural habitat and sensitive ecosystem | Activities that may adversely affect the natural habitat with sensitive ecosystems like natural pond/beel/baor/haor etc. with important aquatic life |
| 3 | Use of pesticides (Annex G : the list of banned pesticides) | Use of excessive pesticides in agricultural land, tree plantation, large scale nursery. |
| 4 | Road construction | Construction, reconstruction and extension of regional, national road and highway involving major concrete/cement concrete/reinforced cement concrete/ concrete block |
| 5 | Extraction of Natural Resource | Activities supporting commercial logging in forested areas or involving the use of unsustainably harvested timber or fuel-wood or significant conversion or degradation of critical natural habitats |
| 6 | Extensive Shrimp Firming | Sub-projects involving threats to mangrove forest and coastal environment |
| 7 | Dams/Embankment | Construction/reconstruction of dam/embankment involving major concrete/cement concrete/reinforced cement concrete /concrete blocks |
| 8 | Supply of contaminated water | Tube-wells with Arsenic contamination (higher than national standard (0.05 mg/l) base below the 10 years flood level water supply schemes with high probability of bacterial contamination |
| 9 | Unsanitary disposal of solid waste and waste water | New or significant expansion of disposal facilities with negative health impacts to nearby water sources or population |
| 10 | Major loss of agricultural land | Construction/reconstruction of road/drain, canal/pond excavation with major loss of agriculture land and use of concrete cement/ reinforced concrete cement |
| 11 | Land filling | Sub-projects that will impact major destruction of top soil of agricultural land and land filling by industrial, household and commercial waste |

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# Annex B

## Environmental Screening

Date of Screening:.....

Name of union:.....

Name of upazila:..... Name of district:.....

**Section A: Identify Interventions**

| Category of Intervention | Name of the interventions | Number of Interventions |
|---|---|---|
| | | |

**Section B: Checklist for Environmental screening**

| Sl # | General intervention issues | Yes | No | N/A | If yes, please indicate specific intervention & location |
|---|---|---|---|---|---|
| | **Issues related Agriculture/Plantation** | | | | |
| 1 | Crop residues that may be used as fertilizers | | | | |
| 2 | Involve use of pesticides/pest management | | | | |
| 3 | Destruction of trees and vegetation or orchard or plant garden | | | | |
| 4 | Possibility to increase soil salinity | | | | |
| | **Issues related to Fisheries/Livestock** | | | | |
| 5 | Waste generation (e.g. animal, carcass, slaughter house waste, etc.) | | | | |
| 6 | Waste from livestock/poultry that may be used as compost | | | | |
| 7 | Susceptible to disease | | | | |
| 8 | Possibility of breaching the dyke and flow of flood/waste water to the pond | | | | |
| 9 | Deteriorate water quality through agricultural/ storm run-off | | | | |
| 10 | Impact on fish habitat and migration | | | | |
| | **Issues Earth work/Plinth Raise** | | | | |
| 11 | Involves use of earth work or land filling | | | | |
| 12 | Damage of cultivable land (area in decimal) | | | | |
| 13 | Involves use of fertile top soil | | | | |
| 14 | Water logging or water stagnation/ drainage congestion | | | | |
| 15 | Erosion of slope of raised plinth of settled ground/road | | | | |
| | **Issues related to Water Supply/Sanitation/irrigation** | | | | |
| 16 | Involves excavation/re-excavation | | | | |
| 17 | Run-off/waste water flow to/from water sources | | | | |
| 18 | Involves latrines, septic tank or sewerage system | | | | |
| 19 | For water supply options, tested positive for Arsenic | | | | |
| 20 | Possibility to affect quality or quantity of surface water | | | | |



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| Sl # | General intervention issues | Yes | No | N/A | If yes, please indicate specific intervention & location |
|---|---|---|---|---|---|
| 21 | Possibility to affect quality or quantity of ground water | | | | |
| 22 | Diversion or use of surface water | | | | |
| 23 | Withdrawal of ground water | | | | |
| 24 | New or rebuilt irrigation or drainage system | | | | |
| 25 | Tested positive for Salinity | | | | |
| 26 | Possibility of rain water harvesting | | | | |
| 27 | People use pond water for drinking | | | | |
| 28 | Possibility of contamination of surface water source from waste or latrine pit | | | | |
| | **Issues related to Biodiversity/Ecosystem** | | | | |
| 29 | Negative or significant effect on threatened or endangered species. | | | | |
| 30 | Negative or significant effect on designated wetlands or water body | | | | |
| 31 | Negative effect on locally important or valued ecosystem | | | | |
| 32 | Introduction of invasive species (plant or fish) which have negative impact on local environment | | | | |
| 33 | Negative impact of electrical waste i.e. acid or lead from battery, used CFL bulb, polythene etc. | | | | |
| | **Other** | | | | |
| 34 | Possibility of water stagnation/drainage congestion/water logging situation created for implementing interventions | | | | |
| 35 | Require to cut/destroy tree | | | | |
| 36 | Obstruction of natural connection between river and wetlands | | | | |
| 37 | Increased noise due to construction activities | | | | |
| 38 | Increased windblown dust from materials | | | | |
| 39 | Health risk to labors involved in project activities | | | | |

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**Section C: Environmental Management Plan** (Please identify the mitigation measures for any of the "Yes" answer provided in Section B)

1. **Environmental mitigation and enhancement plan**

| Name of the intervention | Potential Environmental Impacts | Location | Mitigation measures/ Environmental Code of Practices | Estimated cost | Stage of application ( during or post construction) |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

2. **Monitoring Plan**

| Interventions/ Mitigation Measures | Monitoring Timing & Frequency | Person Responsible |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

| Prepared by | Reviewed by | Approved by |
|---|---|---|
| Name : ..... | Name:..... | Name..... |
| Designation:..... | Designation: ..... | Designation:... |
| Signature:..... | Signature... | Signature :..... |
| Date ..... | Date ... | Date..... |

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## Annex C

### Initial Environmental Examination (IEE) Format

Examination date:.....

Name of union:.....

Name of upazila:..... Name of district:.....

**Section A: General Information**

| Category of Intervention | Name of the Intervention | Number of the intervention | Brief description of the design |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

1. Description of existing Environment: Describe the physical, biological and socio-economic conditions of the catchment area. (Use extra page detail description)

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.....
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Section B: Environmental Examination (Please see annex H for identification of impacts and magnitude)

| Sl # | Environmental Issues/Parameters | Baseline/ Current Situation | Impact Assessment | | | | Suggested Mitigation Measures |
|---|---|---|---|---|---|---|---|
| | | | Impacts? N/A, Yes, No | Magnitude Low, Moderate, High | Measure/Quantify impacts (if possible) | Describe possible impacts (if quantification is not possible) | |
| **Issues related to homestead and plinth raise/land filling/school/community ground raise/ construction/renovation of connecting road** | | | | | | | |
| 1 | Damage of cultivable/Agriculture land | | | | Quantity of damaged land area (Decimal) | | |
| 2 | Loss of fertile top soil | | | | Quantity of land from where top soil collected(Decimal) | | |
| 3 | Water stagnation/drainage congestion/water logging situation/affect storm run-off | | | | # of probable affected point | | |
| 4 | Destruction of trees and vegetation or orchard or plant garden | | | | # of loss trees | | |
| 5 | Health risk to labors involved in project activities | | | | # of affected labors | | |
| 6 | Negative effect on locally important or valued ecosystem | | | | # of affected ecosystem | | |
| 7 | Negative or significant effect on threatened or endangered species. | | | | # of species that could be affected | | |
| 8 | Increased noise due to construction activities | | | | # of noise pollution sources | | |
| 9 | Plantation which have negative impact on environment. | | | | # of plant of such kind | | |
| 10 | Obstruction of natural connection between river and wetlands. | | | | # of obstacle | | |
| 11 | Affect culture or capture fishery. | | | | # of source | | |

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| Sl # | Environmental Issues/Parameters | Baseline/ Current Situation | Impact Assessment | | | | Suggested Mitigation Measures |
|---|---|---|---|---|---|---|---|
| | | | Impacts? N/A, Yes, No | Magnitude Low, Moderate, High | Measure/Quantify impacts (if possible) | Describe possible impacts (if quantification is not possible) | |
| 12 | Negative impact on soil fertility. | | | | probable affected area (Decimal) | | |
| 13 | Impact on large or highly important construction i.e. national highway, town protection embankment etc. | | | | # of affected point | | |
| | **Issues related to pond/canal/dyke excavation/re excavation** | | | | | | |
| 1 | Damage of cultivable/Agriculture land | | | | Quantity of damaged land area (Decimal) | | |
| 2 | Loss of fertile top soil | | | | Quantity of land from where top soil collected(Decimal) | | |
| 3 | Destruction of trees and vegetation or orchard or plant garden | | | | # of loss trees | | |
| 4 | Health risk to labors involved in project activities | | | | # of affected labors | | |
| 5 | Negative effect on locally important or valued ecosystem | | | | # of affected ecosystem | | |
| 6 | Negative or significant effect on threatened or endangered species. | | | | # of species that could be affected | | |
| 7 | Increased noise due to construction activities | | | | # of noise pollution sources | | |
| 8 | Plantation which have negative impact on environment. | | | | # of plant of such kind | | |
| 9 | Affect culture or capture fishery. | | | | # of source | | |
| 10 | Affect quality of surface water | | | | # of affected point | | |
| 11 | Affect quality of ground | | | | # of affected ground | | |

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| Sl # | Environmental Issues/Parameters | Baseline/ Current Situation | Impact Assessment | | | | Suggested Mitigation Measures |
|---|---|---|---|---|---|---|---|
| | | | Impacts? N/A, Yes, No | Magnitude Low, Moderate, High | Measure/Quantify impacts (if possible) | Describe possible impacts (if quantification is not possible) | |
| | water | | | | water point | | |
| 12 | Erosion of slope of raised plinth/land | | | | # of eroded point | | |
| 13 | Possibility of water-borne disease | | | | # of suspected source | | |
| 14 | Odor | | | | # of source | | |
| **Community rain water harvesting system/traditional irrigation pump/solar irrigation pump** | | | | | | | |
| 1 | Damage of cultivable/Agriculture land | | | | Quantity of damaged land area (Decimal) | | |
| 2 | Loss of fertile top soil | | | | Quantity of land from where top soil collected(Decimal) | | |
| 3 | Water stagnation/drainage congestion/water logging situation/affect storm run-off | | | | # of affected point | | |
| 4 | Destruction of trees and vegetation or orchard or plant garden | | | | # of loss trees | | |
| 5 | Health risk to labors involved in project activities | | | | # of affected labors | | |
| 6 | Negative effect on locally important or valued ecosystem | | | | # of affected ecosystem | | |
| 7 | Impact on large or highly important construction i.e. national highway, town protection embankment etc. | | | | # of affected point | | |
| 8 | Run-off/waste water flow to/from water sources/water body | | | | # of affected point | | |
| 9 | Affect quality of surface water | | | | # of affected surface water point | | |

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| Sl # | Environmental Issues/Parameters | Baseline/ Current Situation | Impact Assessment | | | | Suggested Mitigation Measures |
|---|---|---|---|---|---|---|---|
| | | | Impacts? N/A, Yes, No | Magnitude Low, Moderate, High | Measure/Quantify impacts (if possible) | Describe possible impacts (if quantification is not possible) | |
| 10 | Affect quality of ground water | | | | # of affected ground water point | | |
| 11 | Possibility of water-borne disease | | | | # of suspected source | | |
| 12 | Odor | | | | # of source | | |
| 13 | For water supply options, tested positive for Arsenic | | | | # of affected source | | |
| 14 | Tested positive for Salinity | | | | # of affected source | | |
| 15 | Indiscriminate withdrawal/inefficient use of water | | | | # of source and type of technology | | |
| **Issues related to community latrine in village market or gathering place** | | | | | | | |
| 1 | Damage of cultivable/Agriculture land | | | | Quantity of damaged land area (Decimal | | |
| 2 | Loss of fertile top soil | | | | Quantity of land from where top soil collected(Decimal) | | |
| 3 | Destruction of trees and vegetation or orchard or plant garden | | | | # of loss trees | | |
| 4 | Health risk to labors involved in project activities | | | | # of affected labors | | |
| 5 | Negative or significant effect on threatened or endangered species. | | | | # of species that could be affected | | |
| 6 | Increased noise due to construction activities | | | | # of noise pollution sources | | |
| 7 | Run-off/waste water flow to/from water sources/water body | | | | # of affected point | | |
| 8 | Affect quality of surface water | | | | # of affected surface water point | | |
| 9 | Affect quality of ground | | | | # of affected ground | | |

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| Sl # | Environmental Issues/Parameters | Baseline/ Current Situation | Impact Assessment | | | | Suggested Mitigation Measures |
|---|---|---|---|---|---|---|---|
| | | | Impacts? N/A, Yes, No | Magnitude Low, Moderate, High | Measure/Quantify impacts (if possible) | Describe possible impacts (if quantification is not possible) | |
| | water | | | | water point | | |
| 10 | Possibility of contamination of surface water source from waste or latrine pit | | | | # of suspected source | | |
| 11 | Possibility of damages of latrine pit from flood | | | | # of suspected source | | |
| 12 | Possibility of water-borne disease | | | | # of suspected source | | |
| 13 | Improper disposal of excreta | | | | # of suspected source | | |
| 14 | Odor | | | | # of source | | |
| 15 | Tested positive for Salinity | | | | # of affected source | | |

**Section C: Environmental Management Plan** (Summary of the mitigation measures identified in Section B and additionally identify some measures for overall enhancement of the local environment at the project site)

1. **Environmental mitigation and enhancement plan**

| Environmental Issues/Problems | Mitigation/enhancement measures/environmental code of practice | Location | Cost of Implementation | Person Responsible for Implementation |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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2. Monitoring Plan

| Interventions / Mitigation Measures | Types of Monitoring Suggested | Monitoring Frequency | Monitoring Time | Person Responsible |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**Prepared by**
Name :.....
Designation :.....
Signature :.....
Date :.....

**Reviewed by**
Name .....
Designation :.....
Signature :.....
Date.....

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# Annex D

## Progress Monitoring

| Interventions/ Mitigation Measures to be monitored | Progress ( Completed, Not Completed, In Progress) | Observations | Need for further monitoring | | Monitoring Frequency | Person Responsible |
|---|---|---|---|---|---|---|
| | | | Yes | No | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Summary Observations: |
|---|
| |

**Monitoring Conducted By**
Name :.....
Designation :.....
Signature :.....
Date :.....

**Reviewed By**
Name :.....
Designation :.....
Signature :.....
Date :.....

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# Annex E

## Environmental Effect Monitoring Format

Monitoring date:

Sub-project completion date:.....

Name of village:..... Name of union:.....

Name of upazila:..... Name of district:.....

**Section A: General Information (Name/location/description of the schemes/interventions and brief descriptions of the specific site)**

| Name of the interventions/ Mitigation Measures | Brief description of the Design | Brief Description of Baseline Environment |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

**Section B: Environmental Effect Monitoring (identify environmental issues, parameters, mitigation measures needed to be monitored from the IEE)**

| Sl No | Environmental Issues/ Interventions/Mitigation measures | Effect Monitoring | | | Describe/ quantify the effects | Need further monitoring | |
|---|---|---|---|---|---|---|---|
| | | +ve | -ve | No | | Yes | No |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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## Annex F

### Community Monitoring Format

| Environmental Problems/ issues | Relevant Interventions/ Mitigation Measures | Completion status (Done/In progress/Not Done) | Problem Mitigation | | | Remarks |
|---|---|---|---|---|---|---|
| | | | Solved | Not solved | N/A | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

**Summary Observations:**

**Monitoring Conducted By**
**Name** : .....
**Designation** : .....
**Signature** : .....
**Date** :.....

**Reviewed By**
**Name** : .....
**Designation** : .....
**Signature** : .....
**Date** :.....

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# Annex G

## Suggested mitigation measures and Environmental Code of Practices

| SL # | Interventions /Environmental Issues | Mitigation measures and Environmental Code of Practices |
|---|---|---|
| | WASH | 1. Maintain safe distance (minimum 10 m) between latrine and tube well or other water sources;<br>2. Maintain 250 m distance between two adjacent wells;<br>3. Design water seal sanitary latrine. Seal off bottom of the pit, if possible;<br>4. Conduct water quality test for arsenic contamination and salinity;<br>5. Design rain water harvesting system;<br>6. Maximum limit for arsenic concentration in drinking water 0.05 mg/lit;<br>7. Maximum limit for iron in drinking water is 0.3 mg/lit;<br>8. Drinking water should be free from coli forms;<br>9. Hand wash is must before eating and after using toilet;<br>10. Connection with water body from latrine pit is prohibited;<br>11. Maintain 3 feet distance between ground water table and bottom of latrine pit;<br>12. Sufficient ventilation should be ensured in latrine superstructure;<br>13. Untreated water from open pond should be discouraged;<br>14. Natural oxidation of waste water allowing through mud-channel; |
| | Agriculture | 1. Use of Integrated Pest Management (IPM) technologies (Pheromone, Perching, Light trapping, Hand picking);<br>2. Do not cut mature trees. If needed, plant a sapling or design a plantation program;<br>3. Maintain seed bank in village;<br>4. Water re-use and re-cycle for homestead garden;<br>5. Maximization the use of local/indigenous and sustainable varieties for ecological succession;<br>6. Reduce monoculture and maximize multicultural crop-rotation; |
| | Livestock | 1. Safe distance has to maintain between poultry shed and kitchen;<br>2. Use the litter for composting and reduce the scattering of waste;<br>3. Prohibition of mixing and outing during the epidemic period; |
| 1 | Earth filling/Earth cutting/Loss of top soil | 1. Collect earth/soil form dry pond/canal/borrow pits or where the top soil had already been lost;<br>2. Depth can be increased rather than increase of area;<br>3. Use grass to prevent soil erosion;<br>4. Personal safety should be allowed for the labor of earth-work; |
| 2 | Water | 1. Construct user-friendly drain/s; |



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| SL # | Interventions /Environmental Issues | Mitigation measures and Environmental Code of Practices |
|---|---|---|
| | stagnation/drainage congestion/water logging | 2. Construct user-friendly culvert;<br>3. Properly maintain natural slop;<br>4. Alternative project may include considering logged water;<br>5. Natural management of mosquito breeding like allowing local species of catfishes into ditches; |
| 3 | Soil erosion and degradation/sedimentation | 1. Tree plantation or use turf to cover the slope;<br>2. Preparation and application of compost;<br>3. Addition of organic matter like animal manures including com dung and farmyard manures, green manure, oilcake, industrial organic wastes, homestead waste etc.;<br>4. Incorporation of residues of leguminous crops into the soil;<br>5. Plantation of leguminous varietiesfor nitrogen fixation; |
| 4 | Declines of soil fertility | 1. Crops diversification;<br>2. Balanced fertilizer application;<br>3. Use of mixed fertilizer for balanced nutrients;<br>4. Use of bio-fertilizer or organic fertilizers;<br>5. Top covering and allowing siltation;<br>6. Retaining moisture by straw, hyacinth etc.; |
| 5 | Soil salinity | 1. Use of duck weed for removing soil salinity;<br>2. Discourage drainage to intrusion of saline water;<br>3. Flushing soil with pre-monsoon rain water;<br>4. Shrimp-rice farming system;<br>5. Use of organic fertilizer;<br>6. Drip irrigation; |
| 6 | Pest infestation/management | 1. Integrated pest management (IPM);<br>2. Use of varieties tolerant to pest infestation;<br>3. Crop diversification;<br>4. Use biological trap;<br>5. Planting multiple varieties with varying susceptibility to pests<br>6. Use of pheromone trap;<br>7. Use of light during the darkness; |
| 7 | Maintaining biodiversity | 1. Encourage to increase local species of flora and fauna;<br>2. Propagation and conservation of endangered species in the ecosystem;<br>3. Undisturbed the natural ecosystem, habitat and ecological succession;<br>4. Prohibition of mono-culture as well as introducing exotic species; |
| 8 | Depletion of groundwater level | 1. Emphasize on surface water irrigation;<br>2. Economic use of irrigation water;<br>3. Use of spray method for irrigation;<br>4. Increasing rate of natural recharge;<br>5. Introduce low consumption water varieties or crops;<br>6. Increase use of rain water;<br>7. Renovation of river/canal/pond to collect rain water;<br>8. Increase re-use of ground water by using brown water for flashing toilets; |
| 9 | Salinity intrusion in the Southern region | 1. Increased use of surface water;<br>2. Utilize fresh water raised by high tide; |



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| SL # | Interventions /Environmental Issues | Mitigation measures and Environmental Code of Practices |
|---|---|---|
| | | 3. Avoid groundwater extraction;<br>4. Increase irrigation efficiency and water productivity;<br>5. Rain water harvesting; |
| 10 | Destruction of trees and vegetation or orchard or plant garden | 1. Plant alternative sapling as compensation;<br>2. Revise the proposed plan;<br>3. Compensate plantation in another place or adjacent place; |
| 11 | Impact on fish habitat and migration | 1. Construct passage for fish migration;<br>2. Revise the proposed plan;<br>3. Endangered species may be migrated to another place;<br>4. Avoiding mono-culture and maximize multi-layer fish culture for maximizing resource within limited area; |
| 12 | Obstruction of natural connection between river and wetlands | 1. Construction of culvert or diversion passage;<br>2. Revise the proposed plan for alternative use of recourses for minimizing loss; |
| 13 | Impact on surface water quality | 1. Promote 3R (Reduce, Recycle and Re-use) options;<br>2. Introduce solid waste management;<br>3. Prohibition of dumping polithenes and wastes inside of the river and water-bodies; |
| 15 | Increased noise due to construction activities | 1. Introduce sound proof system (if possible);<br>2. Readymade construction materials may arrange.<br>3. Site may change.<br>4. Using low noise techniques;<br>5. Maximize mechanical lubrication to reduce noise from machines; |
| 16 | Increased windblown dust from materials | 1. Consider weather condition like wind flow, wind speed etc.;<br>2. Rescheduling working time period and time;<br>3. Using musk;<br>4. Using water spray and using wet-net wall; |
| 17 | Health risk to labors involved in project activities | 1. Follow the safety instruction and safety wear;<br>2. Supporting first-aid box and to provide minimal level of training;<br>3. Adequate transport facility to allow a patient into the hospital;<br>4. Enlisting the names and numbers of village doctors in nearby community places/shops; |
| 18 | Plantation which have negative impact on environment | 1. Increase the plantation of local varieties avoiding the exotic species;<br>2. Pruning the bunches of trees before the cyclone period to avoid loss of lives under the broken trees; |
| 19 | Negative impact of electrical waste i.e. acid or lead from battery, used CFL bulb, polythene etc. | 1. Promote 3R(Reduce, Recycle and Re-use);<br>2. Promote specific waste management system;<br>3. Promoting the recycle shops; |

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# Annex-H

## List of Banned Pesticides in Bangladesh

| Name of pesticide | Registration Number | Name of Company |
|---|---|---|
| 1. Diazinon | 14G AP-08 | Shetu Corporation Ltd. |
| 2. Bizaguard | 2P AP-09 | Ciba-Geigy (Bangladesh) Ltd. |
| 3. Roxion | 40EC AP-11 | International Services (Bangladesh) Ltd |
| 4. Dankavapon | 100 AP-13 | Shetu Corporation Ltd. |
| . | 2P AP-19 | Ciba-Geigy (Bangladesh) Ltd. |
| 5. Damphin | | |
| 6. Diazinon | 90L AP-20 | Ciba-Geigy (Bangladesh) Ltd. |
| 7. Damphin 950EC | AP-25 | Ciba-Geigy (Bangladesh) Ltd. |
| 8. Dichlorovos | AP-27 | Bayer (Bangladesh) Ltd. |
| 9. Cureterr 3G | AP-30 | Bayer (Bangladesh) Ltd. |
| 10. 2,4-D Na Salf | AP-34 | Bayer (Bangladesh) Ltd. |
| 11. Folithion ULVC 98 | AP-36 | Bayer (Bangladesh) Ltd. |
| 12. Methybron | AP-38 | Excell trading Co. |
| 13. Heptachlor 40WP | AP-39 | Krishi Banijjya Protishthan |
| 14. Chlordane 40 WP | AP-40 | Krishi Banijjya Protishthan |
| 15. Aerovap 100 EC | AP-41 | Liza Enterprise Ltd. |
| 16. Aerodriel 20EC | AP-42 | Liza Enterprise Ltd. |
| 17. Aeromal 57% EC | AP-44 | Liza Enterprise Ltd. |
| 18. Padan 10G | AP-52 | Data Enterprise Ltd. |
| 19. Fenitrothin 98 | AP-53 | Farm Chemical corporation Ltd. |
| 20. Carbin 85 WP | AP-54 | Farm Chemical corporation Ltd. |
| 21. Diamal 57EC | AP-55 | Farm Chemical corporation Ltd. |
| 22. Detia Gas EXT | AP-56 | Farm Chemical corporation Ltd. |
| 23. Dichlovos 100 | AP-57 | Farm Chemical corporation Ltd. |
| 24. Methyl Bromide 98 | AP-58 | Farm Chemical corporation Ltd. |
| 25. Malathion 57EC | AP-68 | BPI Ltd. |
| 26. Cureterr 3G | AP-69 | Bayer (Bangladesh) Ltd. |
| 27. Dieldrin 20EC | AP-73 | Shell Company of Bangladesh Ltd. |
| 28. Bidrin 24WSC | AP-74 | Shell Company of Bangladesh Ltd. |
| 29. Malathion 57EC | AP-78 | Burma Eastern Ltd. |
| 30. Vapona | AP-79 | Shell Company of Bangladesh Ltd. |
| 31. Bidrin 85WSC | AP-80 | Shell Company of Bangladesh Ltd. |
| 32. Diealdrin 50WP | AP-82 | Shell Company of Bangladesh Ltd. |
| 33. Dieldrin 40WP | AP-83 | Shell Company of Bangladesh Ltd. |
| 34. Furadan 3G | AP-85 | FMC International S. A. |
| 35. Actellic 2% Dust | AP-99 | Bangladesh Manufacturers Ltd. |
| 36. Quickphos | AP-102 | Agrani Traders |
| 37. Torque 550g/l | AP-115 | International Service Bangladesh Ltd. |
| 38. Ridan 3G | AP-131 | Rupali Sangstha Ltd. |
| 39. Bkzne 14G | AP-135 | B. K. Traders Ltd. |
| 40 Aerocypermethrin | AP-137 | Liza Enterprise Ltd. |
| 41. Karmex | AP-145 | BEXIMCO Agrochemicals Ltd. |
| 42. Carbaryl 85Wp | AP-147 | Shetu Corporation Ltd. |
| 43. Agridhan 3G | AP-154 | Shetu Corporation Ltd. |
| 44. Techo 2% Dust | AP-157 | Alco Pharma Ltd. |
| 45. Manex II | AP-163 | Shetu Corporation Ltd. |



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| | | |
|---|---|---|
| 46. Phyto MZ-80 | AP-164 | Liza Enterprise |
| 47. Uniflow TM Sulphur | AP-167 | Shetu Corporation |
| 48. Fenkil 20EC | AP-169 | Agrani Traders |
| 49. Sunfuran 3G | AP-171 | Shertu Corporation Ltd. |
| 50. Hekthion 57EC | AP-178 | Farm Chemicals Corporation Ltd. |
| 51. Poligor 40EC | AP-180 | Farm Chemicals Corporation Ltd. |
| 52. Melbromid 98 | AP-185 | Horizon Trade Ltd. |
| 53. Mebrom | AP-186 | Bengal Wings Trade Ltd. |
| 54. Agrine 85WP | AP-187 | Edgro (Pvt) Ltd. |
| 55. Drawizon 60EC | AP-190 | Keeco Pesticides Ltd. |
| 56. Gastoxin | AP-195 | Bright Corporation |
| 57. Cekumethrin 10EC | AP-219 | Premier Traders |
| 58. Cythrin | AP-220 | Bari and company Ltd. |
| 59. Cekuthoate 40EC | AP-225 | Premier Traders |
| 60. Arifos 20EC | AP-229 | Bari and company Ltd. |
| 61. Malathion 57Ec | AP-230 | Sabrina Trading Corporation. |
| 62. Cardan 5G | AP-234 | Bari and Company Ltd. |
| 63. Diazinon 14G | AP-236 | Liza Enterprise Ltd. |
| 64. Rizinon 60EC | AP-239 | Bari and Company Ltd. |
| 65. Zincphosphide | AP-258 | Liza Enterprise Ltd. |
| 66. Davison Glyphosate | AP-266 | Shetu Pesticides Ltd. |
| 67. Morestan 25WP | AP-269 | BEXIMCO Agrochemicals Ltd. |
| 68. Manzate 200 | AP-301 | Auto Equipment Ltd. |
| 69. Dimecron 100Sl | AP-301 | Novratis (Bangladesh) Ltd. |
| 70. Pillarcron 100SL | AP-148 | Shetu Pesticides Ltd. |
| 71. Benicron 100WSC | AP-06 | Sabrina Trading Corporation. |
| 72. DDVP 100W/V | AP-03 | ACI Formulations Ltd. |
| 73. ChemoDDVP | AP-245 | Chemsfil Bangladesh Ltd. |
| 74. DDVP 100EC | AP-151 | Mcdonald Bangladesh (Pvt) Ltd. |
| 75. Nogos 100EC | AP-26&274 | Novratis (BD) Ltd. |
| 76. Phosvit 100EC | AP-46 | Data enterprises Ltd. |
| 77. Daman 100EC | AP-325 | Petrochem (B) Ltd. |
| 78. Azodrin 40WSC | AP-336 | BASF Bangladesh Ltd. |
| 79. Nuvacron 40SL | AP-18&275 | Novratis (Bangladesh) Ltd. |
| 80. Megaphos 40SL | AP-175 | Mcdonald Bangladesh (Pvt) Ltd. |
| 81. Phoskil 40SL | AP-339 | United Phophorous (Bangladesh) Ltd. |
| 82. Kadette 40WSC | AP-284 | BISCO Pesticides & Chemical Corporation |
| 83. Monophos 40WSC | AP-328 | Alpha Agro Ltd. |
| 84. Monodrin 40WSC | AP-07 | Sabrina Trading Corporation |
| 85. Corophos 40SL | AP-342 | Corbel International Ltd. |
| 86. Luphos 40SL | AP-388 | ACI Formulations LTD. |
| 87. Amcordin 40SL | AP-340 | Atherton Imbros Co. Ltd |
| 88. Vitacron 40SL | AP-341 | Shetu Marketting Co. |
| 89. Monotaf 40WSL | AP-331 | Auto Equipment Ltd |
| 90. Tamaron 40SL | AP-188 | Haychem (B) Ltd. |
| 91. Polythion 50EC | AP-32 | Haychem (B) Ltd. |
| 92. Macuprex 65% | AP-65 | Bayer Crop Science |
| 93. Zithiol 57EC | AP-126 | Rohn Polenk Bangladesh. |
| 94. Delapon Na-85 | AP-66 | Rohn Polenk Bangladesh. |
| 95. Enthio 25EC | AP-64 | Rohn Polenk Bangladesh. |
| 96. Zolone 35EC | AP-67 | Rohn Polenk Bangladesh. |
| 97. Rentokill CC Type 75% | AP-221 | Getco Limited |
| 98. Paramound CC Type | AP-300 | B. D. Associate and Company. |
| 99. Darsbun 20EC | PHP-5 | Auto Equipment Ltd. |
| 100. Darsbun 20EC | PHP-85 | Auto Equipment Ltd. |
| 101. Diazinon 60EC | AP-23 | Syngenta Bangladesh Ltd. |



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| | | |
|---|---|---|
| 102. Mortin King Mosquito Coil | PHP-54 | Reckit and Benckiser |
| 103. Mortin Mosquito Coil | PHP-101 | Reckit and Benckiser |

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# Annex I

## Considerations for impact assessment

**Type of impact:**

*Beneficial and adverse impact*

When the predicted impacts of the interventions are useful or beneficial and are not detrimental to the immediate or surrounding environment as a whole or to any of its component will be identified as beneficial. But when the impacts are not useful or beneficial and are generally detrimental to the immediate or surrounding environment as a whole or to any of its components will be identified and marked as'adverse'.

**Magnitude/ severity of impact:**

*None:* When it is clearly understood that there is no impact of the intervention.

*Minor (Low):* When it is felt or clearly understood that there is impact but that is not a significant one and generally does not require any special corrective or mitigation measures and often expected that the impact will be corrected naturally or automatically over a period of time or even if that is not corrected will not bring any consequence of significance.

For example: Improper management of construction debris and solid waste could cause blockage of drainage line/ path and environmental pollution. With some measures these minor problems can be mitigated easily. Impacts due to felling of a few immature small locally available trees or shrubs will be minor.

*Moderate (medium):* when it is felt or clearly understood that there is significant impact but that is not an extreme one though generally may require some kind o corrective or mitigation measures and it is not generally expected that the impact will be corrected naturally or automatically over a period of time.

For example, not matured but reasonably grown tree cutting in the community may have impact of moderate magnitude to settlement environment, aesthetics, horticulture, timber availability, birds nesting, soil stability etc.

*Major (High):* When it is felt or clearly understood that there is impact of very significant nature and obviously will require mitigation measures to address the problem to significantly minimize the consequences of the impact. It is not expected that the impact will be corrected naturally or automatically. It is often anticipated in such case that the consequences will not be completely mitigated and the original situations not restored but the mitigation may bring down the consequences of the impact of significance.

For example: Deforestation of a small patch forest would have major impact on the environment. Or if a pond located close to a sub-project (toilet) site is used for washing/ bathing or for fish culture, pollution of the pond from fecal discharge would generate significant adverse impacts.

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