

## **Appendix 3 The World Bank's New Operational Manual**



*These policies were prepared for use by World Bank staff and are not necessarily a complete treatment of the subject.*

## Environmental Assessment

**Note:** OP, BP, and GP 4.01 together replace OMS 2.36, *Environmental Aspects of Bank Work*; OD 4.00, Annex A, *Environmental Assessment*; OD 4.00, Annex B, *Environmental Policy for Dam and Reservoir Projects*; OD 4.01, *Environmental Assessment*; and the following Operational Memoranda: *Environmental Assessments: Instructions to Staff on the Handling of the Borrower's Consultations with Affected Groups and Relevant Local NGOs*, 4/10/90; *Environmental Assessments: Instructions to Staff on the Release of Environmental Assessments to Executive Directors*, 11/21/90; and *Release of Environmental Assessments to Executive Directors*, 2/20/91. Additional information related to these statements is provided in the *Environmental Assessment Sourcebook* (Washington, D.C.: World Bank, 1991) and subsequent updates available from the Environment Sector Board, and in the *Pollution Prevention and Abatement Handbook*. Other Bank statements that relate to the environment include OP/BP/GP 4.02, *Environmental Action Plans*; GP 4.03, *Agricultural Pest Management*; OP/BP/GP 4.04, *Natural Habitats*; OP 4.07, *Water Resources Management*; OP 4.09, *Pest Management*; OP 4.11, *Safeguarding Cultural Property in Bank Financed Projects* (forthcoming); OP/BP 4.12, *Involuntary Resettlement* (forthcoming); OP/GP 4.36, *Forestry*; OP/BP 10.04, *Economic Evaluation of Investment Operations*; and OD 4.20, *Indigenous Peoples*. This OP and BP apply to all projects for which a PID is first issued after March 1, 1999. Questions may be addressed to the Chair, Environment Sector Board.

1. The Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making.
2. EA is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project's potential environmental risks and impacts in its area of influence;<sup>2</sup> examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation. The Bank favors preventive measures over mitigatory or compensatory measures, whenever feasible.
3. EA takes into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples, and cultural property);<sup>3</sup> and

transboundary and global environmental aspects.<sup>4</sup> EA considers natural and social aspects in an integrated way. It also takes into account the variations in project and country conditions; the findings of country environmental studies; national environmental action plans; the country's overall policy framework, national legislation, and institutional capabilities related to the environment and social aspects; and obligations of the country, pertaining to project activities, under relevant international environmental treaties and agreements. The Bank does not finance project activities that would contravene such country obligations, as identified during the EA. EA is initiated as early as possible in project processing and is integrated closely with the economic, financial, institutional, social, and technical analyses of a proposed project.

4. The borrower is responsible for carrying out the EA. For Category A projects,<sup>5</sup> the borrower retains independent EA experts not affiliated with the project to carry out the EA.<sup>6</sup> For Category A projects that are highly risky or contentious or that involve serious and multidimensional environmental concerns, the borrower should normally also engage an advisory panel of independent, internationally recognized environmental specialists to advise on all aspects of the project relevant to the EA.<sup>7</sup> The role of the advisory panel depends on the degree to which project preparation has progressed, and on the extent and quality of any EA work completed, at the time the Bank begins to consider the project.

5. The Bank advises the borrower on the Bank's EA requirements. The Bank reviews the findings and recommendations of the EA to determine whether they provide an adequate basis for processing the project for Bank financing. When the borrower has completed or partially completed EA work prior to the Bank's involvement in a project, the Bank reviews the EA to ensure its consistency with this policy. The Bank may, if appropriate, require additional EA work, including public consultation and disclosure.

6. The *Pollution Prevention and Abatement Handbook* describes pollution prevention and abatement measures and emission levels that are normally acceptable to the Bank. However, taking into account borrower country legislation and local conditions, the EA may recommend alternative emission levels and approaches to pollution prevention and abatement for the project. The EA report must provide full and detailed justification for the levels and approaches chosen for the particular project or site.

### EA Instruments

7. Depending on the project, a range of instruments can be used to satisfy the Bank's EA requirement: environmental impact assessment (EIA), regional or sectoral EA, environmental audit, hazard or risk assessment, and environmental management plan (EMP).<sup>8</sup> EA applies one or more of these instruments, or elements of them, as appropriate. When the project is likely to have sectoral or regional impacts, sectoral or regional EA is required.<sup>9</sup>

### Environmental Screening

8. The Bank undertakes environmental screening of each proposed project to determine the appropriate extent and type of EA. The Bank classifies the proposed project into one of four categories, depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts.

- (a) *Category A:* A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive,<sup>10</sup> diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. EA for a Category A project examines the project's potential negative and positive environmental impacts, compares them with those of feasible alternatives (including the "without project" situation), and recommends any

measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance. For a Category A project, the borrower is responsible for preparing a report, normally an EIA (or a suitably comprehensive regional or sectoral EA) that includes, as necessary, elements of the other instruments referred to in para. 7.

- (b) *Category B:* A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas—including wetlands, forests, grasslands, and other natural habitats—are less adverse than those of Category A projects. These impacts are sitespecific; few if any of them are irreversible; and in most cases mitigatory measures can be designed more readily than for Category A projects. The scope of EA for a Category B project may vary from project to project, but it is narrower than that of Category A EA. Like Category A EA, it examines the project's potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance. The findings and results of Category B EA are described in the project documentation (Project Appraisal Document and Project Information Document).<sup>11</sup>
- (c) *Category C:* A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impacts.

Beyond screening, no further EA action is required for a Category C project.

- (d) *Category FI:* A proposed project is classified as Category FI if it involves investment of Bank funds through a financial intermediary, in subprojects that may result in adverse environmental impacts.

### EA for Special Project Types

#### *Sector Investment Lending*

9. For sector investment loans (SILs),<sup>12</sup> during the preparation of each proposed subproject, the project coordinating entity or implementing institution carries out appropriate EA according to country requirements and the requirements of this policy.<sup>13</sup> The Bank appraises and, if necessary, includes in the SIL components to strengthen, the capabilities of the coordinating entity or the implementing institution to (a) screen subprojects, (b) obtain the necessary expertise to carry out EA, (c) review all findings and results of EA for individual subprojects, (d) ensure implementation of mitigation measures (including, where applicable, an EMP), and (e) monitor environmental conditions during project implementation.<sup>14</sup> If the Bank is not satisfied that adequate capacity exists for carrying out EA, all Category A subprojects and, as appropriate, Category B subprojects—including any EA reports—are subject to prior review and approval by the Bank.

#### *Sector Adjustment Lending*

10. Sector adjustment loans (SECALs) are subject to the requirements of this policy. EA for a SECAL assesses the potential environmental impacts of planned policy, institutional, and regulatory actions under the loan.<sup>15</sup>

#### *Financial Intermediary Lending*

11. For a financial intermediary (FI) operation, the Bank requires that each FI screen proposed subprojects and ensure that subborrowers carry out appropriate EA for each subproject. Before

approving a subproject, the FI verifies (through its own staff, outside experts, or existing environmental institutions) that the subproject meets the environmental requirements of appropriate national and local authorities and is consistent with this OP and other applicable environmental policies of the Bank.<sup>16</sup>

12. In appraising a proposed FI operation, the Bank reviews the adequacy of country environmental requirements relevant to the project and the proposed EA arrangements for subprojects, including the mechanisms and responsibilities for environmental screening and review of EA results. When necessary, the Bank ensures that the project includes components to strengthen such EA arrangements. For FI operations expected to have Category A subprojects, prior to the Bank's appraisal each identified participating FI provides to the Bank a written assessment of the institutional mechanisms (including, as necessary, identification of measures to strengthen capacity) for its subproject EA work.<sup>17</sup> If the Bank is not satisfied that adequate capacity exists for carrying out EA, all Category A subprojects and, as appropriate, Category B subprojects—including EA reports—are subject to prior review and approval by the Bank.<sup>18</sup>

### *Emergency Recovery Projects*

13. The policy set out in OP 4.01 normally applies to emergency recovery projects processed under **OP 8.50, *Emergency Recovery Assistance***. However, when compliance with any requirement of this policy would prevent the effective and timely achievement of the objectives of an emergency recovery project, the Bank may exempt the project from such a requirement. The justification for any such exemption is recorded in the loan documents. In all cases, however, the Bank requires at a minimum that (a) the extent to which the emergency was precipitated or exacerbated by inappropriate environmental practices be determined as part of the preparation of such projects, and (b) any necessary corrective measures be built into either the emergency project or a future lending operation.

### **Institutional Capacity**

14. When the borrower has inadequate legal or technical capacity to carry out key EA-related functions (such as review of EA, environmental monitoring, inspections, or management of mitigatory measures) for a proposed project, the project includes components to strengthen that capacity.

### **Public Consultation**

15. For all Category A and B projects proposed for IBRD or IDA financing, during the EA process, the borrower consults project-affected groups and local nongovernmental organizations (NGOs) about the project's environmental aspects and takes their views into account.<sup>19</sup> The borrower initiates such consultations as early as possible. For Category A projects, the borrower consults these groups at least twice: (a) shortly after environmental screening and before the terms of reference for the EA are finalized; and (b) once a draft EA report is prepared. In addition, the borrower consults with such groups throughout project implementation as necessary to address EA-related issues that affect them.<sup>20</sup>

### **Disclosure**

16. For meaningful consultations between the borrower and project-affected groups and local NGOs on all Category A and B projects proposed for IBRD or IDA financing, the borrower provides relevant material in a timely manner prior to consultation and in a form and language that are understandable and accessible to the groups being consulted.

17. For a Category A project, the borrower provides for the initial consultation a summary of the

proposed project's objectives, description, and potential impacts; for consultation after the draft EA report is prepared, the borrower provides a summary of the EA's conclusions. In addition, for a Category A project, the borrower makes the draft EA report available at a public place accessible to project-affected groups and local NGOs. For SILs and FI operations, the borrower/FI ensures that EA reports for Category A subprojects are made available in a public place accessible to affected groups and local NGOs.

18. Any separate Category B report for a project proposed for IDA financing is made available to project-affected groups and local NGOs. Public availability in the borrowing country and official receipt by the Bank of Category A reports for projects proposed for IBRD or IDA financing, and of any Category B EA report for projects proposed for IDA funding, are prerequisites to Bank appraisal of these projects.

19. Once the borrower officially transmits the Category A EA report to the Bank, the Bank distributes the summary (in English) to the executive directors (EDs) and makes the report available through its InfoShop. Once the borrower officially transmits any separate Category B EA report to the Bank, the Bank makes it available through its InfoShop.<sup>21</sup> If the borrower objects to the Bank's releasing an EA report through the World Bank InfoShop, Bank staff (a) do not continue processing an IDA project, or (b) for an IBRD project, submit the issue of further processing to the EDs.

### Implementation

20. During project implementation, the borrower reports on (a) compliance with measures agreed with the Bank on the basis of the findings and results of the EA, including implementation of any EMP, as set out in the project documents; (b) the status of mitigatory measures; and (c) the findings of monitoring programs. The Bank bases supervision of the project's environmental aspects on the findings and recommendations of the EA, including measures set out in the legal agreements, any EMP, and other project documents.<sup>22</sup>

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"Bank" includes IDA; "EA" refers to the entire process set out in OP/BP 4.01; "loans" includes credits; "borrower" includes, for guarantee operations, a private or public project sponsor receiving from another financial institution a loan guaranteed by the Bank; and "project" covers all operations financed by Bank loans or guarantees except structural adjustment loans (for which the environmental provisions are set out in OP/BP 8.60, *Adjustment Lending*, forthcoming) and debt and debt service operations, and also includes projects under adaptable lending—adaptable program loans (APLs) and learning and innovation loans (LILs)—and projects and components funded under the Global Environment Facility. The project is described in Schedule 2 to the Loan/Credit Agreement. This policy applies to all components of the project, regardless of the source of financing.

For definitions, see Annex A. The area of influence for any project is determined with the advice of environmental specialists and set out in the EA terms of reference.

See OP/BP/GP 4.12, *Involuntary Resettlement* (forthcoming); OD 4.20, *Indigenous Peoples*; and OP 4.11, *Safeguarding Cultural Property in Bank-Financed Projects* (forthcoming).

Global environmental issues include climate change, ozone-depleting substances, pollution of international waters, and adverse impacts on biodiversity.

For screening, see para. 8.

EA is closely integrated with the project's economic, financial, institutional, social, and technical analyses to ensure that (a) environmental considerations are given adequate weight in project selection, siting, and design decisions, and (b) EA does not delay project processing. However, the borrower ensures that when individuals or entities are engaged to carry out EA activities, any conflict of interest is avoided. For example, when an independent EA is required, it is not carried out by the consultants hired to prepare the engineering design.

The panel (which is different from the dam safety panel required under OP/ BP 4.37, *Safety of Dams*) advises the borrower specifically on the following aspects: (a) the terms of reference for the EA, (b) key issues and methods for preparing the EA, (c) recommendations and findings of the EA, (d) implementation of the EA's recommendations, and (e) development of environmental management capacity.

These terms are defined in Annex A. Annexes B and C discuss the content of EA reports and EMPs.

Guidance on the use of sectoral and regional EA is available in EA Sourcebook Updates 4 and 15.

A potential impact is considered "sensitive" if it may be irreversible (e.g., lead to loss of a major natural habitat) or raise issues covered by OD 4.20, *Indigenous Peoples*, OP 4.04, *Natural Habitats*, OP 4.11, *Safeguarding Cultural Property in Bank-Financed Projects* (forthcoming), or OP 4.12, *Involuntary Resettlement* (forthcoming).

When the screening process determines, or national legislation requires, that any of the environmental issues identified warrant special attention, the findings and results of Category B EA may be set out in a separate report. Depending on the type of project and the nature and magnitude of the impacts, this report may include, for example, a limited environmental impact assessment, an environmental mitigation or management plan, an environmental audit, or a hazard assessment. For Category B projects that are not in environmentally sensitive areas and that present well-defined and well-understood issues of narrow scope, the Bank may accept alternative approaches for meeting EA requirements: for example, environmentally sound design criteria, siting criteria, or pollution standards for small-scale industrial plants or rural works; environmentally sound siting criteria, construction standards, or inspection procedures for housing projects; or environmentally sound operating procedures for road rehabilitation projects.

SILs normally involve the preparation and implementation of annual investment plans or subprojects as time slice activities over the course of the project.

In addition, if there are sectorwide issues that cannot be addressed through individual subproject EAs (and particularly if the SIL is likely to include Category A subprojects), the borrower may be required to carry out sectoral EA before the Bank appraises the SIL.

Where, pursuant to regulatory requirements or contractual arrangements acceptable to the Bank, any of these review functions are carried out by an entity other than the coordinating entity or implementing institution, the Bank appraises such alternative arrangements; however, the borrower/coordinating entity/implementing institution remains ultimately responsible for ensuring that subprojects meet Bank requirements.

Actions that would require such assessment include, for example, privatization of environmentally sensitive enterprises, changes in land tenure in areas with important natural habitats, and relative price shifts in commodities such as pesticides, timber, and petroleum.

The requirements for FI operations are derived from the EA process and are consistent with the provisions of para. 6 of this OP. The EA process takes into account the type of finance being considered, the nature and scale of anticipated subprojects, and the environmental requirements of the jurisdiction in which subprojects will be located.

Any FI included in the project after appraisal complies with the same requirement as a condition of its participation.

The criteria for prior review of Category B subprojects, which are based on such factors as type or size of the subproject and the EA capacity of the financial intermediary, are set out in the legal agreements for the project.

For the Bank's approach to NGOs, see GP 14.70, *Involving Nongovernmental Organizations in Bank-Supported Activities*.

For projects with major social components, consultations are also required by other Bank policies—for example, OD 4.20, *Indigenous Peoples*, and OP/BP 4.12, *Involuntary Resettlement* (forthcoming).

For a further discussion of the Bank's disclosure procedures, see *The World Bank Policy on Disclosure of Information* (March 1994) and BP 17.50, *Disclosure of Operational Information*. Specific requirements for disclosure of resettlement plans and indigenous peoples development plans are set out in OP/BP 4.12, *Involuntary Resettlement* (forthcoming), and OP/BP 4.10, forthcoming revision of OD 4.20, *Indigenous Peoples*.

See OP/BP 13.05, *Project Supervision*, forthcoming.



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## Environmental Assessment

Note: OP, BP, and GP 4.01 together replace OMS 2.36, *Environmental Aspects of Bank Work*; OD 4.00, Annex A, *Environmental Assessment*; OD 4.00, Annex B, *Environmental Policy for Dam and Reservoir Projects*; OD 4.01, *Environmental Assessment*; and the following Operational Memoranda: *Environmental Assessments: Instructions to Staff on the Handling of the Borrower's Consultations with Affected Groups and Relevant Local NGOs*, 4/10/90; *Environmental Assessments: Instructions to Staff on the Release of Environmental Assessments to Executive Directors*, 11/21/90; and *Release of Environmental Assessments to Executive Directors*, 2/20/91. Additional information related to these statements is provided in the *Environmental Assessment Sourcebook* (Washington, D.C.: World Bank, 1991) and subsequent updates available from the Environment Sector Board, and in the *Pollution Prevention and Abatement Handbook*. Other Bank statements that relate to the environment include OP/BP/GP 4.02, *Environmental Action Plans*; GP 4.03, *Agricultural Pest Management*; OP/BP/GP 4.04, *Natural Habitats*; OP 4.07, *Water Resources Management*; OP 4.09, *Pest Management*; OP 4.11, *Safeguarding Cultural Property in Bank-Financed Projects* (forthcoming); OP/BP 4.12, *Involuntary Resettlement* (forthcoming); OP/GP 4.36, *Forestry*; OP/BP 10.04, *Economic Evaluation of Investment Operations*; and OD 4.20, *Indigenous Peoples*. This OP and BP cover all projects for which a PID is first issued after December 11, 1998. Questions may be addressed to the Chair, Environment Sector Board.

1. Environmental assessment (EA) for a proposed Bank-financed operation is the responsibility of the borrower. Bank staff assist the borrower, as appropriate. The Region coordinates Bank review of EA in consultation with its Regional environment sector unit (RESU)<sup>2</sup> and, as necessary, with the support of the Environment Department (ENV).

### Environmental Screening

2. In consultation with the RESU, the task team (TT) examines the type, location, sensitivity, and scale of the proposed project,<sup>3</sup> as well as the nature and magnitude of its potential impacts. At the earliest stage of the project cycle, the TT, with the RESU's concurrence, assigns the proposed project to one of four categories (A, B, C, or FI; see **OP 4.01, para. 8**), reflecting the potential environmental risks associated with the project. Projects are categorized according to the component with the potentially most serious adverse effects; dual categories (e.g., A/C) are not used.

3. The TT records in the Project Concept Document (PCD) and the initial Project Information Document (PID) (a) the key environmental issues (including any resettlement, indigenous peoples,



and cultural property concerns); (b) the project category and the type of EA and EA instruments needed; (c) proposed consultation with project-affected groups and local nongovernmental organizations (NGOs), including a preliminary schedule; and (d) a preliminary EA schedule.<sup>4</sup> The TT also reports the project's EA category in the *Monthly Operational Summary of Bank and IDA Proposed Projects* (MOS), and prepare (and update as necessary) an Environmental Data Sheet (EDS)<sup>5</sup> for the project. For Category A projects, the EDS is included as a quarterly annex to the MOS.

4. If, during project preparation, the project is modified or new information becomes available, the TT, in consultation with the RESU, considers whether the project should be reclassified. The TT updates the PCD/PID and the EDS to reflect any new classification and record the rationale for the new classification. The new classification that appears in the MOS is followed by "(R)" to indicate a revision.

5. Any exemption with respect to the application of this policy to any emergency recovery project processed under **OP 8.50, *Emergency Recovery Assistance***,<sup>6</sup> is subject to approval by the Regional vice president, in consultation with the Chair, ENV, and the Legal Department (LEG).<sup>7</sup>

### EA Preparation

6. During preparation of the PCD, the TT discusses with the borrower the scope of the EA<sup>8</sup> and the procedures, schedule, and outline for any EA report required. For Category A projects, a field visit by an environmental specialist for this purpose is normally necessary.<sup>9</sup> At the time of the Project Concept Review,<sup>10</sup> the RESU provides formal clearance of the environmental aspects of the PCD/PID. For Category B projects, the Concept Review decides whether an environmental management plan (EMP) will be required.

7. EA is an integral part of project preparation. As necessary, the TT assists the borrower in drafting the terms of reference (TOR) for any EA report.<sup>11</sup> The RESU reviews the coverage of the TOR, ensuring among other things that they provide for adequate interagency coordination and for consultation with affected groups and local NGOs. To support preparation of the TOR and the EA report, the TT gives the borrower the documents *Content of an Environmental Assessment Report for a Category A Project* and *Environmental Management Plan*.<sup>12</sup> As applicable, Bank and borrower staff refer to the *Pollution Prevention and Abatement Handbook*, which contains pollution prevention and abatement measures and emission levels that are normally acceptable to the Bank.

8. For a Category A project, the TT advises the borrower that the EA report must be submitted to the Bank in English, French, or Spanish, and an executive summary in English.

9. For all Category A projects, and for Category B projects that are proposed for IDA funding and that will have a separate EA report, the TT advises the borrower in writing that (a) before the Bank proceeds to project appraisal, the EA report must be made available in a public place accessible to affected groups and local NGOs and must be officially submitted to the Bank; and (b) once the Bank officially receives the report, it will make the report available to the public through its InfoShop.<sup>13</sup>

10. During the design phase of a project, the TT advises the borrower on carrying out the EA in accordance with the requirements of **OP 4.01**. The TT and the lawyer identify any matters pertaining to the project's consistency with national legislation or international environmental treaties and agreements (referred to in **OP 4.01, para. 3**).

### Review and Disclosure

11. When the borrower officially submits a Category A or Category B EA report to the Bank, the

Region places a copy of the full report in the project file. It also sends the English-language executive summary of a Category A EA report to the Board Operations Division, Corporate Secretariat, under cover of a transmittal memorandum confirming that the executive summary and the full report (a) have been prepared by the borrower and have not been evaluated or endorsed by the Bank, and (b) are subject to change during appraisal. The results of a Category B EA, when there is no separate report, are summarized in the PID.

12. For Category A and B projects, the TT and the RESU review the results of the EA, ensuring that any EA report is consistent with the TOR agreed with the borrower. For Category A projects, and for Category B projects proposed for IDA funding that have a separate EA report, this review gives special attention to, among other things, the nature of the consultations with affected groups and local NGOs and the extent to which the views of such groups were considered; and the EMP with its measures for mitigating and monitoring environmental impacts and, as appropriate, strengthening institutional capacity. If not satisfied, the RESU may recommend to Regional management that (a) the appraisal mission be postponed, (b) the mission be considered a preappraisal mission, or (c) certain issues be reexamined during the appraisal mission. The RESU sends a copy of Category A reports to ENV.

13. For all Category A and B projects, the TT updates the status of the EA in the PCD/PID, describing how major environmental issues have been resolved or will be addressed and noting any proposed EA-related conditionalities. The TT sends the InfoShop a copy of all EA reports.

14. At the Project Decision stage,<sup>14</sup> the RESU provides formal clearance of the environmental aspects of the project, including their treatment in the draft legal documents prepared by LEG.

### **Project Appraisal**

15. For Category A projects and for Category B projects proposed for IDA funding that have a separate report, the appraisal mission normally departs only after the Bank has received the officially transmitted EA report and reviewed it (see paras. 11-13).<sup>15</sup> For Category A projects, the appraisal mission team includes one or more environmental specialists with relevant expertise.<sup>16</sup> The appraisal mission for any project (a) reviews both the procedural and substantive elements of the EA with the borrower, (b) resolves any issues, (c) assesses the adequacy of the institutions responsible for environmental management in light of the EA's findings, (d) ensures the adequacy of financing arrangements for the EMP, and (e) determines whether the EA's recommendations are properly addressed in project design and economic analysis. For Category A and B projects, the TT obtains the RESU's and LEG's concurrence with any change during appraisal and negotiations in any environment-related conditionality from that approved at the Project Decision stage.

### *Sector Investment and Financial Intermediary Lending*

16. The appraisal mission develops clear arrangements with the borrower to ensure that the implementing institutions will be able to carry out or oversee EAs of proposed subprojects;<sup>17</sup> specifically, the mission confirms the sources of required expertise and the appropriate division of responsibilities among the ultimate borrower, the financial intermediary or sector agency, and the agencies responsible for environmental management and regulation. As appropriate, the TT reviews Category A and B subproject EA reports in accordance with **OP 4.01, paras. 9 and 11-12**.

### *Guarantee Operations*

17. Environmental assessment of a guarantee operation is carried out in accordance with **OP/BP 4.01**. Any EA for an IBRD guarantee operation must be carried out in sufficient time for (a) the RESU to review the results of the EA, and (b) the TT to take the findings into account as part of appraisal.

The TT ensures that a Category A EA report for such an IBRD guarantee operation is available at the InfoShop no later than 60 days before the expected date of Board presentation, and any required Category B EA report no later than 30 days before the expected date of Board presentation.

18. For the purposes of disclosure of EA reports, IDA guarantees are governed by the same policy framework as IDA credits. When a deviation from this policy framework is justified on operational grounds, the procedures for IBRD guarantees may be followed (see para. 17).

### **Documentation**

19. The TT reviews the borrower's Project Implementation Plan to ensure that it incorporates EA findings and recommendations, including any EMP. In preparing the loan package for submission to the Board, the TT summarizes in the Project Appraisal Document (PAD) the reasons for the project classification; the findings and recommendations of the EA, including the justification for the recommended emission levels and approach to pollution prevention and abatement; and any issues related to the country's obligations under relevant international environmental treaties and agreements to which it is a party (see **OP 4.01, para. 3**). For a Category A project, the TT summarizes the EA report in an annex to the PAD,<sup>18</sup> including such key elements as the procedures used to prepare the report; environmental baseline conditions; the alternatives considered; the predicted impacts of the chosen alternative; a summary of the EMP, covering the areas outlined in **OP 4.01, Annex C**; and the borrower's consultations with affected groups and local NGOs, including the issues raised and how they have been taken into account. The annex also describes negotiated environment-related loan conditionalities and covenants; when necessary, documentation of the government's intention to grant appropriate permits; and environmental supervision arrangements. For sector investment and financial intermediary loans, the documents include appropriate measures and conditions for subproject EA work. The TT and LEG ensure that loan conditions include an obligation to carry out the EMP and include as additional conditions specific measures under the EMP, as appropriate for facilitating effective supervision and monitoring of EMP implementation.

### **Supervision and Evaluation**

20. During implementation, the TT supervises the project's environmental aspects on the basis of the environmental provisions and the borrower's reporting arrangements agreed in the legal documents and described in other project documentation.<sup>19</sup> The TT ensures that procurement arrangements are consistent with the environmental requirements set out in the project legal agreements. The TT also ensures that supervision missions contain adequate environmental expertise.

21. The TT ensures that environment-related covenants are included in the monitoring system. It also ensures that reports provided by the borrower on project progress adequately discuss the borrower's compliance with agreed environmental actions, particularly the implementation of environmental mitigation, monitoring, and management measures. The TT, in consultation with the RESU and LEG, reviews this information and determines whether the borrower's compliance with environmental covenants is satisfactory. If compliance is not satisfactory, the TT discusses an appropriate course of action with the RESU and LEG. The TT discusses with the borrower actions necessary to correct the noncompliance, and it follows up on the implementation of such actions. The TT advises Regional management of the actions taken and recommends any further measures. During implementation, the TT obtains the RESU's concurrence with any change in environment-related aspects of the project, including environment-related conditions cleared by LEG.

22. The TT ensures that the borrower's operating plan for the project includes actions required to carry out the project's environment-related aspects, including provision for continued functioning of any environmental advisory panel as agreed with the Bank.

23. The Implementation Completion Report<sup>20</sup> evaluates (a) environmental impacts, noting whether they were anticipated in the EA report; and (b) the effectiveness of any mitigatory measures taken.

### Role of the Environment Department

24. ENV supports the Regions throughout the EA process with advice, training, dissemination of good practice, and operational support. As appropriate, ENV provides to other Regions the EA reports, related materials, precedents, and experience that originate in any one Region or from external sources. ENV carries out project audits to help ensure compliance with the Bank's EA policy, and it conducts periodic reviews of the Bank's EA experience to identify and disseminate good practice and develop further guidance in this area.

### Financing EA

25. Project Preparation Facility advances<sup>21</sup> and trust funds may be available to potential borrowers that request Bank assistance in financing EA.

### Specific Applications

26. Procedures for the environmental assessment of projects involving dams and reservoirs and pest management are set out in Annexes **B** and **C**, respectively.

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"Bank" includes IDA, "EA" refers to the entire process set out in **OP/BP 4.01**; "project" covers all operations financed by Bank loans or guarantees except structural adjustment loans (for which the environmental provisions are set out in **OP/BP 8.60**, *Adjustment Lending*, forthcoming) and debt and debt service operations, and also includes projects under adaptable lending—adaptable program loans (APLs) and learning and innovation loans (LILs)—and projects and components funded under the Global Environment Facility, "loans" includes credits, "borrower" includes, for guarantee operations, a private or public project sponsor receiving from another financial institution a loan guaranteed by the Bank; "Project Concept Document" includes the Initiating Memorandum, and "Project Appraisal Document" includes the Report and Recommendation of the President (President's Report).

As of November 1998, the Regional environmental sector units are as follows: AFR — Environment Group; EAP, SAR, and ECA — Environment Sector Unit; MNA — Rural Development, Water, and Environment Sector Unit; LCR — Environmentally and Socially Sustainable Development Sector Unit.

"Location" refers to proximity to or encroachment on environmentally important areas, such as wetlands, forests, and other natural habitats. "Scale" is judged by Regional staff in the country context. "Sensitivity" refers to projects that may have irreversible impacts, affect vulnerable ethnic minorities, involve involuntary resettlement, or affect cultural heritage sites. For further discussion, see the *Environmental Assessment Sourcebook, Update No. 2: Environmental Screening* (available from the Environment Department).

See **OP / BP 10.00**, *Investment Lending: Identification to Board Presentation*, for the loan processing context in which decisions on the environment category and the EA process are made.

For the EDS, see **Annex A**.

See **OP 4.01, para. 13**.

LEG input is provided through the lawyer assigned to the project.

For sector investment and financial intermediary operations, Bank and borrower staff need to consider the potential for significant cumulative impacts from multiple subprojects.

Such a field visit by an environmental specialist may also be desirable for some Category B projects

Or, for a sector adjustment loan (SECAL), the equivalent Regional review

According to *Guidelines: Selection and Employment of Consultants by World Bank Borrowers* (Washington, D.C.: World Bank, January 1997, revised September 1997), the TT reviews the qualifications of and, if acceptable, gives a no-objection to any consultants retained by the borrower to prepare the EA report or to serve on a panel.

For these two documents, see **OP 4.01**, Annexes **B** and **C**.

See **OP 4.01, para. 19**, and **BP 17.50**, *Disclosure of Operational Information*

Or, for SECALs, before departure of the appraisal mission.

In exceptional cases, the RVP, with the prior concurrence of the Chair, ENV, may authorize the appraisal mission's departing before the Category A EA report is received. In such cases, the RESU's clearance of the project is conditional

on the Bank's receiving, before appraisal ends and negotiations begin, an EA report that provides an adequate basis for continued project processing (GP 4.01 provides examples of such exceptional cases).

It may be desirable to include environmental specialists on the appraisal mission team for some Category B projects, as well.

The TT provides to the implementing institutions, for use (as appropriate) in the preparation and appraisal of subprojects, copies of *Content of an Environmental Assessment Report for a Category A Project* (**OP 4.01, Annex B**).

*Environmental Management Plan* (**OP 4.01, Annex C**), and *Pollution Prevention and Abatement Handbook*.

For a SECAL, a Category A EA report is summarized in a technical annex to the President's Report. This technical annex is made available to the public through the InfoShop.

See **OP/BP 13.05**, *Project Supervision*, forthcoming.

See **OP / BP / GP 13.55**, *Implementation Completion Reporting*.

See **OP / BP 8.10**, *Project Preparation Facility*.

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*These procedures were prepared for use by World Bank staff and are not necessarily a complete treatment of the subject.*

## Environmental Data Sheet for Projects in the IBRD/IDA Lending Program

Country:	Project ID No.:
_____	_____
	Project Name:
	_____
	_____
Appraisal Date:	IBRD Amount (\$m):
_____	_____
Board Date:	IDA Amount (\$m):
_____	_____
Managing Division:	Sector:
_____	_____
Lending Instrument:	Status:
_____	_____
Date for receipt of EA report by Bank:	Date Assigned:
_____	_____
EA Category: _____	
Date data sheet prepared/update: _____	<u>Please do not leave any items blank. Use "N/A" (not applicable) or "TBD" (to be determined) when appropriate.</u>

Major Project Components:

Project Location: (besides geographic location, information about the key environmental characteristics of the area likely to be affected by the project, and proximity of any protected areas or sites or critical natural habitats)

Major Environmental Issues: (identified or suspected in project)

Other Environmental Issues: (of lesser scope associated with project)

Proposed Actions: (to mitigate environmental issues described above)

Justification/Rationale for Environmental Category: (presents reasons for environmental category selected and explanation of any changes from initial classification, including whether any changes relate to alternatives)

Reporting Schedule: Category A EA report: Start-up date, date for first draft, and current status.  
Category B: Is there a separate EA report? If yes, when is it due?

Remarks: (gives status of any other environmental studies, lists local groups and local NGOs consulted and, where EA reports were made public locally, tells whether borrower has given permission to release EA report, etc.)

Signed by: \_\_\_\_\_ (Task Team Leader)

Signed by: \_\_\_\_\_ (Head, Regional Environment Sectoral Unit)



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## Application of EA to Dam and Reservoir Projects

1. During project identification and before assigning an environmental category, the task team (TT) ensures that the borrower selects and engages independent, recognized experts or firms, whose qualifications and terms of reference (TOR) are acceptable to the Bank, to carry out environmental reconnaissance that includes

- (a) identifying the potential environmental impacts of the project;
- (b) ascertaining the scope of the environmental assessment (EA), including any resettlement and indigenous peoples concerns;
- (c) assessing the borrower's capacity to manage the EA process; and
- (d) advising on the need for an independent environmental advisory panel.<sup>1</sup>

The TT obtains from the borrower a copy of the results of the reconnaissance and ensures that they are taken into account in environmental screening and in the preparation of the EA TOR. For dam and reservoir projects that are in an advanced stage of preparation when proposed for financing to the Bank, the TT in consultation with the Regional environment sectoral unit (RESU) determines whether any additional EA work is needed, and whether an independent environmental advisory panel is needed. A field visit for this purpose is normally required (see **BP 4.01, para 6**).

2. During project preparation, the TT assesses the environmental soundness of the country's macroeconomic and sector policies on matters that affect the project. If the TT identifies any issues, it discusses with the government measures to improve the policies.
3. If the borrower engages an environmental advisory panel, the TT reviews and indicates to the borrower the acceptability of the TOR and shortlists.
4. In reviewing the EA, the TT and the RESU ensure that the EA examines demand management opportunities. In appraising the project, they ensure that the project design adequately takes into account demand management as well as supply options (e.g., conservation of water and energy, efficiency improvements, system integration, cogeneration, and fuel substitution).
5. The TT ensures that the borrower establishes within the implementing ministry or agency an in-house environmental unit, with adequate budget and professional staffing strong in expertise relevant to the project, to manage the project's environmental aspects.

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See **OP 4.01, para. 4**





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## Application of EA to Projects Involving Pest Management

### Sector Review

1. The task team (TT) ensures that any environmental assessment (EA) of the agriculture or health sector evaluates the country's capacity to manage the procurement, handling, application, and disposal of pest control products; to monitor the precision of pest control and the impact of pesticide use; and to develop and implement ecologically based pest management programs.

### Project EA

2. During project identification, the TT assesses whether the proposed project may raise potential pest management issues. Projects that include the manufacture, use, or disposal of environmentally significant<sup>1</sup> quantities of pest control products are classified as Category A. Depending on the level of environmental risk, other projects involving pest management issues are classified as A, B, C, or FI.<sup>2</sup> When substantial quantities of highly toxic pesticide materials for use under the project are transported or stored, a hazard assessment may be appropriate.<sup>3</sup>

3. The TT records in the Project Concept Document (PCD) and the initial Project Information Document (PID) any pest management issues that the EA will address. For Category A projects, the TT reports in the *Monthly Operational Summary for Bank and IDA Proposed Projects* (MOS) whether the project (a) will finance procurement of pest control products directly or will provide credit that may be used to purchase pest control products (and whether any specific products are excluded from financing), (b) will finance goods or services that significantly change pesticide use patterns, or (c) includes components—including support for development and implementation of integrated pest management (IPM) programs—aimed at reducing environmental and health hazards associated with pest control and the use of pesticides.

4. The TT ensures that the EA covers potential issues related to pest management and considers appropriate alternative designs or mitigation measures. Depending on the issues identified, the environmental management plan<sup>4</sup> includes a pest management plan.

### Pest Management Plan

5. A pest management plan is a comprehensive plan, developed when there are significant pest management issues such as (a) new land-use development or changed cultivation practices in an area, (b) significant expansion into new areas, (c) diversification into new crops in agriculture,<sup>5</sup> (d) intensification of existing low-technology systems, (e) proposed procurement of relatively hazardous pest control products or methods, or (f) specific environmental or health concerns (e.g., proximity of protected areas or important aquatic resources; worker safety). A pest management plan is also developed when proposed financing of pest control products represents a large component of the

project.6

6. A pest management plan reflects the policies set out in **OP 4.09, *Pest Management***. The plan is designed to minimize potential adverse impacts on human health and the environment and to advance ecologically based IPM.<sup>7</sup> The plan is based on on-site evaluations of local conditions conducted by appropriate technical specialists with experience in participatory IPM. The first phase of the plan—an initial reconnaissance to identify the main pest problems and their contexts (ecological, agricultural, public health, economic, and institutional) and to define broad parameters—is carried out as part of project preparation and is evaluated at appraisal. The second phase—development of specific operational plans to address the pest problems identified—is often carried out as a component of the project itself.<sup>8</sup> As appropriate, the pest management plan specifies procedures for screening pest control products. In exceptional cases, the pest management plan may consist of pest control product screening only.

#### *Screening of Pest Control Products*

7. Pest control product screening is required when a project finances pest control products. The screening establishes an authorized list of pest control products approved for financing, along with a mechanism to ensure that only the specified products will be procured with Bank funds. Screening without a pest management plan is appropriate only when all of the following conditions are met: (a) expected quantities of pest control products are not significant from a health or environment standpoint; (b) no significant environmental or health concerns related to pest control need to be addressed; (c) the project will not introduce pesticide use or other nonindigenous biological control into an area, or significantly increase the level of pesticide use; and (d) no hazardous products<sup>9</sup> will be financed.<sup>10</sup>

#### **Appraisal**

8. Depending on the complexity of the issues involved and the degree of risk to human health or the environment, the appraisal mission includes appropriate technical specialists:

9. The TT records in the Project Appraisal Document (PAD) pest management concerns arising from the EA and any proposed project interventions pertinent to pest management, for example:

- (a) a list of pest control products authorized for procurement, or an indication of when and how this list will be developed and agreed on;
- (b) existing pest management practices; pesticide use; the policy, economic, institutional, and legal framework for regulating, procuring, and managing pesticides; and the extent to which all these are consistent with an IPM approach;
- (c) proposed project activities (or ongoing parallel activities, including other projects supported by the Bank or other donors) aimed at addressing (i) the shortcomings identified, and (ii) any constraints to adopting IPM;
- (d) proposed mechanisms for financing, implementing, monitoring, and supervising components relating to pest management or pesticide use, including any role envisaged for local nongovernmental organizations;
- (e) the capacity of responsible institutions to carry out the activities described; and
- (f) the overall sectoral context and other issues that will not be directly addressed under the project but that should be addressed as long-term objectives.

10. The main elements of the pest management measures are reflected in the legal agreements between the borrower and the Bank.11

### Supervision and Evaluation

11. Depending on the nature and complexity of the pest management and pesticide-related issues confirmed at appraisal, supervision missions may need to include appropriate technical specialists. This need is reflected in the supervision plan.

12. The Implementation Completion Report evaluates the environmental impact of pest management practices supported or promoted by the project, as well as the borrower's institutional oversight capacity. It also discusses whether the project has resulted in improved pest management practices according to the criteria that define the IPM approach.

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For the purposes of this statement, "environmental significance" takes into account the impacts (including benefits) on human health.

For environmental screening, see **OP 4.01, para. 8**.

For definitions, see **OP 4.01, Annex A**.

See **OP 4.01, Annex C**.

Particularly such crops as cotton, vegetables, fruits, and rice, which are often associated with heavy use of pesticides. A pest management plan is not required for the procurement or use of impregnated bednets for malaria control, or of WHO Class III insecticides for intradomestic spraying for malaria control.

See **GP 4.03, Part II**, for information on IPM.

For the content of a pest management plan, see **GP 4.03**.

Hazardous products include pesticides listed in Class Ia and Ib of the World Health Organization (WHO) *Classification of Pesticides by Hazard and Guidelines to Classification* (Geneva: WHO, 1994-95); materials listed in the UN *Consolidated List of Products Whose Consumption and or Sale have been Banned, Withdrawn, Severely Restricted, or not Approved by Governments* (New York: UN, 1994); and other materials that are banned or severely restricted in the borrower country because of environmental or health hazards (see the country's national pesticide registration list, if it has one). Copies of the WHO classification and UN list, which are updated periodically, are available in the Bank's Sectoral Library. Staff may consult the Rural Development Department for further guidance.

**GP 4.03, Part III**, provides further information on pest control product screening.

Loan conditionality may be needed to ensure the effective implementation of project components; for example, (a) establishing or strengthening pesticide regulatory and monitoring framework and capabilities, (b) properly operating and/or constructing pesticide storage or disposal facilities, (c) agreeing on a time-bound program to phase out use of an undesirable pesticide and properly dispose of any existing stocks, or (d) initiating research or extension programs aimed at providing alternatives to undesirable pesticide use.



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## Environmental Assessment

Note: OP, BP, and GP 4.01 together replace OMS 2.36, *Environmental Aspects of Bank Work*; OD 4.00, Annex A, *Environmental Assessment*; OD 4.00, Annex B, *Environmental Policy for Dam and Reservoir Projects*; OD 4.01, *Environmental Assessment*; and the following Operational Memoranda: *Environmental Assessments: Instructions to Staff on the Handling of the Borrower's Consultations with Affected Groups and Relevant Local NGOs*, 4/10/90; *Environmental Assessments: Instructions to Staff on the Release of Environmental Assessments to Executive Directors*, 11/21/90; and *Release of Environmental Assessments to Executive Directors*, 2/20/91. Additional information related to these statements is provided in the *Environmental Assessment Sourcebook* (Washington, D.C.: World Bank, 1991) and subsequent updates available from the Environment Sector Board, and in the *Pollution Prevention and Abatement Handbook*. Other Bank statements that relate to the environment include OP/BP/GP 4.02, *Environmental Action Plans*; GP 4.03, *Agricultural Pest Management*; OP/BP/GP 4.04, *Natural Habitats*; OP 4.07, *Water Resources Management*; OP 4.09, *Pest Management*; OP 4.11, *Safeguarding Cultural Property in Bank-Financed Projects* (forthcoming); OP/BP 4.12, *Involuntary Resettlement* (forthcoming); OP/GP 4.36, *Forestry*; OP/BP 10.04, *Economic Evaluation of Investment Operations*; and OD 4.20, *Indigenous Peoples*. The OP and BP apply to all projects for which a PID is first issued after March 1, 1999. Questions may be addressed to the Chair, Environment Sector Board.

1. Environmental assessments (EAs) of Bank I projects are carried out in a broad range of sectoral, geographical, cultural, and socio-economic contexts. Projects assessed may be large or small, concentrated at one specific site or dispersed over a large area (e.g., in the form of numerous subprojects). For these reasons EAs vary greatly in terms of the type of analysis, the types of relevant issues and impacts, and the breadth and depth of coverage. Moreover, since environmental impacts usually occur in a variety of natural and social settings and affect multiple sectors, it takes a multidisciplinary team to carry out most EAs adequately.

2. Consequently, meaningful guidance on EA—complementing the policy and procedural requirements in **OP** and **BP 4.01**—has to cover specific sectors as well as cross-sectoral issues. It must also explain how to apply different types of EA for different types of projects and how different methods developed by different disciplines may be used in support of EA. The Bank provides such guidance to its staff and borrowers in the *Environmental Assessment Sourcebook* (1991) and the *Environmental Assessment Sourcebook Updates* issued periodically since 1993. These documents are available electronically and in hard copy from the Environment Sector Board.

3. **GP 4.01, Annex A**, *Checklist of Potential Issues for an EA*, lists some of the issues that an EA may need to address and gives sources for further information. **Annex B**, *Types of Projects and Their Typical Classifications*, illustrates the environmental classification of several kinds of Bank projects.

#### Timing of EA Reports

4. **OP** and **BP 4.01** require that EA reports for Category A projects be submitted to the Bank prior to appraisal. The Bank considers EA to be part of the information it requires to appraise a project adequately. Therefore, it allows exceptions only in very specific circumstances, such as the following:

- (a) Sector investment loans and financial intermediary operations: EAs for subprojects that are not known prior to the Bank's appraisal of the project are prepared at the same time as the subprojects are prepared (see **OP 4.01, paras. 9 and 11-12**). However, information on the EA process for subprojects is presented prior to appraisal.
- (b) Loan guarantees: EA reports for loan guarantees may be submitted during appraisal. However, appraisal is not complete until the findings of the EA have been appropriately incorporated into project design and reflected in project documentation (see **BP 4.01, para. 17**). Regional environment sector unit (RESU) review and clearance are required, as for other projects.
- (c) Projects with several components of which only one is classified as Category A: If a convincing case can be made that, unless appraisal of the components that are not in Category A is allowed to proceed, the project or any of its components may be in jeopardy, the Regional vice president, with the prior concurrence of the Chair, Environment Sector Board, may authorize the appraisal mission's departing before the EA report is received (see **BP 4.01, footnote 14**). Still, appraisal is not complete until the EA has been taken into account in the project design and reflected in the project documentation; and the RESU's clearance at the Project Decision Meeting is conditional on submission of a satisfactory EA report prior to negotiations.

If a satisfactory sectoral or regional EA has been carried out prior to the preparation of such projects as are described here, and that EA has influenced the selection and design of these projects, the argument for allowing an exception is considered more solid than when there has been no previous EA.

#### Format of EA Report

5. The effectiveness of EA depends to a large extent on the way information is presented to stakeholders and decision makers. For all Category A and many Category B projects, one of the most important instruments of communication is the EA report, which presents the results of the EA process, including recommendations for a project's final design and implementation.

6. An EA report should present analysis, findings, and recommendations clearly and concisely, and it should be able to be easily reproduced and disseminated. To achieve these objectives, the task team should provide borrowers with the following guidelines:

- (a) Whenever possible, limit the report to one volume of no more than 150 pages. Supplementary technical information may be put into one or more annexes (collectively titled "Technical Annexes") to the main volume; these annexes should also be as concise as possible.<sup>2</sup>

- (b) Use loose-leaf binders rather than spiral or book binding.
- (c) Use standard sizes of paper (generally whatever standard borrower uses).
- (d) Use font size 11 or 12.
- (e) One-page figures, tables, charts, maps, and other illustrations may be used to improve presentation and facilitate understanding, but fold-out or pull-out formats should be avoided because they are difficult to reproduce.

7. For projects with several subprojects that individually require Category A EA, the same guidelines should be followed for each EA report; however, the use of technical annexes is strongly discouraged. It is highly recommended that the borrower summarize the findings of the individual EA reports in one summary volume (which, if concise, may be the same as the EA summary that is submitted to the Board).

### Processing the EA Report

8. The World Bank InfoShop is responsible for making EA reports available to the public. To facilitate the InfoShop's work, the task team should

- (a) request borrowers to provide at least two original sets of the EA report (or two legible copies suitable for reproduction in the Bank);
- (b) transmit the complete EA report to the InfoShop under cover of a memorandum (both in paper copy and as a Lotus Notes attachment addressed to "PIC") giving (i) the name, division, e-mail address, telephone extension, and fax number of a contact person to whom the InfoShop may address questions;<sup>3</sup> (ii) the name of the person or division that reviewed the EA report before appraisal; (iii) the full name of the project for which the EA was produced;<sup>4</sup> (iv) any special information on the EA (e.g., that EA for subprojects will be carried out later and is not yet available); and (v) on a separate page, a list of the titles of the main volume and all other volumes and annexes comprising the EA report; and
- (c) enclose a copy of the EA summary that was sent to the Board.

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"Bank" includes IDA; "EA" refers to the entire process set out in **OP / BP** 4.01; "project" covers all operations financed by Bank loans or guarantees except structural adjustment loans (for which the environmental provisions are set out in **OP/BP** 8.60, *Adjustment Lending*, forthcoming) and debt and debt service operations, and also includes projects under adaptable lending—adaptable program loans (APLs) and learning and innovation loans (LILs)—and projects and components funded under the Global Environment Facility; "loans" includes credits; and "borrower" includes, for guarantee operations, a private or public project sponsor receiving from another financial institution a loan guaranteed by the Bank.

The World Bank's InfoShop provides technical annexes to the public only when they are specifically requested, and it charges an additional fee for each annex requested.



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## Checklist of Potential Issues of an EA

When relevant, the EA addresses the following issues:

- (a) *Agrochemicals.* The Bank promotes the use of integrated pest management (IPM) and the careful selection, application, and disposal of pesticides (see OP 4.09, *Pest Management*). Because fertilizers affect surface and ground-water quality, their use must also be carefully assessed.
- (b) *Biological diversity.* The Bank promotes conservation of endangered plant and animal species, critical habitats, and protected areas (see OP /BP /GP 4.04, *Natural Habitats*).
- (c) *Coastal and marine resources management.* The planning and management of coastal marine resources, including coral reefs, mangroves, and wetlands, are addressed in *Guidelines for Integrated Coastal Zone Management*, Environmentally Sustainable Development Studies and Monographs Series No. 9 (Washington, D.C.: World Bank, 1996).
- (d) *Cultural property.* OP 4.11, *Safeguarding Cultural Property in Bank-Financed Projects* (forthcoming), confirms the Bank's commitment to protect archaeological sites, historic monuments, and historic settlements.
- (e) *Global externalities.* When a project has potential global environmental externalities (i.e., emissions of greenhouse gases or ozone-depleting substances, pollution of international waters, or adverse impacts on biodiversity), the EA identifies the externalities, analyzes them in terms of their impacts, and proposes appropriate mitigation measures.
- (f) *Hazardous and toxic materials.* Guidelines are available from the Environment Sector Board (ENV) on the safe manufacture, use, transport, storage, and disposal of hazardous and toxic materials.
- (g) *Indigenous peoples.* OD 4.20, *Indigenous Peoples* (to be reissued as OP/BP 4.10), provides specific guidance on addressing the rights of indigenous peoples, including traditional land and water rights.
- (h) *Induced development and other socio-cultural aspects.* Secondary growth of settlements and infrastructure, often referred to as "induced development" or "boomtown" effects, can have major indirect environmental impacts, which local governments may have difficulty addressing.

- (i) *Industrial hazards.* All energy and industry projects should include a formal plan to prevent and manage industrial hazards (see *Techniques of Assessing Industrial Hazards: A Manual*, Technical Paper No. 55 [Washington, D.C.: Technica, Ltd., and World Bank, 1988]).
- (j) *Industrial pollution.* The Bank supports an integrated approach to pollution control, viewing pollution prevention as generally preferable to reliance on end-of-pipe pollution controls alone. It encourages the adoption of "cleaner production" and stresses the need for good management and operating practices. Guidance on industrial projects is provided in the *Pollution Prevention and Abatement Handbook*.
- (k) *International treaties and agreements on the environment, natural resources, and cultural property.* The EA should review the status and application of such current and pending treaties and agreements, including their notification requirements. The Legal Department, which maintains a list of international treaties, can obtain the information required on applicable laws in individual countries.
- (l) *International waterways.* OP /BP /GP 7.50, *Projects on International Waterways*, provides guidance.
- (m) *Involuntary resettlement.* OP/BP/GP 4.12, *Involuntary Resettlement* (forthcoming), provides guidance.
- (n) *Land settlement.* Land settlement should generally be carefully reviewed because it can have complex physical, biological, socioeconomic, and cultural impacts.
- (o) *Natural habitats.* The Bank is committed to protecting natural habitats and provides for compensatory measures when lending results in adverse impacts (see OP /BP /GP 4.04, *Natural Habitats*).
- (p) *Natural hazards.* The EA should review whether the project may be affected by natural hazards (e.g., earthquakes, floods, volcanic activity) and, if so, should propose specific measures to these concerns (see OP /BP /GP 8.50, *Emergency Recovery Assistance*).
- (q) *Occupational health and safety.* All industry and energy projects, and relevant projects in other sectors, should include formal plans to promote occupational health and safety (see *Occupational Health and Safety Guidelines* [Washington, D.C.: World Bank, 1988]).
- (r) *Ozone-depleting substances.* Use of ozone-depleting substances (e.g., chlorofluorocarbons and methyl bromide), which is widespread in such applications as refrigeration, foams, solvents, and fumigation, is regulated under the Montreal Protocol and Vienna Convention. Guidance on ozone-safe alternatives is available from the Montreal Protocol Operations Unit in the Bank's Global Environment Coordination Unit (ENV).
- (s) *Ports and harbors.* Guidelines are available from the Transportation, Water, and Urban Development Department on addressing common environmental concerns associated with port and harbor development (see *Environmental Considerations for Port and Harbor Developments*, Technical Paper No. 126 [Washington, D.C.: World Bank, 1990]).



- (t) *Tropical forests.* Guidance is provided by the Bank's July 1991 paper *Forest Policy*, OP/GP 4.36, *Forestry*; and OP/BP/GP 4.04, *Natural Habitats*.
- (u) *Watersheds.* Bank policy promotes the protection and management of watersheds, as an element of lending operations for dams, reservoirs, and irrigation systems (see OP 4.07, *Water Resources Management*).
- (v) *Wetlands.* The Bank promotes conservation and management of wetlands (e.g., estuaries, lakes, mangroves, marshes, and swamps) (see OP/BP/GP 4.04, *Natural Habitats*).



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## Types of Projects and Their Typical Classifications

Bank and international experience shows that projects in certain sectors or of certain types are normally best classified as illustrated below. These examples are only illustrative; it is the extent of the impacts, not the sector, that determines the extent of the environmental assessment and, hence, the category.

### Category A Projects/Components

- (a) Dams and reservoirs
- (b) Forestry production projects
- (c) Industrial plants (large-scale) and industrial estates, including major expansion, rehabilitation, or modification
- (d) Irrigation, drainage, and flood control (large-scale)
- (e) Aquaculture and mariculture (large-scale)
- (f) Land clearance and leveling
- (g) Mineral development (including oil and gas)
- (h) Port and harbor development
- (i) Reclamation and new land development
- (j) Resettlement
- (k) River basin development
- (l) Thermal power and hydropower development or expansion
- (m) Manufacture, transportation, and use of pesticides or other hazardous and/ or toxic materials
- (n) New construction or major upgrading of highways or rural roads
- (o) Hazardous waste management and disposal

### Category B Projects/Components

- (a) Agroindustries (small-scale)
- (b) Electrical transmission
- (c) Irrigation and drainage (small-scale)
- (d) Renewable energy (other than hydroelectric dams)
- (e) Rural electrification
- (f) Tourism
- (g) Rural water supply and sanitation
- (h) Watershed projects (management or rehabilitation)
- (i) Protected areas and biodiversity conservation
- (j) Rehabilitation or maintenance of highways or rural roads
- (k) Rehabilitation or modification of existing industrial facilities (small-scale)
- (l) Energy efficiency and energy conservation

Category C Projects/Components

- (a) Education
- (b) Family planning
- (c) Health
- (d) Nutrition
- (e) Institutional development
- (f) Most human resources projects



*These policies were prepared for use by World Bank staff and are not necessarily a complete treatment of the subject.*

## Definitions

1. *Environmental audit*: An instrument to determine the nature and extent of all environmental areas of concern at an existing facility. The audit identifies and justifies appropriate measures to mitigate the areas of concern, estimates the cost of the measures, and recommends a schedule for implementing them. For certain projects, the EA report may consist of an environmental audit alone; in other cases, the audit is part of the EA documentation.
2. *Environmental impact assessment (EIA)*: An instrument to identify and assess the potential environmental impacts of a proposed project, evaluate alternatives, and design appropriate mitigation, management, and monitoring measures. Projects and subprojects need EIA to address important issues not covered by any applicable regional or sectoral EA.
3. *Environmental management plan (EMP)*: An instrument that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures. The EMP is an integral part of Category A EAs (irrespective of other instruments used). EAs for Category B projects may also result in an EMP.
4. *Hazard assessment*: An instrument for identifying, analyzing, and controlling hazards associated with the presence of dangerous materials and conditions at a project site. The Bank requires a hazard assessment for projects involving certain inflammable, explosive, reactive, and toxic materials when they are present at a site in quantities above a specified threshold level. For certain projects, the EA report may consist of the hazard assessment alone; in other cases, the hazard assessment is part of the EA documentation.
5. *Project area of influence*: The area likely to be affected by the project, including all its ancillary aspects, such as power transmission corridors, pipelines, canals, tunnels, relocation and access roads, borrow and disposal areas, and construction camps, as well as unplanned developments induced by the project (e.g., spontaneous settlement, logging, or shifting agriculture along access roads). The area of influence may include, for example, (a) the watershed within which the project is located; (b) any affected estuary and coastal zone; (c) off-site areas required for resettlement or compensatory tracts; (d) the airshed (e.g., where airborne pollution such as smoke or dust may enter or leave the area of influence); (e) migratory routes of humans, wildlife, or fish, particularly where they relate to public health, economic activities, or environmental conservation; and (f) areas used for livelihood activities (hunting, fishing, grazing, gathering, agriculture, etc.) or religious or ceremonial purposes of a customary nature.
6. *Regional EA*: An instrument that examines environmental issues and impacts associated with a particular strategy, policy, plan, or program, or with a series of projects for a particular region (e.g., an urban area, a watershed, or a coastal zone); evaluates and compares the impacts against those of alternative options; assesses legal and institutional aspects relevant to the issues and impacts; and

recommends broad measures to strengthen environmental management in the region. Regional EA pays particular attention to potential cumulative impacts of multiple activities.

7. *Risk assessment*: An instrument for estimating the probability of harm occurring from the presence of dangerous conditions or materials at a project site. Risk represents the likelihood and significance of a potential hazard being realized; therefore, a hazard assessment often precedes a risk assessment, or the two are conducted as one exercise. Risk assessment is a flexible method of analysis, a systematic approach to organizing and analyzing scientific information about potentially hazardous activities or about substances that might pose risks under specified conditions. The Bank routinely requires risk assessment for projects involving handling, storage, or disposal of hazardous materials and waste, the construction of dams, or major construction works in locations vulnerable to seismic activity or other potentially damaging natural events. For certain projects, the EA report may consist of the risk assessment alone; in other cases, the risk assessment is part of the EA documentation.

8. *Sectoral EA*: An instrument that examines environmental issues and impacts associated with a particular strategy, policy, plan, or program, or with a series of projects for a specific sector (e.g., power, transport, or agriculture); evaluates and compares the impacts against those of alternative options; assesses legal and institutional aspects relevant to the issues and impacts; and recommends broad measures to strengthen environmental management in the sector. Sectoral EA pays particular attention to potential cumulative impacts of multiple activities.

## Appendix 4 Environmental Consideration in JICA

## Outline of Environmental Consideration in JICA

### 1 . Introduction

Various studies for development aid project (social development, mine industry, agriculture, etc.) have been implemented in developing countries as a part of JICA's co-operative activities. Recently, the process of environmental consideration draws more public attentions in developing countries when manipulating master plan and its feasibility for large-scaled project like developing social infrastructure, since it studies the problems of social environments in particular the problems of involuntary resettlements.

### 2 . Concepts of Environmental Consideration in ODA projects

#### 2.1 Background of enhancing environmental consideration

Recently, public concerns for environmental problems are rapidly increasing and along with it, the significance of Environmental Impact Assessment (EIA) in every large-scale development project is widely recognized. Since OECD adopted "Council Recommendation on Environmental Assessment of Development Assistance Projects and Programmes" in 1985, major bilateral aid organizations and multilateral donor bank such as the World Bank began to establish guidelines for EIA.

Environmental Impact Assessment – so called EIA, is a system to set goals for natural conservation and to facilitate countermeasures to prevent/mitigate adverse impacts on environment by performing field study and predicting impacts against every development projects identified as the detailed surveillance is required. Participation opportunities of local residents relating to the project area is very important for EIA implementation, thus, it should be open to the public.

Table 1

Year	Month	Activities
1988	12	Recommendation to enhance environmental consideration in the report of "Sectional Study for Development Assistance on the Environment"
1989	8	Environmental Office was newly established in Planning Department
1989	9	Place an environmental officer in each Department.
1990	2	<u>Environmental Guidelines for EIA study of Dam Construction Projects</u>
1990	4	Allocate new budget on project study for environmental consideration
1991	5	Reorganized Environmental Office into Environment, WID and other global issues Office.
1992	3	<u>Environmental Guidelines on JICA Development Study for EIA of Agricultural and Rural Development Project</u>
1992	7	Manuals for Environmental Consideration for Preparatory Stud, Feasibility Study and Master Plan Study
1992	9	<u>Environmental Guidelines for Infrastructure Projects (following 13 sectors) – Port and Harbors, Airport, Roads, Railways, River and Erosion control, Solid</u>

		<u>waste management, Sewerage, Groundwater development, Water Supply, Regional Development, Tourism Development, Transport Development, Urban Transportation Development)</u>
1993	3	<u>Environmental Guidelines for Forestry Development</u>
1993	4	Environment, WID and other issues Office promoted into Environment, WID and other issues Division
1993	4	Allocate new budget on EIA study (development Study)
1993	7	Environmental Guideline for Mining Industry Development (Operation Manual) for 3 sector (Industry, Mining, Power plant)
1994	3	Environmental Guideline for Fishery Development
1994	3	Q&A for Environmental Consideration on Development Study
1994	3	Report of Study for assisting countermeasures against desertification
1994	4	Increase budget for environmental officers for Grand Aid projects (preparatory and master plan study)
1995	3	Report of Study for assisting Bio-diversity Conservation
1996	1	JICA's Basic Study for Expanding Environmental Cooperation

Note) 20 underlined Guidelines for Environmental Consideration are published.

## 2-2 Basic Concept

JICA's aid report "Sectoral Study for Development Assistance-Environment" published in 1988 defined that "Environmental Consideration" is to study whether a development project will have significant impacts on the environment or not, to assess the impacts and to incorporate measures to prevent or alleviate their effects, if necessary.

The premise of this definition is the understanding that development aid should not end with a one-time involvement but should be continuous and sustainable. Thus, it is believed that environmental consideration is prerequisite for securing the sustainability of the development.

If environmental consideration is not sufficiently undertaken for implementing a development project and, if careful attention is not paid to the management of the surrounding natural resources, the base of the development might be jeopardized and the development might be halted. The base of the people's livelihood or even their subsistence can be also threatened. It is necessary, therefore, to try to ensure the sustainable development by harmonizing the development project with natural resources and the base of livelihood and subsistence of the residents in the area.

## 3 . Most Desirable Environmental Consideration

Among the large-scale development projects, JICA has few cases to implement EIA focused on social environment from the planning phase of the project. Results obtained from case analysis



indicate that EIA focus on social environment will complement conventional JICA's EIA, and will change the projects successful from not. Project proposer should patiently explain necessities and plausibility of the project and mitigation plan thoroughly to the project affected residents (local community).

Needless to say the significance of performing field study, impact prediction, assessment for natural environment, it is important to establish a firm system for sufficient care of social environment. JICA should promote to include an environmental expert into project team for consideration of social environments, and to enhance capacity building in this field as well.

Table: Comprehensive Matrix {Roads}

Project Type		Sectoral Development								Comprehensive Development				
Environmental Items		Sectors												
		1 Ports & Harbors	2 Airports	3 Roads	4 Railways	5 River & Erosion Control	6 Soil Waste Management	7 Sewerage Development	8 Groundwater	9 Water Supply	10 Regional Development	11 Tourism Development	12 Transportation Development	13 Urban Transportation Development
Social Environment	1	Resettlement												
	2	Economic Activities												
	3	Traffic & Public Facilities												
	4	Split of Communities												
	5	Cultural Property												
	6	Water/Rights/Rights of Common												
	7	Public Health Condition												
	8	Waste												
	9	Hazards (Risk)												
Natural Environment	10	Topography & Soil Condition												
	11	.Soil Erosion												
	12	Groundwater												
	13	Hydrological Situation												
	14	Coastal Zone												
	15	Fauna & Flora												
	16	Meteorology												
	17	Landscape												
Pollution	18	Air Pollution												
	19	Water Pollution												
	20	Soil Contamination												
	21	Noise & Vibration												
	22	Ground Subsidence												
	23	Offensive Odor												

Note) : The environmental items to which special attention has to be paid.  
 They might cause serious impact they may affect the project formulation depending on the magnitude of the impacts and the possibility of the measures.  
 : The environmental items which may have a significant impact depending on the scale of project and site conditions  
 No mark : The environmental items requiring no impact assessment since the anticipated impacts are in general, not significant.  
 In case of the comprehensive development projects, all the items are classified in , because their studies are usually at the master planning stage and the extent of impacts are not clear.