ENVIRONMENTAL IMPACT ASSESSMENT

Evaluation of legislations in countries of Africa and South Asia

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Introduction

The urgent need for economic prosperity and development has imposed pressure on the earth's limited natural resources, creating the need to make development sustainable. It is here that scientific tool like Environmental Impact Assessment (EIA) plays a critical role in preventing environmental harm and mitigating loss. It is a policy instrument that can be used to ensure equitable use of natural resources and prevent pollution and/or degradation.

Environmental Impact Assessment (EIA) is a science-based decision-making process by way of which adverse impacts on the environment are assessed for various kinds of developmental projects. It has proved to be an efficient and effective tool in predicting environmental impacts at an early stage of project planning and design, exploring means and techniques to reduce adverse impacts, customizing projects according to the local environment and presenting better options to decision makers. Apart from evaluating and predicting future impacts, EIA is also an exercise for maintaining environmental quality. With the aim of better decision making, it also involves stakeholders other than proponents, regulators and facilitators, i.e. the community that often gets affected by these projects. This ensures logical and rational decision making along with the support of the local community.

Environmental Impact Assessment allows development to be sustainable as it maps out environmental consequences, possible alternatives and mitigation strategies for a project. In the global perspective, this integrative strategy of environment with development serves the broader context of concern against impending global disasters caused by major developmental projects.

An EIA should not be used just as a means for obtaining environmental clearance; rather, project proponents should use it as a management tool to assess the sustainability of a project plan. Alongside, competent authorities must ensure that a project causes minimal adverse environmental impacts and generates maximum social and economic benefits. In many countries, EIA is also used as a tool to monitor compliance with promises made at the inception of a project.

EVOLUTION OF EIA

Environmental Impact Assessment was introduced as a framework for environmental laws in the 1960s in USA.[1] In 1980s, the United Nations Environment Programme (UNEP) supported research on developmental proposals of EIA by providing guidelines. The Goals and Principles of Environmental Impact Assessment was finally established in 1987.[2] These set of goals and principles provided guidance on how to conduct EIA in 1988 for the Organization for Economic Co-operation and Development (OECD) countries.[3] The 13 rules outlined in this document seek to make it easier for member nations to implement and promote EIA systems.[4] Later, the European Union passed the EIA Directive (85/337/EEC) in 1988 specifying minimal procedural parameters for an EIA procedure and the projects that must be EIA-ed.[5]

The United Nations Conference on Environment and Development in Rio De Janeiro, held in 1992, affirmed the role of Impact Assessments on an international level as a universal decision-making tool to map possible mitigation measures amidst complex environmental impacts of projects. Principle 17 of the Rio Declaration on Environment and Development reiterates the requirement of a nation to conduct environmental impact assessments for activities that are likely to have a significant adverse impact on the environment.

TIMELINE ON EVOLUTION OF EIA

Pre 1970	· Projects review based on technical/engineering and economic analysis · Limited consideration given to environmental consequences
Early or mid 1970	· EIA introduced by NEPA in 1970 in US · Several other countries adopt NEPA-based approach (e.g. Canada, Australia, New Zealand)
Late 1970 and early 1980	· Use of EA by developing countries (e.g. Brazil, Philippines, China, Indonesia)
Mid 1980 to end of decade	· EC Directive on EIA establishes basic principles and procedural requirements for all member states · World Bank and other international lending and aid agencies establish EA requirements. · More developing countries adopt EIA system. · In 1987 the "Goals and Principles of Environmental Impact Assessment" was adopted.
1990s	· Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991) · EIA identified as implementing mechanism for UN conventions on climate change and biological diversity. · Greater corporate use of EA · Enactment of EA legislation by many developing countries[6] · Aarhus Convention 1997[7]

Chapter 1: Process of EIA

1.1 Screening

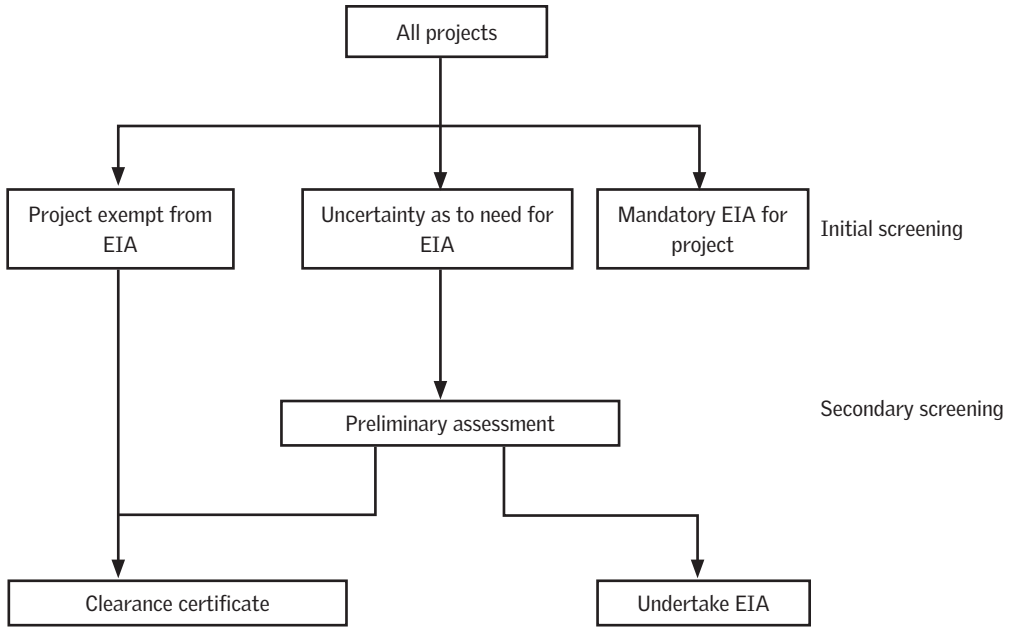
Screening is the initial stage of an EIA process. It determines the very first question of whether an EIA assessment should be conducted for a particular project or development activity. This is a critical task as often a development project might seem low risk at face, but a second look reveals a plethora of issues that may need to be addressed, including sewage and waste management, removal of endangered flora and fauna etc. To make a decision in this stage, the decision maker predicts the magnitude, prevalence, duration and frequency, risks and importance of a specific project.

Objectives of the screening stage include the following:

1. Determining whether a developmental project should be subject to Environmental impact assessment;
2. Driving a precautionary approach by aiding prevention;
3. Protecting the productivity and capacity of natural systems and ecological processes; and
4. Promoting development that is sustainable and optimizes resource use.

There are two ways in which a screening may take place. The first is the threshold approach under which the legislation of a country publishes a list of projects under different categories and the need for them to conduct an EIA. The categories and lists are largely set on the basis of size of the projects and its impact on environment. The second approach focuses on a case-to-case scrutiny of projects where regardless of the size and capacity of the project, every proposal submitted is examined. Though the second approach seems more rigorous, since it is dependent on the discretion of the reviewing authority, it may lead to biased decisions.

Figure 1: Screening process



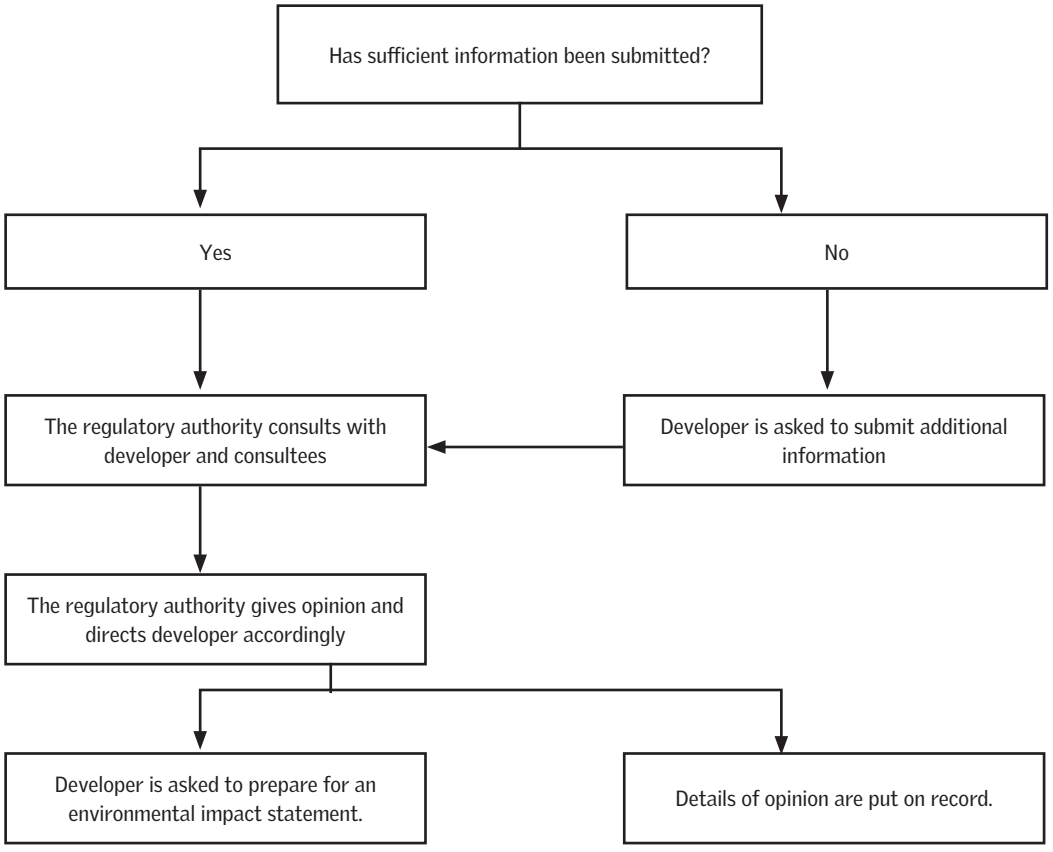
Source: Compiled by CSE

1.2 Scoping

The next step in the EIA process is to determine the issues associated with projects and/or development activity. Within this, once the projects are screened, a project description is required to be submitted for a case-to-case analysis. Usually, a project description is to be submitted by the proponent with or without the assistance of environment consultants/practitioners. This step ensures study of possible impacts and effective prevention measures related with the proposal by collecting detailed set of information. The scoping process generates terms of reference (ToR) for the project, which sets out the approach required to be followed by the proponent while undertaking the detailed EIA. The scoping process—which varies country-wise—is practised through either an Initial Environmental Examination (IEE), Environmental Project Brief (EPB), environmental overview or similar process.

The information needed at this stage includes location of the project, description of the proposal, existing land use and commitments, abundance, quality and regenerative capacity of natural resources impact on the land and through the project, waste generation and management, adherence with notified environmental quality standards, degree of public opinion, and interest about the proposal etc.

Figure 2: Scoping process



Source: Compiled by CSE

1.3 Environmental Impact Assessment report

An EIA report is the core of the whole EIA process. To assess a project proposal objectively, it is pertinent to have a solid data base. This is enabled by gathering essential information regarding the nature and characteristic of the planned project, the selected site and its surroundings. The impact of the project can be assessed by evaluating the baseline data information and co-relating it with the anticipated impacts of the proposed project. Where the required baseline data is not available it must be measured, taking into account seasonal variations.

The EIA report also presents mitigation measures and management plan to control any adverse impacts on the surroundings likely to emanate from the project. This stage also involves consultation with the nearby inhabitants and other relevant stakeholders and incorporation of their suggestions/grievances. Hence, an Environmental Impact Assessment study report helps in impact identification and thus in impact mitigation measures.

The information needed for an EIA report includes:

- Description of proposed activity (analysis of need);
- Analysis of site selection procedure and alternate sites;
- Baseline conditions of environment;
- Description of potential positive and negative environmental, social, economic and cultural impacts including cumulative, regional, temporal and spatial considerations;
- Mitigation plans;
- Consideration of alternatives;
- Waste minimization and recycling plans;
- Public consultation programme;
- Rehabilitation plan, if applicable;
- Monitoring and management plans; and
- Any other information deemed necessary.

1.4 EIA review

This stage entails detailed scrutiny by an expert committee of the EIA report and other relevant documents like proceedings of public hearing etc. This allows the experts to get an understanding of the anticipated impacts from a particular project and evaluate whether the mitigation measures proposed by the applicant are sufficient considering the degree of impacts. It also allows the expert members to discuss and propose any additional studies required for the projects as a step towards reducing the adverse impacts from the project. The EIA review step thus ensures that the committee has a complete understanding and assessment of the project while providing the best measures to control any harm from the project.

1.5 Post-clearance compliance mechanism

Compliance mechanism is an integral part of the Environmental Impact Assessment as it is the driver for the success of an EIA. The proponents often consider the EIA process to be over after the stage of clearance certification; however, as the EIA process comprises interdependent stages, certification is incomplete if effectual monitoring and compliance is not achieved. It is the biggest impediment in achieving positive results through the process.

The set of processes included within this and their efficiency are reflective of the success of institutional capacity and its role in monitoring and evaluation of EIA activities, evaluation of the EIA system and utility of EIA as a larger scheme.

The following are a set of objectives of the compliance mechanism:

1. Enforcement action to be carried out in a fair and transparent manner;

2. Using EIA as an early warning system to identify possible harmful effects in a project life cycle;

3. Opportunities to respond to changes in project and analyse them;

4. Reducing uncertainty;

5. Checking conformance of the identified mitigation plan; and

6. Using the monitoring results and conformance results as a method of calculating environmental compensation in cases where release of pollutants injurious to health to victim or causes damage to receiving environmental components. There shall be penal provision in legislation if blatantly violated the norms of clearances either in terms of punishable with imprisonment/ closure or with fine or both.

Although several benefits are associated with the process of EIA, it also presents challenges. Many of these challenges stem from the fact that the process is still evolving in many developing counties.

This report discusses EIA process in 11 African and South Asian countries and attempts to understand the shortcomings as well as best practices followed by these countries. The evolution of EIA and the process of assessment in each country is discussed further in the section.

1.6 Country-wise EIA process

1.6.1 Bangladesh

In pursuance of achieving sustainable development goals, Bangladesh has initiated a number of environmental regulations and rules to mitigate climate change and anthropogenic pollution. Following the general recommendations of the Rio Earth Summit, the National Environmental Policy was framed in 1992 for the protection of the environment in Bangladesh. It was the first time when EIA was recommended as an important decision support tool. Local government, rural infrastructure and national-level policies were all incorporated in the formulation of guidelines. The Guidelines on Environmental Issues Related to Physical Planning (Local Government Engineering Department [LGED], 1992) and the Flood Action Plan (FAP), were such initiatives to study the causes and nature of flood in Bangladesh.[8]

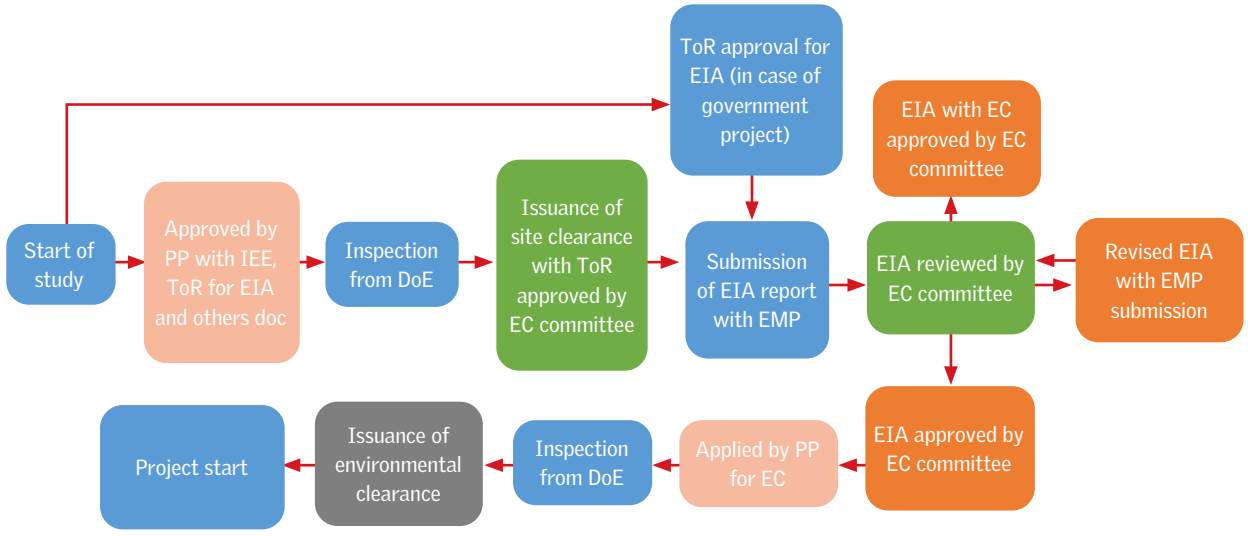
During the subsequent amendment, in LGED 1995, the introduction of the concept of initial environmental examination was included before the environmental impact assessment. In 1995, the government of Bangladesh along with the United Nations Development Programme (UNDP) prepared the National Environmental Management Action Plan, which laid the framework for the National Conservation Policy. Consequently, to strengthen this policy, the Environment Conservation Act, 1995 and Environment Conservation Rules (ECR), 1997 were introduced, which formalized the idea of EIA.

The Ministry of Environment and Forest (MOEF) is the principal government organ to deal with environmental activities in Bangladesh. Under the ministry, the Department of Environment (DoE) is authorized to look into the environmental matters related to planning, management and monitoring. DoE is solely responsible for reviewing and approving EIA reports in the country. They are authorized to issue environmental clearance for all types of industrial units and projects. DoE is also mandated to formulate environmental guidelines.

The Environment Conservation Rules (ECR), 1997 classifies industrial units and projects into four categories: Green, Orange-A, Orange-B and Red, based on the project location and impact on the environment. A list of projects and/or activities for different categories is provided in Schedule I of the ECR.

Projects categorized as Green and Orange-A are required to submit only an application form providing general information about the project, raw material and product, layout plan, effluent treatment plant (ETP) discharge etc. Projects

Figure 3: Environmental clearance methodology in Bangladesh



Source: Environment Conservation Rules, 1997

categorized as Orange-B are required to submit an Initial Environmental Examination (IEE) in form of pre-feasibility report and Environmental Management Plan along with the application form. Red category projects require both IEE and the EIA study.

Green category projects require only an Environmental Clearance Certificate (ECC) while projects under the remaining three categories are required to obtain a land clearance certificate before ECC. Upon receipt of location clearance certificate, proponents with Orange-A or Orange-B category are allowed to undertake land and infrastructure development activities, including installation of machinery and ETP. Once these activities are completed, the proponent is required to apply for the ECC without which the operation of the unit is not allowed. Red category projects, however, needs to submit the EIA report for approval to the DoE upon receipt of land clearance certificate (see *Fig. 3: Environmental clearance methodology in Bangladesh*).

1.6.2 Bhutan

The National Environment Commission (NEC) was formed after the Paro Workshop on Environment and Sustainable Development in 1990. NEC was tasked to develop a national strategy with an objective that there was a need to consider environmental concerns. The ultimate goal of this strategy, called the National Environment Strategy (NES), was to minimize or mitigate the impacts likely to result from the development process.[9]

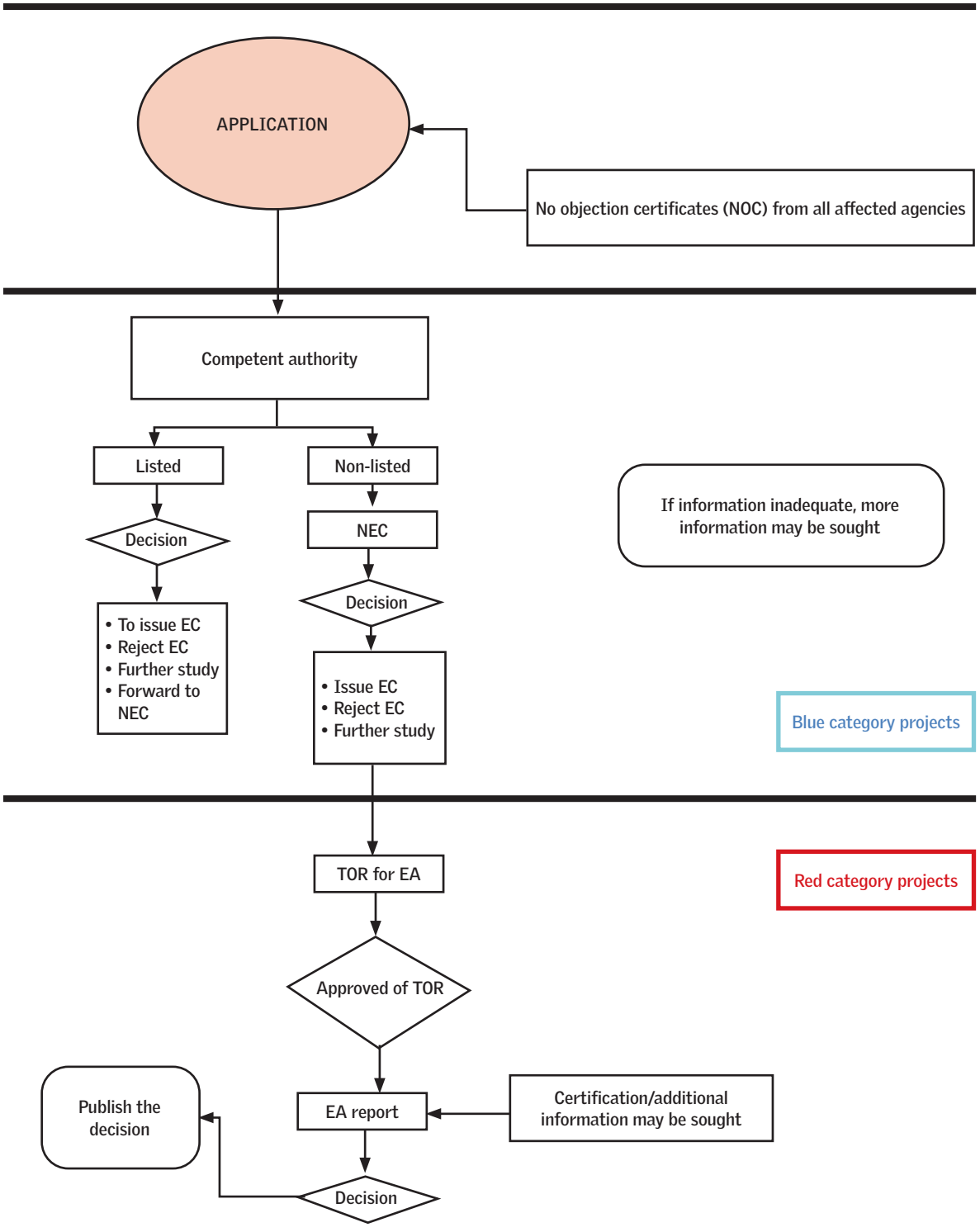
Before the introduction of NES, the focus had been on planning for a developmental target. These targets, called five-year plans, were meant to be achieved in a five-year term. With time, the achievements from the plans led the government to carry out more of such five-year targets, but this time shifting focus from sectoral policies to make space for environmental considerations. In 2000, with the need to strength more environmental aspects, in the year 2000, the Environmental Assessment Act was established. The Act established procedures for assessing potential effects of strategic plans, policies, programmes and projects on the environment. This act was crucial in developing the EIA process in Bhutan and is still in use.

Following this act, eight more guidelines were developed to support regulation in the sectors of forestry, hydropower, mines, tourism, highways and roads, transmission lines, urban development and industry. Later, in 2007, with a reaffirmation to secure a minimum of 60 per cent of Bhutan's land area under forest cover, the National Environment Protection Act was enacted. In 2016, in view of the efficacy of different environmental acts already in use and the necessity to amend provisions regarding the requirements for projects clearance, regulations for environmental clearance were formulated.

The National Environment Commission (NEC) is responsible for the overall management of the environment. Under the NEC, the decision-making power has been given to the secretariat (NECS). The secretariat looks after the different divisions, one being the environmental assessment and compliance division which issues environmental clearances and monitoring.

NEC has developed the list of projects categorizing each into Green, Blue and Red categories. The EIA process requires submission of an application form, also referred to as Initial Environmental Examination (IEE) to the competent authority. The competent authority is the Environment Assessment and Compliance Division (EACD), who reviews and assesses the project application for listed projects and issues environmental clearance. In the case of non-listed projects, the application is forwarded to the secretariat for screening and assessing the potential environmental effects of the project and determining whether or not the project is required to carry out an EIA study. If an EIA study is needed, the proponent is asked to perform it on the basis of terms of reference (ToR) approved by the secretariat. The proponent is also mandated to ensure that the concerned people and organization are informed and consulted and the same should be recorded in the EIA report. On submission of EIA report, the secretariat publishes the summary of the report on the official webpage and other print media for public comments (see *Fig. 4: Environmental clearance procedure in Bhutan).*

Figure 4: Environmental clearance procedure in Bhutan

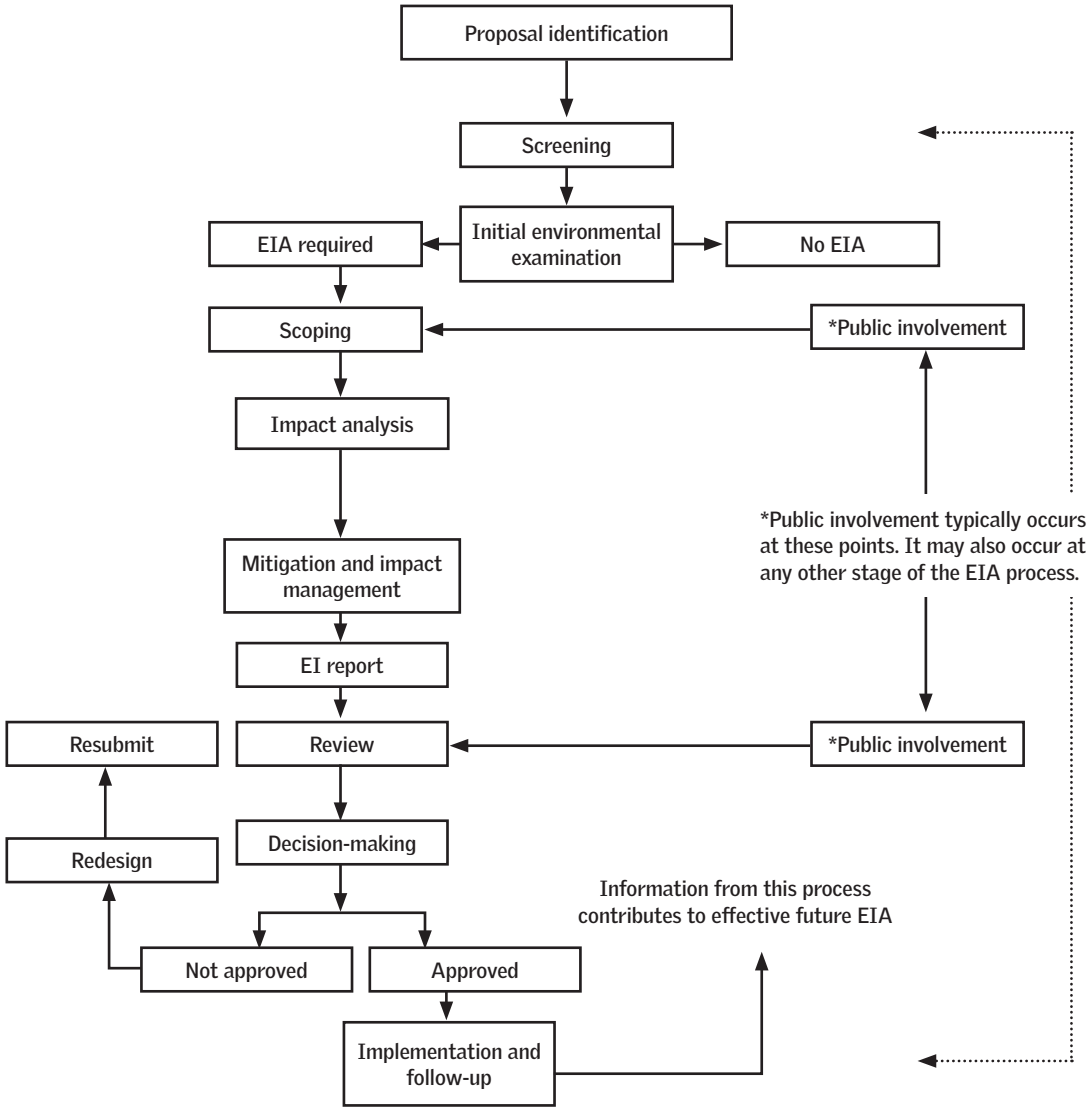


Source: Environment Assessment and Compliance Division, National Environment Commission, Environmental Assessment Act 2000

1.6.3 Ethiopia

Environmental considerations were recognized as early as 1980 in Ethiopia following water resources developmental projects assisted by UNDP and WHO. Until 1995, however, the country did not have an environmental legal policy of its own. In 1995, the Constitution of the Federal Democratic Republic of Ethiopia (FDRE) incorporated EIA into the legislation.[10] Article 92 of FDRE expressed that developmental progress should not destroy the environment and also discussed public participation in the planning and implementation of projects. Later, in April 1997, the Environmental Policy was formulated for the country with the goal of improving and enhancing the health and quality of life of all Ethiopians

Figure 5: EIA procedure in Ethiopia



Source: EIA proclamation No. 299/2002, ESIA Procedural Guideline 2003

and promoting environmental and social development. Following the provisions of environment policy, the Ethiopian government introduced the Environmental Impact Assessment Proclamation 299 of 2002. The proclamation mandated an EIA process for all planned development projects or public policies which are likely to have a negative impact on the environment. In 2003, EPA formulated the EIA procedural guideline series 1 and EIA reviewing guidelines, which elaborate the procedure for conducting the EIA in the country along with the roles of various stakeholders. The Environment, Forest and Climate Change Commission (EFCCC) and Regional Environmental Agencies are responsible for evaluating EIA reports at the federal and state levels respectively.

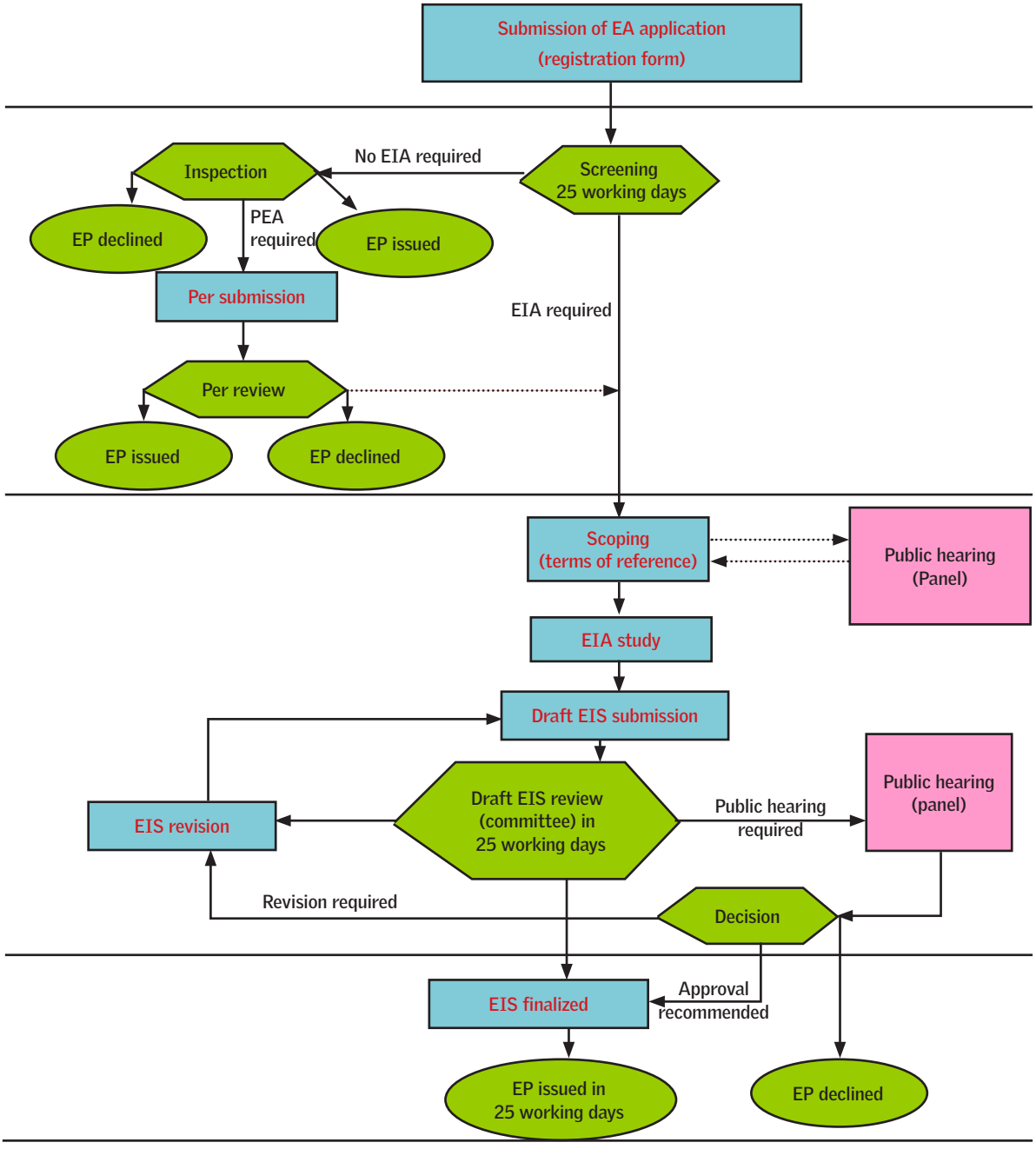
The EIA process in the country initiates with the project proponent submitting the project profile or an initial environmental examination (IEE) to the relevant environmental agency. The agency on assessing the report, generally termed as screening report, determines if the project requires a preliminary assessment, full EIA or no EIA based on the likely impacts of the projects. The Terms of reference (ToR) are approved by the agency for projects that require a full EA study. The country has provision for public participation at this stage, before the ToR is finalized. Public opinion is also involved once the EIA report is prepared by the proponent. On the completion of public consultation, the agency reviews the full EIA and takes a decision to approve or disapprove the project (see *Fig. 5: EIA procedure in Ethiopia*).

1.6.4 Ghana

The Ghana Environmental Protection Council (EPC) was set up in 1974. Subsequently, in 1976, it was amended as the sole government body to look after environmental affairs. In 1985, with an intention to develop EIA system in the country, EPC set up a committee to examine ways in which EIA can be introduced in the country. This led to the inauguration of the National Environmental Management Plan (NEAP) in 1989.[11,12] NEAP called for institution and implementation of an environmental quality control in the form of environmental assessment of all projects with negative impacts on the environment.

NEAP's proposal was strengthened in the 1990s when instances of human health problems due to pollution from neighbouring industrial activities came to light. Following these series of events, the Ghanaian government, in 1994, passed Act 490 to legally establish an Environmental Protection Agency (EPA); EPC was renamed EPA. The Act specified that EPA can ask any project proponent to submit the Environmental Impact Statement (EIS) if the project seems to have negative effects on the environment. The Act was followed, in 1999, by the enactment

Figure 6: Administrative flow chart of the EIA procedure in Ghana



EIA—Environment impact assessment
EIS—Environment impact statement
PER—Preliminary environment report
PEA—Preliminary environment assessment
PH—Public hearing
WD—Working days required for review
EA—Environment assessment
EP—Environment permit

EPA action
Proponent action
Public

Source: Environmental Assessment Regulations ,1999(LI 1652)

of Environmental Assessment Regulations to support Environmental Impact Statement (EIS).

The Environmental Protection Agency of Ghana (EPA)—the lead agency that looks into the overall process of EIA—not only issues environmental permits to the proponents but also advises ministers while implementing new changes in the legislative laws. Schedule 1 and 2 of EAR, 1999, provides the list of projects categorizing whether they require EIA or not.

As a first step of the process, the project proponent has to submit to EPA an application form for obtaining an environmental permit, irrespective of the type of the project. The EPA then screens the application form to determine whether the project requires a preliminary environmental report or environmental impact assessment or can be granted an environmental permit. The screening step is also accompanied by an inspection by the agency to the project site.

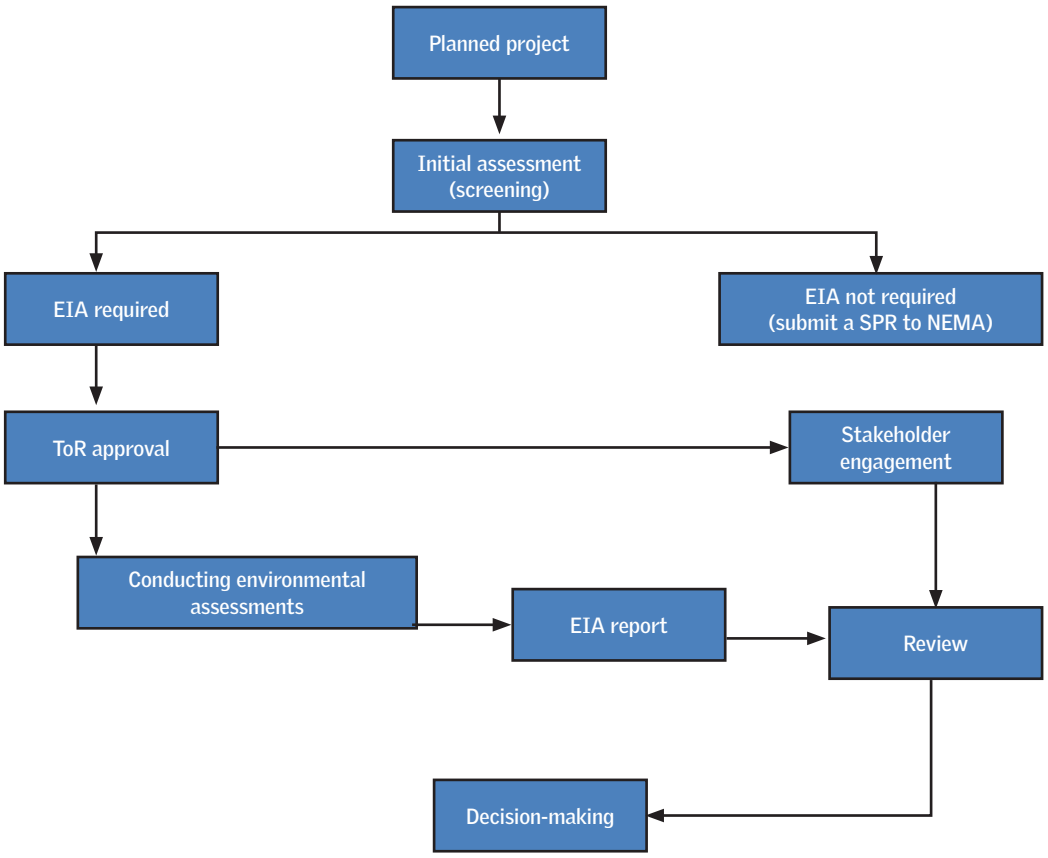
Projects that require an EIA study are required to undertake a scoping study and submit the report to the agency along with the draft terms of reference (ToR). Once the ToR is approved by agency, the proponent is required to publicize the scoping report through advertising in newspaper and submitting copies to the relevant ministries. The same exercise is required to be performed by the proponent after completion of the draft EIA report. The agency will conduct the public hearing on submission of draft report by the proponent. The EPA finally reviews the EIA report after receipt of the recommendations of public hearing and either approves the permit or ask for more information, if required (see *Fig. 6: Administrative flow chart of the EIA procedure in Ghana*).

1.6.5 Kenya

In Kenya, the first legislative act that necessitated EIA in the country is the Environmental Management and Coordination Act (EMCA), 1999. Section 58–67 of Part VI of the Act provides details on the EIA process, governance and procedures. The Act also discusses provision of public participation in environmental law and access to justice. The EIA provisions of the Act, however, gets operationalized via Environmental (Impact Assessment and Audit) Regulations passed in 2003.

The regulations apply to all policies, plans, programmes and projects. It provides guidelines on environmental management and assessment, preparation of a project report, EIA study, environmental audit and monitoring, miscellaneous provisions such as environmental assessment and regional and international issues, appeal to the tribunal and fees paid to NEMA for submitted EIA reports.

Figure 7: EIA procedure in Kenya



Source: The Environmental (Impact Assessment and Audit) Regulations,2003, The Environmental Management and Coordination Act, Legal Notice No 31,2019

Thus, the regulations document is an excellent reference on the implementation of provisions in EMCA. Later, the need for amendment in the regulations was realized due to continuous increase in new kinds of activities and thus requiring better environmental management approach to guide such activities. Thus, an amendment to EMCA was made in 2019 via Legal Notice 31, which provides risk-based categorization of projects (low-, medium- and high-risk projects) that undergo the EIA process.

The National Environment Management Authority (NEMA) was made the responsible agency for all activities related to EIA under EMCA, 1999. Since the EIA process in the country is a decentralized function of the authority, the EIA study reports for high-risk projects are processed at the headquarters of NEMA while the EIA Summary Project Reports (SPRs) and Comprehensive Project Reports (CPRs) for low- and medium-risk projects are processed at the NEMA's county offices in the 47 counties.

All low- and medium-risk projects are required to submit an online application along with a Summary Project Report (SPR) by the proponent. After screening and assessment by the agency, the projects are granted approval if they are not likely to have any significant environmental impact. If the planned project is considered to have significant environmental impacts, the authority recommends that the proponent submit a comprehensive project report (CPR). On receipt of CPR, the report is sent to lead agencies for review and comments and a license is issued for approved projects. For projects requiring an EIA study, an online application form and SPR along with the draft TOR for approval are required to be submitted. On approval of ToR, the EIA reported is submitted to NEMA, which in turn shares it with lead agencies for review. Additionally, NEMA also publicizes the report by publishing it on its website and providing a public disclosure notice in newspapers and radio for oral and written comments. Once the time frame for public comments is over, the report is reviewed and license is issued. The project may also undergo public hearing if it is found to be controversial or complex (see *Fig. 7: EIA procedure in Kenya*).

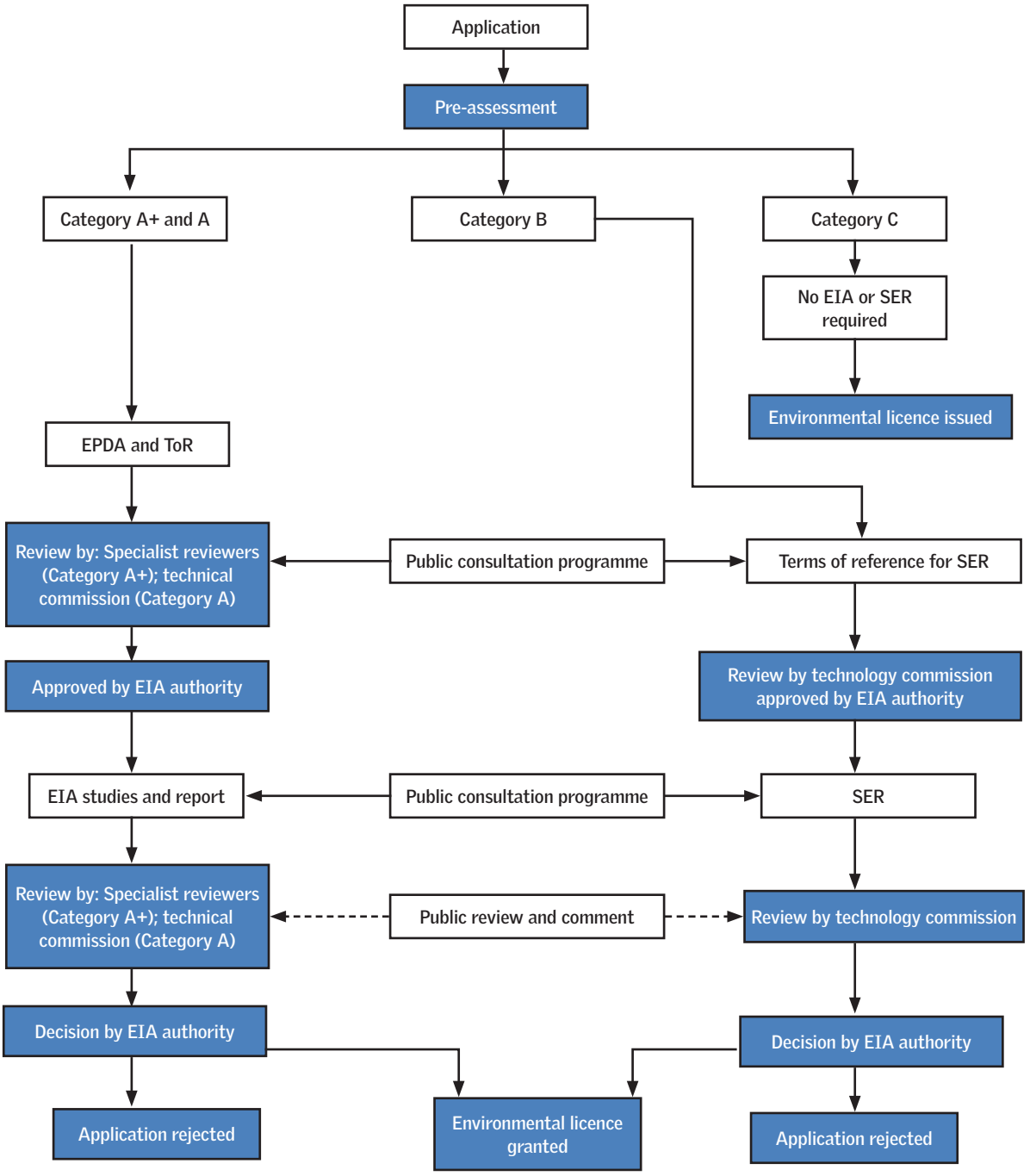
1.6.6 Mozambique

The recognition of outdated policies and laws of the country related to environmental protection led to the development of National Environmental Commission (NEC) in 1990 by the government of Mozambique. Later, in 1994, as environmental issues began to receive higher precedence, the government of Mozambique created the Ministry for Coordination of Environmental Affairs (MICOA) from the NEC in an effort to ensure sustainable development along with its economic growth. In 1996, MICOA formed the National Environmental Management Programme (NEMP) to promote and implement sound environmental policy. NEMP proposed the Framework Environmental Act (FEA) which was subsequently passed in 1997. The Framework Environmental Act (FEA) sets the foundation of legal framework for the use and management of the environment and to assure sustainable development. It also mandates environmental licensing for activities that may have significant impacts on the environment.

Following the mandate, the first regulation of EIA was established in 1998 (Decree 76/98 of 29 of December) detailing the EIA process. The final EIA regulation, after several amendments to 1998 regulation, was enacted in 2015 (Decree 54/2015). The 2015 regulation also made Ministry for Land, Environment and Rural Development (MITADER) responsible for project appraisal and authorization. In 2020, the Ministry of land and environment (MTA) was created following the presidential decree No.1/2020.MTA currently looks into all the environmental related matters of the country.

The Decree 54/2015 categorizes the projects into A+, A, B and C. Projects under category A+ and A requires an full-fledged EIA, category B projects a simplified EIA, and category C projects have to comply with general procedures of good

Figure 8: EIA procedure in Mozambique



Source: Environmental Impact Assessment Process Regulation (Decree 54/2015, of 31 December

practice in environmental management. The environmental assessment process in the country starts with the submission of an application by the proponent to the MITADER. The ministry then categorizes the project into one of four groups based on the level of impact it is likely to have on the environment. While activities under category A+ and A, an Environmental Pre-Viability Study (EPDA) is required along with draft Terms of Reference (ToR); activities under category B requires ToR and Simplified Environmental Report (SER), but no EPDA. The EPDA and ToR (for both SER and EIA) are required to undergo public review before their submission to the authority. These documents are then reviewed by the technical committees of MITADER for approval. On approval, the project undergoes category A and A+ carries out EIA studies whereas category B projects carries SER. Both EIA and SER are again required to go through public consultations before submitting it to the authority for approval. The technical committee may conduct an additional public review for both EIA and SER if deemed necessary. After reviewing the SER and EIA, the committee either grants the license or rejects the application (see *Fig. 8: EIA procedure in Mozambique*).

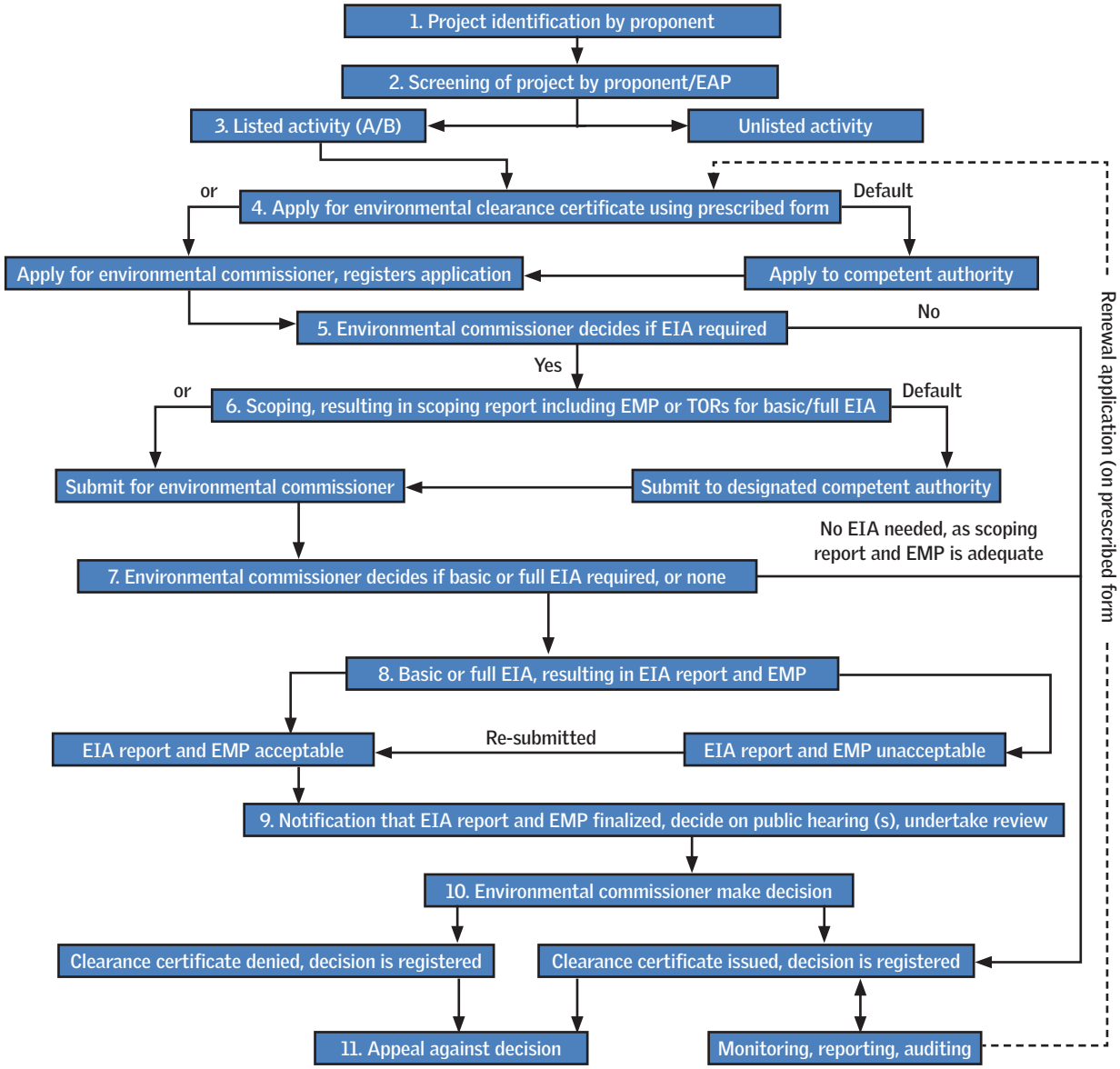
1.6.7 Namibia

In Namibia, an Environmental Impact Assessment was initially included as a part of oil and natural gas projects under Petroleum (Exploration and Production) Act No. 3 of 1991 and Minerals (Prospecting and Mining) Act No.33 of 1992. Sections 55 and 12 of the aforementioned acts mandate projects to carry out an assessment beforehand for these projects. Later, after the conference on Environment and Development in Rio de Janeiro, which affirmed the role of impact assessment as a decision-making tool, the newly formed Ministry of Environment and Tourism conducted inter-sectoral dialogues on Sustainable Environmental Management and came up with a draft of the Green Plan, 1992. The country worked on EIA regulations for a few years and finally in 2007 laid down the official regulation with relation to Environmental Impact Assessment through the Environmental Management Act (EMA). Followed this, in 2012, Environmental Impact Regulations were enacted in the Gazette.

The Ministry of Environment, Forestry and Tourism has been designated as the sole authority to review, process and authorize environmental certificates as part of environmental impact assessments. The EIA process in the country requires registering the proposed project by the proponent via submission of an application to the Environment Commissioner (EC). On assessing the project, the EC determines whether the EIA is required or not project. The EC during this step may consult the organ of state where the project location is proposed. The projects that require environmental assessment, the proponent submits the draft

scoping report to the competent authority which will be forwarded to the EC for finalization of ToR. The proponent undertakes the assessment studies according to the ToR points and submits the EIA report to the EC for review. On the receipt of the EIA report, the EC makes it open for public scrutiny and comments. On completion of giver timeframe for public comments, the EC reviews the report along with the comments received from public and provides decision on approval or rejection of project (see *Fig. 9: EIA process in Namibia*).

Figure 9: EIA process in Namibia



Source: Provision for EIA is made in Part X of the Environmental Management Act (EMA) No. 7 of 2007

1.6.8 Nepal

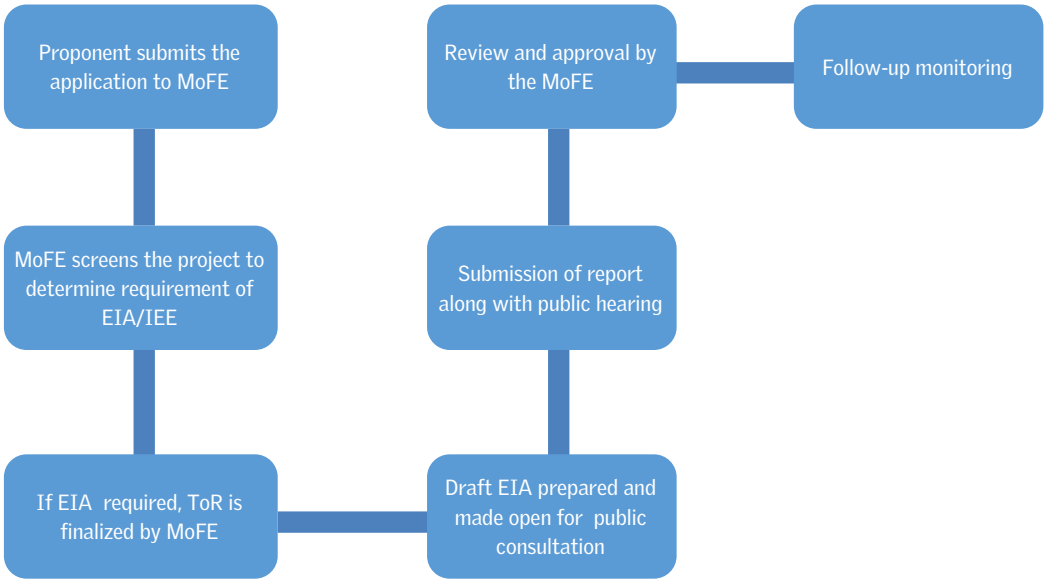
In Nepal, the concept of Environmental Impact Assessment first arose during the sixth five-year plan. The plans are basically national agendas where the government proposes to address specific issues and plan programmes to mitigate or minimize them.

During the sixth five-year plan (1980–85), a programme was introduced as the Environmental Impact Study Project. It was the first time that the concept of EIA was integrated for infrastructural developmental projects. The following five-year plans ensured the environmental impacts were adequately addressed, and the scope of EIA was increased. However, the eighth five-year plan (1992–97) saw a remarkable change in the environmental assessment process leading to the institutionalization of EIA in the country. During this plan, the country also formulated the national EIA guidelines in 1993 called the National Environmental Impact Assessment Guidelines to integrate EIA in national policy and development. Following this, in 1996, the Environment Protection Act was enacted. The Act was followed by the Environment Protection Rules (EPR), which were enforced in 1997. The rules have defined the categories and magnitude of projects that needs to undergo environmental assessments.[13,14]

The EIA process requires submission of preliminary information by the proponent to the Ministry of Forests and Environment (MoFE). Schedule 1 and 2 of the ECR, 1997 clearly categorizes the projects that require environmental impact assessment (EIA) and initial environmental examination (IEE). While projects with known environmental impacts and whose mitigation measures can be easily identified are required to undergo IEE (Initial Environmental Examination), others are mandated to conduct an Environmental Impact Assessment (EIA). Upon screening, the Terms of Reference (ToR) is approved on the basis of which the EIA report is to be prepared by the proponent. The draft EIA report is required to be made public for review and comments.

The final EIA after incorporation of public comments is reviewed by MoFE for a final decision. The role of MoFE does not end after granting clearance to the project; it also carries out monitoring of the approved project for two years after implementation and maintain the records.

Figure 10: EIA procedure in Nepal



Source: Compiled by CSE

1.6.9 Sri Lanka

In 1976, a review by an expert from United Nations Environment Programme (UNEP) highlighted that Sri Lanka had not taken into account the environmental policies and laws in the developmental plans. Following this, in 1978, the government of Sri Lanka incorporated the concept of environmental conservation in Article 18 of the Constitution.

With the development in environmental conservation, a need for a legally binding Act addressing the overarching issues of environment was understood, leading to the enactment of the National Environment Act (NEA) in 1980. The concept of EIA was, however, first introduced in the Coast Conservation Act, No. 57 of 1981, which covered projects coming under the Coast Conservation and Coastal Resources Management Department. Later, in 1988, an amendment to the NEA (1980) introduced EIA for the entire country, including legal provisions in the Act. Further, in 1993, the EIA was made mandatory throughout the country for prescribed developmental projects.[15]

The EIA process in Sri Lanka is managed through Project Approving Agencies (PAAs). PAAs comprise representatives of different government ministries, including National Planning, Forests, Energy etc. and departments such as Urban Development Authority, Geological Survey and Mines Bureau, which

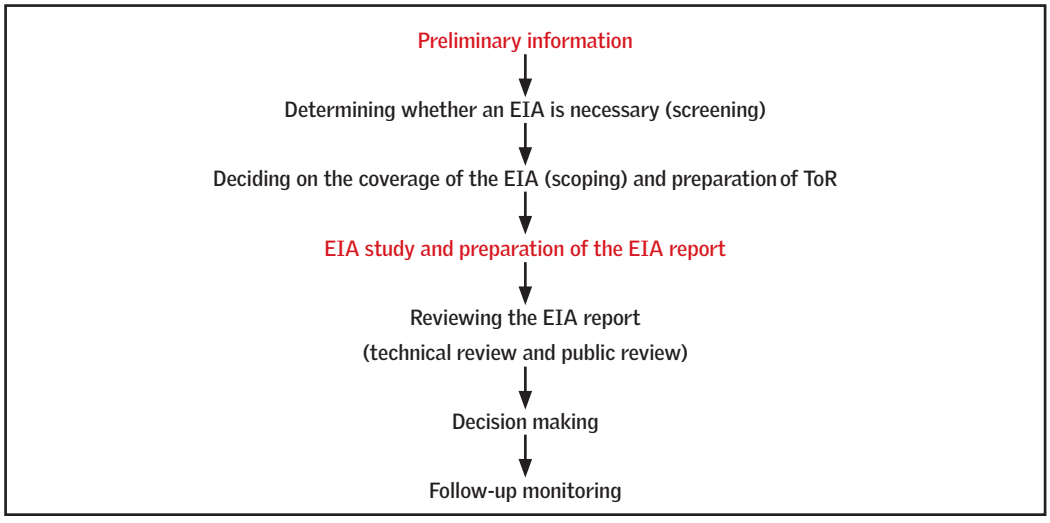
are responsible for administering EIAs for projects. The Central Environmental Authority (CEA) is the lead PAA and designates a suitable PAA for each EIA project.

The EIA process in the country is practised at two levels: Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA). EIA is required only for "prescribed projects" as listed in the Gazette No. 772/22 of June 24, 1993. The prescribed projects are described according to type and magnitude and location of project in sensitive areas.

The first step of the EIA process requires submission of application form along with a brief description of project and documents related to PAA. On scrutiny, the PAA decides if a project needs an IEE or EIA or if an IEE needs to be updated to EIA considering the impact of the project.

Once a decision is made, the PAA in consultation with CEA develops the Terms of Reference (ToR) for IEE or EIA as per the project. On submission of IEE and EIA reports, while IEE is assessed by PAA for rejection or approval of certificate; EIA is put up for public review by publishing notice in national newspaper for 30 days. On completion of the time period for public review, the comments received from the public are forwarded to the project proponent by PAA for review and response. The PAA then reviews the EIA along with the written responses to grant or reject the project. Post-approval of the project, the PAA has to submit a copy of the report to CEA stating the plan to monitor the implementation for each project (see *Fig. 11: Environmental clearance process in Sri Lanka*).

Figure 11: Environmental clearance process in Sri Lanka



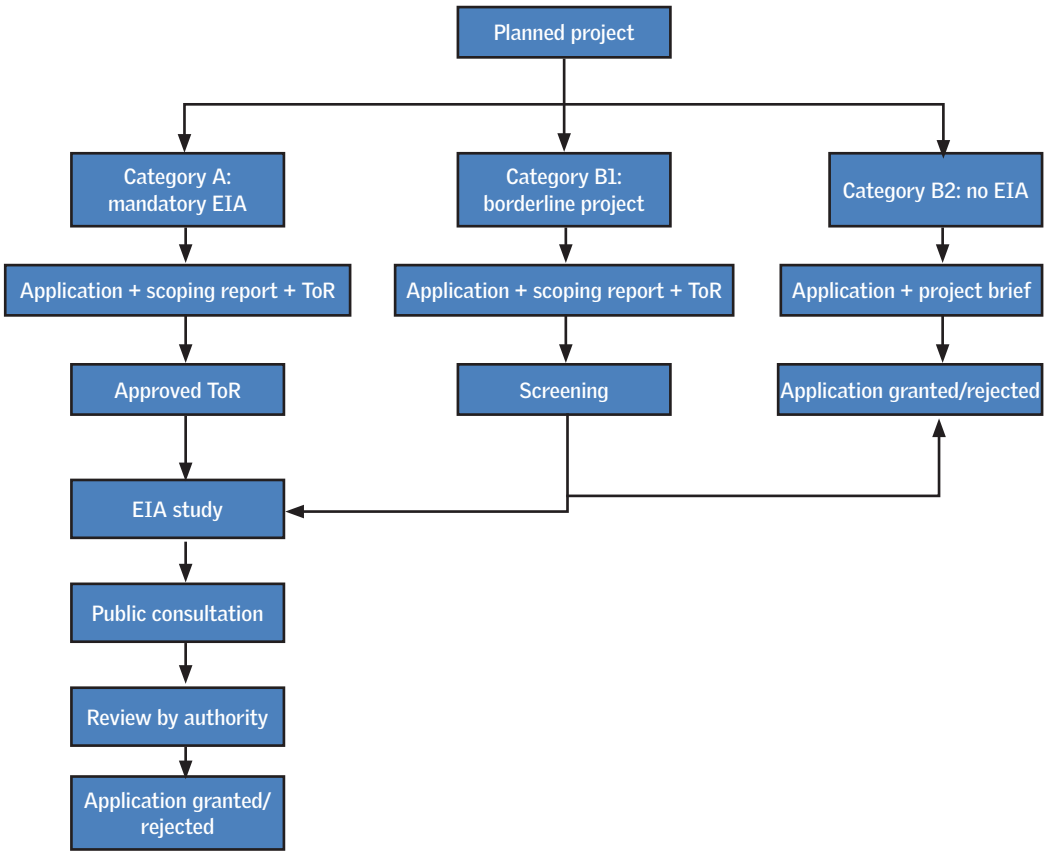
Source: The National Environmental Act, No. 47 OF 1980

1.6.10 Tanzania

In 1983, Tanzania's government passed the National Environment Management Act No. 19 which led to the establishment of the National Environment Management Council (NEMC). Later, various other laws such as the National Environmental Policy (NEP) of 1997, the National Conservation Strategy for Sustainable Development (NSSD), and the National Environmental Action Plan (NEAP) were enacted and they took into account the relevance of EIA in fostering sustainable socio-economic development.

The country, however, established its complete legal and institutional framework for EIA by enacting the Environmental Management Act in 2004. The Act promotes environmental assessment, provides legal backing for it and establishes the institutional framework for environmental management. Following this, in 2005, the Environmental Impact Assessment and Audit Regulations came out, which was later amended in 2018. NEMC is the leading authority involved in reviewing overall EIA process.

Figure 12: EIA procedure in Tanzania



Source: The EIA and Audit Regulations 2005 (GN No. 349/2005)

The 2018 regulations have provided the list of projects categorized into three different groups. The projects under Category A mandatorily require to undertake an EIA, while Category B2 projects do not require EIA and need to submit only a project brief. Category B1 projects are considered borderline projects and are required to undergo screening by the authority to determine the requirement of EIA.

The process initiates by submission of an application form along with the project brief/scoping report and draft ToR by the proponent. On approval of ToR by the authority, the proponent carries out an assessment study and submits the draft Environmental Impact Statement (EIS) to the authority. Before submission of the draft EIS, the proponent publicizes the project through newspapers and notices and conducts public consultations and meetings with the affected community. On receipt of the EIS, the authority may conduct an on-site visit to the project location to inspect the project. It may also conduct public hearing if deemed necessary. The authority finally reviews the report and submits it to the minister for approval of project (see *Fig.12: EIA procedure in Tanzania*).

1.6.11 Zambia

Zambia included environmental issues into their legislation as early as in 1985 by adopting the National Conservation Strategy (NCS) as the country's first environmental policy. This was followed by the enactment of the Environmental Protection and Pollution Control Act (EPPCA) in 1990. In 1994, NCS was reviewed and incorporated as the National Environmental Action Plan (NEAP).[16]

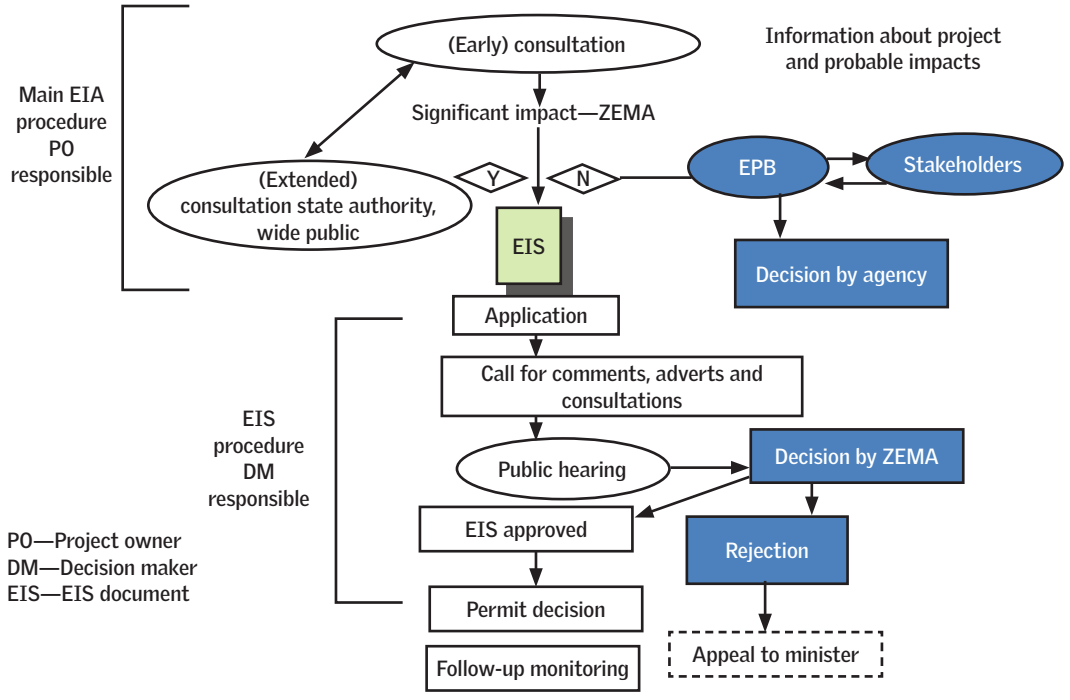
The main objective of the NEAP was to consider sustainable use of resources for national development and consider public participation inclusive of sustainable decision making. Finally, in an effort to integrate environmental concerns into economic development and as a way to mitigate adverse environmental impacts, the EIA process was finally introduced by the government through EIA Regulations gazetted in Statutory Instrument No.28 of 1997 (SI 28, 1997). In 2011, EPPCA was repealed and replaced by the Environmental Management Act (EMA), which became the principal law governing environmental assessment in the country along with the EIA regulations of 1997.

The Zambia Environmental Management Agency (ZEMA) is the statutory body under the Ministry responsible for environmental management in the country. ZEMA was initially established in 1992 as Environmental Council of Zambia (ECZ) under the EPPCA of 1990. However, after the enactment of EMA 2011, ECZ was renamed as ZEMA.

The EIA process initiates with the submission of project proposal by the proponent to ZEMA. The project is screened according to the First Schedule of EIA Regulation 1997, which categorizes the projects that require Environmental Impact Statement (EISs) or Environmental Project Brief (EPBs); if the project is not listed in the regulation, ZEMA determines whether a project requires EIS or EPB. Projects that require EPB submit six copies of the project brief to the agency for review and decision. The projects that require EIS, the proponent submits the draft terms of reference to the agency. The proponent, however, has to organize a public consultation process, involving government and non-government agencies and local public, before submission of draft ToR to help determine the scope of work to be done in the EIS. On approval of ToR, the draft EIS report is prepared and submitted to the agency.

Before submission of EIS, the proponent has to again conduct public meetings and consultations regarding the project. On receipt of the EIS, the agency distributes it to relevant ministries, community-based organizations and affected parties and places a notification in newspapers for submission of comments on the proposed project. After receiving the comments, ZEMA conducts the public meetings for the project if deemed necessary. All the comments from public consultations need to be incorporated by the proponent before submission of final EIS to ZEMA. The agency then reviews the EIS and provides its decision (see *Fig. 13: EIA procedure in Zambia*).

Figure 13: EIA procedure in Zambia



Source: The Environmental Management Act (EMA) No. 12 of 2011 Environmental Impact Assessment Regulations Statutory Instrument No. 28 of 1997

Chapter 2: Evaluation of the EIA system

2.1 Rationale for the study

This review clearly states that the EIA system is supported by legislation and efforts to ensure that good protocol is followed from screening, scoping, preparation of draft EIA, public hearing and issuance of environmental clearance certificate.

For this reason, the Centre for Science and Environment (CSE) decided to evaluate the EIA system in selected countries. This analysis is independent of on-ground implementation of the EIA process. However, CSE seeks to understand the effectiveness of the process that ensures process implementation of the objective of the EIA, which will help ensure less impact on environment once a project is operational.

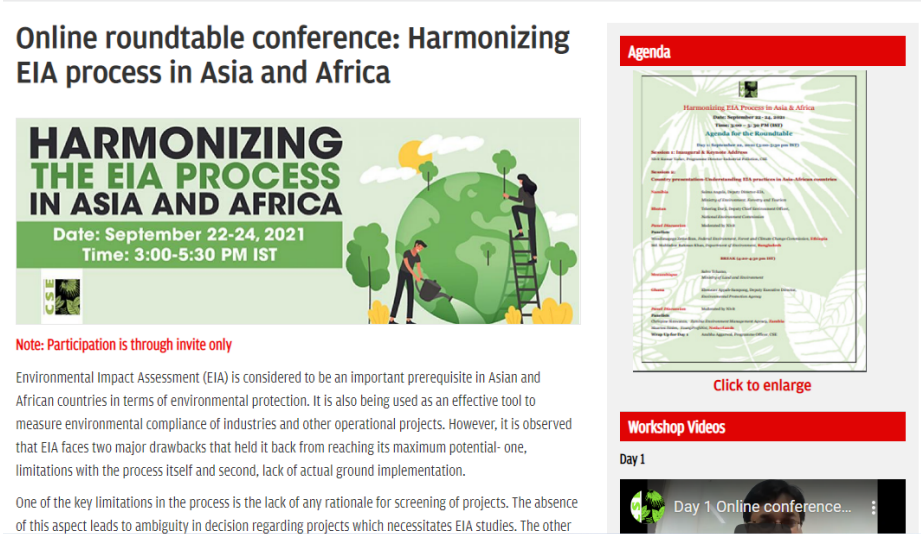
Although EIA is a legal instrument for decision making, different countries have different systems in place for collecting information, categorizing projects, giving clearances and post-clearance vigilance. Thus, in order to bring a rational uniformity while evaluating the EIA system, five indicators have been chosen. The integration of these indicators in the EIA system will ensure a quality report that takes into account environmental and social impact mitigation is prepared. Also, it has components that will ensure a robust system is in place for its effective implementation.

The indicators are as follows:

- Project categorization
- Information collection
- Compliance mechanism
- Information transparency
- Accreditation of EIA consultants

Each indicator has its own significance in terms of strengthening the EIA system. For example, the purpose of project categorization is to ensure projects are grouped on the basis of scale of operation and sensitivity. Such grouping will ensure that only projects with significant impact undergo comprehensive EIA and projects with less impact need not undergo an extensive process of EIA. It will also manage

Figure 14: Online conference held by CSE



the workload of EIA regulators, which would increase significantly if all projects underwent EIA.

Another indicator is information collection. The significance of information collection is to ensure relevant data and information is collected during the process of screening and scoping and the legislation has provision for the same. EIA reports have generally been observed to have thousands of categories of information from which relevant information is often missing. Therefore, what data is sought becomes very important in the screening and scoping process.
An EIA study requires people with sector expertise. Therefore, a system needs to be in place to register or accredit consultants. This will ensure that proper impact identification and mitigation measures are suggested.

Compliance monitoring is another indicator that evaluates how legislation is equipped to monitor compliance of environmental clearance conditions. It is, however, also pertinent to understand information dissemination such as project application, granting of terms of reference, draft and final EIA report, and public hearing announcements and their details. An environmental clearance certificate is necessary to bring transparency in the process as well as to generate a sense of trust among stakeholders.

The major limitation with the exercise is that information and data collection is done through review of the country-specific EIA legislation and discussion with

METHODOLOGY ADOPTED FOR DATA COLLECTION

- Presentation of participatory countries during the webinar held on September 22–24, 2021;
- Review the country-specific acts, legislations, rules and guideline pertaining to EIA;
- Collation of information pertaining to indicators; and
- Online discussion with regulators of participatory countries for clarification.

regulators from each country in the study. The regulators have also shared their presentation on the same in the online workshop held on September 22–24, 2021. There is, however, a chance of gap of information that cannot be ruled out.

2.2 Project categorization

Projects are classified on the basis of their potential impacts. The impacts are understood by analysing them in terms of the project location's sensitivity and scale of operation. The scale of operation would also indicate how proportionate the increase in factors such as stress, risk on natural resources and pollution potential would impact a project.

Understanding site sensitivity is important since the proposed location has to be thoroughly understood. The site area might be ecologically sensitive to land-use change, a seismic-prone area, wetlands or highly fertile. Site sensitivity also addresses and quantifies distance of ecologically sensitive areas from the proposed area of construction.

To make the task easier for the clearance authority, it is imperative to list the projects/activities into categories based on different criteria. The listing is only complete when heavy polluting industries/activities have a scale quantified. Mentioning threshold will remove any discretion due to ambiguity in comprehending furnished information by the clearance authority.

Based on this, projects are distinguished based on:

- Scale of operation
- Sensitivity of the area

Different countries have criteria like the sensitivity or the scale of the projects which helps in listing the projects into different categories. Although the fundamental purpose of categorization remains the same for most countries, they deploy different categorizing criteria according to the suitability and flexibility of

their legislations and topography. These categorizations vary from colour-coding methods, categorizing projects into low, medium, and high projects, and categories A, B and C, to name a few.

Under the Environmental Impact Assessment amended notification, S.O. 1533(E)b on September 14, 2006, India distinguished projects in categories based on the spatial extent of potential impacts on human health, natural and man-made resources. It is also dependent on the scale of operation. The notification categorically included in Category A projects that required expansion and modernization of existing projects or activities and change in product mix. In contrast, Category B included projects with impacts but with lesser spatial extent due to smaller scale of operation. Sensitivity of the area was also considered.

It is thus clear that to perceive what impacts a projects with greater scale might have on an area and whether any irreversible damage is caused due to the sensitive nature of the area, the rationale of any categorization of projects should be based on scale of operation along with emphasis on degree of sensitivity. These criteria along with the listing of the projects into different categories would surely make a project categorization comprehensive yet easy for clearance for further investigation.

2.2.1 Methodology for rating on project categorization

The rating criteria includes listing of projects, scale of operation, sensitivity of location and distance from sensitive location.

The rating criteria with values is as follows:

- Is there any listing project?
  If yes, provide 0.5

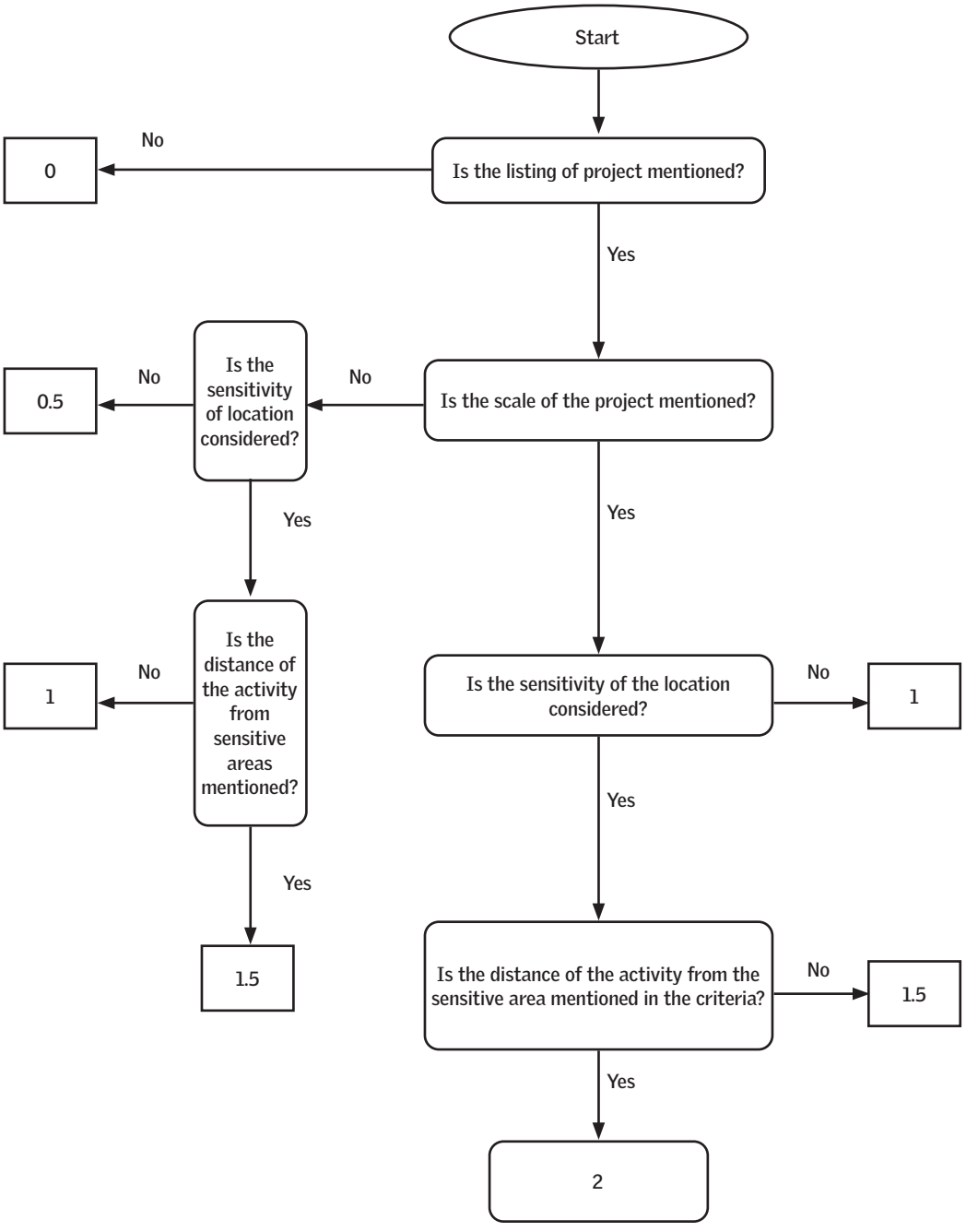
- Is the scale of the project mentioned?
  If yes, provide 0.5

- Is the sensitivity of the location considered?
  If yes, provide 0.5

- Is the distance of the activity from sensitivity areas mentioned?
  If yes, provide 0.5

(See *Fig. 15: Flowchart on rating of project categorization*)

Figure 15: Flowchart on rating of project categorization



Source: Compiled by CSE

2.2.2 Project categorization of participatory countries

2.2.2a Bangladesh

In Bangladesh, the authorizing agency (Department of Environment) categorizes projects based on the project's site location and its impacts on environment. Projects have been classified as Green, Orange A, Orange B and Red as listed in the Environmental Conservation Rules (ECR), 1997 notification itself.

Industrial units and projects falling in Orange-A, Orange-B and Red categories differ significantly from the Green category in terms of issuance of the site clearance certificate. Projects in the Green category do not require this certificate while other projects must obtain land clearance mandatorily before the environmental clearance certificate is issued.

When any activity is due for a clearance process, the Department of Environment (DoE) distinguishes the project after listing it. If the projects are recognized as any category other than Green, DoE requires comprehensive information to further assess the impacts. This information, based on the Initial Environmental Examination (IEE), serves the dual purpose of setting the terms of reference (ToR) as well as giving an overview of the project to the clearance authority.

Following the assessment of IEE, projects are further categorized into Orange-A, Orange-B and Red categories along with issuance of the land clearance certificate.

As can be seen, project categorization in Bangladesh is a colour-coded process based on the site selection of the area and negative impacts. It is also observed that the clearance for categories other than the Green category requires land clearance, indicating that there is a focus on sensitivity of the area (see *Table 1: List of activities under different categories*).

CSE understands the list mentions activities that have capital investment as a categorizing criterion. Also, all potentially highly polluting industries are categorized as Red projects. This helps remove categorization of projects at the discretion of DoE officers (see *Table 2: Score on project categorization—Bangladesh*).

Table 1: List of activities under different categories

Categories	Activities
Green	Assembling and manufacturing of TV, radio; assembling and manufacturing of clocks and watches; assembling of telephones; assembling and manufacturing of toys; book-binding; rope and mats; photography; production of artificial leather goods; assembling of motorcycles, bicycles and toy cycles; assembling of scientific and mathematical instruments; musical instruments, etc.
Orange-A	Dairy farm—10 cattle heads or below in urban areas and 25 cattle heads or below in rural areas; poultry (up to 250 in urban areas and up to 1,000 in rural areas); grinding/husking of wheat, rice, turmeric, pepper, pulses (up to 20 horse power); weaving and handloom; production of shoes and leather goods (capital up to Bangladesh taka [BDT] 500,000; sawmill/wood sawing.
Orange-B	PVC items; artificial fibre (raw material); glass factory; lifesaving drug (applicable to formulation only); edible oil; tar; jute mill; hotel, multi-storied commercial and apartment building; casting; aluminium products; glue (excluding animal glue); bricks/tiles; lime; plastic products; processing and bottling of drinking water and carbonated drinks; galvanizing; perfumes, cosmetics; flour (large); carbon rod
Red	Tannery; formaldehyde; urea fertilizer; TSP fertilizer; chemical dyes, polish, varnish, enamel; power plant; all mining projects (coal, limestone, hard rock, natural gas, mineral oil, etc.); cement; fuel oil refinery; artificial rubber; paper and pulp; sugar; distillery; fabric dying and chemical processing; caustic soda, potash; other alkalis; production of iron and steel; raw materials of medicines and basic drugs; electroplating

Table 2: Score on project categorization—Bangladesh

	Listing of projects		Sensitivity of area	Distance of project from sensitive location mentioned	Total (Max: 2 marks)
Scoring	0.5	0.5	0.5	0.5	2
Reason	Projects distinguished based on colour-coded categories	Quantification mentioned in terms of financial investment	The project has to obtain location clearance certificate considering sensitivity	Distance criteria is mentioned	

2.2.2b Bhutan

The government of Bhutan has established the National Environment Commission (NEC), which standardized the Environmental Assessment Act 2000. NEC also formed the National Environment Commission Secretariat (NECS), the apex authority with regard to the clearance process after individual clearances from respective departments as mandated by the EIA Act 2000.

In 2016, the Regulations for Environmental Clearance of Projects, 2016, devised colour-coded categories for projects based on the significance of the impacts and listing of the projects typically listed in the sector-specific. Developmental projects were to be categorized as:

- Green category;
- Blue category; or
- Red category

Green category

Green category projects do not require any clearance certificate from NEC as they have the lowest environmental effects. These projects thus require less time and few steps to obtain a clearance certificate.

Blue category

Blue category projects have moderately higher significant environmental effects than Green category projects. Since initiating the application process is the proponent's responsibility, the project proponent refers, with the assistance of consultants, to sector-specific manuals to categorize projects.

After the proponent submits the application process, the competent authority is authorized to examine the application and further assists in categorizing the projects. The National Environment Commission (NEC) does not review all the projects. Sometimes, the concerned departments are authorized to review the Initial Environmental Examination (IEE). For example, if a project is listed and delegated to the Department of Industries, the department will acknowledge, review and decide on matters. Simultaneously, the proposal is directly forwarded to NEC when the project is unlisted in the manual. If the NEC understands through application that the project is classified as a Blue category projects, it will list the project to undergo IEE.

Red category

Projects with significant impacts are labelled as Red category projects. NEC thereafter endorses the Terms of Reference (ToR) for Red category projects, which go directly for an Environmental Impact Assessment after categorization.

As discussed, Bhutan follows a colour coded process of categorization for projects proposed for clearance. While analysing the process, it was observed that to simplify the categorization process, proponents take the help of the annually published manuals, which has projects listed according to specified sectors. CSE understands there is a need to visit the Blue category projects and quantify

potentially heavy-polluting industries. This will make the task of scrutinizing the project significantly easier for departmental officers (see *Table 3: Score on project categorization—Bhutan*).

Table 3: Score on project categorization—Bhutan

	Listing of the projects		Sensitivity of the area	Distance of the project from the sensitive location mentioned	Total (Max: 2 marks)
Scoring	0.5	0	0	0	0.5
Reason	Projects distinguished based on colour-coded categories	Quantification not mentioned for each potentially polluting industry in blue category	No mention of sensitivity to land	No mention of sensitivity to distance	

2.2.2c Ethiopia

The Environmental and Social Impact Assessment (ESIA) procedural guidelines were enacted in 2003 and provided a list of projects under Schedules I, II and III.

Categorizing projects is based on the rationale by considering the description of potential impacts, sensitivity of area and the scale of project as mentioned in Schedule I , II and III of Annexure 3 of ESIA 2003.

On the basis of outcome of the screening report or the initial environmental examination, projects can be categorized into:

- No EA required-projects with perceived negligible impacts by the licencing authority as mentioned in Schedule III of Annexure 3.

- Preliminary Assessment (PA)—Preliminary assessment groups projects that have limited impacts, with inadequate information and projects with ambiguity. It is in accordance with Schedule II of Annexure 3

- Full-scale Environmental Assessment—Projects with sufficient information and visible impacts would require detailed assessment as mentioned in Schedule I is observed that most of the relevant parameters have been included for categorization. For small- and medium-scale industries, however, the quantification is not mentioned. Not quantifying the scale would certainly cause ambiguity amongst the clearance authorising officers.

CSE understands that Article 6 of Part II gives provisions on trans-regional impact assessment which provides a scope for considering cumulative impacts. It is the regional environmental agency which is authorized to give prior assessment to environmental reports for such kinds of clearance (see *Table 4: Score on project categorization—Ethiopia*).

Table 4: Score on project categorization—Ethiopia

	Listing of projects		Sensitivity of area	Distance of project from the sensitive location mentioned	Total (Max: 2 marks)
Scoring	0.5	0	0.5	0	1
Reason	Projects distinguished based on listings into no Environmental Assessment, requirement of PA and EA	Quantification not considered	Mention of environmentally sensitive areas	The minimum distance that the project should keep from ecological sensitive areas is not mentioned	

2.2.2d Ghana

The Environmental Protection Agency of Ghana (EPA) is the apex agency that oversees the overall process of EIA. The Environmental Assessment Regulations (EAR), 1999 was instrumental in formulating different frameworks for categorization. Based on the Environmental Assessment Regulations 1999, LI 1652 (Reg. 1, 2, and 3) and Schedules of the Environmental Protection Agency of Ghana the projects are categorized by the licensing agency in coordination with the regional environmental agency. Projects are categorized on the basis of significance of the environmental impacts, scale or size, location, potential impacts, public concerns and technology used. Schedule 1 of EAR, 1999, which categorizes projects with more negligible environmental impacts, and comprehensive assessment is not mandatory. The project, however, requires registration with the EPA. In contrast with Schedule 1, Schedule 2 allocates projects which are of more significant environmental impacts and public health. These projects require mandatory Environmental Impact Assessment. In addition, Schedule 5 requires mandatory EIA for projects located in environmentally sensitive sites and greater emphasis on public consultation in such areas.

Based on the criteria, the categorization of the projects can be divided into:

- Requirement for registration or environmental permit for medium- and low-scale projects;
- Requirement for a comprehensive assessment (EIA); and
- Eco-sensitive zone

The categorization in Ghana has indicated a large set of rationales for the criteria. It is pertinent, however, that projects that require an environmental permit—such as rubber, paper and pulp and mining industries—have not mentioned scale of operation. Eco-sensitive zones are mentioned but there is no specific mention of minimum distance that will be considered while assessing projects near ecologically sensitive areas (see *Table 5: Score on project categorization—Ghana*).

Table 5: Score on project categorization—Ghana

	Listing of projects		**Sensitivity of the area**	**Distance of project from the sensitive location mentioned**	**Total** (Max: 2 marks)
Scoring	0.5	0.5	0.5	0	1.5
Reason	Listing provided which distinguishes projects with respect to projects with EIA or no EIA.	Quantification mentioned	Mention sensitivity of site	The minimum distance that the project should keep from ecological sensitive areas, not mentioned	

2.2.2e Kenya

The National Environmental Management Authority (NEMA) is responsible for overseeing environmental management in Kenya. The Environmental Management and Coordination Act (EMCA) in 1999 is a fairly comprehensive act framing the basis for the rationale of categorization. A rule of particular interest significant to the categorization of the projects is the Second Schedule of EMCA, which was amended in 2019. Legal Notice 31 of this Amendment provides a risk-based categorization of projects that explicitly have to undergo an EIA process. Based on the characterization of risk, projects are distinguished into three categories—Summary Project Report, Comprehensive Project Report and Summary Report.

The following is a brief explanation of the three categories of projects:

Summary Project Report (SPR)

According to Legal Notice 32 of 2019, county offices, supervised by county directors who group those projects and those with low- or medium-risk projects with less or minimum environmental risk are grouped into SPR. SPR projects are generally looked after by the county offices and approved by the county directors.

Comprehensive EIA Project Report (CPR)
CPR is conducted for low- and medium-risk projects with significant adverse environmental impacts. These projects are a bit more detailed than the SPR.

EIA Study Report (SR)
SR is conducted for high-risk projects as per the second schedule of EMCA, 1999. The projects based on perceived risk with the highest significance are grouped into these lists. Any decisions regarding the SR are generally made at the national level.

Project categorization is based on the risk perceived by NEMA—the projects are categorized as low risk, medium risk and high risk. Though there is a mention of requirements of land ownership there is no specific consideration of sensitive areas in case of categorizing projects. But while scoring, location specificity is considered with respect to sensitivity. Effort is made to avoid discretion of the authority (see *Table 6: Score on project categorization—Kenya*).

Table 6: Score on project categorization—Kenya

	Listing of projects		**Sensitivity of area**	**Distance of project from the sensitive location mentioned**	**Total** (Max: 2 marks)
Scoring	0.5	0.5	0.5	0	1.5
Reason	Projects distinguished based on SPR, CPR and SR	Quantification mentioned	Sensitive area mentioned	Distance of the project from the sensitive area not mentioned	

2.2.2f Mozambique

The Ministry of Land and Environment is responsible for project appraisal and authorization in Mozambique. The ministry has laid down a different decree that helps in setting up the framework in the screening process of the Environmental Impact Assessment.

One such clause is the Decree 54/2015 which help in categorization of the projects. The projects are categorized into Category A+, A, B and C, and the selection criteria is based on the broad domain of activities, size and scale of the project and sensitivity of area.

The following is a brief description of the kinds of projects included in the different categories:

Category A+

Projects that require extensive social and environmental monitoring in areas that are ecologically sensitive areas. These are generally projects that are likely to cause the most adverse effects such as altering the physical characteristics of the place and thus impacting the ecology. Projects that cause physical displacement and those involving dangerous toxins, carcinogens, pesticides and extraction of minerals all fall under Category A+.

Category A

Projects grouped into this category have significant environmental and social impacts but lesser than that of Category A+. Agricultural projects that require over 350 hectares of area to be irrigated and activities that would cause resettlement issues are included in Category A.

Category B

Projects grouped into this category generally have lesser environmental significance than Category A projects. Fuel stations and projects that require construction of power lines below 66 kV are included.

Category C

Projects screened with least environmental significance and those that would not have significant environmental impacts would be clubbed into category. Construction of a bakery and projects that require power lines below 33 kV are grouped into Category C.

Table 7: Types of projects under different categories

Screening category	Type of projects
Category A+	Projects positioned in areas characterized by highly valued biodiversity and habitats, animal and plants species on the edge of extinction, or may involve projects producing dangerous toxins (carcinogens), pesticides and extraction and processing of minerals
Category A	Large-scale infrastructures (airports, highways), large-scale agriculture, forestry, fisheries and related industries
Category B	Transmission lines, education complexes
Category C	Small-scale irrigation, telecommunication towers or small factories

It is understood that the projects in Mozambique are categorized on the basis of the broad domain of activities, size and scale of the project. CSE understands that although ecologically sensitive areas are considered which are explicitly mentioned to be included in the Category A+, there is no specific mention of minimum distance to be considered while assessing projects near ecologically sensitive areas (see *Table 8: Score on project categorization—Mozambique*).

Table 8: Score on project categorization—Mozambique

	Listing of projects		Sensitivity of area	Distance of project from the sensitive location mentioned	Total (Max: 2 marks)
Scoring	0.5	0.5	0.5	0	1.5
Reason	Projects distinguished into types A+, A, B and C	Quantification mentioned	The project categorization is done on the basis sensitivity of area.	Distance of the project from the sensitive area not mentioned	

2.2.2g Namibia

Section 27 of the Environmental Management Act, mentions project activities that require screening in Namibia. The list of activities is mentioned in Part VII of EMA 7 of 2007. Activities cannot be undertaken without obtaining an environmental clearance certificate.

For the environmental clearance certificate, nature, location and the scale of the activity is required in Form 1 of the EMA, 2007. Some of the activities that are mentioned in Section 27 of EMA that require screening are waste management disposal projects, energy generation and storage, mining and quarrying, forest activities, land use development, tourism developmental activities, agriculture and aquaculture, water resources and development, mining and other infrastructural changes.

All the projects that are either public funded or state funded are included in the list. However, while analysing the EMA 7 of 2007, CSE understands that there is no exclusive categorization process; the clearance authority only refers the list to determine whether to clear and approve the project or make it mandatory to conduct an EIA for a specific project. Projects do not undergo rigorous screening to

Table 9: Score on project categorization—Namibia

	Listing of projects		Sensitivity of area	Distance of the project from the sensitive location mentioned	Total (Max: 2 marks)
Scoring	0.5	0.5	0.5	0	1.5
Reason	Listing of projects but no categorization of projects has been made	Scale of the project is required in environmental clearance certificate	Environmental clearance certificate required which requires location clearance of the activity	Distance from sensitive areas not mentioned	

determine whether they are to be placed in specific lists. While scrutinizing EMA 7 of 2007, under the part VII and VIII there is ambiguity regarding the consideration of site sensitivity (see *Table 9: Score on project categorization—Namibia*).

2.2.2h Nepal

The Environmental Protection Rules, 1997 (EPR) lays guidelines of the intricacies of the management of the EIA process. Rule 3 of the Environmental Protection Rules, 2054 (1997) directs project categorization on the basis of the project's known environmental significance and mitigation measures. The list of projects is mentioned in Schedule 1 and 2 of the EPR for IEE or EIA respectively.

Projects are classified into two levels. Projects with known environmental effects, which demand framing mitigation measures projects, are slated to undergo IEE (Initial environmental examination). The guidelines for this rationale are derived from Schedule 1 of the EPR, 1997. New projects whose adverse effects cannot be predicted and the authority cannot lay out a mitigation plan are directed for Environmental Impact Assessments (EIA). The guidelines for this schedule are given in Schedule 2 of the EPR, 1997. Categorized projects are slated for IEE and/or EIA. Projects with minimum, low or medium impacts are quantified and directed for IEE. Projects with high environmental significance are placed for EIA.

As discussed, the rationale of a project categorization is based on the listing of the project. Categorization in Nepal demonstrates that the ecological sensitivity of a place is addressed since above 20 per cent of Nepal's falls in the Terai region (lower part of Himalayas).

CSE understands that IEE and EIA categorizes the projects based on quantification of the operational capacity of the projects (see *Table 10: Score on project categorization—Nepal*).

Table 10: Score on project categorization—Nepal

	Listing of projects		Sensitivity of area	Distance of project from the sensitive location mentioned	Total (Max: 2 marks)
Scoring	0.5	0.5	0.5	0.5	2
Reason	Projects listed into IEE and EIA	Quantification mentioned	Sensitivity mentioned	Distance mentioned from the sensitive area	

2.2.2i Sri Lanka

The National Environmental Act (NEA) of Sri Lanka categorized the projects based on specific criteria relevant to Sri Lanka's topography. NEA has also formulated sector-specific manuals which are updated annually. The Project Approving Agency (PAA) is authorized to determine the project categorization. Projects are categorized on the basis of the environmental significance of the projects, which includes the type and magnitude of the project. NEA also considers the sensitivity of the land. A comprehensive list of developmental projects is listed under the notifications provided by the National Environmental Act of Sri Lanka, published in Gazette No.772/22 of June 24, 1993.

As per the schedule, projects are categorized into one of the three following parts:

Part I: Projects defined on the basis of proximity to the coastal conservation zone are categorized as Part I projects. Because of Sri Lanka's topography, projects are defined according to the Coast Conservation Act No 57 of 1981.

Part II: Projects categorized on the basis of scale and magnitude irrespective of their proximity to the coastal conservation zone are categorized as Part II projects.

Part III: Projects that might alter the physical nature of the area due to the sensitivity are categorized as Part III projects.

After categorization into one of the three parts, projects undergo either:

- Initial Environmental Examination (IEE) or
- Environmental Impact Assessment (EIA)

Post submission of the preliminary information to the PAA, it is decided whether the project should proceed with Initial Environmental Examination (IEE) or Environmental Impact Assessment (EIA). IEE is assessed for projects deemed to have lower significance. Projects deemed to have greater significance undergo EIA. Projects that require clearing land area exceeding 50 hectare, hotel plans of over 99 rooms, highways over 10 km and those filling over 4 hectare of wetlands are considered to have significant negative impacts. Projects located in sensitive areas such as river reservoirs or land adjoining forests or wildlife reserves also require project clearance.

As seen, Sri Lanka's NEA categorizes projects on the basis of the significance of impacts after which the projects are listed to undergo IEE and/or EIA. It is interesting to note that since most of the country is coastal, proximity to the

conservation zones in the coastal parts of the country along with the scale and magnitude are the focus. It is understood that the topography of the country has been considered in the categorization (see *Table 11: Score on project categorization—Sri Lanka*).

Table 11: Score on project categorization—Sri Lanka

	Listing of the projects		Sensitivity of area	Distance of project from the sensitive location mentioned	Total (Max: 2 marks)
Scoring	0.5	0.5	0.5	0.5	2
Reason	Projects distinguished based on Part I, II and III	Quantification mentioned	Site sensitivity mentioned	Categorization based on proximity to site	

2.2.2j Tanzania

A significant provisions are there for categorization of projects under the the EIA and Audit Regulations 2005 (GN No. 349/2005).that has helped categories of projects in Tanzania is the EIA and Audit Regulations 2005 (GN No. 349/2005). An amendment is made in 2018 of the said regulations.

According to the EIA and Audit (Amendment) Regulations, 2018, projects are categorized into Type A, B1 and B2 projects based on their likelihood of having significant adverse environmental impact.

Schedule 1 of the regulations provides a list of the projects that helps in categorising the projects according to significant negative impacts. For all projects listed in Type A, an EIA is mandatory. The Second Schedule of the EIA and Audit (Amendment) Regulations, 2018 explicitly classifies the projects into following categories:

Type A

Type A projects have high negative environmental effects. EIA is mandatory for this category.

Type B1

Type B1 projects category must be screened to determine whether EIA will be carried out.

Type B2

Type B2 does not require full EIA; screening ends at Project Brief stage. (The content of the Project Brief must adhere to the EIA and Audit Regulations 2005.)

It is also understood that the projects with potentially significant impacts are listed according to Parts IV, V and VI of the EIA regulation laid out in 2005.

CSE understands that although lists are provided with categorization of projects, no quantification is done. Projects, however, have exclusive regulations that make the regulations seem stringent.

Some important criteria—such as stress on natural resources, waste management, pollution potential and scale of the project—are not considered while implementing a project. Even though the projects with high negative significance are listed, it does not mention the size and scale of the projects (see *Table 12: Score on project categorization—Tanzania*).

Table 12: Score on project categorization—Tanzania

	Listing of projects		Sensitivity of area	Distance of project from the sensitive location mentioned	Total (Max: 2 marks)
Scoring	0.5	0.5	0.5	0	1.5
Reason	Projects distinguished based on type A, B1 and B2	Quantification mentioned in environmental clearance certificate	No mention of sensitivity to land, but the project has to obtain location clearance certificate which requires information on the sensitivity of the area	Location clearance certificate does not mention distance form sensitive area	

2.2.2k Zambia

The Zambian Environmental National Authority (ZEMA) is the apex agency in Zambia empowered to issue clearance and oversee the entire process of EIA. Regulation 3, ZEMA, or the First Schedule of the EIA Regulation have categorized projects in two groups. Projects with less significant environmental impact are assessed through an Environmental Project Brief (EPB) while projects that significantly impact the environment must be assessed through an Environmental Impact Statement (EIS) report.

Environmental Project Brief (EPB)

The First Schedule of the EIA Regulations outlines the requirements for an EPB. This EIA report is prepared for projects with very low negative environmental impacts.

Environmental Impact Statement (EIS)

The Second Schedule outlines the requirements for an EIS, an EIA report prepared following projects likely to have significant negative impacts on the environment.

Statutory Instrument no. 28, 1997, of the Environmental Protection and Pollution Control Act describes the First and Second Schedules which list the projects that require either a Project Brief or an Environmental Impact Assessment. It is pertinent to mention that there was scale of operation is considered while categorizing the projects. Section 3(2) of the same act mentions the sensitivity of the area (see *Table 13: Score on project categorization—Zambia*).

Table 13: Score on project categorization—Zambia

	Listing of projects		**Sensitivity of area**	**Distance of the project from sensitive location mentioned**	**Total** (Max: 2 marks)
Scoring	0.5	0.5	0.5	0.5	2
Reason	Listing of the projects categorize the projects into Environmental Project Brief and Environmental Impact Assessment	Quantification of the scale of the projects	Sensitivity of area mentioned	Distance of the project from the sensitive area mentioned	

2.3 Information collection

The process of conducting environmental assessments depends on the availability of appropriate information to the decision-making authority.

Based on the submission of the initial data (which is generally in an application form), the environmental assessment process is initiated. To assess a project's impacts, proponents must provide information on various factors. These factors are natural resources, location, the motive behind selecting the site, purpose of the activity, future utilization of products and by products, waste generation, social impact, alternatives to the site, and mitigation measures. In essence, the application form should be an initial brief about the project that would help decision maker decide about the need for EIA as well as the depth to which the EIA study should be done.

The proponent usually initiates the application process by submitting the application form furnishing all the information required in the form. This form is obtained either by downloading it from the authorizing agency's website or by physically getting it from the respective department in the country. Since there

are technical modalities associated with the project that the proponent might not be able to comprehend, the proponent usually hires environmental consultants to help him with the entire environmental assessment process. The responsibility starts with filling up the application form.

After obtaining the application form, the proponent is typically expected to provide adequate and appropriate information to the best of their knowledge. The content of a typical application form should typically include:

Basic information about the project

Basic information typically includes the project name, production and operational capacity, and information on whether the activity requires new construction, expansion or modernization of existing infrastructure. Information is also required on the status of interlinked projects that are operating nearby. The latter information makes it easier to comprehend the cumulative impacts of the projects. Legal information about the project location is generally scrutinized. Information such as legal notices pending against the project are important to be acknowledged. Since there might arise a situation where the proposed location might get rejected, there is a need to provide details of alternative sites suitable for development of the project (see *Table 14: Indicators for evaluating basic information*).

Table 14: Indicators for evaluating basic information

Basic information	Marking
Name of the project; location	Yes (1) / No (0)
Name of the applicant	
Address for correspondence	
Information regarding any government order or policy relevant or relating to the site?	
Proposed capacity/area/tonnage to be handled; existing capacity/area etc.;	
Type of the project	
New/expansion/modernization	
Interlinked projects	
Details of alternative sites examined, if any	
Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case number c) Orders/directions of the court if any and its relevance with the proposed project	

Information on the usage of natural resources

Data on natural resource usage at the proposed site is important, especially where non-renewables sources are in short supply. Information is required if the project

is located on undeveloped or agricultural land. This might help understand the potential land use change due to proposed modernization and extension of projects. Natural resources such as water and their usage in the project should be clearly addressed in the application form, specifically the source of water (ground/surface) abstraction. The drainage and the runoff from the project is also to be accounted for. Similarly, usage of the raw materials such as minerals, the source of its extraction and quantity is required to be mentioned in the application form. Data would consist of identifying the source from where it was extracted and types of minerals used in the project. Description on forest, timber and other construction materials such as stone aggregates and soil would also have to be taken into consideration while filling out the application form. The quantity and source of these materials is expected to be mentioned in the description. An important resource, energy, has to be properly described while filling out the application form. Data on the energy supplier, type of fuel used, existing users, and its source is to be specifically mentioned (see *Table 15: Indicators for evaluating information on natural resource usage*).

Table 15: Indicators for evaluating information on natural resource usage

Information on natural resources	Marking
Information whether the land is undeveloped or agricultural	Yes (1) / No (0)
Possible land use change and the environment around	
Water (source of water) in unit, KLD (kilolitre per day)	
Abstraction or transfers of water from ground or surface water?	
Is the project changing course of water runoff or drainage?	
Minerals (tonne)—type of minerals, expected source and quantity	
Construction material—stone, aggregates, sand/soil (expected source in tonne)	
Forests and timber (tonne)—expected usage of the product	
Energy including electricity and fuels (source, competing users) Unit: fuel (tonne), energy (MW)	
Any other natural resource (use appropriate standard units)	

Information on emissions

During the lifecycle of the project, it is typically expected there would be emissions during the project's construction, operation and decommissioning phase. Air emissions have a significant effect on the biota, especially when the particulate matters precipitate down as a form of acid rain. Thus, information like the emission from mobile sources such as vehicles need to be accounted for. There also has to be a clear indication of emissions and expected quantities properly provided with appropriate units. Emissions like odour, fugitive emissions, emission from

incineration and open-air burning should to be accounted for in the application form. During operations and construction, data emission of noise and any heat and light generated causing pollution during life cycle of the project should also be taken into account. Also, data on emissions while loading and unloading of materials from blasting of a particular area during demolition of machineries, materials or location are all required to be filled in as a form of general description about the project (see *Table 16: Indicators for evaluating information on emissions*).

Table 16: Indicators for evaluating information on emissions

Information on emission		Marking
Air emissions	Emissions during construction and production processes	Yes (1) / No (0)
	Emissions from materials handling including storage or transport	
	Emission status of VoC	
	Emissions from incineration of waste (fly ash management systems)	
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	
Generation of noise and vibration, and emissions of light and heat	From industrial operation	
	From blasting or piling	
	From traffic during construction and operation	

Information on waste and wastewater generation and treatment

The inevitable consequence of human existence and consumption—and its concurrent extracting raw materials, industrial processes and manufacturing products—lead to waste generation. Improper waste collection and disposal systems has been a cause of environmental, social, economic and public health.

Table 17: Indicators for evaluating information on waste and wastewater generation

Information on waste and wastewater generation	Marking
Industrial processes waste	Yes (1) / No (0)
Municipal waste (domestic and commercial)	
Biomedical and hazardous wastes	
Addressing leachate waste	
Other solid or industrial process wastes	
Wastewater (domestic and industrial)	
Sewage sludge or other sludge from effluent treatment	
Treatment facility of waste with STP/ETP capacity	

issues. The goal of zero waste and zero landfills through incorporating the concept of reducing, reusing and recycling before disposing of the waste depends solely upon the segregation and collection. Waste can be distinguished into solid waste, commercial, municipal and biomedical and hazardous waste.

Collection and disposal of municipal, commercial, landfill leachate, biomedical and hazardous waste in environmentally sound manner is significant while properly addressing waste management systems. Solid waste of various types as stated need to be accounted for. Liquid waste, if poorly managed, can impact surface land and water. Disposal of untreated wastewater can alter the quality of water of both surfaces and groundwater. It is, therefore, required to obtain information on a project's daily, monthly and yearly expected production of wastewater (see *Table 17: Indicators for evaluating information on waste and wastewater generation*).

Environmental and social sensitivity

Environmental assessment is not complete without information on the biodiversity and the local stakeholders affected by the project. The project description should mandatorily include proximity to national heritage if any. This information is essential since the developmental projects might have detrimental environmental consequences on the nearby areas. Since these architectural monuments are preserved, these structures are as important as consideration of flora or fauna. Similarly, the project information should also disclose if the projects are located in ecologically sensitive areas like wetlands or near coastal zones, waterbodies, biosphere, mountains or forest reserves. Whether the project will disrupt the inland, coastal, marine or underground waters should be mentioned. Specific details about the site selected if the project is susceptible to any natural hazards such as flood and earthquake is significant to understanding the topography of the site. Data on locations near the construction area and during activity, if the project causes disruption to the fauna's migration, roosting and breeding area shall all be required to be mentioned in the application form. Information if the project addresses endemic species of flora and fauna should also be disclosed. Information on habitat fragmentation must be disclosed in the application form (see *Table 18: Indicators for evaluating information on environmental and social sensitivity*).

As discussed, cumulative impacts, along with addressing of habitat fragmentation, will give an overview of whether the project will cause any potential displacement of larger mammals. Information on how the project addresses the social issues should be considered. Data about the workers involved in the projects and housing facilities should be included in the application form. Also, descriptions such as impact on the livelihood, rehabilitation scheme and the employment generation

considered during project development is to be explicitly mentioned in the application form.

Table 18: Indicators for evaluating environmental and social sensitivity

Environmental and social sensitivity		Marking
Environmental sensitivity	Proximity to national heritage	Yes (1) / No (0)
	Areas important or sensitive for ecological reasons (wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	
	Inland, coastal, marine or underground waters	
	Areas susceptible to natural hazard	
	Will the activity result in loss or irreversible damage to ecosystem services/endemic flora/fauna	
	Will the project cause habitat fragmentation/roosting/breeding	
Workers	Facilities for long term housing of operational workers?	
	Temporary sites used for construction works or housing of construction workers?	
Communities and other stakeholders	Densely populated or built-up area	
	Will it impact local livelihood?	
	Will it cause displacement of people?	
	Employment generation for local residents	

2.3.1 Methodology for rating on information collection

The information is divided into the following five major categories:

- Basic information
- Natural resources
- Emissions
- Waste and wastewater generation and treatment
- Environmental and social sensitivity

Scoring shall be the ratio (S) = Number of items covered by the countries/Total number of items

i. Thus, the scoring of basic information S1 =X1/10

X1 = Number of items covered by the country
10 = Total number of items under basic information

ii. Scoring on information of usage on natural resources S2 =X2/10

X2 = Number of items covered by the country
10 = Total number of items under natural resources

iii. Scoring on information of emissions S3 = X3/8

X3 = Number of items covered by the country
8 = Total number of items under emissions

iv. Scoring on information of waste and wastewater generation and treatment S4 = X4/8

X4 = Number of items covered by the country
8 = Total number of items

v. Scoring on environmental and social sensitivity S5 = X5/13

X5 = Number of items covered
13 = Total number of items

Total score **S** =**S1**+ **S2** + **S3** + **S4** + **S5** = $\sum_{i=1}^{5} Si \sum_{i=1}^{5} Si$

2.3.2 Information collection of participatory countries

2.3.2a Bangladesh

The government of the People's Republic of Bangladesh, through the Environment Conservation Rules 1997, lays a provision for the project description. Section 7(5) of the said rule lays down the condition for issuing an Environmental Clearance Certificate (ECC). It states, "The entrepreneur of the concerned industrial unit or project shall apply to the concerned Divisional Officer of the Department according to Form-3 along with appropriate fees as specified in Schedule – 13." The proponent initiates the application form by filling up Form 3, which is an application for Environmental Clearance Certificate. Form 3 seeks detailed information about the project except some critical information such as details of site alternative or any litigation pending against the project. The crucial information of natural resource and raw material usage is categorically mentioned in the Form 3. It requires the proponent to specify the source of the raw materials and their quantity.

Prediction of impacts on air by understanding emissions of gaseous pollutants such as SO_2, NOx, CO, CO_2, fly ash, dust, etc., through heavy vehicles movements, transportation of construction materials, and stone quarry operations is the initial step to determine project's footprint on ambient air concentration. The form also asks about the probable quantity of daily emission of gaseous substances and the mode of emission. The present form, however, does not go include noise, light or heat emissions.

There is no mention with regard to solid waste collection in the form. While there is a section on generation of daily liquid waste, location of waste and discharge, the mandate for information on solid waste is non-existent. There is also mention of design and time schedule of proposed effluent treatment plant but the same is missing for municipal, biomedical or hazardous which could be a serious issue in medium to large scale projects. Another gap in Form 3 is that it does not explicitly ask for information on environmental sensitivity and impact of the upcoming project on local stakeholders, an important factor in the case of medium- to large-scale units (see *Table 19: Score on information collection—Bangladesh*).

Table 19: Score on information collection—Bangladesh

Indicator	Total
Basic information	0.50
Information on the usage of natural resources	0.60
Information on emission	0.63
Information on waste and wastewater generation and treatment	0.50
Environmental and social sensitivity	0.00
Total score	2.23 [Max: 5 marks]

2.3.2b Bhutan

The Royal government of Bhutan has implemented the Environmental Assessment 2000 and its regulation in 2016. Chapter IV of Environmental Assessment 2000 states the applicant shall provide basic information, raw material usage including water and fuel, waste generation along with a non-technical summary for Initial Environmental Examination (IEE). IEE also seek information required regarding the forest and timber use along with the source of energy. The main issue with the IEE is it does not focus on emissions form combustion or operations causing emission during construction phase. IEE has taken into account noise generation during the operation phase. IEE also has a section on waste generation which includes solid and liquid waste. The form does not seek information on hazardous waste management. There is a requirement to attach Environmental Management Plan to address mitigation measures to address impacts because of solid and liquid waste.

The Initial Environmental Examination for both general projects and industrial projects requires information on the environmental and social sensitivity such as if it is within state reserve forests or within the vicinity of a river, spring, stream, wetland, private forest or any heritage site (see *Table 20: Score on information collection—Bhutan*).

Table 20: Score on information collection—Bhutan

Indicator	Total
Basic information	0.60
Information on the usage of natural resources	0.70
Information on emission	0.25
Information on waste and wastewater generation and treatment	0.38
Environmental and social sensitivity	0.38
Total score	2.31 [Max: 5 marks]

2.3.2c Ethiopia

Proclamation number 299/2002 details the EIA process to be adopted in Ethiopia. The EIA process is further detailed in the Environmental Impact Assessment procedural guideline Series 1. Section 5.2.2 and 5.2.3 talks about the screening and scoping process to be adopted. The screening and scoping process enlist what information is required by the decision makers. It is, however, not exhaustive and many important questions are missing. It is difficult to understand how decision makers will take important decision based upon the little information provided by the project proponent.

The information sought is under broad headings such as potential impacts, institutional requirements, environmental enhancement, monitoring consideration etc. Such broad headings will not provide the finer details that decision makers need to evaluate a project (see *Table 21: Score on information collection—Ethiopia*).

Table 21: Score on information collection—Ethiopia

Indicator	Total
Basic information	0.40
Information on the usage of natural resources	0.30
Information on emission	0.38
Information on waste and wastewater generation and treatment	0.00
Environmental and social sensitivity	0.38
Total score	1.46 [Max: 5 marks]

2.3.2d Ghana

The EIA process starts in Ghana with the proponent submitting environmental assessment forms. These are the initiating document that the proponent has to fill in.

Environmental Assessment Form 1 is the initial form to start EIA process. Based upon information provided in Form 1, the regulator will suggest whether proponent needs to go for comprehensive EIA by submitting Form 2.

EA Form 1 collects information in three headings: project site, infrastructure and utilities and environmental impacts. Form 1 along with basic information also seeks details about land use of adjacent land which will help decision maker understand the cumulative impact of the projects.

The section on raw material usage is not comprehensive. In one question they have asked all details. There is separate section on source and quantity of water required and also on power regarding details about type, source and quantity of fuels.

Surprisingly, EA Form 1 does not seek any information on emission with regard to either process or burning of waste. What they have asked is subjective question, for example, detailing environmental impact during construction and operation phase.

Also, the concerns of the local stakeholders (the first public consultation happens) during the information collection where the proponent is required to initiate the process of environmental assessment. The impact should focus on geomorphology, land stability and landscape. In addition, impacts on drainage, water quality, biota and transport systems are also mentioned (see *Table 22: Score on information collection—Ghana*).

Table 22: Score on information collection—Ghana

Indicator	Total
Basic information	0.70
Information on the usage of natural resources	0.60
Information on emission	0.00
Information on waste and wastewater generation and treatment	0.50
Environmental and social sensitivity	0.31
Total score	2.11 [Max: 5 marks]

2.3.2e Kenya

The general application form which requires preliminary information about the project was not available. Neither there was any format of the application form given in the public domain. However, in consultation with NEMA, it is understood that the information about the project is asked under Section 7 of Part II of the Environmental (Impact Assessment and Audit) Regulations, 2003.

The section mentions the content of the project report. The project report should contain information regarding the nature of the project, the location of the project including the physical area. However there is no mention of the interlinked projects and alternative sites.

The project report should contain information on the type of activities during construction, operation and decommissioning. There is also requirement of the natural resources used, by-products and waste generated and disposal methods but there is neither mention of the quantity of the natural resources nor mention about the energy and fuel used.

The potential environmental impacts, plans regarding environmental mitigation, health and safety plans for the stakeholders is mentioned. However there is no mention of effects on factors like ecological sensitivity, flora and fauna (see *Table 23: Score on information collection—Kenya*).

Table 23: Score on information collection—Kenya

Indicator	Total
Basic information	0.70
Information on the usage of natural resources	0.25
Information on emission	0.25
Information on waste and wastewater generation and treatment	0.50
Environmental and social sensitivity	0.38
Total score	2.08 [Max: 5 marks]

2.3.2f Mozambique

The Regulation on the Environmental Impact Assessment process details the EIA protocol adopted in Mozambique. Annex VI of the regulation—called preliminary environmental information sheet—enlists information the proponent needs to provide to the authority that is used to categorize the project. Along with basic information, information on cumulative impact assessment and site alternative is also sought. Information is also sought on raw material type and its source and quantity; source of water and proposed requirement; energy source, type and proposed requirement; as well as waste and wastewater generation and treatment.

Unfortunately, the information sheet does not ask proponent to provide information on emission. The information sheet seeks details about indicators that are environmentally and socially sensitive such as type of ecosystems, local and regional environmental situation, location of the zone and the vegetation type. The proponent has to also provide information on the type, origin number of labour which will be required during the operation, construction and demolition phase of the activity (see *Table 24: Score on information collection—Mozambique*).

Table 24: Score on information collection—Mozambique

Indicator	Total
Basic information	0.90
Information on the usage of natural resources	0.50
Information on emission	0.00
Information on waste and wastewater generation and treatment	0.50
Environmental and social sensitivity	0.54
Total score	2.44 [Max: 5 marks]

2.3.2g Namibia

The Ministry of Environment, Forestry and Tourism have provided screening questionnaire to ascertain projects requiring EIA. This is one of the best information sheets available among the countries of study. The only weak part is with respect to basic information, which does not include details about cumulative impact assessment, litigation pending or site alternatives. Information on impact of project on neighbouring country is sought but no there is no question on impact of the project in the area where it is located.

The questionnaire has a section on process detail and raw materials. The proponent has to also provide information on source of water and whether significant energy will be required. The proponent has to also provide information on emissions from the combustion process, production process and of other sources. Qualitative questions about waste and wastewater generation are asked. Quantitative information is missing.

The project proponent is to provide exhaustive information on unique wildlife, unique plant life, archaeological features and national monuments nearby, proximity to wetlands, rivers or any other waterbody, and any impact on valuable habitats or ecosystem. Information on displacement and resettlement has to be provided (see *Table 25: Score on information collection—Namibia*).

Table 25: Score on information collection—Namibia

Indicator	Total
Basic information	0.40
Information on the usage of natural resources	0.65
Information on emission	0.56
Information on waste and wastewater generation and treatment	0.50
Environmental and social sensitivity	0.61
Total score	2.72 [Max: 5 marks]

2.3.2h Nepal

Schedules 5 and 6 of the Environment Conservation Rules detail information of the project. Since there is already a clear distinction between projects that requires IEE and EIA, the proponent has to either fill in the IEE or the EIA depending on the kind of the project. Among Asian countries, only Nepal has asked for information on site alternative and cumulative impact of the project.

The usage of the natural resources is not addressed properly in the Section 5. It simply asks what materials are to be used. With respect to energy, the source and quantity is asked as per day/year. Detailed information is required from project proponent on emission or effluent from the upcoming project. In the same question, information on solid waste is also sought—the proponent has to also describe the arrangement made for disposing of or processing of waste.

Very little is asked pertaining to environmental and social sensitivity and the questions asked are not focussed but scattered all over the questionnaire (see *Table 26: Score on information collection—Nepal*).

Table 26: Score on information collection—Nepal

Indicator	Total
Basic information	0.70
Information on the usage of natural resources	0.60
Information on emission	0.75
Information on waste and wastewater generation and treatment	0.38
Environmental and social sensitivity	0.31
Total score	2.74 [Max: 5 marks]

2.3.2i Sri Lanka

The Central Environmental Authority provides an application form—also called the basic information questionnaire (BIQ)—to the project proponent. On the basis of the furnished information on BIQ, the Central Environmental Authority decides if the project requires an EIA.

The BIQ is fairly exhaustive and covers several important indicators that show the decision maker details regarding timber extraction, surface or groundwater extraction, waste disposal, conversion of forestland etc. The basic information questionnaire (BIQ) does not seek information on the quantity of air emission and wastewater discharge. It intends to know whether emission or discharge will have any impact on the surroundings. However, they have asked in detail the mitigation measures to reduce air and water pollution.

The BIQ has accounted for the generation of waste during the construction, operation and decommissioning process. Information regarding hazardous waste, industrial wastewater and sewage along with treatment facility is sought.

When it comes to addressing environmental and social sensitivity, the BIQ has asked for good information to understand the likely impact of the project on the same. Information on proximity to national heritage, archaeological sites or protected areas such as botanical gardens, sanctuaries, public lakes and national reserve forests are all included in the BIQ. The BIQ also requires information on impact on livelihood of local residents as well as displacement of people (see *Table 27: Score on information collection—Sri Lanka*).

Table 27: Score on information collection—Sri Lanka

Indicator	Total
Basic information	0.70
Information on the usage of natural resources	0.90
Information on emission	0.25
Information on waste and wastewater generation and treatment	0.63
Environmental and social sensitivity	0.54
Total score	3.02 [Max: 5 marks]

2.3.2j Tanzania

The EIA process starts in Tanzania with project proponent submitting the project registration form or Form 1 according to the Regulation 5(3) of the Environmental Management Act (CAP 191).

The information required in Form 1 is broadly divided into five headings: proposed undertaking/development, proposed site, infrastructure and utility, environmental impacts and other environmental issues.

The section of the proposed undertaking requires information on the detail process diagram, raw material usage along with chemicals, storage facilities, waste

generation and infrastructure for labour force. The proposed site section requires information such as location, adjacent land use and site descriptions. The section on infrastructure and utility requires information on water and power usage.

The section on the environmental impacts requires information on potential environmental effects both during construction and operation phase. The area where Form 1 is weak is in seeking details regarding and environmental and social sensitivity (see *Table 28: Score on information collection—Tanzania*).

Table 28: Score on information collection—Tanzania

Indicator	Total
Basic information	0.70
Information on the natural resources	0.70
Information on emission	0.38
Information on waste and wastewater generation and treatment	0.63
Environmental and social sensitivity	0.38
Total score	2.79 [Max: 5 marks]

2.3.2k Zambia

Section 3 (1) under Part III of the Environmental Protection and Pollution Control 1997 have provision for project brief as a requirement before a developer can implement project. Section 4 of the Part III details out what should project brief should contain. The generic environmental project brief format is also available on the website. The general section of the project brief is quite exhaustive and has asked crucial questions like cumulative impact assessment, site alternative or any litigation pending against the project which is not there in the format used by other countries in the study.

The projects brief has questions pertaining to raw material usage, hazardous materials, groundwater and surface water. Surprisingly the brief does not have any question on energy usage. The question on emission is incomplete. There are questions only on noise and vibration and have qualitative questions on emission. Surprisingly the brief does not have any question on waste and wastewater generation.

The project brief has some good questions on environmental and social sensitivity such as identification of rare and endangered bird species, flora and fauna, location of significant historical or archaeological features, population density, and resettlement and compensation plan (see *Table 29: Score on information collection—Zambia*).

Table 29: Score on information collection—Zambia

Indicator	Total
Basic information	0.90
Information on the usage of natural resources	0.70
Information on emission	0.25
Information on waste and wastewater generation and treatment	0.00
Environmental and social sensitivity	0.46
Total score	2.31 [Max: 5 marks]

2.4 Compliance mechanism

Once a project is approved, periodic inspection is required to assess the compliance status concerning norms and conditions as stipulated by the competent authority. The norms include environmental standards duly notified under law and/or resolution with respect to emissions, effluents, hazardous and non-hazardous solid waste disposal and/or management in an environmentally sound manner. The project proponent may also submit a report with a stipulated frequency to the competent authority on compliance status.

Therefore, there shall be a dedicated agency under the law to supervise the entire compliance mechanism including inspection, monitoring and reviewing of the report submitted by the project proponent. Inspection and monitoring shall be done with a regular frequency.

It is pertinent to understand the deterrence mechanism empowers the authorizing agency under law to exercise in case of non-compliance. The deterrence mechanism may comprise show cause notices and fine with fixed amount mentioned in the penal provision of law. The closure of industries in the case of gross violation may be one of the deterrence mechanisms. There shall, however, be provision to empower the authority to prosecute the proponent in court. In such cases the penal provision includes either fine or imprisonment or both.

Based on the aforementioned, a systematic analysis compares each participatory Asian and African country's compliance mechanism process following the criteria discussed below:

- Compliance mechanism available
- Identification of monitoring agency
- Frequency of compliance report submission by project proponent
- Penal provision in case of non-compliance

2.4.1. Methodology for rating on compliance mechanism

The assessment of countries on compliance mechanism is done on the four parameters and marked as explained in then following:

a. Availability of compliance mechanism in the legal system

Yes (1 mark) No (0 mark)

b. Is there any authorized agency for ensuring compliance mechanism

Yes (1 mark) No (0 mark)

c. Frequency on submission of compliance report

Yes (1 mark) No (0 mark)

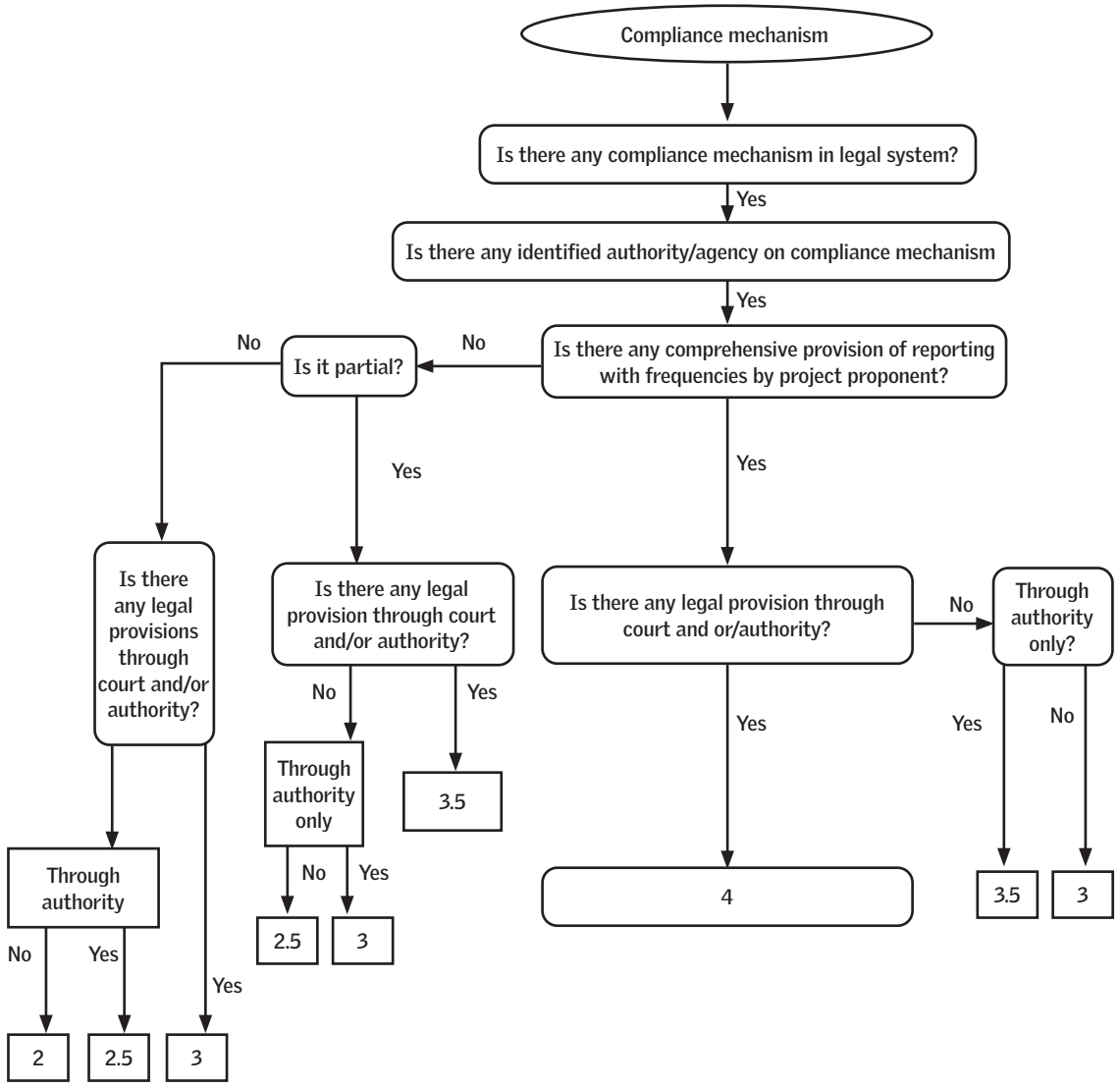
- Yes, implies both reporting and monitoring of compliance along with frequency of submission of report: 1 mark
- If it is partial: 0.5 mark, Partial is termed when there is a provision but no frequency
- No provision: 0 mark

d. Penal provision: Is there any penal provision, concerning prosecution to court and/or provision on the direction on closure or warning with the agency/ authority?

- If both court and authority are available: 1 mark
- If only by authority: 0.5 mark
- No such provision: 0 mark

(See *Fig. 16. Flow chart on rating compliance and monitoring.*)

Figure 16: Flow chart on rating compliance mechanism



Source: Compiled by CSE

2.4.2. Compliance mechanism in participatory countries

2.4.2a Bangladesh

The environmental clearance given to the projects is valid for three years for green projects and one year for Orange A, B and Red. Although there is a mechanism for monitoring to check if the industries are complying with the norms laid down in the clearance certificate, the project proponent is supposed to submit the compliance report to the department of environment (DoE). The DoE is

the compliance monitoring agency that gives the clearance and monitors the compliance mechanism.

Three phases of licensing have been mentioned under the ECR, 1997, are:

1. Temporary license with a validity of three years

2. License for installation of the project with a validity of two years

3. Operational license with a validity period of five years, if the norms comply, duly inspected by the DoE officials.

DoE officials are empowered to check if the proponent reports. With respect to penal provision in case of non-compliance vested with authority to give directions including closure. In addition, provision of prosecution is provided under law (see *Table 30: Score on compliance mechanism—Bangldesh*).

Table 30: Score on compliance mechanism—Bangladesh

	Compliance mechanism available	**Identification of compliance agency**	**Compliance report submission frequency**	**Penal provision in case of non-compliance**	**Total** (Max: 4 marks)
Consideration	Yes	Yes	Partial	Yes	
Scoring	1	1	0.5	1	3.5
Reason	Available under Environment Conservation Rules, 1997	The Department of Environment (DoE) is the agency under Section (3) of the provision of Environment Conservation Act, 1995	Frequency is not fixed and varies according to the requirements of different projects	Authority has the power to give directions including closure under section 4 and provision of prosecution is provided under Environment Conservation Act, 1995.	

2.4.2b Bhutan

Compliance monitoring has been strengthened in Bhutan by creating a separate division, namely, the Environmental Assessment and Compliance Division (EACD) whose main responsibility is to monitor and enforce the norms laid down in clearance.

The EACD oversees the overall compliance mechanism and conducts the monitoring of the projects by giving authorization to the compliance authority (CA) to conduct field visits. The CA is empowered with conducting compliance monitoring annually and ensures that the proponent who has obtained the license follows all the norms. The EACD has the final authority to enforce deterrence mechanisms in case of non-compliance.

Once the proponent agrees to the terms and conditions, their projects are approved, and environmental clearance is given. The proponent must comply with the environmental standards during the operational phase and submit the compliance reports as per terms and conditions in environmental clearance. However, during the annual field visits, if the compliance authority (CA) feels there is a non-compliance, they report the findings to the EACD, who can direct sanctions and penalize the proponent through monetary compensation for the environmental damage caused (see *Table 31: Score on compliance mechanism—Bhutan*).

Table 31: Score on compliance mechanism—Bhutan

	Compliance mechanism available	**Identification of compliance agency**	**Compliance report submission frequency**	**Penal provision in case of non-compliance**	**Total** (Max: 4 marks)
Consideration	Yes	Yes	Yes	Yes	
Scoring	1	1	1	1	4
Reason	Available under the Environment Assessment Act, 2000.	The Environmental Assessment and Compliance Division (EACD) under Section 39 of Environmental Assessment Act, 2000.	Annual	Payment of compensation for environmental damage resulting from their action, as well as provision for prosecution with respect to criminal offense under section 49, chapter VII of the said Act.	

2.4.2c Ethiopia

The Federal Democratic Republic of Ethiopia, through the EIA Proclamation 299/2002, stipulates compliance monitoring under the duties and responsibilities with the regional environmental agency. The function of the regional environmental agency is to oversee the entire compliance mechanism, lay self-auditing procedures, and monitor during implementation operation. As an example, Addis Ababa City

Environmental Protection Authority has the power to monitor and evaluate the performance with stipulated norms under the clearance condition of the project. Under Section 6.2 of Environmental Impact Assessment Procedural guideline series 1, the proponent has to report on a regular bases about its environmental performance. In case of non-compliance, the regional authority can direct orders for the proponent to take rectification measures under the provision of stated proclamation. The regional authority can also revoke or suspend the license in an adverse situation. Under Proclamation 299/2002, it is also stated that the authority can impose penal provisions if it is so desired (see *Table 32: Score on compliance mechanism—Ethiopia*).

Table 32: Score on compliance mechanism—Ethiopia

	Compliance mechanism available	**Identification of compliance agency**	**Compliance report submission frequency**	**Penal provision in case of non-compliance**	**Total** (Max: 4 marks)
Consideration	Yes	Yes	Partial	Yes	
Scoring	1	1	0.5	1	3.5
Reason	Available under Environmental Impact Assessment Proclamation no. 299/2002	The regional environmental authority is entrusted to ensure compliance under Section 12 of Part IV of Environmental Impact Assessment Proclamation no. 299/2002	Reporting is mentioned but frequency is not quantified as per EIA Procedural Guidelines, 2003	Provision of direction for rectification measures, the penalty in the form of monetary compensation. Also, revocation of the license of the project. There is also provision for prosecution by court (Part SIX Section 18(5) of Proclamation no. 299/2002	

2.4.2d Ghana

Section 13 of the Environmental Protection Agency Act 1994 lays procedure for enforcement. There are provisions for monitoring to ensure compliance in Ghana. Ghana has also empowered field officers to conduct monitoring at the affected location.

The monitoring protocol as well as environmental quality parameters are defined in permitting schedules on a case-by-case basis. It is expected that there will be

a submission of annual environmental reports by the project proponents. These reports have to be examined by the EPA with due diligence. In the report and approved within 24 months of activity, the proponent should send evidence to the EPA that the activity complies with the conditions laid down in the environmental clearance. The proponent then obtains an Environmental Clearance Certificate.

It is also noteworthy to understand there are specific provision in case of non-compliance issues that are addressed through Section 13 of EPA Act 490, which empowered the agency to enforce notices, penalties, administrative charges, suspension, revocation, and cancellation of environmental permits and finally prosecutions (see *Table 32: Score on compliance mechanism—Ghana*).

Table 33: Score on compliance mechanism—Ghana

	Compliance mechanism available	**Identification of compliance agency**	**Compliance report submission frequency**	**Penal provision in case of non-compliance**	**Total** (Max: 4 marks)
Consideration	Yes	Yes	Yes	Yes	
Scoring	1	1	1	1	4
Reason	Available under Environmental Assessment Regulation, 1999 under Environmental Protection Agency Act, 1994	Environmental Protection Agency under Sections 12 to 15 under Environmental Protection Agency Act, 1994	Annual	Provision to enforce notices, penalties, administrative charges, suspension, revocation, cancellation of Environmental Permits and provision for prosecutions. Under section 13(3) of environmental protection agency, Act, 1994	

2.4.2e Kenya

The National Environment Management Authority (NEMA) is empowered under the Environmental Management and Coordination Act EMCA) under Section 7 of 1999 to administer the EIA. NEMA appoints an agency to audit the project annually to ensure compliance as well as the impact on the environment during the construction and operation phases. NEMA also inspects to ensure the implementation of licence conditions. There is a provision of submission of compliance report by the project proponent under section 68(3) of the said act. In case of non-compliance, NEMA may initiate action such as a warning, direction etc. If necessary, they also prosecute the project proponent.

If non-compliance from any industry is found, then enforcement actions like warnings and restoration maybe initiated. Sections 138–144 describes that if a licensee commits an offence, he shall, on conviction be liable to imprisonment for a term of not less than one year but not more than four years, or to a fine of not less than two million shillings but not more than four million shillings, or to both such fine and imprisonment. Offenses related to compliance of norms stipulated in clearance condition, a defaulter is liable on conviction to imprisonment for a term not exceeding twenty-four months or to a fine of not more than two million shillings or both such imprisonment and fine (see *Table 34: Score on compliance mechanism—Kenya*).

Table 34: Score on compliance mechanism—Kenya

	Compliance mechanism available	**Identification of compliance agency**	**Compliance report submission frequency**	**Penal provision in case of non-compliance**	**Total** (Max: 4 marks)
Consideration	Yes	Yes	Yes	Yes	
Scoring	1	1	1	1	4
Reason	Available under the Environmental Management and Coordination Act (EMCA), 1999	National Environment Management Authority (NEMA) under Section 7 of the Environmental Management and Coordination Act (EMCA) 1999.	Annual	In case of non-compliance, there is an enforcement action like warnings, monetary compensation and also the prosecution of the defaulter under Section 144 of the said Act	

2.4.2f Mozambique

The National Agency for the Control of Environmental Quality (AQUA) is a part of concerned ministry which oversees the compliance of EIA regulation during the project of the cycle. There is provision of conducting environmental audit by the accredited auditor by AQUA. However, the monitoring activities are with the proponent. Frequency of submitting compliance report is annual (see *Table 35: Score on compliance mechanism—Mozambique*).

Table 35: Score on compliance mechanism—Mozambique

	Compliance mechanism available	Identification of compliance agency	Compliance report submission frequency	Penal provision in case of non-compliance	Total (Max: 4 marks)
Consideration	Yes	Yes	Yes	Partial	
Scoring	1	1	1	0.5	3.5
Reason	Available under Decree 25/2011, of 15 de June	AQUA under Articles 5 and 6 of Decree 25/2011, of 15 de June	Annual	Comprehensive offenses and penal provisions under Articles 14, 15 and 16 of Decree 25/2011, of 15 de June. No provision for prosecution.	

2.4.2g Namibia

The Environmental Management Act (EMA), 2007 provides a comprehensive mechanism for compliance and monitoring. According to the Act, Environmental Management plan has to be submitted by the project proponent. The proponent shall submit the report bi-annually as laid down in the clearance condition. The environmental commissioner is the competent authority to deal with non-compliance of the clearance conditions. There is also mechanism for penalty/prosecution on offense by the project proponent (see *Table 36: Score on compliance mechanism—Namibia*).

Table 36: Score on compliance mechanism—Namibia

	Compliance mechanism available	Identification of compliance agency	Compliance report submission frequency	Penal provision in case of non-compliance	Total (Max: 4 marks)
Consideration	Yes	Yes	Partial	Yes	
Scoring	1	1	0.5	1	3.5
Reason	Available under Environmental Management Act (EMA) 7 of 2007	The office of the Environmental commissioner is the regulatory agency (Under section 16 and 17 of the EM Act, 2007	Bi-annual	Suspension or cancellation of the licence under Section 42 of said Act by Environmental Commissioner. Provision for prosecution. Imprisonment under Sections 53 and 54(b) of the EM Act, 2007	

2.4.2h Nepal

The Ministry of Environment in Nepal is the apex agency accountable to look into all the environmental matters of the country. There is a provision for submission of report but frequency of submission of EIA report is not mentioned (see *Table 37: Score on compliance mechanism—Nepal*).

Table 37: Score on compliance mechanism—Nepal

	Compliance mechanism available	Identification of compliance agency	Compliance report submission frequency	Penal provision in case of non-compliance	Total (Max: 4 marks)
Consideration	Yes	Yes	Partial	Partial	
Scoring	1	1	0.5	0.5	3
Reason	Available under Environment Protection Rules (EPR), 1997	The Ministry of Forests and Environment under Sections 12 and 13 of the Environment Protection Act, 2019	There is a provision of submission of reports but frequency not mentioned	Provision of direction by the authority is under section 13(2) of the Environmental Protection Rules, 1997	

2.4.2i Sri Lanka

In order to abide by the compliance norms in Sri Lanka, the proponent must submit the Environmental Management Plan (EMP). CEA is responsible for ensuring compliance monitoring. However, CEA has delegated the task to Project Approving Authority (PAA). To mitigate the site-specific impacts, the proponent must submit the site-specific mitigation measures within the EMP. It is mandatory for the proponent to obtain an Environmental Protection License (EPL) from the CEA. However, in order to observe the compliance in field, the PAA appoints a monitoring committee to implement the monitoring program. The provision of the monitoring committee is to review the periodic monitoring reports submitted by the proponent. It is the task of the proponent who has to regularly submit the self-monitoring report to the CEA.

It is worth mentioning that monitoring reports should also include compliance monitoring data in the case of industries. The competent authority also checks whether the industry complies with conditions stipulated in the EPL. If the industries are not complying with the regulations, there might be legal proceedings against industries. Legal proceedings are adopted under part IV A of the National Environmental Act when;

- An industrial activity/process violates any terms, conditions, and standards stipulated in the license.

- The prescribed industries do not obtain an Environmental Protection Licence (EPL) (see *Table 38: Score on compliance mechanism—Sri Lanka*).

Table 38: Score on compliance mechanism—Sri Lanka

	Compliance mechanism available	Identification of compliance agency	Compliance report submission frequency	Penal provision in case of non-compliance	Total (Max: 4 marks)
Consideration	Yes	Yes	Partial	Yes	
Scoring	1	1	0.5	1	3.5
Reason	Available under the National Environmental Act,1980	Central Environmental Authority (CEA) under section 2 of the National Environmental Act, 1980	Submission of reports mentioned but frequency not quantified	Revocation of licence and administrative charges. Provision for prosecution under section 23 part IV A of National Environmental (Amendment) Act No.56 of 1988.	

2.4.2j Tanzania

The monitoring and compliance framework in Tanzania is vested with the directorate of the environment under the National Environment Management Council (NEMC). Auditing is the tool for assessing compliance with the conditions laid down under the environmental management plan. The proponent shall submit the self-audit report annually. Self-auditing is a continuous process. However, NEMC is empowered to monitor to ensure the compliance status. If the proponent fails to implement, an improvement order or mitigation measures as stipulated by the authority, concerning the audit report. Penal provisions such as revocation, suspension can be issued (see *Table 39: Score on compliance mechanism—Tanzania*).

Table 39: Score on compliance mechanism—Tanzania

	Compliance mechanism available	Identification of compliance agency	Compliance report submission frequency	Penal provision in case of non-compliance	Total marks (Max: 4 marks)
Consideration	Yes	Yes	Yes	Yes	
Scoring	1	1	1	1	4
Reason	Available under Environmental Management Act, 2004	NEMC under Section 3 of Environmental Management Act, 2004	Annual	Revocation, suspension can be issued in case of non-compliance. Proponent can be persecuted in the case of non-compliance (Section 184 of EM Act 2004).	

2.4.2k Zambia

There is a provision on compliance mechanism under the Environmental Management Act, 2011 in Zambia. Environmental Management Authority (ZEMA) is the agency for ensurance of compliance mechanism. There is a provision of self-auditing by the project proponent and submit the report annually under section 101 of the EMA 2011. Failure to comply with the clearance condition attracts actions of revocation or Zambia suspension or direction for mitigation from ZEMA under Section 106(3) and liable to prosecution upon conviction to a fine of not exceeding 300,000 penalty units or to imprisonment for a period not exceeding three years or to both under section 106(5) of the said act (see *Table 40: Score on compliance mechanism—Zambia*).

Table 40: Score on compliance mechanism—Zambia

	Compliance mechanism available	Identification of compliance agency	Compliance report submission frequency	Penal provision in case of non-compliance	Total (Max: 4 marks)
Consideration	Yes	Yes	Yes	Yes	
Scoring	1	1	1	1	4
Reason	Available under Environmental Management Act, 2011	Zambia Environmental Management Agency (ZEMA) under Section 12 of the Environmental Management Act, 2011.	Annual	Revocation of environmental licence, the direction to mitigative measures and prosecution under Section 106(5) of the Environmental Management Act, 2011	

2.5. Information transparency

In order to safeguard the interest of communities affected by developmental activities, there should be a means for dissemination of information about an upcoming project so that local stakeholders have a sense of inclusiveness and better understanding while making a decision regarding the project. A conference organized by the United Nations Economic Commission for Europe (UNECE) on information dissemination on June 25, 1998 in Aarhus, Denmark, discussed that access to environmental information should be considered a right and should also include public participation in decision-making. This Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters was to be famously known as the Aarhus Convention. Since then, active engagement with the stakeholders has been considered a crucial aspect of the environmental conservation process.

The Environmental Impact Assessment process considers public participation and stakeholder consultation as an essential step. It is understood that conducting a successful EIA process is synonymous with a meaningful stakeholder engagement perceived by the local communities. It is also observed that for better stakeholder engagement, there must be a transparent information dissemination followed by unbiased integration of responses by stakeholders. This would ensure a better sense of inclusiveness amongst the stakeholders about the project.

Environmental assessment processes are primarily statutory, based on bylaws enacted by Parliament. So, it is difficult for stakeholders to continuously monitor, checking updates on any EIA projects unless an online system is developed that allows interested parties to look up information in case of any queries arise. While exclusively discussing EIA, it is important that there is a portal that would update stakeholders with details about the developing project, like the EIA reports. During the public hearing process, the proceedings are recorded and published in reports that should also be put up on the online portals so that the public can provide feedback. Since EIA is a time-constrained process, the time frame allotted should be sufficient for stakeholder comments. Moreover, documents of the EIA process like the environmental clearance certificate given at the end of a satisfactorily conducted environmental assessment process should also be accessible.

The system in place for African and South Asian countries on information transparency is being evaluated using a set of questions—such as whether the country has a website dedicated to environmental administration and accessible to all the stakeholders—that would define how efficient the process of information dissemination is. If a website is available, it should provide an overview of the environmental scenario by updating the

environmental laws, regulations, and amendments. It is essential to know if the reports on environmental assessments like the EIA study report are uploaded on the online portal to be accessible to everyone. Finally, to understand the status of the proposed project—including if it was approved by the environmental clearance authorities—it is imperative to check the details of the clearance certificates. Thus, uploading the environmental certificate can imply whether the concerns of the stakeholders was included in the decision-making.

2.5.1 Methodology for rating on information transparency

The rating is assessed based on the questions. Fulfilling the following questions defines the overall effectiveness of the information transparency practised in different countries;

- Whether there is a website provided it includes a crucial database related to environmental laws and updates on environmental regulations and amendments of the country. Also includes documents and portals related to EIA procedures: Yes (1) / No (0)

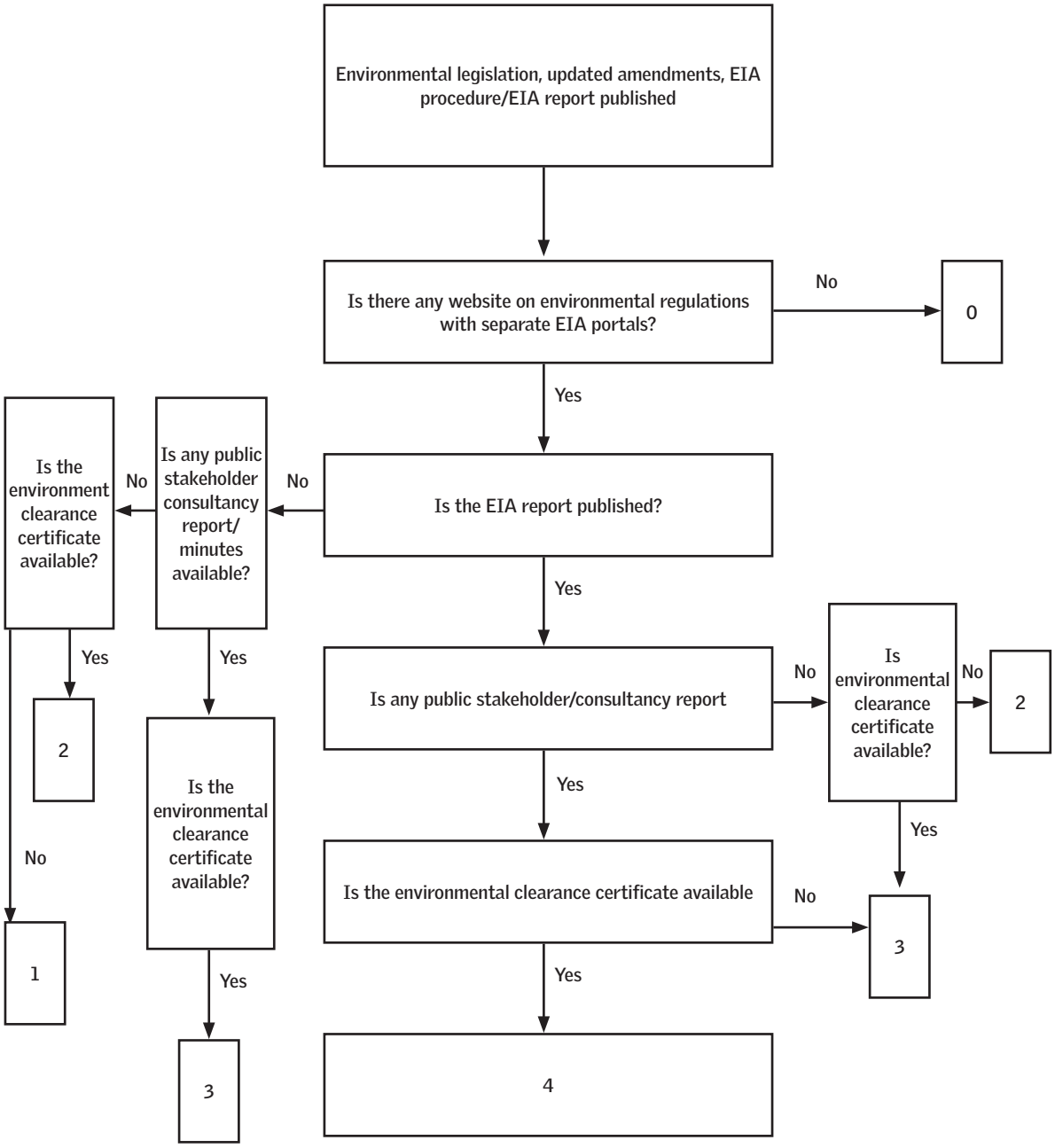
- If EIA reports available online: Yes (1) / No (0)

- Is the information on public consultation (highlights from public hearing and key discussing points during the stakeholder consultation process recorded and published) available on the website?: Yes (1) / No (0)

- Is the environmental clearance certificate available?: Yes (1) / No (0)

(See *Fig.17: Flow chart on rating information transparency*.)

Figure 17: Flow chart on rating information transparency



Source: Compiled by CSE

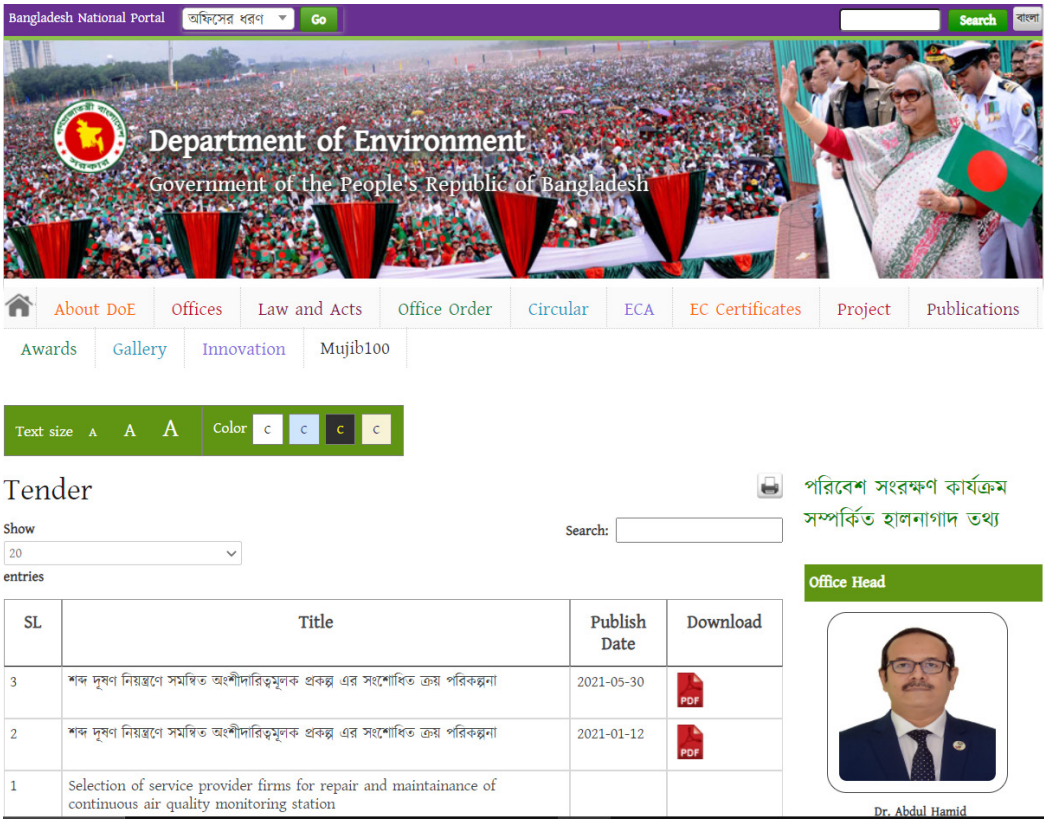
2.5.2 Country-specific rating on information transparency

2.5.2a Bangladesh

Bangladesh has a portal maintained by the Department of the Environment (DoE), which is the national portal for disseminating information regarding the updates on the environmental database. Two languages, Bengali and English, are available to users.

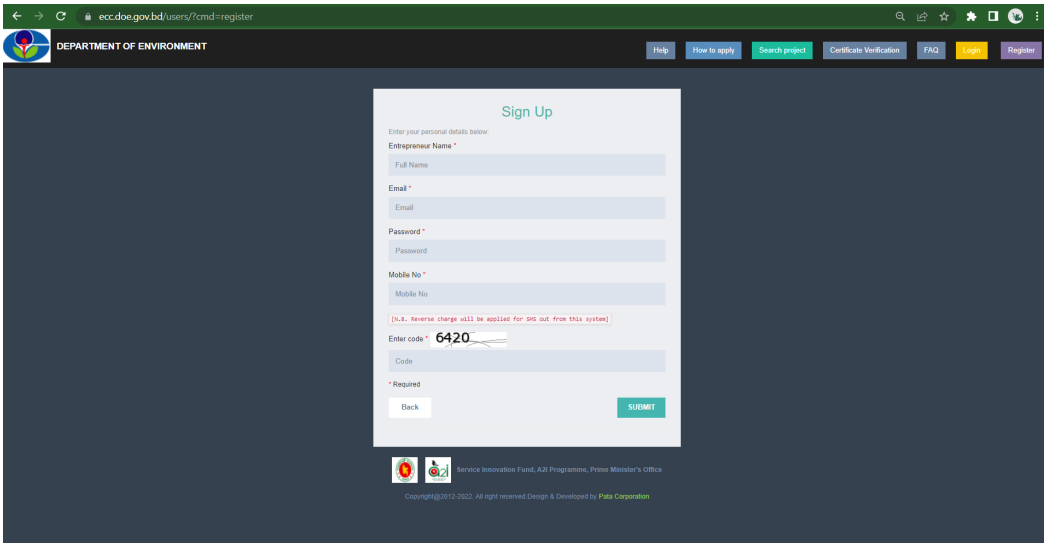
The sub-portal on EC clearances has documents pertaining to process required for EIA, different type of forms, EIA guidelines for different sectors. However, the EIA report of past or upcoming project was not available on the website. Even the EC clearances page required registration which is available only for the entrepreneurs. In nutshell, DOE has not provided sufficient information in public domain for projects requiring EIA. It is in need for improvement (see *Table 41: Score on information transparency—Bangladesh*).

Figure 18: The portal of Department of Environment



Source: http://www.doe.gov.bd/ as accessed on June 29,2022

Figure 19: Environmental clearance portal for entrepreneurs only



Source: https://ecc.doe.gov.bd/users/?cmd=register accessed on June 29,2022

Table 41: Score on information transparency—Bangladesh

	Website of regulating authority	Availability of EIA reports	Accessibility of information on stakeholder consultation	Availability of clearance certificate	Total (Max: 4 marks)
Scoring	1	0	0	0	1.0
Reason	Department of environment http://www.doe.gov.bd/	Not available	Not available for public comments	EC certificate is password protected and is accessible only to entrepreneurs	

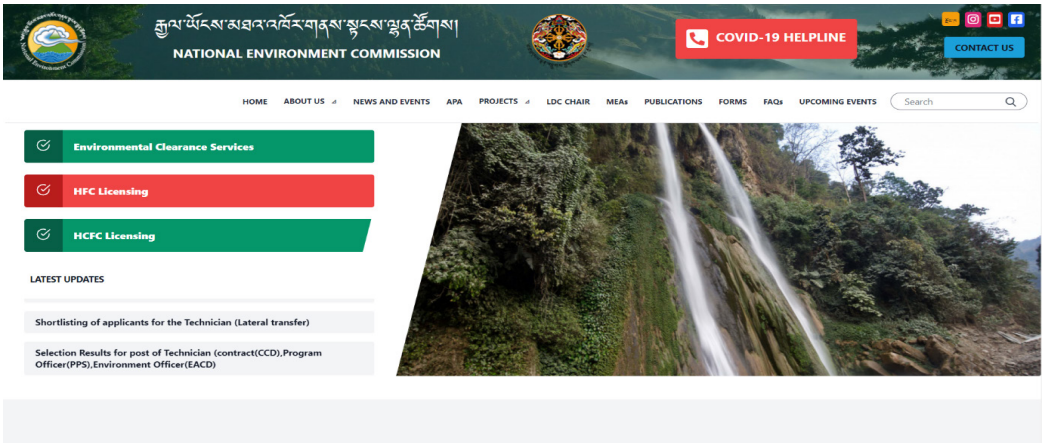
2.5.2b Bhutan

Bhutan has an online portal that is maintained by the National Environment Commission (NEC). This is a national portal for coordinating with environmental matters reflecting the decision made at the highest level by multi-sectoral body of Bhutan. The portal is accessible in English predominantly, although the reports are both available in English and Bhutanese.

The NEC has publicized many reports and forms for stakeholders for direct accession. The IEE, EA, notification on project categorization have all been included as part of publication and forms which is available to the stakeholders. The portal has also put up different reports on environmental standards, ozone and other hazardous waste regulations. This portal certainly provides a one-stop

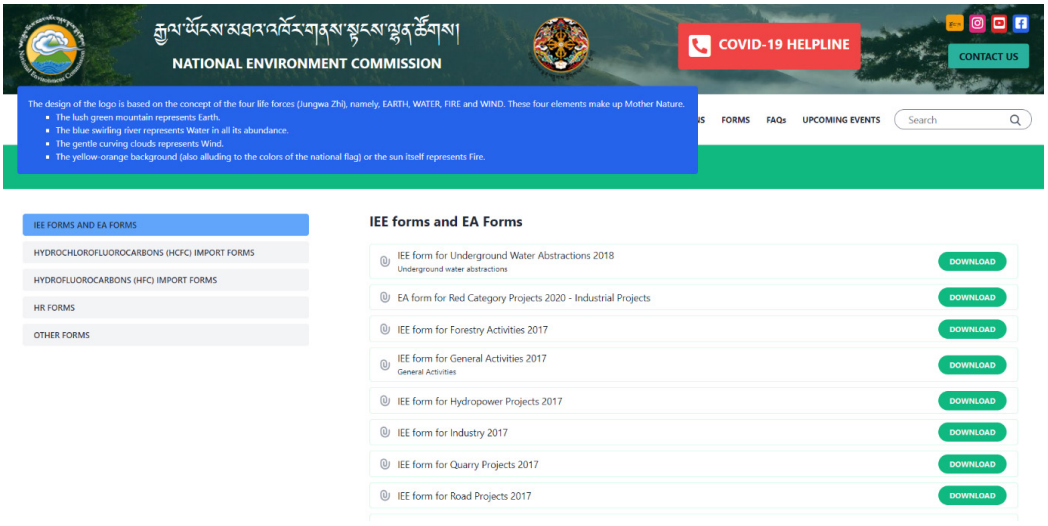
directory for understanding and referring to information required for a project.

Figure 20: National portal for environmental clearance and other projects



Source: http://www.nec.gov.bt/ as accessed on June 29,2022

Figure 21: Different environmental assessment forms



Source: http://www.nec.gov.bt/forms/iee-forms-and-ea-form-for-red-category-projects-industrial-projects as accessed on June 29,2022

However, the website has not published any reports of existing, or previous environmental assessment reports in the portal. The minutes of meeting of recordings of the stakeholder consultation or the information about awareness of a public hearing in Environmental Impact Assessment is also not available on the website (see *Table 42: Score on information transparency—Bhutan*).

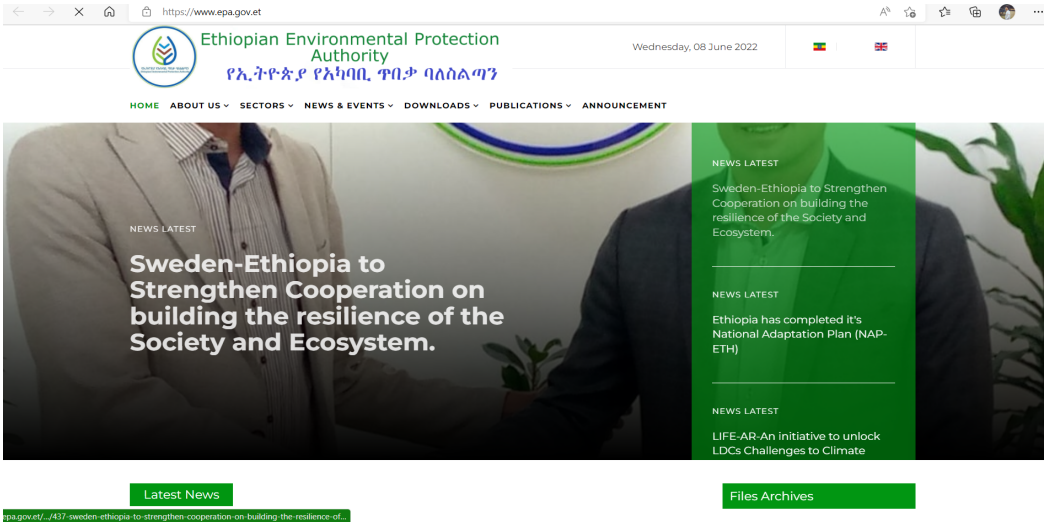
Table 42: Score on information transparency—Bhutan

	Website of regulating authority	Availability of EIA reports	Accessibility of information on stakeholder consultation	Availability of clearance certificate	Total (Max: 4 marks)
Scoring	1	0	0	0	1
Reason	National Environment Commission (NEC) http://www.nec.gov.bt/	Not available	Not available for public comments	Not available	

2.5.2c Ethiopia

The government has a national agency called the Ministry of Environment, Forest and Climate Change of Ethiopia (EFCCC) which is now merged with Ethiopian Environmental Protection Authority. The agency has a website but does not have a comprehensive page on EIA. They have a page on Environmental and Social Impact Assessment report which has few ESIA report. There is no information on the website regarding old projects or anything about the upcoming projects. The transparency level in the country on upcoming or approved projects need serious attention (see *Table 43: Score on information transparency—Ethiopia*).

Figure 22: National portal for Ethiopian Environmental Protection Authority



Source: https://www.epa.gov.et/ as accessed on June 29,2022

Table 43: Score on information transparency in Ethiopia

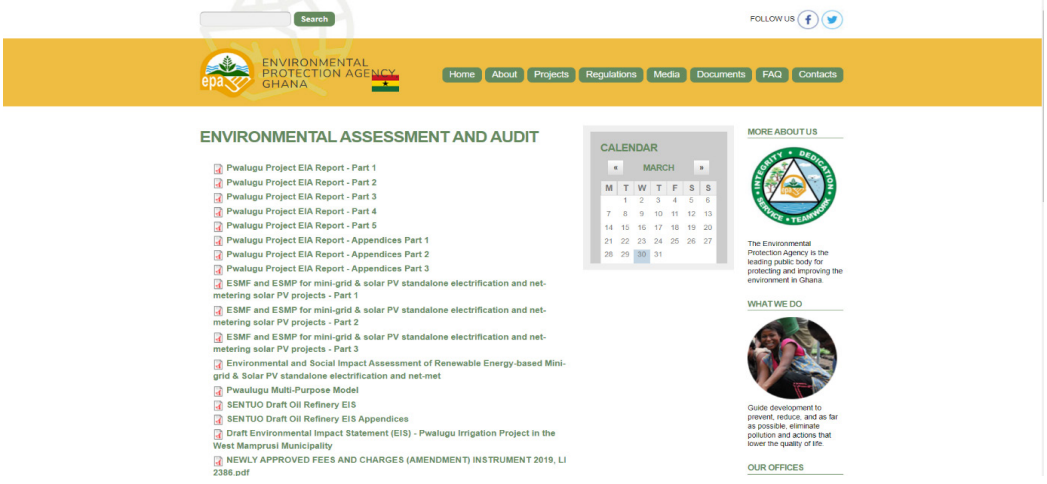
	Website of regulating authority	Availability of EIA reports	Accessibility of information on stakeholder consultation	Availability of Clearance certificate	Total (Max: 4 marks)
Scoring	1	0	0	0	1
Reason	https://www.epa.gov.et/	Not available	Not available for public comments	Not available	

2.5.2d Ghana

The Environmental Protection Agency which is the leading authority in Ghana has a website that addresses and updates information on environment and provides all relevant documents in public domain such as laws, various forms and guidelines.

The website provides information on environmental assessment audit, environmental quality, application forms for project categorization, fees and charges required while applying for the assessment process and reports on the strategic environment assessment reports. It has also included the new amendments regarding the processing fee charged to the proponent. Most importantly, EPA have published a list of EIA reports which are published since 2011.

Figure 23. Environemental assessment and audit reports published since 2011



Source: http://www.epa.gov.gh/epa/publications/environmental-assessment-and-audit as accessed on June 29, 2022

It is also pertinent to mention that the website does not have draft EIA reports for public complaints or details of public hearings. However, there is a Grievance Redressal System (GRS) which enables the interested individuals to register the complaints.

Figure 24: Grievance redressal mechanism for stakeholders

Source: http://www.epa.gov.gh/epa/grievance-redress-mechanism as accessed on June 29,2022

In Ghana, the ECC is referred to as the Environmental permit is not available on the website for the local stakeholders to access. Only the environmental clearance status is put up for view. Although it is beneficial for the stakeholders to know if the projects with significant concerns were approved or not, the conditions laid by the authority for approval are not visible to the common people (see *Table 44: Score on information transparency—Ghana*).

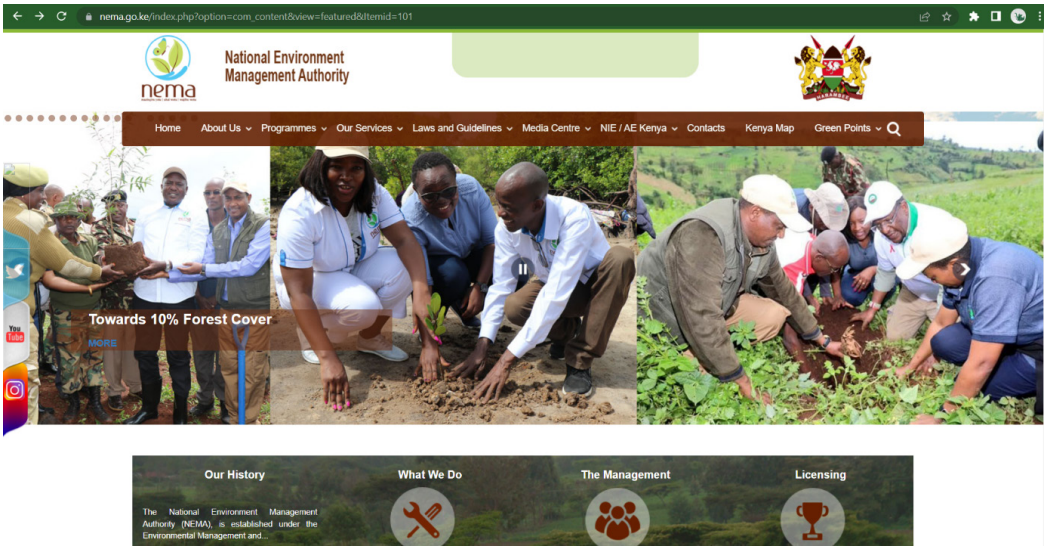
Table 44: Score on information transparency—Ghana

	Website of regulating authority	**Availability of EIA reports**	**Accessibility of information on stakeholder consultation**	**Availability of clearance certificate**	**Total** (Max: 4 marks)
Scoring	1	1	0	0	2
Reason	http://www.epa.gov.gh/epa/	Available for projects given permission since 2011	Not available for public comments	Not available	

2.5.2e Kenya

The National Environment Management Authority (NEMA) which is the lead authority in making environmental decisions in the country has its own website to update environmental information for common access. The website is available only in English.

Figure 25: Website of National Environmenta Mangement Authority



Source: https://www.nema.go.ke/ as accessed on June 29,2022

The portal provides comprehensive information regarding the steps to be followed in the environmental assessment process, the compliance process which further requires environmental licensing, environmental auditing and environmental inspection. The summary project report (SPR) of the EIA along with the information on registration of experts, compliance reports, environmental incidents management reports and environmental reporting are all provided in the "services" section of the portal. Although NEMA has given information about the assessment process along with application forms, it has not published any EIA reports on the website. There is no provision for uploading draft EIA report for public comments either. The website also does not have clearance certificates though it provides list of projects and their status in terms of approval (see *Table 45: Score on information transparency—Kenya*).

Figure 26: Downloadable attachments of EIA documents

Source: https://www.nema.go.ke/index.php?option=com_content&view=article&id=119&Itemid=144 as accessed on June 29,2022

Table 45: Score on information transparency—Kenya

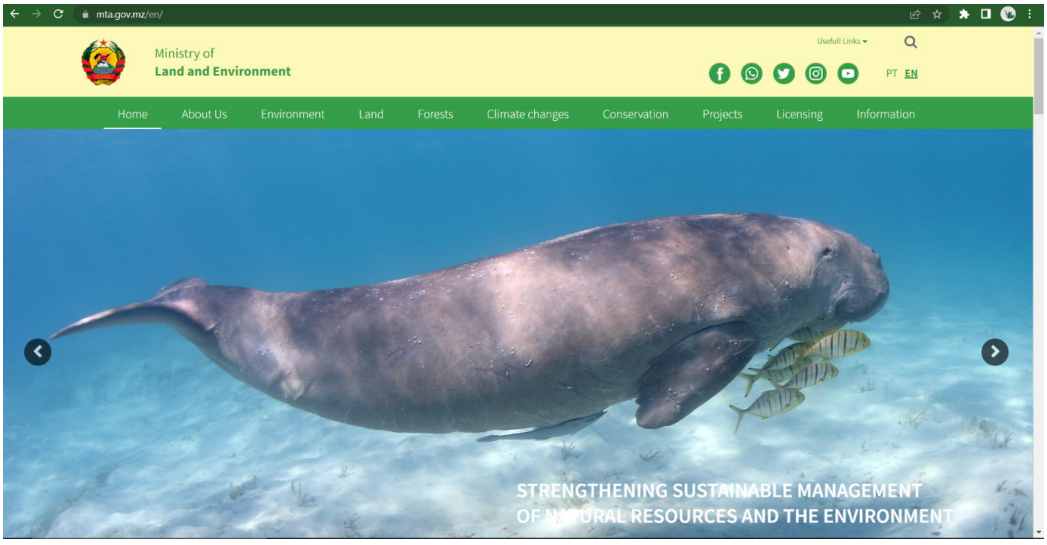
	Website of regulating authority	Availability of EIA reports	Accessibility of information on stakeholder consultation	Availability of clearance certificate	Total (Max: 4 marks)
Scoring	1	0	0	0	1
Reason	https://www.nema.go.ke/	Not available	Not available for public comments	Not available	

2.5.2f Mozambique

The Ministry of Land and Environment (MTA) provides information on the project types, fees and the types of licences. The website is available in English and Portuguese.

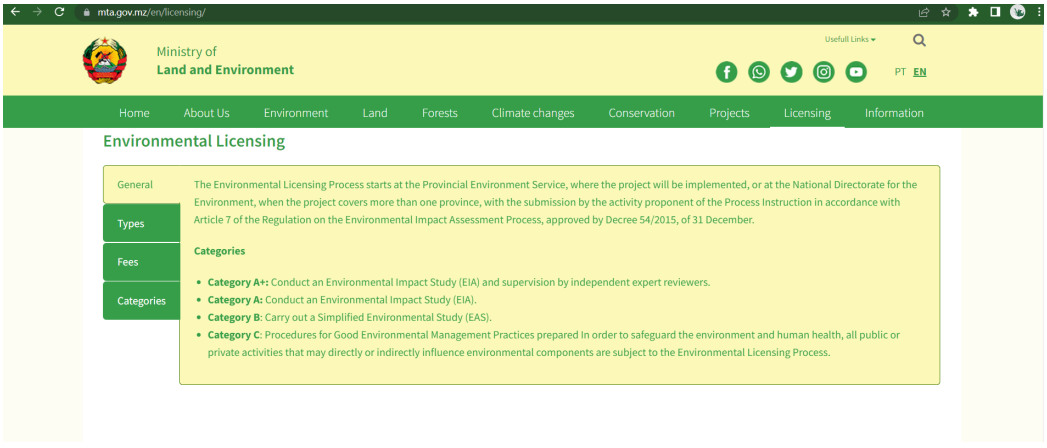
However, while browsing the website it was understood that there was no availability of EIA reports, or reports available for public comments and no availability of compliance and clearance certificate (see *Table 46: Score on information transparency—Mozambique*).

Figure 27: Portal for Ministry of Land and Environment



Source: https://www.mta.gov.mz/en/ as accessed on June 29,2022

Figure 28: Categorization of projects into A+, A, B and C



Source: https://www.mta.gov.mz/en/licensing/ as accessed on June 29,2022

Table 46: Score on information transparency—Mozambique

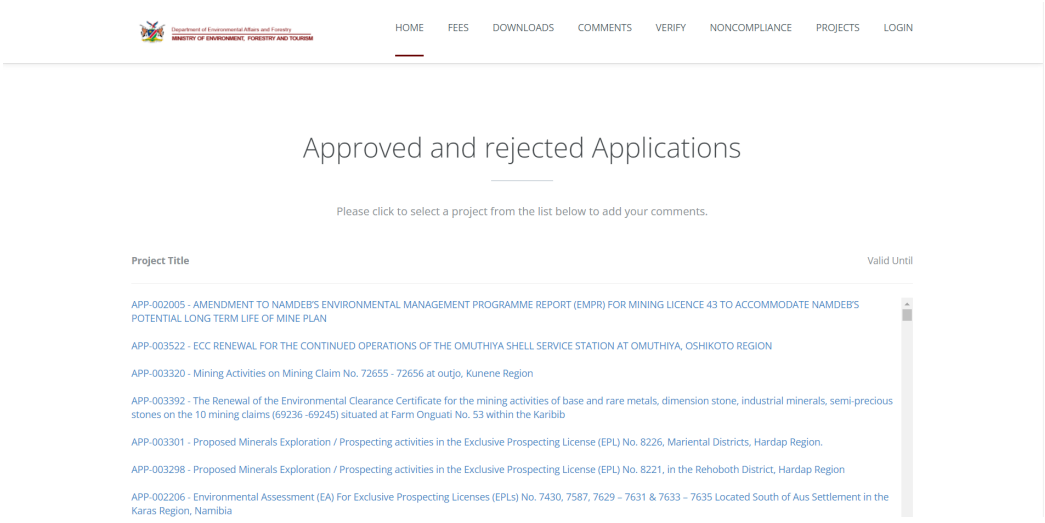
	Website of regulating authority	Availability of EIA reports	Accessibility of information on stakeholder consultation	Availability of clearance certificate	Total (Max: 4 marks)
Scoring	1	0	0	0	1
Reason	https://www.mta.gov.mz/en/	Not available	Not available for public comments	Not available	

2.5.2g Namibia

The Ministry of Environment, Forest, and Tourism has a website which is a repository of Namibian law, process, forms required for various license/consent, guidelines, etc. The portal is accessible in English. To ease the review of the of the project, the Ministry of Environment, Forest, and Tourism has included all the necessary information on the scoping report, environmental management plan, consent letter to carry out environment assessment, advertisement of consultation, and the coordinates of the location. Different fees (appeal fees, processing fees, transfer certificate processing fees), information on screening, environmental clearance certificate procedures and screening questionnaires and other environmental acts crucial to EIA process are also available.

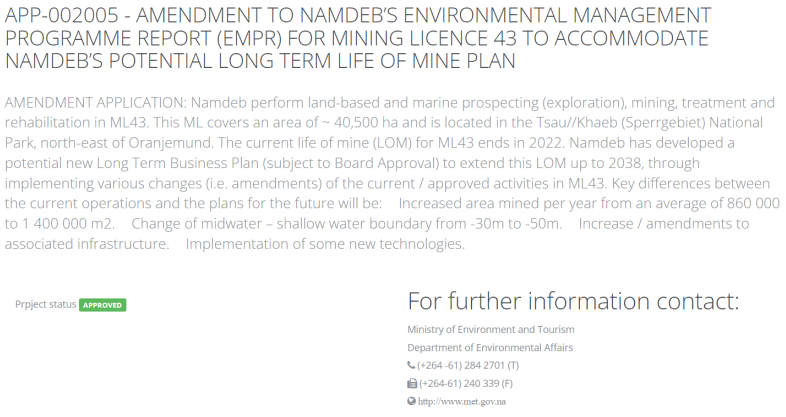
The website has a page on approved or rejected project. Only approval or rejection information is available for each project. No EIA report, public hearing details or EIA certificate is available. However, there is a webpage on public comments on new projects. A good amount of information is available under each project such as scoping report, EMP plan, proof of consultation, project site area with coordinates, details about Environment Assessment Practitioner and confirmation of screening notice. However, the environmental clearance certificate is password protected and is available only to entrepreneurs. The website also has page titled non-compliance reporting where anyone can report of their grievances or inform about non-compliance (see *Table 47: Score on information transparency—Namibia*).

Figure 29: List of project reports available on the website for common access



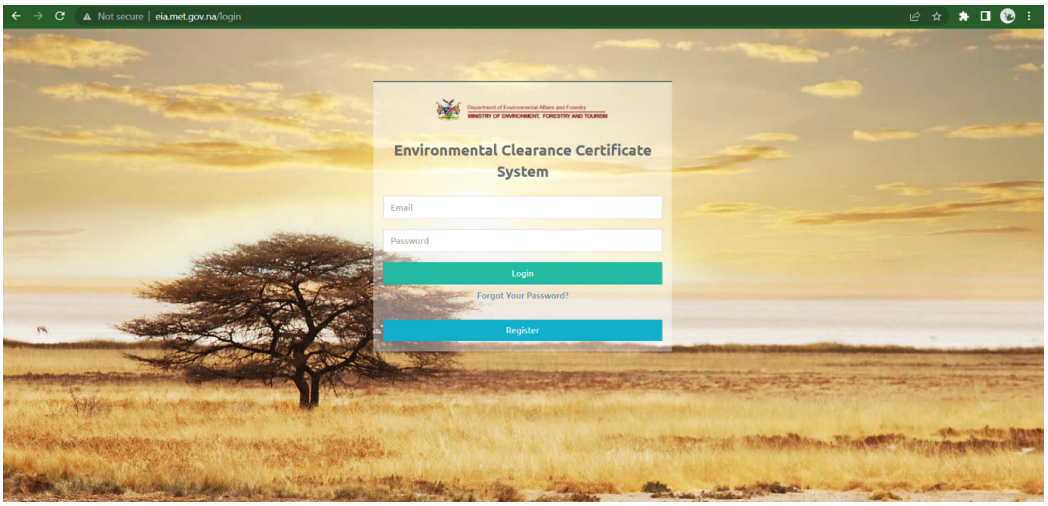
Source: http://eia.met.gov.na/web/cleared as accessed on June 29,2022

Figure 30: Status of the environmental clearance of the reports provided on the website



Source: http://eia.met.gov.na/web/projects/2005 as accessed on June 29,2022

Figure 31: The Environmental clearance certificate portal is password protected



Source: http://eia.met.gov.na/login as accessed on June 29,2022

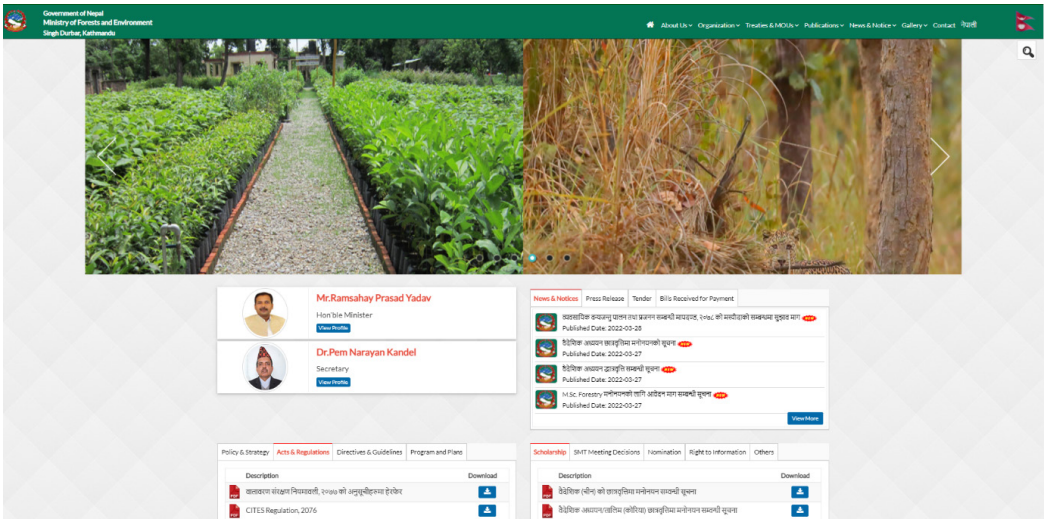
Table 47: Score on information transparency—Namibia

	Website of regulating authority	Availability of EIA reports	Accessibility of information on stakeholder consultation	Availability of clearance certificate	Total (Max: 4 marks)
Scoring	1	0	1	0	2
Reason	http://eia.met.gov.na/#home	Not available	Scope of public comments available in website	The clearance certificates are not available to everyone, it can be only accessed through registration. (http://eia.met.gov.na/login).	

2.5.2h Nepal

Nepal has an online website that consists of all the information related to environmental matters in the country. The site is maintained by the Ministry of Forests and Environment. There are two languages in which the website can be accessed through, English and Nepali.

Figure 32: National portal for Ministry of Forests and Environment



Source: https://www.mofe.gov.np/ as accessed on May 19,2022

While browsing the portal, it was found there was no EIA-related information such as availability of draft or final EIA reports, details of public hearing, EIA guidelines, clearance certificate or any other form. Even the EIA law is not available. Some basic information and documents is available such as environmental reports, national environmental plan but nothing pertaining to EIA (see *Table 48: Score on information transparency—Nepal*).

Table 48: Score on information transparency—Nepal

	Website of regulating authority	Availability of EIA reports	Accessibility of information on stakeholder consultation	Availability of clearance certificate	Total (Max: 4 marks)
Scoring	1	0	0	0	1
Reason	The website is maintained by Ministry of Forests and Environment (MoFE) http://doenv.gov.np/	Not available	Not available for public comments	Not available	

2.5.2i Sri Lanka

Sri Lanka has an online portal which is maintained by the Central Environmental Authority (CEA). Although the website is available in English, the portal can also be also accessed in Sinhala and Tamil, the official languages of Sri Lanka.

Figure 33: Official website for the Central Environmental Authority

Source: http://www.cea.lk/web/en as accessed on June 29,2022

The website provides a wide array of environmental services such as information on Environmental Impact Assessment, Initial Environmental Examination and the basic information questionnaire while also keeping a record of environmental application forms and maintaining the database for environmental reports. The CEA has a system within the assessment process, of updating the intermediary EIA report with a timeframe so that there is a scope for public comments. This is crucial for the proponent to bring in confidence amongst the local stakeholders and provide opportunity to express their concern.

Figure 34: EIA reports published on the website for public commenting

Source: http://www.cea.lk/web/?option=com_content&view=article&layout=edit&id=173 as accessed on June 29,2022

The Environmental Protection Licence (EPL) which can be considered synonymous to environmental clearance certificate is not provided on the website. Only details of EPL could be found on the page but project-related EPL is not available.

Figure 35: Information mentioned like the stages of EIA, details about the Environmental Protection Licensing

Source: http://www.cea.lk/web/en/services as accessed on June 29,2022

It is pertinent to mention the website has not provided final approved reports what is available is draft report for public comment. But EIA reports of past projects are nowhere available on the website. However, the same can be accessed through the Right to Information Act. The CEA has also provided information of contacting specific authorities in case of lodging grievances (see *Table 49: Score on information transparency—Sri Lanka*).

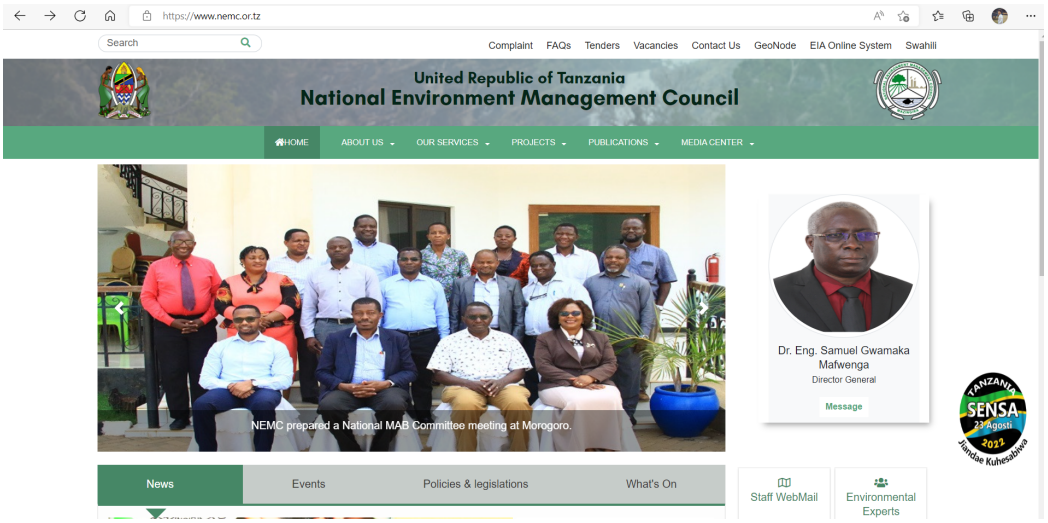
Table 49: Score on information transparency—Sri Lanka

	Website of regulating authority	Availability of EIA reports	Accessibility of information on stakeholder consultation	Availability of clearance certificate	Total (Max: 4 marks)
Scoring	1	0	1	0	2
Reason	Central Environmental Authority http://www.cea.lk/web/en	Not available	Data available also mentioned with the date for public comments http://www.cea.lk/web/?option=com_content&view=article&layout=edit&id=173	Not available	

2.5.2j Tanzania

The National Environment Management Council is the leading authority in Tanzania. The website is primarily in English. However, one can still access the website in the local language of the country (Swahili).

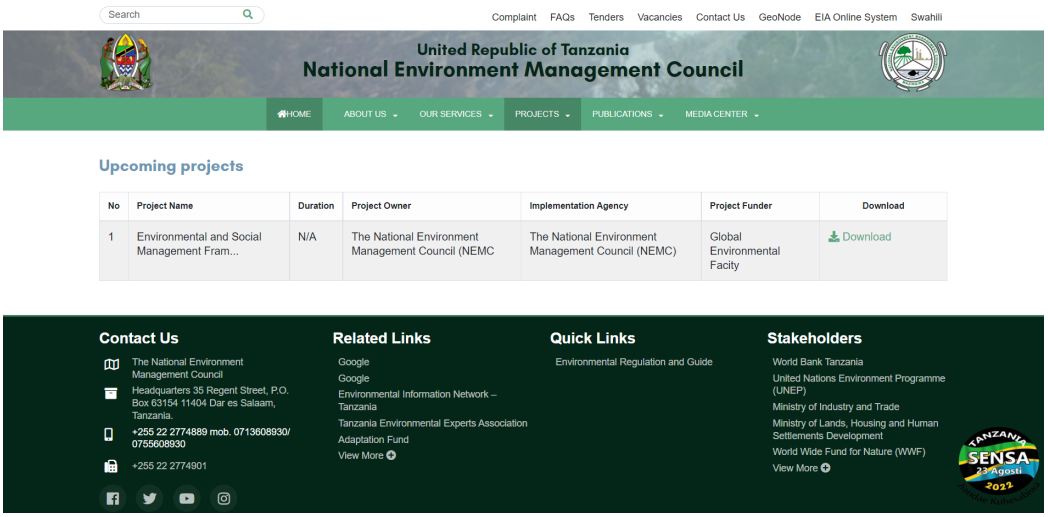
Figure 36: Website of the National Environment Management Council



Source: https://www.nemc.or.tz/ as accessed on June 29,2022

Apart from acts and regulations, the website consists of a section "Our services" which includes subsections on environmental inspection, expert registration, environmental research and coordination, environmental education, enforcement section and compliance monitoring. While browsing these links, however, no information was found. Some important documents—such as the application form for practicing permits for foreign firms, permits for hazardous waste, application for access to information and EIA transfer certificates—are up. It is observed that neither are EIA reports are available, nor is any information on the availability of reports put up for public comments. Although it is observed that there has been an effort to address transparency by putting up a section for incoming, completed and ongoing projects, only details for one project are provided under upcoming projects (see *Table 50: Score on information transparency—Tanzania*).

Figure 37: Environmental reports for upcoming projects



Source: https://www.nemc.or.tz/ as accessed on June 29,2022

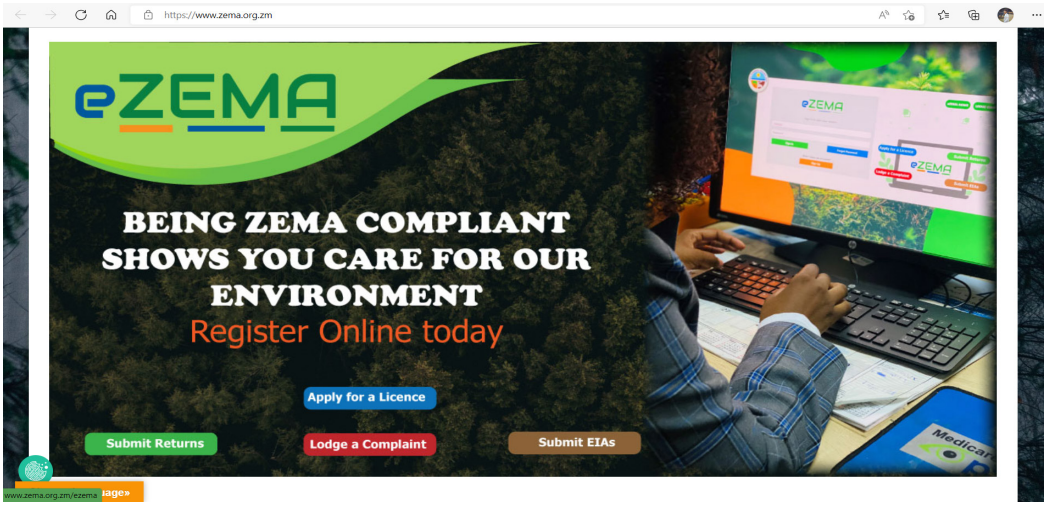
Table 50: Score on information transparency—Tanzania

	Website of regulating authority	Availability of EIA reports	Accessibility of information on stakeholder consultation	Availability of clearance certificate	Total (Max: 4 marks)
Scoring	1	0	0	0	1
Reason	Website available https://www.nemc.or.tz/	Not available	Not available for public comments	Not available	

2.5.2k Zambia

The Zambia Environmental Management Authority is the leading authority for implementation of rules and regulations in Zambia. It has a website—in English—for updating environmental information. The section "Our section" of the website has information about the format of the scoping report, format of the resettlement action plan, format for the terms of reference and Environment Project Brief (EPB) and Environmental Impact Statement (EIS) formats. It also has other subjects on Environmental awareness and public participation baseline survey in selected districts report. There is a published report on state of environment, environmental annual report and environmental outlook of the country, which states the situation of the environment in Zambia.

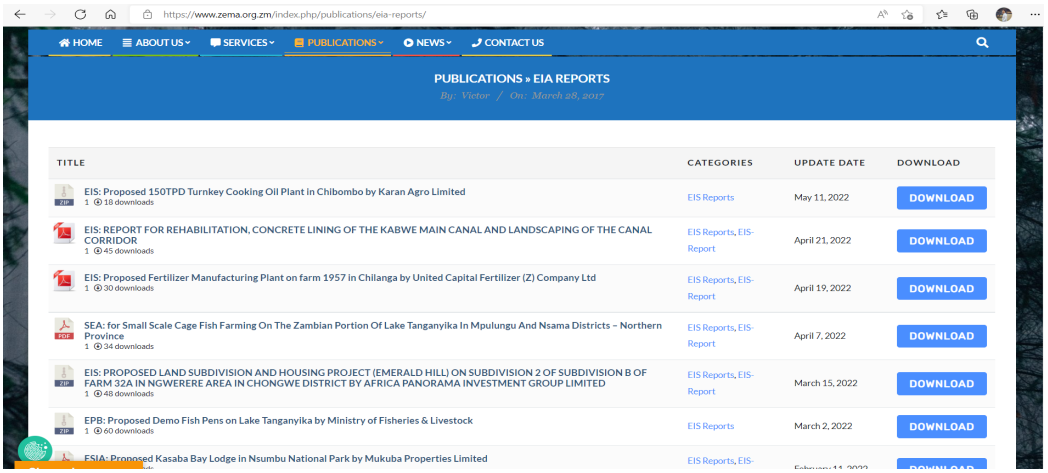
Figure 38: Online portal for Zambia Environmental Management Authority



Source: https://www.zema.org.zm/ as accessed on June 29,2022

Most importantly, EIA reports such as the Environmental Impact Statements and the Environmental Project Brief are published on the website since 2019. Not only EIA but also strategic environmental assessments and environmental and social impact assessments are also published in the website. While browsing the website, however it was seen that there were no reports available for public comments but there is scope for an environmental complaint only after registering on the website. There is a licensing system but here also the individual has to register (see *Table 51: Score on information transparency—Zambia*).

Figure 39: Downloadable environmental assessment reports published on the website



Source: https://www.zema.org.zm/index.php/publications/eia-reports/ as accessed on June 29,2022

Table 51: Score on information transparency—Zambia

	Website of regulating authority	Availability of EIA reports	Accessibility of information on stakeholder consultation	Availability of clearance certificate	Total (Max: 4 marks)
Scoring	1	1	0	0	2
Reason	https://www.zema.org.zm/	Report available since 2019	Not available for public comments	Not available	

2.6 Accreditation of EIA consultants

EIA activity is not a single-person job but requires involvement of multiple actors, including developers/proponents, regulatory agencies, EIA practitioners/consultants, and lastly indigenous people. EIA consultants are the foremost players as they are responsible for maintaining quality of EIA reports. EIA practitioners are a complex web of professionals from diverse educational and professional background. They come together to provide services ranging from preparation of baseline data, finding solutions towards avoiding, reducing or compensating the potential impact of activities and suggesting management plan. They are generally hired by the project proponent to undertake EIA studies on their behalf. The nature and complexity of the project determines the composition of the EIA consulting team. From time to time, these teams need specialists other than core EIA professionals to conduct quantitative analysis in other subject matter involved.

There are two kinds of arrangements for the preparation of an environmental impact assessment/statement. The ideal arrangement would be of an environmental agency selecting, contracting and paying the EIA practitioners for assessing every project, while the second arrangement is one involving the proponent himself to select, contract and pay the EIA practitioners for conducting the EIA study. It is observed that most countries follow the second arrangement due to paucity of financial resources; however, this creates an issue of bias. To balance this, an accreditation and license system of EIA consultants plays a vital role.

The accreditation system implies that a regulatory or separate approving authority provides a license/certificate to consultants, depending on the competency of the consultant, to perform EIA studies of different development sectors. The competency can be measured by the education and professional background and experience of working in relevant areas/sectors. This ensures that the EIA reports are prepared by sector experts with sound technical knowledge of the domain and

thus will be competent to address both anticipated and accidental impacts of the project. Subsequently, the knowledge and experience of the expert will also help suggest measures for mitigating such impacts. However, since EIA is a multi-functional activity, it is not feasible for a single person to conduct the EIA study. Thus, constitution of a right team is required in order to collate the data, assess the significant impacts and develop management plan to minimize the adverse effect of the project. The professional team identified for a specific EIA study should consist of qualified and experienced professionals from various disciplines in order to address the critical aspects identified for the specific project. Another benefit of accreditation system is that it provides credibility to consultants for the data used in the EIA study and the overall quality of the report.

Hence, the presence of a legal mechanism obligating the registration of EIA Consultants reduces the possibility of diminishing the report to a mere tick-down exercise. Some countries have provision of hiring consultant for EIA study on the discretion of developer; however, without any legal mandate for the same and an availability of the accreditation system, the purpose will remain unsolved. Thus, the effectiveness of this parameter is analysed on the basis of following indicators-

2.6.1. Methodology for rating on accreditation of consultants

- Is there any legal mandate for preparation of EIA by expert/consultant or consultancy firm? *Scoring: 1 if prepared by consultants and 0 if no legal mandate*

- If prepared by consultants/ consultancy firm, are they approved/registered/ licensed? *Scoring:* 1 if consultants are registered and 0 if not registered

- Is there any criterion for approving these consultants? *Scoring:* 1 if criterion is available, 0 for absence

2.6.2. Status of accreditation of consultants in participatory countries

2.6.2a Bangladesh

The Environment Conservation Act mandates the requirement of an Environment Clearance Certificate in order to proceed with a project, however, the onus of conducting an EIA study is given on the project proponent. The EIA Guidelines for Industries,[17] however, allows the project developer to delegate the task of conducting EIA study to a consultant but the responsibility for the content of the report for the project should be taken by the proponent only.

Since there exists no law mandating the requirement of EIA study to be conducted by EIA practitioners, no approval/ accreditation/ registration/licensing system exists in place in the country. In case proponents opt for EIA consultants to carry out the study, they are the ones who select, contract and pay these consultants. In this setting, there exist no uniform criteria to assess the qualification of the consultants (see *Table 52: Score on accreditation of EIA consultants—Bangladesh*.

Table 52: Score on accreditation of EIA consultants—Bangladesh

	Provision of legal mandate for preparation of EIA	Are consultants approved/ registered/licensed?	Criteria available for approval/ licensing of EIA Consultant	Total (Max: 3 marks)
Scoring	0	0	0	0
Reason	There is no legal mandate of requirement for a consultant.	There is no registration or licensing scheme for EIA practitioners.	No provision for criteria of EIA consultant; depends on the discretion of the applicant	

2.6.2b Bhutan

With regard to Environmental Impact Assessment, the rules clearly lay down the procedure but does not discuss about the involvement of environmental consultant for the preparation of EIA report. Therefore, in the absence of any legal obligation, the actors conducting the EIA study may either be the project proponent himself or the environmental consultant, as per the proponent's discretion. Resultantly, no criterion for consultant evaluation is available in the country.

Although Bhutan's EIA Guideline for Industry recommends that the EIA report should include accreditation status of consultants who prepare the EIA report, this is simply a guideline, with no legal or binding force. In the absence of experts while conducting the EIA study and limited knowledge of the proponent about the potential environmental implications of the project, the EIA reports might not have the requisite technical and professional levels. This limits the purpose of the EIA process to a mere clearance-focused tool (see *Table 53: Score on accreditation of EIA consultants—Bhutan*).

Table 53: Score on accreditation of EIA consultants—Bhutan

	Provision of legal mandate for preparation of EIA	Are consultants approved/ registered/licensed?	Criteria available for approval/ licensing of EIA Consultant	Total (Max: 3 marks)
Scoring	0	0	0	0
Reason	There is no legal mandate of requirement for a consultant.	There is no registration or licensing scheme for EIA practitioners.	There is no provision for criteria of EIA consultant. It totally depends on the discretion of the applicant.	

2.6.2c Ethiopia

Section 7 under Part Three of the Proclamation no 299/2002 Environmental Impact Assessment Proclamation list down duties of a proponent. Section 7 (2) of the Proclamation states, "a proponent shall ensure that the environmental impact of his project is conducted and the environmental impact study report prepared by experts that meet the requirements specified under any directive issued by the Authority".

Section 6.2 of the Environmental Impact Assessment Procedural Guideline Series 1 states that a proponent is required to appoint an eligible independent consulting firm to undertake the Environmental Assessment. Section 6.3 of the Guideline also lists the qualifications or technical skill required by the consulting firm. The legal requirement of environmental experts is followed by a registration system in place. However, the criteria for licensing an EIA consultant or the minimum qualification needed for the environmental experts or consultants is missing from the guidelines (see *Table 54: Score on accreditation of EIA consultants—Ethiopia*).

Table 54: Score on accreditation of EIA consultants—Ethiopia

	Provision of legal mandate for preparation of EIA	Are consultants approved/ registered/licensed?	Criteria available for approval/ licensing of EIA consultant	Total (Max: 3 marks)
Scoring	1	1	0	2
Reason	There is a legal mandate of requirement for a consultant.	There is a registration or licensing scheme for EIA practitioners.	There is no provision for criteria of EIA consultant. It depends on the discretion of the applicant.	

2.6.2d Ghana

The responsibility of conducting EIA in Ghana lies with the person who intends or proposes to commence any undertaking. Normally, in practice, the proponent

hires EIA consultants to undertake the assessments on their behalf. As discussed earlier, as per the law, consultants are currently not required to be approved/ registered/licensed by the regulatory agency. However, the Agency (EPA) keeps a register of consultants in practice to aid proponents who may require guidance (see *Table 55: Score on accreditation of EIA consultants—Ghana*).

Table 55: Score on accreditation of EIA consultants—Ghana

	Provision of legal mandate for preparation of EIA	Are consultants approved/ registered/licensed?	Criteria available for approval/ licensing of EIA consultant	Total (Max: 3 marks)
Scoring	0	0.50	0	0.50
Reason	There is no legal mandate of requirement for a consultant.	Though there is no registration or licensing scheme for EIA practitioners, there exists a register of consultants to aid proponent.	There is no provision for criteria of EIA consultant. It totally depends on the discretion of the applicant.	

2.6.2e Kenya

Under Section 58(5) of the Environmental Management and Co-ordination Act, 1999, the environmental impact studies are to be conducted by individual experts or a firm of experts. Any individual or firm of experts who wish to undertake environmental impact assessment activities in Kenya is required to register as experts with the National Environment Management Authority (NEMA) on payment of the prescribed fees. The experts are registered and annually licensed by NEMA as per Regulations 14 and 15 of the EIA/EA Regulations, 2003.

NEMA under Schedule 4 of EIA Regulation 2003 has a detailed criterion in place for an individual and firm to be registered as expert or firm of experts respectively and any person or firm who wish to get registered are required to meet these criteria. The registrations are done as Lead Expert, associate expert and firm of experts and each category have different requirement (see *Table 56: Criteria for EIA experts*). Any medium- to low-impact project study is to be carried out by a lead expert along with some associate experts under them. On the other hand, high impact projects are to be carried out by firm of experts. An environmental impact assessment expert practising under a firm of experts should be registered as an individual expert.

There is a code of practice and professional ethics for all practising EIA experts and a registered expert can be deregistered if he/she contravenes any of provisions of the code of practice issued by the Authority. All practising experts are members of the

Environmental Institute of Kenya and the list of all these experts is made available on the NEMA website (www.nema.go.ke) from where the proponent can select the experts for a particular project depending on the competency of the expert/s.

Table 56: Criteria for EIA experts

Experts	Criteria
Lead Expert	A Doctorate degree or equivalent in any field plus training in environmental impact assessment from a recognized institution, with three years' experience in environmental impact assessment related activities; or A Doctorate, Masters or Bachelor's degree plus five years' experience in environmental impact assessment related research consultancy or teaching and at least two relevant publications in referred journals; or A Master's degree or equivalent in any field plus training in environmental impact assessment from a recognised institution, with five years' experience in environmental impact assessment related activities; or A Bachelor's degree or an equivalent in any field plus training in environmental impact assessment from recognised institution, with 8 years' experience in environmental impact assessment related activities.
Associate Expert	A Bachelor's degree or equivalent in any field plus training in environmental impact assessment from a recognized institution.
Firm of Experts	Must be registered in Kenya Must submit to the Authority a firm profile indicating capacity to undertake Environmental impact assessment /audit studies.

Overall, NEMA plays a strong role in not only overseeing registration and licensing system of EIA experts but also capacity building by conducting regular trainings and refresher courses. In a nutshell, as part of the environmental impact assessment process, the legal requirement, registration and licensing system and lastly criteria for EIA experts have been enacted in Kenya (see *Table 57: Score on accreditation of EIA consultants—Kenya*).

Table 57: Score on accreditation of EIA consultants—Kenya

	Provision of legal mandate for preparation of EIA	Are consultants approved/ registered/licensed?	Criteria available for approval/ licensing of EIA consultant	Total (Max: 3 marks)
Scoring	1	1	1	3
Reason	There is a legal mandate of requirement for Experts for conducting EIA study.	The consultant should be registered under NEMA for conducting the EIA study.	There is detailed criterion available for registering of EIA consultant.	

2.6.2f Mozambique

Section 20 of the decree 54/2015 states that environmental consultants should be licensed by the Ministry that oversees the environment area to carry out the EIA of developmental activity. The accreditation of consultants in Mozambique involves registration of environmental individual consultants, consulting firms or consortium which can only be involved in conducting such activity if they have an experience of five or more years in the area of environment. Although there is a bar on who can conduct these assessments—which ensures that an individual who does is well acquainted with environmental field—it does not stipulate specific qualification requirement for independent experts (see *Table 58: Score on accreditation of EIA consultants—Mozambique*).

Table 58: Score on accreditation of EIA consultants—Mozambique

	Provision of legal mandate for preparation of EIA	Are consultants approved/ registered/licensed?	Criteria available for approval/ licensing of EIA consultant	Total (Max: 3 marks)
Scoring	1	1	1	3
Reason	There is a legal mandate of requirement for a consultant.	There is a registration or licensing scheme for EIA practitioners.	There is a provision for criteria of EIA consultant. It depends on the discretion of the applicant.	

2.6.2g Namibia

The Environmental Management Act 7 of 2007, Part VIII, deals with the EIA process. There is, howver, an absence of a legal requirement to involve an EIA consultant for conducting an EIA study. The act also does not talk about any licensing or registration system for EIA specialists. One of the good practices observed under this act is the provision of appointment of external specialists for review. This is included to compensate for the technical knowledge to review any aspect of an assessment which is not readily available within the ministry. These provisions recognize requirement of expertise for review, at the same time there is a lack of requirement of expertise for the initial environmental assessment report in the country system (see *Table 59: Score on accreditation of EIA consultants—Namibia)*.

Table 59: Score on accreditation of EIA consultants—Namibia

	Provision of legal mandate for preparation of EIA	Are consultants approved/ registered/licensed?	Criteria available for approval/ licensing of EIA consultant	Total (Max: 3 marks)
Scoring	0	0	0	0
Reason	There is no legal mandate of requirement for a consultant.	There is no registration or licensing scheme for EIA practitioners.	There is no provision for criteria of EIA consultant. It depends on the discretion of the applicant.	

2.6.2h Nepal

Section 3 of the Environment Protection Act, 2019 puts the responsibility on the project proponent in Nepal to submit an environmental study report to the Department of Environment, Ministry of Forests and Environment. Section 5 of the Act mandates that the scope of the brief environmental study, initial environmental study or environmental impact assessment shall be approved by the concerned body. Section 6 of the Act is on standards and quality, which need to be maintained in the form as prescribed by the Government of Nepal. Section 3 to Section 14 of the Environment Protection Act talks about how EIA has to be implemented in Nepal and Section 3 says proponent needs to prepare environmental study report. However, what is lacking in the Act is the provision on to accredited or license technical people or organization to carry out EIA study (see *Table 60: Score on accreditation of EIA consultants—Nepal*).

Table 60: Score on accreditation of EIA consultants—Nepal

	Provision of legal mandate for preparation of EIA	Are consultants approved/ registered/licensed?	Criteria available for approval/ licensing of EIA Consultant	Total (Max: 3 marks)
Scoring	0	0	0	0
Reason	There is no legal mandate of requirement for a consultant.	There is no registration or licensing scheme for EIA practitioners.	There is no provision for criteria of EIA consultant. It depends on the discretion of the applicant.	

2.6.2i Sri Lanka

The project proponent in Sri Lanka submits preliminary information on the project to the Central Environmental Authority (CEA). The CEA then assigns the Project Approving Authority (PAA) to assist the proponent in the EIA process. The PAA then conveys in writing to the project proponent the Terms of Reference

for the Initial Environmental Examination report or EIA report. The National Environmental Amendment Act, 1988, of Sri Lanka is however silent on who should carry out the EIA study. The Act only mentions the overall course of the assessment which proponent needs to carry out and role of the PAA. There is no mention of registration system or criteria of assessing EIA practitioners (see *Table 61: Score on accreditation of EIA consultants—Sri Lanka*).

Table 61: Score on accreditation of EIA consultants—Sri Lanka

	Provision of legal mandate for preparation of EIA	Are consultants approved/ registered/ licensed?	Criteria available for approval/ licensing of EIA Consultant	Total (Max: 3 marks)
Scoring	0	0	0	0
Reason	There is no legal mandate of requirement for a consultant.	There is no registration or licensing scheme for EIA practitioners.	There is no provision for criteria of EIA consultant. It depends on the discretion of the applicant.	

2.6.2j Tanzania

To govern the process of Environment Impact Assessment, there are three legislations that have been enacted in Tanzania, namely, Environmental Management Act, Environmental Management Regulations and Environmental Registration of Environmental Experts Regulations, 2005. There is a clause of general prohibition, prohibiting any conduct of EIA study report without a certified environmental expert. Hence, strict rules have been laid down under Section 83 of the Environmental Management Act 2004 with regard to who is permitted to conduct an EIA study report to begin with. As per the Regulation 14 of Environmental Management and Audit, 2005, the Environmental Impact Assessment can only be conducted by "Environmental Experts" in accordance with the Registration of Environmental Experts Regulations, 2005. This registration system and duty of maintaining a register of environmental experts is embowed upon the Registrar of Environmental experts.

To be accredited as an EIA expert, individual experts or firm of experts are required to submit an application to the Registrar.[18] The criteria for EIA experts to be certified includes a first degree in a relevant disciple, names of three referees and lastly to not have been convicted of a professional or a disciplinary offence. Subsequent to licensing, the EIA expert has to apply under the registration system.

Apart from the educational qualifications, these experts also have to follow a set of professional code of conduct which also set out clauses of submitting a complaint against a particular expert for investigation. Such provisions allow the

Environmental Impact assessment to be a systematic study without any mistakes as they are conducted by registered consultants (see *Table 62: Score on accreditation of EIA consultants—Tanzania*).

Table 62: Score on accreditation of EIA consultants—Tanzania

	Provision of legal mandate for preparation of EIA	Are consultants approved/ registered/ licensed?	Criteria available for approval/ licensing of EIA consultant	Total (Max: 3 marks)
Scoring	1	1	1	3
Reason	There is a legal mandate of requirement for a consultant.	There is a registration or licensing scheme for EIA practitioners.	There is a provision for criteria of EIA consultant. It depends on the discretion of the applicant.	

2.6.2k Zambia

In an effort to ensure that environmental concerns are integrated into economic development and as a way of preventing, minimizing, mitigating or compensating for adverse environmental impacts, the government introduced the requirement of EIA study report to be conducted by EIA consultants. This is formalized by the way of Regulation 8 (1) of the Environmental Protection Act. According to Regulation 9(2), the Environmental Council of Zambia has the power to approve or reject the name of the person who is chosen by proponent to prepare the EIA report (see *Table 63: Score on accreditation of EIA consultants—Zambia*).

Table 63: Score on accreditation of EIA consultants—Zambia

	Provision of legal mandate for preparation of EIA	Are consultants approved/ registered/ licensed?	Criteria available for approval/ licensing of EIA consultant	Total (Max: 3 marks)
Scoring	1	0.5	0	1.5
Reason	There is a legal mandate of requirement for a consultant.	There is no registration or licensing scheme for EIA practitioners. Having said that, there exists a case-to-case analysis of qualification of the EIA practitioner. In absence of a qualified practitioner, the application can be rejected.	There is no provision for criteria of EIA consultant.	

Chapter 3: Conclusion and recommendations

The analysis of EIA legislation on acts, regulation, rules and guidelines of eleven countries shows inherent weaknesses in them in almost all the countries. The legislations have attempted to cover all the components but in many instances detailing—which is essential for an effective EIA regime as well as on quality EIA report—is missing. Chapter 2 discussed in detail the strength of EIA legislation based on five indicators.

The legislation of the countries in the study when analysed for the indicator, "project categorization" is good except for Bhutan and Ethiopia. Bangladesh, Nepal, Sri Lanka and Zambia scored the maximum marks: they all have project listing along with scale of operation and provision for sensitivity of the area along with distance of the project from the sensitive area (see Table *64: Project categorization—how have countries performed?*). Kenya, Mozambique, Namibia, Ghana and Tanzania have project listing along with scale of operation. Though information on sensitivity is required, distance of a project from sensitive areas is not mentioned in these five countries. There are issues with the system in place in Bhutan and Ethiopia. Bhutan and Ethiopia have project listing but no mention of scale of operation, which means any project in the listing needs to go for EIA

Table 64: Project categorization—how have countries performed?

Countries	Listing of the projects	Listing of the projects based upon scale of project	Mention of sensitivity of the area	Mention of distance of the project from the sensitive location	Total (Max: 2 marks)
Bangladesh	**0.5**	**0.5**	**0.5**	**0.5**	**2**
Bhutan	0.5	0	0	0	0.5
Ethiopia	0.5	0	0.5	0	1
Ghana	0.5	0.5	0.5	0	1.5
Kenya	0.5	0.5	0.5	0	1.5
Mozambique	0.5	0.5	0.5	0	1.5
Namibia	0.5	0.5	0.5	0	1.5
Nepal	**0.5**	**0.5**	**0.5**	**0.5**	**2**
Sri Lanka	**0.5**	**0.5**	**0.5**	**0.5**	**2**
Tanzania	0.5	0.5	0.5	0	1.5
Zambia	**0.5**	**0.5**	**0.5**	**0.5**	**2**

irrespective of size. Further, Bhutan does not mention sensitivity or distance of the project from sensitive areas. Though Ethiopia mentions sensitivity, there is no reference to distance between the project and sensitive area.

The indicator on information collection has six parameters: basic information, usage of natural resources, emissions, information on waste and wastewater, environmental sensitivity, and social sensitivity. The system adopted for information collection in Sri Lanka, Nepal and Namibia is good (see *Table 65: Information collection—how have countries performed?)*. The system adopted in the other countries studied, however, needs improvement. For example, Bangladesh and Tanzania do not mention information with respect to environmental and social sensitivity in their format. No information is sought in their format in Ethiopia and Zambia on waste and wastewater generation, which needs incorporation in future. Overall score of Ethiopia in each parameter of information collection is less than 50 per cent, which simply means not much is asked by the regulators in their format. Mozambique and Zambia scored 90 per cent in the parameters—they request basic information, which is encouraging. They require information on cumulative impact assessment, site alternatives as well as other information. Zambia even has information on any litigation pending against the project and/or on land on which project is being set up. The information on format for air emission in seven out of 10 countries needs overhauling. The format of Kenya is online which is available to regulators and entrepreneurs only. NEMA, Kenya, putting this in the public domain would bring transparency in the whole system.

Table 65: Information collection—how have countries performed?

Countries	Basic information	Information on the usage of natural resources	Information on emission	Information on waste and wastewater generation and treatment	Environmental and social sensitivity	Total (Max: 5 marks)
Bangladesh	0.50	0.60	0.63	0.50	0.00	2.23
Bhutan	0.60	0.70	0.25	0.38	0.38	2.31
Ethiopia	0.40	0.30	0.38	0.00	0.38	1.46
Ghana	0.70	0.60	0.00	0.50	0.31	2.11
Kenya	0.70	0.25	0.25	0.50	0.38	2.08
Mozambique	0.90	0.50	0.0	0.50	0.54	2.44
Namibia	0.40	0.65	0.56	0.50	0.61	2.72
Nepal	0.70	0.60	0.75	0.38	0.31	2.74
Sri Lanka	**0.70**	**0.90**	**0.25**	**0.63**	**0.54**	**3.02**
Tanzania	0.70	0.70	0.38	0.63	0.38	2.79
Zambia	0.90	0.70	0.25	0.00	0.46	2.31

Almost all the countries secured either 75 per cent of the maximum marks or more in the indicator compliance mechanism (see *Table 66: Compliance mechanism—how have countries performed?*). The indicator has four criteria: availability of compliance mechanism, whether legislation has identified the compliance agency, frequency of submission of compliance report and penal provision in case of non-compliance. All countries have a system for compliance mechanism and the legislation has also identified the regulatory agency. Six countries—Kenya, Zambia, Tanzania, Ghana, Bhutan and Sri Lanka—have clearly stated the frequency of compliance report. Others have mentioned submission of compliance report but not the frequency of submission. Except for Mozambique and Nepal, others countries have a penal provision for non-compliance both through the court and the regulating authority. Mozambique and Nepal do not have legal provision for non-compliance through court but only through the regulating authority. CSE has not done any analysis of implementation of compliance mechanism on the ground. This analysis has only tried to understand the provision in the law for the same.

Table 66: Compliance mechanism—how have countries performed?

Countries	Compliance mechanism available	Has legislation identified the compliance agency?	Frequency of compliance reports	Penal provision in case of non-compliance	Total (Max: 4 marks)
Bangladesh	1	1	0.5	1	3.5
Bhutan	**1**	**1**	**1**	**1**	**4**
Ethiopia	1	1	0.5	1	3.5
Ghana	**1**	**1**	**1**	**1**	**4**
Kenya	**1**	**1**	**1**	**1**	**4**
Mozambique	1	1	1	0.5	3.5
Namibia	1	1	0.5	1	3.5
Nepal	1	1	0.5	0.5	3
Sri Lanka	1	1	0.5	1	3.5
Tanzania	**1**	**1**	**1**	**1**	**4**
Zambia	**1**	**1**	**1**	**1**	**4**

Almost all the countries scored low except for four—Sri Lanka, Ghana, Namibia and Zambia—which scored 50 per cent of the marks in the indicator on information transparency (see *Table 67: Information transparency—how have countries performed?*). The other countries scored 25 per cent of the maximum marks, which clearly shows more effort need to be made with regard to sharing information in public domain. Countries that scored 25 per cent marks did so on the basis of the existence of an official website. They could not score when it comes

to parameters such as availability of EIA reports, accessibility to information on public hearing and availability of clearance certificate in the public domain.

Among the countries in the study, only Ghana and Zambia have placed EIA reports in the public domain. Only Namibia has provided information on stakeholder consultation on their website, which is appreciable. No country has provided clearance certificates in the public domain. Bangladesh and Namibia have a section on their website where clearance certificates are available but it is password protected. Only regulators or entrepreneurs can view it. This simply means stakeholder does not know what compliance condition a project has to follow. Everything is between the regulator and entrepreneurs. Overall, all the country in the study need to improve their system by bringing more information in the public domain, which will ensure their participation.

Table 67: Information transparency—how have countries performed?

Countries	Accessibility of a dedicated website for an environmental-related portal	Availability of reports	Accessibility of information on stakeholder consultation	Clearance certificate available	Total (Max: 4 marks)
Bangladesh	1	0	0	0	1
Bhutan	1	0	0	0	1
Ethiopia	1	0	0	0	1
Ghana	**1**	**1**	**0**	**0**	**2**
Kenya	1	0	0	0	1
Mozambique	1	0	0	0	1
Namibia	**1**	**0**	**1**	**0**	**2**
Nepal	1	0	0	0	1
Sri Lanka	**1**	**0**	**1**	**0**	**2**
Tanzania	1	0	0	0	1
Zambia	**1**	**1**	**0**	**0**	**2**

The indicator on accreditation of EIA consultant has three criteria: provision of legal mandate, approval of registration, accreditation and/or license for consultant and availability of criteria for EIA consultant approval. Kenya, Mozambique and Tanzania have scored maximum marks as they fulfilled all the criteria—legal mandate in their legislation is available, system for registration, accreditation and/or license for consultant and availability of criteria for approval of EIA consultants (see *Table 68: Accreditation of EIA consultant—how have countries performed?*). Ethiopia has scored 67 per cent of the marks as they have legal mandate for appointing consultant for EIA study and a scheme for registration of consultant. Ghana has only provided list of consultants who could be approached

for conducting an EIA study. However no legal mandate or registration scheme is available. Zambia has scored 50 per cent of the marks: they have a legal mandate. They do not have a system for accreditation of consultant. However, they examine on a case-to-case basis the qualifications of EIA practioners. Other countries in the study—Bangladesh, Bhutan, Nepal, Sri Lanka and Namibia—could not score under any criteria of indicator on accreditation of EIA consultant.

Table 68: Accreditation of EIA consultant—how have countries performed?

Countries	Provision of legal mandate for preparation of EIA	Approval/registration/ accreditation/License	Is there a criterion for EIA consultant approval?	Total (Max: 3 marks)
Bangladesh	0	0	0	0
Bhutan	0	0	0	0
Ethiopia	1	1	0	2
Ghana	0	0.5	0	0.5
Kenya	**1**	**1**	**1**	**3**
Mozambique	**1**	**1**	**1**	**3**
Namibia	0	0	0	0
Nepal	0	0	0	0
Sri Lanka	0	0	0	0
Tanzania	**1**	**1**	**1**	**3**
Zambia	1	0.5	0	1.5

Overall it can be concluded the countries have legislation support when it comes to project categorization, information collection and compliance monitoring mechanism (see *Table 69: Overall score*). However, on two indicators—information transparency and accreditation of EIA consultant—the majority of the countries were found lagging. The report identifies an issue with information transparency in all the countries in study. Only four countries—Sri Lanka, Ghana, Namibia and Zambia—could score 50 per cent of total marks and rest have scored 25 per cent of total marks which is for having dedicated website by regulator. Kenya, Mozambique, Tanzania and Zambia have scored above 60 per cent. None of the South Asian countries could achieve more than 60 per cent of the marks. The highest score among South Asian countries is 58 per cent by Sri Lanka.

The reason for Kenya, Mozambique, Tanzania and Zambia scoring more than 60 per cent is like others they have scored well in project categorization, information collection and compliance monitoring mechanism as well as in accreditation of EIA consultant where others have not fared well. Five countries out of 11 do not have a system for accreditation of EIA consultants. Out of five, four are South Asian countries.

Table 69: Overall score

Countries	Indicators					Total marks	Per-centage
	Project categori-zation	Information collection	Compliance mechanism	Information transparency	Accreditation of EIA consultants		
Bangladesh	2	2.23	3.5	1	0	8.73	48.5
Bhutan	0.5	2.31	4	1	0	7.81	43.4
Ethiopia	1	1.46	3.5	1	2	8.96	49.8
Kenya	1.5	2.08	4	1	3	11.58	64.3
Ghana	1.5	2.11	4	2	0.5	10.11	56.2
Mozambique	1.5	2.44	3.5	1	3	11.44	63.6
Namibia	1.5	2.72	3.5	2	0	9.72	54
Nepal	2	2.74	3	1	0	8.74	48.6
Sri Lanka	2	3.02	3.5	2	0	10.52	58.4
Tanzania	**1.5**	**2.79**	**4**	**1**	**3**	**12.29**	**68.3**
Zambia	2	2.31	4	2	1.5	11.81	65.6

Recommendations

1) **Rationalizing project categorization**: Countries need to provide rationale behind project categorization which should also include scale of operation. Location sensitivity needs to be worked upon. Proper guidelines on what the distance of project from sensitive areas should be needs to be provided. Sensitive areas may be identified and listed.

2) **Need for exhaustive and explicit questionnaire for scoping and screening**: The questionnaire for screening and scoping needs to be exhaustive and explicit. Relevant information needs to be collected which can be used to understand the overall impact of the project and framing of scoping of EIA study. There is need for sector-specific guidelines on what data needs to be collected and the methodology of data collection.

3) **Transparency of information**: Countries need to be more transparent in information sharing which will develop trust relationship between project-affected people, industry and regulators. A portal should be developed with a whole sole purpose of sharing data like EIA reports, information on stakeholder consultations, clearance certificate etc. in the public domain.

4) **Need for a robust system for empanelment of qualified and eligible EIA consultants**: In order to ensure quality and integrity of EIA reports, a robust system for empanelment of EIA consultants should be formulated.

5) **Strengthening of EIA review system**: EIA review system needs to be strengthened through comprehensive guidelines and regular capacity building programmes.

6) **Strengthening compliance mechanism**: Inspection guidelines and guidelines for compliance reports are required for strengthening compliance mechanism.

7) **Strengthening capacity on strategic environmental assessment and cumulative impact assessment**: Comprehensive guidelines and regular capacity-building programmes on strategic environmental assessment (SEA) and cumulative impact assessment (CIA) are needed. These are becoming necessary for many projects in Africa and South Asia.

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Annexure A

Database for marking on information collection

Bangladesh

Table 1: Basic information required in the Form 3

Basic information	Required/Not required	Marking (max. 10)
Name of the project; location	Required	1
Name of the applicant	Required	1
Address for correspondence	Required	1
Information regarding any Government Order/policy relevant/relating to the site?	Required	1
Proposed capacity/area/tonnage to be handled; Existing Capacity/ Area etc.	Required: Name of product and quantity to be produced (daily, monthly or yearly) Proposed industrial unit or project: Expected date of starting construction: Expected date of completion of construction: Expected date of trial production in case of: industrial unit: In other cases, date of starting operation of the project:	1
Type of the project	Not mentioned	0
New/Expansion/Modernization	Not mentioned	0
Interlinked projects	Not mentioned	0
Details of alternative sites examined, if any	Not mentioned	0
Whether there is any litigation pending against the project and/ or land in which the project is propose to be set up? a) Name of the court b) Case no. c) Orders/directions of the court if any and its relevance with the proposed project	Not mentioned	0
		Total: 5

Table 2: Information on natural resources required in the Form 3

Information on natural resources	Required/Not required	Marking (max. 10)
Information whether the land is undeveloped or agricultural	Not mentioned	0
Possible land use change and the environment around (new road, rail or sea traffic during construction or operation? New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? New or diverted transmission lines or pipelines?)	Not mentioned	0
Water (source of water) in unit, KLD (kilolitre per day)	Mentioned	1
Abstraction or transfers of water from groundwater or surface water?	Not mentioned	0
Is the project changing course of water runoff or drainage?	Not mentioned	0
Minerals (tonne)—type of minerals, expected source and quantity	Required (name of raw material and quantity required)	1
Construction material – stone, aggregates, sand / soil (expected source [tonne])	Required (name of raw material and quantity required)	1
Forests and timber (source [tonne])—expected usage of the product	Required (Name of raw material and quantity required)	1
Energy including electricity and fuels (source, competing users); Unit: fuel (tonne), energy (MW)	Required	1
Any other natural resources (use appropriate standard units)	Required	1
		Total: 6

Table 3: Information on emission required in the Form 3

Information on emission		Required/not required	Marking (max. 8)
Air emissions	Emissions during construction and production processes	Mode of emission of gaseous substances	1
	Emissions from materials handling including storage or transport		1
	Emission status of VoC		1
	Emissions from incineration of waste (fly ash management systems)		1
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)		1
Generation of noise and vibration, and emissions of light and heat	From industrial operation	Not mentioned	0
	From blasting or piling	Not mentioned	0
	From traffic during construction and operation	Not mentioned	0
			Total: 5

Table 4: Information on waste and wastewater generation required in the Form 3

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Industrial processes waste	Mentioned (location of waste discharge)	1
Municipal waste (domestic and commercial)	Not mentioned	0
Biomedical and hazardous wastes	Not mentioned	0
Addressing leachate waste	Not mentioned	0
Other solid or industrial process wastes	Not mentioned	0
Wastewater (domestic and industrial)	Required (Information on probable quantity of daily liquid waste, location of waste discharge mentioned)	1
Sewage sludge or other sludge from effluent treatment	Required (probable quantity of daily liquid waste, Location of waste discharge,)	1
Treatment facility of waste with STP/ETP capacity	Required (design and time schedule of proposed effluent treatment plan) (layout plan with location of effluent treatment plan)	1
		Total: 4

Table 5: Information on environmental and social sensitivity required in the Form 3

Environmental and social sensitivity		Required/Not required	Marking (max. 13)
Environmental sensitivity	Proximity to national heritage	Not mentioned	0
	Areas important or sensitive for ecological reasons (wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Not mentioned	0
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	Not mentioned	0
	Inland, coastal, marine or underground waters	Not mentioned	0
	Areas susceptible to natural hazard	Not mentioned	0
	Will the activity result in loss or irreversible damage to ecosystem services/endemic flora /fauna	Not mentioned	0
	Will the project cause habitat fragmentation/roosting/breeding	Not mentioned	0

Workers	Facilities for long term housing of operational workers?	Not mentioned	0
	Temporary sites used for construction works or housing of construction workers?	Not practicing/no facility available	0
Communities and other stakeholders	Densely populated or built-up area	Not mentioned	0
	Will it impact local livelihood?	Not mentioned	0
	Will it cause displacement of people?	Not mentioned	0
	Employment generation for local residents	Not mentioned	0
			Total: 0

Bhutan

Table 6: Basic information required in Initial Environmental Examination

Basic information	Required/Not required	Marking (max. 10)
Name of the project; location	Mentioned	1
Name of the applicant	Required	1
Address for correspondence	Required	1
Information regarding any government order/policy relevant/ relating to the site?	Not mentioned	0
Proposed capacity/area/tonnage to be handled; existing capacity/ area etc.;	Mentioned	1
Type of the project	Mentioned	1
New/expansion/modernization	Mentioned if the project falls into new kind or project falling for modernization or expansion	1
Interlinked projects	No mention of cumulative impacts	0
Details of alternative sites examined, if any.	Not mentioned	0
Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case no. c) Orders/ Directions of the court if any and its relevance with the proposed project.	Not mentioned	0
		Total: 6

Table 7: Information on natural resources required in Initial Environmental Examination

Information on natural resources	Required/Not required	Marking (max. 10)
Information whether the land is undeveloped or agricultural	Requirement of information regarding presence of interested land within 50 metre buffers of the project	1
Possible land use change and the environment around- (new road, rail or sea traffic during construction or operation? New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? New or diverted transmission lines or pipelines?)	Not mentioned	0
Water (expected source and competing users)	Mentioned in (metre^3/ per day)	1
Abstraction or transfers of water from groundwater or surface water?	Not mentioned	0
Is the project changing course of water runoff or drainage?	Not mentioned	0
Minerals (tonne)-Type of minerals, expected source and quantity	Mentioned	1
construction material – stone, aggregates, sand / soil (expected source [tonne])	Mentioned	1
Forests and timber (source [tonne])—expected usage of the product	Mentioned	1
Energy including electricity and fuels (source, competing users) Unit: fuel (tonne), energy (MW)	Mentioned	1
Any other natural resources (use appropriate standard units)	Required	1
		Total: 7

Table 8: Information on emission required in Initial Environmental Examination

Information on emission		Required/Not required	Marking (max. 8)
Air emissions	Emissions during construction and production processes	Waste per annum generated in air/gaseous waste	1
	Emissions from materials handling including storage or transport	Only method for storing and final products asked, no emission mention	0
	Emission status of VOC	Not mentioned	0
	Emissions from incineration of waste (fly ash management systems)	Not mentioned	0
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	Not mentioned	0

Information on emission		Required/Not required	Marking (max. 8)
Generation of noise and vibration, and emissions of light and heat	From industrial operation	During operation	1
	From blasting or piling	Not mentioned	0
	From traffic during construction and operation	Not mentioned	0
			Total: 2

Table 9: Information on waste and wastewater generation required in Initial Environmental Examination

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Industrial process waste	Mentioned	1
Municipal waste (domestic and commercial)	Not mentioned	0
Biomedical and hazardous wastes	Not mentioned	0
Addressing leachate waste	Not mentioned	0
Other solid or industrial process wastes	Mentioned	1
Wastewater (domestic and industrial)	Mentioned	1
Sewage sludge or other sludge from effluent treatment	Environmental Management Plan mentioned but not explicit	0
Treatment facility of waste with STP/ETP capacity	Environmental Management Plan mentioned but not explicit	0
		Total: 3

Table 10: Information on environmental and social sensitivity required in Initial Environmental Examination

Environmental and social sensitivity		Required/Not required	Marking (max. 13)
Environmental sensitivity	Proximity to national heritage	Mentioned	1
	Areas important or sensitive for ecological reasons (wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Mentioned	1
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	Not mentioned	0
	Inland, coastal, marine or underground waters	Not mentioned	0
	Areas susceptible to natural hazard	Not mentioned	0
	Will the activity result in loss or irreversible damage to ecosystem services/endemic flora / fauna	Not mentioned	0
	Will the project cause habitat fragmentation/ roosting/breeding	Not mentioned	0

Workers	Facilities for long term housing of operational workers?	Not mentioned	0
	Temporary sites used for construction works or housing of construction workers?	Not mentioned	0
Communities and other stakeholders	Densely populated or built-up area	Mentioned	1
	Will it impact local livelihood?	Mentioned	1
	Will it cause displacement of people?	Mentioned	1
	Employment generation	Not mentioned	0
			Total: 5

Ethiopia

Table 11: Basic information required in application form

Basic information	Required/Not required	Marking (max. 10)
Name of the project; location	Mentioned	1
Name of the applicant	Mentioned	1
Address for correspondence	Mentioned	1
Information regarding any government order/policy relevant/ relating to the site?	Not mentioned	0
Proposed capacity/area/tonnage to be handled; existing capacity/ area etc.;	Not mentioned	0
Type of the project	Nature of the project	1
New/expansion/modernization	Not mentioned	0
Interlinked projects	Not mentioned	0
Details of alternative sites examined, if any.	Not mentioned	0
Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case no. c) Orders/directions of the court if any and relevance with the proposed project	Not mentioned	0
		Total: 4

Table 12: Information on natural resources required in application form

Information on natural resources	Required/Not required	Marking (max. 10)
Information whether the land is undeveloped or agricultural	Mentioned	1
Possible land use change and the environment around (New road, rail or sea traffic during construction or operation? New road, rail, air transport, waterways or other transport infrastructure including new or altered routes and stations, ports, airports etc? Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? New or diverted transmission lines or pipelines?)	Not mentioned	0
Water (expected source and competing users) unit: KLD (kilolitre per day)	Not mentioned	0
Abstraction or transfers of water from groundwater or surface water?	Mentioned	1
Is the project changing course of water runoff or drainage?	Not mentioned	0
Minerals (tonne)—type of minerals, expected source and quantity	Not mentioned	0
Construction material—stone, aggregates, sand/soil (expected source [tonne])	Not mentioned	0
Forests and timber (source [tonne])—expected usage of the product	Not mentioned	0
Energy including electricity and fuels (source, competing users); unit: fuel (MT), energy (MW)	Mentioned	1
Any other natural resources (use appropriate standard units)	Not mentioned	0
		Total: 3

Table 13: Information on emission required in application form

Information on emission		Required/Not required	Marking (max. 8)
Air emissions	Emissions from construction and production processes	Not mentioned	0
	Emissions from materials handling including storage or transport	Not mentioned	0
	Emission status of VoC	Not mentioned	0
	Emissions from incineration of waste (fly ash management systems)	Not mentioned	0
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	Not mentioned	0
Generation of noise and vibration, and emissions of light and heat	From industrial process	Mentioned	1
	From blasting or piling	Mentioned	1
	From traffic during construction and operation	Mentioned	1
			Total: 3

Table 14: Information on waste and wastewater generation required in application form

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Industrial processes waste	Not mentioned	0
Municipal waste (domestic and commercial wastes)	Not mentioned	0
Biomedical and hazardous wastes	Not mentioned	0
Addressing leachate waste	Not mentioned	0
Other solid or industrial process wastes	Not mentioned	0
Wastewater (domestic and industrial)	Not mentioned	0
Sewage sludge or other sludge from effluent treatment	Not mentioned	0
Treatment facility of waste with STP/ETP capacity	Not mentioned	0
		Total: 0

Table 15: Information on environmental and social sensitivity required in application form

Environmental and social sensitivity		Required/Not required	Marking (max. 13)
Environmental sensitivity	Proximity to national heritage	Mentioned	1
	Areas important or sensitive for ecological reasons (Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Potential environmental issues required	1
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	Mentioned	1
	Inland, coastal, marine or underground waters	Not mentioned	0
	Areas susceptible to natural hazard	Mentioned	1
	Will the activity result in loss or irreversible damage to ecosystem services/endemic flora/fauna	Potential environmental issues required	1
	Will the project cause habitat fragmentation/ roosting/breeding	Not mentioned	0
Workers	Facilities for long term housing of operational workers?	Not mentioned	0
	Temporary sites used for construction works or housing of construction workers?	Not mentioned	0
Communities and other stakeholders	Densely populated or built-up area	Not mentioned	0
	Will it impact local livelihood?	Not mentioned	0
	Will it cause displacement of people?	Not mentioned	0
	Employment generation	Not mentioned	0
			Total: 5

Ghana

Table 16: Basic information required in environmental assessment Form 1

Basic information	Required/Not required	Marking (max. 10)
Name of the project; Location	Mentioned	1
Name of the applicant	Mentioned	1
Address for correspondence	Mentioned	1
Information regarding any government order/policy relevant/relating to the site?	Mentioned	1
Proposed capacity/area/tonnage to be handled; Existing Capacity/ Area etc.;	Installed production capacity mentioned in the scope of the proposal	1
Type of the project	Information on site description required	1
New/expansion/modernization	Not mentioned	0
Interlinked projects	Adjacent land uses	1
Details of alternative sites examined, if any.	Not mentioned	0
Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case no. c) Orders/directions of the court if any and its relevance with the proposed project	Not mentioned	0
		Total: 7

Table 17: Information on natural resources required in environmental assessment Form 1

Information on natural resources	Required/Not required	Marking (max. 10)
Information whether the land is undeveloped or agricultural	Not mentioned	0
Possible land use change and the environment around (new Road, rail or sea traffic during construction or operation? New road, rail, air transport, waterways or other transport infrastructure including new or altered routes and stations, ports, airports etc? Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? New or diverted transmission lines or pipelines?)	Information on zoning of land required	1
Water (expected source and competing users) unit: KLD (kilolitre per day)	Access to water	1

Information on natural resources	Required/Not required	Marking (max. 10)
Abstraction or transfers of water from groundwater or surface waters?	Not mentioned	0
Is the project changing course of water runoff or drainage?	Draining provision	1
Minerals (tonne)—type of minerals, expected source and quantity	Not mentioned	0
Construction material—stone, aggregates, sand/soil (expected source [tonne])	Not mentioned	0
Forests and timber (source [tonne])—expected usage of the product	Mentioned	1
Energy including electricity and fuels (source, competing users); unit: fuel (MT), energy (MW)	Infrastructure to power (type, source and quantity) required	1
Any other natural resources (use appropriate standard units)	Other major utilities proposed	1
		Total: 6

Table 18: Information on emission required in environmental assessment Form 1

Information on emission		Required/Not required	Marking (max. 8)
Air emissions	Emissions from construction and production processes	Not mentioned	0
	Emissions from materials handling including storage or transport	Not mentioned	0
	Emission status of VoC	Not mentioned	0
	Emissions from incineration of waste (fly ash management systems)	Not mentioned	0
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	Not mentioned	0
Generation of noise and vibration, and emissions of light and heat	From industrial operation	Not mentioned	0
	From blasting or piling	Not mentioned	0
	From traffic during construction and operation	Not mentioned	0
			Total: 0

Table 19: Information on wastewater generation required in environmental assessment Form 1

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Industrial processes waste through construction, demolition, redundant machinery etc.	Mentioned	1
Municipal waste (domestic and commercial wastes)	Not mentioned	0
Biomedical and hazardous wastes	Not mentioned	0
Addressing leachate waste	Not mentioned	0
Other solid or industrial process wastes	Mentioned	1
Wastewater (Domestic and industrial)	Mentioned	1
Sewage sludge or other sludge from effluent treatment	Not mentioned	0
Treatment facility of waste with STP/ETP capacity	Information on major utilities proposed or existing on site	1
		Total: 4

Table 20: Information on environmental and social sensitivity required in environmental assessment Form 1

Environmental and social sensitivity		Required/Not required	Marking (max. 13)
Environmental sensitivity	Proximity to national heritage	Mentioned	1
	Areas important or sensitive for ecological reasons (wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Mentioned	1
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	Mentioned	1
	Inland, coastal, marine or underground waters	Not mentioned	0
	Not mentioned	Not mentioned	0
	Addressing issues of introduction of genetically modified species?	Not mentioned	0
	Will the activity result in loss or irreversible damage to ecosystem services/endemic flora /fauna	Not mentioned	0
	Will the project cause habitat fragmentation/ roosting/breeding	Not mentioned	0
Workers	Facilities for long term housing of operational workers?	Not mentioned	0
	Temporary sites used for construction works or housing of construction workers?	Not mentioned	0

Communities and other stakeholders	Densely populated or built-up area	Not mentioned	0
	Will it impact local livelihood?	Not mentioned	0
	Will it cause displacement of people?	Not mentioned	0
	Employment generation	Mentioned	1
			Total: 4

Kenya

Table 21: Basic information required in Project Report

Basic information	Required/Not required	Marking (max. 10)
Name of the project; location	Required	1
Name of the applicant	Required	1
Address for correspondence	Required	1
Information regarding any government order/policy relevant/ relating to the site?	Required	1
Proposed capacity/area/tonnage to be handled; existing capacity/ area etc.;	Required	1
Type of the project	Required	1
New / expansion / modernization	Not mentioned	0
Interlinked projects	Not mentioned	0
Details of alternative sites examined, if any	Not mentioned	0
Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case no. c) Orders/directions of the court if any and its relevance with the proposed project	Mentioned	1
		Total: 7

Table 22: Information on natural resources required in Project Report

Information on natural resources	Required/Not required	Marking (max. 10)
Information whether the land is undeveloped or agricultural	Not mentioned	0
Possible land use change and the environment around (New Road, rail or sea traffic during construction or operation? New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? New or diverted transmission lines or pipelines?)	Not mentioned	0
Water (source of water) in unit, KLD (kilolitre per day)	Quantity not mentioned	0.5
Abstraction or transfers of water from ground or surface waters?	Not mentioned	0

Information on natural resources	Required/Not required	Marking (max. 10)
Is the project changing course of water runoff or drainage?	Not mentioned	0
Minerals (tonne)—type of minerals, expected source and quantity	Required (name of raw material and quantity required)	0.5
Construction material—stone, aggregates, sand/soil (expected source [tonne])	Required (name of raw material and quantity required)	0.5
Forests and timber (source – MT) -expected usage of the product	Required (Name of raw material and quantity required)	0.5
Energy including electricity and fuels (source, competing users); unit: fuel (MT), energy (MW)	Not required	0
Any other natural resources (use appropriate standard units)	Quantity not mentioned	0.5
		Total: 2.5

Table 23: Information on emission required in Project Report

Information on emission		Kenya	Marking (max. 8)
Air emissions	Emissions during construction and production processes	Mode of emission of gaseous substances	0
	Emissions from materials handling including storage or transport		0
	Emission status of VoC		1
	Emissions from incineration of waste (fly ash management systems)		0
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)		0
Generation of noise and vibration, and emissions of light and heat	From industrial operation	Not mentioned	0
	From blasting or piling	Not mentioned	0
	From traffic during construction and operation	Mentioned	1
			Total: 2

Table 24: Information on waste and wastewater generation required in Project Report

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Industrial processes waste	Quantity not mentioned	0.5
Municipal waste (domestic and commercial)	Quantity not mentioned	0.5
Biomedical and hazardous wastes	Not mentioned	0

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Addressing leachate waste	Not mentioned	0
Other solid or industrial process wastes	Not mentioned	0
Wastewater (domestic and industrial)	Required (Information on probable quantity of daily liquid waste, location of waste discharge mentioned)	1
Sewage sludge or other sludge from effluent treatment	Required (probable quantity of daily liquid waste, location of waste discharge,)	1
Treatment facility of waste with STP/ETP capacity	Required (design and time schedule of proposed effluent treatment plan) (layout plan with location of effluent treatment plan)	1
		Total: 4

Table 25: Information on environmental and social sensitivity required in Project Report

Environmental and social sensitivity		Required/Not required	Marking (max. 13)
Environmental sensitivity	Proximity to national heritage	Mentioned	1
	Areas important or sensitive for ecological reasons (wetlands, watercourses or other waterbodies, coastal zone, biospheres, mountains, forests	Not mentioned	0
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	Not mentioned	0
	Inland, coastal, marine or underground waters	Not mentioned	0
	Areas susceptible to natural hazard	Not mentioned	0
	Will the activity result in loss or irreversible damage to ecosystem services, endemic flora or fauna	Not mentioned	0
	Will the project cause habitat fragmentation, roosting or breeding	Not mentioned	0
Workers	Facilities for long-term housing of operational workers?	Quantity not mentioned	0.5
	Temporary sites used for construction works or housing of construction workers?	Quantity not mentioned	0.5
Communities and other stakeholders	Densely populated or built-up area	Not mentioned	0
	Will it impact local livelihood?	Mentioned	1
	Will it cause displacement of people?	Mentioned	1
	Employment generation for local residents	Mentioned	1
			Total: 5

Mozambique

Table 26: Basic information required in Preliminary Environmental Information Sheet

Basic information	Required/Not required	Marking (max. 10)
Name of the project; Location	Required	1
Name of the applicant	Mentioned	1
Address for correspondence	Mentioned	1
Information regarding any government order/policy relevant/relating to the site?	Land tenure (legal situation regarding the acquisition of land)	1
Proposed capacity/area/tonnage to be handled; existing capacity/ Area etc.;	Mentioned	1
Type of the project	Mentioned	1
New/expansion/modernization	Type of activity mentioning expansion of the project	1
Interlinked projects	Main existing infrastructure around the activity	1
Details of alternative sites examined, if any	At least two alternative sites mentioned	1
Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case no. c) Orders/directions of the court if any and its relevance with the proposed project	Not mentioned	0
		Total: 9

Table 27: Information on natural resources required in Preliminary Environmental Information Sheet

Information on natural resources	Required/Not required	Marking (max. 10)
Information whether the land is undeveloped or agricultural	Not mentioned	0
Possible land use change and the environment around- (new Road, rail or sea traffic during construction or operation? New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? New or diverted transmission lines or pipelines?)	Not Mentioned	0
Water (expected source & competing users) unit: KLD (kilo litre per day)	Mentioned	1
Abstraction or transfers of groundwater or surface water?	Not mentioned	0
Is the project changing course of water runoff or drainage?	Not mentioned	0

Information on natural resources	Required/Not required	Marking (max. 10)
Minerals (tonne)—type of minerals, expected source and quantity	Mentioned	1
construction material—stone, aggregates, sand / soil (expected source [tonne])	Not mentioned	0
Forests and timber (source [tonne])—expected usage of the product	Mentioned	1
Energy including electricity and fuels (source, competing users); unit: fuel (MT), energy (MW)	Mentioned	1
Any other natural resources (use appropriate standard units)	Mentioned	1
		Total: 5

Table 28: Information on emission required in Preliminary Environmental Information Sheet

Information on emission		Required/Not required	Marking max. 8)
Air emissions	Emissions from production, combustion and construction processes	Not mentioned	0
	Emissions from materials handling including storage or transport	Not mentioned	0
	Emission status of VoC	Not mentioned	0
	Emissions from incineration of waste (fly ash management systems)	Not mentioned	0
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	Not mentioned	0
Generation of noise and vibration, and emissions of light and heat	From industrial operation	Not mentioned	0
	From blasting or piling	Not mentioned	0
	From traffic during construction and operation	Not mentioned	0
			Total: 0

Table 29: Information on waste and wastewater generation required in Preliminary Environmental Information Sheet

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Industrial processes waste	Quantity not mentioned	0.5
Municipal waste (domestic and commercial wastes)	Quantity not mentioned	0.5
Biomedical and hazardous wastes	Not mentioned	0
Addressing leachate waste	Not mentioned	0
Other solid or industrial process wastes	Not mentioned	0
Wastewater (domestic and industrial)	Mentioned	1
Sewage sludge or other sludge from effluent treatment	Not mentioned	1
Treatment facility of waste with STP/ETP capacity	Not mentioned	1
		Total: 4

Table 30: Information on environmental and social sensitivity required in Preliminary Environmental Information Sheet

Environmental and social sensitivity		Required/Not required	Marking (max. 13)
Environmental sensitivity	Proximity to national heritage	Not mentioned	0
	Areas important or sensitive for ecological reasons (wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Brief information about the local and regional environmental situation	1
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	Brief information about the local and regional environmental situation	1
	Inland, coastal, marine or underground waters	Mentioned	1
	Areas susceptible to natural hazard	Not mentioned	0
	Will the activity result in loss or irreversible damage to ecosystem services, endemic flora and/or fauna?	Not mentioned	0
	Will the project cause habitat fragmentation, roosting and/or breeding?	Not mentioned	0
Workers	Facilities for long-term housing of operational workers?	Quantity not mentioned	0.5
	Temporary sites used for construction works or housing of construction workers?	Quantity not mentioned	0.5
Communities and other stakeholders	Densely populated or built-up area	Not mentioned	0
	Will it impact local livelihood?	Rehabilitation plan	1
	Will it cause displacement of people?	Mentioned	1
	Employment generation	Mentioned	1
			Total: 7

Namibia

Table 31: Basic information required in screening questionnaire

Basic information	Namibia	Marking (max. 10)
Name of the project; location	Mentioned	1
Name of the applicant	Mentioned	1
Address for correspondence	Mentioned	1
Information regarding any government order/policy relevant/ relating to the site?	Not mentioned	0
Proposed capacity/area/tonnage to be handled; existing capacity/ area etc.	Not mentioned	0
Type of the project	Not mentioned	0
New/expansion/modernization	Mentioned	1
Interlinked projects	Not mentioned	0
Details of alternative sites examined, if any	Not mentioned	0
Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case no. c) Orders/directions of the court if any and its relevance with the proposed project.	Not mentioned	0
		Total: 4

Table 32: Information on natural resources required in screening questionnaire

Information on natural resources	Required/Not required	Marking (max. 10)
Information whether the land is undeveloped or agricultural	Mentioned	1
Possible land use change and the environment around (new Road, rail or sea traffic during construction or operation? New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? New or diverted transmission lines or pipelines?)	Mentioned	1
Water (expected source and competing users) unit: KLD (Kilo Litres per day)	Quantity not mentioned	0.5
Abstraction or transfers of groundwater or surface water?	Not Mentioned	0
Is the project changing course of water runoff or drainage?	Not mentioned	0
Minerals (tonne)—type of minerals, expected source and quantity	Mentioned	1
Construction material—stone, aggregates, sand/soil (expected source [tonne])	Not mentioned	0
Forests and timber (source [tonne]) -expected usage of the product	Mentioned	1

Energy including electricity and fuels (source, competing users) unit: fuel (tonne), energy (MW)	Mentioned	1
Any other natural resources (use appropriate standard units)	Mentioned	1
		Total: 6.5

Table 33: Information on emission required in screening questionnaire

Information on emission		Required/Not required	Marking (max. 8)
Air emissions	Emissions from construction and production process	Quantity not mentioned	0.5
	Emissions from materials handling including storage or transport	Not mentioned	0
	Emission status of VoC	Quantity not mentioned	0.5
	Emissions from incineration of waste (fly ash management systems)	Not mentioned	0
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	Quantity not mentioned	0.5
Generation of noise and vibration, and emissions of light and heat	From industrial operation	Mentioned	1
	From blasting or piling	Mentioned	1
	From traffic during construction and operation	Mentioned	1
			Total: 4.5

Table 34: Information on waste and wastewater generation required in screening questionnaire

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Industrial processes waste through construction, demolition, redundant machinery etc.	Mentioned	1
Municipal waste (domestic and commercial wastes)	Mentioned	1
Biomedical and hazardous wastes	Not mentioned	0
Addressing leachate waste	Not mentioned	0
Other solid or industrial process wastes	Mentioned	1
Wastewater (domestic and industrial)	Not mentioned	0
Sewage sludge or other sludge from effluent treatment	Mentioned	1
Treatment facility of waste with STP/ETP capacity	Not mentioned	0
		Total: 4

Table 35: Information on environmental and social sensitivity required in screening questionnaire

Environmental and social sensitivity		Required/Not required	Marking (max. 13)
Environmental sensitivity	Proximity to national heritage	Mentioned	1
	Areas important or sensitive for ecological reasons (wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Mentioned	1
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	Not mentioned	0
	Inland, coastal, marine or underground waters	Not mentioned	0
	Areas susceptible to natural hazard	Not mentioned	0
	Will the activity result in loss or irreversible damage to ecosystem services, endemic flora and/or fauna?	Mentioned	1
	Will the project cause habitat fragmentation, roosting and/or breeding?	Mentioned	1
Workers	Facilities for long term housing of operational workers?	Mentioned	1
	Temporary sites used for construction works or Housing of construction workers?	Not mentioned	0
Communities and other stakeholders	Densely populated or built-up area	Mentioned	1
	Will it impact local livelihood?	Mentioned	1
	Will it cause displacement of people?	Not mentioned	0
	Employment generation	Mentioned	1
			Total: 8

Nepal

Table 36: Basic information required in application form (IEE)

Basic information	Required/Not required	Marking (max. 10)
Name of the project; Location	Required	1
Name of the applicant	Required	1
Address for correspondence	Required	1
Information regarding any government order/policy relevant/ relating to the site?	Not required	0
Proposed capacity/area/tonnage to be handled; existing capacity/ Area etc.;	Installed capacity	1

Basic information	Required/Not required	Marking (max. 10)
Type of the project	Mentioned in type of proposal	1
New/expansion/modernization	Not mentioned	0
Interlinked projects	Direct or indirect and cumulative impact of the proposal	1
Details of alternative sites examined, if any	Detail description of the alternative site	1
Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case no. c) Orders/directions of the court if any and its relevance with the proposed project	Not required	0
		Total: 7

Table 37: Information on natural resources required in application form (IEE)

Information on natural resources	Required/Not required	Marking (max. 10)
Information whether the land is undeveloped or agricultural	Not required	0
Possible land use change and the environment around (New Road, rail or sea traffic during construction or operation? New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? New or diverted transmission lines or pipelines?)	Not required	0
Water (expected source and competing users) unit: KLD (Kilo Litres per day)	Required	1
Abstraction or transfers of water from ground or surface waters?	Sources of water mentioned	1
Is the project changing course of water runoff or drainage?	Not mentioned	0
Minerals (tonne)—type of minerals, expected source and quantity	Materials to be used mentioned	1
Construction material—stone, aggregates, sand/soil (expected source [tonne])	Mentioned	1
Forests and timber (source [tonne])—expected usage of the product	Mentioned	1
Energy including electricity and fuels (source, competing users); unit: fuel (tonne), energy (MW)	Sources and volume of the consumption	1
Any other natural resources (use appropriate standard units)	Not required	0
		Total: 6

Table 38: Information on emission required in application form (IEE)

Information on emission		Required/Not required	Marking (max. 8)
Air emissions	Emissions during construction and production process	Required	1
	Emissions from materials handling including storage or transport	Required	1
	Emission status of VoC	Other emission from the implementation for the project	1
	Emissions from incineration of waste (fly ash management systems)	Information not mentioned	0
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	Required	1
Generation of noise and vibration, and emissions of light and heat	From industrial operation	Required	1
	From blasting or piling	Not mentioned	0
	From traffic during construction and operation	Required	1
			Total: 6

Table 39: Information on waste and wastewater generation required in application form (IEE)

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Industrial processes waste	Mentioned	1
Municipal waste (domestic and commercial waste)	Not required	0
Biomedical and hazardous wastes	Not required	0
Addressing leachate waste	Not required	0
Other solid or industrial process wastes	Other solid waste from implementation	1
Wastewater (domestic and industrial)	Other solid waste from implementation	1
Sewage sludge or other sludge from effluent treatment	Not required	0
Treatment facility of waste with STP/ETP capacity	Not required	0
		Total: 3

Table 40: Information on environmental and social sensitivity generation required in application form (IEE)

Environmental and social sensitivity		Required/Not required	Marking (max. 13)
Environmental sensitivity	Proximity to national heritage	Particulars to sensitive things or objects	1
	Areas important or sensitive for ecological reasons (wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Geographical area likely to be impacted stated in the questionnaire	1
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	Not mentioned	0
	Inland, coastal, marine or underground waters	Not mentioned	0
	Areas susceptible to natural hazard	Not mentioned	0
	Will the activity result in loss or irreversible damage to ecosystem services/endemic flora/ fauna	Not mentioned	0
	Will the project cause habitat fragmentation/ roosting/breeding	Not mentioned	0
Workers	Facilities for long term housing of operational workers?	Not mentioned	0
	Temporary sites used for construction works or housing of construction workers?	Not mentioned	0
Communities and other stakeholders	Densely populated or built-up area	Resources required for implementation of the proposal	1
	Will it impact local livelihood?	Not mentioned	0
	Will it cause displacement of people?	Not mentioned	0
	Employment generation	Mentioned	1
			Total: 4

Sri Lanka

Table 41: Basic information required in Basic Information Questionnaire (BIQ)

Basic information	Required/Not required	Marking (Max 10)
Name of the project; location	Mentioned	1
Name of the applicant	Mentioned	1
Address for correspondence	Required	1

Basic information	Required/Not required	Marking (Max 10)
Information regarding any government order/policy relevant/ relating to the site?	If any permit is required for the project	1
Proposed capacity/area/tonnage to be handled; existing capacity/ Area etc.;	Physical scale of the project mentioned	1
Type of the project	Mentioned	1
New/expansion/modernization	Plans for future mentioned	1
Interlinked projects	Cumulative impact not mentioned	0
Details of alternative sites examined, if any.	Not mentioned	0
Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case no. c) Orders/directions of the court if any and its relevance with the proposed project	Not mentioned	0
		Total: 7

Table 42: Information on natural resources required in Basic Information Questionnaire (BIQ)

Information on natural resources	Required/Not required	Marking (10 Max)
Information whether the land is undeveloped or agricultural	Information on land use type required	1
Possible land use change and the environment around- (New Road, rail or sea traffic during construction or operation? New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? New or diverted transmission lines or pipelines?)	Not mentioned	0
Water (expected source and competing users) unit: KLD (kilolitre per day)	Mentioned	1
Abstraction or transfers of groundwater or surface water?	The quantity of the extraction required	1
Is the project changing course of water runoff or drainage?	Information on likely impacts of the project	1
Minerals (tonne)—type of minerals, expected source and quantity	Mentioned	1
Construction material—stone, aggregates, sand/soil (expected source [tonne])	Mentioned	1
Forests and timber (source [tonne])—expected usage of the product	Mentioned	1

Information on natural resources	Required/Not required	Marking (10 Max)
Energy including electricity and fuels (source, competing users); unit: fuel (MT), energy (MW)	Mentioned	1
Any other natural resources (use appropriate standard units)	Mentioned	1
		Total: 9

Table 43: Information on emission required in Basic Information Questionnaire (BIQ)

Information on emission		Required/Not required	Marking (8 max.)
Air emissions	Emissions from production, combustion and construction processes	Information on impacts on air quality	1
	Emissions from materials handling including storage or transport	Not mentioned	0
	Emission status of VoC	Not mentioned	0
	Emissions from incineration of waste (fly ash management systems)	Not mentioned explicitly	0
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	Not mentioned	0
Generation of noise and vibration, and emissions of light and heat	From industrial operation	Information on generation of excessive noise and vibration required	1
	From blasting or piling	Not mentioned	0
	From traffic during construction and operation	Not mentioned	0
	From lighting or cooling systems	Not mentioned	0
			Total: 2

Table 44: Information on waste and wastewater generation required in Basic Information Questionnaire (BIQ)

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Industrial processes waste through construction, demolition, redundant machinery etc.	Not mentioned	0
Municipal waste (domestic and commercial wastes)	Not mentioned	0
Biomedical and hazardous wastes	Information on disposal of waste (hazardous)	1
Addressing leachate waste	Not required	0
Other solid or industrial process wastes	Mentioned	1

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Wastewater (domestic and industrial)	Mentioned	1
Sewage sludge or other sludge from effluent treatment	Mentioned	1
Treatment facility of waste with STP/ETP capacity	Mentioned	1
		Total: 5

Table 45: Information on environmental and social sensitivity required in Basic Information Questionnaire (BIQ)

Environmental and Social sensitivity		Required/Not required	Marking (max. 13)
Environmental sensitivity	Proximity to national heritage	100 m from the boundaries	1
	Areas important or sensitive for ecological reasons (wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Mentioned	1
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	100 m from the boundaries	1
	Inland, coastal, marine or underground waters	Not mentioned	0
	Areas susceptible to natural hazard	100 m from the high flood level contour of or within a public lake	1
	Will the activity result in loss or irreversible damage to ecosystem services, endemic flora and/or fauna?	Impacts on flora and/ or fauna	1
	Will the project cause habitat fragmentation, roosting and/or breeding/	Not mentioned	0
Workers	Facilities for long term housing of operational workers?	Not mentioned	0
	Temporary sites used for construction works or housing of construction workers?	Not mentioned	0
Communities and other stakeholders	Densely populated or built-up area	Not mentioned	0
	Will it impact local livelihood?	Mentioned	1
	Will it cause displacement of people?	Mentioned	1
	Employment generation	Not mentioned	0
			Total: 7

Tanzania

Table 46: Basic information required in Form 1

Basic information	Required/Not required	Marking (max. 10)
Name of the project; location	Mentioned	1
Name of the applicant	Mentioned	1
Address for correspondence	Mentioned	1
Information regarding any government order/policy relevant/ relating to the site?	Not mentioned	0
Proposed capacity/area/tonnage to be handled; existing capacity/ area etc.	Mentioned	1
Type of the project	Information on the product type in the scope of the proposal	1
New/expansion/modernization	Not mentioned	0
Interlinked projects	Mentioned	1
Details of alternative sites examined, if any	Project alternatives in case of environmental impacts	0
Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case no. c) Orders/directions of the court if any and its relevance with the proposed project	Not mentioned	0
		Total: 7

Table 47: Information on natural resources required in Form 1

Information on natural resources	Required/Not required	Marking (max. 10)
Information whether the land is undeveloped or agricultural	Not mentioned	0
Possible land use change and the environment around (New Road, rail or sea traffic during construction or operation? New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? New or diverted transmission lines or pipelines?)	Information on adjacent land uses (Existing and proposed)	1
Water (expected source and competing users) unit: KLD (kilolitre per day)	Mentioned	1
Abstraction or transfers of water form groundwater or surface waters?	During the infrastructure and facilities	1
Is the project changing course of water runoff or drainage?	Not mentioned	0
Minerals (tonne)—type of minerals, expected source and quantity	Mentioned	1

Information on natural resources	Required/Not required	Marking (max. 10)
construction material—stone, aggregates, sand / soil (expected source [tonne])	Mentioned	1
Forests and timber (source [tonne])—expected usage of the product	Mentioned	1
Energy including electricity and fuels (source, competing users); unit: fuel (MT), energy (MW)	Mentioned	1
Any other natural resources (use appropriate standard units)	Not mentioned	0
		Total: 7

Table 48: Information on emission required in Form 1

Information on emission		Required/Not required	Marking (8 max)
Air emissions	Emissions during construction and production process	Mentioned	1
	Emissions from materials handling including storage or transport	Not mentioned	0
	Emission status of VoC	Information on chemical usage required	1
	Emissions from incineration of waste (fly ash management systems)	Not mentioned	0
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	Not mentioned	0
Generation of noise and vibration, and emissions of light and heat:	From industrial operation	Mentioned	1
	From blasting or piling	Not mentioned	0
	From traffic during construction and operation	Not mentioned	0
			Total: 3

Table 49: Information on waste and wastewater generation required in Form 1

Information on waste and wastewater generation	Tanzania	Marking (max. 8)
Industrial processes waste	Information on waste and by products required	1
Municipal waste (domestic and commercial wastes)	Required	1
Biomedical and hazardous wastes	Not mentioned	0
Addressing leachate waste	Not mentioned	0
Other solid or industrial process wastes	Mentioned	1
Wastewater (domestic and industrial)	Mentioned	1
Sewage sludge or other sludge from effluent treatment	During infrastructure and utilities	1

Information on waste and wastewater generation	Tanzania	Marking (max. 8)
Treatment facility of waste with STP/ETP capacity	Not mentioned	0
		Total: 5

Table 50: Information on environmental and social sensitivity required in Form 1

Environmental and social sensitivity		Required/Not required	Marking (max. 13)
Environmental sensitivity	Proximity to national heritage	Not mentioned	0
	Areas important or sensitive for ecological reasons (Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Mentioned	1
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	Mentioned	1
	Inland, coastal, marine or underground waters	Not mentioned	0
	Areas susceptible to natural hazard	Potential significant risk and hazards during operation, construction and decommission phase	1
	Will the activity result in loss or irreversible damage to ecosystem services, endemic flora and/or fauna?	Not mentioned	0
	Will the project cause habitat fragmentation, roosting and/or breeding?	Not mentioned	0
Workers	Facilities for long term housing of operational workers?	Not mentioned	0
	Temporary sites used for construction works or housing of construction workers?	Not mentioned	0
Communities and other stakeholders	Densely populated or built-up area	Not mentioned	0
	Will it impact local livelihood?	Mentioned	1
	Will it cause displacement of people?	Mentioned	1
	Employment generation	Not mentioned	0
			Total: 5

Zambia

Table 51: Basic information required in Project Brief

Basic information	Required/Not required	Marking (max. 10)
Name of the project; location	Mentioned	1
Name of the applicant	Mentioned	1
Address for correspondence	Mentioned	1
Information regarding any government order/policy relevant/ relating to the site?	Policy, legal and institutional framework relevant to the project	1
Proposed capacity/area/tonnage to be handled; existing capacity/ area etc.	Mentioned	1
Type of the project	Nature of the project which requires information on products and byproducts	1
New/expansion/modernization	Not mentioned	0
Interlinked projects	Identify surrounding developments	1
Details of alternative sites examined, if any	Project alternatives mentioned	1
Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case no. c) Orders/directions of the court if any and its relevance with the proposed project	Mentioned	1
		Total: 9

Table 52: Information on natural resources required in Project Brief

Information on natural resources	Required/Not required	Marking (10 Max)
Information whether the land is undeveloped or agricultural	Not mentioned	0
Possible land use change and the environment around (New Road, rail or sea traffic during construction or operation? New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc? Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements? New or diverted transmission lines or pipelines?)	Information on land use and land tenure	1
Water (expected source and competing users) unit: KLD (Kilo Litres per day)	Mentioned	1
Abstraction or transfers of water from ground or surface waters?	Mentioned	1
Is the project changing course of water runoff or drainage?	Mentioned	1

Information on natural resources	Required/Not required	Marking (10 Max)
Minerals (tonne)—type of minerals, expected source and quantity	Mentioned	1
construction material—stone, aggregates, sand/soil (expected source [tonne])	Not mentioned	0
Forests and timber (source [tonne])—expected usage of the product	Mentioned	1
Energy including electricity and fuels (source, competing users); unit: fuel (MT), energy (MW)	Not mentioned	0
Any other natural resources (use appropriate standard units)	Mentioned	1
		Total: 7

Table 53: Information on emission required in Project Brief

Information on emission		Zambia	Marking (8 max)
Air emissions	Emissions from construction and production processes	Not mentioned	0
	Emissions from materials handling including storage or transport	Not mentioned	0
	Emission status of VoC	Not mentioned	0
	Emissions from incineration of waste (fly ash management systems)	Not mentioned	0
	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	Not mentioned	0
Generation of noise and vibration, and emissions of light and heat	From industrial operation of equipment, e.g. engines, ventilation plant, crushers	Mentioned	1
	From blasting or piling	Mentioned	1
	From traffic during construction and operation	Not mentioned	0
			Total: 2

Table 54: Information on waste and wastewater generation required in Project Brief

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Industrial processes waste through construction, demolition, redundant machinery etc.	Not mentioned	0
Municipal waste (domestic and commercial wastes)	Not mentioned	0
Biomedical and hazardous wastes	Not mentioned	0
Addressing leachate waste	Not mentioned	0
Other solid or industrial process wastes	Not mentioned	0
Wastewater (domestic and industrial)	Not mentioned	0

Information on waste and wastewater generation	Required/Not required	Marking (max. 8)
Sewage sludge or other sludge from effluent treatment	Not mentioned	0
Treatment facility of waste with STP/ETP capacity	Not mentioned	0
		Total: 0

Table 55: Information on environmental and social sensitivity required in Project Brief

Environmental and social sensitivity		Required/Not required	Marking (max. 13)
Environmental sensitivity	Proximity to national heritage	Mentioned	1
	Areas important or sensitive for ecological reasons (wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Not mentioned	0
	Areas used by protected, important or sensitive flora or breeding, foraging, resting, over wintering, migration	Information on fauna and flora	1
	Inland, coastal, marine or underground waters	Not mentioned	0
	Areas susceptible to natural hazard	Not mentioned	0
	Will the activity result in loss or irreversible damage to ecosystem services, endemic flora and/or fauna?	Identification of endemic flora/fauna /birds	1
	Will the project cause habitat fragmentation, roosting and/or breeding?	Not mentioned	0
Workers	Facilities for long-term housing of operational workers?	Not mentioned	0
	Temporary sites used for construction works or housing of construction workers?	Not mentioned	0
Communities and other stakeholders	Densely populated or built-up area	Mentioned	1
	Will it impact local livelihood?	Mentioned	1
	Will it cause displacement of people?	Mentioned	1
	Employment generation	Not mentioned	0
			Total: 6

Environmental Impact Assessment (EIA) is a decision-making support tool to assess the impacts of various projects on the environment. This reports examines five significant indicators whose integration ensures a robust EIA system is in place. These indicators also take into account environmental and social impact mitigation aspects.

As EIA is backed by legislations, CSE has analysed different EIA processes—screening, scoping, preparation of draft EIA, public hearing and issuance of environmental clearance certificate—of different countries under their respective legislations. This report attempts to analyse whether the respective legislations have enough teeth to implement these processes effectively on the ground. Its findings will enable governments to strengthen their EIA systems and move towards their effective implementation.

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